



DCC Business & Development Plan (BDP) 2024/25 Consultation

Your chance to shape DCC's five-year BDP

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1. Introduction and Context

The Data Communications Company (DCC) is Britain's digital backbone, supporting the transformation of the energy system. DCC is licensed by the Government and regulated by the energy regulator Ofgem to connect smart meters in homes and small businesses across Great Britain to a single secure, digital network. DCC supports the roll-out of second-generation (SMETS2) smart meters, as well as the migration of existing first-generation (SMETS1) meters onto our network.

1.1. Purpose of the consultation

We are delighted to share a draft version of key sections within the DCC's Business and Development Plan 2024/25 for consultation. Please find enclosed a draft of the following:

- Section 3: Our Operating context
- Section 4: Our Strategy
- Section 5: Outcomes

These sections form the majority of the plan, and we are keen to ascertain and take account of your views as we finalise these elements. Section 1 (CEO forward) and Section 2 (Who we are and what we do) are not included for consultation.

This document remains in its early stages of development and all content should be considered "Draft". DCC will consider all information included in light of feedback from this consultation and further internal reviews prior to formal publication and reserves the right to amend and alter information included within the final document as part of this process.

Customer feedback received earlier this year during the Business and Development Plan early engagement workshop has already fed into our plans. During the sessions with all attendees (SEC and Non-SEC members), we captured the following key themes:

- **Transparency:** increase transparency in costs, plans, and programme future direction
- **Clarity:** DCC to ensure primary focus remains on smart metering rollout
- **Positioning:** how DCC will adapt to future changes (e.g. move to ex-ante, licence renewal)
- **DCC's role:** DCC to define its role in key programmes and activities

Our customer engagement team will remain on hand through the course of the consultation if you need our assistance or would like to discuss elements of the plan in more detail.

At the DCC we continue to seek ways to provide a quality experience for our customers. Central to this is ongoing feedback on our plans.

2. How to Respond

To help guide your feedback and comments we have produced a set of questions below:

Section 3: Our operating context
<ol style="list-style-type: none">1. Do you believe we have captured the key market trends impacting DCC over the course of the next five years? Are there additional trends that we should be considering?2. Are there additional implications for the DCC beyond those identified?
Section 4: Our Strategy
<ol style="list-style-type: none">3. DCC is undertaking a significant volume of activity in response to customer and stakeholder feedback.<ul style="list-style-type: none">• Are we clearly communicating what it is?• Are we clearly communicating why we are doing it?4. Are there additional areas of focus you would like to see referenced within this section? If yes, what would those be and why would you like to see them discussed?
Section 5: Our strategic outcomes
<ol style="list-style-type: none">5. Are there specific activities where the information provided is not clear, or where further information would be helpful for your decision making? If yes, please outline what information is required and why it would be helpful.6. What, if anything, would you change on how we structure our activities to enable you to better understand what we are doing?

Please submit your feedback by **5pm on Monday 20 May 2024** to customerengagement@smartdcc.co.uk.

Consultation responses will be published on our website [Consultations | Smart DCC](#). Please state clearly in writing whether you want all or any part, of your consultation to be treated as confidential. It would be helpful if you could explain to us why you regard the information you have provided as confidential. Please note that responses in their entirety (including any text marked confidential) may be made available to the Department for Energy Security and Net Zero (The Department) and the Gas and Electricity Markets Authority (the Authority). Information provided to The Department or the Authority, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 2018, and the Environmental Information Regulations 2004). If The Department or the Authority receive a request for disclosure of the information, we/they will take full account of your explanation (to the extent provided to them), but we/they cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

If you have any questions about the consultation, please customerengagement@smartdcc.co.uk.

3. Draft Business & Development Plan 2024/25

3.1. Section 3: Our operating context

The DCC operates at the intersection of energy, secure technology and telecoms, and government policy. Across these domains, the speed of change is increasing, albeit to varying degrees, which places an increased importance on the DCC's ability to understand them, identify the implications and plan accordingly. This section assesses some of the key trends that impact our broader operating context.

These challenges are of course not unique to DCC. As a licenced monopoly at the centre of an evolving energy ecosystem, we continue to look for ways to work collaboratively with all our stakeholders to anticipate, respond to, and manage changing requirements.

3.1.1. Energy transition

The transition to a Net Zero energy system will chiefly rely on the decarbonisation of supply and the electrification of demand. As the power sector decarbonises and integrates more variable renewables into the system, the need for flexibility from demand to match variable supply becomes paramount. The Fourth Carbon Budget requires a step change in emissions reduction, reducing the amount of greenhouse gases by 50% between 2023 and 2027¹.

The Government has a target to decarbonise the energy grid by 2035, with Labour committing to do this five years earlier by 2030. Therefore, continued growth in renewable energy will be essential, with a particular focus on offshore wind power. The government has set a target of 50GW for offshore wind capacity by 2030², with floating offshore wind likely to become a vital part of the renewable energy mix.

In parallel, solar energy is becoming increasingly popular. In the domestic sector in 2023 there were more than 183,000 solar panel installations across the UK, a third higher than the previous year³, with Cornwall Insight outlining a further 12GW of solar in planning permission, and an additional 10GW submitted but awaiting permission⁴.

On the demand side, decarbonisation of heat and transport continue to progress, although with headwinds to wider adoption. While, the UK saw the millionth Electric Vehicle registered in January 2024, a recent survey suggested 47% of consumers have a preference for an internal combustion engine (ICE) as their next vehicle, up from 42% last year, with only 9% considering a pure Battery Electric Vehicle⁵. This may be a consequence of the Government's decision, in September 2023, to delay the ban on ICE to 2035, back from the previous 2030 target.

In heating, the Government remains committed to a target of 600,000 heat pump installations annually by 2028, increasing the grant level for the Boiler Upgrade Scheme to £7,500. Yet, in parallel it is consulting on a one year delay to the implementation of the Clean Heat Market Mechanism as it seeks to take a pragmatic route to Net Zero.

A market-wide strategy, including government targets, policy support and market reform is required to facilitate significant growth in distributed flexibility, essential to balancing supply and demand. A smart electricity system could reduce system costs by up to £10 billion a year by 2050⁶.

¹ [UK proposes Fourth Carbon Budget - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/uk-proposes-fourth-carbon-budget)

² [Offshore wind net zero investment roadmap - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/offshore-wind-net-zero-investment-roadmap)

³ [2023: A record-breaking year for MCS and small-scale renewables - MCS \(mcscertified.com\)](https://www.mcscertified.com/news/2023-a-record-breaking-year-for-mcs-and-small-scale-renewables)

⁴ [Landowners cover countryside with solar panels in 'sunrush' \(thetimes.co.uk\)](https://www.thetimes.co.uk/story/landowners-cover-countryside-with-solar-panels-in-sunrush-2023-10-11)

⁵ [2024 Global Automotive Consumer Study | Deloitte UK](https://www.deloitte.com/uk/en/issues/automotive/2024-global-automotive-consumer-study.html)

⁶ [New laws passed to bolster energy security and deliver net zero - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/new-laws-passed-to-bolster-energy-security-and-deliver-net-zero)

Increased flexibility from demand side response (DSR), storage and interconnection, provides significant cost savings in a decarbonised electricity system. Government estimates that 30GW¹ of flexibility capacity is required by 2030 to balance the system and cost-effectively integrate high levels of renewable generation. The successful delivery of Market-wide Half Hourly Settlement (MHHS) will enable consumers to participate more readily in demand flexibility as it spurs greater adoption of Time of Use tariffs. In the interim, the Demand Flexibility Service (DFS), operated by the Electricity System Operator (ESO), has built on the success from last winter with greater participation and demand reduction. Over 2.4m households and small businesses signed up to participate this winter, and 800,000 increase compared to last, with a total demand reduction of 7.2GW². Smart meters were a prerequisite for participation.

For Distribution Network Operators and Distribution System Operators (DNO's/ DSO's) to effectively manage supply and demand in a future smart grid, it is imperative they understand the installed base of low carbon technologies (LCT). However, today there is a lack of visibility of what is installed and where. It is estimated that roughly only 40% of new domestic LCTs are currently visible to the electricity networks.

To address the problem, DESNZ created the Automatic Asset Registration (AAR) Programme, an innovation project aimed at identifying technical solutions for a simplified domestic asset registration process and a Central Asset Register (CAR).

What does this mean for DCC?

- Continue to deliver a reliable and stable system, enabling consumers to understand and engage with their energy usage. In parallel, support energy suppliers with their obligations on the smart meter rollout, including investigating options for premises not currently within the Wide Area Network (No WAN) to enable all eligible premises to receive a smart meter should they need or want one
- Ensuring our systems and infrastructure are sufficiently flexible and scalable to support continued growth in the volume of transactions across the network. This will be driven by absolute volume increase, and a change in request patterns as the DCC customer base and associated behaviours change. This places an increased emphasis on demand forecasting and network traffic management
- Continued engagement with industry to support and enable flexibility propositions and effective management of local networks. Smart meters are key enablers to unlocking the value of flexibility from DSR. Secure communication of half hourly data from meters, facilitated by the DCC network, allows customers to be rewarded for shifting energy usage in a way that wouldn't be possible with traditional meters
- Continued engagement with government and the regulator on proposals around future flexibility services and protocols, including the provision of a secure, central register of assets

3.1.2 Data and Digitalisation

Digitalisation of the energy system is critical to reaching net zero. Accelerating the digitalisation of the energy system will enable emergence of net zero compatible business models, markets, and industry structures.

The rollout of smart meters across households and businesses in Great Britain is the cornerstone of the industry's ongoing digitalisation efforts. As outlined in the Department for Business and Trade's Smart Data Roadmap, "Smart meters are an example today of how digitalisation is empowering consumers to change their behaviour to support decarbonisation; and in the future will enable consumers to access a broader range of products and services, better tailored to their needs"³. Smart metering infrastructure not only provides real-time data on energy consumption, enabling more accurate billing, improved energy

¹ DESNZ, Electricity System Flexibility Modelling

² Electricity System Operator

³ [The Smart Data Roadmap \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/100000/smart-data-roadmap.pdf)

management, and greater visibility into usage patterns; but also offers system capabilities that can be leveraged to meet the urgent need for progress against our net zero objectives and obligations.

With over 30 million smart meters installed, the smart metering network is generating over 1.9 billion data transactions every month. As outlined in 'Data for Good: Smart Meter Data Access' greater transparency of, and accelerated access to, smart meter data can promote energy efficiency, effectively target those in need, empower consumers, and support new solutions for the energy transition¹.

As the energy industry becomes more digitalised and interconnected, data management, including considerations around access, privacy and standards, become critical. A significant volume of policy activity is seeking to carefully advance progress in this area including Consumer Consent, Data Sharing Infrastructure and Data Best Practice.

The impending Data Protection and Digital Information Bill, which is in its last stages of review and approval, will greatly enhance the access and use of data. The Bill is expected to simplify the UK's data protection framework by providing industry with greater flexibility on how to comply with certain aspects of the data protection legislation and improve the clarity of the framework.

