

DCC review: Phase 1 Consultation	
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We are consulting on the principles, scope and next steps for the review of regulatory arrangements for the Data Communications Company (DCC). We would like views from people with an interest in smart metering. We particularly welcome responses from DCC customers, including energy suppliers, distribution network operators, consumer groups and other current or potential future users of the DCC network. We would also welcome responses from other stakeholders and the public.

This document outlines the scope, purpose and questions of the consultation and how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at [Ofgem.gov.uk/consultations](https://www.ofgem.gov.uk/consultations). 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.

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Executive summary

The Data Communications Company (DCC) is responsible for establishing and operating a secure national communications network for smart metering in Great Britain. It currently operates under the Smart Meter Communication Licence, awarded by the government in 2013 for an initial period of 12 years. We are reviewing the regulatory arrangements to be put in place for DCC following the expiry of the current licence in 2025.

Context

The focus of the review is forward looking and its objective is to ensure that an effective regulatory framework is in place to underpin a future role of DCC to 2040. This period will be marked by both continuity and change in the energy market. Smart metering and smart meter data are crucial for the success of key ongoing and future transformation initiatives needed to decarbonise our energy system. DCC's role in operating and maintaining a secure and reliable communications network for smart metering will therefore remain vital. The transition to Net Zero, however, will change how consumers use and access energy and how market participants serve consumers. Likewise, the technology behind DCC systems will continue to evolve, bringing new opportunities but also potential threats. These challenges will together require a future DCC to adapt, evolve and manage change. The new arrangements will therefore need to provide a framework able to appropriately manage uncertainty. Equally, while the review is not driven by the experiences of the past, it is intended to reflect how the arrangements in which the current DCC was set up have changed over time and build on stakeholder and regulatory experience to date in identifying the desired outcomes the future framework should deliver.

Principles of DCC review

In 2021 we issued a call for evidence and carried out stakeholder engagement, including bilateral meetings and workshops, to determine the scope of the DCC review. We have identified five key principles representing the desired outcomes a future regulatory framework should drive. We sought stakeholder feedback on these principles at a workshop. We now consider that any effective future DCC regulatory framework should:

- Drive delivery of a quality, cost-efficient and secure service
- Be customer-centric and consumer-focused
- Enable full accountability and decisive governance
- Allow DCC's role to evolve in an uncertain environment
- Maximise the value of DCC infrastructure by enabling the exploration of assets subject to appropriate control mechanisms.

Through this consultation, we will apply these principles to select from, and assess, different policy options.

Alternative regulatory models

We have identified two broad models for a future regulatory framework of DCC:

- 'Option A' embodies a similar approach to the current DCC regulatory framework. Under this option, we would carry out a redesign of the current model to introduce changes to some of the key parameters of the existing framework, including price control arrangements, governance and incentive regime. This would be followed by a competitive retender of the licence.
- An alternative 'Option B' would involve more extensive changes to the governance of DCC and consist of operation by a not-for-profit organisation accountable to DCC customers through a stakeholder-controlled or independent DCC Board.

We discuss these two broad models, and variants of them, in terms of the following parameters: accountability & control, ownership, cost control & incentives, funding and operational model. We evaluate both models against our principles. We seek stakeholder views on these two models to help shape the design of the DCC future regulatory framework in the next phase of the review.

Transition period considerations

In considering the two broad options for a future framework, we are seeking stakeholder views on whether a licence extension would be required to facilitate their design, implementation and transition, and on the key trade-offs. We also seek stakeholder views on whether certain aspects of a new framework could be introduced during a potential extension period.

There are a number of key dependencies over a possible transition period of 2025-2031 (maximum possible extension of the current licence), which should be taken into account. These include changes to the role of BEIS following the end-date of the current smart meter rollout framework, ongoing reform of industry codes governance, the procurement landscape of DCC's main contracts, and the impact of sunseting of 2G and 3G technology in GB. We invite feedback on these dependencies.

Future role of DCC

We consider that a future DCC should remain focused on the continued delivery of its core business, that is, to provide communications and data services to and from smart meters in a secure, economical and coordinated manner. We seek views on which services should be part of DCC's future Mandatory Business. We propose that these services should continue to be clearly defined in the licence and relevant codes.

We also consider that there may be other types of services, which DCC currently provides or which it may provide in future, but which may not clearly be considered part of its core remit. We seek views on whether DCC should carry out such activities and how they should be treated under the new framework.

Secondly, we propose to explore mechanisms to include in the new framework which would facilitate change in DCC's role and service requirements. We seek views on the types of formal processes that would be followed to enable a controlled change in DCC's role in response to:

- Change in customer expectations & consumer needs
- New policy or regulatory requirements
- Evolving technology

Thirdly, we propose that a future framework should allow exploration of commercial re-use of the smart metering infrastructure under specific circumstances and seek stakeholders' views on:

- What conditions are needed to be fulfilled before enabling this
- Governance routes which best facilitate this

Price control change considerations

As a monopoly company, it is important that DCC's costs are subject to appropriate controls. We have been receiving stakeholder feedback on the continued suitability of the existing *ex-post* price control arrangements for DCC. In general, stakeholders have suggested that a move to an *ex-ante* approach could deliver the following benefits: greater control over budgets; more transparency and accountability to DCC users; making it easier to incentivise efficiency and value for money; greater predictability and more accurate forecasts; and aligning DCC to other regulated monopolies.

Building on this feedback, we assess the effectiveness of both *ex-post* and *ex-ante* regimes, including potential risks and benefits, using the following criteria:

- 1) Dealing with cost uncertainty
- 2) Incentives to control or reduce costs
- 3) Incentives to deliver the right level of performance/quality of service
- 4) Transparency and stakeholder engagement
- 5) Regulatory and resource burden

We seek stakeholder views on our assessment and broader considerations for price control changes, whether on an interim basis during a transition period, or as part of implementation of a new framework.

Next steps

This consultation will conclude the first, 'scoping', phase of the review. On the basis of stakeholder representation we expect to make decisions on what type of regulatory framework we should design in the next phase of the review and whether a licence extension will be required. Following this consultation, the next phase of the review will focus on designing the new regulatory framework. All feedback we receive, including on the future role of DCC and price control considerations, will inform our work on the detail design. However, decisions in these areas will be subject to further consultation process.

We will discuss the proposals and questions presented in the consultation at our virtual stakeholder meeting in October 2022. The invitation to this event is published alongside this consultation. The consultation will remain open until 16 January 2023 to allow stakeholders and other interested parties to express their views, prior to making our final decision in 2023.

1. Introduction

What are we consulting on?

- 1.1. We are consulting on the scope and next steps of our review of the regulatory arrangements for the future Data Communication Company (DCC)¹ ahead of the current licence coming to an end in 2025.
- 1.2. DCC is the term used to refer to the holder of the Smart Meter Communication Licence ("licence"), which was originally awarded by the government in 2013 following a competitive tender. The licence holder is responsible for establishing and operating a secure national communications network for smart metering in Great Britain and operates under the conditions of its licence.
- 1.3. The current licence framework was put in place to establish a body tasked with:
 - Firstly, developing a new centralised, secure GB-wide communications network for exchange of smart meter data
 - And secondly, operating and maintaining the system to enable completion of the smart meter rollout and to foster a competitive environment in the supply of energy and with commercial activities associated with the supply of energy²
- 1.4. DCC was set up to perform this role by managing external contracts with communication service providers delivering the communication network and facilitating the provision of core smart metering services and working with industry stakeholders to ensure efficient end-to-end management of the network. Details on DCC's current role and regulatory framework can be found in Appendix 2.
- 1.5. While DCC's role in delivering the core smart metering services has not fundamentally changed, over time, the circumstances in which the original framework had been put in place have evolved. The smart meter rollout has made significant progress and DCC is

¹ Throughout this consultation we use the terms 'DCC', 'future DCC' and 'licensee'. By 'DCC', we mean the current organisation that is carrying on Authorised Business under the Smart Meter Communication Licence. By 'future DCC', we mean the organisation that will operate under the new regulatory framework. By 'licensee', we mean the licence holder.

² BEIS (2012), Consultation on the Draft DCC Licence and Licence Application Regulations. Accessible at: www.gov.uk/government/consultations/policy-design-of-the-regulatory-and-commercial-framework-for-dcc

now responsible for delivering services to a broad range of users and over 20 million meters across GB.³ Moreover, DCC has taken on additional activities, such as enrolling first generation smart meters and delivering the central systems needed to support faster, more reliable switching. DCC has also become a more mature organisation and the industry as a whole has likewise gained more experience. DCC customers have clearer expectations of what they need DCC to deliver as well as of the standards of service needed to be able to fully unlock all of the potential benefits of smart metering. Going forward, the expectations on DCC's service are likely to develop and change as the energy market continues its transition towards decarbonisation in meeting our Net Zero targets and as the technology enabling the smart metering network evolves. With the current licence coming to an end, a comprehensive review of the regulatory arrangements for DCC is needed to ensure that an effective framework is in place to drive the right future outcomes.

- 1.6. This consultation concludes the first, 'scoping', phase of the review. We are seeking stakeholder views on our identified core principles and outcomes of the review, changes to the regulatory framework to deliver these principles, the future role of DCC under a new framework, options to transition to the new regulatory framework, and initial thinking about changes to the price control arrangements. Following this consultation, the next phase of the review will focus on designing the new regulatory framework.
- 1.7. Below, we set out what individual chapters of this consultation will cover.

Principles and outcomes

- 1.8. This chapter⁴ sets out our identified principles of the review. These represent a set of criteria used to assess different policy options for the new regulatory framework.
- 1.9. The principles are designed to be outcome-based and reflect issues identified through our stakeholder engagement to date. To help reflect stakeholder priorities, each

³ DCC's users (customers) include network companies, small and large energy suppliers, as well as a number of 'other users'. You can find a list of DCC's customers on DCC's website: www.smartdcc.co.uk/our-smart-network/dcc-customers/. You can also view the current list of parties to the Smart Energy Code (not all of whom are current DCC's users) on the SEC website: <https://smartenergycodecompany.co.uk/current-sec-parties/>

⁴ By 'chapter' we mean one of the numbered consultation chapters listed in the table of contents on page 2. By 'section' we typically mean a part of a chapter, unless used in a specific context.

principle carries a relative weighting which will further aid their application in choosing different policy options.

Alternative regulatory models

1.10. Stakeholders have expressed interest in understanding if there is an alternative regulatory model to the existing framework that could help deliver the desired outcomes. In this chapter, we present two broad options for a future regulatory framework for DCC. We are seeking stakeholder views on our assumptions and the effectiveness of these models against our principles. The feedback we receive will help us make a decision on which option should shape the basis of the design of the DCC future regulatory framework in the next phase of the review.

Question 1: Which of the two broad models do you think we should adopt as the basis for our design of the future regulatory framework for DCC and why? What are the features of your preferred option that lead to you to this choice?

Question 2: Do you agree with the way we have applied the principles in our analysis of the options? Please state your reasoning.

Question 3: With regard to Option A, to what extent do you think that changes to the DCC licence alone could provide incentives that result in a third party investor-controlled DCC Board providing the quality and cost of service that DCC customers require, and managing DCC effectively?

Question 4: With regard to Option B, how effective do you think a non-profit-making, stakeholder-controlled or independent DCC Board would be in providing the quality and cost of service that DCC customers require, and managing DCC effectively?

Question 5: Do you have any views on the details of Options A and B?

Transition period considerations

1.11. The DCC review is taking place at a time of significant changes in the energy retail market. This chapter outlines key links and dependencies for the review over a possible transition period of 2025-2031. With the current licence due to expire in September 2025, it is important that any changes to this date by way of a potential licence extension are informed by considerations of key developments. These include timeline and considerations for the process of awarding the licence to a new DCC and

full implementation of a new framework in the context of re-procurement of major service provider contracts, the Energy Code Reform, and changes to the role of BEIS following the end-date of the current smart meter rollout framework. The chapter also discusses whether any changes to the regulatory framework could be introduced during this transition period. Stakeholder representation will help us make a decision on whether a licence extension would be required to enable transition to a new framework.

Question 6: What are your views on the options identified and the associated trade-offs for a possible licence extension?

Question 7: What are your views on the assumptions we have made for Options A and B transition periods?

Question 8: In your view, which of the considerations we have identified for the transition period are the key dependencies and why? Are there any other dependencies that should be considered?

Question 9: What is your view on implementing incremental changes to the regulatory framework during a transition period? Which parts of the regulatory framework would be most suitable for such changes and why? Do you have suggestions for their implementation?

Future role of DCC

1.12. This chapter outlines our considerations for a possible future role of DCC. It aims to establish a common understanding of DCC's role and set out options for defining that role in the new licence framework by taking a three-step approach. First, we seek views on what should be part of DCC's Mandatory Business under the new framework. Secondly, we discuss how to account for future uncertainty and allow for a controlled change in DCC's role driven by changes in technology, customer needs, policy and regulation. Thirdly, we present considerations for whether it would be appropriate to enable a future DCC to pursue any commercial activity beyond the activities specifically defined in the licence, the Smart Energy Code (SEC) or the Retail Energy Code (REC). Stakeholder feedback will help to inform our work in this area during the detail design of a new regulatory framework in the next phase of the review.

Question 10: Do you agree with our proposed scope of future DCC's Core Mandatory Business?

Question 11: Should the future framework permit DCC to carry out any services additional to its Core Mandatory Business? What are your views on the concepts of 'mandated services', 'ancillary services' and 'additional services to users'?

Question 12: Do you agree with our proposed drivers for a controlled change in DCC's role? What are your views on the ways in which evolution of DCC's role can be managed?

Question 13: Do you agree that the future framework should enable exploration of re-use of DCC's infrastructure? What are your views on the specific conditions and measures that may need to be in place to enable it?

Price control change considerations

1.13. This final chapter summarises stakeholder feedback to date on a potential transition to an *ex-ante* regime for DCC price control (under which some, or all, of DCC's revenue would be agreed before its spend). Without pre-empting any specific regulatory model, we discuss broad opportunities and barriers for introduction of *ex-ante* arrangements. Stakeholder representation will help inform our further work on designing new price control arrangements in the next phase of the review.

Question 14: Do you consider that a hybrid model, where some costs are regulated under an *ex-ante* regime and some under an *ex-post* regime based on the level of cost uncertainty, would be appropriate for DCC?

Question 15: What elements of DCC's Allowed Revenue are stable (with low risk of forecasts being either under- or over-estimated) and would benefit most from an *ex-ante* approach by 2025?

Question 16: What are your views on the different ways in which risk (ie the benefit of underspending and the cost of overspending) can be shared between the DCC and its customers under an *ex-ante* regime?

Question 17: What are your views on whether DCC can be effectively incentivised to reduce costs at scale under an *ex-ante* regime?

Question 18: Do you think that moving to an *ex-ante* regime could adversely affect the quality of service? What mechanisms could be used to reduce the risk of underperformance under an *ex-ante* regime (eg provisions to allow clawback in case of delivery failing to meet specifications)?

Question 19: What are your views on how best to assess costs under an *ex-ante* approach? For example: What level of detail on costs and benefits would be appropriate? How early should DCC share details of costs with customers? How should this information be shared and evaluated?

Question 20: Do you agree with our initial view that an *ex-ante* model has the potential to reduce the resource burden both for Ofgem and DCC? Please state why.

Context of the review

Timeline and engagement to date

- 1.14. Work on the DCC review commenced in February 2021 with our call for evidence in the form of a published open letter. Through this open letter we sought early stakeholder

views to inform our approach towards, and the scope of, the review.⁵ In April 2021, we held a series of structured bilateral engagements to help contextualise the evidence.

- 1.15. In June 2021, we hosted a stakeholder workshop where we invited views on our understanding of the range of issues identified through the call for evidence, tested our proposed principles, and explored the extent of changes needed to deliver our principles and if these can be achieved via changing and retendering the licence.
- 1.16. This consultation follows from the work we did last year and sets out further information and questions for stakeholders to consider.

Context of uncertainty of the future policy landscape

- 1.17. The objective of the review is to put in place an effective regulatory framework for a future DCC. As such, the focus of the review is forward-looking, focussing on the period from 2025 to 2040. A key factor in our considerations is therefore inherent uncertainty, both in terms of policy landscape, including future needs of DCC customers and energy consumers, and external factors, such as evolution of technology.

Uncertain policy landscape and changing customer and consumer needs

- 1.18. Smart metering already delivers significant benefits to energy consumers, for example by ending manual meter readings, improving accuracy of billing, empowering consumers to better manage their energy consumption, and improving outcomes for pre-payment consumers.
- 1.19. By 2050, the energy sector as a whole is expected to complete a significant transition to achieve our Net Zero targets and smart meters and smart metering data will be at heart of many of these reforms.⁶ Improved access to consumption data will enable market reforms such as introduction of Market-wide Half Hourly Settlement⁷ creating opportunities for suppliers and innovators to introduce new consumer-focused products and services. These will incentivise and empower consumers to engage in the market

⁵ Ofgem (2021), Call for evidence: Review of the DCC licence arrangements. www.ofgem.gov.uk/publications/call-evidence-review-dcc-licence-arrangements

⁶ For more information, see: BEIS (2021), Plans unveiled to decarbonise UK power system by 2035. www.gov.uk/government/news/plans-unveiled-to-decarbonise-uk-power-system-by-2035

⁷ Ofgem (2022), Electricity Settlement Reform. www.ofgem.gov.uk/energy-policy-and-regulation/policy-and-regulatory-programmes/electricity-settlement-reform

in new ways, for example through the use of smart time-of-use tariffs.⁸ Smart meter data will also help to introduce and integrate technologies key for the transition towards Net Zero. This will become increasingly important over the next 30 years with increase in electricity demand as a result of electrification of transport and heat. For example, DNOs will rely on half-hourly, or even more granular, data to manage demand from EV chargers and integration of small-scale and inflexible sources of generation while maintaining high standards of security of supply. Energy suppliers will require up to date consumption data to be able to offer consumers products supporting the shift of consumption to off-peak times and incentivise them to sell excess power back to the grid.⁹

1.20. In some ways, the requirements on DCC services will remain similar to those today – consumers will continue to expect a GB-wide, reliable, and secure smart metering service and DCC users will continue to require access to data at appropriate levels and timeliness to be able to carry out their business and serve their customers. Ensuring that DCC continues to deliver core smart metering services to its customers is therefore a key outcome of any future regulatory framework.

1.21. However, access to richer data as a result of an advanced rollout of smart meters and the settlement reform,¹⁰ changes in the way consumers engage in the market, and the introduction of new smart-enabled technologies may change the expectations on the type of services DCC delivers. This may include use of smart meter data in support of new business models, some of which will be delivered by new market entrants, not-for-profit research and innovation, as well as policy-setting and regulation. Owing to its position at the centre of the GB-wide smart meter communication network, DCC may also be asked by the government or Ofgem to deliver future policy initiatives.¹¹ While some of these developments may be anticipated, the exact form they will take remains uncertain.

⁸ BEIS (2020), Energy white paper: Powering our Net Zero future, pp.21-22.
www.gov.uk/government/publications/energy-white-paper-powering-our-Net-Zero-future

⁹ For more information, see for example Ofgem (2020), Decarbonisation Action Plan.
www.ofgem.gov.uk/publications/ofgems-decarbonisation-action-plan

¹⁰ For more information, see Ofgem, Electricity Settlement reform. www.ofgem.gov.uk/energy-policy-and-regulation/policy-and-regulatory-programmes/electricity-settlement-reform

¹¹ DCC has already been mandated to help deliver Market-wide Half-Hourly Settlement and has a role in implementing the Switching programme. The government is currently considering the use of the DCC network for a GB-wide rollout of EV-charging. See BEIS (2019), Electric vehicle smart charging.
www.gov.uk/government/consultations/electric-vehicle-smart-charging

- 1.22. A future framework will therefore need to ensure that DCC can both continue to provide its core services and be prepared to anticipate, respond to, and manage changing requirements. We discuss the implications of this inherent uncertainty in chapters 2 and 5 in the context of our key principles and considerations for the future role of DCC.

Continued evolution of smart metering technology

- 1.23. In our engagement to date, some stakeholders have expressed views that a future DCC should transition towards stable operations with predictable costs and timelines. Indeed, the current framework for the smart meter rollout is expected to end in 2025 with key systems having been set up, all core functionality delivered and running at scale.¹² However, DCC will have an enduring role in ensuring that its network remains functional, reliable and secure. New challenges, both foreseeable and unexpected, are likely to arise as a result of evolving technology and user needs. Change management will therefore be a crucial aspect of future DCC's 'business as usual' operations.
- 1.24. Predictably, key aspects of the infrastructure will need to be updated on an ongoing basis to keep up with technological change. For example, in the medium term, as 2G and 3G service network service provision reaches its sunset date, 2G communication hubs will need to be upgraded to a 4G equivalent.¹³ DCC will need to follow a clear strategic direction with priorities aligned to the wider industry and be capable of careful execution of necessary changes.
- 1.25. Evolving technology will also give rise to new, potentially unexpected challenges, particularly, in the area of cyber-security. With over 55m meters expected to be connected to the DCC network and with the paramount position of the smart metering architecture in enabling key decarbonisation reforms, DCC will need to ensure that its systems remain secure. This will require ongoing work to anticipate and adapt to new threats.

¹² Wider Area Network (WAN), which enables smart meters to connect to the DCC network, reached >99% of properties across GB in 2021. See DCC (2021), Statement of Service Exemptions. www.smartdcc.co.uk/media/6376/dcc_statement_of_service_exemptions_2021-v10.pdf.

Similarly, solutions such as Dual Band Communication Hubs and Alt-Han, are being developed and rolled out to maximise the coverage of Home Area Network (HAN) in homes and businesses. The Enrolment and Adoption programme is also expected to conclude by 2025.

¹³ The sunset date for 2G/3G is 31 October 2033. DCC has already initiated a programme to procure 4G capable communications hubs and relevant services.

1.26. These considerations highlight the underlying need for any new framework to manage uncertainties in a way that enables a future DCC to continue to fulfil its role.

Links and dependencies

1.27. The current DCC licence is due to expire in September 2025. Under the provision of the Smart Meter Communication Licence, the Authority has the power to extend the licence for up to 6 years.¹⁴ There may be circumstances under which it could be appropriate to exercise this power, for example to facilitate a handover to a new licensee, to more effectively implement significant overhaul of the regulatory arrangements or to account for other in-flight change. We discuss these considerations in more detail in chapter 4. Nevertheless, it is important to note that there are certain key developments over the period 2025-2031, which are central to all considerations for a possible 'transition period'.¹⁵ These include:

- The appropriate point for implementation in DCC's live operations, in particular key milestones in expiry of certain main contracts and procurement or replacement relevant service capability by DCC
- The implementation of the Energy Code Reform
- The winding down of BEIS-led transitional governance

1.28. DCC manages a number of large contracts with external service providers. These include contracts with the Fundamental Service Providers (FSPs),¹⁶ SMETS1 service providers facilitating the enrolment and continued operation of first generation smart meters, along with other contracts, for example to maintain security of the infrastructure. Some of these contracts will start to expire over the period 2025-2031, necessitating their re-procurement in some cases. Equally, new contracts may need to be negotiated to support new capabilities. It is crucial that these procurements are carried out with a long-term strategic vision and that DCC is able to derive value for

¹⁴ Smart Meter Communication Licence, Part 1, Section C, paragraphs 6-10.
<https://epr.ofgem.gov.uk/Content/Documents/Smart%20DCC%20Limited%20-%20Smart%20Meter%20Communication%20Consolidated%20Licence%20Conditions%20-%20Current%20Version.pdf>

¹⁵ By a 'transition period' we mean any period of time between the natural expiry of the current licence in September 2025 and the appointment of a new licensee.

