



DCC Business Plan

Delivering your smart future

2016/17 – 2019/20



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Smart meters
represent a once
in a generation
opportunity to
transform the
energy industry



Foreword

The implementation of smart meters has been described as the largest change in Great Britain's energy sector since privatisation. As I write, every energy supplier and network operator in the country is working hard to make the smart meter transformation a success and striving to be ready for the start of mass rollout in summer 2016.

In 2015, DCC has been at the heart of this great endeavour. The DCC communications, data and security systems are developing well and the challenge of integrating them into an end to end service is well underway.

It is in this context that I am delighted to present the DCC business plan for the period 2016/17 to 2019/20. By the end of the decade the implementation task should be substantially complete. DCC will have developed from the major programme organisation that it is today to an operational service delivery organisation which is supporting the realisation of the consumer benefits that we all want to see from smart meters.

My hope is that this business plan will provide transparency by helping Users and other interested parties to understand what DCC will be delivering and how their money is being spent.

This is our first published business plan. I hope you will give me your feedback so that we can make future editions of the annual DCC business plan ever more helpful.

Jonathan Simcock
Managing Director

We are committed to being open and transparent about our spending plans and what these will deliver for our Users

Executive summary

In 2016, DCC will launch the data communications infrastructure to enable the nationwide rollout of smart meters. Smart meters represent a once in a generation opportunity to transform the energy industry. The rollout of smart meters will help consumers to better understand and manage their energy usage and to make better informed decisions about how they buy their energy. Accurate, near real-time information captured by smart meters will support the energy market in becoming more responsive, efficient and flexible.

The DCC smart meter communication service is a crucial enabler for the energy industry. The service will allow suppliers to install meters in every home and small business across Great Britain. Funded by the energy industry, the DCC network will connect smart meters to the business systems of energy suppliers, network operators and other authorised Users, such as third party intermediaries. It will offer a secure, consistent service for all energy suppliers and avoid the complexity and duplicated costs of

energy suppliers procuring their own networks. It will provide the information that will enable Users to develop innovative new services and products.

During the period of this business plan, we will move from design, development and testing into delivery of a live service. We will scale to support the smart metering rollout, improve our services to provide the best possible experience to our Users and develop our services to realise the industry transformation made possible by smart meters.

In this business plan we set out our plans for the next four years, including how we expect to support Users during the smart metering rollout and the key challenges we expect to face. This will help our Users understand the full range of DCC's activities and how these relate to the costs set out in the DCC Charging Statement and Indicative Budgets.

Over the next four years, we will focus on delivering:

Year	Our focus areas
2016/17	<p>Integration – bringing DCC systems and processes together into a coherent service</p> <p>Interoperability – ensuring that Users can interact with our service</p>
2017/18	<p>Scalability – adapting DCC systems and processes to match growing User demand</p> <p>Reliability – providing a dependable and consistent service that Users can rely on</p>
2018/19	<p>Reach – extending the reach of the smart metering network and smart metering service to extend the benefits of smart meters to as many consumers as possible</p> <p>Performance – improving the quality and responsiveness of the services we offer</p>
2019/20	<p>Efficiency – improving how we provide services, reducing DCC unit costs</p> <p>Enhancements – developing smart metering services in line with industry priorities</p>

Table 1 – Focus areas for the next four years

The projected total cost of the DCC Service through this period is shown in the table below:

Cost Summary - £m	Charging Statement	Charging Statement	Variance	Indicative Budget	Indicative Budget	Budget Outlook
	2015/16	2016/17	2016/17 vs. 2015/16	2017/18	2018/19	2019/20
Internal Operations	29.5	36.4	7.2	32.4	30.8	31.5
Fundamental Service Providers (1)	72.3	185.6	113.3	165.8	192.1	178.3
Other External Service Providers (2)	4.5	6.0	1.6	6.7	5.8	4.8
Total Regular Activity	106.3	228.0	122.1	204.9	228.7	214.6
Adjustments	8.5	11.3	2.8	0.0	0.0	0.0
Total Charges	114.8	239.3	124.9	204.9	228.7	214.6

(1) Fundamental Service Providers - Data Services Provider, Communication Services Providers

(2) Other External Service Providers - Trusted Service Provider (SMKI provider), Parse and Correlation Service Provider, Enterprise Systems Service Provider

Table 2 – Summary profile of expected charges and budgets

This business plan reflects the costs set out in the DCC Charging Statement for 2016/17 and the Indicative Budgets for 2017/18 and 2018/19¹.

We also provide an outlook of the expected charges for 2019/20.

DCC's first business plan

We are publishing a DCC business plan to explain our priorities over the next four years and what we will be doing to deliver them. This will help our Users understand the full range of DCC's activities and how these relate to the costs set out in the DCC Charging Statement, Indicative Charging Statement and Indicative Budgets. We are committed to being open and transparent about our spending plans and what these will deliver for our Users.

It is consistent with the DCC Development Plan², which focuses on service development activities. This business plan covers the full range of DCC activities, which includes service delivery as well as service development.

This is our first business plan and we welcome your feedback. We intend to publish a business plan each year.

In this business plan we set out:

- Who we are and what we do
- A review of our activities in 2015/16
- Our plans for the next four years
- A summary of our budgets for the next four years.

Who we are and what we do

DCC's role in the energy industry

Who we are

Smart DCC Limited (DCC), a wholly owned subsidiary of Capita plc, was awarded the Smart Meter Communication Licence by the Secretary of State for Energy and Climate Change on 23 September 2013. DCC is a special purpose vehicle created to carry out the Authorised Business of the Licence, which is primarily to establish and manage the smart metering communication service for Great Britain. The company is led by the board of Directors, including two Independent Directors, whose role includes ensuring that DCC acts independently in accordance with its Licence Objectives.

A regulated business

We have a unique position in Great Britain's energy market because all domestic energy suppliers will be required to use DCC Services. Due to our monopoly position, DCC is rigorously regulated and governed.