In the 2023 Autumn Statement, the Chancellor set out his ambition for the government to kickstart a Smart Data big bang. The Department for Business and Trade's ambition is to realise a world-leading Smart Data economy, empowering consumers and small businesses, and turbo charging competition, innovation, and growth². Energy will be critical to realising this vision, with smart meter data at the heart of this journey.

What does this mean for DCC?

- Absolute focus on secure and stable network performance to ensure customers receive the data they need to develop innovative products and services, and are able to test these safely in a controlled environment
- Continued engagement with interested 3rd parties to support and enable innovation projects seeking to leverage the power of smart meter data, in line with the first recommendation from Data for Good
- Continued engagement with Ofgem to support and inform ongoing regulatory considerations regarding data and the digital regulatory landscape

3.1.3 Consumer challenges

Unprecedented increases in wholesale energy prices from mid-2021 caused significant and prolonged volatility in the energy retail market. Consumers faced several challenges, ranging from concerns about affordability, under-heated homes, piling debt and self-disconnection. Recent estimates suggest that the number of households in fuel poverty across the UK increased from 4.5million in October 2021 to 6.5 million in January 2024³. Energy debt has crossed the £3 billion⁴ mark, the highest level recorded.

At the height of the crisis, the Government implemented various rebates and payment schemes including the Energy Price Guarantee, the Energy Bills Support Scheme and council tax rebate to protect consumers from the impact of energy price shocks, in addition to the existing schemes such as Warm Home Discount and Cold Weather Payment. While these have accounted for one of the largest support packages⁵ to help consumers, there remains scope to improve efficiency of such schemes with better targeting thereby allowing allocation of funds to the consumers most in need. The Government is also

¹ [Data for Good. Smart Meter Data Access - Energy Systems Catapult](#)

² [The Smart Data Roadmap \(publishing.service.gov.uk\)](#)

³ [Fuel poverty in the UK - House of Commons Library \(parliament.uk\)](#)

⁴ [Debt and Arrears Indicators | Ofgem](#)

⁵ [Accounting for £94 billion \(Spring Budget 2023 speech - GOV.UK \(www.gov.uk\)\)](#)

working on strengthening the economic regulation of the energy and other sectors and to update its Fuel Poverty Strategy. As part of their 'Smarter Regulation' consultation, the government is considering a proposal on multi-sector Priority Services Register which would mean that consumers need to disclose their vulnerability only once.

At the same time, Ofgem is reviewing regulation in place to support vulnerable consumers. These include calls for input on examining issues around affordability and debt in the energy market, on reviewing standing charges and more recently on the Future of Domestic Price Protection (Price Cap).

There is also an increased focus on prepayment meters within the energy industry and Ofgem intends to periodically review the rules to check that they are succeeding in their objective of protecting the most vulnerable without unsustainably increasing bad debt, which would add to customer bills. So far Ofgem has taken significant steps to address the issue of involuntary installation of prepayment meters and compensate affected customers, with compensation totalling more than £340,000 already paid out¹.

What does this mean for DCC?

- Ensuring DCC operates efficiently and responsibly, continuing to deliver value for money so that we do not add unnecessarily to the pressure on household energy bills. We are continuing to our increase cost controls across the organisation and are on track with our efforts to drive £30m of cost efficiencies out of the business by 2026
- Continue focus in secure and stable network so that customers can have access to clear, accurate, and timely information about their energy usage, tariffs, and billing
- Continue to support efforts to leverage the smart metering system to tackle fuel poverty. Enabling efforts to understand how system data can help identify areas at risk of fuel poverty and deliver targeted support schemes

3.1.4 Technology and security landscape

The mobile network operators have confirmed to the Government that they do not intend to offer 2G and 3G mobile networks past 2033 at the latest. 3G mobile networks in the UK are gradually being switched off over the next five years, to make room for more advanced 4G and 5G networks.

4G will continue to play a critical role in providing mobile connectivity across the UK. Through the £1 billion Shared Rural Network Programme Government is moving further and faster to push 4G coverage to 95% of the UK's landmass and reduce the digital divide. The UK Wireless Infrastructure Strategy set out an ambition for 5G to reach all populated areas by 2030².

The fibre broadband rollout continues to progress, with the 6 in 10 households now having access to full fibre³. Openreach is aiming to reach 25 million premises by December 2026⁴, with alternative networks continuing to invest in infrastructure, either as part of Government's Project Gigabit or independently. The Government's ambition is to provide gigabit broadband to at least 85% of premises by 2025 and over 99% by 2030.

In its most recent Annual Review, the National Cyber Security Centre (NCSC) warned that the threat to the nations critical infrastructure was 'enduring and significant', with the continued rise of state aligned groups, an increase in aggressive cyber activity and ongoing geopolitical tensions⁵.

¹ [Compensation paid for force-fitting of prepayment meters - BBC News](#)

² [UK Wireless Infrastructure Strategy - GOV.UK \(www.gov.uk\)](#)

³ [UK Broadband Report - January 2024 | thinkbroadband](#)

⁴ <https://www.openreach.com/news/openreach-rolling-out-full-fibre-to-36-new-locations-as-network--reaches-more-than-seven-million-homes/>

⁵ [NCSC warns of enduring and significant threat to UK's... - NCSC.GOV.UK](#)

Evolving techniques enabled by new technologies will make the threat detection and response challenge even greater. Earlier this year, NCSC warned of state sponsored actors using “living off the land” techniques to persist on critical infrastructure networks, while the rise of Artificial Intelligence is expected to heighten the global ransomware threat over the next two years¹.

What does this mean for DCC?

- DCC is a deemed critical national infrastructure, with security obligations inherent in our licence. We have a continued focus on ensuring our security capabilities remain appropriate and commensurate to the threat, working closely with our stakeholders and suppliers to maintain vigilance across the supply chain
- Ensure continued progress and timely delivery of our Communications Hubs & Networks Programme to address impact of 2G and 3G sunseting
- Continue to explore how future connectivity solutions can support the future requirements of the network
- In line with the UK Wireless Infrastructure Strategy, continued engagement with government, our customers, and suppliers, Ofgem and Ofcom to support the digitalisation of the energy sector

3.1.5 Regulation and governance

Energy policy and regulation play a crucial role in shaping the energy landscape, affecting both consumers and the environment.

There are several ongoing regulatory and governance changes across the sector, including Energy Code Reform. The passing of the Energy Act 2023, will address several critical aspects of energy policy, including energy security, net zero emissions, and affordability for households and businesses. It updates Ofgem’s remit so that it considers Net Zero targets as part of its policy making and everyday decisions.

Ultimately, with a general election on the horizon, energy policy is likely to again be at the forefront of political considerations. One of Labour’s five missions is to transform Britain into a green energy superpower, while the Conservatives continue to promote a pragmatic and proportionate route to net zero.

Finally, Ofgem continue to consult on the future of DCC. Since publication of our Business and Development Plan last year, Ofgem has concluded on the key features of our new regulatory model, including conducting core mandatory business on a not-for-profit basis, operational model remaining primarily outsourced, and the Board majority stakeholder or independently controlled, including consumer representation. It will also result in the transition to an ex-ante cost control process, for costs deemed sufficiently stable.

What does this mean for DCC?

- Continue to collaborate with Ofgem on the design of the future DCC and support any procurement process
- Engage on broader governance and regulatory reform across the sector, including code governance, to ensure the regime remains fit for purpose for the future
- Enable the smart metering network and the DCC to be able to act as a platform for policy implementation ahead of and following the General Election

¹ [Global ransomware threat expected to rise with AI, NCSC warns - NCSC.GOV.UK](https://www.ncsc.gov.uk/global-ransomware-threat-expected-to-rise-with-ai-ncsc-warns)

3.2. Section 4: Our Strategy

The DCC, together with its customers, connects homes and businesses to a single, secure, smart metering network.

3.2.1 Purpose, mission, values

Purpose

We believe in making Britain more connected, so we can all lead smarter, greener lives.

Mission

Our mission is to digitalise Britain's energy system, enabling innovation and re-use of the DCC network to accelerate decarbonisation and drive social good.

Values

How we achieve these is guided by our three core values. They help us to work consistently and collaboratively, both internally and with our diverse set of external stakeholders.

Our three core values:



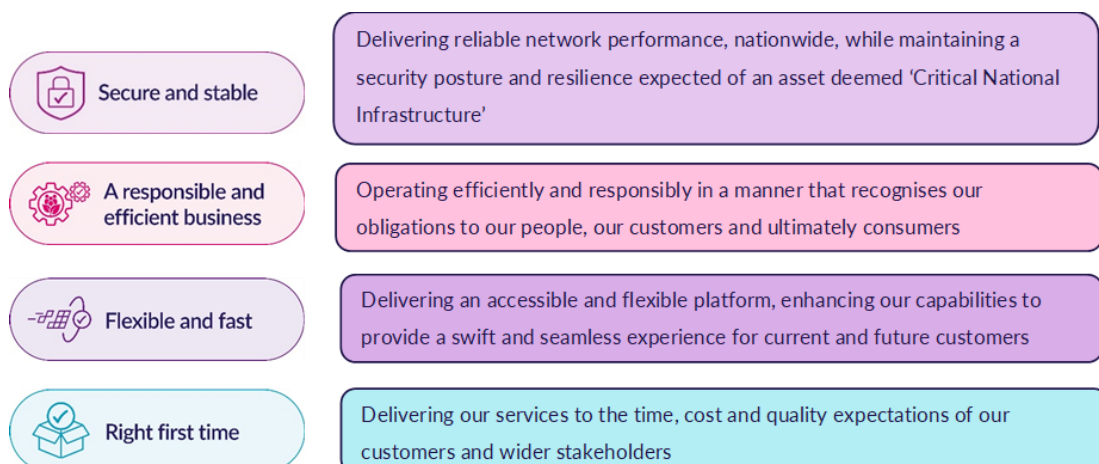
3.2.2 Our strategic outcomes

As a regulated monopoly, we are clear on the obligations on and expectations of the smart metering network to Ofgem and the Department for Energy Security and Net Zero.

We must deliver in an efficient and economical manner, providing value for money and delivering the lowest cost for all our customers and ultimately end consumers.

Given our mandate and the evolving context in which we operate, we have a series of strategic outcomes for our organisation to help align our activities and measure our performance.

We will be:



3.2.3 What we operate

We operate and maintain the smart metering network on a 24/7 basis, securely transferring energy data from homes and businesses to our customers. Our network is now supporting 30 million smart meters in over 18 million premises, helping over half of British households save money and carbon emissions.

Our customers are energy retailers, DNOs, Managed Service Providers and a growing number of other innovative businesses.

We provide a range of service offerings, supported by common capabilities.

Smart Energy

We are continuing to support the roll-out of second-generation (SMETS2) smart meters and the migration of existing first generation (SMETS1) meters onto our network, for domestic premises and small businesses across Great Britain.

The DCC is working on future connectivity solutions to ensure all consumers can access the benefits of smart meeting. We are currently undertaking a programme of work to prepare for the roll-out of next generation, 4G communication hubs expected to be deployed onto the network from 2025 onwards and are working closely with industry and government to address the gap where there is no WAN coverage.

