Data Communications Company

Draft DCC Business Case for DCC activities during the Transitional Phase of the Switching Programme

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Document Control Heading

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Approvals

Name	Signature	Title / Responsibility	Release Date	Version Number
Helen Fleming		Policy Director	08/09/2016	1.0
Matt Roderick		Programme Sponsor – Chair of DCC Switching Programme Board	03/11/2016	2.0

Contents

1 Executive Summary

1.1 The Switching Programme

1. Ofgem has established the Switching Programme to improve consumers' experience of switching between energy suppliers, leading to greater engagement in the retail energy market. This will be achieved by designing and implementing a new faster and more reliable switching process, underpinned by a Centralised Registration Service (CRS) to be procured by Smart DCC Ltd (DCC).

2. DCC is a key delivery partner in Ofgem's programme. Conditions have been introduced to the Smart Meter Communication Licence ('the licence') that require DCC to contribute to the design of the CRS and the broader switching arrangements and to procure the CRS.

1.2 DCC Switching Business Case

3. Ofgem have applied an 'ex post plus' price control approach to all of DCC's Switching Programme costs during the period from 1 April 2016 up to the point of contract signature for Fundamental Registration Service Capability to deliver the CRS. This period is referred to as the Transitional Phase of the Switching Programme. Under the ex post plus arrangements, DCC is required to set out its planned activities and costs upfront in a published business case and report its actual and forecast costs to Ofgem on a regular basis throughout each regulatory year. DCC is also required to justify its expenditure on the Switching Programme through its annual ex post price control reporting.

4. This DCC Switching Business Case for DCC activities during the Transitional Phase of the Switching Programme ('the DCC Switching Business Case') sets out DCC's forecast activities and costs and its proposed margin and incentives relating to its role in supporting Ofgem's Switching Programme during the Transitional Phase. The DCC Switching Business Case will be baselined in March 2017 following scrutiny by Ofgem and consultation with industry.

5. The DCC Switching Business Case is based on the information available at the time of writing. There is a significant level of uncertainty relating to DCC's scope and therefore costs should be treated as indicative at this stage. Where information is not yet available in relation to key activities then assumptions have been made, validated where possible, and documented. The DCC Switching Business Case will be revised and updated at key points in the programme to take account of the increasing level of certainty about activities, timelines, resource requirements and costs.

6. Ofgem is developing a wider Business Case for the introduction of new switching arrangements. The content of the DCC Switching Business Case will inform elements of the Ofgem Business Case.

1.3 Requirements

7. During the Transitional Phase, DCC is required to:

   - support development of the Ofgem and DCC Business Cases

- fully participate in Ofgem-led design teams (Business Process Design, Delivery Strategy, Commercial and Regulatory Design) by leading and contributing to the development of products

- prepare for and deliver the procurement of the CRS.

8. In conjunction with Ofgem, DCC has identified specific products and activities to deliver these requirements and traced these to Licence Conditions, decision documents and Ofgem instructions. Note that this includes impact assessment of any changes required to DCC's smart metering communication service.

9. DCC's Switching programme requirements are not well defined beyond the Blueprint Phase, therefore many planning assumptions have had to be made, which are captured in the RAID (Appendix D) and represented by DCC's programme timeline (Appendix C), to allow us to generate an indicative budget for our involvement in Switching.

10. In recognition of the uncertainty faced, DCC has developed three high level scenarios that illustrate how key areas of scope uncertainty may affect DCC's activities and the associated costs: a baseline scenario, a high scenario and a low scenario. This approach is intended to provide transparency to Ofgem and stakeholders about the potential cost impacts of changes to the baseline assumptions. In the first baselined version of the DCC Switching Business Case to be published in March 2017, DCC will endeavour to align the scope scenarios more closely to the reform packages included in Ofgem's Blueprint Request for Information.

11. DCC notes that Ofgem's Programme Board has discussed changes to DCC's role in relation to governance of the Transitional Phase. In addition, potential changes to DCC's responsibilities during the Detailed Level Specification (DLS) Phase are currently under discussion with Ofgem, for example in relation to delivery strategy, security and service management. These discussions have not yet been reflected in the DCC Switching Business Case, pending further clarity on Ofgem's intent for the role that DCC will play in the Transitional Phase and DCC's responsibilities in relation to specific areas of work within the DLS phase. Ofgem and DCC are working jointly to clarify this position ahead of the baselined DCC Switching Business Case being published in March 2017.

1.4 Activity and resourcing plan

12. DCC has planned the activities required to deliver the requirements associated with the baseline scenario, based on the information currently available. DCC has developed an indicative programme timeline that identifies the duration of activities and the effort and capabilities required to deliver them, in order to develop a costed resource plan. DCC's planned activities during the Transitional Phase are summarised in Figure 1.

13. This plan does not reflect Ofgem's currently planned timescales for the Enactment Phase for the following reasons:

- DCC has reduced the level of overlapping activity, across Blueprint, DLS and Enactment phases, in order to reflect a realistic resourcing profile

- DCC considers that it would be logical to commence the development of the CRS technical specification and CRS delivery specification once the detailed design and detailed delivery planning are complete at DB4, rather than undertaking both design and specification activities in parallel

- DCC has reflected the planned review and approval cycles for procurement products as set out in the Procurement Framework[1] in its timescales for the procurement activities.

14. The timeline is a working document that will continue to develop during the period of Ofgem's consultation on the DCC Switching Business Plan. It will only be possible to determine the end date of the Transitional Phase with any certainty once the solution design and delivery strategy have been decided, DCC and Ofgem have undertaken joint planning and this is confirmed to be achievable following external assurance.

[1] Based on Switching Programme Procurement Framework (Ofgem letter) v0.96 and DCC Procurement Framework Response Letter v0.9

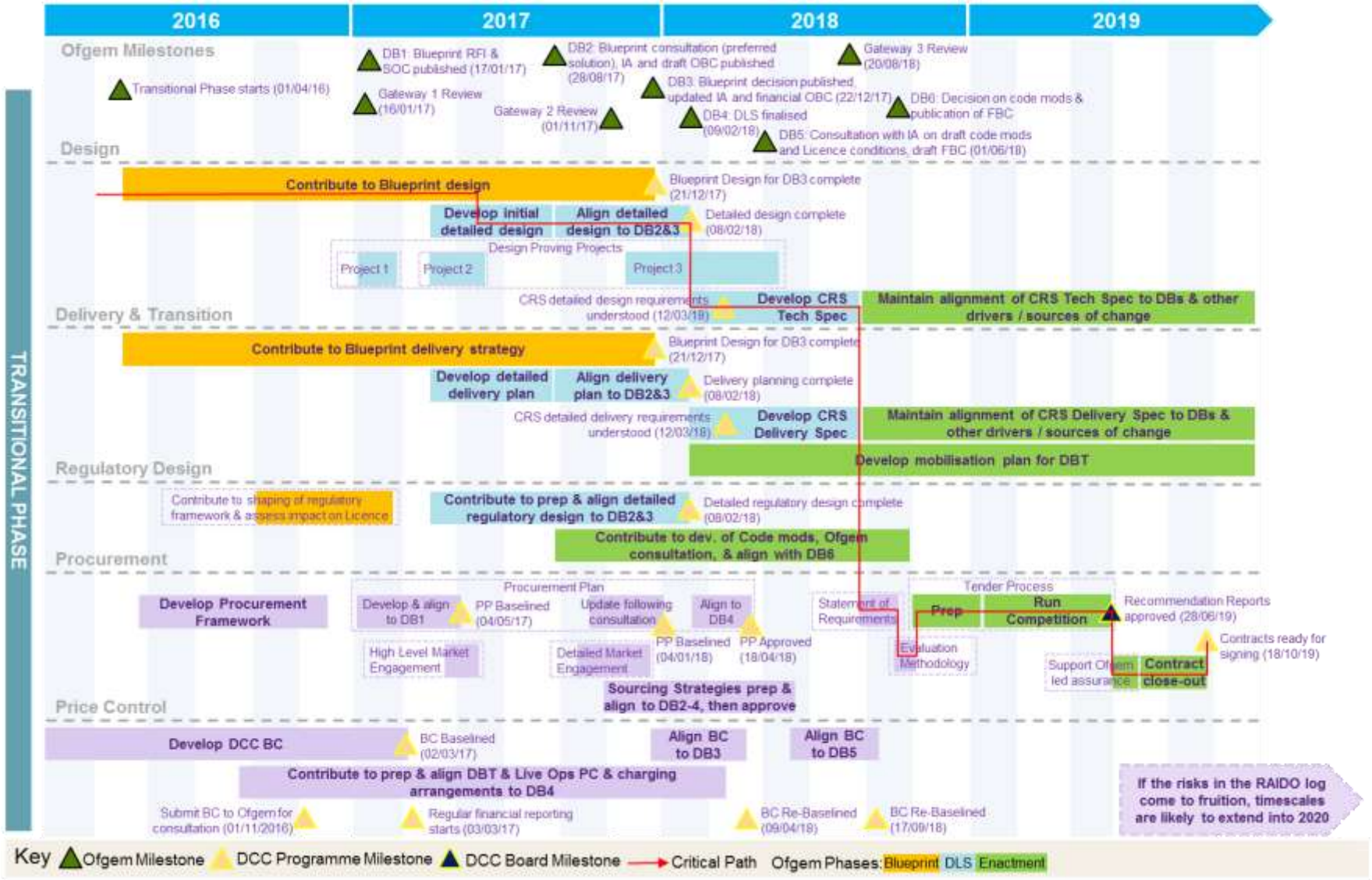

Figure 1 – High level DCC programme timeline

15. The key resource capabilities required are:

- technical design, including security
- delivery planning
- programme management
- procurement
- regulation
- commercial (including price control and charging)
- support services.