¹⁶ FSPs include contracts with Communication Service Providers (CSPs), who maintain the SM-WAN communication network across GB and deliver communications hubs, and the Data Service Provider (DSP) who provides key data services.

money from these contracts. We therefore take into account DCC carrying out or preparing for these procurements as an important consideration for any transition period.¹⁷

- 1.29. The Energy Code Reform is a joint Ofgem-BEIS initiative aiming to reform the governance of the industry codes, to establish a codes framework that is forward-looking, agile, and able to facilitate the transition to Net Zero.¹⁸ The changes, being introduced through the Energy Security Bill, will impact the governance of the Smart Energy Code (SEC) and the Retail Energy Code (REC), which may have knock-on implications for the DCC review. We consider that these reforms have the potential to support the delivery of our desired outcomes for DCC's governance and we will seek alignment on our proposals. However, the timetable for these reforms, including the appointment of new licenced code managers, may also play a role in our considerations for any transition period.¹⁹
- 1.30. By the expected endpoint of the current rollout framework, the vast majority of smart meters will have been installed; in this context we anticipate changes in BEIS's role in the Smart Meter Implementation Programme (SMIP). This includes a planned change in BEIS's continued role in driving and assuring DCC programmes and operations. This change will have implications for any transition period and is a key consideration for putting in place enduring governance and oversight arrangements under a new framework.

¹⁷ We discuss these considerations in more detail in chapter 4 on the transition period. An overview of the procurement landscape over 2025-2031 can be found in Appendix 4.

¹⁸ The key areas of reform include: providing strategic direction; empowered and accountable code management; independent decision-making; and code consolidation and simplification. See BEIS (2022), Energy Code Reform: governance framework.

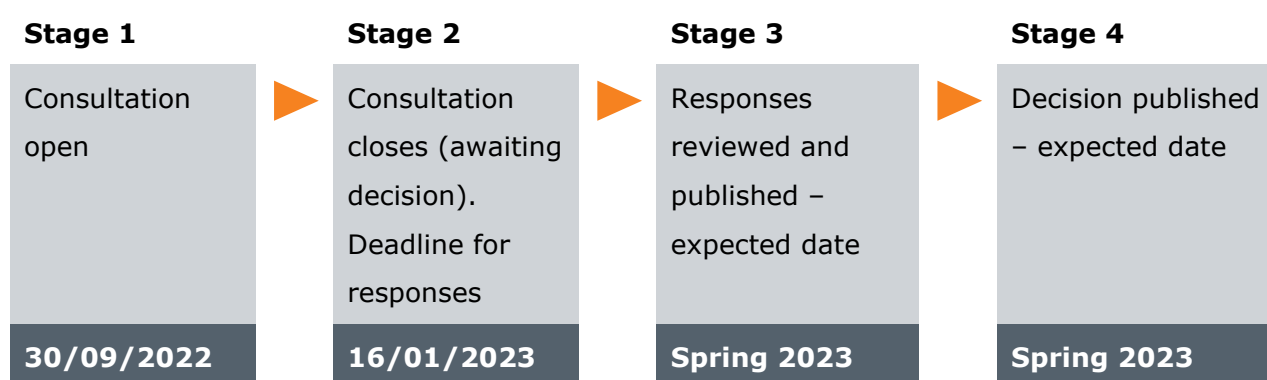
www.gov.uk/government/consultations/energy-code-reform-governance-framework

¹⁹ Overview of the key interactions between the changes proposed under the Code review and the DCC review is discussed in chapter 4 on the transition period.

Consultation stages

- 1.31. This consultation opens on 30 September 2022 and will close on 16 January 2023. Following our review of stakeholder representation, we expect to make a decision in the spring 2023, subject to internal governance.
- 1.32. We expect to run a stakeholder workshop to discuss the consultation questions. Invitation to this workshop will be published on our website alongside this consultation document.

Figure 1.1: Consultation stages



How to respond

- 1.33. We want to hear from anyone interested in this consultation. Please send your response to the person or team named on this document's front page.
- 1.34. We have asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.
- 1.35. We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

Your response, data and confidentiality

- 1.36. You can ask us to keep your response, or parts of your response, confidential. We will respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.

- 1.37. If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you *do* wish to be kept confidential and those that you *do not* wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we will get in touch with you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.
- 1.38. If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the UK's withdrawal from the European Union ("UK GDPR"), the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 6.
- 1.39. If you wish to respond confidentially, we will keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We will not link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

General feedback

We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We would also like to get your answers to these questions:

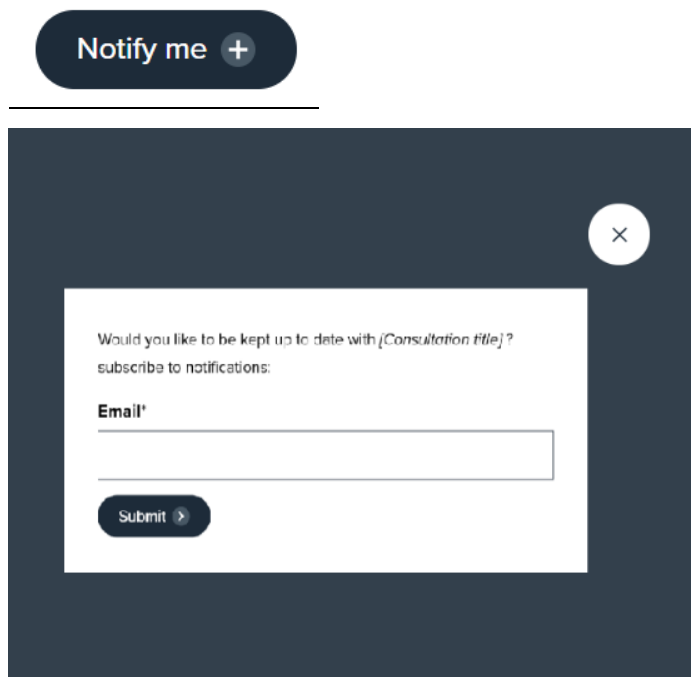
1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Were its conclusions balanced?
5. Did it make reasoned recommendations for improvement?
6. Any further comments?

Please send any general feedback comments to stakeholders@ofgem.gov.uk

How to track the progress of the consultation

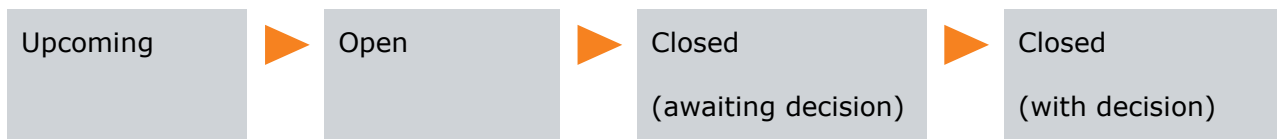
You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website:

[Ofgem.gov.uk/consultations.](https://www.ofgem.gov.uk/consultations)



The image shows a dark blue button labeled 'Notify me' with a white plus sign. Below it is a dark blue modal box with a white 'X' in the top right corner. Inside the modal is a white form with the text 'Would you like to be kept up to date with [Consultation title]?' and 'subscribe to notifications:'. Below this is a text input field labeled 'Email*' and a dark blue 'Submit' button with a white right arrow.

Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:



2. Principles and outcomes

Chapter summary

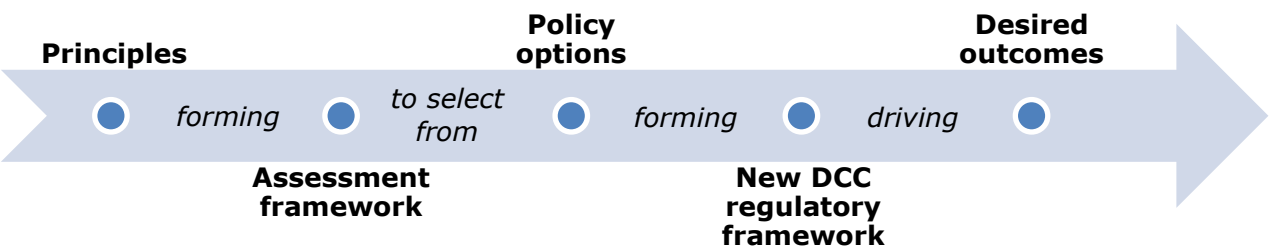
In 2021 we engaged with stakeholders to determine the scope of the DCC review. We identified five key principles representing the desired outcomes that a future regulatory framework should drive and sought stakeholder feedback on these principles at a workshop. We now consider that any effective future regulatory framework should:

- Drive delivery of a quality, cost-efficient and secure service
- Be customer-centric and consumer-focused
- Enable full accountability and decisive governance
- Allow DCC’s role to evolve in an uncertain environment
- Maximise the value of DCC infrastructure by enabling the exploration of assets subject to appropriate control mechanisms.

We apply these principles to select from, and assess, different policy options.

- 2.1. The objective of the DCC review is to develop an effective regulatory framework that is fit for purpose to underpin DCC’s role over 2025-2040. We consider that a principles-driven approach, which allows for an objective application of pre-agreed high-level priorities, is appropriate for shaping a future regulatory framework for DCC.
- 2.2. We have identified 5 key principles that we deem an effective framework should follow. As visualised in Figure 2.1 below, these principles are designed to create a set of criteria which we can apply to assess a range of potential policy options for the future DCC framework to identify those that best deliver the right outcomes.

Figure 2.1: Visualising the policy process



Development of principles

2.3. In developing the principles, we have considered a range of key inputs, including:

- Stakeholder feedback, priorities, issues and comments raised in response to our call for evidence.²⁰ For more detail on how stakeholder feedback informed the development of our principles, please see Appendix 1
- Ofgem’s strategy and priorities for the retail market²¹
- Government’s intent and considerations for DCC’s role and regulation set out in public consultations preceding DCC’s creation in 2013²²
- Views of internal expert advisory board

2.4. The principles have been designed to meet two tests:

- First, the principles should be mutually exclusive and collectively exhaustive
- Secondly, they should help us distinguish between, and assess, different policy options to select those that would best deliver desired outcomes

2.5. In June 2021, we sought views on five proposed draft principles at a stakeholder workshop. These were as follows:

- (1) Driving delivery of a quality, cost-efficient and secure service
- (2) Being customer-centric and consumer conscious
- (3) Enabling clear accountability and governance

²⁰ Ofgem (2021), Call for evidence: Review of the DCC licence arrangements.

www.ofgem.gov.uk/publications/call-evidence-review-dcc-licence-arrangements

²¹ For latest strategy, see Ofgem (2022) 2022/23 Ofgem Forward Work Programme.

www.ofgem.gov.uk/publications/202223-ofgem-forward-work-programme

²² Please see Department of Energy and Climate Change (2012), Smart Metering Implementation Programme Consultations (Archived).

https://webarchive.nationalarchives.gov.uk/ukgwa/20121217154910/http://www.decc.gov.uk/en/content/cms/consultations/cons_smip/cons_smip.aspx#

(4) Allowing DCC's role to evolve in an uncertain environment

(5) Maximising the value of DCC infrastructure (by enabling the exploration of re-use of assets)

2.6. We presented these high-level principles alongside their more detailed features.

Overall, stakeholders endorsed our principle-driven approach to identifying, assessing, and selecting a new framework. The majority of stakeholders agreed with the proposed principles in terms of their scope, driving the right outcomes, and ability to help identify and assess different policy options.²³ No stakeholder expressed a disagreement; however, some suggested amendments to refine specific detailed features of individual principles in order to better capture stakeholder views and improve the intended application of the principles as an assessment framework. The main points of stakeholder feedback included:

- Ensuring that principles are outcome-focused
- Better recognition in the principles of different and evolving needs of the full range of DCC customers across GB geography
- Stronger emphasis on the central position of the end-consumer, particularly in terms of receiving quality smart meter service
- Clearer reference to transparency of costs and processes
- Reflection of the importance of appropriate risk allocation and overall accountability across the smart metering ecosystem
- Enshrining governance arrangements that are harmonised and aligned with wider industry policy and regulatory arrangements
- Improved clarity on the principles designed to guide evolution of DCC's role

²³ In an anonymous polling exercise, 41% of stakeholders agreed and 59% somewhat agreed that our principles were sufficient to drive the right outcomes for the DCC service over the period 2025-2040. 56% of stakeholders agreed and 44% somewhat agreed that the proposed principles would help us identify and assess different policy options. See Appendix 1, Figures A1.1 and A1.2 for more details.

- General feeling that core service must remain a priority for DCC, but agreement in principle on enabling the exploration of re-use of DCC's infrastructure, subject to appropriate criteria and conditions

2.7. We reflected this feedback and incorporated stakeholders' views into our revised final draft, presented in Table 2.1 below.

2.8. Some stakeholders felt that there were overlaps between certain principles, noting that successful outcomes in one area may drive outcomes in another. In particular, one stakeholder highlighted a link between effective governance & accountability and strong customer engagement outcomes. We acknowledge that there are interlinkages between individual principles. However, as noted, the principles have been designed with a view to explore trade-offs of different models. We are confident that by separating otherwise related attributes, we can further the utility of the principles in their application. To that end, we further proposed assigning each principles a relative weighting.

Assigning relative weighting

2.9. In applying the principles, a relative weighting can enable us to better contrast the outcomes of different policy options while placing emphasis on specific priority areas. We sought stakeholder views on this matter at the June 2021 workshop. While there were some who argued for equal weighting across the board, the majority of stakeholders supported our proposal and ranked the principles in order of their relative importance in a poll.²⁴

2.10. On the basis of stakeholder ranking of individual principles, we have assigned each principle the following weighting:

- Principle 1 (Drive delivery of a quality, cost-efficient and secure service) and Principle 2 (Be customer-centric and consumer-focused) shall each have a weighting of **0.3**
- Principle 3 (Enable full accountability and clear governance) shall be weighted at **0.2**

²⁴ For details, please see Appendix 1, paragraphs A1.19-A1.21 and Figure A1.3

- Principle 4 (Allow DCC's role to evolve in an uncertain environment) and Principle 5 (Maximise the value of DCC's infrastructure) shall each have a weighting of **0.1**

Final principles and outcomes

2.11. Upon considering stakeholder feedback, we have finalised the five principles as presented in Table 2.1 below. Each principle comprises detailed features, which can be understood as key desired outcomes that an effective future regulatory framework should drive. As outlined above, the relative weighting is derived from the outcome of a stakeholder poll, reflecting a broad consensus on priority areas.

Table 2.1 Principles of the DCC review

Principles & weighting	Detailed features
1. Drive delivery of a quality, cost-efficient and secure service: ensure customers receive efficient, reliable, secure and coordinated smart metering service; equip and incentivise DCC to deliver value for money, anticipate and manage change, and deliver against its strategic goals Weighting: 0.3/1	DCC customers must derive clear benefit from their investment in the smart metering infrastructure through a GB-wide efficient, reliable, secure and coordinated smart metering service. This includes having access to accurate and timely data from DCC to support their decision-making.
	The framework should ensure cost transparency and efficiency of processes; it should incentivise and equip DCC to manage the cost-quality-timeliness trilemma.
	It should provide DCC with tools and incentives to anticipate and manage change, including anticipating and managing any necessary changes to its capacity and capability, and deliver against strategic goals.
2. Be customer-centric and consumer-focused to give DCC customers confidence that DCC's activities are aligned with	The framework should ensure that DCC's activities are based on DCC's customers' evolving expectations and enable DCC customers to engage with and shape DCC's activities in a meaningful way that is not unduly burdensome.

<p>their expectations and based on consumer needs</p> <p>Weighting: 0.3/1</p>	<p>It should reflect needs of all DCC users and ensure they have access to the smart metering services they are entitled to receive.²⁵</p> <p>While DCC does not have a direct relationship with end-consumers, the framework should have regard for consumer interest and protection and reflect the impact of DCC's service on end-consumer experience. It should recognise DCC's role in delivering a service crucial for consumers' ability to make use of the smart metering benefits and the behaviour change needed for a transition towards Net Zero.</p>
<p>3. Enable full accountability and decisive governance: ensure roles and responsibilities in DCC's governance arrangements are clearly defined, there are clear lines of accountability, and DCC is aligned with industry, regulatory and wider energy policy, while having sufficient operational independence to deliver day-to-day service</p> <p>Weighting: 0.2/1</p>	<p>The framework should enable clearly defined and transparent roles and responsibilities in relation to DCC governance and accountability. This includes accountability for third-party procurement and performance, and for the delivery of expected outcomes, as well as appropriate allocation and management of risk.</p> <p>Governance should be aligned with other relevant industry regulatory arrangements. DCC's strategy should be set in a way that places DCC in the context of a whole system change and is aligned with wider energy policy strategy.</p> <p>Effective governance should drive agility and give DCC sufficient operational independence to deliver the day-to-day service, while providing strong links to the wider policy, regulatory and industry environment to avoid short-term thinking and decision making.</p>
<p>4. Allow DCC's role to evolve in an uncertain environment: capture the scope of DCC's role and provide flexibility for its transparent evolution in an</p>	<p>DCC's customers should have sufficient transparency and confidence in terms of how DCC's role is defined and will evolve to consider DCC activities deliver value for money.</p> <p>The framework should provide clarity on the scope of DCC's role, including its core functions, and reflect what type of organisation stakeholders want DCC to be.</p>

²⁵ This is currently defined in the Smart Energy Code (Schedule I).

<p>uncertain future environment, while accounting for DCC's monopoly position</p> <p>Weighting: 0.1/1</p>	<p>The regulatory framework should have sufficient flexibility to account for uncertainty in terms of how DCC's role and activities may need to evolve in response to future consumer needs, customer expectations, technological change, and policy requirements.</p>
	<p>There should be checks and balances to mitigate against inappropriate growth or scope creep and prevent DCC from using its monopoly position to foreclose otherwise competitive markets through its licensable activity.</p>
<p>5. Maximise the value of DCC infrastructure by enabling the exploration of re-use of assets subject to appropriate control mechanisms, which should protect the provision of fundamental service and competition, and ensure fair distribution of risk and reward</p> <p>Weighting: 0.1/1</p>	<p>In addition to maximising the value of existing assets through delivering a quality service, the framework should enable exploration of appropriate re-use of the infrastructure.</p>
	<p>Any re-use should be subject to criteria, including satisfactory delivery of the existing core service, and control mechanisms to ensure that activities and services fundamental to serving energy consumers continue to be safeguarded and prioritised, and competitive environment is protected.</p>
	<p>The framework should include provisions for funding and governance of any additional services, and appropriate allocation of risk and reward between DCC, its customers and any third parties.</p>

2.12. In designing and delivering a new framework, we will follow the principles of better regulation.²⁶ These include, but are not limited to, accountability and transparency of the process, and proportionality (including feasibility and considerations for regulatory burden) and consistency (including following Ofgem's future regulatory strategy)²⁷ of outcomes.

2.13. DCC is a natural monopoly. It is therefore crucial that throughout the process, where possible the principles of fair and effective competition are followed to ensure best

²⁶ BEIS (2018), Better regulation framework (Guidance). www.gov.uk/government/publications/better-regulation-framework

²⁷ See Ofgem (2022), 2022/23 Ofgem Forward Work Programme. www.ofgem.gov.uk/publications/202223-ofgem-forward-work-programme

possible outcomes. This includes in particular a transparent process for selecting and appointing a successor to the current DCC.

3. Alternative regulatory models

Chapter summary

We have identified two broad models for a future regulatory framework of DCC:

- 'Option A' embodies a similar approach to the current DCC regulatory framework. Under this option, we would carry out a redesign of the current model to introduce changes to some of the key parameters of the existing framework, including price control arrangements, governance and incentive regime. This would be followed by a competitive retender of the licence.
- An alternative 'Option B' would involve more extensive changes to the governance of DCC and consist of operations by a not-for-profit organisation accountable to DCC customers through a stakeholder-controlled or independent DCC Board.

We discuss these two broad models, and variants of them, in terms of the following parameters: accountability & control, ownership, cost control & incentives, funding and operational model. We evaluate both models against our principles. We seek stakeholder views on these two models to help shape the design of the DCC future regulatory framework in the next phase of the review.

Questions

Question 1: Which of the two broad models do you think we should adopt as the basis for our design of the future regulatory framework for DCC and why? What are the features of your preferred option that lead to you to this choice?

Question 2: Do you agree with the way we have applied the principles in our analysis of the options? Please state your reasoning.

Question 3: With regard to Option A, to what extent do you think that changes to the DCC licence alone could provide incentives that result in a third party investor-controlled DCC Board providing the quality and cost of service that DCC customers require, and managing DCC effectively?

Question 4: With regard to Option B, how effective do you think a non-profit-making, stakeholder-controlled or independent DCC Board would be in providing the quality and cost of service that DCC customers require, and managing DCC effectively?

Question 5: Do you have any views on the details of Options A and B?

Background

- 3.1. Following our Call for evidence, we discussed with stakeholders the extent to which a retender of the DCC licence, with changes, could deliver against the principles set out in chapter 2. We also gauged the appetite of stakeholders for exploring more radical options which might have a greater potential to deliver improved outcomes.
- 3.2. In considering possible alternative regulatory frameworks for DCC, we have considered the following:
- Stakeholder feedback in response to our call for evidence – more details can be found in chapter 2 ('Principles and outcomes') and Appendix 1
 - Changes to the governance of industry codes under an ongoing Energy Code Reform – discussed in chapter 4 ('Transition period considerations')
 - Context of regulation put in place for the Future System Operator (FSO) – for more details, see Appendix 3
 - Context of regulatory arrangements for Elexon – see Appendix 3

- Other industry models – see Appendix 3

3.3. Our analysis has led us to shortlist two broad models, which we call Option A and Option B. Firstly, we outline the key features of these models in terms of five parameters: ownership, accountability & control, cost control & incentives, funding and operation model. These parameters correspond to the assessment framework we employed in our stakeholder workshop. An overview of how the two options compare across the five parameters is set out in Table 3.1 below. For more details on the current regulatory framework, please see Appendix 2.

3.4. We then assess these models against the principles identified in chapter 2. Table 3.2 at the end of this chapter provides a high-level summary of this assessment.

3.5. The feedback we receive will help shape the design of the DCC future regulatory framework in the next phase of the review.

Table 3.1: Overview of Options A and B

Parameter	Option A	Option B
Ownership	<ul style="list-style-type: none"> • Third-party shareholder 	<p>Options include:</p> <ul style="list-style-type: none"> • All or a subset of SEC & REC Parties • Public ownership • One or more specific industry parties
Accountability & Control	<ul style="list-style-type: none"> • Board majority controlled by owner • Minority independent or industry-appointed Board representation • Subject to conditions of Ofgem-awarded licence 	<ul style="list-style-type: none"> • Stakeholder-controlled²⁸ or independent Board with scope for Ofgem appointments (eg chair and possibly CEO) • Potentially Ofgem approval required for business plans and budgets • Subject to conditions of Ofgem-awarded licence
Cost control & Incentives	Options include a combination of <i>ex-ante</i> and <i>ex-post</i> approaches to cost control, for example:	<ul style="list-style-type: none"> • Budgets determined by the Board, potentially subject to customer

²⁸ Please note, we use the terms 'DCC customers' and 'DCC users' interchangeably in this chapter. By 'stakeholder-controlled' Board, we mean a Board composed of the representatives of DCC customers (with a potential consumer representation).