The DCC has delivered additional services beyond the original scope of its role at the licence award in 2013, notably providing the Central Switching Service (CSS) which went live in 2022. This makes switching energy suppliers faster, more reliable, and more efficient. It has supported more than 26m energy switches since it went live, offering 99.98% availability over FY23/24.

Testing

The DCC network relies on smart meters and communication hubs operating efficiently. We make sure that they do. We provide a range of services and support environments designed to test device operability, which lets us ensure functionality, and lets our customers ensure their smart metering systems work seamlessly on the network.

Enabling technology and operational services

Meter data management services involve the collection, storage and processing, and analysis of data gathered from smart meters that enables the continued provision of a stable and secure system. In the Technical operations and Security operations centres, our dedicated teams continually monitor the performance and security of our network, providing peace of mind and deeper insight into our customers smart meter operations.

Supporting government policy

Given our position as central to the digitalisation of the GB energy system, and an already established national asset, the DCC may be asked by the government or Ofgem to deliver future policy initiatives. The reach, scale and inherent security of our network provides a platform for policy implementation and market innovation.

3.2.4 How we deliver

In operating these services, the DCC delivers a unique set of activities from engaging with a varied set of stakeholders, to designing, procuring, and securing new technologies, through to assuring and operating these as part of managing the network.

Any changes to existing services are managed through our Lifecycle Management approach. The following sections outline this integrated approach and our efforts to designing (Technology), procuring (Commercial), and securing (Security) our network.

Lifecycle management approach

We manage any changes to existing services and the implementation of new services provided to our customers through our lifecycle management approach. This provides an ongoing process to ensure that services are managed proactively and efficiently through the course of their lifecycle, with clear accountability at each stage. It seeks to support our shift to increased in-life management of services, and ensures that as deemed CNI, we have the processes, controls and standards in place through the lifecycle of our services.

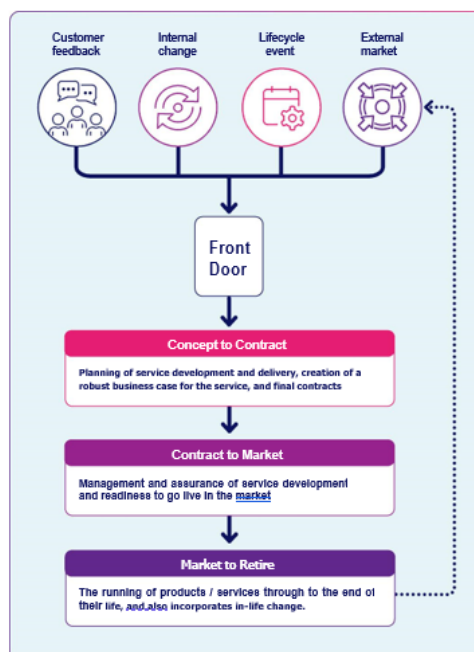
New sources of change, such as instruction from government or our customers funnel through the 'Front Door' that acts as a single point for change initiation. This enables foresight on future activity and ensures delivery impacts and risks can be flagged at the earliest opportunity.

At the 'Concept to Contract' stage, for programmes and procurements that cover core service provision or where the contract value is greater than £10m, the DCC follows the HM Treasury Green Book Business Case approach. This enables us to articulate and demonstrate how the change will meet customers' needs and provide value for money. We are increasingly standardising our approach here, across design and procurement activities, to drive speed, transparency, and value for money.

As the activity moves from 'Contract to Market' to 'Market to Retire', and transitions into the live environment, our service assurance process ensures a smooth go-live that protects customer operations. We do this by controlling all change through quality gates into the live environment, so that service risks are identified and mitigated, and key quality standards are met. Over 3,700 changes were deployed in FY23/24 with an average success rate of c.98% change right first time against our target of 95%.

Lifecycle management supports appropriate stakeholder engagement throughout the process. The DCC operates in a complex and changing stakeholder landscape. We want to be recognised as a trusted partner - by our customers, our regulator, our suppliers, and other ecosystem participants. Therefore, engaging and collaborating with our stakeholders is fundamental to the way we operate, with regular engagement from across the business.

We recognise that as a licenced monopoly we have a duty to be an economic, efficient, and responsible operator, delivering value for money for our customers, because this ultimately delivers value for money for end consumers. We're committed to continuing to seek opportunities to enhance our cost efficiency. We're making good progress against our £30m target, driving efficiency across all areas of the business (see Section 5 for more details).



Technology

The Office of the CTO is accountable for the design decisions that will enable DCC's role as central to the digitalisation of the future energy system. It is the design authority, responsible for the integration and assurance of technology systems associated with our licence.

Technology vision

Our vision is to ensure that the DCC network operates efficiently and securely at scale. We will leverage virtualised, secure, and scalable infrastructure to ensure we meet our service obligations. Our plan is to simplify the design of our infrastructure and where practical push functionality towards the edge of the network. As we evolve our solutions we will reduce complexity, deliver change faster and drive improved interoperability across end devices to ultimately drive efficiency for our customers and to offer the flexibility to support future policy to deliver a net zero energy system.

To deliver against our obligations, we follow these technology and design principles:

- Standards-based design: Design end to end solutions that utilise proven, common standards-based technologies and services rather than leading edge and proprietary technologies that are unproven
- "Secure by Design" architecture principles: Ensure our service providers designs meet or exceed the required security standards in their solutions and will always operate to deemed CNI standards
- Our architecture and designs ensure we can operate to the scale and in-life performance as set by our customers and code bodies – SEC and REC

We will work towards this vision gradually, recognising the need to balance ongoing performance and continuity of service with improvement and futureproofing of the network, while taking advantage of new developments in infrastructure to harness the benefits of server-less, multi-cloud solutions and evolution in the connectivity solution for the end devices.

Commercial

Ensuring secure and stable network performance, resilience, and value for money for customers is paramount, and we rely on our external partners to deliver many of our mandated obligations. Our Commercial team are focused on:

- Continued optimisation of core commercial processes, focusing on refinement and standardisation to ensure our processes are not only robust but also adaptable to changing market dynamics
- Following the implementation of our new Sourcing Platform, significantly enhancing our digital capabilities, we will strengthen the end-to-end operational efficiency further by leveraging advanced analytics, AI-driven insights, and automation
- New Strategic Supplier Management team will facilitate stronger connections with our external partners working to collaboratively identify opportunities in support of further consumer benefit
- Proactively identifying and mitigating third-party risks to safeguard the business against potential threats and disruptions. Enhancing business continuity planning, and build greater resilience to withstand external challenges
- Refine our strategy and policies to drive alignment to Government Procurement Policy (i.e. Chartered Institute of Procurement and Supply, Government Commercial Organisation) and ensure we are adopting industry best practice and driving commercial excellence, all whilst maximising value for our customers

Security

To ensure that the DCC stays ahead of new developments such as AI and increasing use of Cloud based services, we are focusing on enhancing our existing initiatives and augmenting them with new techniques to help with these growing areas of threat.

For example, several significant and well publicised incidents involving ransomware attacks in the last year have confirmed the need for continued work to address this both through technology and ongoing employee awareness. This type of attack is expected to become more challenging as Artificial Intelligence gathers pace. The DCC already has been running a proof-of-concept trial internally to assess viability of AI as both an enabler and an assistance with defence against the growing sophistication of attacks, this will be taken further during 2024/5.

In 2024/25 we will:

1. Further strengthen our strategic initiative to identify threats and provide strong mitigations using the MITRE ATT&CK framework
2. Enhance our security assurance reporting with automated linkage to our latest risk tooling to further ensure that we maintain risks within appetite
3. As with previous years we will continue to integrate and centralise our cyber defences, creating a single 'pane of glass' to monitor the security of Britain's smart metering network
4. Develop our cyber risk maturity and target an overall reduction in cyber security risk over the next 24 months
5. Invest in our people to ensure that we have the skills needed to secure the digital energy system of the future, including the launching of our new Security Degree Apprenticeship programme in the autumn of 2024

Cyber Fusion Centre

After our Security Operations Centre (SOC) successfully achieved CREST accreditation, we are set for the continued onboarding of security event logs from all parts of the DCC network to provide an essential second set of eyes over the entire DCC ecosystem. This work will be ongoing in 2024 and 2025 as we add existing suppliers and new ones to the single view.

Supply Chain Risk Management

In alignment to our Commercial initiatives the Security team are planning more effective use of assurance assessment and real time analysis that will integrate additional control effectiveness data into a new improved risk framework to give a more accessible and concise view of risks and changes in risk.

Summary

The imperative is to ensure that the security mission does not remain stationary but evolves to address the upcoming challenges such as AI and in the slightly longer-term Quantum computing. Both risk areas are already being assessed and tested in readiness to ensure the DCC network remains secure and stable.

3.2.5 Our capabilities

Since the DCC was established, we have built an organisation capable of delivering complex, technology-enabled change programmes. As we have evolved, and the smart meter roll-out has progressed, we have shifted to become a more stable operating business, capable of ensuring reliable network performance on a 24/7 basis, while maintaining the security and resilience of a vitally important element of national infrastructure.

Our core capabilities as an organisation include:

Technical and service operations

We proactively monitor our network on a 24/7 basis using best practice to maintain availability of our systems, while also providing operational insights to our customers, the government, and the regulator.

Security architecture, operations, and assurance

We have built a 24/7 SOC, which actively monitors security threats and operates to NCSC standards. Our SOC successfully achieved CREST accreditation in March 2024 becoming 1 of only 47 accredited SOCs in the world.

Procurement and contract management

We have significant expertise in designing, procuring, and managing complex, high value contracts.

Device management

We have had to develop highly technical processes and systems to support thousands of device model combinations in use across the industry.

Design, programme delivery, test management and assurance

We have designed and built one of the most complex pieces of digital infrastructure in the world.

3.2.6 Measuring performance

We are on the journey to become a more operational and service-oriented organisation, characterised by a focus on network performance and ongoing lifecycle management, underpinned by a culture of customer and consumer centricity.

The DCC's performance and financial incentives are assessed by Ofgem through our annual price control submission and the Operational Performance Regime (OPR).

The three areas of focus for the OPR are:

1. System performance
2. Customer engagement
3. Contract management

3.3. Section 5: Strategic Outcomes

In this section, we have articulated the business outcomes we are seeking to achieve, and the associated key programmes and initiatives that fall within each one. Inevitably, many of the activities we undertake deliver multiple business outcomes, but this approach seeks to provide a more comprehensive explanation of why we do what we do.

These outcomes are:

- Secure and stable
- A responsible and efficient business
- Right first time
- Flexible and fast

Outcome 1: Secure and stable

Provision of a secure and stable network and switching platform is fundamental.