16. The mapping of roles against these capabilities is set out in Section 8.4.

17. DCC has developed a resource model that generates a resourcing profile for delivery of the products and activities. This is based on business conditions within the cost model that automatically determine which roles would be more economically and efficiently fulfilled by permanent resource or by temporary resource. The resource profile is summarised below in Figure 2.

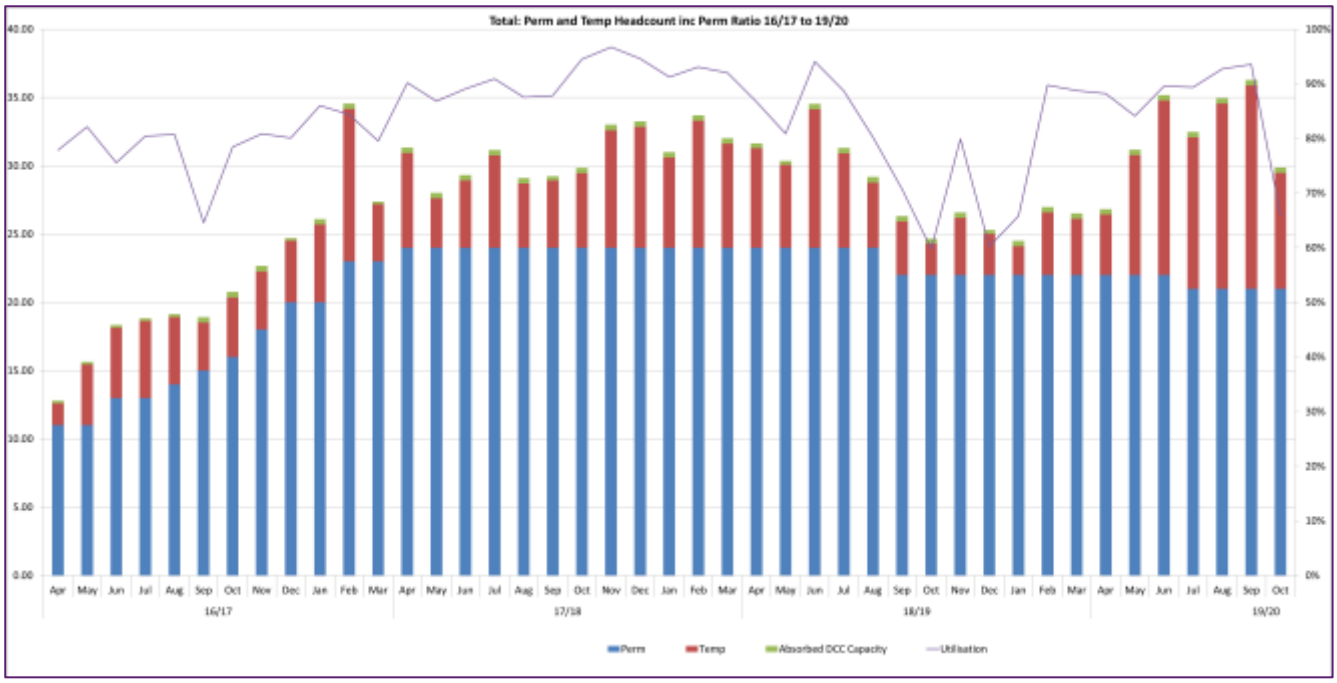

Figure 2 - DCC FTE profile

18. DCC has also identified non-staff resources that are required to deliver its activities. Non-staff resources are driven by the number of staff, such as office space, tools and IT equipment, or by specific delivery activities, for example proving of the design and other professional services that may be required.

19. DCC has identified risks, assumptions, issues, dependencies and opportunities associated with the delivery of these activities.

1.5 Costs

1.5.1 Total cost to industry

20. The total estimated cost to industry associated with delivering the baseline scenario is summarised in Table 1. These costs represent DCC's forecast of the likely costs it will incur in the Transitional Phase of the Switching Programme based on the information currently available. DCC has forecast these costs for the purpose of generating a realistic budget and to feed into the overall Ofgem-owned Switching business case.

21. Further to its business case, DCC will provide a full and thorough justification of all of its costs incurred in support of the Switching Programme as part of its annual ex post price control submission to Ofgem.

22. All costs detailed in this business case are stated in real terms i.e. they exclude any allowance for inflation.

23. Approximately half of this cost to industry is related to providing resource to support Ofgem-led activity to define the design, delivery, commercial and regulatory arrangements for Switching. The other half is related to the cost of DCC specifying and procuring the CRS elements as part of the overall Switching arrangements.

(£k)	RY 16/17	RY 17/18	RY 18/19	RY 19/20	RY 20/21	Total
Total cost to industry	**6,642**	**9,483**	**8,010**	**5,983**	**8**	**30,127**
Total base costs	**4,293**	**5,479**	**4,301**	**3,167**	**0**	**17,240**
Staff costs	*3,867*	*4,579*	*3,936*	*2,967*	*0*	*15,349*
Non-staff costs	*427*	*900*	*365*	*200*	*0*	*1891*
Materiality threshold	**863**	**1882**	**1917**	**1478**	**6**	**6,146**
Contingency	*600*	*988*	*1057*	*844*	*6*	*3,495*
Management reserve	*263*	*894*	*860*	*633*	*0*	*2,651*
Overhead	**490**	**699**	**591**	**441**	**1**	**2,222**
Margin	**996**	**1,422**	**1,202**	**897**	**1**	**4,519**

Table 1 - DCC baseline scenario costs

1.5.2 Staff costs

24. The forecast staff cost by resource type is summarised in Table 2 (a full breakdown of the roles included within each resource type is included in Table 19 in Section 9.4).

Staff Costs (£k)	RY 16/17	RY 17/18	RY 18/19	RY 19/20	Total
Total staff costs	**3,867**	**4,579**	**3,936**	**2,967**	**15,349**
Support Services *(e.g. Legal, HR, Financial, Commercial, Industry Liaison)*	411	518	651	667	2,246
Design *(e.g. Solution, Process, Data, Security, Service Management)*	1,485	1,859	1,145	547	5,036
Delivery *(e.g. Delivery planning, Testing, DBT mobilisation)*	213	369	331	791	1,704
Programme *(e.g. Programme Director, Programme Manager, PMO)*	874	714	716	516	2,821
Procurement *(e.g. Procurement Lead, Procurement consultant)*	158	320	239	115	832
Regulation *(e.g. Regulation Lead, CRS Technical Drafter)*	68	268	380	57	773
Commercial *(e.g. Price Control, Business Architecture)*	658	530	474	275	1,937

Table 2 - DCC staff costs

1.5.3 Corporate overhead charge

25. The Capita overhead charge is levied at 9.5% of DCC's Internal Costs. The corporate overhead charge enables Capita to function as a business, covering Group corporate management activity including Head Office and executive oversight. It is also covers the contribution to the central Capita services that underpin all Capita contracts including DCC e.g. payroll and insurance.

1.5.4 Materiality threshold

26. The materiality threshold sets the tolerance level for variance from the baseline DCC costs. If this materiality threshold is exceeded, DCC will be required to update and publish a revised DCC Switching Business Case, subject to certain criteria. The materiality threshold comprises contingency, which allows for known quantified and weighted risks, and management reserve, which allows for unforeseen change. Given that changes will arise as part of any programme, DCC considers that it is prudent to expect that these costs will be incurred.

27. The proposed contingency allowance is £3,495k. This is equivalent to 20% of the total cost base associated with the baseline scenario.

28. The proposed management reserve is £2,651k, which is equivalent to 15% of the total cost base associated with the baseline scenario.

29. The total materiality threshold is £6,146k, which is equivalent to 35% of the total cost base associated with the baseline scenario.

1.5.5 Comparison of scope scenario costs

30. The costs associated with the high scenario, baseline scenario and low scenario are summarised in Table 3. Note that this comparison is based on resource and non-staff resource costs only and does not include the corporate overhead charge, contingency, management reserve or margin.

Scenario base costs - staff and non-staff costs) (£k)	RY 16/17	RY 17/18	RY 18/19	RY 19/20	RY 20/21	Total	Variance from base scenario
Baseline scenario base cost	4,293	5,479	4,301	3,167	0	17,240	0%
Low scenario base cost	3,454	4,408	3,461	2,548	0	13,871	-20%
High scenario base cost	6,283	8,756	7,807	5,968	20	28,834	67%

Table 3 - Scope scenario cost comparison

1.6 Margin and incentives

31. DCC's proposals relating to margin and incentives are subject to a separate consultation by Ofgem. The key features of DCC's proposals are summarised in this section.