We are regulated by Ofgem, who assure our compliance with the Licence. This includes assuring that we spend money in an economic and efficient way.

We report on our delivery progress to industry and to the Department of Energy and Climate Change (DECC). DECC oversee and coordinate the joint industry activity during the implementation phase of the Smart Metering Implementation Programme.

We are a party to the Smart Energy Code (SEC). The SEC is a multi-party agreement that provides the regulatory framework for DCC to provide services to the energy industry. It defines the rights and obligations of DCC, energy suppliers,

network operators, and other parties involved in the end-to-end management of smart metering. The SEC Panel governs the SEC. DECC is gradually transferring powers to the SEC Panel and to Ofgem, who will be responsible for managing and approving changes to DCC systems through the SEC modifications process.

A delivery body on behalf of the energy industry

We are a delivery body that provides services to the energy industry. On behalf of DECC, Ofgem, the SEC Panel and industry, we help to realise policy objectives that will allow consumers to benefit from smart meters and a smarter energy market. We do not have a direct relationship with energy consumers.

In line with our commitment to our Licence Objectives, our primary role is to implement and operate the smart meter communication service and to deliver our services in a way that encourages competition and innovation, while ensuring value for money and reducing DCC charges. DCC is just one of many participants in the Smart Metering Implementation Programme. It is crucial that we coordinate and collaborate with energy suppliers, network operators, meter manufacturers, Registration Data Providers, and others to enable a successful rollout.

In our delivery role, we aim to act as the intelligent client on behalf of the energy industry. This means we contract with Service Providers, assure the delivery of these Service Providers and lead coordination with other industry parties to ensure that Users receive high quality, economic and efficient services.

2016

Integration and Interoperability

2017

Scalability and Reliability

2018

Reach and Performance

2019

Efficiency and Enhancements

2020

The smart meter communication service

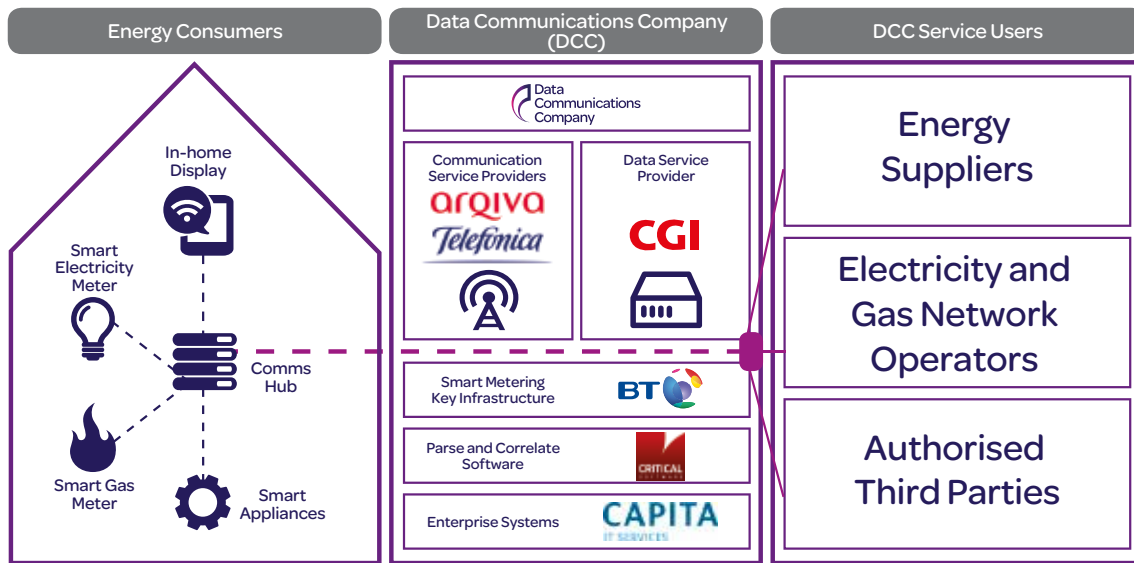


Figure 1 – Summary of DCC solution and Service Providers

DCC Services

This section describes the services that DCC will provide to Users from 2016 onwards.

Communications Hubs

We will provide Communications Hubs to connect the smart meter, In-Home Display and other smart devices in homes to the DCC smart metering network. Suppliers will install the Communications Hub along with the smart metering equipment. DCC’s Communications Hub services include supporting Users to submit forecasts and orders for Communications Hubs. We will also provide operational support through the DCC Service Centre, for example to resolve incidents relating to Communications Hubs.

Messaging services

We will provide the data and communications service that allows Users to send and receive service requests, service responses and alerts to and from smart meters. Examples include meter reads, tariff updates and power outage alerts. Messages can be scheduled to be sent at a

particular time, or can be sent on an ad hoc basis. DCC will transmit messages over a nationwide secure telecommunications network that will provide coverage to 99.5% of domestic premises in the north of England and Scotland and 99.25% coverage in central and southern England and Wales by the end of 2020.

End-to-end security

To ensure secure end-to-end communications with devices in the home, DCC will provide the Smart Metering Key Infrastructure Service. DCC will also provide a Parsing and Correlation Service, which enables Users to convert messages from one format into another and ensure that the message has the same meaning after it has been converted.

All messages containing energy consumption data will be encrypted. DCC does not store, analyse or have access to consumer data.

User Entry Services

To support organisations to become Users, we will provide User Entry Services. These services include ordering and configuring DCC Gateway Connections that allow Users to communicate securely with DCC systems, testing activities and registration for Key Infrastructure services.

Testing Services

DCC provides testing services so that organisations can become authorised Users and test that their own systems can communicate with meters via the DCC network. While some testing is mandatory for Users, such as User Entry Process Testing, some other testing services are optional and are intended to support Users in ensuring their systems are interoperable with DCC systems and processes. For example, Pre-User Interface Testing allows Users to start testing their systems with DCC earlier than would otherwise be the case.