	<ul style="list-style-type: none"> • <i>Ex-ante</i> price control for established ongoing operational costs of sufficient certainty • <i>Ex-post</i> price control for areas with uncertainty, eg early-life programmes or exceptional activities • A range of upside or downside incentives on DCC's performance and delivery 	<p>consultation and Ofgem approval (no formal price control)</p> <ul style="list-style-type: none"> • Stakeholder-controlled or independent Board acting in the interest of DCC customers in order to deliver quality of service at appropriate cost • Ofgem may retain the power to remove directors or sack the Board as the ultimate sanction
Funding	<ul style="list-style-type: none"> • Continued funding from industry charges for core services, with corporate debt and/or owner-provided equity and loan guarantees, as required • Potential for separate funding of any commercial re-use 	<ul style="list-style-type: none"> • Continued funding from industry charges for core services; industry indemnities allow borrowing at low cost • Potential for risk capital to be raised for ring-fenced activities with project finance style arrangements, eg for additional activities and/or commercial re-use
Operational Model	<ul style="list-style-type: none"> • Decisions on in-house vs contracting out taken on case-by-case basis by the Board, subject to limits imposed through the licence • Evidence of efficient contracting out necessary for activities covered by <i>ex-post</i> controls • Potential for more scope for DCC discretion for <i>ex-ante</i> controlled activities 	<ul style="list-style-type: none"> • Decisions on in-house vs contracting out taken on case-by-case basis by the Board, subject to limits imposed through the licence

Option A

3.6. The first model we outline is a variation of the current DCC regulatory framework. It continues with a third party-owned licensee, appointed through a competitive tender, and subject to a price control.

3.7. However, there are a range of enhancements that can be implemented. They take account of the feedback we received in response to the call for evidence and through stakeholder engagement, and aim to strengthen DCC's incentives to deliver quality and

cost-effective service, improve accountability to DCC customers and ensure uncertainty can be managed by allowing for a controlled change in DCC's role over time.

Ownership, Accountability and Control

- 3.8. DCC is currently owned by Capita, who is the holder of the Smart Meter Communication Licence. Under Option A, we expect a competitive retender to appoint a successor licensee. For avoidance of doubt, we would not want to restrict the types of organisations eligible to fulfil the DCC role and so would welcome tenders from a variety of organisations. However, we note the challenges of designing a competition that compares both for-profit and not-for-profit tenders and accommodates incentive structures appropriate for different types of organisations. It is likely that Option A will mostly attract tenders from investor-owned businesses, whose objective is to earn a return for their shareholders.
- 3.9. While DCC is privately owned, it operates as a standalone entity with its Board determining the day-to-day operations, including how DCC delivers its business. The current DCC Board is majority parent-controlled; however, the licence requires it to have at least two members who are "sufficiently independent" of the licensee and of its affiliates or related undertakings.²⁹ In order to better represent the interests of, and provide accountability to, DCC customers, a possibility under this Option A would be to have one or more industry-appointed Board members, either in addition to or instead of independent Board members. A further possibility would be to also include one or more Board members directly representing consumers.
- 3.10. Nevertheless, the extent to which minority representation can have a tangible impact on Board decisions may remain a challenge. Equally, the extent to which a shareholder of DCC could be prepared to dilute its control of DCC's operations before undermining the value of their investment will be limited.
- 3.11. In recognition of views expressed in the call for evidence, we would anticipate a review of DCC's objectives specified in its licence. In particular, a number of stakeholders have commented that DCC's objectives need to be matched to those of DCC customers. They commented that DCC needs to concentrate on providing an improved

²⁹ Smart Meter Communication Licence, Licence Condition 9.14.
<https://epr.ofgem.gov.uk/Content/Documents/Smart%20DCC%20Limited%20-%20Smart%20Meter%20Communication%20Consolidated%20Licence%20Conditions%20-%20Current%20Version.pdf>

and stable core service, before seeking to provide additional services. We discuss this in more detail in chapter 5: Future role of DCC (see especially section titled 'Commercial re-use considerations').

- 3.12. Stakeholders responding to the call for evidence also cited the need for improved customer engagement, and for better visibility of planned developments and projected costs. Subject to consultation, licence conditions could be specified placing obligations on the DCC in this regard.

Incentives

- 3.13. Option A would continue to rely on the licence to direct DCC's actions and provide financial incentives through a price control to both contain costs and provide an appropriate quality of service.
- 3.14. Over the past few price control cycles, as well as in response to our call for evidence, many stakeholders have expressed concerns about DCC operations continuing to be subject to exclusively *ex-post* price control. Stakeholders have suggested that a move towards an *ex-ante* approach (where costs are agreed before they are incurred), for some or all areas of DCC's activity, should be considered.
- 3.15. We consider that a feature of Option A could be to introduce an *ex-ante* price control for a proportion of DCC's operational costs. This could be accompanied by a process of *ex-ante* consultation and engagement whereby DCC's business plans and costs can be scrutinised prior to an *ex-ante* price control determination.
- 3.16. Nevertheless, we recognise that there would continue to be a need to undertake delivery of major changes and special projects whose costs are more uncertain than the costs of ongoing core services. Given their inherent uncertainty, it may be appropriate to introduce a hybrid regime, combining *ex-post* and *ex-ante* approaches to relevant parts of DCC's business. We discuss the benefits and risks of both *ex-ante* and *ex-post* regimes in chapter 6 ('Price control change considerations').
- 3.17. In 2020, we consulted on increasing DCC's revenue at risk in the Operational Performance Regime (OPR).³⁰ We concluded that, at that time and for the current DCC,

³⁰ Ofgem (2020), Consultation on increasing DCC's revenue at risk against the Operational Performance Regime (OPR). www.ofgem.gov.uk/publications/consultation-increasing-dccs-revenue-risk-against-operational-performance-regime

it would not be appropriate to increase the revenue at risk to the extent that DCC could make a loss with poor performance under the OPR.³¹ Nevertheless, for the future regulatory framework we could consider a range of options to strengthen DCC's incentives, notwithstanding its asset-light nature; for instance by requiring shareholder or parent company guarantees to cover the possibility of losses for poor performance.

Funding

- 3.18. Funding for DCC's core services would continue to be primarily through charges on its users. Given the operational model of contracting out for most of the services DCC needs, relatively little capital would be required. Nevertheless, in certain circumstances it may be appropriate for DCC's shareholder(s) to inject equity, or for DCC to issue corporate debt with appropriate guarantees provided by the parent company.
- 3.19. We recognise separate funding arrangements may be required to enable any commercial re-use of DCC's infrastructure. We discuss this in more detail in chapter 5 ('Future role of DCC').

Operational Model

- 3.20. In general, we envisage that the current operational model requiring DCC to primarily procure services from External Service Providers (with a discretion afforded to DCC Board to decide on in-house provision of certain services subject to limitations imposed by the licence) would continue. Compelling DCC to conduct an open tendering process would remain a means of ensuring that the costs of providing these services were reasonable and transparent. While changes to give DCC customers better transparency of business plans and projected costs could provide some improvement over the current arrangements, we do not think these changes would be sufficient to move away from the current operational model towards a model where DCC provides most services in house.

Option B

- 3.21. In response to stakeholder feedback, we have considered options for an alternative model, which may deliver to our principles through more significant changes to the

³¹ Ofgem (2021), Decision on increasing DCC's revenue at risk against the Operational Performance Regime (OPR), paragraph 2.9. www.ofgem.gov.uk/publications/decision-increasing-dccs-revenue-risk-against-opr

regulatory arrangements for DCC.³² While Option A achieves accountability and incentives through the licence, Option B, although also licensed, relies on control of DCC by, and accountability to, its users to drive performance.

Accountability and Control

- 3.22. In Option B, the DCC Board would represent DCC's principal stakeholders, being the users of DCC services. If appropriate, one or more Board members representing the interests of end consumers could be also appointed. The Board, supported by appropriate articles of association, would then be expected to act in the best interests of its stakeholders, particularly in terms of providing users with an appropriate quality of service at a reasonable cost.
- 3.23. Under Option B, the Board would represent the interests of the stakeholders directly (ie a 'stakeholder-controlled Board'), rather than relying on a price control to reflect those interests indirectly through incentives on DCC's shareholders. The Board would then oversee and direct management to run the business to best effect, using a light-touch or more involved approach, or a combination of the two, as it deemed appropriate.
- 3.24. In principle, a Board comprising members who are independent of industry or any other relevant affiliation could also act in the same manner. This is the model adopted in US ISOs and being considered also for the GB Future System Operator (FSO). This model could also be considered under Option B, although the accountability to DCC customers (and consumers) may not be as clear as it would be with a stakeholder-controlled Board.
- 3.25. It is relevant to consider whether DCC acting in the best interests of the users of DCC services would be in the interests of all possible stakeholders, including potential future users of DCC services and end customers. The SEC and the REC, managed by relevant licensed code managers following the code reform changes, will continue to determine what DCC is required to do, and what services it must provide. The DCC Board's control will extend only to how DCC does these things and how services are delivered. Nevertheless, given the central role of the DCC Board, we could envisage Ofgem having the right, in certain circumstances, to appoint, approve or remove the DCC Board Chair and possibly also the Chief Executive, and have oversight or exercise

³² For more details on our analysis of alternative regulatory models, please see Appendix 3.

approval of certain DCC activities, such as business plans and costings. Similar to Option A, to ensure that consumer interests are protected, a direct consumer representation on the Board could also be considered.

- 3.26. With an independent Board, a suitable appointments process would be needed, not only for the DCC Board Chair, but also for the other Board members. In the absence of the direct accountability to stakeholders of a stakeholder-controlled Board, additional attention might need to be paid to the motivation and incentive of individual Board members.
- 3.27. While Option B would place the emphasis on the stakeholder-controlled or independent Board in the management of DCC, the licence would continue to provide Ofgem with the means to impose obligations on DCC, in addition to the power to issue directions proposed as part of Energy Code Reform.

Ownership

- 3.28. A DCC controlled by a stakeholder-majority Board may not be an attractive proposition to a third-party investor. Consequently, we would not envisage ownership by an investor owner under Option B.
- 3.29. Separation of ownership and control has already been tested in the case of Elexon. While NGESO owns Elexon, it exerts no control over it, nor does it derive any financial benefit. Accordingly, we believe the decision on the future ownership of DCC may be of secondary importance to the decision on who exercises control over DCC. A number of ownership options could be possible, including:
- ownership by all, or a subset of, the SEC and REC Parties
 - public, ie government ownership
 - ownership by one or more specific industry parties
- 3.30. The first two of these ownership options are currently being considered for Elexon, whereas the third option is similar to the existing arrangements for Elexon and Xoserve. In contrast to governance, we would note that the question of ownership of Elexon and Xoserve has not been seen as controversial. Indeed, the recent consultation on the future ownership of Elexon has been driven purely by the creation

of the Future System Operator (FSO) and its proposed ownership structure.³³ At present, we view potential ownership of DCC by one or more industry parties as more likely due to the established government policy that new public bodies should only be created where no viable alternative exists.³⁴ For avoidance of doubt, depending on the selected ownership option, the licence award process could take the form of a competitive retender exercise among eligible parties, an eligibility criteria-based licence application process, or potentially a direct licence award.

Incentives

- 3.31. We consider that arrangements under Option B would not require any explicit financial incentives on the organisation to drive quality of service. Incentive structures of complex operations can be difficult to design and imperfections can have unintended consequences. Under Option B, it is expected that the DCC Board would be able to respond to the needs of DCC users through the accountability route, thus removing reliance on an incentive structure. This also addresses the challenge of incentivising an asset light organisation like DCC.
- 3.32. Broadly, the DCC Board, acting in the interests of DCC users, should also be concerned that costs are efficiently incurred, as it is DCC users that will incur these costs through DCC charges. One exception, though, is the extent to which there are DCC charges that impinge on all DCC users equally. Any such common charges will not affect the competitive position of any one DCC user vis-à-vis any other, and it is possible that DCC users would be less concerned about the magnitude of these charges as compared to other charges that impact DCC users differently.
- 3.33. It may thus be appropriate that DCC budgets are open to scrutiny and subject to consultation. It may be also appropriate that Ofgem should be required to approve budgets and should have the power of veto if not satisfied that costs were being incurred efficiently. Such obligations could be imposed through the DCC licence.
- 3.34. Even under the option where DCC is owned by its users, we would expect the DCC Board, acting in their interests, to be concerned primarily about the quality and cost of the services provided, and how well DCC facilitates the other aspects of DCC users'

³³ BEIS (2022), The Future Ownership of Elexon, p.10. www.gov.uk/government/consultations/the-future-ownership-of-elexon

³⁴ Cabinet Office (2016), Classification of public bodies: Guidance for departments, p.7. www.gov.uk/government/publications/classification-of-public-bodies-information-and-guidance

businesses, rather than in maximising the value of their DCC shareholding.

Accordingly, we would expect DCC to be operated on a not-for-profit basis. Whether or not this should be formally incorporated in DCC's constitution rather than being a consequence of how DCC is managed would be for consideration.

Funding

3.35. As a not-for-profit business, we would not expect DCC's owner or owners to inject equity. Nevertheless, suitable indemnities could be provided by DCC users under the SEC and/or REC, as is the case under other codes, which would enable DCC to borrow any capital necessary to support the business (and to do so at low cost).

3.36. In principle, there might also be the potential to raise risk capital – debt and equity – for specific ring-fenced operations on a project finance basis. This would require ring-fencing of all associated revenues and costs from DCC's other operations, which would be impractical for most of DCC's activities. It may potentially be relevant for new business ventures, although there would still be issues with assets shared with core services.

Operational Model

3.37. In the absence of a profit motive, DCC would be expected to focus on quality of service and value for money. In principle, this could allow for relaxation of certain restrictions placed on DCC's operational model and enable the DCC Board to take decisions, on a case-by-case basis, whether to undertake activities in-house or to competitively procure them from external service providers.³⁵ Nevertheless, our expectation is that the current operational model (where most services are contracted out on a competitive basis) would not be substantially changed.

Assessment of the Options against the Principles

3.38. Having proposed a set of principles and tested them in stakeholder workshops, as discussed in chapter 2, we assess how the two models for DCC will help deliver to these principles.

³⁵ Restrictions would remain that prohibit DCC from engaging in activities that would undermine competition in commercial activities associated the supply of energy.

Drive delivery of a quality, cost-efficient and secure service

- 3.39. Under Option A, the existing licensing and price control framework remains.
- 3.40. A likely move under this option to an *ex-ante* price control for a significant proportion of DCC's activities could be expected to provide stronger control over costs to ensure value for money, as well as providing the opportunity, through the price control review process, for scrutiny of DCC's business plans and projected costs. In addition, enhanced incentives could encourage efficient operations and delivery. However, as discussed in chapter 6 ('Price control change considerations'), there are certain challenges associated with an *ex-ante* approach, which will need to be considered.
- 3.41. Moreover, having few assets and little shareholder equity could place DCC at risk of insolvency in the event that a high-powered incentive scheme resulted in losses. This means that trade-offs between the risk of insolvency and higher margins to compensate that risk will need to be taken into account when designing an incentive regime.
- 3.42. Specifying, tendering, negotiating and managing complex contracts, which form a large part of what DCC does, are activities which are difficult to reflect in performance formulae, particularly those that identify the extent to which outcomes are within or outside DCC's control. Consequently, it can be challenging to establish effective incentives that avoid distributed accountability and accurately reflect DCC's functions. This issue applies equally whether DCC has a strong or a weak balance sheet.
- 3.43. Under Option B, DCC would be controlled by its stakeholders, in particular the users that pay for DCC's services. As such, through their representatives DCC customers would be able to ensure that services were delivered to the desired quality, and that DCC was sufficiently responsive to its user needs.
- 3.44. With no profit motive, there would be no incentive on DCC to maximise revenues derived from providing services to users.
- 3.45. However, where costs are recovered through charges that are borne equally by all users, the incentive to control these costs may be weak, as the costs will not disadvantage any DCC user relative to any other DCC user. Licence conditions covering transparency, obligations to consult, and Ofgem approval of business plans, together with consumer representation on the Board, could encourage DCC to manage these costs efficiently.

- 3.46. It is important to note that under both options, some challenges could remain in deriving value for money from existing contracts with external service providers. The key distinction lies between, on the one hand, incentivising DCC's contract management ability through a set of mechanisms that determine the level of payments to DCC (under Option A) and, on the other, empowering a stakeholder-controlled (or independent) Board to undertake effective contract management (Option B). Under Option B, DCC would have the same opportunities, through contractual incentives and contract management, as in Option A. That said, the greater scope for nuance in the incentives on DCC could lead to differences in DCC's approach to contract negotiation and management of its External Service Providers. A stakeholder-controlled Board managing service contracts might be more motivated to negotiate appropriate contractual mechanisms that maximise the benefit to DCC users.

Be customer-centric and consumer-focused

- 3.47. Option A would see enhanced incentives placed on DCC to provide services in line with its customers' requirements. Subject to this consultation, greater emphasis could be placed, for example by refining DCC's enduring general objectives, on the provision of mandatory services, and less emphasis on the development of value added services, which some DCC users consider has been a distraction from providing core services to a satisfactory standard.
- 3.48. Licence conditions requiring stakeholder engagement, for example through strategy and policy statements, *ex-ante* price controls with customer input, charging statements and business plan development, could underscore the importance of DCC consulting with its users, although this would not necessarily create a step change in the way that their views are taken into account. These changes would also need to be balanced against the risk of increasing burden on customers. Representation on the DCC Board for DCC users and/or a consumer representative would assist in this respect, although the extent to which minority representation can have a tangible impact on Board decisions may remain a challenge. Conversely, greater representation of users and/or consumers could be an issue for a third-party owner.
- 3.49. Under Option B, DCC service would be 'customer-centric' on account of accountability to a DCC Board that represents its customers directly. It would therefore not be necessary to define metrics for all aspects of DCC's performance that are important to its users, as representatives of DCC customers would be able to exercise their influence through the company's constitution in the normal manner of corporate governance. The Board would be able to incentivise management in whatever manner

it saw fit, both through explicit incentives and through the usual processes of staff selection and advancement within the organisation.

- 3.50. We believe this arrangement could help ease burden on DCC customers themselves as decisions would be taken by their representatives on the Board. However, it is for consideration whether this arrangement *in itself* would be sufficient to ensure that interests of all groups of DCC users are protected. It would be important to ensure that different groups of DCC customers are fairly represented without one group exercising disproportionate influence. This includes smaller as well as potential future users. While future DCC users would in time be represented on the DCC Board as current users, other direct measures may be required, including potentially Ofgem intervention.
- 3.51. Under either option, consumer representation on the Board, whether alongside the shareholder under Option A, or alongside industry representatives or independent directors under Option B, can be considered to give consumer a direct voice in DCC's day-to-day decision-making and ensure focus on issues important to consumers.

Enable full accountability and decisive governance

- 3.52. Under both options, DCC would remain accountable to Ofgem through the licence.³⁶ Furthermore, under either option, following the Energy Code Reform changes, DCC will remain accountable to code managers to the extent as they succeed existing code panels (although the details of the mechanisms for this are yet to be developed). Code managers will be responsible for delivering the 'strategic direction' set by Ofgem. This may include having a role, through the code-change process, in defining the services that DCC would be required to provide.³⁷ DCC Board governance would determine how best to deliver those services to the expected quality and cost. These changes should ensure that DCC is strategically aligned to wider energy strategy but operationally independent to deliver day-to-day services as required, including determining appropriate risk allocation.

³⁶ DCC is accountable to its users through the SEC and REC. However, the SEC and the REC define what DCC is required to do, and the services it must provide. The SEC and the REC do not specify how DCC discharges its obligations, which may impact on the service DCC users and the costs they incur.

³⁷ Code managers will be able to propose and develop code modifications, approve non-material modifications, and make recommendations to Ofgem for approval of material modifications. For more information, see BEIS (2022), Government response to the consultation on Energy Code Reform, p.24. www.gov.uk/government/consultations/energy-code-reform-governance-framework.

- 3.53. Under Option A, notwithstanding measures taken to improve customer engagement, a degree of Ofgem's involvement in governance may be required, particularly with the eventual expiry of the Section 88 powers and reduced involvement of BEIS in the oversight of DCC.³⁸ It would continue to be necessary for Ofgem to hold DCC to account on behalf of DCC's customers.
- 3.54. Under Option B, DCC would be directly accountable to its customers by virtue of their control exercised through the Board. Stakeholders' representatives would be able to determine whether the scrutiny of DCC's activities was light-touch or in-depth, on a case-by-case basis. This is in contrast to accountability to Ofgem through the licence, where the criteria are more rigidly defined, the burden of proof is high, and the range of sanctions is limited.
- 3.55. It is important to note that with the retention of the DCC licence, the role of stakeholders' representatives on the Board would not be replacing Ofgem but DCC's owner. Under Option B, Ofgem would continue to have the powers over DCC to ensure compliance, but we would envisage that, with a direct representation of customers on the Board, the need for direct involvement of Ofgem to drive accountability could be reduced. We believe this outcome could also be achieved under a majority independent Board, which could be appointed by Ofgem.

Allow DCC's role to evolve in an uncertain environment

- 3.56. Under both options, the scope and the detail of DCC's services would, as now, be defined by the licence and by the relevant codes. The normal governance and change management of these instruments would thus determine the evolution of DCC's services.
- 3.57. Under Option A, an *ex-ante* price control framework would require a periodic review of many of DCC's business plans and projected activities. Explicit mechanisms such as re-openers, or a continuation of the *ex-post* price control, with ongoing scrutiny of business cases and review of costs, for uncertain activities not amenable to *ex-ante* price control, would be required to accommodate uncertainty in between price control reviews.

³⁸ Unless changed, including in application of Licence Condition 16.6 which requires the approval of the Secretary of State for changes to the procurement of services from External Service Providers.

- 3.58. Under Option B, the direct control by stakeholders and, in particular, DCC users should allow DCC to adapt to uncertain future circumstances, as and when appropriate, without the need for detailed provisions to have been formulated in advance. Nevertheless, any business plans and projected costs could be subject to the requirement for consultation and Ofgem approval, as discussed above.

Maximise the value of DCC infrastructure by enabling the exploration of re-use

- 3.59. Under Option A, subject to consultation, a licence condition could allow DCC to have a role in exploring commercial re-use of its infrastructure. This is intended to benefit DCC's customers through offsetting the cost of the smart metering infrastructure through the charges for such re-use. There is scope to improve the current licence obligations and define funding mechanisms to better align incentives and ensure that DCC users share in the benefits.
- 3.60. Under Option B, stakeholder control would allow DCC infrastructure to be reused to the extent that it is in the best interests of stakeholders to do so (subject to the limitation that DCC does not undermine competition in commercial activities associated with the supply of energy). It might be expected that stakeholders would encourage innovation since they would feel the benefit via reduced costs to themselves when DCC returned the gains. However, it is possible that the focus of DCC's current stakeholders could be directed mostly at the provision of DCC's current core activities. Consequently, there could be a risk that opportunities to innovate are missed as incumbents may not have interest in re-use or market disruption. An absence of innovation and market disruption could forestall effective competition in new business models and products with a potential negative long-term impact on consumers. The likelihood of this and what mitigations could be introduced is for consideration.

Conclusion

- 3.61. We have put forward two broad options for a future regulatory framework for DCC. We believe that both options have the potential to deliver to the desired outcomes, although they offer a different set of benefits and risks. We set out a brief summary of the key trade-offs against our principles in Table 3.2 below.
- 3.62. As such, we do not at present view either option as our minded-to approach and are keen to understand stakeholder views on which option should provide the basis for our detail design in the next phase of the review, and why. We will make our decision on the way forward on the basis of stakeholder representation.