1.6.1 Proposed margin

32. DCC proposes that:

- the margin is calculated as a fixed rate of return of 15% of revenue, based on all DCC costs in the Transitional Phase. This is calculated as 'margin' as opposed to a 'mark-up', where the margin value = x/(1-y)-x, where x = cost; y = % rate of return
- the fixed rate of return is set ex ante for the entire Transitional Phase (RY 2016/17 – RY 2019/20)[2]
- the forecast margin is recovered via DCC charges in effect from April 2017 onwards
- there is a mechanism for both DCC and Ofgem to apply for an adjustment to the fixed rate of return in the event of a significant change to DCC's role and/or risk profile.

[2] Except for the margin relating to RY2016/17, which would be set during RY 2016/17 and be recovered during RY 2017/18

33. DCC considers that this rate of return represents a fair return on the provision of professional services to the Ofgem Switching programme compared to market rates, and reflects the commercial expectations of DCC.

34. Based on the rate of return of 15% and the forecast costs associated with the baseline scope scenario, the forecast value of the margin to be recovered compared to the forecast DCC costs are set out in Table 4.

(£k)	RY 16/17	RY 17/18	RY 18/19	RY 19/20	RY 20/21	Total
Total costs (including materiality threshold)	5,646	8,061	6,809	5,086	7	25,608
Margin	996	1,422	1,202	897	1	4,519

Table 4 - Proposed margin values (based on forecast costs)

1.6.2 Proposed incentives

35. Ofgem's preference is for DCC to operate under a performance incentive regime with incentives relating to timeliness of product delivery and stakeholder satisfaction. As a result, DCC has developed a proposal that seeks to mitigate some of the challenges of implementing incentives during the Transitional Phase and ensure that the incentives can be practically implemented and monitored. Further collaborative work by DCC and Ofgem is required to develop the incentive framework in detail.

Time-based incentive

36. A time-based incentive places DCC margin at risk based on whether DCC delivers specific milestones by agreed dates.

37. The time-based incentive applies only to DCC activities where DCC has a high level of ownership and control. DCC proposes that incentives are applied to the following milestones:

- CRS technical specification complete
- CRS tender packs complete (for the latest of multiple major procurement projects)
- Contract award recommendation reports approved (for the latest of multiple major procurement projects).

38. This is a downside-only financial incentive. DCC proposes that the level of margin at risk is proportionate to the percentage of the cost base for DCC activities relating to delivery of the incentivised milestones. Based on the current forecast costs this equates to 25% of DCC margin at risk.

39. Milestone achievement should be based on defined and agreed acceptance criteria in order to ensure an appropriate quality level is achieved alongside timely delivery. DCC proposes that milestone achievement is validated by wholly independent assurance, sourced by Ofgem and paid for by DCC.

40. In addition to this milestone assurance, DCC proposes that the incentive mechanism should only be activated following external assurance that the plan is deliverable and that it is possible to achieve the milestones linked to the incentives.

Stakeholder satisfaction incentive

41. DCC proposes that a non-financial, reputational incentive is linked to survey feedback from Switching Programme participants on DCC's performance within the Switching Programme. This incentive could form the baseline for a potential financial incentive in future phases of the Switching Programme.

1.7 Monitoring and updating the DCC Switching Business Case

42. DCC is required to justify its expenditure on the Switching Programme through its annual ex post price control reporting.

43. Under the ex post plus arrangement for the Switching Programme, DCC will also:

- report to Ofgem regularly on its actual and forecast financial performance against the DCC Switching Business Case
- provide regular updates to industry stakeholders on its delivery against the DCC Switching Business Case via regular programme governance forums.

44. DCC plans to update the DCC Switching Business Case at key milestones in Ofgem's Switching Programme plan. DCC will also update the DCC Switching Business Case by exception if the materiality threshold has been exceeded and Ofgem subsequently instructs DCC to re-baseline the DCC Switching Business Case.

2 Introduction and background

45. The DCC Switching Business Case sets out DCC's forecast activities and costs and proposed margin and incentives relating to its role in supporting Ofgem's Switching Programme for the Transitional Phase of the Programme. It covers all of DCC's activities during the period from 1 April 2016 up to the point of contract signature for Fundamental Registration Service Capability to deliver the CRS. This Business Case forms the basis for the application of an 'ex post plus' price control approach to DCC's involvement in the Switching Programme.

46. The DCC Switching Business Case is based on the information available at the time of writing and where information is not yet available about key activities then assumptions have been made, validated where possible, and documented. The DCC Switching Business Case will be revised and updated at key points in the programme to take account of the increasing level of certainty about design and delivery decisions and planned activities, timelines, resource requirements and costs.

2.1 The Switching Programme

47. Ofgem's Switching Programme aims to improve consumers' experience of switching energy suppliers, leading to greater engagement in the retail energy market. This will be achieved by designing and implementing a new faster and more reliable switching process. This is intended to build consumer confidence and facilitate competition, delivering better outcomes for consumers.[3]

48. Ofgem's programme will be delivered over five phases, illustrated in Figure 3 below:

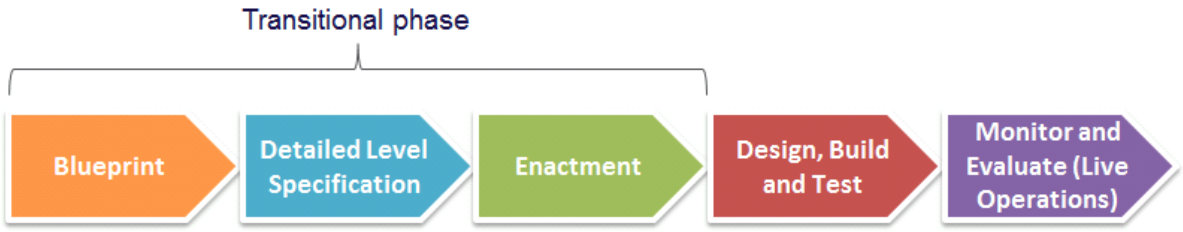

Figure 3 - Switching Programme phases

49. This DCC Switching Business Case covers DCC's activities during the Transitional Phase (from 1 April 2016), which consists of the Blueprint, Detailed Level Specification and Enactment phases.

50. Ofgem is developing a wider Business Case for switching and this has defined the activity required in each phase within the Transitional Phase of the programme. The content of the DCC Switching Business Case will inform elements of the Ofgem Business Case and DCC's activities are centred on supporting the Ofgem Business Case design baseline milestones.

[3] Ofgem, 'Moving to reliable and fast switching: Updated Target Operating Model and Delivery Approach', 17 November 2015: https://www.ofgem.gov.uk/publications-and-updates/moving-reliable-and-fast-switching-updated-target-operating-model-and-delivery-approach

51. The Blueprint phase defines the new market arrangements and delivery strategy in a Target Operating Model. As part of the Blueprint phase, Ofgem will issue a Request for Information (RFI) to industry, consult on the preferred solution and publish a decision on the solution to be adopted.

52. The DLS phase will define in detail how the reforms will work. Licence and code modifications will start to be developed during this phase.

53. During the Enactment phase, code modifications will be developed and Ofgem will consult on draft licence and code modifications before publishing decisions on these changes. During this phase, DCC will also procure one or more Service Providers to deliver the CRS.

54. Ofgem will define a series of six design baselines through the Transitional Phase of the Switching Programme. Each design baseline will reflect a consolidated view of all of the design products at a particular time as a point of reference.[4]

55. The timescales of the Switching Programme phases and their relationship to the design baselines is illustrated in Figure 4 below.