End-to-End Testing will allow Users to test the interoperability of different types of meters and to test their end-to-end business processes with DCC systems. To reduce the level of integration risk, we have also provided a GBCS Integration Testing (GIT) tool to industry. This will allow meter manufacturers to test that they have implemented GBCS in a way that is consistent with how DCC's Service Providers have implemented the specification.

Operational support

DCC will provide a Service Centre and self-service tools to support Users in their day-to-day use of the smart meter communication service. The Service Centre is already in place and supporting Users. Operational support for the live

service will include order management to ensure Users have the equipment they need to install and incident management to support Users to resolve any issues as quickly as possible. The operation will be responsible for ensuring Users receive the best possible service from DCC.

Charging for Services

The majority of the costs associated with providing these services are recovered from suppliers and networks based on total market share. Costs for Communications Hubs are based on the number of smart meters enrolled with DCC. For specific services for individual Users, such as remote test labs and Gateway Connections, costs are recovered through explicit charges. Full details of DCC's charges are set out in the Charging Statement published alongside this business plan.

Our Service Providers

To deliver these services, we have contracts with two Communication Services Providers, Arqiva and Telefonica, and a Data Services Provider, CGI. Arqiva provides the network infrastructure in the north of England and Scotland, while Telefonica provides the network across central and southern England and Wales. Telefonica and Arqiva also provide the Communications Hubs that are installed in the home alongside the smart meters and the In-Home Display. CGI provides the data services that direct and schedule the messages that are sent across the network.

BT delivers the Smart Metering Key Infrastructure Services and Critical Software provides a Parsing and Correlation Service. Capita IT Services also provide enterprise systems to support DCC's operations.

The DCC Service Centre is already in place and supporting Users

Review of 2015/16 activities

Live DCC Services

We are already providing some live services to Users. These include:

- DCC Gateway Connection ordering and configuration – for Gateway Connections that allow Users to communicate securely with DCC systems
- Remote Test Services – test participants can order Communications Hubs for testing and install these in a ‘remote test lab’ at a location of their choice, along with their own meters. This will allow test participants to test the operation of different types of meters with the DCC systems. Users can also carry out end-to-end tests between their back office systems, the DCC network and smart meters.

- Smart Metering Key Infrastructure Registration – the steps that organisations need to follow in order to gain access to Smart Metering Key Infrastructure (SMKI) services, which ensure secure end-to-end communications with devices in the home.

The DCC Service Centre is already in place and supporting Users to receive these services. We have plans in place to grow the Service Centre to support Users during the rollout period from 2016 onwards.

We have learnt from our experience of delivering these services and made changes as a result. For example, we have improved the process for ordering and configuring Gateway Connections. Based on experience with early Users of Smart Metering Key Infrastructure Registration, we have refined the process and made changes to the supporting documentation.

Updating the delivery plan

Since March 2015 the energy industry has been working towards August 2016 as the launch date for the rollout of smart meters, with October 2016 as the latest date for commencing the rollout.

We are still aiming to deliver go-live by August 2016, despite significant changes to the DCC service. These changes include resolving high priority issues within the GB Companion Specification (GBCS), which sets out the messages used between DCC and devices in the home and is fundamental to many aspects of the DCC solution. We had planned to go live on GBCS v0.8.1. The design and build work we have carried out over the last year based on this version provides the foundation for our services. However, we now know that we need to resolve high priority issues to take the specification to v0.8.2 to ensure the systems will be fit for live operations. High priority change requests are also

needed to meet the developing requirements of the Smart Energy Code and to meet User demand. These changes affect security, service management and reporting, Communications Hubs and associated supply chain processes, and the testing regime.

To accommodate this change, we have drawn down some of the time contingency and functional contingency that was made available in March 2015. Contingency arrangements were put in place to anticipate changes of this kind. The Secretary of State has directed us on to the revised plan and the central industry planning assumption remains August 2016 for DCC go-live.

There are, of course, still risks and uncertainties in a programme of this scale. There is further schedule contingency in the programme to accommodate these risks.

Delivery progress

Design and Build

Over the last year we have made valuable progress in designing and building core data systems aligned to GBCS v0.8.1. The Communication Services Providers have successfully delivered certified Communications Hubs into Systems Integration Testing. Users are also able to order prototype Communications Hubs to support their own testing. Our Billing System is complete and is now live.

The Smart Metering Key Infrastructure (SMKI) Service ensures secure end-to-end communications with devices in the home. Following successful build completion of the initial live platform, the SMKI test service is operational and is being used to support SMKI and Repository Entry Process Testing.

We have made version 2.0 of the Parse and Correlate software available as a beta release and we are working towards alignment with GBCS v0.8.2. The Parsing and Correlation Service enables Users to convert messages from one format into another within their own systems and ensures that the message has the same meaning after it has been converted.

To support the development of the design baseline, we have produced and consulted on 31 SEC Subsidiary Documents. These are design documents required under regulation. As of December 2015, 23 of these documents have been accepted into the design baseline for DCC and Users to build against. Four have been designated and have become part of the SEC. We have uplifted the key design documents that Users need in order to communicate with DCC to align with GBCS v0.8.2.

Integration

So far, our Communication Services Providers and Data Services Provider have been building and testing their own systems in isolation. In September 2015 we entered Systems Integration Testing, where DCC, our Service Providers and Registration Data Providers begin to test our systems together. This is a crucial period in which multiple systems provided by several Service Providers will come together to form a coherent solution. We have increased our test assurance resource and strengthened our integration capability to support these critical activities.

80%
coverage
declared
and delivered



Telefonica

CSP CENTRAL and SOUTH

Adapting existing and creating new infrastructure



As we expected, given the complexity of the solution, integration has been challenging. We continue to work with our Service Providers to identify and fix defects. Already we have successfully connected real meters to the DCC User Interface. This involves passing messages securely across the Home Area Network, through the Communications Hubs and through the Communication Services Provider and Data Services Provider systems. Once we have completed Systems Integration Testing we will be ready for Users to test their systems with the DCC systems.