We recognise that we are responsible for the maintenance and operation of this unique network which at scale will support secure messaging across 100 million devices in 30 million homes. Given its increasingly central role at the heart of an evolving energy system, ensuring stability and reliability across the entire network is critical. Furthermore, while we have made significant progress to enable over 99% of eligible premises to access the network, we recognise there remains a small proportion of areas without access. To ensure all consumers can take advantage of the benefits from smart metering, we are investigating efforts to address this, seeking to deliver a stable network nationwide.

The smart metering network was designed with security at its heart. As the security threat continues to evolve, we need to ensure we have the right security controls in place.

The following section covers our key programmes which enable us to deliver this and some key elements of business-as-usual activity.

SMETS 1 Enrolment and Adoption

Enabling the migration of more than 15 million first generation SMETS1 smart meters onto the DCC network

DCC Strategic Outcome	Secure and Stable
Programme	SMETS 1 Enrolment and Adoption
What is this programme?	<p>The SMETS1 Enrolment and Adoption Programme is enabling the migration of more than 15 million first generation SMETS1 smart meters onto the DCC network where they will become fully interoperable between energy suppliers.</p> <p>The programme is complex and technically challenging, involving multiple hardware and software combinations operating in a live environment. The migration and operation of each cohort has required the deployment and integration of a new platform. All cohort migration capabilities went live between August 2019 to February 2021.</p>
Why is it important?	Migration will allow consumers to change energy suppliers without losing smart functionality. The objective is to support

	competition in the retail market and allow consumers to enjoy the full benefits of products and services which depend on smart metering. Migration also extends the operating life of first-generation metering assets, ensuring value for money and reducing waste.
What's next?	<p>Energy suppliers have a licence enrolment obligation to have taken all reasonable steps to enrol SMETS1 meters onto the DCC network by September 2024 with three months to complete closure activities. We are therefore preparing for the closure of the DCC's Migration Service.</p> <p>The Key Activities for SMETS1 in 2024 are:</p> <ol style="list-style-type: none"> 1) Working with our remaining customers to complete migrations of outstanding devices 2) Requesting Party Closure for Secure & Final Operating Capacity British Gas (FOC BG) Cohorts once all migrations have completed 3) Certificate Rotation in FOC to allow devices to continue to operate to End of Life

SMETS 1 Dual Control Organisation (DCO) Re-procurement

Ensures a stable and secure platform for the SMETS1 service

DCC Strategic Outcome	Secure and Stable
Programme	SMETS1 DCO Re-procurement
What is this programme?	<p>SMETS1 DCO is an application that sits at the heart of the SMETS1 security and is fundamental to providing a stable and secure platform for the SMETS1 service.</p> <p>The existing DCO contracts expire over the course of 2024, and this programme aims to procure and implement a replacement DCO service.</p>
Why is it important?	<p>We are reprocuring the SMETS1 DCO to provide service continuity and stability through to the end of 2033. This will ensure the security of the SMETS1 service through helping to detect if a SMETS1 Service Provider is compromised and prevent mass meter attack using anomaly monitoring and cryptography.</p> <p>It also provides Key Management and a 'Detect and Prevent' mirroring service to remove the SMETS1 Service Provider as a single point of compromise for SMETS1 smart meters, providing a stable and secure platform for the SMETS1 service.</p> <p>The re-procurement will seek to deliver value for money through a scalable DCO service. Ensuring flexibility, the</p>

	service can scale down in line with demand as the number of SMETS1 meters reduces through to retirement.
What's next?	<p>The winning bidders for each of the three lots will be known by early June 24 with contract signature aimed for end July 2024.</p> <p>Transition to the new hosting solution will be completed by end of April 2025, with the programme delivering service continuity and meeting existing service levels for availability, operability, resilience, and reliability. These are critical factors to maintaining a stable and secure platform for SMETS 1.</p>

SMETS1 End of Life

Planning for the end of life of SMETS1 service

DCC Strategic Outcome	Secure and Stable
Programme:	SMETS1 End of Life
What is this programme?	<p>We are planning for the end of life of SMETS1 meters. There are a series of connectivity challenges to overcome over the next ten years. However, there are three overriding factors which have significant implications for the operation and lifespan of SMETS1 meters over the next decade. The combination of these will present a significant challenge to industry and will require an agreed transition approach, overseen by industry Committees.</p> <ul style="list-style-type: none"> ▪ The expiry of Vodafone’s contract for network and services in March 2029 ▪ The ‘sunset of 2G’ networks in the UK by 2033 ▪ Ageing infrastructure and contract expiry challenges <p>This programme is aiming to provide industry the support it needs in managing our commercial and contractual positions with key service providers and ensure smart meter functionality for the future.</p> <p>DCC’s role is to understand if the contractual position of the service needs to be assessed to support industry in the swap out.</p>
Why is it important?	<p>SMETS1 service provides smart connectivity to circa 8.9m premises.</p> <p>The SMETS1 service is underpinned by 11 major contracts which will expire between now and 2033.</p> <p>The challenge of this transition is significant. It is imperative that we have a strategy in place to ensure smart meter functionality from March 2029 to the end of 2033.</p>

What's next?	The DCC is producing business cases to understand the implications for industry of swapping out SMETS1 meters ahead of the contractual deadline for Vodafone in March 2029.
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In-life Change

An ongoing programme of maintenance and refresh for key architecture components to ensure security and stability of the network

What is this?

In November 2023, we created a dedicated In-life Change team in Operations to manage and coordinate the enduring delivery of all operational changes under the Market to Retire lifecycle stage.

The primary objective of this team is to maintain the stability, performance, and security of our smart metering network, as well as deliver small minor enhancements across our existing products and services, including SEC and REC modifications, in line with our SEC and REC obligations.

We are seeing significant success in delivering change:

- 438 changes completed in March 2024 with a success rate of 97.95%
- 3,774 changes deployed FY23/24 with an average success of 98.01%

Why is it important?

Below is a summary of the key changes we delivered in 2023 and the associated benefits to our customers.

Type of Change	Product / Service	Description of the Change	Benefits to Customers
Maintenance	SMETS1	Completed DCO service platform upgrades which included Mirantis, ALM Servers, Network Database SQL and Network Switch	Maintain stability, security, and performance of the network
	SMETS2	Completed the first phase of our Data Services Program (DSP) maintenance programme	
Firmware Upgrade	Comms Hubs	Great Britain Companion Specification (GBCS) 4.1 passed operational acceptance and is now in the process of mass rollout across WNC and Toshiba comms hubs	Introduction of 'Over the Air' (OTA) functionality and security features. OTA functionality reduces costs and enhances customer experience by reducing the number of home visits / call outs required

Capacity Enhancements	SMETS2	Channel expansion in the North	Improved performance at peak loads
SEC Modifications	SMETS1 & SMETS2	Northbound traffic prioritisation	Ensures high priority service requests are placed further up an existing queue, e.g., Prepayment Top-ups
	SMETS2	Power Outage Alerts from OTA firmware (GBCS) upgrades	Enhanced and more timely outage alerts to improve service for energy consumers
	SMETS2	Correct Electricity Meter device Information	Reduce number of consumer meters that are not functioning correctly
	SMETS2	Augmenting recovery scenarios for National Grid	Allows acceleration of the replacement of security certificates that will improve performance of this key infrastructure
	SMETS2	Alerts relating to DCC Performance Measurement Report	This will improve the logging and understanding of Alert performance coming from Comms Hubs, allowing DCC to improve its service to customers
	SMETS2	Incorporation of Category 2 Issue Resolution Proposals	This ensures DCC's customers' devices are kept up to date with firmware versions protecting end consumers
REC Modifications	Switching	First release to go live since the launch of the CSS. Introduction of CSS Refresh Functionality	Improves accuracy and speed of switching service for consumers

What's next?

Below, we have set out the pipeline through to 2025 and are continuously reviewing this schedule.

Type of Change	Product / Service	Description
Maintenance	SMETS1	Completion of the remaining DCO service platform upgrades. Targeted for Q4 2024

	SMETS2	Second phase of our DSP maintenance programme Targeted Q1 2025
Firmware Upgrade	Comms Hubs	Completion of the GBCS 4.1 rollout to EDMI comms hubs
Capacity Enhancements	SMETS2	Investment in network infrastructure in the North.
	SMETS1	Capacity enhancements in readiness for Market Half Hourly capability being launched in April 2025
SEC Modifications	SMETS2	Southbound traffic prioritisation
		Introduction of new user role – Meter Data Retrieval (MDR) to support the MHHS Programme
REC Modifications	Switching	

Alongside delivering all the technical product improvements to our network and maintaining its performance and stability, we have also embarked on a series of incremental process improvements to ensure we improve the way we deliver change consistently for our customers. These improvements remove inefficiency and rework, deliver value for money through better planning and forecasting, and create a delivery model that is scalable and more flexible for new changes that will be delivered in 2025, such as follow on activity after the 4G communications hubs have been delivered.

4G Communications Hubs and Networks (CH&N)

Design and procurement of next-generation communications hubs and networks

DCC Strategic Outcome	Secure and Stable
Programme	4G CH&N
What is this programme?	<p>The CH&N programme is geared towards defining and delivering future-proof CH&N in the Central and South regions with an efficient supply chain and a targeted longevity of at least 15 years.</p> <p>To ensure the longevity of smart functionality, DCC is developing a solution to allow for the introduction of new Communications Hubs that use the 4G network.</p> <p>In procuring the contracts to implement the 4G CH&N programme, DCC has for the first time, established a disaggregated supply chain made up of six component entities to improve visibility, control, and agility in providing smart meter connectivity.</p>
Why is it important?	The smart meter network in the Central and South regions is currently supported by 2G and 3G cellular networks. This technology is now being phased out by all UK networks.

	<p>To help mitigate the 2G/3G sunset, provide secure ongoing connectivity, and maximise the longevity of smart meter devices, this programme ensures that smart metering can continue to provide an efficient and effective service for energy providers and consumers post closure of the 2G and 3G networks. This is through the introduction of 4G-supported services.</p> <p>In delivering these outcomes, the 4G CH&N programme will provide updated technologies and deliver a service that is sufficiently flexible to allow for future change while minimising the impact of change on DCC's customers and consumers. A disaggregated model also allows DCC to drive greater efficiency in delivering our services, and these cost savings will be passed on to our customers.</p>
What's next?	<p>A live pilot will be running from the end of 2024 and volume manufacture and installation of 4G communications hubs from mid-2025.</p> <p>Over the course of 2024, we will be working closely with customers to ensure both DCC and our service users are prepared for go live, ensuring a smooth transition to new ways of working.</p>

Public Key Infrastructure - Enduring Services (PKI-E)

Provides cryptographic services to the smart metering infrastructure to ensure security

DCC Strategic Outcome	Secure and Stable
Programme	PKI-E
What is this programme?	<p>The Trusted Service Provider (TSP) PKIs provide cryptographic services to the smart metering infrastructure. This programme is introducing an enduring public key infrastructure platform.</p> <p>The new solution will be delivered with minimal impacts to our customers and DCC's live services and programmes.</p> <p>In establishing the programme, the DCC will mitigate the end-of-life risk but will also develop an enduring public key infrastructure platform that will provide the required levels of security, flexibility, and cost efficiency to support both core services and future enhanced DCC capabilities. The new services will be designed to respond to emerging security needs over a ten-to-fifteen-year time horizon.</p>
Why is it important?	TSP provides the fundamental public key infrastructure for the GB smart metering infrastructure and ensures that the Smart Metering Total System can operate with the required level of security and efficiency.