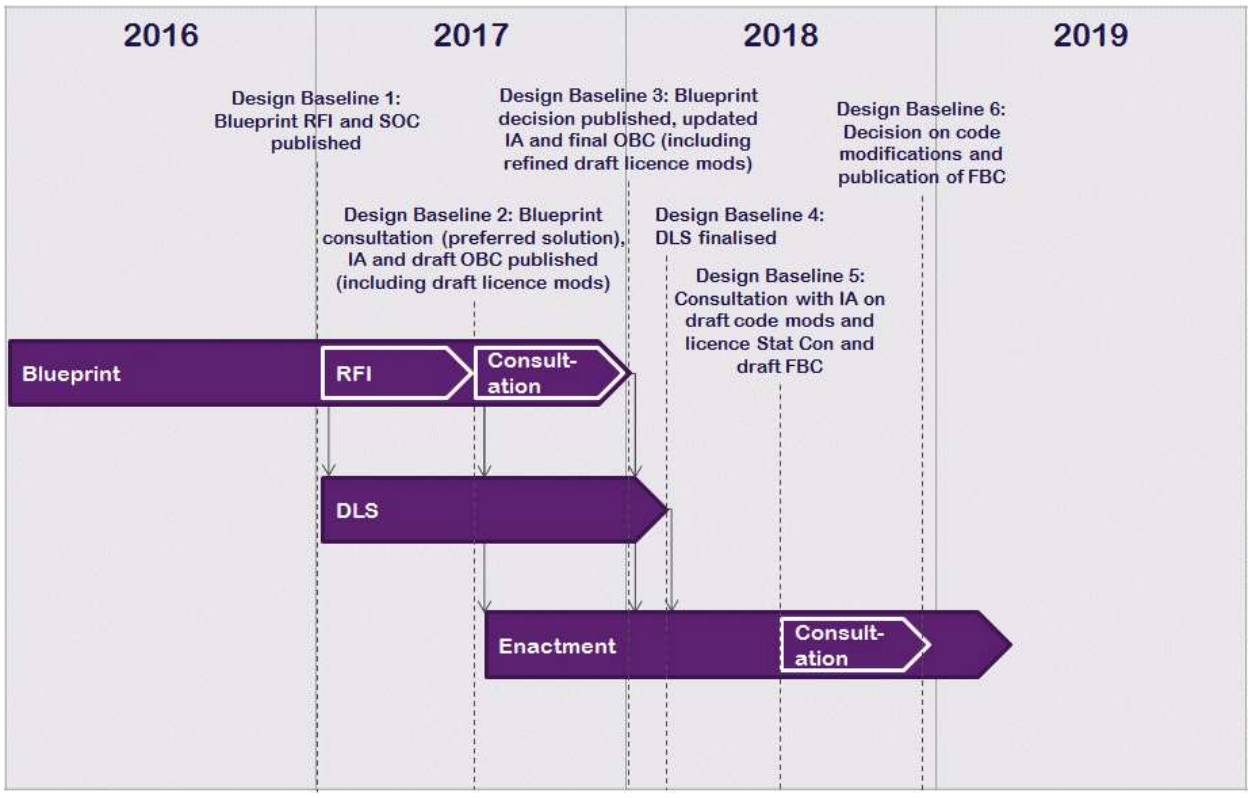

Figure 4 - Ofgem Switching Programme phases and design baselines

[4] Ofgem, 'Moving to reliable and fast switching: Target Operating Model and Delivery Approach v2', 17 November 2015: https://www.ofgem.gov.uk/sites/default/files/docs/2015/11/tom_v2_final_17112015_0.pdf

2.2 DCC's role in the Switching Programme

56. DCC is a key delivery partner in Ofgem's programme, and is responsible for contributing to the design of the CRS and broader switching arrangements and will be responsible for procuring the CRS. The regulatory changes defining DCC's role are summarised below.

57. In February 2015 Ofgem published their decision document[5] which initiated the Switching Programme. In this document Ofgem concluded that the new switching arrangements would be underpinned by a new CRS, which will be procured and operated by DCC.

58. In December 2015 Ofgem published a Statutory Consultation[6] and subsequently concluded[7] on new obligations for DCC to play a contributory role in Ofgem's Switching Programme and changes to the price control framework in DCC's licence to allow it to recover the economic and efficient costs it incurs for participating in the Switching Programme. Ofgem also decided to apply an 'ex post plus' price control approach for all of DCC's Switching Programme costs during the Transitional Phase, from 1 April 2016. These conditions came into effect on 14 July 2016.

2.3 Ex post plus approach

59. Under the ex post plus arrangements, DCC is required to set out its planned activities and costs up front in a published DCC Switching Business Case and report its actual and forecast costs to Ofgem a regular basis throughout each Regulatory Year. DCC is also required to justify its expenditure on the Switching Programme through its existing annual ex post price control reporting (on 31 July of each relevant year). These arrangements are set out in Ofgem's Decision on DCC's role in developing a Centralised Registration Service[8] and are described in Section 12.

60. The price control arrangements have not yet been defined for the Design, Build and Test (DBT) and Live Operations phases. These will be defined through a separate piece of work led by Ofgem as part of the Transitional Phase.

2.4 Baselining the DCC Switching Business Case

61. The key activities leading to the baselining of this DCC Switching Business Case are shown in Figure 5 below.

[5] Ofgem, 'Decision: Moving to reliable next-day switching', 10 February 2015: https://www.ofgem.gov.uk/sites/default/files/docs/2015/02/fast_and_reliable_switching_decision_final.pdf
[6] Ofgem, 'Final Proposals on DCC's role in developing a Centralised Registration Service and penalty interest proposals', 17 December 2015: https://www.ofgem.gov.uk/publications-and-updates/final-proposals-dcc-s-role-developing-centralised-registration-service-and-penalty-interest-proposals
[7] Ofgem, 'Decision: DCC's role in developing a Centralised Registration Service', 17 May 2016: https://www.ofgem.gov.uk/publications-and-updates/decision-dccs-role-developing-centralised-registration-service
[8] Ofgem, 'Decision: DCC's role in developing a Centralised Registration Service', 17 May 2016: https://www.ofgem.gov.uk/system/files/docs/2016/05/dcc_statcon_decision_publication_final.pdf

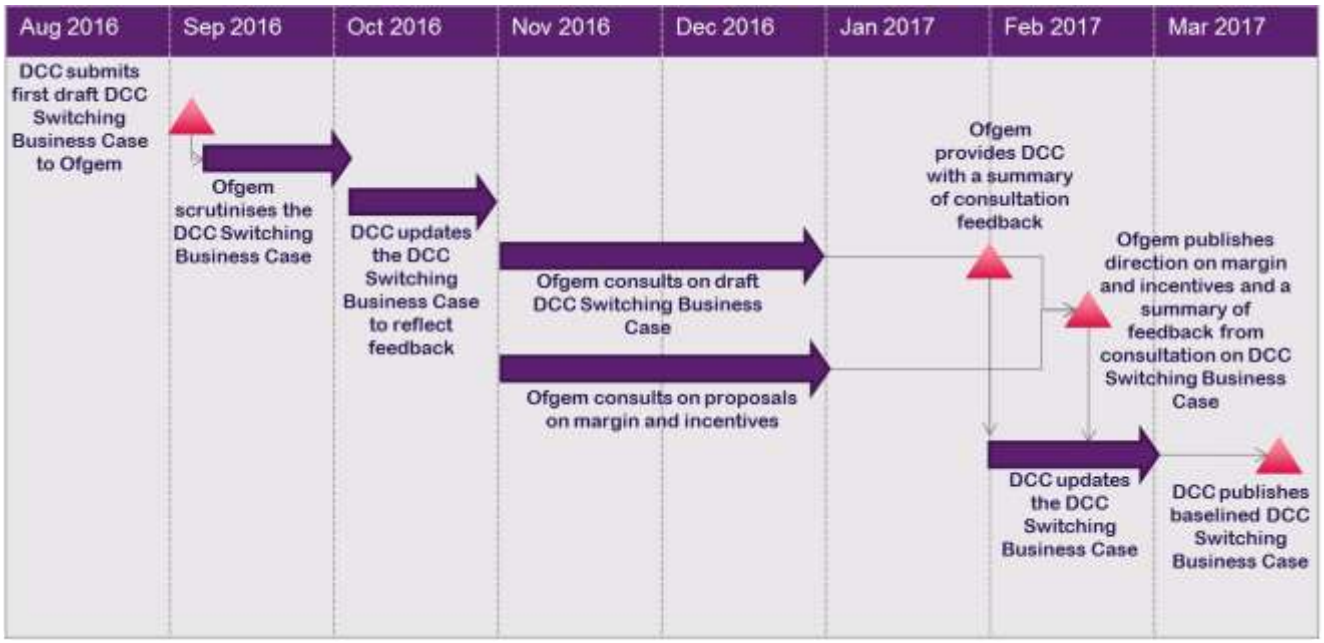

Figure 5 - Activities leading to baselining of DCC Switching Business Case

3 Purpose

62. The purpose of the baselined version of this DCC Switching Business Case will be:

- to enable earlier scrutiny by Ofgem and stakeholders of DCC's proposed and actual costs and activities under the ex post plus price control approach as set out in Ofgem's decision on DCC's role in developing a CRS[9]
- to form the baseline for Ofgem and stakeholders to monitor DCC's incurred and forecast costs during the regulatory year under the ex post plus price control approach
- to form the baseline for Ofgem and stakeholders to monitor DCC's delivery against its plans during the Transitional Phase, via Switching Programme governance.

[9] Ofgem, 'Decision: DCC's role in developing a Centralised Registration Service', 17 May 2016: https://www.ofgem.gov.uk/system/files/docs/2016/05/dcc_statcon_decision_publication_final.pdf and Ofgem, 'Notice of licence modification of the conditions of the smart meter communication licence', 17 May 2016: https://www.ofgem.gov.uk/system/files/docs/2016/05/decision_notice_and_licence_drafting_for_publication_seal_only.pdf

4 Scope of the DCC Switching Business Case

63. This DCC Switching Business Case sets out DCC's forecast activities and costs and proposed margin and incentives relating to the support it will provide during the Transitional Phase of the Switching Programme. The DCC Switching Business Case covers the period from 1 April 2016 up to the point of contract signature for Fundamental Registration Service Capability to deliver the CRS. It also sets out actuals to date for activities already undertaken. Activities and the associated costs, margin and incentives during the DBT and Monitor and Evaluate (operational) phases are not included within the scope of this DCC Switching Business Case.

64. Within these parameters, the DCC Switching Business Case covers all DCC activities in support of the Switching Programme, including:

- contributing to the design of the new registration and switching arrangements
- contributing to the identification of requirements for the CRS
- procuring the Fundamental Registration Service Capability to deliver the CRS.

65. DCC's costs include:

- staff costs for permanent DCC staff
- staff costs for contractor staff
- contracted consultancy support
- costs for professional services (e.g. design proving, legal)
- non-staff resource costs (e.g. software, tools)
- central DCC resource costs (e.g. finance, HR, IT)
- Capita's corporate overhead charge.