Network coverage

The Communication Services Provider network build is progressing to plan. In the north of England and Scotland, Arqiva is building a new infrastructure from scratch. As of November 2015, Arqiva has achieved 70% coverage. Telefonica is adapting its existing telecommunications network and has already declared 80% coverage in central and southern England and Wales.

Preparation for operations

We have been working closely with Users and our Service Providers to develop end-to-end operational processes, for example to deal with

different types of faults. This work will ensure a seamless experience for Users and ultimately for energy consumers. Our operational process design is based on industry best practice, which has been tailored to meet the needs of the Smart Metering Implementation Programme. We have also made good progress in the build and testing of the Service Management System that supports many of these processes.

We have increased our operational resource as we prepare for live operations. Anticipating that we will need to scale the operation to support the smart metering rollout, we have put plans in place to build the capability and capacity required to run an industrial scale business.



Over the last
year we have
made valuable
progress in
designing and
building core
data systems

Our plans

Our top priority is to deliver the smart meter communication service to enable the smart metering rollout. It is crucial that we operate an excellent service for our Users, to support industry to realise the opportunities offered by smart meters.

These plans reflect the General Objectives defined in our Licence, the Development Objectives set out in our Development Plan and indicative policy positions from Government and Ofgem. We will ensure that we carry out all of our activities in compliance with the Licence and the Smart Energy Code.

In this section we explain our plans for the next four years.

Our plans for the next four years

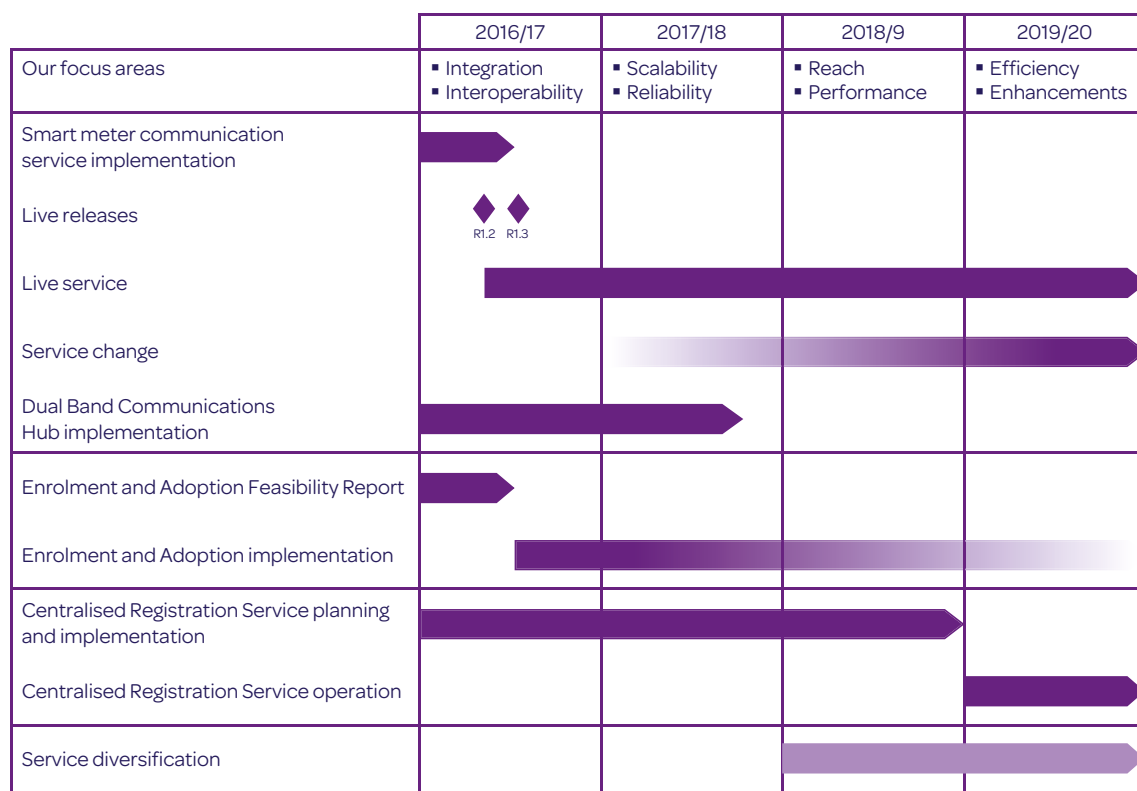


Figure 2 – Summary of focus areas and key activities

It is critical that
industry and
consumers
are confident
that data is
communicated
securely

2016/17: Integration and Interoperability

In 2016 our priority is to deliver the smart meter communication service that will enable suppliers to install smart meters. We will focus on bringing DCC systems and processes together into a coherent service and ensuring that Users can interact with it.

During 2016, we will test DCC systems together and then test with Users' systems before we launch the smart meter communication service. In parallel, Users will be preparing for the smart metering rollout, including testing their own business systems, procuring meters and recruiting meter installers.

We plan to deliver the live service over two releases:

- Release 1.2 will allow Users to roll out smart meters to credit customers. Networks will be able to access some service requests.
- Release 1.3 will allow Users to roll out smart meters to prepayment customers. It will provide the remaining service requests, support half-hourly readings and provide alerts to network operators.

We recognise the obligations and pressures on Users at DCC Live and that this is just one of many changes across the industry. We are conscious that Project Nexus is scheduled to go live at same time as Release 1.3.

We expect to encounter some challenges during integration and early life, despite the thorough and rigorous testing we undertake. Smart metering systems are spread across multiple organisations and supply chains and the service is based on a new specification. As a result, it is realistic to expect that there will be teething problems during early life as Users connect their systems with the DCC systems and communicate with meters in a real life environment. We are keen to work with and support Users to find pragmatic ways to address any problems.

To aid this, during the period shortly after DCC Live, we will retain service design support to make changes to processes based on early learning. Some problems will be addressed through defect fixes, while others will require changes to the underlying design. In the early months of live service, the first imperative is achieving stable operations rather than to pursue efficiency per se.