What's next?	The programme is currently in an advanced phase of procurement with a goal of awarding contracts by Q3 2024 and entering the Design phase by Q4 2024. The planned Go-Live date is Q1 2026.
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Enduring Change of Supplier (ECoS)

Enhance security when consumers are switching from one energy supplier to another

DCC Strategic Outcome	Secure and Stable
Programme	ECoS
What is this programme?	<p>Ensuring that consumers can change energy suppliers securely is one of the primary purposes of the smart metering roll-out.</p> <p>An essential part of this is the change of the security certificates on smart devices (primarily meters) that identify the responsible supplier. This is achieved through the ECoS programme. In August 2019, the DCC was mandated by the Department to deliver an ECoS solution, and the corresponding Service Provider procurement process was concluded in 2021.</p> <p>Remote Transitional Change of Supplier (TCoS) to ECoS certificate migration successfully started in July 2023, and since then, over 29 million TCoS devices have been successfully migrated to the ECoS solution and corresponding Service Provider.</p>
Why is it important?	ECoS is a mandated programme in accordance with Condition 13A.1 of the DCC's Smart Communication Licence. The DCC is directed to establish efficient, economical, coordinated, and enduring arrangements for the changing of Device Security Credentials on or following the completion of a supplier transfer in respect of premises at which there is a smart metering system.
What's next?	<p>ECoS went live in summer 2023 and the activities below will be completed for full programme closure:</p> <ul style="list-style-type: none"> • In Q2 2024, portability of keys will be enabled, and the security keys associated with the TCoS service provider will be migrated to the ECoS service provider • At the end of Q3 2024, the TCoS service provider will be shut down, and the security keys it once held will be destroyed • At the end of Q4 2024, new manufacturing certificates will be made available to meter manufacturers to enable the manufacturing of new devices with ECoS credentials

Build of a Network Demand/ Capacity Forecasting & Management Capability

Ensuring we have capacity available in the right place and at the right time

DCC Strategic Outcome	Secure and Stable
Function	Build of a Network Demand/Capacity Forecasting & Management Capability
What is this function?	The Network Demand Forecasting and Capacity Management function sits across the end-to-end lifecycle of the DCC Network. It is responsible for the production of projected future network demand profiling with input from customers, programmes, and DCC-driven demands that will inform the capacity across the DCC network.
Why is it important?	<p>This capability supports all four of DCC’s strategic outcomes, and success is measured by having the right capacity available in the right place and at the right time. Capacity is maintained across the lifecycle, ensuring we deliver our customers value for money.</p> <p>DCC implemented a new operating model in 2023/24 that anchors to a customer first strategy, a key enabler for ensuring a successful approach to scaling of the network. The new 3-pillar demand and capacity operating model ensures that customer and industry change is sufficiently captured, modelled, and translated into a clear capacity plan over the short- and medium-term planning horizon. The longer term will require a different approach at an industry and policy level to determine the future requirements of the DCC network.</p> <p>Our aim is to ensure that the end-to-end network has been sufficiently dimensioned and sized across the lifecycle to provide an efficient flow of traffic. This ensures the network runs in a secure and stable manner to service emerging business and customer needs and meets the performance measures expected by our customers.</p>
What's next?	<p>Strengthen maturity of the new operating model to improve engagement and insights with our customers, industry and programme change in a proactive and deterministic manner. We welcome our customers continued support to help isolate discontinuities of their demand profile with advanced notice as possible.</p> <p>Demand Forecast Tooling using machine learning and the ingestion of existing usage data to increase efficiency and reduce cycle time of the production of the demand forecast. This tooling is currently in proof of concept, and we hope to deploy into production this year, enabling DCC to provide sensitivity analysis and scenario planning across the very large data set and parameters required.</p>

	<p>Capacity Management Assurance to undertake a detailed review and gap analysis of suppliers' future capacity plans and highlight proposed interventions required to deliver the demand forecast. A clear outcome is for DCC and suppliers to have the confidence that robust plans are in place, in the most efficient manner to deliver the DCC Capacity and services dependent upon it.</p>
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Network Traffic Management (NTM)

Support the efficient management of the network

DCC Strategic Outcome	Secure and Stable
Programme	NTM
What is this programme?	<p>Significant growth in message volume carried over the smart metering network and changing customer expectations, has driven a need for a single strategic approach to NTM to ensure an economic and customer-led approach to network and service continuity.</p> <p>Network traffic growth is driven by several factors. Growth in the number of devices on the network from the continued smart meter roll-out, completion of the SMETS1 Migrations in 2024, and increased usage of the network from new use cases that include growing use by DNO's for better awareness of power usage patterns, Other Users for consumer consumption advice, and MHHS.</p> <p>The NTM Portfolio will focus on the intelligent use of capacity, to minimise investment while optimising performance, and it will pragmatically drive several collective initiatives spanning the DCC business and work collaboratively with DCC's customers.</p> <p>To help support the management of the increased traffic demand, changes are needed in the way we think about how traffic is managed across the network, with problem statements and innovative solutions. The initiatives will not be limited to being technical in nature but will proactively identify opportunities within the customer, operational, process, regulatory, and commercial areas of the business, striving to be data led and benefits driven.</p> <p>DCC will work on the identification of potential issues and improvements, define problem statements, and work through an evaluation with a set of criteria to assess overall benefits and value. The criteria will include the impact or change to customers, complexity of the solution, timing of delivery, total cost to deploy and manage in-life, realisable value, benefits, regional or national opportunity, and system-level impact.</p>
Why is it important?	DCC needs to ensure it has a robust strategy in place to ensure we make the right strategic choices to manage the

	<p>network. This is important for continued and reliable performance, optimising capacity investment and for broader public benefit given the growing number of uses cases for the network.</p> <p>Without intervention, the performance risk to on-time message delivery will grow. An end-to-end strategic approach is therefore essential to ensure timely delivery of solutions that offer value for money and avoid potentially costly changes implemented in isolation.</p>
What's next?	<p>There are currently 15 initiatives identified and tracked by the NTM portfolio, in four different stages that will be progressed dependent on economic and service viability:</p> <ul style="list-style-type: none"> • Candidate and Feasibility (7) • Requirements and Solution (3) • Implementation (2) • Deployed and Value Realisation (3) <p>Quarterly updates to customers are planned for these NTM initiatives through TABASC and OPSG. Forecast: May 24</p>

Future Connectivity

Sustainable smart metering connectivity for the future

DCC Strategic Outcome	Secure and Stable
Programme	Future Connectivity
What is this programme?	<p>DCC is continuously reviewing the future needs of the network and technology requirements to facilitate this. Holistically, this has shown there are three areas to investigate:</p> <ul style="list-style-type: none"> • Future Connectivity Strategy • Fibre Trial • No WAN CADG Trial <p>Future Connectivity Strategy Connectivity is fundamental to DCC's smart platform and service.</p> <p>To prepare for the future, the DCC is developing a strategic business case that considers the inherent limitations of existing connectivity technologies, assesses how future connectivity technologies could be adopted to meet the needs of DCC's customers, and ensures that the final choice of</p>

	<p>technologies will enable the evolution of the network up to 2050.</p> <p>Fibre Trial Project</p> <p>Fibre is the technology of interest in next-generation Wide Area Network (WAN) technology. We are currently in the planning stage for a proof of concept using the fibre network to provide smart metering connectivity and exploring how it may deliver benefits for residents of the Orkney Islands. This will provide learnings on the technical set-up and operational support required for any future scaled operational development.</p> <p>No WAN CADg Project</p> <p>We have a current WAN coverage of 99.3% which leaves a 0.7% gap uncovered. Following Ministerial direction that DCC must ensure that all consumers can access the benefits of smart metering, DCC is working closely with industry and Government to address this gap by developing a technical solution that allows smart meters to operate using a consumer's broadband as an unmanaged connectivity to the DCC network. The solution leverages an enhanced Consumer Access Device (CAD) to transmit messages over domestic Wi-Fi and then through a Virtual Private Network (VPN) to the DSP.</p>
<p>Why is it important?</p>	<p>DCC needs to ensure sustainable long-term smart metering connectivity infrastructure for continuity of service and performance up to and beyond 2033, so that customers can build their long-term plans and ensure value for money. The future connectivity strategy needs to have the necessary headroom to be able to meet evolving demand forecasts and customer needs in a landscape where government policy and technology are transforming.</p> <p>DCC has an opportunity to ensure there is a sustainable long-term connectivity infrastructure that reduces the cost and disruption to industry and consumers resulting from successive technology replacement cycles. At the same time, the DCC has an obligation to deliver an economic and efficient solution that meets licence obligations. By considering alternative connectivity technologies provided to premises today and in the future, DCC will seek to strike the right balance of mitigating the known risks with providing an enduring connectivity platform and service up to 2050.</p>
<p>What's next?</p>	<p>Future Connectivity</p> <p>Throughout 2024, the business case will be refined further to address the challenge, propose the preferred solution, and get the requisite approval for the future connectivity solution. There will also be engagements with service providers</p>

	<p>regarding baselining, developing, and testing the technical solution before deployment. We will also be engaging with wider stakeholders including Ofgem and DESNZ to communicate the plans and objectives that we are developing. We will continue engaging with our customers to ensure any resulting solution meets their needs.</p> <p>Fibre Trial</p> <p>We continue to prepare for the proof of concept and are currently working on contractual arrangements. This will enable further resource mobilisation and entry into test phases.</p> <p>CADg</p> <p>Evaluation of cost and solution options and determine optimal approach to delivery.</p>
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Outcome 2: A responsible and efficient business

The DCC is a unique organisation, operating at the heart of a changing energy landscape to enable a fundamental shift in energy usage and engagement on the path to net zero. As a licensed monopoly, we take this mandate very seriously, striving to continuously improve how we operate for the benefit of our customers and ultimately end consumers. We want to operate an efficient and responsible business that recognises our obligations to our people, our customers and ultimately consumers.

We recognise this responsibility is even more important at a time when energy bills and cost of living pressures continue to impact household spending.