66. The DCC Switching Business Case also sets out DCC's proposed margin and performance incentives. Note that these will be consulted upon and directed by Ofgem prior to the baselining of this DCC Switching Business Case.

5 Objectives

5.1 Ofgem Programme Objectives

67. The objectives of the Ofgem Switching Programme are set out in the Target Operating Model (TOM) paper that was published alongside the Switching Programme Significant Code Review launch[10] and the relevant parts are set out below:

- "2.1. The objective of the Switching Programme is to: *"improve customers' experience of switching, leading to greater engagement in the retail energy market by designing and implementing a new switching process that is reliable, fast and cost-effective. In turn this will build consumer confidence and facilitate competition, delivering better outcomes for consumers"*. To do this we [Ofgem] have established the Switching Programme to deliver the necessary changes.

- "2.3. Our primary objective for these reforms is to create new reliable and fast switching arrangements. Our ambition is for consumers to be able to switch the next day. The detailed design of the new arrangements is still uncertain. From a consumer's perspective, next-day switching could include a range of timescales, from agreeing to switch and being with the chosen supplier at the beginning, to the end, of the next day. During the Blueprint Phase, we will assess which approach would provide the best overall outcome for consumers including opportunities to move to next-day switching in stages, once the new centralised systems are put in place."

68. We do not believe there is any material change to these objectives.

5.2 DCC Objectives

69. DCC's overarching objective for the Switching Programme is to fulfil the obligations established in DCC's licence and in the guidance set out in the Ofgem's 'Decision: DCC's role in developing a Centralised Registration Service'[11].

70. Paragraph 15.4 of the licence requires that DCC "must comply with the Interim Centralised Registration Service Objective by:

> (a) contributing to the achievement of a full and timely design for an efficient, economical and secure Centralised Registration Service that would, if implemented, provide a platform for fast and reliable switching for all Supply Points in the GB market;
>
> (b) making all relevant preparations for the procurement of Relevant Service Capability to deliver and operate a Centralised Registration Service; and

[10] Ofgem, 'Moving to reliable and fast switching: Updated Target Operating Model and Delivery Approach', 17 November 2015: https://www.ofgem.gov.uk/publications-and-updates/moving-reliable-and-fast-switching-updated-target-operating-model-and-delivery-approach

[11] Ofgem, 'Decision: DCC's role in developing a Centralised Registration Service', 17 May 2016: https://www.ofgem.gov.uk/publications-and-updates/decision-dccs-role-developing-centralised-registration-service

(c) procuring Relevant Service Capability to deliver and operate a Centralised Registration Service that:

(i) reflects the design of a Centralised Registration Service which has been designated by the Authority for this purpose (including any amendments to that designated design); and
(ii) would, if executed, in all likelihood, give effect to an efficient, economical and secure Centralised Registration Service that would provide a platform for fast and reliable switching for all Supply Points in the GB market."

71. Paragraph 15.5 states that "For the purposes of paragraph 15.4(a), the Interim Centralised Registration Service Objective includes, but is not limited to, a duty to contribute to the development and documentation of the design of the Centralised Registration Service."

72. In addition, 15.6 requires that DCC "must comply with any direction issued to it by the Authority for the purposes of meeting the Interim Centralised Registration Service Objective in respect of the Licensee's obligations in this condition."

73. The general objectives for DCC are set out in Licence Condition 5 and apply to the preparation for the Centralised Registration Service as this is now defined as a Mandatory Business Service. These are paraphrased below:

- First General Objective - Development, operation and maintenance of an efficient, economical, coordinated, and secure system for the provision of Mandatory Business Services
- Second General Objective - Deliver Mandatory Business in a manner that is most likely to facilitate:
  - effective competition between persons engaged in, or commercial activities connected with, the Supply of Energy
  - innovation in the design and operation of Energy Networks
  - reduction (by virtue of benefits arising from the provision of Value Added Services) of the charges payable for Mandatory Business Services.

74. Paragraph 15.3 makes it clear that "The Transition Objective and/or General Objectives of the Licensee shall prevail in the event of a conflict between their provisions and the requirements imposed on the Licensee by the Interim Centralised Registration Service Objective."

6 Requirements

75. This section sets out the requirements for DCC's involvement in the Transitional Phase of Ofgem's Switching Programme. These requirements determine the scope of DCC's activity, which in turn determines the products that DCC will produce to deliver the requirements. These products are captured in the product breakdown structure included in Appendix B and each product will be underpinned by a product description. The requirements traceability matrix included in Appendix A defines the relationship between the requirements and the products that DCC will deliver. The activities required to deliver the products are set out in the DCC Switching Programme Plan included in Appendix C and this which in turn underpins the costs contained within this DCC Switching Business Case and the cost model included in Appendix D. There are some areas of uncertainty in the scope of DCC's role that DCC and Ofgem will continue to refine.

76. The relationship between the requirements, Product Breakdown Structure, Requirements Traceability Matrix, DCC Switching Programme Plan and Cost Model is illustrated in Figure 6.

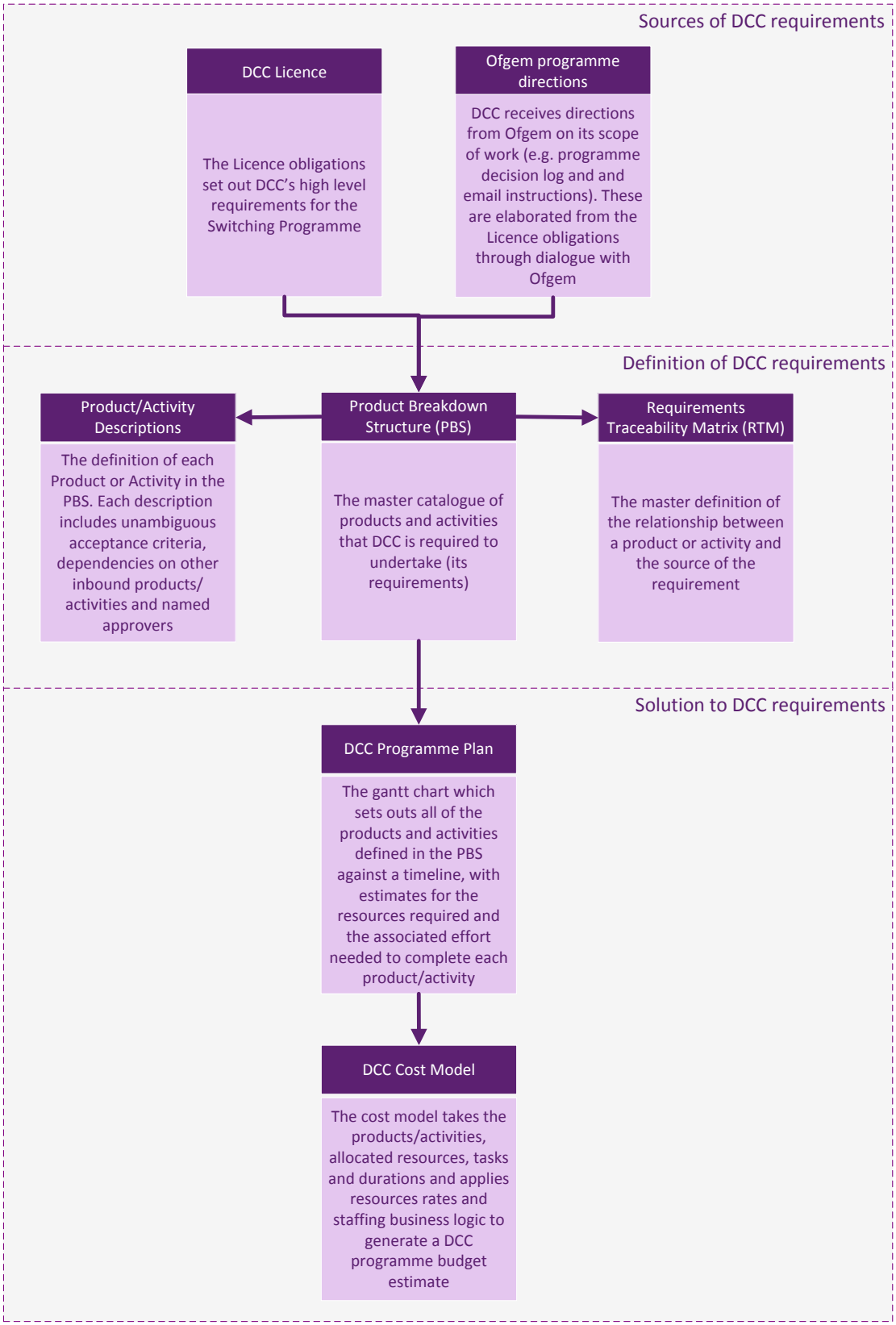

Figure 6 – Relationship between requirements, Product Breakdown Structure, Requirements Traceability Matrix, DCC Switching Programme Plan and Cost Model

77. The scope of DCC's role is determined primarily by its overarching regulatory obligations; however, these typically need elaborating into more detailed requirements to provide clearer instruction. This has been provided either by specific work instructions from Ofgem or by a set of working assumptions jointly agreed by DCC and Ofgem, which will continue to be refined. This has resulted in a set of products and activities underpinned by descriptions which clearly define what is required and the associated acceptance criteria to measure whether this has been achieved to the required quality standard.