Consultation – DCC review: Phase 1
Table 3.2: Assessment against principles

Principle	Option A	Option B
Drive delivery of a quality, cost-efficient and secure service: ensure customers receive efficient, reliable, coordinated, and secure smart metering service; equip and incentivise DCC to deliver value for money, anticipate and manage change, and deliver against its strategic goals.	<p>Enhanced incentives and introduction of an <i>ex-ante</i> price control framework for more certain parts of DCC’s Allowed Revenue can improve value for money for DCC customers.</p> <p>However, it may remain challenging to derive value from main external contracts, limiting the potential of <i>ex-ante</i> price control to stabilise or drive down costs.</p> <p>It can also be challenging to design incentives for all aspects of DCC’s activities that are important for users due to the complexity of DCC’s operation, which makes it difficult to measure activities within DCC’s control.</p>	<p>Stakeholder-controlled or independent Board can ensure alignment of incentives on delivery of required services, new solutions and resource allocation.</p> <p>There may be risk of weak incentive to control costs borne by all users equally, although business plans and budgets can be consulted on and subject to Ofgem approval.</p> <p>Some challenges may remain around deriving value from external service contracts and managing issues beyond DCC’s direct control.</p>
Be customer-centric and consumer-focused to give DCC customers confidence that DCC’s activities are aligned with their expectations and based on consumer needs.	<p>DCC customers can have a role in business plan development or <i>ex-ante</i> price control arrangements. Customer engagement requirements can be enshrined in the licence and incentivised. Representation on the DCC Board could also improve focus on DCC customer and consumer issues.</p> <p>However, a degree of conflict may still exist between industry and a shareholder-majority Board.</p>	<p>Stakeholder-controlled or independent Board can ensure DCC delivers to the needs of its customers. To the extent that consumers’ interests are not best served by providing best service for users, consumers could also be represented directly on the Board. Licence and the power to issue directions would give influence via Ofgem.</p> <p>Ofgem’s enduring role may be required to ensure that Board continues to represent interests of all stakeholders. Special provisions or intervention may be needed to ensure that interests of all groups of DCC’s customers, including future users, are protected and that no one group of stakeholders can exercise undue control.</p>
Enable full accountability and decisive governance: ensure roles and responsibilities in DCC’s governance arrangements are clearly defined, there are clear lines of accountability, and DCC is aligned with industry, regulatory and wider energy policy while having sufficient operational independence to deliver the day-to-day service	<p>DCC would remain accountable to Ofgem under the licence and price control framework. Governance arrangements can be streamlined and lines of accountability strengthened, for example through code reform changes by making DCC accountable under relevant codes. Code reform changes are also expected to drive better strategic alignment under Ofgem-issued directions.</p> <p>Customer and/or consumer representation on DCC’s Board could increase DCC’s accountability on issues important to DCC users and end-consumer.</p>	<p>DCC would remain accountable to Ofgem under the licence. Code reform changes can strengthen accountability under the codes and ensure alignment to strategic direction issued by Ofgem.</p> <p>Stakeholder-controlled Board would provide direct accountability to, and control by, DCC users in terms of delivery, while maintaining operational independence for delivery of day-to-day service.</p>

	<p>However, it would continue to be necessary for Ofgem to hold DCC to account on behalf of DCC customers on delivery.</p> <p>Risk sharing and risk allocation would need to be subject to appropriate incentives.</p>	<p>Stakeholder-controlled Board would also be well-placed to determine appropriate level of risk in delivery and embed required risk-sharing mechanisms in new or renewed service contracts.</p>
<p>Allow DCC's role to evolve in an uncertain environment: capture the scope of DCC's role and provide flexibility for its transparent evolution in an uncertain future environment, while accounting for DCC's monopoly position.</p>	<p>The scope and detail of DCC's services would be defined by the licence and by the relevant codes with a governance process in place to allow for a transparent evolution in DCC's role.</p> <p>An <i>ex-ante</i> price control framework with up-front business planning process would set clear baseline for DCC's activities and spend, with flexibility accommodated through uncertainty mechanisms, such as reopeners. <i>Ex-post</i> controls could continue for certain activities to account for uncertainty.</p>	<p>The scope and detail of DCC's services would be defined by the licence and by the relevant codes with a governance process in place to allow for a transparent evolution in DCC's role.</p> <p>Stakeholder control would be expected to enable DCC to adapt to uncertain future requirements.</p>
<p>Maximise the value of DCC infrastructure by enabling the exploration of re-use of assets subject to appropriate control mechanisms, which should protect the provision of fundamental service and competition, and ensure fair distribution of risk and reward.</p>	<p>There is scope to improve the current licence framework to achieve a better alignment of incentives and review funding mechanisms to enable a more appropriate route for exploring additional services, ensuring that DCC customers share in the benefits that arise from system reuse.</p>	<p>Stakeholder control of DCC Board would allow DCC infrastructure to be re-used to the extent that it is in the best interests of DCC customers. However, there could be a risk that opportunities to innovate are missed as incumbents may not have interest in re-use or market disruption.</p>

4. Transition period considerations

Chapter summary

In considering the two broad options for a future framework, we are seeking stakeholder views on whether a licence extension would be required to facilitate their design, implementation and transition, and on the key trade-offs. We may be able to implement potentially limited changes by the expiry of the current licence due in 2025, although this carries a number of risks. Subject to relevant licence conditions, we can extend the licence for up to 3 years to facilitate a smoother transition to a new framework but with a potential delay to realisation of certain benefits. Or, we can explore the scope for more fundamental changes to the regulatory model over a longer transition period under an extended licence. We invite views on the trade-offs associated with these options. We also seek stakeholder views on whether certain aspects of the new framework could be introduced during a potential extension period.

There are a number of key dependencies over a possible transition period of 2025-2031 (maximum possible extension of the current licence), which should be taken into account. These include changes to the role of BEIS following the end-date of the current smart meter rollout framework, ongoing reform of industry codes governance, the procurement landscape of DCC's main contracts, and the impact of sunseting of 2G and 3G technology in GB. We invite feedback on these dependencies in the context of the licence extension options.

Questions:

Question 6: What are your views on the options identified and the associated trade-offs for a possible licence extension?

Question 7: What are your views on the assumptions we have made for Options A and B transition periods?

Question 8: In your view, which of the considerations we have identified for the transition period are the key dependencies and why? Are there any other dependencies that should be considered?

Question 9: What is your view on implementing incremental changes to the regulatory framework during a transition period? Which parts of the regulatory framework would be most suitable for such changes and why? Do you have suggestions for their implementation?

Background

- 4.1. The DCC review and transition to the new framework take place during a period of significant change in the energy market. Timelines of implementation and any key links and dependencies will need to be proactively considered when developing the plan for transition to the new framework.
- 4.2. DCC's current licence is due to expire in September 2025. Under the licence, subject to specifically defined parameters, the Authority has the power to extend the licence for up to 6 years.³⁹
- 4.3. As discussed in the previous chapter, we are exploring two potential lead options for the DCC framework – a competitive retender of the licence (Option A), or operation by a stakeholder-controlled not-for-profit organisation (Option B). Either option is expected to require significant changes to the current licence model, and as such it may be that extending the current licence to facilitate a longer handover to a new licensee, or to implement a more significant overhaul of the regulatory arrangements is an option for consideration. We are currently considering the route for legal

³⁹ Under Smart Meter Communication Licence, Part 1, Section C, a determination on a licence extension can be made to facilitate an efficient competitive tender process, to facilitate an efficient handover of the Authorised Business, to ensure licence requirements are met with respect to the procurement of Relevant Service Capability, or to ensure that energy industry activities can continue to be carried on in an orderly and efficient manner.

implementation of both options, either of which might require legislative change. Legislative change could have an impact on timelines and resource and this will be factored into any further design analysis of the selected option.

- 4.4. The timelines for implementation of both options will need to be considered in the context of key events taking place during the period from 2025-2031, such as the expiry of key DCC contracts, key delivery programmes, the implementation of the Energy Code Reform, and expected changes in BEIS's role. We discuss these dependencies later in this chapter.

Licence extension options

Question 6: What are your views on the options identified and the associated trade-offs for a possible licence extension?

Question 7: What are your views on the assumptions we have made for Options A and B transition periods?

- 4.5. Given the time required to develop, implement and transition a new framework, and taking account of other changes planned in the same timeframe, it is important to consider whether a licence extension could be explored to facilitate an effective and lower-risk transition, or to allow the design and implementation of more extensive changes to the framework. We have identified the following options regarding licence extension:

- **No licence extension.** This means a new framework would come into effect no later than September 2025, thus potentially allowing certain benefits being realised sooner on account of better alignment to DCC's operations at scale. However, any changes or improvements to the current regime would need to be designed and introduced at pace over the next two years, which could lead to limited changes being implemented. Equally, a successor licensee would need to be selected, appointed and ready to provide Authorised Business by September 2025. This would require a faster transition and may significantly increase risks in design of the regulatory model, licence drafting, the appointment process and business handover. We are seeking stakeholder views on the key trade-offs to consider.
- **Extension of up to 3 years.** This option could enable a smoother transition from the current to a new framework, accounting for steps needed to design

and implement either an Option A or Option B type framework, which we set out in the section below.

- Under an Option A-type framework, the extension could help facilitate more effective competitive retender and a lower-risk business handover. In parallel, and depending on the length of an extension, it could also be possible to phase in elements of the future framework within the extension period to achieve potential incremental benefits to the current regime. For example, we may consider implementing early changes to the price control. We discuss this in chapter 6.
- Under an Option B-type framework, due to the substantially different set-up of the key parameters of the framework, such as replacing a price control with a budget setting process, it may be more challenging to phase in changes during an extension period. However, we may consider introducing some interim changes to the existing regime before full implementation of new arrangements.
- **Extension for the maximum of 6 years.** This option is more likely to require the introduction of interim changes to the existing arrangements given the longer period of time to implement the new framework. A longer transition might enable enhanced coordination when implementing regulatory changes in parallel to other changes in DCC's operations, including upcoming reprocurement of key contracts.⁴⁰ However, we should note that there can never be an ideal period of transition given the current contract end-dates and industry changes are expected to continue over the next 10 years. While a maximum extension of 6 years may allow for a longer and lower-risk transition, which could be timed to account for other changes, it may delay the implementation of the new framework beyond reasonable timelines. In particular, there may be substantial negative impact on continued effective governance.

4.6. In considering the options for a potential licence extension, it is worth noting the dates of the *final* opportunity to extend the current licence:

⁴⁰ Please refer to Table A4.1 in Appendix 4 for details of DCC's key contracts and their expiry dates.

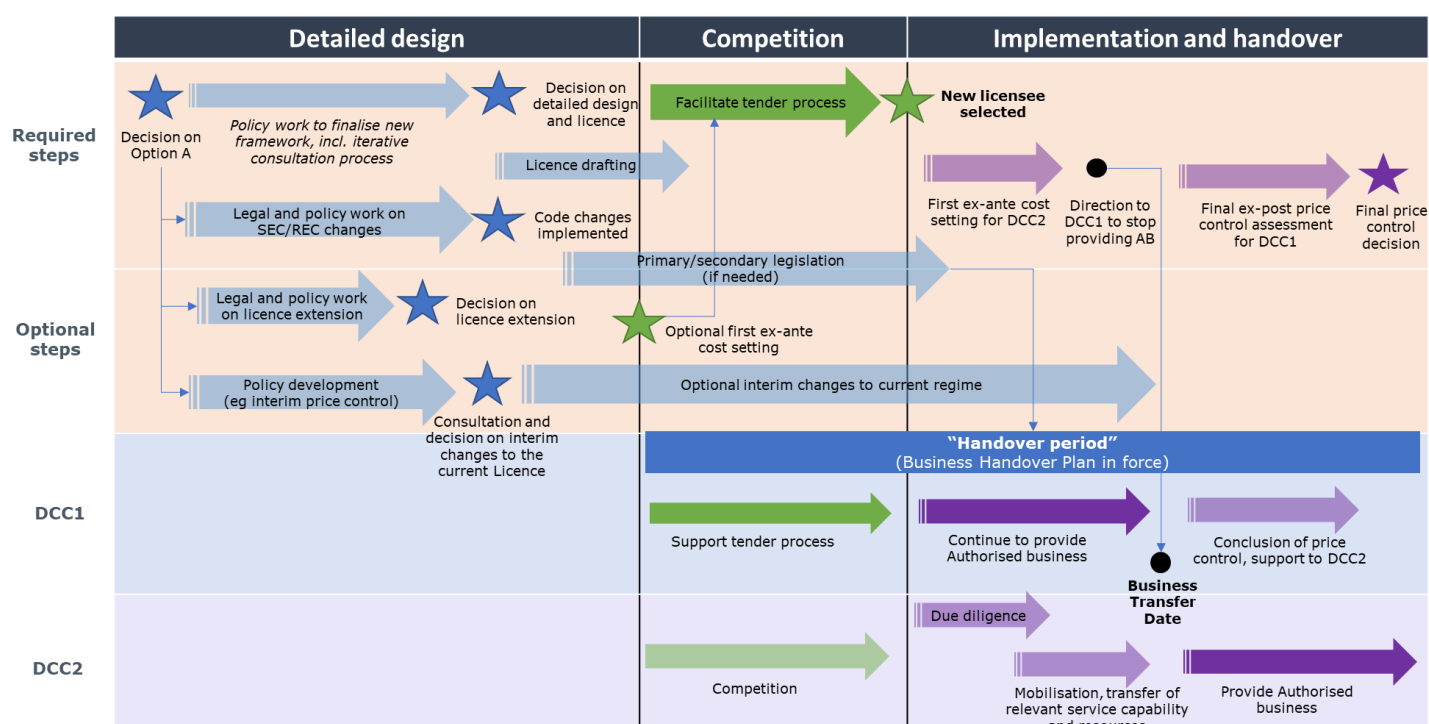
- For an extension period of a year or less, this date is 6 months prior to the licence expiry date (ie March 2025)
- For an extension period longer than a year, this date is 12 months prior to the licence expiry date (ie September 2024)⁴¹

4.7. In the following section we explore steps needed to facilitate transition to Options A and B in more detail. We are keen to hear stakeholders' views on our assumptions and the impact on timeframes for a potential licence extension.

Option A – Licence Retender to successor Licensee

4.8. Figure 4.1 shows a potential timeline to enable transition to an Option A-type framework, including a number of optional steps associated with a potential extension. Please note that the timeline is for illustrative purposes only.

Figure 4.1 Possible transition under Option A (including optional steps)



⁴¹ Under Smart Meter Communications Licence, Part 1, Section C, Condition 10, it may be possible to extend the licence for a period of more than one year more than once, so long as the licensee consents and the total extension does not exceed the maximum of 6 years.

- 4.9. This potential timeline shows that, if a regulatory framework aligned to Option A were chosen, we would carry out detailed design of the new framework, including drafting and consulting on the new licence. This would also include any necessary changes to relevant industry codes. Depending on the level of industry engagement and scope of changes, we have estimated that this may take up to 24 months.
- 4.10. A competitive tender process would follow, with the incumbent licensee (DCC1) supporting this process as necessary. We have estimated up to 12 months for the competitive tender process, based off the original tender timeline for the DCC licence in 2012-2013,⁴² and the requirements of the Electricity and Gas (Competitive Tenders for Smart Meter Communication Licences) Regulations 2012.⁴³ In our assumption, we have also included time necessary to prepare documents for the Invitation to Tender.
- 4.11. Once the successor licensee (DCC2) is selected, the business handover process would begin, where DCC1's systems, contracts and processes are handed to DCC2. This would be carried out in accordance with Ofgem-approved DCC1's Business Handover Plan, which it is required to have in place under Licence Condition 43.⁴⁴ For avoidance of doubt, during this period DCC1 would continue to provide Authorised Business. We have estimated that this process could last approximately 3-6 months and would be concluded at Business Transfer Date. In general, while certain internal changes may be needed to facilitate handover of existing shared services, we expect that DCC's internal resources, systems and processes should continue uninterrupted under the new licensee to minimise disruption to business as usual operations. During this time, subject to agreed changes to the price control process, the first *ex-ante* cost-setting may take place for DCC2. Alternatively, this process may precede the tender exercise to inform completion. We are interested in stakeholders' views on the sequencing options for the first price control for DCC2.

⁴² DECC commenced the qualification stage of the licence competition on 12 October 2012 and the licence came into effect on 23 September 2013.

⁴³ The Electricity and Gas (Competitive Tenders for Smart Meter Communication Licences) Regulations 2012 can be found here: www.legislation.gov.uk/uksi/2012/2414/contents/made. The Regulations set out key stages and requirements for carrying out a tender exercise for the award of a Smart Meter Communication Licence. These regulations apply in respect of any grant of the Smart Meter Communication Licence and were made under Section 56FC of the Electricity Act 1989 and Section 41HC of the Gas Act 1986; however, they may be repealed by the Secretary of State.

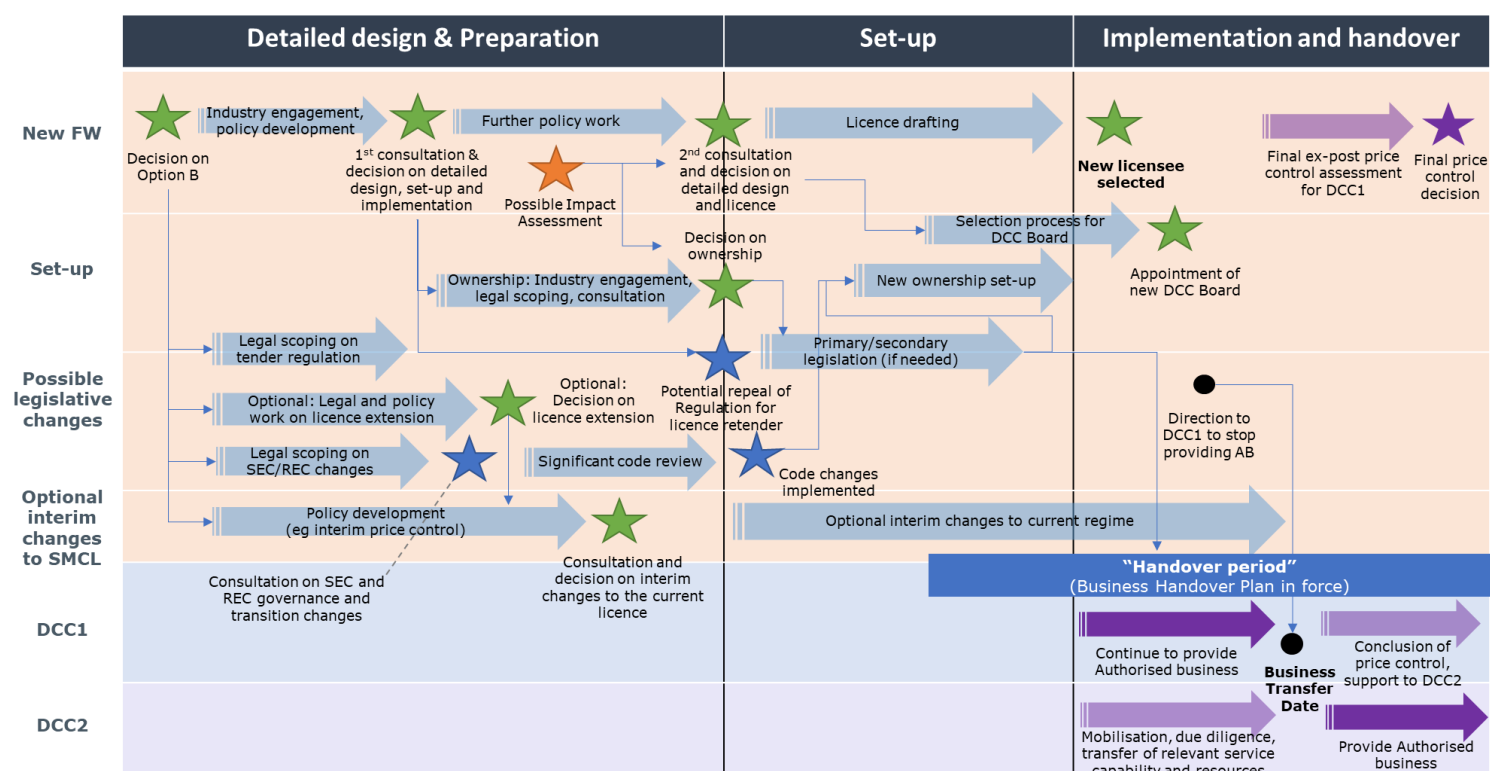
⁴⁴ Licence Condition 43 imposes duties on DCC that are designed to ensure that the Authorised Business will be transferred without disruption and in an orderly manner to a Successor Licensee in the event of the revocation or expiry of the licence, or pursuant to direction by the Authority under Condition 15.6.

- 4.12. We also consider it appropriate to have a period following the Business Transfer Date to conclude the final *ex-post* price control assessment and other financial arrangements of DCC1 and potentially to provide support to DCC2. We have estimated further 3-6 months but would like to understand whether stakeholders have any views on the length of this period. For clarity, following the Business Transfer Date only DCC2 would carry on the Authorised Business. Further policy and legal work will be required to fully ascertain how best to facilitate this.
- 4.13. As we are currently developing the policy of the new framework, we expect to have decided on our approach to the new regulatory framework by spring 2023. If we choose to fully design and implement a framework based on Option A, we consider handover on the current timeline of licence expiry in 2025 may not allow for sufficient consultation and development of the new framework.
- 4.14. Nevertheless, it is important to note that the exact timeline will be dependent on the detailed design, including the extent of any framework changes, as well as business handover requirements.
- 4.15. For these reasons, an extension period of up to 3 years could be envisaged to facilitate transition to the new framework (with the detailed design being needed to allow further refinement of this timeline). It would be possible to phase in elements of the future framework within the extension period to achieve potential incremental benefits to the current regime. We invite stakeholder views on these assumptions and also between the balance of pace, risk and the scale of any change.

Option B - Alternative Regulatory Framework

- 4.16. Figure 4.2 shows a potential timeline for implementation of a framework aligned to Option B. Please note that this timeline is for illustrative purposes only.

Figure 4.2 Phases and dependencies over a possible transition under Option B



4.17. While it may be possible to implement by 2025, given that more significant framework changes are needed (as opposed to a licence retender), we consider it likely that a licence extension of up to 3 years could be considered to enable the framework to be sufficiently developed, consulted on and tested with stakeholders, to ensure due diligence of the process leading to change in ownership and to account for uncertainties.

4.18. We envisage that detailed design would take approximately two years and include developing and consulting on new arrangements. These would be substantially different from the existing regulation and would likely require an iterative consultation process with significant input from the industry. Upon reaching a decision on the new arrangement, we would proceed with drafting and consulting on the new licence.

4.19. Additionally, transition to an Option B-type framework differs from Option A in the process leading to the selection and set up of the new licensee. One option under consideration, subject to further policy and legal work and a consultation, is an award of the DCC licence to a new or existing industry stakeholder or publicly owned body,

either via an eligibility-based licence application process or by a direct award.⁴⁵ While this may remove the need for a distinct phase to facilitate a competitive retender and hence could shorten the implementation timeline by around a year, there are other dependencies with uncertain timelines, including:

- Consultation on governance and transition changes to the SEC and REC, followed by necessary changes to the codes enacted by either the Secretary of State or Ofgem
- Consultation on the selection process of the new licensee, including consultation and decision on future ownership
- Selection process and the appointment of a new board

4.20. As with implementation of an Option A-type framework, we consider that a six-to-twelve-month handover period could be required to ensure continuation of operations, for example to allow the new owner to complete their due diligence of DCC's operations and risk profile, or to conclude the final *ex-post* price control for DCC1 and other financial arrangements.