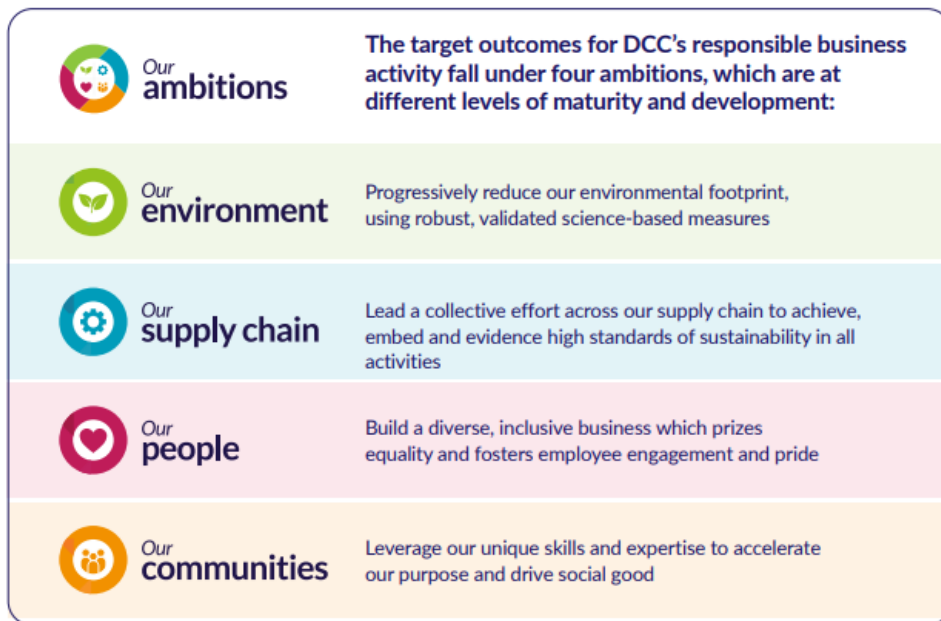
It also means we need to be sustainable in our approach as we have a responsibility to limit our emissions and support the pathway towards decarbonisation. Ultimately, as with many organisations, we believe it is important to embody our purpose, and ensure the decisions we make internally reflect the impact we strive to make and the value we seek to deliver. The following section covers our key programmes and business as usual (BAU) activity which enables us to deliver this outcome.

Responsible Business Framework

The DCC is a purpose-led, responsible business that is focused on serving its customer community and held to high standards of performance and value for money.

In 2023, DCC launched its Responsible Business Framework, which draws together an array of environmental and social aspects of how we work, based on the principles of 'ESG', into a coherent whole.

Throughout 2023 and into 2024, we operationalised DCC's Responsible Business Framework and built a team to ensure DCC continues to operate responsibly and sustainably. The past year has focused on data gathering and assessments to identify the greatest opportunities for impact.



Looking ahead, we will continue to focus on delivering positive impact through responsible, inclusive, and sustainable practices. We will continue to build strong foundations for the framework while balancing this with initiatives to deliver impact. We are looking forward to engaging our value chain and collaborating with our partners to strengthen our collective efforts.

We will:

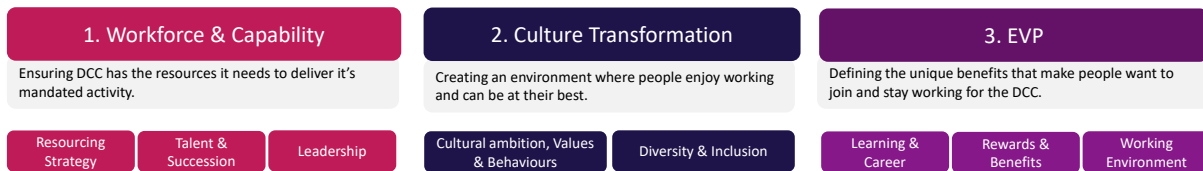
- Empower our employees to act responsibly while increasing our capacity to deliver positive impact through increased employee training and engagement
- Decarbonise our operations progressively and identify opportunities to decarbonise the network in collaboration with our partners to help deliver Britain's net zero targets
- Encourage greater diversity at all levels and create an inclusive environment that attracts the best talent to support our company goals
- Harness the talent and desire to help at DCC to give back to local communities
- Deliver responsible business initiatives in the most efficient manner possible, with a continued focus on delivering value for money for our customers

Our People Strategy

The delivery of our strategy remains through our three key people pillars which will be our enduring focus for the future.

These three pillars – Workforce and Capability, Culture Transformation, and Employee Value Proposition – form the foundation of our People Strategy. By focusing on these areas, we aim to:

- build a workforce that is not only skilled and capable but also
- engaged, motivated, and aligned with the strategic priorities of our organisation



Workforce and Capability:

We continue to refine our workforce strategy, which will ensure that we have access to the right resource at the right time. By ensuring we have the right talent and nurturing their skills, we aim to build a workforce that is not only skilled and capable but also aligned with the strategic goals of our organisation.

Investment in leadership development remains, and our 'Smart Leader' Leadership programme, launched in July 2023 and concluded in March 2024, exemplifies this commitment. Aligned closely with our organisational values and behaviours, this programme has garnered positive engagement levels for its efficacy in fostering leadership excellence.

We are currently in the process of conducting a thorough learning needs analysis, conducting focus groups with all levels of leaders as well as reviewing the organisational goals for leadership capability to enable the Culture, Talent, and Learning Team to produce a recommended approach to the next steps for leadership development.

Moreover, we are currently in the process of enhancing our HR platform to capture and validate the skills and competencies of all colleagues across DCC. This ongoing initiative offers immediate visibility into our workforce's skill sets and lays the groundwork for conducting strategic gap analyses and capability planning tailored to our future organisational needs.

In support of our talent agenda, we have launched a new intake of 3 Degree Apprenticeship schemes in areas of core importance to DCC: Security, Enterprise IT and Architecture. This initiative underscores our unwavering commitment to future talent development and the promotion of a culture of continuous learning and growth.

Culture Transformation:

Our focus on fostering a positive and inclusive organisational culture has yielded significant progress, driven by a new approach to colleague engagement strategy and a commitment to diversity, equity, and inclusion. Prioritising employee feedback has sparked a positive mindset shift among leaders, driving enhanced engagement throughout the organisation, as evidenced in our recent employee opinion survey. This saw the Employee Net Promoter Score (eNPS) increase by 18 points during 2023/4 to +14. During this year, voluntary attrition has also declined from 16% to 13% reinforcing the importance of our culture strategy on the stability of the workforce.

Efforts to engage leadership at all levels have been intensified through the implementation of a robust Leadership Engagement Framework. This framework facilitates information sharing, fostering alignment and cohesion across diverse leadership groups.

The adoption of a hybrid work policy has ushered in a new era of connectivity and engagement, revitalising office dynamics and bolstering organisational cohesion. Moreover, prioritising wellbeing for all colleagues underscores our commitment to their holistic development, promoting awareness, and providing access to development resources across the six pillars of wellbeing.

Substantial strides in advancing our Diversity & Inclusion (D&I) agenda reflect our dedication to cultivating an inclusive workplace culture. We continue to perform well relative to comparable organisations in our sector, with 37% of employees being female and 28% BAME. Integration of inclusion targets into corporate objectives, supported by a new diversity and inclusion plan for 2024 and beyond,

signifies a pivotal step forward in addressing key focus areas and fostering a more diverse and inclusive future.

Our next steps include progressing our relaunched D&I Forum, promoting education and awareness, updating policies and processes to create an increasingly inclusive environment, and working with our supply chain to promote accountability across our wider network.

Employee Value Proposition (EVP):

We have been working on a revitalised Employee Value Proposition (EVP). This refreshed EVP, tailored to resonate with both prospective and current employees, showcases the unique proposition of the DCC employee experience. Central to our EVP is a renewed focus on our strengths and distinctive attributes, setting us apart in the competitive talent marketplace.

Further, the evolution of our hybrid work policy and on-site enhancements has resulted in a resurgence of office attendance to pre-COVID levels.

Noteworthy enhancements to our physical workspace include the introduction of versatile activity-based zones and collaborative workspaces. Accommodations for neurodiverse colleagues, such as covered booths, exemplify our commitment to fostering an inclusive and supportive work environment.

Cost efficiency

DCC continues to mature from a business focused largely on programmes with incremental, transactional value-for-money decisions into a stable operating business with a longer-term view of its cost base. Last year, following our cost benchmarking exercise, we focused on delivering short-term cost efficiency opportunities. This year, we will focus on driving cost efficiency through automation, contract management, and optimising resources, which will include both short-term opportunities and mid-to-long-term enduring efficiencies. We have identified over 50 initiatives to support this, and we are on track to deliver £30 million of enduring cost efficiencies over the three-year period (FY23/24 to FY25/26).

We have a robust process of capturing cost efficiency initiatives that are validated, tracked, reported internally, and contribute to our strategic and corporate objectives. This reinforces our focus on value for money and being a responsible and efficient business.

Move to Ex-Ante Programme (MEAP)

DCC’s move to an ex-ante regulatory regime will enable more robust activity and financial forecasts, providing more certainty for our customers.

DCC Strategic Outcome	A responsible and efficient business
Programme	MEAP
What is this programme?	Ofgem and its stakeholders have identified that an ex-ante regulatory regime would provide benefits to all parties. In August 2023, in their Licence Review Phase 1 Decision, Ofgem determined that DCC should start transitioning away from ex-post regulation towards ex-ante regulation starting in April 2025. To do this effectively, DCC believes this needs to be accompanied by a refreshed view of our cost structure

	<p>to ensure reporting is easily understood and in line with the services we offer.</p> <p>This will better support the needs of our customers and provide them with the following benefits:</p> <ul style="list-style-type: none"> • A greater understanding and visibility of the costs of the services that we provide • More effective and efficient delivery and running of services and value for money • Improved certainty on the costs of the services we provide over a price control period • More effective engagement and input of their needs and requirements in the delivery of services <p>The move to ex-ante will enable these needs through multi-year certainty on pre-approved total expenditure and clear business plans covering the price control period. However, the way that we currently operate will not support the effective and efficient delivery of the above customer needs within an ex-ante regulatory regime.</p> <p>To do this effectively, we need to increase our focus on customers and services and improve our planning and cost management capabilities. The MEAP programme will achieve this by implementing service line management within our operating model and setting up the structures to deliver our first ex-ante forecast.</p> <p>Embedding service line management in the organisation is the core business change required to achieve these outcomes. Service line owners will develop roadmaps for the services required to achieve agreed-upon customer service outcomes and will provide end-to-end accountability and ownership of service provision. The introduction of service line management will integrate with improvements to project, programme, and in-life change delivery, the implementation of flexible resource management, changes to business planning and cost management and improving and aligning functions to support new ways of working.</p>
<p>Why is it important?</p>	<p>MEAP will enable us to be confident that we can operate successfully within an ex-Ante regulatory framework, meeting or exceeding the service quality outcomes agreed in our 3-year business plan and delivering our projects and operational activities with greater cost certainty and transparency.</p> <p>The business outcomes from changing our operating model to one that has service line management at its core, will be as follows:</p>