78. The scope of DCC's role in the Blueprint phase is currently more clearly defined than its role in either the DLS phase or the Enactment phase. This is consistent with typical programme planning; there is typically a greater level of uncertainty associated with activities planned to take place further in the future. There are also a number of key design and delivery decisions still to be taken by the Ofgem Switching Programme that will determine DCC's activities during the remainder of the Transitional Phase. Where product descriptions are not yet available for products planned to be delivered later in the programme, we have used our judgement to plan for products and associated activities based on assumptions that we deem to be reasonable and have recorded in the RAIDO in Appendix E.

6.1 Summary of requirements

79. The key requirements of DCC during the Transitional Phase of the Switching Programme relate to design, delivery, procurement, price control and regulatory design. These requirements are summarised below. The full detail is available in the requirements traceability matrix and product breakdown structure, which are introduced below and are included in Appendices A and B.

80. In order to meet the requirements, DCC will need to undertake two broad types of activities:

- Advisory activities to support Ofgem-led designing and planning for the delivery of end-to-end switching arrangements, of which the Centralised Registration Service is just one part
- Activities to deliver the DCC-led procurement of the CRS, including developing the CRS specification and planning and executing the procurement of the CRS solution.

81. The Switching programme requirements are not well defined beyond the Blueprint Phase, therefore many planning assumptions have had to be made, which are captured in the RAID (Appendix E) and represented by DCC's programme timeline (Appendix C), to allow DCC to generate an indicative budget for our involvement in Switching.

82. DCC notes that Ofgem's Programme Board has discussed changes to DCC's role in relation to governance of the Transitional Phase. In addition, potential changes to DCC's responsibilities during the DLS Phase are currently under discussion with Ofgem, for example in relation to delivery strategy, security and service management. These discussions have not yet been reflected in the DCC Switching Business Case, pending further clarity on Ofgem's intent for the role that DCC will play in the Transitional Phase and DCC's responsibilities in relation to specific areas of work within the DLS phase. The potential changes to DCC's responsibilities are reflected in the high scenario within the Scope Scenarios section and probability weighted costs are reflected within the contingency allowance. Once Ofgem has provided further clarity on the implications for DCC roles and responsibilities, the changes will

be incorporated and an updated version of the DCC Switching Business Case will be issued as appropriate.

83. The key requirements for DCC's contribution to the Switching Programme are summarised in below and included in full in the requirements traceability matrix included in Appendix A.

6.1.1 Blueprint phase

84. During the Blueprint Phase, DCC will be required to:

- support the development of the Ofgem and DCC Business Cases, through:
  - developing and reporting against the DCC Switching Business Case
  - supporting Ofgem in preparing content for the RFI and Blueprint consultation
  - responding to the Ofgem RFI and Blueprint consultation
- provide external input to challenge and assure design products, especially in relation to business processes and policy papers
- fully participate in Ofgem-led design teams (Business Process Design, Delivery Strategy, Commercial and Regulatory Design), including:
  - producing Blueprint products and activities, under Ofgem leadership, according to the product descriptions that are already in place
  - contributing to Blueprint design products through Design Team, User Group and External Design Advisory Group (EDAG).

6.1.2 Detailed Level Specification phase

85. During the DLS phase, DCC will be required to:

- support the development of the Ofgem and DCC Business Cases, through:
  - maintaining and reporting against the DCC Switching Business Case
- fully participate in Ofgem-led design teams (Business Process Design, Delivery Strategy, Commercial and Regulatory Design), including:
  - supporting Ofgem in the detailed definition of the functional and non-functional requirements for the CRS
  - leading on the development of the technical specification for CRS procurement
  - preparing for procurement of the CRS.

6.1.3 Enactment phase

86. During the Enactment phase, DCC will be required to:

- support the development of the Ofgem and DCC Business Cases, through:
  - maintaining and reporting against the DCC Switching Business Case
  - responding to Ofgem consultations
- deliver the CRS procurement, including all associated products
- update the technical specification and the CRS contract(s) to align to the final design baseline.

6.2 Outputs and deliverables

6.2.1 Requirements traceability matrix

87. In order to provide transparency to industry of DCC's involvement in the Switching Programme and the rationale for that involvement, a requirements traceability matrix is included in Appendix A. The purpose of this matrix is to trace every element of DCC's costed solution underpinning this DCC Switching Business Case back to an agreed product or activity and clearly relate this to the source of each requirement. This is a key piece of due diligence DCC has undertaken to provide traceability that DCC's activities relating to the Switching Programme are justified by clear requirements.

88. Most of DCC's source requirements stem from Ofgem's 'Final Proposals for DCC's role in developing a Centralised Registration Service and penalty interest proposals' published on 17 December 2015[12]. This resulted in a decision document[13] and the publication of amendments to DCC's licence[14] on 17 May 2016, primarily to Licence Condition 15.

89. In addition to these regulatory requirements, elements of DCC's solution can also be traced back to the Switching Commercial Workstream Design Team Decision Log (Feb 2016-present).

90. In addition to the Decision Log itself, DCC has been working collaboratively with Ofgem in the Commercial Workstream Design Team forum to define DCC's scope and activities during the Transitional Phase of the Switching Programme in greater detail. The output from this forum is also reflected in this DCC Switching Business Case.

[12] Ofgem, 'Proposals for DCC's role in developing a Centralised Registration Service and penalty interest proposals', 17 December 2015: https://www.ofgem.gov.uk/sites/default/files/docs/crs_dcc_licence_modifications_final.pdf
[13] Ofgem, 'Decision: DCC's role in developing a Centralised Registration Service', 17 May 2016: https://www.ofgem.gov.uk/publications-and-updates/decision-dccs-role-developing-centralised-registration-service
[14] Ofgem, 'Notice of licence modification of the conditions of the smart meter communication licence', 17 May 2016: https://www.ofgem.gov.uk/system/files/docs/2016/05/decision_notice_and_licence_drafting_for_publication_seal_only.pdf

6.2.2 Product and activity breakdown

91. All products and activities documented in the requirements traceability matrix are presented in diagrammatic form in the product breakdown structure, included in Appendix B. This lays out products and activities according to the phase in which they will be delivered and within the functional area of ownership.

92. Products in the product breakdown structure are typically deliverables for which DCC has been assigned clear ownership and will be underpinned by a detailed product description. Product descriptions are created using a template consistent with that being used by Ofgem and other parties contributing to the Switching Programme. Key elements defined in the product descriptions include:

- title and format
- composition
- inbound and outbound dependencies
- ownership and approvals
- acceptance criteria
- planned delivery dates.

93. Product descriptions are developed by the Ofgem workstream leads with input from DCC. Once the description is fit for purpose it is approved by the Ofgem Programme Director.

94. Activities in the product breakdown structure tend to involve DCC's participation in an Ofgem-led product or workstream activity. These activities have been documented to show where DCC is expected to provide appropriate resource to support workshops, meetings, industry forums and provide written review comments on other products. Activities also cover DCC's own programme management and support activities which enable its effective participation in the Switching Programme.

95. Activities on the product breakdown structure are supported by activity descriptions. These consist of a brief paragraph describing what is required of DCC and are intended to remove any ambiguity from the interpretation of the activity title. These do not use the same template or governance arrangements associated with product descriptions.

96. At present, there are a greater number of products and activities documented for the Blueprint phase than for the DLS and Enactment phases. This is due to Ofgem's more immediate planning focus on the Blueprint phase. However, DCC has worked with Ofgem to forecast the products and activities that are likely to be required during the later Transitional Phase based on what both parties could reasonably foresee at present.

97. DCC expects that the level of certainty relating to Ofgem's requirements of DCC's role will increase throughout the Transitional Phase as the Switching Programme takes key decisions on the solution design and delivery strategy and undertakes more detailed planning. When

updating the DCC Switching Business Case at planned review points or in response to specific triggers as set out in Section 12, DCC will review and revise the product breakdown structure and requirements traceability matrix to reflect this increased level of certainty relating to requirements. The updating and republishing process, associated governance and communication with industry is explained in more detail in Section 12.

98. All products and activities in the product breakdown structure and requirements traceability matrix are captured in the DCC Switching programme plan for the Transitional Phase, which is summarised in the Section 8 and included in full in Appendix C.

6.3 Ways of working: Outcomes and non-functional requirements of DCC input

99. In addition to the functional requirements for DCC captured in the product and activity descriptions, Ofgem has specified some overarching programme principles it expects DCC to comply with and some behaviours it expects DCC to exhibit during its participation in the Switching Programme. Examples of this include being economic and efficient; providing timely input; working to design principles; and planning activities with the target implementation date in mind.

100. These overarching requirements for DCC are designed to ensure that DCC participates in the Programme in a manner that supports the best possible chance of delivering the Programme's intended outcomes. These requirements originate from regulatory sources (primarily the DCC Licence) and are captured under 'ways of working' in the requirements traceability matrix.

101. DCC will rely on Ofgem and stakeholder feedback to gauge its performance against these requirements and will agree key checkpoints with Ofgem to review performance and agree any actions to further improve ways of working. In addition, DCC will use regular stakeholder surveys to capture feedback that can then be used to inform the way DCC's engages with the Switching Programme. Further details on DCC's approach to the stakeholder satisfaction surveys are included in Section 13.8.4.