The security of the live service is absolutely crucial. It is critical that industry and consumers are confident that data is communicated securely. We will actively monitor the DCC network and keep DCC security arrangements under review, including taking advice from external organisations, to make sure we continue to have the right security capability in place.

Decisions

In 2016 we will work with industry and transitional governance to make some important decisions that will affect industry.

Based on our published entry and exit criteria, we will judge, with third party assurance from a test auditor, when we are ready to exit Systems Integration Testing and when we are to ready commence Interface Testing with prospective Users.

Once we have met our Interface Testing exit criteria and this has been confirmed by independent assurance, we will submit our Interface Test Stage Completion Report to the SEC Panel for approval.

Following SEC Panel approval, we anticipate that DECC-led governance will judge when the smart metering rollout is ready to commence.

During 2016/17 we will also make decisions that determine how our services will evolve in in future years. In particular, we will decide how to reconfigure our Service Provider contracts to best support changes to the service in the coming years. We will also secure an agreed direction for the Enrolment and Adoption of SMETS1 meters.

Enrolment and Adoption of SMETS1 meters

In 2016 DCC will publish a Feasibility Report to assess options for how we could provide a smart metering service for SMETS1 meters already being installed by energy suppliers. This service would:

- Enable more efficient and effective switching for customers with SMETS1 meters, to ensure they can continue to receive a smart service after switching energy supplier
- Reduce the risk that meters will have to be replaced before the end of their operating lives.

The Feasibility Report is a complex piece of analysis which will take into account technical, commercial, financial, operational, security and implementation considerations across a number of different existing SMETS1 smart meter solutions. It will set out the feasibility, costs and risks of different options for providing a DCC smart meter communication service for SMETS1 meters.

In line with our published timetable for completing the Feasibility Report³, we will consult on the draft Feasibility Report in 2016 before submitting it to the Secretary of State, who will then direct DCC to implement one or more options.

DCC has mobilised a separate team to carry out this work, to ensure that this does not distract from the delivery of the core smart meter communication service.

2017/18: Scalability and Reliability

In 2017/18 our priority is to operate an economic and efficient smart metering service that meets growing User demand. Our business focus will be on adapting DCC systems and processes to match increasing User demand and providing a dependable and consistent service that Users can rely on.

During 2017/18, we expect the rollout will be picking up pace. We will be supporting Users in their day-to-day use of the DCC service, including bringing new Users on board, Communications Hub ordering and logistics, and resolving incidents. In 2017/18 efficiency improvements will be delivered by economies of scale.

We will learn a huge amount during our first full year of operations. Our plans for scaling the service are currently based on assumptions about how Users will actually use the service. During 2017/18, our assumptions will be replaced with real information and experience.

We will need to be flexible and use actual usage information to adapt and improve the service. To achieve this, we will carry out data analysis and diagnostics to identify recurrent problems and work out how best to fix them. Building on work during earlier years, we will also engage with industry to decide on the enduring arrangements for demand management to ensure DCC can provide a reliable service to all Users.

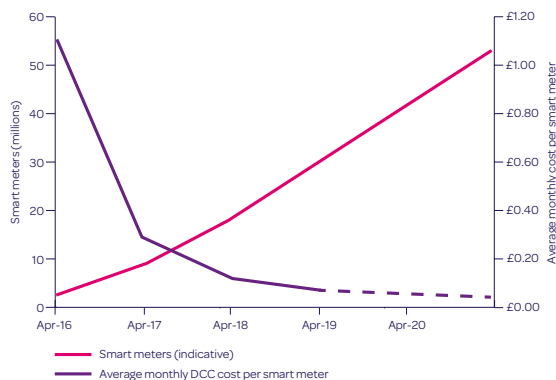


Chart 1 – Average monthly DCC cost per smart meter (indicative)

Change

In 2017/18 we will also implement changes to DCC systems and processes. Changes could be externally-driven, as a result of User requests, policy decisions and SEC Modifications; or changes could be identified internally by DCC or our Service Providers. During 2017/18, we are likely to focus on regulatory changes and enhancements to underlying specifications and requirements to resolve defects and integration issues.

We will introduce change through a release based approach, which will be set out in the DCC Release Management Policy. We expect to deliver change through a capacity limited release model with our Service Providers. This will ensure a controlled and cost effective mechanism for introducing change and will manage the delivery risk of implementing too many changes at once. To ensure change is implemented successfully, we will need to work closely with industry and other stakeholders to prioritise, schedule and develop changes.

Enrolment and Adoption of SMETS1 Meters

Subject to the outcome of the Feasibility Report, during 2017/18 we will develop a SMETS1 smart meter communication service that enables efficient and effective switching for customers with eligible SMETS1 meters. Given that we are currently partway through producing the Feasibility Report, we do not yet have a clear view of the solution we will be directed to take forward or exactly when implementation will take place. However, we currently expect that implementation will take place during 2018/19.

We will improve
the performance
of the DCC
systems and
processes

2018/19: Reach and Performance

In 2018/19 we will focus on widening the reach of the smart metering network and smart metering service, to extend the benefits of smart meters to as many consumers as possible. We will also focus on improving the quality and responsiveness of the services we offer.

In 2018/19 we expect the smart metering rollout will have reached full momentum, with tens of thousands of meters being installed every day. After more than a year of live operations, our service will be stable and dependable. We will be considering our technology strategy to inform the future development of the service.

Extending network coverage

DECC estimates that the standard Communications Hub will be suitable for around 75% of properties and that the introduction of the Dual Band Communications Hub will mean that a viable Home Area Network can be established in around 95% of properties.

By 2018/19 we will have introduced a Dual Band Communications Hub, which includes an 868MHz radio. The Dual Band Communications Hub will be able to establish a Home Area Network in premises where the standard Communications Hub is not suitable.