	<ol style="list-style-type: none"> 1. There will be fewer surprises for us and our customers due to improved long-term business planning to achieve agreed-upon service line outcomes 2. We will have a greater understanding of our service cost drivers, enabling us to drive further opportunities to deliver more efficiently 3. There will be end-to-end business ownership of the services DCC provides and linkage of projects and programmes to the services they add value to. This will provide greater context to our customers regarding how our projects and programmes support the services we provide them 4. We will be confident we can predict and access the short and long-term capacity and capability needed to deliver on our business plan for customers and remain within our ex-ante envelope approved by Ofgem 5. Responsibilities and accountabilities are clearly defined, resulting in faster decision-making and issue resolution, with service line owners at the heart of the delivery of services for our customers
<p>What's next?</p>	<p>We are scoping the projects that will be required to integrate the changes and achieve the capabilities, and integrated operating model needed to operate effectively in an ex-ante regulatory framework. The expectation is that the core changes will be embedded in FY24/25. As we build our service line roadmaps, we will share those roadmaps with our customers.</p> <p>Ofgem will be consulting on the structure of the ex-ante regime and will be publishing their consultation document at the end of May 2024 or early June 2024, with final determination four to eight weeks later. Given the Ofgem expectation that we will start our first control period in April 2025, DCC will need to prepare for an ex-ante budget submission to Ofgem in the autumn of 2024.</p> <p>Given the timelines for initial submission, at this stage, we envisage limited customer engagement. We expect Ofgem to consult on the ultimate ex-ante submission once it is submitted. The final submission and consultation dates for the ex-ante submission are still unknown at this time.</p>

Charging Review

<p>DCC Strategic Outcome</p>	<p>A responsible and efficient business</p>
<p>Project</p>	<p>Review of SEC Charging Methodology</p>
<p>What is this project?</p>	<p>DCC is reviewing its charging policy in line with SEC Modification DP218. Frontier Economics has been appointed</p>

	to support analysis around charging options and distributional impacts.
Why is it important?	DCC's current charging methodology has not substantively changed since it was first established ten years ago. As the roll-out progressed, it was always envisaged that DCC would review its charging model. DCC is now witnessing a shift in how its network is being used and the user groups driving demand. The review of DCC charging will look at how a sustainable charging framework can be delivered.
What's next?	DCC aims to consult industry and all other interested parties over the course of 2024 on the main options for reforming charging. A Request for Information will be published in April and will be open to all those who wish to respond. A second stage consultation will run from September to October this year. Insights from both consultations will be shared with Ofgem and DESNZ who will take a final view on any changes.

Outcome 3: Right first time

We will deliver our services to the time, cost, and quality expectations of our customers and wider stakeholders.

We continuously look for ways to decrease our cycle time across key lifecycle stages, recognising the increasing pace of change across the industry. With improved assurance across delivery phases, we will reduce the number of change requests required, ensuring quality and expectations are designed and agreed from the outset. In doing this, and with an increasing benchmark of historical data behind us, we will be able to forecast costs more accurately.

The following section covers our key programmes and BAU activity which enables us to deliver this outcome.

Project management methodology

Following feedback from our customers and the findings of an independent assessment of DCC's programme delivery capabilities, DCC intends to adopt PRINCE2 as our standard project management method. We are currently working on the design of our future PRINCE2-based Delivery Framework. The intention is to complete design by October 2024 and commence rollout.

The new Delivery Framework will complement our lifecycle management approach with an internationally recognised, process-based methodology that will further enable right first-time delivery and allow us to operate as efficiently as possible.

The adoption of PRINCE2 will support a common language across our customer and supplier base, providing greater transparency of DCC's delivery approach which will positively impact alignment as well as ensure that DCC attracts and retains highly competent delivery talent. The framework will additionally drive greater compliance with P3M (Portfolio, Programme & Project Management) standards, enhancing our control and risk management practices. The outcome will be an improved experience for both our customers and our people.

Licence Renewal


Ofgem has started the review of regulatory arrangements for the DCC and has made some key decisions about our future. While our core mandate and operating obligations remain unchanged, the DCC’s core business will operate on a not-for-profit basis in the successor licence period, and the Board will be independent with an independent Chair.

However, there are a number of other areas where Ofgem has yet to make a final decision, for example, the duration and terms of any extension to the current licence.

We are committed to continuing to work with Ofgem as they finalise the details of the extension to the current licence, the structure of the successor licence, and how we can best support them as they run the procurement for the next licence period.

We have prepared a Business Handover Plan that sets out how we would transition from one licence holder to another. Maintaining the stability and continuity of the core service during any transition and supporting the novation of our supply chain contracts and the transfer of staff to the successor licensee will be paramount.

It is our intention to mobilise a team to:

-  Work with Ofgem and industry on the detailed design of the future model
-  Support the Ofgem led procurement for the next licence holder
-  Ensure a seamless transition to the new model, including early adoption of key changes

Outcome 4: Flexible and fast

We want to deliver an accessible and flexible platform, enhancing our capabilities to provide a swift and seamless experience for both current and future customers.

We know we have a wider role to play in enabling the transformation of Great Britain’s energy system as both a platform for policy implementation and market innovation. To do this effectively, we need to ensure our network remains fit for purpose, offering our customers, current and future, the capabilities they need to deliver on their priorities at the pace needed to bring innovative services to market.

The following section covers our key programmes and BAU activity which enables us to deliver this outcome.

Data Service Provider (DSP) Data Systems

Design and procurement of a data services platform to ensure continuity of service

DCC Strategic Outcome	Flexible and Fast
Programme	DSP Data Systems

<p>What is this programme?</p>	<p>The DSP sits at the heart of the smart metering infrastructure, providing data services that connect energy suppliers to devices at their consumers' premises.</p> <p>In simple terms, the DSP Data System is a central facility that controls the flow of messages to and from smart metering equipment, with service user organisations (e.g., energy suppliers, network operators, and other users) communicating via these central DSP facilities. These messages enable critical functions to take place, such as prepayment meter top-up, and allows for the collection of data needed for energy supplier billing, settlement, or other industry-wide innovative purposes.</p> <p>DCC currently has a single hub contract with a data services provider who operates these central facilities, and this contract expires in October 2024. The DSP Programme will ensure continuity of service beyond the lifetime of the existing contract, making sure any change is managed effectively to minimise risk. It will also provide an opportunity for technical redesign and improvement, where necessary.</p>
<p>Why is it important?</p>	<p>As a regulated business, the DCC is required to ensure the maintenance and continuity of critical services, while securing value for money for our customers. The DSP Programme will ensure this continuity with a reliable service that meets the needs of our customers by improving the pace and cost of delivering industry change. The use of more flexible technology will also lower the cost of operation for our customers and enable future re-use of the network for new services.</p> <p>Specifically, the programme will provide the following benefits:</p> <ul style="list-style-type: none"> • Meet customer needs including improved performance and reduced service outages • Self-serve enabling authorised customers improved data access, diagnostics, and development of elective services • Contested in life change to reduce time and cost for testing, modifications, and the new feature development • Enable increased customer flexibility, reduced cost, and service innovation • Maintain continuity of service and minimise transition risk • Meet mandatory Licence and SEC compliance criteria
<p>What's next?</p>	<p>A preferred option for the DSP Core Services procurement was agreed with customers and stakeholders in December 2023 enabling the issue of the Core Services Provision Invitation to Tender. The procurement is underway, and contracts are planned to be signed by October 2024.</p> <p>Further to this, a preferred option for the procurement of the Systems Integrator to support DSP was agreed with customers and stakeholders in April 2024 enabling the issue of the Systems Integrator Invitation to Tender. This procurement is also targeting completion by October 2024.</p> <p>A forward look post-2024:</p>

	<ul style="list-style-type: none"> • Design and build phase (including Pre-Integration Testing) then runs to January 2026 • Test and sign off phase (including System Integration Testing and User Integration Testing) runs from January 2026 to October 2026, with DSP MVP available October 2026 • Migration runs from October 2026 to October 2027 • Technical go-live is October 2026 • Fully operational with all meters migrated is planned for October 2027
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Future Service Management (FSM)

Upgrading our service management system to drive an improved customer experience

DCC Strategic Outcome	Flexible and Fast
Programme	FSM
What is this programme?	The FSM programme will replace the existing DCC Service Management System (DSMS) with a modern, secure service management system that is easy to maintain and meets the performance obligations under the Smart Energy Code (SEC).
Why is it important?	DSMS is a critical part of the DCC's infrastructure, which is used to track and resolve issues across the smart meter network. Customers can request DCC services, raise incidents, review service audit trails, check downtime, and access a wider range of other reporting and diagnostics information through the Self-Service Interface.
What's next?	DCC is currently progressing the competitive procurement of the new capability, aiming for a down select to a preferred bidder in July 2024 and a contract award in September 2024. DCC will then work with this new Service Provider to conduct design, build, and test activities with a commissioning date of October 2025.

Market-wide Half-Hourly Settlement (MHHS)

DCC is supporting the industry wide MHHS programme

DCC Strategic Outcome	Flexible and Fast
Programme	MHHS
What is this programme?	<p>MHHS is an industry-wide programme, of which DCC is delivery a series of capabilities.</p> <p>Electricity settlements and trading works using half-hourly interval data today. However, most domestic, and smaller non-domestic meter points are settled on a non-half hourly basis. MHHS will mandate energy suppliers to provide all consumers with capable meters on a half-hourly basis. This opportunity has only been made possible by the roll-out of smart meters which can capture half-hourly data and transmit</p>

	<p>it back to the supplier. Through MHHS, energy suppliers will be exposed to the exact half-hourly costs of customer consumption patterns instead of being estimated as they are today. This will encourage electricity suppliers to offer time-of-use tariffs, which in turn will incentivise customers to shift their consumption to times when energy is cheap or to support protecting the electricity networks by managing levels of demand.</p> <p>DCC supports industry in the delivery of MHHS, specifically the delivery of the following capabilities:</p> <ul style="list-style-type: none"> • MDR role, and associated SEC & REC Changes • Additional network management for increased network traffic associated with MHHS • End-to-end System Integration Testing (SIT) Functional Testing, and migration of suppliers to MHHS
Why is it important?	<p>DCC is a key participant in the industry wide MHHS programme and works closely with Elexon as the programme owner and Ofgem as the overall sponsor.</p> <p>DCC will be delivering key enablers for MHHS including the new MDR role, increased capacity required to support the additional network traffic generated, and support for the industry Testing & Migration activity.</p>
What's next?	<p>End-to-end SIT Functional Testing will commence in March 2024 and run for 12 months, ensuring that the full industry-wide solution is in place for the start of migration to MHHS in April 2025.</p> <p>Alongside the testing, DCC is working with suppliers on the delivery of the increased capacity required, to be in place ahead of the start of industry migration in April 2025.</p>

Maximising value from smart metering

We have a unique combination of network and system capabilities, run by an expert organisation providing programme delivery and in-life operation that can be used as a platform for policy interventions and market innovation in support of the energy system transition. For our customers, we are focused on ensuring the smart metering network provides them with what they need to develop innovative new products and services.

Platform for policy implementation and market innovation

Working with our customers and partners, the DCC has delivered one of the most complex examples of secure digital infrastructure in the world. This infrastructure is operational and has already been paid for by consumers. The government's initial vision of a secure, nationwide smart metering network included the potential for its wider use. Given the sums invested, it is prudent to seek to use its core capabilities for wider public benefit.