7 Scope Scenarios

7.1 Overview

102. Given the early stage of the Switching Programme, there is a high degree of uncertainty relating to DCC's activities, particularly in relation to the DLS and Enactment phases.

103. This section identifies the key areas of uncertainty that are likely to affect DCC costs in relation to its activities during the Transitional Phase of the Switching Programme. DCC has developed three high level scenarios that illustrate how these uncertainties may affect DCC's activities and the associated costs. This approach is intended to provide transparency to Ofgem and stakeholders about the potential cost impacts of changes to the baseline assumptions.

104. DCC has developed three scenarios:

- a baseline scenario – this models the cost forecast of DCC's current assumptions relating to its scope and activities during the Transitional Phase
- a high scenario – this models the cost forecast of the aggregate impact of the most costly requirements coming to fruition based on the identified areas of uncertainty
- a low scenario – this models the cost forecast of aggregate impact of the least costly requirements coming to fruition on the identified areas of uncertainty.

105. These solution scenarios are illustrated in Figure 7. This illustration is only intended to provide a basic view of how each scenario relates to the others. The estimated cost of each scenario is included in Section 9.

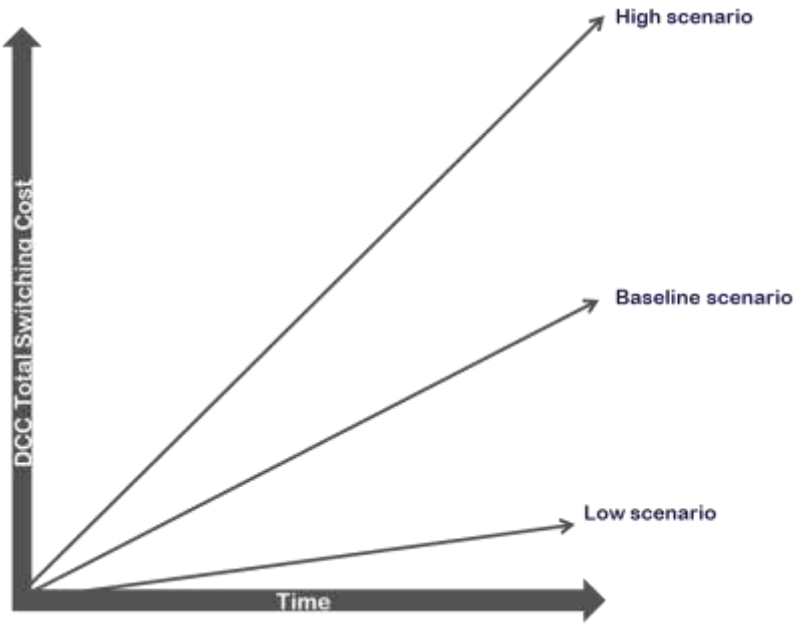

Figure 7 - Three solution scenarios

106. The delivery activities and resourcing approach set out in Section 8 and DCC Switching programme plan reflect the baseline scenario. DCC's forecast costs are therefore predicated on the baseline scenario. The estimated costs associated with high and low scenarios are calculated in the cost model and the high scenario informs the contingency element of the materiality threshold, which is explained in more detail in Section 11.

7.2 Drivers of uncertainty

107. There are three overarching areas of uncertainty relating to DCC's involvement in Ofgem's Switching Programme:

- CRS solution uncertainty – the design and delivery strategy for the CRS solution is still under development and will be subject to formal consultation with industry by Ofgem. The current lack of clarity on the solution leads to uncertainty relating to the breadth and depth of DCC activities and therefore the level of effort involved in certain programme activities, such as procurement

- Programme timescales:

  - Phase timescales and durations – Ofgem's programme planning of the later phases is still under development and will be subject to the key decisions on solution design and delivery strategy. As a result there is uncertainty on the timing, duration and extent of overlap of the DLS and Enactment phases, and therefore there is uncertainty on when activities will occur and whether DCC will need to increase the level of resource to meet them

  - Product/activity timescales and durations – the sequencing and expected duration of DCC's input to specific products and activities is uncertain. Similarly, where DCC is expected to lead on a product or activity, joint Ofgem and DCC planning for these tasks is yet to be undertaken

- Scope of DCC activities:

  - DCC-owned deliverables – the number of products and activities that DCC is expected to lead is uncertain and therefore the level of resource that is required is uncertain

  - Level of DCC contribution into Ofgem-owned deliverables – the expected level of contribution by DCC to Ofgem-led products and activities is uncertain and therefore the level of resource that is required is uncertain.

7.3 Areas of uncertainty

108. This section sets out the key areas of scope uncertainty relating to design, delivery, procurement and regulatory design. It explains DCC's proposed assumptions for the baseline scenario and identifies the positions that form the high and low scenarios.

109. This section should be read with reference to the product breakdown structure provided in Appendix B. The product breakdown structure defines all of the specific products and activities included in the baseline solution scenario, which are referenced in a more collective manner in this section.

7.3.1 Design scope

110. The key areas of uncertainty relating to design and the proposed mapping of DCC's role to each of the baseline, high and low scenarios are summarised in Table 5 below.

Area	Proposed DCC approach for baseline scenario	Rationale	DCC approach for high scenario	DCC approach for low scenario
Iterate Switching solution design in response to feedback received during Transition phases e.g. RFI and consultation	Combination of leading iteration of design products and contributing to iteration of design products (full participation in design workstreams, leading on some products and contributing on others, based on the same allocation as in the Blueprint phase)	Logical for those who develop the high level design products to continue to iterate those products. Clear accountability.	Lead iteration of all design products	Review all design products only through formal engagement at the User Group

Area	Proposed DCC approach for baseline scenario	Rationale	DCC approach for high scenario	DCC approach for low scenario
Complexity of the technical solution[15] for the CRS, based on areas including: ▪ Whether the technology is proven ▪ Number of components ▪ Level of customisation required ▪ Number of interfaces, including with existing energy systems ▪ Network solution, e.g. if using a solution other than DTN ▪ Level of security controls required ▪ Volume of data items stored in CRS ▪ Level of data stewardship responsibilities within the CRS	Moderate solution (relatively proven solution, with a limited number of components and customisation)	Appropriate balance of appetite to transform vs. minimising unnecessary industry upheaval	Complex solution (e.g. innovative or unproven solution, with a high number of components and customisation, increased number of interfaces, alternative network solution (e.g., other than DTN), increased level of security controls required, increased volume of data items stored in CRS, increased stewardship responsibilities within the CRS)	Simple solution (e.g. proven solution, with a limited number of components and customisation, limited number of interfaces, limited volume of data items stored in CRS/MIS, limited data stewardship responsibilities)
Basis of the technical specification for CRS procurement which will underpin the CRS procurement - technical, security and service management (DLS and Enactment)	Non-prescriptive specification (outcome-focused, less design effort pre-procurement)	Aligned to outcomes-based regulation Allows solution ideas not previously considered to surface	Prescriptive specification (output-focused, high design effort pre-procurement)	Non-prescriptive specification (outcome-focused, less design effort pre-procurement)

[15] Note that within each of the solution architecture options that will be assessed as part of Ofgem's RFI, there is a potential range of complexity depending on how the design is further developed

Area	Proposed DCC approach for baseline scenario	Rationale	DCC approach for high scenario	DCC approach for low scenario
CRS industry interface specifications i.e. specifications for any parties required to interface to the new CRS solution (DLS and Enactment)	Lead (author of the interface specifications on which industry will be consulted and then adhere to)	Alignment to the CRS technical specification resource and knowledge of DCC	Lead development of CRS industry interface specifications	Review CRS industry interface specifications only as part of the User Group
Technical specifications not relating to the CRS i.e. specifications that may be required for system and service elements of the switching process that need to change but that do not interface directly with the new CRS solution (DLS and Enactment)	Contribute to the development of any industry interface specifications not relating to the CRS (contributory, advisory role in support of Ofgem-led activity)	Alignment to Ofgem's leadership role on the programme in engaging with industry	Lead development of industry interface specifications not relating to the CRS	Review industry interface specifications not relating to the CRS only as part of the User Group
Creation of security strategy	Contribute to the development of a security strategy for Switching (contributory role to Ofgem-led activity)	Alignment to Ofgem's leadership role on the programme in engaging with industry	Lead development of security strategy	Review security strategy only as part of the User Group
Creation of detailed security design (the next level of detail beneath the security strategy)	Lead (author of the detailed security design documents)	Access to skills Natural alignment to solution architecture	Lead development of detailed security design	Review detailed security design only as part of the User Group
Creation of service management model	Contribute to the development of a service management model for Switching (contributory role to Ofgem-led activity)	Alignment to Ofgem's leadership role on the programme in engaging with industry	Lead development of service management model	Review service management model only as part of the User Group

Area	Proposed DCC approach for baseline scenario	Rationale	DCC approach for high scenario	DCC approach for low scenario
Creation of detailed service management design	Lead (author of the detailed service management design)	Access to skills Natural alignment to solution architecture	Lead development of detailed service management design	Review detailed service management design only as part of the User Group

Table 5 - Areas of uncertainty in design scope

7.3.2 Delivery scope

111. The key areas of uncertainty relating to delivery and the proposed mapping to each of the baseline, high and low scenarios are summarised in Table 6 below.