Pending the completion of our impact assessment in early 2016, we currently expect to introduce the Dual Band Communications Hub by no earlier than the second half of 2017, and we expect that Users will realise the benefits of the Dual Band Communications Hub during 2018/19 as smart meter installations continue.

We will also make any changes required to support any alternative Home Area Network solutions being developed by industry. These will enable a Home Area Network to be established in

the remaining premises where a standard or Dual Band Communications Hub is not suitable.

During 2018/19 our Communication Services Providers will be approaching contracted maximum Wide Area Network coverage levels across Great Britain. We will be working on how to extend coverage in a cost effective way to the remaining properties that do not have a signal.

Enrolment and Adoption of SMETS1 meters

We also expect to extend the reach of the service to accommodate eligible SMETS1 meters. Following implementation of the SMETS1 service, we currently expect that migration of SMETS1 meters to the new service will be underway in 2018. This will enable efficient and effective switching for customers with eligible SMETS1 meters.

Enabling reduced User unit costs

We will improve the performance of the DCC systems and processes by carrying out data analytics to identify improvement opportunities for implementation. Performance improvements should reduce User unit costs, for example by reducing the time an installer has to wait for messages to be received by the smart meter during installation, or reducing the time a call agent spends on the phone to a consumer while waiting for a response from the meter.

We will introduce additional services and performance improvements through our release based approach to change.

It is important
that DCC adapts
to support the
evolving needs
of the energy
industry

2019/20: Efficiency and Enhancements

In 2019/20 we will focus on improving how we provide services, which should reduce DCC unit costs, and developing smart metering services in line with industry priorities.

By 2019/20 the DCC service will be supporting tens of millions of smart meters with very high network coverage. We expect to be completing the migration of eligible SMETS1 meters to the DCC service.

Based on our operational experience of the previous two years, we will identify where we can improve systems and processes to deliver services in a more efficient way. This should result in lower DCC unit costs.

It is important that DCC adapts to support the evolving needs of the energy industry and to encourage further innovation and competition. The volume and type of new functionality that Users wish us to build will depend on several factors, in particular how energy suppliers choose to develop their products and offerings.

Innovative consumer technology that connects to the Communications Hub could also influence User demand for new functionality. By 2019/20 we expect to be developing enhanced functionality based on a well-established pipeline of User requests.

We will introduce new functionality and efficiency improvements through our release based approach to change. We will also consider how to refresh the technology of the DCC systems and infrastructure.

At this time we will also develop our future commercial strategy, including how to re-procure the Data Services Provider, Smart Metering Key Infrastructure Service Provider and Parsing and Correlation Service Provider.

In time, we will engage with the energy, wider utility and non-utility sectors to identify potential additional uses of the DCC infrastructure

Beyond smart metering

The smart meter communication service forms DCC’s Mandatory Business as defined in our Licence. There may be additions to DCC’s Mandatory Business to allow us to support wider energy industry change programmes that realise the transformation made possible by smart meters. We may also deliver additional services defined as Permitted Business in our Licence.

This section describes our current plans to deliver additional services.

Switching Programme

Both Ofgem and the Government have made faster, reliable switching for energy consumers a priority. This should improve customers’ experience of changing their energy supplier, leading to greater engagement in the retail energy market.

The arrangements for faster switching will be delivered through an Ofgem-led programme to transform current switching arrangements. The new arrangements will be supported by a new Centralised Registration Service. Ofgem has concluded that activity to design and procure a Centralised Registration Service should form part of DCC’s Mandatory Business.

Although the requirements for DCC’s input into the programme are still evolving, we are already mobilising a project to support Ofgem. During 2016/17 we will work with Ofgem and industry through the Blueprint phase with the aim of agreeing a design for switching arrangements and the Centralised Registration Service. Based on this Blueprint, we then expect to

procure, implement and operate a Centralised Registration Service for industry.

DCC will mobilise a separate team to carry out this work, to ensure that this does not distract from the delivery of the core smart meter communication service.

Services for other markets

Our Licence also encourages us to provide services to other sectors by using spare capacity on the DCC infrastructure. As the cost of operating the DCC infrastructure is currently borne exclusively by the energy industry and consumers, this would reduce the costs passed on to energy industry Users. These services would form part of DCC’s Permitted Business and are known as Value Added Services. Value Added Services must not affect DCC’s ability to provide Mandatory Business and they must be approved by Ofgem.

Delivering and operating the smart meter communication service remains our core priority. However, in time, we will engage with the energy, wider utility and non-utility sectors to identify potential additional uses of the DCC infrastructure that could be considered in the longer term. It is important that Value Added Services are developed with the support of our Users.

As the scope and timing of these changes have not yet been identified and agreed, we have not included any forecast costs or savings relating to Value Added Services in the Indicative Charging Statement and Indicative Budgets published alongside this business plan.

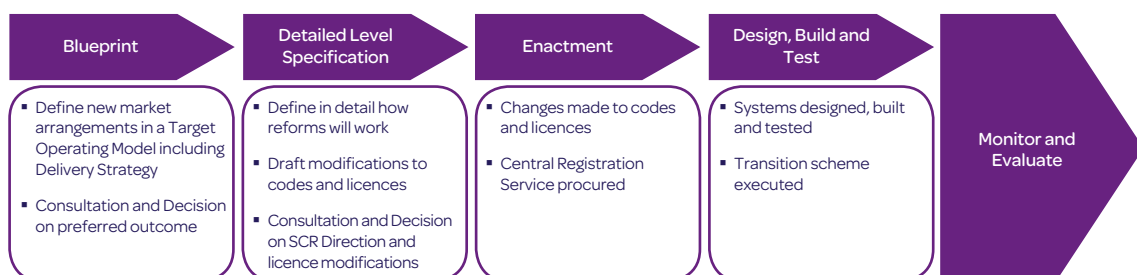


Figure 3 – Switching Programme implementation phases

Financial summary

Overview

This business plan reflects the four year outlook of expected charges relating to DCC's internal operational activities, external Service Provider agreements and other adjustments. We have aligned the financial information with the latest Indicative Charging Statement and Indicative Budgets at the time of writing. In addition, we have provided an outlook of the expected charges for RY 2019/20.