4.21. For these reasons, an extension of up to 3 years may be required to facilitate transition to an Option B-type framework. We invite stakeholder views on these assumptions.

Key links and dependencies

Question 8: In your view, which of the considerations we have identified for the transition period are the key dependencies and why? Are there any other dependencies that should be considered?

4.22. The DCC review must be considered in the context of other ongoing government or Ofgem-led projects, and industry change, and there are a number of parallel changes which will require consideration as we define the transition period approach. Key considerations for the transition period include:

⁴⁵ For more information on the ownership considerations under an Option B-type framework, please refer to paragraphs 3.28-3.30.

- Changes in BEIS's role in the SMIP and the transition to enduring governance arrangements
- Energy Code Reform and upcoming changes to the Smart Energy Code (SEC)
- The procurement landscape of DCC's contracts, with some key contracts due to expire
- Sunsetting of 2G and 3G technology in GB
- Other ongoing industry change

BEIS transition

4.23. The Smart Metering Implementation Programme (SMIP) at BEIS currently has oversight and involvement in numerous aspects of the smart meter rollout, including developing and implementing policy and adjusting requirements to ensure delivery of smart metering benefits.

4.24. However, we anticipate change in BEIS's role in DCC governance with BEIS's current roles transitioning to alternative bodies including SECAS, Ofgem, industry forums and alternative BEIS functions as the smart metering rollout completes.

4.25. Currently, engagement with DCC is part of BEIS's market monitoring and includes engagement at operational and senior levels. We expect senior level engagement to remain on an infrequent basis. However, we expect more direct involvement such as oversight of programmes, business cases and incentive schemes to transition to alternative governance.

4.26. The timing of the BEIS transition will depend on considerations such as other government publications and programmes, and the current energy market. The DCC review itself may also impact the BEIS transition. We expect that as the DCC review work continues, the timeline for the BEIS transition will become clearer. Nevertheless, it is important that appropriate governance structures are in place during any transition period. This may take the form of phasing in new governance arrangements as part of implementation or interim changes to the current arrangements pending design of the new model.

Energy Code Reform

- 4.27. In July 2021 Ofgem and BEIS published a joint consultation on the design and delivery of the code reform with a decision on the governance framework published in April 2022.⁴⁶ These reforms will have a direct impact on the future operation of DCC.
- 4.28. Under the new framework, the industry codes in scope (including SEC and REC) will be managed by licensed code managers appointed by Ofgem. These new code managers will undertake the functions currently delivered by code administrators and industry code panels. They will be accountable to Ofgem through their code manager licence, and responsible for, among other things, the code change processes and delivering upon the strategic direction set by Ofgem.
- 4.29. DCC will be treated as a Central System Delivery Body (CSDB) under these reforms. As such, it will be subject to enforceable directions from Ofgem to ensure that it complies with its obligations under relevant codes and does what is reasonably necessary for the efficient operation or implementation of provisions in the codes.⁴⁷ As a code party, DCC will have the right to propose code change and to be consulted on code changes. We also anticipate that the DCC, as a CSDB, will have a role in supporting the code manager(s) in developing delivery plans to implement Ofgem's strategic direction. However, as a delivery body, we do not expect DCC to independently lead on strategy development.
- 4.30. We consider these changes to be compatible with our stated principles as well as both broad options under considerations. In particular, we believe that these changes have the potential to strengthen accountability of DCC under the codes and to ensure delivery of DCC services is aligned to wider strategy.
- 4.31. Both of our options aim to increase the role of SEC and REC parties as DCC customers in DCC governance in line with our second principle (customer-centric and consumer-focused outcomes). While the code reform changes – in particular the disbanding of industry panels and creation of Stakeholder Advisory Forums – mean that code parties will have a consultative, as opposed to decision-making, role in determining the scope of DCC's business, we believe our proposed models are compatible with this direction

⁴⁶ BEIS (2022), Energy Code Reform: governance framework.

www.gov.uk/government/consultations/energy-code-reform-governance-framework

⁴⁷ Directions will be enforceable under Ofgem's existing enforcement powers (as a "relevant requirement" under the Gas Act 1986 and the Electricity Act 1989).

of travel. We envisage that any enhanced role of DCC customers in DCC governance would focus on the detail of *how* DCC delivers its business (for example, by strengthening control over spend). Under either option, the code manager(s) for relevant code(s) would be part of future DCC's governance in terms of overseeing the code-change process, which would be one of the principal avenues to change the scope of DCC's role by modifying its Mandatory Business set out in the code(s). We discuss this in more detail in the following chapter: 'Future role of DCC'. We consider that this alignment would be feasible even under a potential full control of DCC's Board by a representative group of SEC and REC parties, where Ofgem could retain the power to ensure that interests of both current and future parties are protected.

- 4.32. As we proceed to design details of the new model, we are mindful of the key decisions and rationale behind the code reform changes and will remain engaged with relevant stakeholders to ensure continued alignment between both projects.

Contract expiry dates

- 4.33. Table A4.1 in Appendix 4 details DCC's key contracts and their expiry dates. These include contracts with existing Fundamental Service Providers, as well as external service providers for the SMETS1, Enduring Change of Supplier (ECoS) and Switching programmes. We expect any necessary reprocurement activity for these contracts to begin appropriately in advance of their deadlines. Some of these reprocurement are already underway, in particular the reprocurement of the Data Service Provider capability. We consider it important to highlight these contracts as their end dates may coincide with a potential licence extension timeline.
- 4.34. We would note that the key contracts due to expire over 2025-2031 include extension clauses as a contingency. Equally, under LC 16.12, all of DCC's contracts are required to be capable of novation. This means that a new licensee would be able to conclude any ongoing programmes or reprocurement.
- 4.35. It may also be necessary to procure new contracts to support new capabilities which may occur during period from 2025-2031. The timing of the handover will impact whether the current or new DCC is expected to procure or reprocure a particular contract and should be taken into consideration for any transition period.
- 4.36. We are interested in hearing stakeholder views on dependencies with the contracts and their reprocurement, and whether this should be a factor in considering the length of a potential licence extension.

2G/3G sunsetting

- 4.37. The existing 2G and 3G networks are being phased out in GB over the next 10 years. DCC is implementing an enduring solution through its 4G comms hubs and networks (CH&N) workstream within its Network Evolution programme.
- 4.38. DCC currently expects 4G comms hubs to be available at scale by 2025.⁴⁸ However, the process of transitioning towards a market-wide 4G penetration will continue post-2025. We therefore expect that the conclusion of this, as well as other DCC's programmes, would be subject to business handover and could be concluded by DCC2. We would encourage stakeholders to remain engaged with business cases for this and other programmes.

Implementation of changes during Transition Period

Question 9: What is your view on implementing incremental changes to the regulatory framework during a transition period? Which parts of the regulatory framework would be most suitable for such changes and why? Do you have suggestions for their implementation?

- 4.39. As discussed earlier, there may be some areas of the current DCC framework where we could implement changes early in order to reflect benefits through the transition period, if the licence is extended for a period of over 6 months. As noted, these changes could take the form of an early introduction of forthcoming enduring arrangements or temporary amendments to the existing framework pending full implementation of the new model. The latter scenario would be more likely under Option B where the largescale overhaul of existing arrangements could make it challenging to phase in distinct elements of the framework.
- 4.40. Such areas could include, but not be limited to:
- **Price control** – There may be scope for introducing an *ex-ante* framework for certain aspects of DCC's Allowed Revenue from RY25/26. We discuss this in further detail in chapter 6.

⁴⁸ DCC sets out its expectations for the CH&N programme in its 2022/2023 Business and Development Plan (published July 2022): www.smartdcc.co.uk/about-dcc/business-development-plan/

- **Governance** – Depending on the implementation timeline of the code reform changes for SEC and REC, changes to the current framework can be made to reflect the new role of the code managers.

4.41. Given the scale of the likely changes being undertaken under the DCC review, we are keen to hear stakeholders' views on which areas could be prioritised for phasing in during the transition period if the licence is extended for a period of over 6 months.

5. Future role of DCC

Chapter summary

We consider that a future DCC should remain focused on the continued delivery of its core business, that is, to provide communications and data services to and from smart meters in a secure, economical and coordinated manner. We seek views on which services should be part of DCC's future Mandatory Business. We also consider that there may be other types of services, which DCC currently provides or which it may provide in future, but which may not clearly be considered part of its core remit. We seek views on whether DCC should carry out such activities and how they should be treated under the new framework.

Secondly, we propose to explore mechanisms to include in the new framework which would facilitate change in DCC's role and service requirements. We seek views on the types of formal processes that would be followed to enable a controlled change in DCC's role in response to:

- Change in customer expectations & consumer needs
- New policy or regulatory requirements
- Evolving technology

Thirdly, we propose that a future framework should allow exploration of commercial re-use of the smart metering infrastructure under specific circumstances and seek stakeholders' views on:

- What conditions are needed to be fulfilled before enabling this
- Governance routes which best facilitate this

Questions

Question 10: Do you agree with our proposed scope of future DCC's Core Mandatory Business?

Question 11: Should the future framework permit DCC to carry out any services additional to its Core Mandatory Business? What are your views on the concepts of 'mandated services', 'ancillary services' and 'additional services to users'?

Question 12: Do you agree with our proposed drivers for a controlled change in DCC's role? What are your views on the ways in which evolution of DCC's role can be managed?

Question 13: Do you agree that the future framework should enable exploration of re-use of DCC's infrastructure? What are your views on the specific conditions and measures that may need to be in place to enable it?

- 5.1. Establishing what role a future DCC should play is important to help determine what type of organisation is needed to deliver that role and what regulatory framework would be suitable to underpin it. We sought stakeholder views on DCC's future role through our call for evidence and stakeholder workshop and embedded the key desired outcomes in our principles.⁴⁹
- 5.2. Building on stakeholder feedback to date, we first present a conceptualised view of DCC's role to establish a common understanding. We then follow a structured three-step approach to considering DCC's future role:
- First, we discuss **what types of services should be part of a future DCC's Mandatory Business and how to capture these under a future framework.**
 - Secondly, we consider **how to allow for uncertain but controlled evolution in DCC's role** (including potentially additional Mandatory Business). We discuss

⁴⁹ This includes Principle 4 (Evolving DCC's in an uncertain environment) and Principle 5 (Maximising the value of DCC infrastructure through exploration of re-use). For more details on stakeholder views, see Appendix 1, paragraphs A1.3-A1.6.

drivers of such evolution and seek views on what mechanisms may be needed to facilitate it in line with our stated principles.

- Thirdly, we are looking to identify the conditions and circumstances under which it would be **appropriate to enable a future DCC to pursue commercial re-use of the smart metering infrastructure**.

Conceptualising DCC's role

- 5.3. We have found through stakeholder engagement that there is a broad consensus that a future DCC should continue to focus on delivering its 'core business'. For clarity, we seek to conceptualise an understanding of DCC's role through its 'core business' and set out how it relates to the regulatory definitions of existing 'core communication service' and 'enabling services'. For more information on how DCC's business is defined under the current licence, please see Appendix 2.
- 5.4. We distinguish between two aspects of DCC's role: the services it provides ('what' DCC does) and the method and way of their delivery ('how' DCC does it).

'What' DCC does

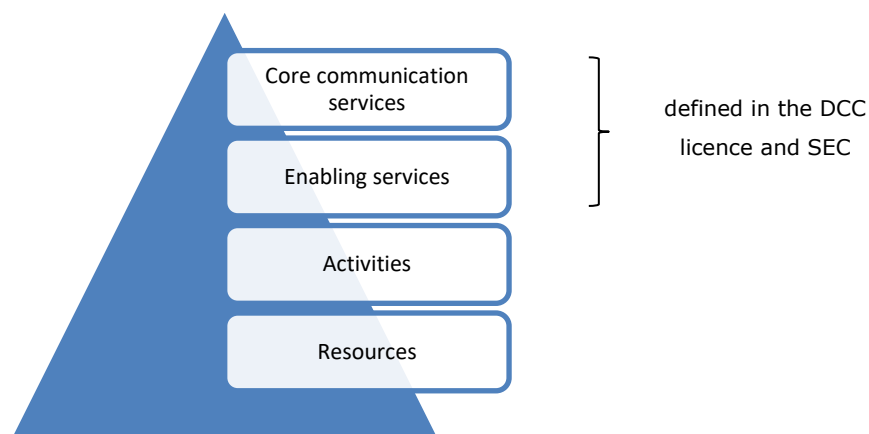
- 5.5. At a high level, DCC's main role is to provide **core communication services** to its customers. DCC does this through a range of **enabling services** that are necessary to facilitate their delivery, such as procuring suitable communications hubs or delivering a SMETS1 enrolment service, as well as providing enrolment services. These services are part of DCC's current Mandatory Business and are set out in the licence and/or SEC.⁵⁰ This means they can be modified by Ofgem, BEIS, or through a code-change process.
- 5.6. We consider that enabling services are in essence an extension of the core communication services. As such, all services captured in the definitions of DCC's core communication services and enabling services can be considered as DCC's 'core' business and essential to perform its role of providing communications and data services to and from smart meters in a secure, economical and coordinated manner.

⁵⁰ Core communication services are defined in Appendix E to the Smart Energy Code (SEC). Enabling services are defined in LC 6.5(c). The SEC also enshrines minimum requirements on these services.

'How' DCC does it

- 5.7. To deliver its Mandatory Business, DCC undertakes different **activities**, such as procurement of relevant service capability or contract management. These activities require deployment of **resources**.
- 5.8. The delivery aspect of DCC's role is generally not explicitly set out in the licence to the same extent as the definition of specific services that are provided.⁵¹ Efficient deployment of activities and resources for the provision of DCC's Mandatory Business is determined by DCC's Board. Nevertheless, DCC has to demonstrate the economy and efficiency of these processes under an *ex-post* price control and is subject to a performance regime incentivising two key activities in service delivery: contract management and customer engagement.

Figure 5.1: Conceptualising DCC's 'core business'



- 5.9. Over time, both areas of DCC's role have evolved:
- Additional services, such as delivery of the Switching programme, have been added to the remit of DCC's Mandatory Business, *alongside* the 'core' (understood as 'core communication services' and 'enabling services')

⁵¹ LC 6.5(c) obliges DCC to 'procure and utilise resources necessary or expedient for the provision [of core and elective services]', for example procurement of relevant service capability or contract management of external providers. LC 16 stipulates that with the exception of fundamental service capability, which must be procured externally from FSPs, DCC is able to employ a mix of internal and external resources for the delivery of enabling services.

- The delivery aspect has likewise changed with DCC now managing 18 major contracts and providing certain services 'in house', eg testing services

5.10. We propose to review and refine the scope of a future DCC's business ('what' DCC does), how DCC's services should be treated under the new framework and how they may be permitted to evolve. We set out in general terms what an 'effective delivery' looks like; however, detailed considerations pertaining to the way DCC delivers its services will be subject to further consultation on DCC's governance and operational model.

DCC's future Mandatory Business

Core Mandatory Business

Question 10: Do you agree with our proposed scope of future DCC's Core Mandatory Business?

5.11. We propose to retain the concept of Mandatory Business under the new framework. At minimum, we believe that Mandatory Business should continue to include DCC's core functions, that is such services and activities which both:

- **relate directly to ensuring the continued provision of a secure, reliable and efficient smart metering service**
- **cannot be contestable.** This means only DCC can provide them by virtue of being the licence-holder

5.12. We believe that many existing services can clearly be considered as part this Core Mandatory Business; these include:

- Core communications services as currently defined in the SEC (Appendix E)
- Services and requirements that clearly support delivery of the smart metering service and cannot be contestable (eg services enabling provision of core communication services or certain services defined in Schedule H of the SEC)
- Modification of these services in response to code changes

5.13. We propose to keep these services clearly defined and enshrined in the licence and the SEC under agreed categories. We are minded to retain the existing categories of 'core

communication services’ and ‘enabling services’ in the licence with specific services belonging to these categories defined in the SEC to provide clarity and transparency on the scope of services provided. We have enclosed our assessment of which existing services may belong to these categories in Appendix 5. We invite stakeholder views on this assessment.

- 5.14. To inform further work, in Appendix 5, we have also set out in general terms what ‘effective delivery’ looks like. These considerations will help determine suitable mechanisms to underpin DCC’s role in the delivery aspect of its business, including governance, incentives or price control/budget setting. We likewise invite stakeholder views on these observations.

Additional Mandatory Business

Question 11: Should the future framework permit DCC to carry out any services additional to its Core Mandatory Business? What are your views on the concepts of ‘mandated services’, ‘ancillary services’ and ‘additional services to users’?

- 5.15. We believe that there may be certain current or future services, which may not strictly relate to the provision of DCC’s ‘core’ business but which could be appropriate for DCC to carry out and therefore also be part of its Mandatory Business.

- 5.16. We have identified the following broad categories:

- ‘Mandated services’
- ‘Ancillary services’
- ‘Additional services to users’

Mandated services

- 5.17. Over time, DCC has been required to deliver services on behalf of, and as instructed by, the Authority or the Secretary of State beyond the original scope of its role at the licence award. This includes, for example, DCC’s design, build and test role in the Switching programme.
- 5.18. It is possible that DCC may be asked to deliver other such projects in the future. To ensure transparency around such activities, we would like to explore introducing a category of ‘mandated services’, which would enshrine this part of DCC’s business in

the licence, along with a clear process for future additions or amendments. (We discuss this in more detail in the next section on evolving DCC's role.) A clear separation of 'mandated services' from the provision of Core Mandatory Business could also allow us to set bespoke requirements and arrangements for these projects, for example in their early stages.

Ancillary services

- 5.19. To date, DCC has provided its core services through activities related to specifying, designing, building, testing, securing, operating, and maintaining the telecommunications network and associated data processing capability. We believe that there are some existing services which may not fall within the definition of 'Core Mandatory Business' but could be considered expedient for DCC to carry out to improve system efficiency or coordination. The key characteristic of these services is that they may be contestable. Existing examples may include elements of testing services, such as development and provision of a 'DCC Boxed' tool or user-integration testing.
- 5.20. In response to our call for evidence, some stakeholders have indicated that there may be scope for a future DCC to have an enhanced role in system coordination, for instance by providing its own adapter service. Such a service could be considered ancillary to the Mandatory Business.
- 5.21. We are seeking stakeholder views on the potential scope of these 'ancillary services' and whether they should be included in DCC's remit alongside, but distinguished from, the provision of the Core Mandatory Business. In particular, we are interested in stakeholders' views on whether they see a trade-off between improved efficiency and impact on competition, as these services could be contestable.

Additional services to users

- 5.22. The existing licence includes provisions for bespoke capability offered to users on request, known as 'elective communication services'. Although to date no elective communication services have been provided, we are minded not to foreclose the option to access bespoke services to potential future users at this stage. However, we are looking for stakeholder views on what barriers have limited uptake to date to assess whether a suitable redesign could make these services viable in the future.
- 5.23. We are also exploring whether the concept of bespoke capability could be broadened to include chargeable services to users other than elective *communication* services. The

key characteristic of these services is that, although non-contestable, they are demand-driven and provided only on request.

Table 5.1: Possible future categories and scope of DCC's Mandatory Business

Category	Types of services	Scope	Examples
Core Mandatory Business	Core Communication Services	Services provided on the DCC User Interface Embedded in the licence and defined in the SEC	Messages sent/received to and from smart meters
	Enabling services and other requirements	Services and requirements <u>strictly necessary</u> for the provision of core communication services Defined in the licence with detailed requirements enshrined in the SEC	Updating and maintaining security of the network, Enrolment service, Incident management, Processing service requests, Onboarding of new customers etc.
Additional Mandatory Business	Mandated services	As instructed by the Authority or the Secretary of State and included in the licence (with relevant provisions in the SEC/REC for the relevant code manager to require delivery)	Delivery of certain parts of the Switching programme
	Ancillary services	As agreed with users and defined in the SEC/REC through a code-change process	Potentially contestable services improving system efficiency or coordination to leverage economies of scale, eg 'DCC boxed'
	Additional services to users	Bespoke capability offered to users on request	Elective communication or other services

Evolving DCC's role

Question 12: Do you agree with our proposed drivers for a controlled change in DCC's role? What are your views on the ways in which evolution of DCC's role can be managed?

5.24. Both the scope of services forming DCC's current Mandatory Business and the scope of the activities DCC carries out in dispensing of its business (including the resource required to deliver these activities) have seen growth and evolution during the current licence period. There are several channels through which this growth has been enabled:

- Incorporation of additional baseline: these are requirements that DCC was expected to deliver at the time of licence award but were not fully costed at that time. They include SMETS1 enrolment and adoption programme and Enduring Change of Supplier. DCC has also had to respond to technological change giving rise to the Network Evolution programme.
- New scope: these are activities 'mandated' by the Secretary of State or Ofgem beyond the scope of DCC's role at the licence award. They have included design, build and test of the Switching programme, as well as Market-Wide Half-Hourly Settlement and ad-hoc requirements to carry out specific activities.
- Growth in enabling services: The complexity of the smart metering ecosystem (eg number of device model combinations) has led to a growth of enabling services (eg testing services). Some of these services have also been brought 'in house' and are now provided from DCC's internal resources.

5.25. As set out in our Principle 4 (allowing DCC to evolve in an uncertain environment), it is important that the future framework continues to have sufficient flexibility to account for uncertainty in terms of how DCC's role and activities may need to evolve further. It is crucial that such evolution is transparent and subject to a clear process.

5.26. **We propose to include an uncertainty mechanism in the framework to allow for a controlled evolution in DCC's role.** In line with our principles, such mechanism should at minimum:

- Be sufficiently flexible to account for both known and unknown future factors. We propose to agree a set of broad triggers necessary for initiation of a formal process leading to a change in DCC's role
- Be transparent to all parties. This means identifying ways in which such a process should be governed, including the role of key stakeholders
- Mitigate against inappropriate growth or scope creep. This means embedding the process in the licence and the Smart Energy Code or Retail Energy Code, as appropriate

5.27. First, we have identified the following triggers that a change in DCC's business could be initiated in response to:

- **Change in customer expectations & consumer needs**
- **New policy or regulatory requirements**
- **Evolving technology**

5.28. We believe that these triggers cover the uncertainty landscape and factors necessitating amendments to DCC's role; however, we are open to feedback on further factors that may need to be considered.

5.29. In considering the role of key stakeholders, we have identified several possible uncertainty mechanisms, or ways in which the scope of DCC's services could be modified. These are set out in Table 5.2 below.

Table 5.2: Overview of possible ways to manage uncertainty

Stakeholder initiating change	Likely type of change	Likely trigger
SEC/REC code manager ⁵²	<ul style="list-style-type: none"> Code-change process amending the scope of DCC services under the SEC/REC 	<ul style="list-style-type: none"> Change in customer expectations & consumer needs Evolving technology New policy or regulatory requirements (responding to a strategic direction)⁵³
The Authority or Secretary of State	<ul style="list-style-type: none"> Addition of 'Mandated' business into DCC licence Significant code review of the SEC/REC 	<ul style="list-style-type: none"> New policy or regulatory requirements Evolving technology
DCC Board	<ul style="list-style-type: none"> Submission of a proposal to the code manager, the Authority or the Secretary of State to modify the licence or code requirements 	<ul style="list-style-type: none"> Evolving technology
DCC customers	<ul style="list-style-type: none"> Submission of a proposal to the code manager to initiate a code-change 	<ul style="list-style-type: none"> Change in customer expectations & consumer needs Evolving technology

5.30. In addition to these formal routes for altering DCC's business ('what' DCC does), other uncertainty mechanisms may be needed to support its continued effective delivery ('how DCC does it'). This may include flexible provisions in business planning, or price control or budget setting process. We invite stakeholder views on these considerations to inform our further work in this area.