We are therefore exploring several opportunities in which the end to-end system and its features might be used to facilitate the delivery of government policy objectives. Since our 2023 Business and Development Plan was published, activity in several policy areas has progressed. Significant industry

initiatives such as the MHHS Programme are continuing to advance and provide the foundation for the next wave of energy system propositions such as Time-of-Use Tariffs. In addition, we have continued to support the development of the government’s proposals for ‘Common Systems’ for cyber security including Public Key Infrastructure and Anomaly Detection. We also responded to several policy proposals on digitalisation and consumer consent.

We will also continue to participate in several government-funded innovation competitions, particularly under the Flexibility Innovation Programme. In parallel, DCC’s own data access initiative, termed ‘Data for Good’ seeks to increase access to smart metering data, particularly for public good. DCC and Energy Systems Catapult published ‘Data for Good: Smart Meter Data Access’ with proposals to the industry that can be implemented to maximise the public interest benefit of smart meter data. Following on from the paper’s recommendation, DCC is working to provide access to smart meter system data for the purposes of addressing fuel poverty. As part of this initiative, DCC is working to provide controlled access to anonymised and aggregated smart meter system to certain organisations with Ofgem’s approval and Suppliers’ support. These organisations, including local authorities and academia, will use the Data to develop further methods to identify and support households at risk of fuel poverty. The data sharing commenced in March 2024 and will continue for the period of Permitted Purpose¹.

We continue to support these opportunities to help our stakeholders and industry understand the potential of the system in contributing to key policy priorities and the viability of doing so, while remaining cognisant of the absolute priority of focusing on our mandated obligations. A summary of these activities is provided on the next page.

Policy Priorities	Summary	Timescales
Vulnerable consumers, in particular fuel poverty	<p>Following successful participation in the Modernising Energy Data Applications competition, we are continuing to work to provide appropriate access to smart system data at an aggregated level to a wider group of organisations to enable further support services to those at risk of fuel poverty</p> <p>The potential for smart meter data to help identify those at risk or in fuel poverty is increasingly recognised as a significant opportunity by industry, with both the Committee on Fuel Poverty and Citizens Advice highlighting its potential</p>	<ul style="list-style-type: none"> • Ofgem ‘Permitted Purpose’ granted and valid till August 2025 • Anonymised smart meter system data sets to be provided monthly for the same period • DCC is a project partner in the Strategic Innovation Fund (SIF) project Vulnerability Identification Via Informative Data (VIVID), which utilises anonymised smart meter system data to inform fuel poverty modelling
Flexibility	<p>Continuing to support the Department with proposals for the potential use of DCC capabilities to deliver ‘Common Systems’ for cybersecurity including Public Key Infrastructure and Anomaly Detection. We will also support industry, as requested, on the Interoperable Demand Side Response programme (IDSR)</p> <p>The Electricity System Operator's DFS has enabled greater consumer savings over the winter of 2023/24, building upon the success of last year's iteration. The</p>	<p>Working groups expected throughout 2024:</p> <ul style="list-style-type: none"> • Government proposals and decision on implementation of common systems expected in 2024 • Phase 2 of AAR continues in 2024 and Phase 3 expected in August 2024

¹ [Consent granted to DCC under Conditions 9 and 10 of the Smart Meter Communication Licence, and Section M4.3 of the Smart Energy Code - August 2023 | Ofgem](#)

	<p>DFS also continues to change consumer attitudes towards energy usage via smart meters</p> <p>We continue to be involved as a consortium partner alongside GreenSync and the Energy Systems Catapult (ESC) in the Government-funded AAR Programme. Our key role (beyond provision of advice across several areas - technical, security, regulation, and operations) has been to explore how 'gold standard' address data from the Retail Energy Location (REL), established through the CSS, can be incorporated into the solution</p>	<ul style="list-style-type: none"> • IDSR Phase 2: June 2023-March 2024 and Phase 3: April 2024-October 2024 • Continued engagement with the ESO to support the DFS's ongoing development and evolution
Energy Efficiency	<p>We will continue to help determining the feasibility of connecting sensor devices (temperature and humidity) as part of the Smart Meter Internet of Things (SMIoT) programme. We are also exploring the potential role energy data when combined with these additional data sets could play in supporting in Green Finance initiatives and the evolution of Energy Performance Certificates</p>	<ul style="list-style-type: none"> • Two SMIoT Phase 2 projects are currently in delivery • Phase 2 culminates in a trial of the new technology in real energy consumers' homes • Both projects will run until the second calendar quarter of 2025
Data policy and services	<p>We will continue to work with industry to progress the Data for Good proposals (published by the Catapult in September 2023)</p> <p>As part of a consortium led by Advance Infrastructure Technology, DCC is contributing to the Phase 2 of the Smart Meter Energy Data Repository (SMEDR) project. This will enable future innovation of products and services to benefit consumers while ensuring their data remains protected under the Smart Meter Data Access and Privacy Framework</p> <p>We will also continue to work with RECCo to develop new ways to identify energy theft, which has become a more widespread issue due to the energy and cost of living crisis using smart meter data</p>	<ul style="list-style-type: none"> • Progressing recommendations of the Data for Good¹ paper through to 2024/25 • Developing and enduring way to access to anonymised smart meter system data in 2024/25 • Smart Meter Energy Data Repository Phase 2 Project to run until August 2024

The Demand Flexibility Service (As of 28th February 2024)

- 1. 5 million households and small businesses participated
- 3,083 MWh of electricity saved, equivalent to powering nearly 10 million homes
- £10 million paid to consumers for shifting usage

The continued development of the DFS emphasises the pivotal role of managing energy consumption by shifting usage away from peak periods. This approach not only aids in maintaining grid stability but also supports incorporating renewable sources and the electrification of various assets, potentially circumventing the need for expensive infrastructure upgrades.

Coordinated by the National Grid Electricity System Operator, the DFS was operational from November 2023 to March 2024, offering Great Britain's consumers the option to receive a rebate from their electricity providers in exchange for reducing their energy use during peak hours (for example, between 17:00 and 21:00). The national smart meter infrastructure, managed by the DCC, was instrumental in enabling consumer involvement. In preparation for and throughout the service, there was a close collaboration with the ESO to guarantee its successful execution.

¹ [Data-For-Good-Final.pdf \(esc-production-2021.s3.eu-west-2.amazonaws.com\)](#)

This initiative underscores the critical role that smart metering will play in future flexibility services and the broader context of demand flexibility as we transition towards a more sustainable and intelligent energy landscape. We are eager to continue our partnership with the ESO, our clients, and the broader industry as we prepare for this coming winter and subsequent versions of the DFS.

Automatic Asset Registration Programme

The uptake of LCT is rapidly accelerating, but at present, there is a distinct and increasing lack of visibility of these energy assets. While registration with network companies is a legal requirement for some assets, it is understood that roughly 40% or less of new small-scale energy assets are currently visible to the networks.

DESNZ set up the AAR Programme, a funded innovation programme, to address this challenge. The AAR Programme will develop a pilot demonstration using live data for an automated asset registration process. Once assets are registered, a CAR, will act as an intelligent data repository for all relevant data of a registered LCT.

Having completed the project’s feasibility study, we are currently engaged in solution development, with pilot testing to begin in August 2024 and conclude in August 2025. Through this programme, we have gained experience of navigating and working to overcome challenges of data use in principle versus in practice, relevant to the future flexibility of digital infrastructure (FDI).

For example, in exploring requirements for a scalable solution, we have found that although the potential for reuse of the Retail Energy Location (REL) is identified in the CSS Licence in practice, re-licencing the use of data (derived ultimately from Ordnance Survey) is complex and requires alignment across multiple stakeholders – an activity that we are currently progressing.

Supporting new customers

Following an increasing focus within GB on the decarbonisation of homes and small businesses, accompanied by the rising penetration of smart metering nationally, DCC is witnessing rising interest in its user roles. This interest comes from a range of organisations in both the commercial and non-commercial sectors and across a range of industries. DCC has a duty to ensure its network can service incoming demand and unlock the wider benefits that smart metering brings. To ensure it is best placed to do this, we are making improvements across a range of areas, including our user onboarding journey, our technical capabilities, and our charging policy.

Enhance the onboarding process

Improving the onboarding journey for new users

DCC Strategic Outcome	Flexible and Fast
Project	Enhance the onboarding process
What is this project?	The DCC network is attracting an increasing number of potential new users. As outlined in an independent report for DESNZ, and a DCC commissioned analysis, several pain points in the existing journey were established. These result in a poor customer experience - too long, too complex and in some cases too onerous, especially for small and medium sized

	<p>enterprises. This results in a poor customer experience, which is likely to deter potential new users from using DCC services.</p> <p>This project seeks to address these issues by improving the onboarding journey through the implementation of better processes and systems.</p>
Why is it important?	<p>This is important because to get to net zero, we need to facilitate access to the smart metering network in a secure, controlled and coordinated manner. Improving the onboarding journey will help this by reducing complexity, accelerating timelines, and increasing efficiency.</p>
What's next?	<p>The project will provide an initial business case setting out the available options to simplify, automate, and digitise the DCC's on-and-off boarding journeys.</p> <p>Improvements will be delivered in phases, with incremental improvements to processes delivered over the first half of 2024.</p> <p>Further significant changes subject to further assessment and business case justification to be developed over the course of 2024.</p>

Onboarding case studies

New DCC Users

DCC is seeing increasing interest from a range of parties looking to use its network across a range of user roles. We provide three examples of new users below, spanning DCC's retail, network, and other user roles.

Unify - non-domestic retailer user

Unify Energy went live on the DCC network as a non-domestic energy retailer in December 2023, however it has been supplying energy since 2016. Unify Energy is a Manchester based energy supplier with a national portfolio of business customers specialising in supplying green energy, bespoke billing and managing multi-tenanted energy supply. As a core user, Unify Energy, will be using the DCC network to, amongst other things, manage billing and optimise demand to innovative tariffs.

Brookfield Utilities UK (BUUK) - independent distribution network operator (iDNO) user

BUUK has become the first independent distribution network operator (iDNO) user of the DCC network. BUUK, as a leading multi-utility provider for new-build properties, has a range of innovative, low carbon solutions designed to meet the upcoming Future Homes Standard. By utilising DCC technology, BUUK can deliver comprehensive end-to-end services to property developers, including low-carbon heating networks. This enables BUUK to address network outages while enhancing its capacity to provide improved network management services promptly and precisely for customers.

New DCC Services

DCC has worked to improve its testing service offer to the market, building on existing and new capabilities to serve a range of new use cases.

DCC Boxed Emulation Testing

Leveraging DCC's "Boxed" product, DCC has been able to provide remote testing services for organisations looking to test new products, supporting test and learn environments outside of the live DCC network. Late last year, using Boxed Emulation testing carried out at its secure Brabazon facility, DCC was able to support GEO in comprehensively testing its innovative new SeeZero integrated PPMID, CAD, and Home Energy Management System, which offers a range of new functionality that will unlock smart energy services for households and support energy suppliers in reducing household energy costs and carbon emissions.

Testing Automation Framework (TAF)

DCC's TAF service will go live shortly and will use robotics to support testing either in live production on the DCC network or via DCC Boxed emulation testing. Robotics support a wide range of use cases, including accelerated lifetime testing of new devices.