The periods covered in this business plan are:

- RY 2016/17 – aligned to Indicative Charging Statement published on 8 January 2016; these charges will come into effect from April 2016
- RY 2017/18 – aligned to Indicative Budget published on 8 January 2016
- RY 2018/19 – aligned to Indicative Budget published on 8 January 2016
- RY 2019/20 – outlook of expected charges; this will be formally revised in the Indicative Budget published in April 2016.

The plan reflects the profile in which DCC will invoice Service Charges to Users, rather than the profile in which DCC incurs costs.

The Indicative Charging Statement and Indicative Budgets are published on a quarterly basis, following a review of our ongoing activities and future plans. To support this, we carry out a monthly review of internal activities and ongoing reviews of external Service Provider activities.

These reviews generate a four-year outlook of our planned activities and associated costs.

This section outlines the expected cost of internal and external activities as well as adjustments due to Price Control, the Prudent Estimate and Correction Factor. The majority of the costs are recovered from suppliers and networks through fixed charges based on total market share. We generate fixed charges by converting the total cost for the year into specific unit costs (per meter per month) for each of the predefined Charging Groups.

Costs associated with delivering Communications Hubs will be recovered from suppliers through Communications Hub Fixed Charges based on the number of smart meters enrolled with DCC. For specific services for individual User consumption, costs are recovered through Explicit Charges. These include remote test labs, Gateway Connections and some peripheral Communications Hubs services such as aeriels and Communications Hubs for testing. Full details of DCC's charges are set out in the Indicative Charging Statement published alongside this business plan.

Scope

This section sets out the costs included and excluded from the budgets.

DCC's cost structure consists of items termed as Regular Activity and other adjustments allowed under the conditions of our Licence.

Regular Activity

Internal Operations – These costs reflect the functional activities carried out within DCC. The main drivers behind internal operational costs relate to the headcount, systems, and operational activities of Smart DCC Ltd.

Fundamental Service Providers – DCC contracted with the Fundamental Service Providers (the Data Services Provider and Communication Services Providers) when we were awarded the Licence. These costs relate to the planning, design, implementation and operation of the core components of the smart meter communication service.

Other External Service Providers – DCC has procured additional External Service Providers to deliver key systems such as the Smart Metering Key Infrastructure Service, Parsing and Correlation Service, Service Centre, billing platform, and business intelligence and management information systems.

Adjustments

We include a number of adjustments in our charges. These are:

Pass-Through Costs – These are costs incurred by Ofgem or the Smart Energy Code Company Ltd for activities associated with smart metering.

DCC's charging mechanism is used as a vehicle to pass these costs to Users.

Correction Factor – This is an adjustment to account for the over or under-recovery of charges for prior years. This is the difference between what DCC has charged and the costs DCC has actually incurred. We forecast a balancing figure when the Charging Statement is finalised and the actual correction factor is finalised after the end of the Regulatory Year.

Prudent Estimate – The prudent estimate provides the DCC with operating liquidity to ensure we remain cash positive and can meet our ongoing financial commitments. DCC will return any surplus in the prudent estimate to Parties through the correction factor.

Other Charges – These charges consist of:

- **Baseline Margin** – The amount of additional revenue, over and above the sum of DCC's internal and external costs, that is included in the Licensee's Allowed Revenue
- **Baseline Margin Adjustment** – This represents DCC's adjustment for allowed incremental margin for activities outside of the original Baseline Margin Values
- **Price Control Adjustments** – These account for the cost of activities that have been amended or disallowed following Ofgem's Price Control determination.

Exclusions

We have not included costs relating to the following areas:

Excluded cost area	Rationale
External costs of delivering the Dual Band Communications Hub	The Service Provider impact assessment is still underway. Following the impact assessment we will begin to include Service Provider costs in the Charging Statement and Indicative Budgets. We do not expect there to be any impact on charges for RY 2016/17.
External costs of implementing and operating a SMETS1 smart meter communication service and internal costs of operating the service	We do not yet have a clear view of the solution we will be directed to take forward following the Feasibility Report or exactly when implementation will take place. We will start to include external costs once we have received a direction from the Secretary of State to deliver one or more options.
External costs associated with the Centralised Registration Service	The scope and shape of the Centralised Registration Service has yet to be defined.
Costs or benefits associated with delivering Value Added Services	There are no current indications of the likely scope, timing or scale of potential Value Added Services.
Financing for subsequent tranches of Communications Hubs	The financing arrangements for the first tranche of Communications Hubs are in place. Beyond this point further financing will be required – we currently expect this will be in place by mid-2017.

Cost Summary

The total projected cost of the DCC Service through this period is shown in the table below.

Cost Summary - £m	Charging Statement	Charging Statement	Variance	Indicative Budget	Indicative Budget	Budget Outlook
	2015/16	2016/17	2016/17 vs. 2015/16	2017/18	2018/19	2019/20
Internal Operations	29.5	36.4	7.2	32.4	30.8	31.5
Fundamental Service Providers (1)	72.3	185.6	113.3	165.8	192.1	178.3
Other External Service Providers (2)	4.5	6.0	1.6	6.7	5.8	4.8
Total Regular Activity	106.3	228.0	122.1	204.9	228.7	214.6
Adjustments	8.5	11.3	2.8	0.0	0.0	0.0
Total Charges	114.8	239.3	124.9	204.9	228.7	214.6

(1) Fundamental Service Providers - Data Services Provider, Communication Services Providers

(2) Other External Service Providers - Trusted Service Provider (SMKI provider), Parse and Correlation Service Provider, Enterprise Systems Service Provider

Table 3 – Summary profile of expected charges and budget

The increase in RY 2016/17 reflects the peak of delivery activities in the year in which the DCC Service goes live. Charges are then forecast to reduce in the operational phase of the plan.