⁵² Under the ongoing reform of industry codes, many of the responsibilities currently residing with the existing code panels, including the responsibility for code-change process, are expected to transfer to newly appointed code managers, licensed and accountable to Ofgem. See BEIS (2022), Government response to the consultation on Energy Code Reform, p.24.

www.gov.uk/government/consultations/energy-code-reform-governance-framework

⁵³ Under the code reform changes, newly appointed code managers will be issued strategic direction by Ofgem and tasked with developing and publishing a delivery plan consistent with the strategic direction and proposing code changes, as part of its need to implement this delivery plan. See BEIS (2022), Government response to the consultation on Energy Code Reform, p.23.

Commercial re-use considerations

Question 13: Do you agree that the future framework should enable exploration of re-use of DCC's infrastructure? What are your views on the specific conditions and measures that may need to be in place to enable it?

- 5.31. Under the existing regulatory arrangements, DCC is permitted to develop and offer Value Added Services, subject to Ofgem's approval. No such services have been offered to date. We have sought stakeholders views on whether the concept of commercial re-use of the DCC infrastructure should continue to feature in the new framework. Some stakeholders considered that due to its monopoly position, DCC's role should in principle not extend beyond the provision of its core or Mandatory Business. Nevertheless, on the whole, we have found that stakeholders are broadly not opposed to maximising the value of DCC's infrastructure through the exploration of re-use, under specific conditions.
- 5.32. Those who saw the benefit of a potential re-use noted in particular the opportunity to reduce charges to customers, offsetting the investment into DCC's set-up and operations to date. Equally, there may be opportunities to leverage the existing technology of the smart metering communications network to support innovation and improve consumer experience and enhance competitive environment in the retail market.
- 5.33. However, most stakeholders have expressed concerns in relation to the following areas enabling this in practice: clear funding mechanism, transparent governance arrangements, agreed risk & benefit distribution, and protection of competition and provision of the 'core' service. We have found a near-universal agreement that the continued delivery of the 'core' service must remain the focus of DCC's operations.
- 5.34. **We propose to include in the new framework specific provisions allowing the exploration of commercial re-use of the infrastructure.** On balance, we believe that the risks associated with allowing the exploration of re-use can be mitigated through changes to the framework and a set of criteria underpinning the mechanism. Such conditions may include, but not be limited to:
- Measures defining the rules for, and constraints on, relevant parties across key areas of concern. We discuss these in more details below

- Specific licence condition permitting such exploration, which may or may not be active until such time as DCC and its operations are deemed sufficiently mature
- Suitable set of objectives ensuring the delivery of the 'core' service remains the priority. For example, it may be appropriate to de-emphasise the importance of developing commercial propositions in DCC's enduring objectives

5.35. To enable any such activity, we believe that measures would need to be in place across six areas set out in Table 5.3 below. We have included points for stakeholders to consider.

Table 5.3: Areas requiring measures to unlock the opportunity to explore commercial re-use of DCC infrastructure

Area	Principle	Points to consider
Maturity level	DCC must remain focused on delivering its Mandatory Business, resolving existing issues and reaching satisfactory levels of system performance before exploring re-use.	Due to ongoing maintenance and improvements to DCC systems in response to changing customer requirements and evolving technology, DCC's 'business as usual' operations are unlikely to reach a fully stable state. We are therefore interested in views on the grounds on which 'maturity level' could be determined.
Governance	There must be a transparent procedure for initiating, developing and approving any re-use activity. This includes agreement on whom DCC may be allowed to offer commercial services and how active role DCC could play at each stage of the process.	Which party should take the lead role in the governance process?
Funding	There must be a clear route for funding. This may include individual or collective user funding, parent company investment or a third-party investment.	In the absence of risk on DCC and its customers, how can appropriate benefits-distribution be determined?

Risk	DCC customers should not take on risk for commercial ventures. Any commercial re-use must not at any time adversely impact the provision of core services.	
Benefits distribution	The primary objective of any commercial re-use should be to generate benefits flowing back to DCC customers.	
Competition	DCC itself must not benefit from its monopoly or privileged position in any competition with its customers or persons involved in commercial activities associated with energy supply.	What safeguards may need to be in place?

5.36. We invite stakeholder views on these measures to inform our further work on the detailed design of the future framework.

6. Price control change considerations

Chapter summary

As a monopoly company, it is important that DCC's costs are subject to appropriate controls. We have been receiving stakeholder feedback on the continued suitability of the existing *ex-post* arrangements for DCC. In general, stakeholders have suggested that a move to an *ex-ante* approach could deliver the following benefits: greater control over budgets; more transparency and accountability to DCC users; making it easier to incentivise efficiency and value for money; greater predictability and more accurate forecasts; and aligning DCC to other regulated monopolies.

Building on this feedback, we assess the effectiveness of both *ex-post* and *ex-ante* regimes, including potential risks and benefits using the following criteria:

- 1) Dealing with cost uncertainty
- 2) Incentives to control or reduce costs
- 3) Incentives to deliver the right level of performance/quality of service
- 4) Transparency and stakeholder engagement
- 5) Regulatory and resource burden

We seek stakeholder views on our assessment and broader considerations for price control changes, whether on an interim basis during a transition period, or as part of implementation of a new framework.

Questions:

Question 14: Do you consider that a hybrid model, where some costs are regulated under an *ex-ante* regime and some under an *ex-post* regime based on the level of cost uncertainty, would be appropriate for DCC?

Question 15: What elements of DCC's Allowed Revenue are stable (with low risk of forecasts being either under- or over-estimated) and would benefit most from an *ex-ante* approach by 2025?

Question 16: What are your views on the different ways in which risk (ie the benefit of underspending and the cost of overspending) can be shared between the DCC and its customers under an *ex-ante* regime?

Question 17: What are your views on whether DCC can be effectively incentivised to reduce costs at scale under an *ex-ante* regime?

Question 18: Do you think that moving to an *ex-ante* regime could adversely affect the quality of service? What mechanisms could be used to reduce the risk of underperformance under an *ex-ante* regime (eg provisions to allow clawback in case of delivery failing to meet specifications)?

Question 19: What are your views on how best to assess costs under an *ex-ante* approach? For example: What level of detail on costs and benefits would be appropriate? How early should DCC share details of costs with customers? How should this information be shared and evaluated?

Question 20: Do you agree with our initial view that an *ex-ante* model has the potential to reduce the resource burden both for Ofgem and DCC? Please state why.

Background

- 6.1. DCC is a monopoly provider funded by gas and electricity consumers via the energy industry, so it is important that there is an effective control of DCC's costs and revenues to ensure value for money.
- 6.2. We currently do this through the price control arrangements, which restrict DCC's revenues to ensure that incurred costs are 'economic and efficient'. The arrangements also place incentives on DCC to counter its monopoly position to deliver higher quality services and performance levels. Under the current price control arrangements the scrutiny of DCC's costs and performance take place on an annual basis and after the

costs have been incurred ('*ex-post*'). As part of the annual price control exercise, we may also assess and decide on related requests from the DCC, such as the proposal for an adjustment to the Baseline Margin values or the application for External Contract Gain Share (ECGS).

- 6.3. Over the last few price control cycles, stakeholders have expressed concerns about DCC operations continuing to be subject to exclusively *ex-post* price control arrangements. In many instances stakeholders suggested that a move towards an *ex-ante* approach (where costs are agreed before they are incurred), for some or all areas of DCC's activity, should be considered. As we have previously said,⁵⁴ we recognise that an assessment of the price control framework is necessary in order to address the concerns raised by stakeholders.
- 6.4. As part of our DCC review work we are looking at what changes may be required to the current price control to make it appropriate for a future DCC. We have outlined two overarching models in chapter 3. An early discussion on the price control would inform our detail design of price control changes under an Option A-type regulatory framework. We would also consider if certain changes could be brought in early during a transition period if we needed to extend the licence beyond 6 months. Such changes could also be explored on a temporary basis even under Option B. In any case, and subject to the feedback received to this consultation, further work would be required to design and incorporate any potential changes to the price control mechanisms for effectively controlling DCC's costs.

Current price control arrangements

- 6.5. Under its current licence, DCC has to submit cost, revenue, and incentive reporting on an annual basis to Ofgem. DCC's costs can be categorised into two general areas:
- **Internal costs** – these comprise costs like resource and accommodation costs; costs associated with some procured services, such as Smart Metering Key Infrastructure (SMKI); or IT services. Baseline internal costs associated with DCC's role were set in the Licence Application Business Plan (LABP)

⁵⁴ For example in our price control determination for RY2017/18. See Ofgem (2019) DCC Price Control Decision: Regulatory Year 2017/18. www.ofgem.gov.uk/publications/dcc-price-control-decision-regulatory-year-201718

- **External costs** – these are, for the most part, costs incurred by the Fundamental Service Providers (FSPs) who are responsible for delivering the data and communications infrastructure to support smart metering and who were contracted through a competitive tendering process. DCC's contracts with its FSPs include agreed deliverables as well as baseline costs associated with these deliverables that the FSPs will receive payments for. Over the years, costs of procured services to deliver additional baseline activities such as SMETS1 have also been reported under external costs. Over the licence term, the majority of DCC's costs are external costs and therefore one of DCC's key responsibilities is to effectively manage any changes to these large external contracts and ensure value for money and good quality service for consumers

6.6. Both internal and external costs have fluctuated relative to initial expectations over the first few years of DCC's operations. At each price control, we determine *ex-post* what the total level of economic and efficient internal and external costs is and will disallow any costs which DCC has incurred beyond this (ie costs that are found to be not economic and efficient). This *ex-post* approach was selected to reflect the uncertainty attached to setting up and scaling the smart metering infrastructure. As part of the price control, we may also have to assess and decide on related requests from DCC, notably on Baseline Margin (BM) adjustments and External Contract Gain Share (ECGS) application. Each year, DCC can propose an adjustment to its Baseline Margin values.⁵⁵ We assess this proposal and determine whether or not to change the level of margin values set out in the licence. DCC may also submit a proposal for an adjustment to the ECGS term. The effect of the application of External Contract Gain Share is to provide for an upward adjustment to the amount of Allowed Revenue that reflects some part of the reduction in external costs that DCC helped to achieve.

Stakeholder feedback

6.7. We often receive feedback from stakeholders that the current *ex-post* price control regime should be reviewed with changes needed to continue to provide effective control over DCC costs going forward.⁵⁶ In particular, in February 2021 we issued a call

⁵⁵ In each Regulatory Year the amount of additional revenue, over and above the sum of the licensee's Internal Costs and External Costs that the Secretary of State has agreed shall be included (subject to the operation of the Baseline Margin Performance Adjustment) in the licensee's Allowed Revenue, and is determined in accordance with the provisions of Part C of Condition 36.

⁵⁶ For example, see stakeholder representation in response to DCC Price Control consultation: Regulatory Year 2020/21. www.ofgem.gov.uk/publications/dcc-price-control-consultation-regulatory-year-202021

for evidence inviting stakeholders to share their views to inform our approach towards, and the scope of, the review of DCC regulatory framework for the period 2025-2040. Among other questions, we asked stakeholders to “assess the effectiveness of the current regulatory arrangements in light of experience to date, agree key issues and identify what we would like future arrangements from 2025 to achieve”.

- 6.8. The vast majority of respondents that commented on the price control regime question expressed the view that, at least some elements of DCC’s business, should be regulated under an *ex-ante* price control regime.
- 6.9. A significant number of respondents thought that an *ex-post* regime was better suited for activities that carried significant uncertainty, typically new projects or major developments. Many stakeholders suggested a hybrid model under which ‘stable’ activities would be regulated under an *ex-ante* regime. Other respondents simply expressed the view that the current *ex-post* regime has proved ineffective in keeping costs low or aligned to forecasts, and that an *ex-ante* regime would be preferable, or at least should be considered by Ofgem.
- 6.10. Overall, respondents shared the view that an *ex-ante* regime is better suited than *ex-post* for stable activities and operations. Stakeholders typically identified the following expected benefits of an *ex-ante* price control regime compared to an *ex-post* approach:
- Greater control over budget
 - More transparency and accountability for DCC users
 - Easier to incentivise efficiency and value for money
 - Greater predictability and more accurate forecasts
 - Would align DCC to other regulated monopolies
- 6.11. Going forward, most respondents were of the view that the current *ex-post* regime could not provide sufficient control over DCC costs or deliver desired accountability to DCC users.
- 6.12. However, some respondents also identified limitations of an *ex-ante* regime, notably its limitation in managing cost uncertainty, typically associated with transformative

change and new projects. These respondents argued that an *ex-ante* regime might lack the flexibility required to manage uncertainty in these scenarios, and that an *ex-post* regime might be better suited in some cases. Therefore, they proposed a 'hybrid' model where more stable activities would be regulated under an *ex-ante* regime, while activities that required high levels of flexibility would be regulated under an *ex-post* regime.

Assessment of *ex-post* and *ex-ante* regimes

6.13. We note the feedback received on the price control regime question, not only through the call for evidence but also from the annual DCC price control consultations and other industry forums. This feedback has helped to shape our thinking around this question and fed into the discussion we would like to have with stakeholders.

6.14. To help us keep progressing the discussion on the price control question, we are using a set of criteria, which we think capture most of the feedback received to date and represent important aspects to consider when assessing possible changes to the current regime and looking for potential solutions. It is important to note, however, that this set of criteria is only intended to support the discussion at this initial stage and should not be considered an exhaustive or final list.

6.15. We have identified the following criteria against which we assess the effectiveness of both *ex-ante* and *ex-post* regimes:

- (1) Dealing with cost uncertainty
- (2) Incentives to control or reduce costs
- (3) Incentives to deliver the right level of performance/quality of service
- (4) Transparency and stakeholder engagement
- (5) Regulatory and resource burden

Criterion 1. Dealing with cost uncertainty

Question 14: Do you consider that a hybrid model, where some costs are regulated under an *ex-ante* regime and some under an *ex-post* regime based on the level of cost uncertainty, would be appropriate for DCC?

Question 15: What elements of DCC's Allowed Revenue are stable (with low risk of forecasts being either under- or over-estimated) and would benefit most from an ex-ante approach by 2025?

- 6.16. The complexity of DCC's operations creates inherent uncertainty around the scope, timing and level of costs that DCC will incur over a price control period. This level of uncertainty is likely to vary for different parts of the cost base, with some activities being more stable than others. It may also vary according to whether it is driven by exogenous factors beyond the control of DCC's management, or whether DCC itself has a certain level of influence or ability to control the source of uncertainty (or its impact on costs).
- 6.17. Under an *ex-post* model, DCC has the flexibility to respond to changes in cost drivers as and when they happen, and we can form a view after the event of whether DCC performed efficiently given the changes in circumstance, albeit there are challenges associated with this approach. In particular, there are challenges in relation to quantifying the impact of specific actions (or lack of thereof) on costs and this can prevent disallowances being made even where costs impacts are likely to have occurred.⁵⁷
- 6.18. In contrast, in an *ex-ante* model where all cost allowances are fixed up-front, DCC is likely to be more exposed to the risk that such forecasts are either under- or over-estimated. If there is significant cost uncertainty, particularly if that uncertainty is driven by exogenous factors outside of DCC's control, it may be inappropriate to place this risk on DCC (or accordingly, DCC may require a higher margin to take on the additional risk of performing the activity). *Ex-ante* models can be amended to include uncertainty mechanisms which would help to address this, but these mechanisms present their own challenges and might reduce some of the benefits typically associated with *ex-ante* regimes. For example, there may be risk of frequent reopeners and reassessment of previously agreed costs.

⁵⁷ Ofgem (2021), DCC Price Control consultation: Regulatory Year 2020/21, paragraphs 3.112-3.114. www.ofgem.gov.uk/publications/dcc-price-control-consultation-regulatory-year-202021

Criterion 2. Incentives to control or reduce costs

Question 16: What are your views on the different ways in which risk (ie the benefit of underspending and the cost of overspending) can be shared between the DCC and its customers under an *ex-ante* regime?

Question 17: What are your views on whether DCC can be effectively incentivised to reduce costs at scale under an *ex-ante* regime?

6.19. Delivering strong incentives to improve efficiency is usually cited as one of the key benefits of *ex-ante* regulation. This is because, under a stylised *ex-ante* price control, cost allowances are decided upfront and fixed for the duration of the price control period. Once the cost allowances are decided, the regulated entity is typically allowed to recover those allowances, partly or in full, irrespective of the actual costs it incurs. This means that any cost reduction actually achieved by the regulated entity is directly associated with higher profits and, similarly, any cost increase actually incurred reduces its profits.

6.20. It is common practice to use an efficiency incentive rate or 'sharing factor' in order to determine how the risk of any overspend or underspend is shared between the regulated entity and its users under an *ex-ante* regime. For example, we use this incentive mechanism under the RIIO-2 price controls.⁵⁸ This efficiency rate is a fixed percentage of any overspend or underspend which the regulated entity is allowed to retain. A higher sharing rate means DCC takes more risk, strengthening the incentive to reduce costs.⁵⁹ The downside of higher sharing factor is that customers receive less of the benefits from cost reduction within the period (although they may still benefit in the long term). Other factors, such as whether the sharing factor is symmetrical for overspending and underspending, the length of the price control review, and whether there are specific incentives for accurate forecasting in place, would also impact the overall effectiveness of the incentive.

⁵⁸ For further information on how the sharing factor is implemented under RIIO-2 please see: Ofgem (2021), RIIO-2 Final Determinations - Core Document (REVISED).

www.ofgem.gov.uk/sites/default/files/docs/2021/02/final_determinations_-_core_document_revised.pdf

⁵⁹ Example of a symmetric efficiency incentive rate: if the rate is set at 25 per cent, the company's investors will earn £25 profit (before tax) for each £100 that the company saves during the price control period and bear £25 of each additional £100 the company spends. The remainder will be passed on to customers. The rate can also be different for overspend and underspend (asymmetric efficiency incentive).

- 6.21. Another relevant consideration when thinking about cost reduction incentives is whether significant cost reductions are really achievable, particularly in light of the nature of DCC's costs. As described above, DCC's business activity is predominantly the management of large external contracts with service providers. This means that DCC may not have full control over certain costs. Nevertheless, a revised model could reduce overspend even if cost reduction may be more difficult to achieve.

Criterion 3. Incentives to improve quality of service

Question 18: Do you think that moving to an *ex-ante* regime could adversely affect the quality of service? What mechanisms could be used to reduce the risk of underperformance under an *ex-ante* regime (eg provisions to allow clawback in case of delivery failing to meet specifications)?

- 6.22. Under the current *ex-post* price control, DCC has a profit incentive to ensure it meets certain implementation milestones and performance targets.⁶⁰ If cost allowances are set *ex-ante*, however, there is a risk that DCC focuses on cost-cutting at the expense of the quality of service and target deliverables. This means a much stronger focus on identifying the required levels of service. While DCC might be subject to any minimum standards or objectives based on its licence obligations, the incentive to reduce costs could still lead to a reduction in quality. Furthermore, *ex-ante* regime incentivises deferral of spending, which introduces a risk of delays in delivery. Introduction of milestone-based incentives could lead to targeted and timely delivery but can also lead to DCC pursuing those targets at the expense of continued provision of quality service across the board.
- 6.23. Nonetheless, we believe that appropriate incentives to deliver the right quality of output could be designed and implemented under an *ex-ante* regime, for example by employing a combination of different incentive tools similar to the existing Operational Performance Regime (OPR).⁶¹

⁶⁰ Under the existing Operational Performance regime (OPR), 70% of DCC's baseline margin is at risk against system performance measures. Target and minimum performance levels for key DCC's services are set out in the SEC.

⁶¹ For more information on the OPR, please see Revised OPR Guidance (March 2022), accessible at: [Ofgem \(2021\), Decision on OPR Guidance March 2021, subsidiary documents.](https://www.ofgem.gov.uk/publications/decision-opr-guidance-march-2021)

Criterion 4. Transparency and stakeholder engagement

Question 19: What are your views on how best to assess costs under an *ex-ante* approach? For example: What level of detail on costs and benefits would be appropriate? How early should DCC share details of costs with customers? How should this information be shared and evaluated?

- 6.24. Under the current *ex-post* model, DCC submits its incurred costs report and updated cost forecast to Ofgem on an annual basis, as part of its price control submission. We evaluate these costs and provide stakeholders with the opportunity to directly respond to proposed cost disallowances. The submissions, however, are not published at present and stakeholders have only limited sight of DCC's costs. While DCC has other avenues to communicate its costs to its customers, in practice stakeholder visibility of costs is limited.
- 6.25. An *ex-ante* price control may provide stakeholders with cost allowances and justifications before these costs are incurred by DCC via published business plans. This gives stakeholders the opportunity to scrutinise and challenge these plans before the cost allowance is set. However, there is a question of how much detail needs to be made public for this control to be effective.

Criterion 5. Regulatory and resource burden

Question 20: Do you agree with our initial view that an *ex-ante* model has the potential to reduce the resource burden both for Ofgem and DCC? Please state why.

- 6.26. Our initial view is that an *ex-ante* model might reduce the resource burden, both on Ofgem and DCC, for two main reasons. Firstly, from a theoretical point of view, the efficiency incentive under an *ex-ante* regime discussed above should help reveal the efficient cost level. Over time, this information can be used to inform our decisions on updated *ex-ante* cost allowances in subsequent price controls. Secondly, resource burden could be alleviated in the long run if the *ex-ante* price control period was set to last longer than one year. Nevertheless, even under an *ex-ante* framework, the risk of frequent reopeners could lead to continued resource burden, both on the regulator, DCC and DCC's customers.
- 6.27. A hybrid regime (under which certain aspects of DCC's Allowed Revenue are subject to an *ex-ante* price control, whereas others remain within the *ex-post* framework) could be resource intensive on all parties to set up and manage. For example, it will require ensuring the right parts of DCC's business are ring-fenced and subject to the right price control mechanism depending on their certainty. It is conceivable that some

programmes may be subject to *ex-post* arrangements at the outset due to early uncertainty but later transition to be *ex-ante* as they mature and their costs become more stable.

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Appendix 1: Additional information on the principles and outcomes

Summary of Call for Evidence

A1.1. In February 2021, we published a call for evidence, inviting feedback on the scope, priorities and objectives of the DCC review from all interested parties. To gather further evidence, this public consultation was followed by a series of bilateral engagement with a range of stakeholders, including DCC customers, consumer groups, the SEC Panel, government, DCC and its parent, among others. The feedback we received formed the core input for our five principles.

A1.2. Stakeholders raised a range of issues across three broad categories: the future role of DCC, performance and behaviour expectations, and considerations on governance, organisational structure & regulation.

Future role of DCC

A1.3. There was a near-universal agreement that DCC should continue to focus on delivering its 'core' service, working to improve its reliability and efficiency. However, no clear consensus emerged on how the definition of DCC's 'core' service should change under the new framework and how it may be permitted to evolve. For example, some stakeholders suggested that a future DCC should have a coordination role in areas currently outside of its remit, while others considered such functions should remain competitive.

A1.4. A number of stakeholders highlighted the need for a level-playing field, both across geography, in terms of service stability and consistency, and user types, ensuring different users are able to receive the services they are entitled to under the SEC.