The tables and commentary below explain the cost profiles in more detail.

Internal Operations Costs

Internal Operations Costs - £m	Charging Statement	Charging Statement	Variance	Indicative Budget	Indicative Budget	Budget Outlook
	2015/16	2016/17	2016/17 vs. 2015/16	2017/18	2018/19	2019/20
Staff Payroll	13.1	17.0	3.9	19.8	19.8	19.9
Contractor	8.1	12.2	4.2	6.0	6.4	7.3
Consultants	0.7	3.9	3.2	4.7	3.0	2.6
Other Staff Costs	0.9	1.2	0.6	0.7	0.6	0.6
IT & Systems	6.7	2.1	-4.7	1.2	1.0	1.1
Total Internal Operations	29.5	36.4	7.2	32.4	30.8	31.5

Table 4 – Internal Operations Costs

Most of the Internal Operations Costs pay for the staff and contractors who work in DCC. The headcount is set to peak during 2016 as we manage the final months of major programme delivery at the same time as ramping up operational functions.

Beyond RY 2016/17, the headcount is forecast to decline as we transition into enduring live operations.

DCC uses consultancy services to provide specialist expertise and independent assurance across programme, finance and commercial

streams. We will also be using consultants for specialist input on new projects such as Enrolment and Adoption of SMETS1 meters and the Switching Programme. The selection and procurement of consultancy services is governed by DCC's Procurement Strategy⁴.

Other Staff Costs include training, recruitment, travel and subsistence. The IT and Systems costs primarily relate to the cost of computer systems and equipment that DCC staff use in their daily operations.

Fundamental Service Provider Costs

Fundamental Service Provider Costs - £m	Charging Statement	Charging Statement	Variance	Indicative Budget	Indicative Budget	Budget Outlook
	2015/16	2016/17	2016/17 vs. 2015/16	2017/18	2018/19	2019/20
External Setup	42.5	23.9	-18.6	24.1	15.2	13.6
External Operational	0.4	36.5	36.1	50.0	58.3	66.5
Communications Hubs	1.2	0.5	-0.7	11.1	42.6	77.8
Contract Change	25.9	123.2	97.3	79.0	76.0	20.4
Impact Assessments & Projects	2.3	1.5	-0.8	1.6	0.0	0.0
Total Fundamental Service Providers	72.3	185.6	113.3	165.8	192.1	178.3

Table 5 – Fundamental Service Providers Costs

These costs relate to Fundamental Service Provider activities as they plan, design, build, test and operate components of the smart meter communication service. The Data Services Provider develops and operates the data services that direct and schedule the messages that are sent across the network. The Communication Services Providers develop and operate the nationwide communications network and also provide the Communications Hubs that are installed in the home alongside the smart meters and the In-Home Display.

External Setup costs relate to the design and implementation of systems, infrastructure and processes. The cost profile for these activities reflects the original Service Provider contracts under which live operation was set to commence in October 2015.

External Operational costs cover the ongoing operation and maintenance of the service. Service Providers will begin to charge operational costs from DCC Live. Over the period of the rollout, operational costs will increase as we support a growing number of meters and messages.

Communications Hub costs relate to the development and delivery of the Communications Hubs by the Communication Services Providers. The profile of Communications Hub costs is based on the latest available rollout forecasts.

Contract Change costs reflect the development of the DCC solution since the contracts were awarded in 2013. These costs include changes that have already been contracted, an amount for changes that have yet to be finalised, and an allowance for future change activities. The increase in RY 2016/17 primarily relates to the cost of changes to the technical specifications and requirements for the service, and the consequential impacts on the delivery plan.

Impact Assessment and Projects costs reimburse Service Providers for producing detailed breakdowns of resource and activity plans for impending contract changes and for undertaking specific projects. We have included provision for impact assessments and projects based on the likely volume of change, which we expect to be highest during RY 2016/17 and RY 2017/18 as we enter live operations.

Other External Service Provider Costs

Other External Service Provider Costs - £m	Charging Statement	Charging Statement	Variance	Indicative Budget	Indicative Budget	Budget Outlook
	2015/16	2016/17	2016/17 vs. 2015/16	2017/18	2018/19	2019/20
Total Other External Service Providers	4.5	6.0	1.7	6.7	5.8	4.8

Table 6 – Other External Service Provider Costs

Other External Service Provider costs relate to the delivery and operation of other DCC systems including the Smart Metering Key Infrastructure Service provided by BT, the Parsing and Correlation Service provided by Critical Software, and the Service Centre, Billing system, and

business intelligence and management information systems provided by Capita. The costs reflect the milestone payments for finalising the delivery of these systems in RY 2016/17 and subsequent operational costs for future years.

Adjustments

Adjustments - £m	Charging Statement	Charging Statement	Variance
	2015/16	2016/17	2016/17 vs. 2015/16
Pass-Through	4.5	5.2	0.7
Correction Factor	-8.4	-9.1	-0.7
Prudent Estimate	9.5	13.1	3.6
Baseline Margin	2.9	2.1	-0.8
Total Adjustments	8.5	11.3	2.8

Table 7 – Adjustments

For RY 2016/17 DCC has received notifications of £5.2m Pass-Through Costs from Smart Energy Code Company Ltd and nil from Ofgem.

The forecast Correction Factor for RY 2016/17 is £9.1m. This consists of a final balance of £2.7m for RY 2014/15 and forecast outturn over recovery of £6.4m for RY 2015/16.

For RY 2016/17 the Prudent Estimate is £13.1m. This represents three weeks of average working capital charge calculated as a proportion of Regular Activities.

In RY 2016/17, the amount of Baseline Margin is £2.1m.

As Ofgem is currently consulting on its Price Control decision, we have not included Price Control Adjustments and Baseline Margin Adjustments in the RY 2016/17 Charging Statement. We will include any adjustments following Ofgem's final decision.

Getting in touch

We would be delighted to hear your views or questions about the DCC business plan.

Please contact us at

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