A1.5. There was comparatively less agreement on whether DCC should carry on its functions through third party providers or via in-house capabilities. Most stakeholders did not express preference for either model, so long as they resulted in the delivery of reliable and cost efficient services.

A1.6. Stakeholders had mixed views on whether a future DCC should be permitted to provide any additional services. In principle, most stakeholders were not opposed to maximising the value of DCC's infrastructure through its potential reuse, which could offset customer charges; however, this was not regarded as a priority and many DCC's current customers expressed they would not consider it appropriate to fund this re-use through their charges. Any additional services would have to be subject to appropriate maturity level of the 'core'

service and criteria in place to protect competition and define clear governance, funding, and risk & benefit distribution.

Expected performance and behaviours

A1.7. DCC's performance and expected behaviour were consistently of high degree of importance to stakeholders. There was a broad agreement that a future DCC should:

- Exercise effective customer engagement so as to understand, and deliver to, its customers' needs
- Be conscious of the impact of its service on end-consumer experience
- Have strong contract management capability and be accountable for the performance of all external service providers
- Follow a clear strategic direction with priorities aligned to a wider industry strategy
- Be agile and proactive in anticipating and managing change, including strong planning and operational capability and deadline management

Governance, organisational structure & regulation

A1.8. The majority of stakeholders expressed support for changes to the price control arrangements with a strong desire to move towards an *ex-ante* regime. Some stakeholders were open to exploration of alternative models, including a not-for-profit model, fixed-price model, or a hybrid model, with key considerations given to managing uncertainty, potential operational complexity and risk.

A1.9. Likewise, there was substantial support for changes being made to the incentive framework, with many stakeholders seeking alignment of DCC's incentives with its delivery to customer needs and addressing service provider performance.

A1.10. Most stakeholders called for a move towards streamlined enduring governance arrangements with a substantially reduced operational involvement from the government. While most agreed on desired outcomes of improved change management process and needs-based decision making, there was a lack of clear understanding of the future roles of DCC's Board, Ofgem, SEC Panel and the government in DCC's governance. Likewise, there were mixed views on the degree of industry oversight over DCC, with some stakeholders noting risk of enduring resource burden on DCC's customers.

A1.11. Most stakeholders expressed no firm view on the question of changes to existing prohibition on DCC to own and provide fundamental service capability.

A1.12. Similarly, most stakeholders did neither support nor oppose a continued private, for profit ownership model; however, there were a variety of views on the role of the parent company, with some questioning its added value to the DCC ecosystem.

Developing and testing of principles

A1.13. As evidenced by stakeholder feedback through the call for evidence, the key desired outcome is for DCC to continue the delivery of effective 'core' services. At a high level, this requires both an active management of a stable, reliable and secure network, as well as stakeholder confidence in how DCC delivers its services, including:

- DCC's accountability to its customers and end-consumers for its and its service providers' performance
- DCC possessing key capabilities in contract management, strategic planning, proactive change management and operational agility
- DCC displaying expected behaviours in key areas such as transparent cost management and change process, responsiveness to customers, and corporate culture that fosters internal cohesion and long-term thinking

A1.14. Additional services can only be enabled subject to maturity of an effective 'core' service and specific criteria for governance, competition, funding, and appropriate allocation of risk and benefit.

A1.15. We consider that both depend on common understanding and agreement on:

- (1) The quality of expected service, with focus on transparency of costs and processes
- (2) Customer and consumer needs that should drive DCC's priorities
- (3) Lines of accountability through the DCC ecosystem and streamlined governance with clearly defined roles and responsibilities
- (4) The scope of DCC's role and how it should be allowed to evolve in uncertain future environment

(5) How best to maximise the value of the infrastructure, including funding of any such development

A1.16. These considerations formed the basis for our five key principles for a future regulatory framework. We sought views on the draft principles at a stakeholder workshop in June 2021 through facilitated group discussions, group feedback sessions and anonymous polling. Figures A1.1 and A1.2 below provide details of the polling results in support of the principles.

A1.17. 41% of respondents agreed and 59% somewhat agreed that our principles were sufficient to drive the right outcomes. Furthermore, 56% of stakeholders agreed and 44% somewhat agreed that the principles would help us identify and assess different policy options. Across both polls, stakeholders broadly agreed with the headline principles, although some suggested that certain underlying detailed features of the principles should be further refined. Our final draft of the principles discussed in chapter 2 reflects this detailed feedback.

Figure A1.1: Stakeholder workshop polling result – principles and outcomes

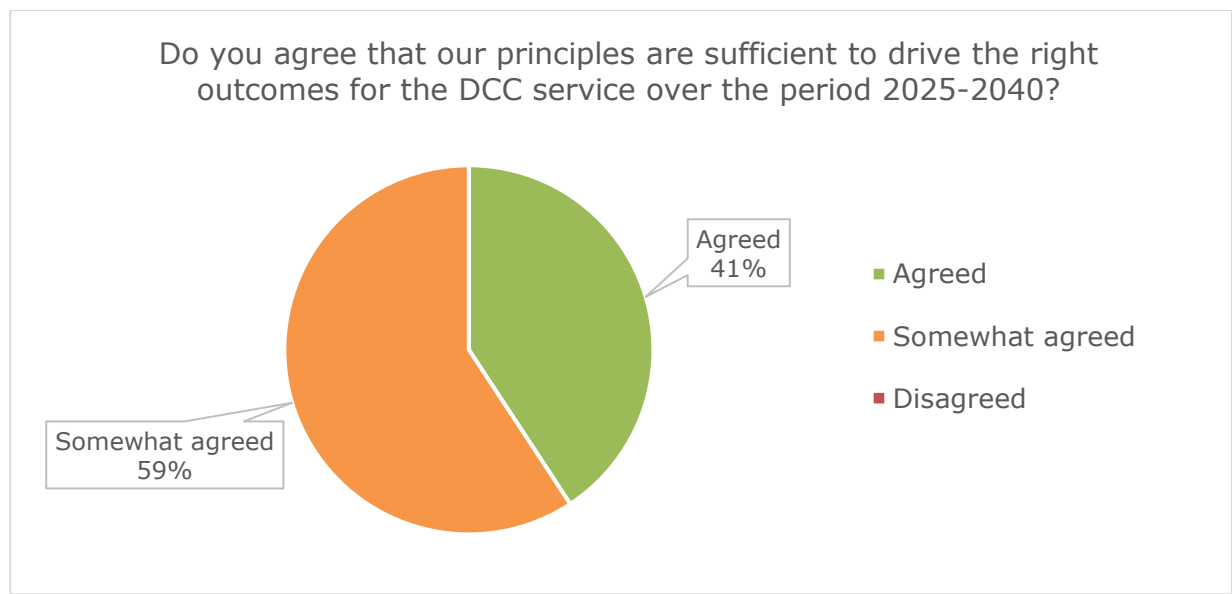


Figure A1.1: Data Table

	Number of respondents	[%] of respondents
Agreed	11	41%
Somewhat agreed	16	59%
Disagreed	0	0%
Total	27	100%
Did not respond	8	N/A

Figure A1.2: Stakeholder workshop polling result – application of principles

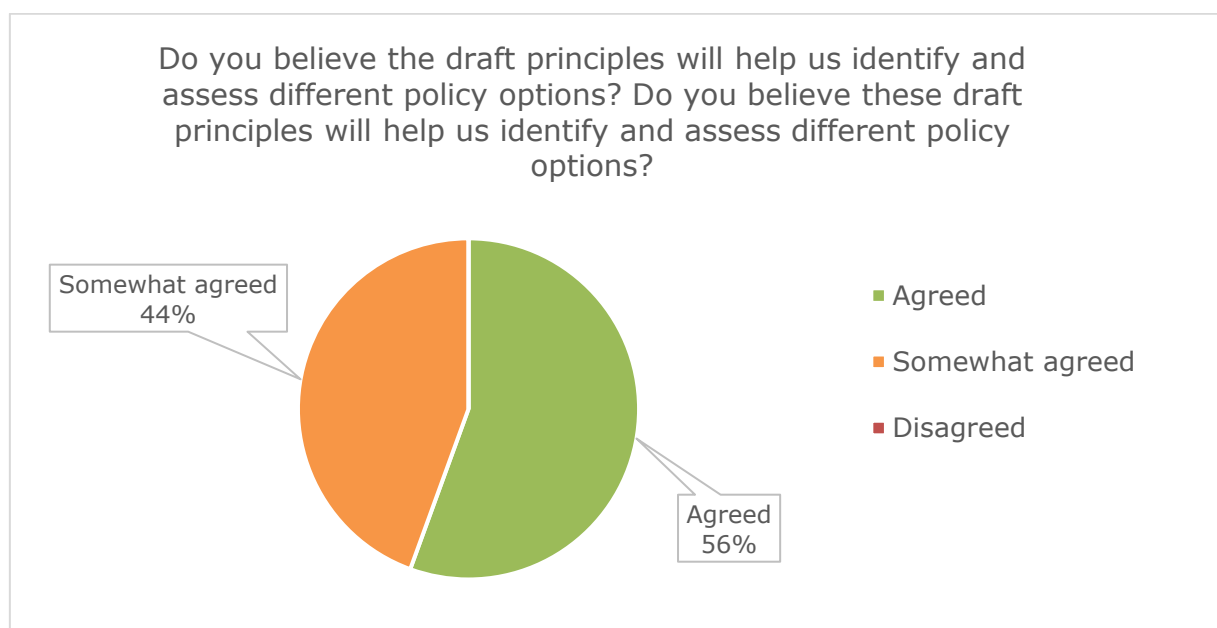


Figure A1.2: Data Table

	Number of respondents	[%] of respondents
Agreed	15	56%
Somewhat agreed	12	44%
Disagreed	0	0%
Total	27	100%
Did not respond	8	N/A

A1.18. We further proposed to assign weighting to individual principles to recognise that certain outcomes may be of higher priority and to help us apply the principles to explore trade-offs of different regulatory models. We asked stakeholders to rank individual principles in order of their relative importance.

A1.19. As outlined in Figure A1.3, there was a near-universal agreement among stakeholders that Principle 1 (delivery of a quality, cost-efficient and secure service) & Principle 2 (customer-centric and consumer-focused outcomes) were paramount, with 78% and 80% of stakeholders, respectively, ranking these as top two. We have therefore assigned these a joint-highest score of 0.3 each. In contracts, principles 4 and 5 relating to the evolution of DCC's role and maximisation of the value of the DCC infrastructure through exploration of re-use were considered comparatively less important with over 80% stakeholders ranking them as fourth or fifth. We have therefore assigned them a joint-lowest rating of 0.1. Over 50% of stakeholders ranked Principle 3 (enabling full accountability and decisive governance) as

third, with the remainder equally split between considering it of high and low priority. We have therefore assigned this principle a score of 0.2.

A1.20. Of the 25 respondents, 3 proposed to weigh all principles equally or only draw out Principle 2 to drive quality and cost-efficient core service. This is also reflected in our higher rating of the second principle.

Figure A1.3: Stakeholder ranking of principles in order of their relative importance

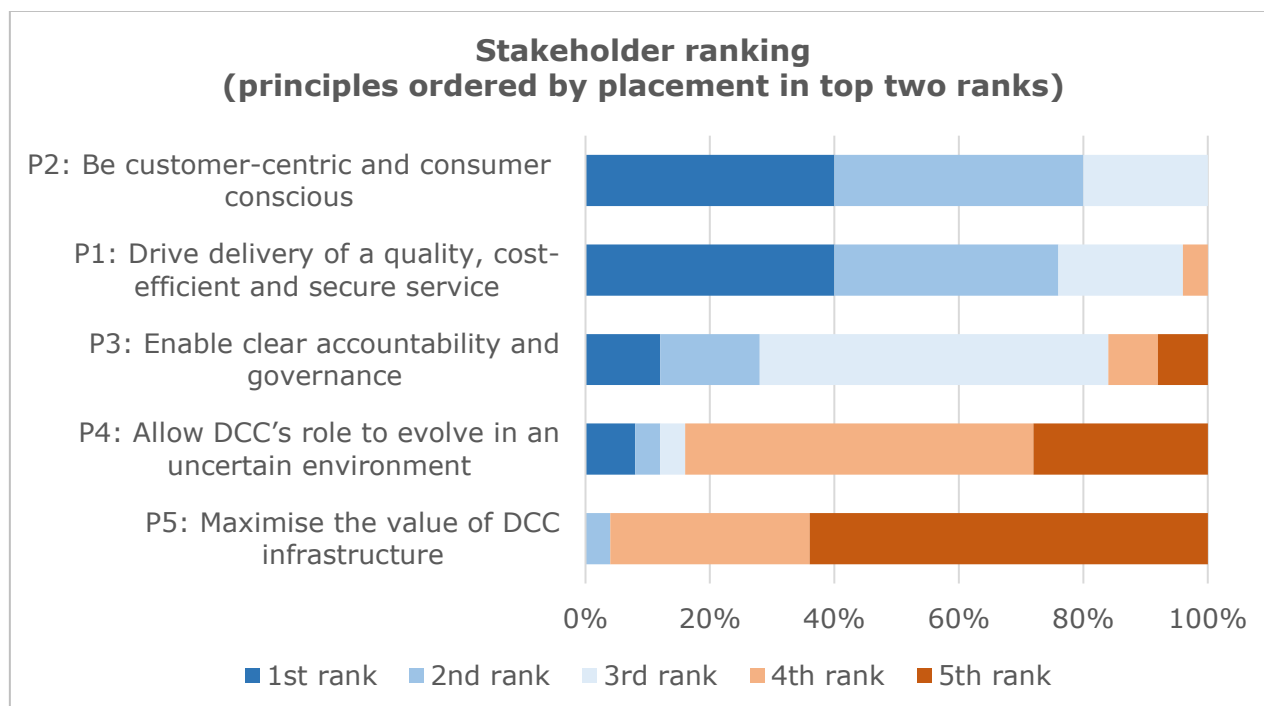


Figure A1.3: Data Table

Principle	Number and percentage of stakeholders ranking given principle in order of relative importance as:									
	First		Second		Third		Fourth		Fifth	
P2: Be customer-centric and consumer conscious	10	40%	10	40%	5	20%	0	0%	0	0%
P1: Drive delivery of a quality, cost-efficient and secure service	10	40%	9	36%	5	20%	1	4%	0	0%
P3: Enable clear accountability and governance	3	12%	4	16%	14	56%	2	8%	2	8%
P4: Allow DCC's role to evolve in an uncertain environment	2	8%	1	4%	1	4%	14	56%	7	28%
P5: Maximise the value of DCC infrastructure	0	0%	1	4%	0	0%	8	32%	16	64%

Appendix 2: Overview of DCC's current role and regulatory arrangements

DCC entity and its role in the energy industry

A2.1. Smart DCC Ltd (DCC) is a licenced entity, operating under the conditions of the Smart Meter Communication Licence (hereafter "DCC licence" or "licence").⁶² The licence was granted by the government to DCC's parent company Capita following a competitive tender in 2013 for an initial period of 12 years.

A2.2. The single, licenced entity model has been selected as the most appropriate approach to establishing DCC. It was intended to reduce the complexity of integrating interoperable and secure smart meter communications services (as provided by DCC) into the industry, reducing the integration risk between separate data and communications companies, provide a single point of accountability, and offer effective procurement of service providers combined with downward pressure on costs through the retendering of individual service provider contracts.⁶³

Ownership structure and composition

A2.3. DCC is a subsidiary of its parent company, Capita, but operates as a standalone entity and the licence prohibits cross-subsidy between DCC and its parent. Nevertheless, DCC's staff are employees of Capita and Capita provides a range of back-office services to DCC. Capita also has a function as the risk underwriter through a limited parent company guarantee. It is compensated through a shared service charge on DCC's baseline internal costs.

A2.4. DCC's Board is composed of two non-executive directors (including the Chair and a Capita executive), two executive directors (including the company CEO and CFO) and a minimum of two, though currently three, independent directors.⁶⁴ This means that while DCC maintains operational independence from its parent, the majority of its current Board members are Capita's employees.

⁶² For clarity, there are 2 licences, embodied in a single document, granted under the Gas Act 1986 and the Electricity Act 1989, respectively.

⁶³ See Ofgem (2010), Smart Metering Implementation Programme: Communications Business Model. www.ofgem.gov.uk/publications/smart-metering-implementation-programme-prospectus?docid=40&refer=e-serve/sm/Documentation

⁶⁴ The current composition of DCC's Board of Directors can be found on DCC's website: <https://www.smartdcc.co.uk/about-dcc/company-leadership/>

DCC's accountability to Ofgem, BEIS and its customers

A2.5. DCC is accountable to Ofgem through its licence. The licence sets out DCC's objectives, Authorised Business as well as a range of conditions with regards to how DCC conducts itself in a number of areas. The licence also requires DCC to comply with the provisions of the Smart Energy Code (SEC). Ofgem oversees DCC's compliance with the licence and relevant code provisions and has the power to revoke the licence as the ultimate sanction. DCC is also accountable to BEIS through its licence, in particular LC 13 requires the production of and compliance with specified project delivery plans, and LC 16 sets out a governance role for BEIS prior to delivering significant new or amended contracts.

A2.6. DCC's accountability to its customers⁶⁵ is through the Smart Energy Code (SEC) and Retail Energy Code (REC). The SEC sets out the detailed service and technical requirements on DCC, which DCC is obligated to comply with.⁶⁶ It is self-governed, managed by the SEC Panel (with Ofgem's oversight as appropriate), in order to empower DCC customers to engage with, be consulted on, input into, and shape, DCC's activities. While DCC is independent of the industry, it faces incentives to drive customer engagement outcomes.

DCC's objectives and scope of the DCC service (Authorised Business)

A2.7. DCC licence sets out the scope of DCC's current role in the industry through the Enduring General Objectives (Table A2.1) and the definition of Authorised Business, which, as set out in Table A2.2 below, comprises Mandatory Business and Permitted Business. DCC's Authorised Business is also set out in greater detail in Appendix 5.

A2.8. Mandatory Business describes activities that DCC has a duty to carry out. It focuses on facilitating the rollout of smart meters to energy consumers in GB, and the maintenance of a functional infrastructure enabling secure two-way communications between smart meters and DCC users. Ofgem and BEIS can extend the scope of DCC's Mandatory Business where necessary or desirable, and DCC's Mandatory Business now also includes activities, which have over time been mandated by Ofgem or the government.⁶⁷ We discuss our approach to conceptualising DCC's Mandatory Business in more detail in chapter 5 in considering DCC's

⁶⁵ DCC customers are users of DCC's network. They include energy suppliers, distribution and network companies, as well as other users, including innovators and other parties with interest in smart metering.

⁶⁶ For more information, see <https://smartenergycodecompany.co.uk/about-the-smart-energy-code/>

⁶⁷ These include 'Additional Baseline', such as Enduring Change of Supplier (ECoS) service, Network Evolution Programme, Smart Metering Key Infrastructure (SMKI), or Parse & Correlate Service, and 'New scope' activities, including the delivery of Switching and Market-wide half hourly settlement (MHHS).

future role. DCC customers can also change the scope of DCC's role via modifications to the SEC or REC (subject to Ofgem's approval).

A2.9. Permitted Business comprises activities that DCC has the power to carry out, subject to specific conditions. This allows DCC to offer Value Added Services with the aim of generating additional revenue to help reduce charges payable by DCC's customers, so long as these do not impair DCC's ability to carry out its Mandatory Business. However, at present DCC does not offer such services and their provision is subject to Ofgem's approval.

Table A2.1: DCC's Enduring General Objectives⁶⁸

Objective	Text
First Enduring General Objective	To carry out Mandatory Business in the manner that is most likely to ensure the development, operation, and maintenance of an efficient, economical, co-ordinated, and secure system for the provision of Mandatory Business services under the Smart Energy Code (SEC) and where relevant the Retail Energy Code (REC).
Second Enduring General Objective	<p>To carry out Mandatory Business in the manner that is most likely to facilitate:</p> <ul style="list-style-type: none"> a) effective competition between persons engaged in, or in commercial activities connected with, the supply of energy under the principal energy legislation b) such innovation in the design and operation of energy networks as will best contribute to the delivery of a secure and sustainable supply of energy under the principal energy legislation c) the reduction (by virtue of benefits arising from the provision of Value Added Services) of the charges payable for Mandatory Business services.

⁶⁸ As defined under Condition 5 of the Smart Meter Communication Licence

Table A2.2: Overview of DCC’s Authorised Business⁶⁹

Mandatory Business	Scope	Provision requirements
Core communication services	Services, that relate solely to the supply (or use) of energy, and are specified and defined in Appendix E to the SEC <i>In effect, communication to and from smart meters</i>	Provided in accordance with LC 17B (“requirements for provision of services”) <i>In effect, provided to any eligible party and to SEC-defined standards⁷⁰</i>
Elective communication services	Services, excluding core communication services, that relate solely to the supply (or use) of energy <i>In effect, bespoke capability that can be requested by any DCC user.</i> <i>None provided to date</i>	Provided in accordance with LC 17C <i>In effect, on a bilateral basis upon evaluation of feasibility and costs</i>
Enabling services	Services that fulfil an enabling role (including making provision for the testing of services and equipment, and for ensuring the security of services) with respect to core or elective communication services; and the procurement and utilisation of all such resources (including, in particular, the Fundamental Service Capability) as may be necessary or expedient for the purposes of securing such provision They consist of: <ul style="list-style-type: none"> • enrolment service • communication hub service • other enabling services specified and defined as such in the licence or the SEC 	As pertaining to individual services: <ul style="list-style-type: none"> • enrolment service in accordance with LC 17D • comms hub service in accordance with LC 17E • other enabling services in accordance with LC 17F

⁶⁹ As laid out in Condition 6 of the licence

⁷⁰ Minimum service levels of some services and target response times for all core communication services are defined alongside the list of these services in Appendix E of the SEC

Centralised registration service (Switching)	Services provided by DCC to achieve the design designated by the Authority and set out within the REC	Provided in accordance with LC 17 and a direction from the Authority in accordance with LC 15
Permitted Business	Scope	Provision requirements
Minimal services	<i>One provided to date</i>	Must not be provided to any material extent from within the capability or resource available to the Mandatory Business; must not exceed £500,000 per regulatory year
Value Added Services (VAS)	<p>Services, which are not related solely to the supply (or use) of energy and are not Minimal Services.</p> <p><i>In effect, possible commercial re-use of the DCC network</i></p> <p><i>None provided to date</i></p>	Must not prejudice DCC's ability to carry out its Mandatory Business; must be approved by the Authority

Operational model

A2.10. To deliver its Mandatory Business, DCC must procure all Fundamental Service Capability from external service providers.⁷¹ This includes the key communication and data services necessary to provide a GB-wide coverage for SM-WAN and facilitate core communication services on the network. As such, DCC's primary role is to manage and derive value from these external contracts.

A2.11. Where deemed most economic and efficient, DCC is permitted to offer non-fundamental relevant service capability from its own resources, for example testing services. However, the prohibition on ownership of fundamental service capability in practice means that DCC is an asset-light entity with an outsourced delivery model. We discuss the implication of the asset-light nature of DCC in chapter 3 when assessing different regulatory options.

⁷¹ In accordance with LC 16.4 and 16.5

Funding

A2.12. DCC's core activities are funded by charges to its customers. The charging methodology is set out in the SEC. At present no separate funding arrangement exists for Permitted Business.

Price control and incentive arrangements

A2.13. As a for-profit monopoly company, it is crucial that DCC face appropriate controls and incentives to deliver quality service and value for money to its users and energy consumers. Ofgem carries out an annual *ex-post* price control to ensure that the costs, which DCC incurs in each regulatory year, are 'economic and efficient'. Any costs that do not meet this benchmark are disallowed and DCC cannot pass these costs onto its customers.

A2.14. DCC is also incentivised under performance regimes, putting DCC's margin at risk. These comprise the Operational Performance Regime (OPR), under which DCC is incentivised against a set of measures in areas of system performance, customer engagement and contract management,⁷² and the Baseline Margin Project Performance Adjustment Schemes (BMPPAS), which are determined by BEIS for specific projects. In practice, all performance incentives are downside only.

A2.15. Under the annual price control DCC is allowed to apply for adjustment to its Baseline Margin, where it can show that an aspect of its Mandatory Business has changed since the Licence Application Business Plan. Additionally, a gain share mechanism allows DCC to pocket a portion of savings on its main external contracts. Further revenue can also be generated through Value Added Services, although none have been provided to date.

⁷² Ofgem (2021), Decision on OPR Guidance. www.ofgem.gov.uk/publications/decision-opr-guidance-march-2021

Appendix 3: Additional information on alternative regulatory frameworks analysis

A3.1 This appendix provides further information on our development of Option B, presented as an alternative regulatory model in chapter 3.

Industry CSDB models

A3.2 There are ten energy codes spanning electricity and gas industries that define the obligations owed by typically tens or even hundreds of parties to each other. Table A3.1 below provides an overview of these codes and, where relevant, Central System Delivery Bodies (CSDBs) and their ownership and governance.

Table A3.1: Overview of industry codes

Code	Code Administrator	Central Service Delivery Body	CSDB Ownership	CSDB Governance
Balancing & Settlement Code (BSC)	Elxon, incorporated as BSCCo pursuant to BSC.	Elxon, incorporated as BSCCo pursuant to BSC	NGESO (future ownership being consulted on)	Board appointees ratified by BSC Voting Parties
Distribution User of System Agreement (DCUSA)	Electralink, appointed by Panel pursuant to DCUSA	Electralink, established by DNOs pursuant to Distribution Licence	DNOs	Directors appointed by DNOs
Uniform Network Code (UNC) and Independent Gas Transporter UNC (IGT UNC)	UNC – Joint Office, established by Gas Transporters pursuant to Licence IGT UNC - Genserv, appointed by IGT UNC Operators pursuant to IGT UNC	Xoserve, established by Gas Transporters pursuant to Licence	Gas Transporters	Xoserve Board comprises 4 Shippers, 4 Gas Transporters & Chairman
Smart Energy Code (SEC)	Genserv, appointed by SEC Panel pursuant to SEC.	DCC, granted licence	Third-party shareholder	Shareholder-appointed Board
Retail Energy Code (REC)	Genserv, appointed by RECco Board pursuant to REC	DCC (as CSS Provider), granted licence	Third-party shareholder	Shareholder-appointed Board
Connection and User of System Code (CUSC)	NGESO	None*	N/A	N/A
Grid Code	NGESO	None*	N/A	N/A
Distribution Code	Energy Networks Association, appointed by DNOs pursuant to Distribution Code	None*	N/A	N/A
System Operator – Transmission Owner Code (STC)	NGESO	None*	N/A	N/A
Security and Quality of Supply Standard (SQSS)	NGESO	None*	N/A	N/A

* These codes do not have an officially designated CSDB, and the services are provided by one or more of the transmission licensees

A3.3 While principally concerning the role of code managers, the Energy Code Reform has recognised at least four CSDBs including: DCC, Electralink, Xoserve and Elexon.⁷³ We discuss below the ownership and governance arrangements for these four bodies and this has informed Option B, as presented in chapter 3.

DCC

A3.4 The DCC, under the SEC and the REC, is the only CSDB which is licensed and owned by a third party which is not already a party of the code in some other capacity. As a third-party owned business, DCC is able to provide returns to its shareholder within the framework of its licence obligations and the SEC, and in response to the incentives provided by its price control.

Electralink

A3.5 Under the Electricity Distribution Licence, licensees are obligated, in conjunction with other Distribution licensees, “to establish or procure the establishment of” and to “operate and maintain, or procure the operation and maintenance” of the Data Transfer Service (DTS).⁷⁴ The DNOs have discharged this obligation by setting up Electralink. Electralink continues to be owned by the DNOs, and its Board is accountable to them as shareholders.

Xoserve

A3.6 Under the Gas Transporter Licence, licensees are obligated, “together with Relevant Gas Transporters, ensure that there is in post at all times a person appointed as the CDSP [central data services provider] to provide CDSP services and systems”.⁷⁵ The licence requires that the CDSP is a company jointly owned by the licensee and Relevant Gas Transporters, being operators of the gas NTS or gas Distribution Networks. The Gas Transporters have discharged the obligation by setting up Xoserve to be the CDSP.

A3.7 Xoserve is jointly controlled and governed by the licensee and “Relevant Users”, being not only the licensee Relevant Gas Transporters, but also other “Non-RGT Users” of CDSP Services, ie shippers. Non-RGTs can nominate directors, and Non-RGT Users’ representatives

⁷³ BEIS (2021), Consultation on the Design and Delivery of the Energy Code Reform, page 30.
www.gov.uk/government/consultations/energy-code-reform-governance-framework

⁷⁴ Ofgem, Standard conditions of the Electricity Distribution Licence, Condition 37. Accessible at:
www.ofgem.gov.uk/industry-licensing/licences-and-licence-conditions

⁷⁵ Ofgem, Gas Transporter Licence: Standard Special Conditions Part A, Standard Special Condition A15. Accessible at: www.ofgem.gov.uk/industry-licensing/licences-and-licence-conditions

have the opportunity to participate in contract management, change management, and decisions relating to the operation of CDSP.⁷⁶

Elexon

A3.8 Under the Electricity Transmission licence, an obligation is imposed on National Grid ESO to establish a Balancing and Settlement Code Company to “provide and procure facilities, resources and services required for the proper, effective and efficient implementation of the BSC”.⁷⁷ Further, the BSC restricts NGESO from exercising its rights as shareholder only to acts that must be done by Elexon’s shareholder.

A3.9 Elexon’s board is stakeholder-controlled, in which prospective board members are nominated by the Elexon Board’s Nomination Committee and then ratified by BSC Voting Parties.⁷⁸ BSC Voting Parties also have the power to remove directors.⁷⁹

A3.10 Elexon’s constitutional arrangements, including the procedures for appointing directors, liabilities, budgets and plans, are set out in the BSC. Under the terms of the BSC, Elexon is not intended to make a profit,⁸⁰ and does not have the authority to declare any dividend.⁸¹

A3.11 In July 2022, along with BEIS, Ofgem began a consultation on the future ownership of Elexon, prompted by the potential transfer of ownership of NGESO into public ownership.⁸²

A3.12 The consultation has considered the following two options:

- Public ownership as a subsidiary of the FSO
- Ownership by a group of industry stakeholders

⁷⁶ Ibid

⁷⁷ Ofgem, Transmission Licence Standard Conditions, Condition C3. Accessible at: www.ofgem.gov.uk/industry-licensing/licences-and-licence-conditions

⁷⁸ Elexon, Balancing and Settlement Code, Section C4.1. www.elexon.co.uk/bsc-and-codes/balancing-settlement-code/

⁷⁹ Elexon, Balancing and Settlement Code, Section C4.10. www.elexon.co.uk/bsc-and-codes/balancing-settlement-code/

⁸⁰ Elexon, Balancing and Settlement Code, Section C1.3.2. www.elexon.co.uk/bsc-and-codes/balancing-settlement-code/

⁸¹ Elexon (2013), Memorandum and New Articles of Association of Elexon Limited, Article 42. Accessible at: www.elexon.com/governance/

⁸² BEIS (2022), The Future Ownership of Elexon. www.gov.uk/government/consultations/the-future-ownership-of-elexon

A3.13 Under both options, Elexon’s funding and governance, data sharing and mandatory activities would remain as defined in the BSC, and both options would maintain Elexon’s non-profit status and its industry accountability.⁸³

Other Codes

A3.14 The four CSDBs involve five of the ten codes. The other five codes – the CUSC, Grid Code, Distribution Code, System Operator-Transmission Owner Code and SQSS – provide for the obligations between network licensees and their users and between different network licensees, and do not have anything analogous to a CSDB.

Future System Operator

A3.15 Although not a CSDB, the governance of the Future System Operator (FSO) has recently been in development.

A3.16 In July 2021, Ofgem and BEIS published a consultation, setting out proposals for an expert, impartial body, with responsibilities across both electricity and gas systems, to drive progress towards Net Zero while maintaining energy security at efficient cost to consumers. We stated that the FSO would need to be independent from both commercial energy interests and day-to-day operational control of Government.⁸⁴

A3.17 Government and Ofgem published a joint response to the consultation in April 2022, stating a decision to create an FSO to take on the roles and responsibilities of NGESO and longer-term planning, forecasting and market strategy functions in respect of gas.⁸⁵ To achieve freedom from actual or perceived conflicts of interest, it was concluded that FSO should be established as a public corporation.

Options for ownership and control of a future DCC

A3.18 The various CSDBs provide a variety of options for ownership, with DCC owned by a third-party shareholder, and Xoserve, Electralink and Elexon owned by subsets of industry parties. Option A continues the current DCC model, with ownership by a third-party.

⁸³ Ibid, Section 2.4, Criteria 3 and 4.

⁸⁴ BEIS (2021), Energy Future System Operator Consultation, page 3.

www.gov.uk/government/consultations/proposals-for-a-future-system-operator-role

⁸⁵ BEIS (2022), Future System Operator: Government and Ofgem’s response to consultation, Section 1.3.2. www.gov.uk/government/consultations/proposals-for-a-future-system-operator-role

A3.19 Option B is intended to take an alternative approach which decouples ownership and control of the organisation. Its central feature is to model the governance arrangements broadly on Elexon. It is envisaged that, under Option B, DCC's constitutional arrangements would be set out in a combination of the DCC licence and SEC and/or REC, and would provide for voting rights, appointment of directors, obligations to consult, as well as Ofgem's powers of intervention.

A3.20 It seems likely that the ownership, under Option A, by a third-party would be incompatible with significant control by other stakeholders. Except where required to do so, as is the case with NGESO, a third-party is likely to be interested in owning DCC only to the extent that its investment may earn returns and is unlikely to be content with an arrangement under which it cannot control the means by which those returns can be generated.

A3.21 It is therefore envisaged that under Option B, DCC would be not-for-profit with no dividends paid to shareholders. In principle, a stakeholder-controlled DCC could be allowed to choose to make a profit and pay dividends to shareholders, but it is not obvious how it would be in the interests of its stakeholders that pay DCC charges to do so, even if they are also the shareholders. Instead, the focus of the stakeholder-controlled company would be on the provision of services to its customers, and on any wider impact on other stakeholders.

A3.22 Our initial view is that options for the other parameters of the model, ie funding and the operational model, largely flow from the choices made regarding ownership and control.

A3.23 We recognise that the nature of DCC's role in managing the smart metering system is distinct. While informed by the arrangements of other regulatory models, our analysis does not presuppose that a perfect analogy exists between DCC and other CSDBs. Were we to select Option B as the basis for DCC's future regulatory framework, the detailed design would have to take into account DCC's role to ensure feasibility of such framework in practice.

Appendix 4: Additional information on the transition period considerations

A4.1. Table A4.1 below provides an overview of DCC’s main contracts over period 2023 to 2031. A number of these contracts would be up for reprocurement over a possible transition period between 2025 and 2031. This information is intended to help stakeholders provide feedback on our considerations for a possible licence extension discussed in chapter 4.

Table A4.1 Procurement landscape of DCC’s main contracts over period 2023-2031

Service	Provider	2023	2024	2025	2026	2027	2028	2029	2030	2031
DCC Licence				expires September						
DSP	CGI		expires October							
CSP-N	Arqiva						expires December			
CSP-C	Telefonica						expires November			
CSP-S	Telefonica						expires November			
IOC SP	CGI									expires July
MOC SP	Secure									expires March
FOC SP	Trilliant								expires May	
FOC ANSO	DXC			expires July						
DCO SP	Capgemini		expires October							
DCO SDA	Critical Software		expires October							
S1 CSP	Vodafone							expires March		
S1 CSP	Telefonica						expires December			
SMKI	BT			expires April						
Parse & Cor.	Critical Software				expires November					
ECoS	Accenture					expires January				
ECoS	Critical Software			expires January						
Switching	Landmark		expires May							
Switching	Capgemini					expires January				
Switching	Net Company		expires September							

Current contract in place
Possible extension

Appendix 5: Overview of DCC’s Authorised Business

What is provided? (The service that DCC deliver)	Regulatory Basis (non-exhaustive)	In scope of future <u>Core Mandatory Business</u>	Examples of effective delivery (non-exhaustive)	How is it provided? (non-exhaustive)
Core communication services to and from smart meters	LC 6.5(a) <i>DCC User Interface Service Schedule</i> (Appendix E)	YES	<ul style="list-style-type: none">Services are delivered to expected/agreed standards (meeting requirements in the relevant SEC documents) on a fair, transparent, and equitable basis for all service users.DCC drives value for money and efficiency in the procurement of relevant service capabilityCustomers are sufficiently engaged and able to shape DCC’s decision-making, for example through:<ul style="list-style-type: none">development of timely, transparent, and credible delivery plansproactive, timely and sufficiently frequent engagement based on transparent timeframesprovision of information of sufficient quality and detailemploying a range of engagement methods, eg consultation process, workshops, general updatestaking account of customer views in decision-makingWhere services are delivered externally, this is done through effectively managed service provider contracts, including:<ul style="list-style-type: none">strategically planned and timely procurementsintegration/coordination across service providerstimely and effective change managementappropriate risk allocation and managementgenerally following <i>good practice</i> in contract management as set out in the NAO framework⁸⁶Solutions are underpinned by a clear rationale and delivered in the wider context of smart metering strategy	<ul style="list-style-type: none">in Line with LC 17 Part B,<i>[core communication services are provided] through Enabling Services and other requirements (see below)</i>
Services and other requirement enabling core communication services. This means provision of:	LC 6.5(c)	YES		<ul style="list-style-type: none">Through specifying, designing, building, testing, securing, operating and maintain the telecommunications network and associated data processing capability which supports smart metering.From a mix of internal* and external resourcesIn general, external resources should be used unless there is a clear case for the licensee to internally provide (to minimise the scale of the licenced entity operations)Competitive procurement of external servicesIndependence requirements to ensure probityProcurement with a (limited) degree of flexibility to meet future requirements (where these are known, and in agreement with users)
Communications Hubs service (including order management and delivery of CH to users)	LC 6.6(b), SEC Section F5-10, <i>CH Handover Support Materials</i> (Appendix H), <i>CH Installation and Maintenance Support Materials</i> (Appendix I)	YES		<div><div><div>DCC’s Specialist supporting capabilities</div><div>Security assurance <i>Governance, risk & compliance</i> <i>Security operations</i> <i>Demand & Delivery</i> <i>Security architecture</i> <i>Information and data protection</i></div><div>Operations <i>Service design & Transition</i> <i>Design & Test</i> <i>Technical operations</i> <i>Service operations</i> <i>Service management</i></div><div>Technology strategy <i>Test assurance</i> <i>Technology innovation</i> <i>Product management</i> <i>Network Evolution</i></div><div>Regulatory affairs <i>Strategic customer engagement</i></div></div><div>→</div><div><div>DCC’s Corporate functions</div><div><i>Enterprise IT</i></div><div>Finance <i>Regulatory finance</i> <i>Reporting</i> <i>Financial transformation</i> <i>Legal</i></div><div>People and HR <i>Organisational development</i> <i>People operations</i></div><div><i>Economic regulation</i></div></div></div>
Testing services, incl. Production Proving DCC Boxed	SEC Section H14 ⁸⁷ , SEC Section F10 (Test Communications Hub), SEC Section T (Testing during transition), ⁸⁸ <i>Common Test Scenarios Document</i> (Appendix R) <i>SEC Variation Testing Approach Documents</i> ⁸⁹ Production Proving (to the extent as defined in) SEC Section P	In part - We propose to review the scope of testing services		
Updating and maintaining security of the network	SEC Section G	YES		
PKI (public key infrastructure) related services: SMKI, DCCKI, IKI, incl. SMETS1 PKI	SEC Section L, Appendices A, B, C, D, K, L, M, N, O, P, Q, S, T, U, V, W, W, AO and AP	YES		
Enrolment services and smart metering inventory	LC 6.6(a), SEC Section H5, <i>Inventory Enrolment and Decommissioning Procedures</i> (Appendix AC)	YES		
Ongoing maintenance (eg firmware updates)	<i>[Cross-cutting obligations]</i> LC13B (Network Evolution Arrangements)	YES		

⁸⁶ Good practice in contract management has been described in detail in the National Audit Office (NAO) framework. This framework is also used for assessment under the revised OPR contract management incentive. For details, please see: [Good practice contract management framework - National Audit Office \(NAO\) Report](#)

⁸⁷ Under *SEC Section H14*, testing services include: (a) User Entry Process Tests; (b) SMKI and Repository Entry Process Tests; (c) Device and User System Tests; (d) Modification Proposal implementation testing (as described in Section H14.34); (e) DCC Internal Systems change testing (as described in Section H14.36); (f) RDP Entry Process Tests; and (g) SMETS1 Pending Product Combinations Tests

⁸⁸ Testing during transition consist of: System Integration Testing (SIT), Interface testing, End-to-End testing, SMKI and Repository testing, and development of enduring testing documents. It will cease to apply following the completion of Interface, End-to-End and SMKI and Repository testing.

⁸⁹ As developed by DCC directed by Secretary of State, pursuant to SEC Section X11 and incorporated pursuant to SEC Section X5; including *SEC Variation Testing Approach Document* (Appendix AJ), *SEC Variation Testing Approach Document for SMETS1 Services* (Appendix AK), *SEC Variation Testing Approach Document for BEIS Changes included in the November 2020 SEC Release* (Appendix AN), *SEC Variation Testing Approach Document for the CH&N Arrangements* (Appendix AQ), and *SEC Variation Testing Approach Document for the Enduring Change of Supplier Arrangements* (Appendix AR)

What is provided? (The service that DCC deliver)	Regulatory Basis (non-exhaustive)	In scope of future <u>Core Mandatory Business</u>	Examples of effective delivery (non-exhaustive)	How is it provided? (non-exhaustive)		
DCC User Interface and managing demand	SEC Section H3 <i>DCC User Interface Code of Connection</i> (Appendix AE), <i>DCC User Interface Specification</i> (Appendix AD)	YES	<ul style="list-style-type: none"> Enhancements to services and systems are anticipated in response to technological change and customer demands 	<i>Regulatory design & delivery</i>	→	<i>Strategy & Policy</i>
Processing Service Requests	SEC Section H4, <i>Service Request Processing Document</i> (Appendix AB)	YES		<i>Service Delivery Programme & Project management Vendor management PMO Procurement Commercial operations</i>		<i>Business Improvement and Internal Audit Risk Compliance</i>
Decommissioning, Withdrawal and Suspension of Devices	SEC Section H6, <i>Inventory Enrolment and Decommissioning Procedures</i> (Appendix AC)	YES		<i>Service design and Transition Early life support Migration control centre</i>		<i>Corporate Affairs Internal & External Communications</i>
Onboarding service for new customers	SEC Section H1	YES				<i>Corporate & Business Planning</i>
Service Management, Self-Service Interface and Service Desk	SEC Section H8, <i>Self Service Interface Access Control Specification</i> (Appendix AH); <i>Self-Service Interface Code of Connection</i> (Appendix AI)	YES				
Incident Management	SEC Section H9, <i>Incident Management Policy</i> (Appendix AG)	YES				
Business Continuity and Disaster Recovery Testing	SEC Section H10.11-12B	YES				
Parse and Correlate Software	SEC Section H11	YES				
Intimate Comms Hubs Interface specifications	SEC Section H12	YES				
DCC Gateway Connections	SEC Section H15, <i>DCC Gateway Connection Code Connection</i> (Appendix G)	YES				
Interoperability Checker Service	SEC Section H16.8-14	NO				
Provision of registration data and Registration Data Interface maintenance	SEC Section E <i>Registration Data Interface Specification</i> (Appendix X); <i>Registration Data Interface Code of Connection</i> (Appendix Y)	YES				
Enduring Change of Supplier (ECoS)	LC 13A <i>ECoS Transition and Migration Approach Document</i> (Appendix AS)	YES				
Modifying the services that are provided in response to SEC or REC changes		YES	<p>Economic and efficient change management process resulting in the selection of best-value solutions, including:</p> <ul style="list-style-type: none"> Timely production of impact assessment Proactive and timely customer engagement on available options Transparent resource procurement allocation Effective contract management 			

What is provided? (The service that DCC deliver)		Regulatory Basis (non-exhaustive)	In scope of future <u>Core Mandatory Business</u>	Examples of effective delivery (non-exhaustive)	How is it provided? (non-exhaustive)
Other mandatory business: Providing other central services to the extent that BEIS or Ofgem modifies the DCC licence (or other document, eg SEC/REC) to require provision of <i>additional mandatory services</i>		SMCL Part 1 Section F: <i>Modification of Conditions</i>		Services are delivered to expected/agreed standards (eg meeting KPIs in the relevant code) on a fair, transparent, and equitable basis for all service users.	
	MHHS	LC 21 Part H	YES		
	Providing the Centralised Registration Service (Switching) under the Retail Energy Code in a secure and coordinated manner	LC 6.5(d) detailed arrangements in LC 15	NO		
	Providing services ancillary to the Central Registration Service under the REC	LC 15	NO		
Bespoke capability delivered on a bilateral basis (Elective Communication Services)		LC 6.5(b)	NO	Services are delivered to agreed standards (enshrined in a relevant bilateral agreement)	<ul style="list-style-type: none">in line with LC 17 Part Cin line with SEC Section H7
Permitted Business			NO – These services would be subject to proposals on ‘commercial re-use’		
	Minimal Services	LC 6.8(b)			<ul style="list-style-type: none">from internal resourcesnot provided to any material extent from within capability or resources available to the Mandatory Business
	Value Added Services	LC 6.8(a) Subject to authorisation under LC 6 Part D			<ul style="list-style-type: none">in line with LC 17 Part G<i>none to date</i>
Other requirements					
	Reporting Activity	LC 29 or any reporting under the SEC, as agreed by DCC in SEC Panel or subgroups	N/A		
	Supporting the smart meter rollout planning		N/A		

Appendix 6: Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, “Ofgem”). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

3. With whom we will be sharing your personal data

(Include here all organisations outside Ofgem who will be given all or some of the data. There is no need to include organisations that will only receive anonymised data. If different organisations see different set of data then make this clear. Be as specific as possible.)

4. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for ***(be as clear as possible but allow room for changes to programmes or policy. It is acceptable to give a relative time e.g. 'six months after the project is closed')***

5. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services
- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at <https://ico.org.uk/>, or telephone 0303 123 1113.

6. Your personal data will not be sent overseas (Note that this cannot be claimed if using Survey Monkey for the consultation as their servers are in the US. In that case use “the Data you provide directly will be stored by Survey Monkey on their servers in the United States. We have taken all necessary precautions to ensure that your rights in term of data protection will not be compromised by this”.

7. Your personal data will not be used for any automated decision making.

8. Your personal data will be stored in a secure government IT system. (If using a third party system such as Survey Monkey to gather the data, you will need to state clearly at which point the data will be moved from there to our internal systems.)

9. More information. For more information on how Ofgem processes your data, click on the link to our “[Ofgem privacy promise](#)”.