Area	Proposed DCC approach for baseline scenario	Rationale	DCC approach for high scenario	DCC approach for low scenario
Iterate delivery strategy products in response to feedback through Transition phases e.g. RFI and consultation	Combination of leading iteration of delivery products and contributing to iteration of delivery products (full participation in design workstreams, leading on some products and contributing on others)	Sensible for those who develop the high level strategy products to continue to iterate those products. Clear accountability	Lead on the iteration of all delivery products	Review all design products only through formal engagement at the User Group
Creation of Switching test plan, post implementation plan and data cleansing plan products (the next level of detail beyond the strategy documents)	Lead (Lead on all of these products)	Continuity of lead role in Blueprint phase (test strategy, post implementation and data cleansing strategies). Clear accountability	Lead on the development of Switching test, post implementation and data cleansing plans	Review Switching test, post implementation and data cleansing plans only through formal engagement at the User Group

Area	Proposed DCC approach for baseline scenario	Rationale	DCC approach for high scenario	DCC approach for low scenario
Creation of detailed Switching transition plan products for transition (including a pilot), governance and assurance, and data migration (the next level of detail beyond the strategy documents)	Contribute (full participation in design workstreams, led by Ofgem)	Continuity of DCC's outward-looking contributory role adopted in Blueprint phase	Lead on the development of detailed transition and data migration plans	Review Switching transition and data migration plans only through formal engagement at the User Group
System integration role for Switching (preparing for Design, Build and Test) - scope and design the system integration function including potentially procuring the service provider	Lead (delegated authority to act on Ofgem's behalf to integrate systems and service – potentially through a procured service)	System integration will likely be required for within the CRS solution, therefore this would be create alignment and be an extension and efficient use of resource	Lead (delegated authority to act on Ofgem's behalf to integrate systems and service – potentially through a procured service)	Review the development of an Ofgem-led system integration role for Switching through formal engagement at the User Group

Table 6 - Areas of uncertainty in delivery scope

7.3.3 Procurement scope

112. The key areas of uncertainty relating to procurement and the proposed mapping to each of the baseline, high and low scenarios are summarised in Table 7.

Area	Proposed DCC approach for baseline scenario	Rationale	DCC approach for high scenario	DCC approach for low scenario
Market engagement (pre-procurement) for CRS procurement i.e. early engagement with the market to gauge interest and test ideas.	Lead on market engagement activity for the CRS procurement	Aligned to DCC ownership and accountability for the CRS procurement	Lead market engagement activity for the CRS procurement	Review market engagement for the CRS procurement carried out by Ofgem only through formal engagement at the User Group
Procurement approach to be adopted for the CRS solution	Competitive tender (not restricted) i.e. the number of bidders is not limited	Aligned to procurement strategy More attractive timescales than a multi stage refinement approach Does not assume that there is a wholly mature vendor market	Multi-stage refinement process	Competitive tender (restricted) i.e. the number of bidders is limited
Number of procurements and complexity of solution as described in Design scope table	Few procurements based on moderately complex solution i.e. three procurement projects with complexity characteristics as described in baseline scenario in Design scope table	Provides an appropriate balance of competition, allowance for natural splits in the market and a level of integration complexity	Many procurements i.e. five; and/or increased complexity of solution as described in high scenario in Design scope table	A single procurement; and/or reduced complexity of solution as described in low scenario in Design scope table

Table 7 - Areas of uncertainty in procurement scope

7.3.4 Regulatory scope

113. The key areas of uncertainty relating to regulatory design and the proposed mapping to each of the baseline, high and low scenarios are summarised in Table 8 below.

Area	Proposed DCC approach for baseline scenario	Rationale	DCC approach for high scenario	DCC approach for low scenario
Level of technical prescription in regulatory documents	Partially prescriptive	Trend towards outcome-based regulation	Very prescriptive	Less prescriptive

Table 8 - Areas of uncertainty in regulatory scope

8 Solution: Delivery and resourcing approach

8.1 Overview

114. This section sets out DCC's planned approach to delivering the requirements set out in Section 6, based on the baseline scope scenario defined in Section 7.

115. The purpose of outlining delivery plans as part of the DCC Switching Business Case is to establish a baseline set of activities, timescales and costs which DCC will report against during the Transitional Phase. It is intended to set an initial programme budget for delivery of Ofgem's requirements by DCC and to provide transparency on the drivers of DCC costs, based on currently available information.

116. As explained in Section 6, detailed plans and product descriptions for activities and products planned to be delivered later in the Transitional Phase are not yet available and so cannot provide a firm basis for planning. DCC plans for activities during these phases are therefore based on assumptions and will need to be refined as Ofgem make more detailed requirements available throughout the course of the Programme.

117. Together, these elements determine the forecast costs of DCC's activities during the Transitional Phase. This section explains the process we have used to generate each element of the approach.

118. DCC's delivery approach is underpinned by three key artefacts:

- DCC Switching programme plan – an MS Project plan that sets out the delivery activities, associated timescales and the resource types assigned to each activity. The plan is based on the baseline scope scenario defined in Section 7. The DCC Switching programme plan is included in Appendix C
- Cost model – an MS Excel workbook that uses the output of the DCC Switching programme plan to generate a full-time equivalent (FTE) resource profile and a set of forecasts that show the monthly costs associated with tasks and resources. The model also generates the costs associated with the high and low scope scenarios. The total financial forecast includes the base costs, contingency and management reserve, overhead and margin. The total financial forecast associated with the baseline scenario forms the baseline against which DCC will report. The cost model is included in Appendix D
- RAIDO – within the cost model, a series of worksheets set out the risks, assumptions, issues, dependencies and opportunities that underpin the DCC Switching programme plan, including the weighted costs of the high and low scenarios. The weighted costs of the high scenario inform the level of contingency applied to the base costs, as set out in Section 11. The RAIDO is explained in more detail in Section 10 and is included in Appendix E.

8.2 DCC Switching programme plan

119. DCC's plan to deliver the requirements defined by Ofgem is set out in the DCC Switching programme plan included in Appendix C. The DCC Switching programme plan has been tested with Ofgem workstream leads during its development and reflects our best estimates of activities given the current level of certainty of scope, key programme phases and deliverables. The primary function of the DCC Switching programme plan at this stage is to generate a costed resource plan.

120. The timeline is a working document that will continue to develop during the period of Ofgem's consultation on the DCC Switching Business Plan. DCC and Ofgem will undertake joint planning in order to develop a robust programme delivery plan with agreed inbound and outbound dependency milestones. It will only be possible to determine the timescales of the Transitional Phase with any certainty once the solution design and delivery strategy have been decided, DCC and Ofgem have undertaken joint planning and this is confirmed to be achievable following external assurance of the plan.

121. The DCC Switching programme plan sets out:

- the phasing of the planned activities
- DCC delivery activities associated with the products included in the product breakdown structure
- the anticipated duration of each activity
- the level of resource effort required to deliver each activity
- the resource capability assigned to each activity (explained in Section 8.4 below).

122. A high level timeline is included in Figure 8. Assumptions underpinning the timeline and the Microsoft Programme Plan underpinning it, are captured and managed and are available alongside the plan in Appendix E.

123. This plan does not reflect Ofgem's currently planned timescales for the Enactment Phase for the following reasons:

- The extent of overlapping activity, including Blueprint, DLS and Enactment activities, would result in an unrealistic increase in the level of resource DCC would be required to source (an increase of around 30 roles in one month). DCC has therefore reduced the extent of overlapping activities in the latter half of 2017 in order to achieve a realistic resourcing profile
- DCC considers that it would be logical to commence the development of the CRS technical specification and CRS delivery specification once the detailed design and detailed delivery planning are complete at DB4, rather than undertaking both design and specification activities in parallel. DCC has therefore planned for these activities to be sequential rather than in running in parallel. This work may be able to be

initiated in advance of DB4, but DCC considers that this should only be captured as an opportunity at this stage.

- DCC has reflected the planned review and approval cycles for procurement products as set out in the Procurement Framework in its timescales for the procurement activities.

8.2.1 Resourcing challenge

124. If all activities were started at their earliest opportunity, four to five months could potentially be saved from the overall timeline. In particular, in the latter half of 2017, when the end-to-end switching design and delivery planning work could be run in parallel with DCC initiating the production of the CRS design and delivery specification.

125. However DCC considers that, due to the overlapping activities required under this approach and our learning from resourcing the Smart Metering Implementation Programme (SMIP), that this would be unrealistic and introduce significant risk to the programme:

- Recruiting of the required headcount of the required quality would be very challenging
- On-boarding of new starters would be very difficult and the productivity of new staff would be below expectations
- Productivity of existing Switching and wider DCC staff would be affected by the resourcing spike, as the new induction demands would be well beyond that which can be managed through Business-As-Usual activity
- The use of contracting resource to meet the spike would be less economic and efficient and provide less continuity of knowledge through the programme
- The Ofgem Switching Programme is aligned to a waterfall programme delivery method, where there is a need to keep requirements (and the documents in which they are set out) up to date and aligned across all parties. This approach is based on new design activities being triggered by formal releases of design information, therefore running parallel activities under this approach is less viable
- Managing a programme that doubles in size from one month to the next is inherently risky.

126. DCC has therefore smoothed out the resource profile to provide a resource plan that it considers a more realistic basis to work from.

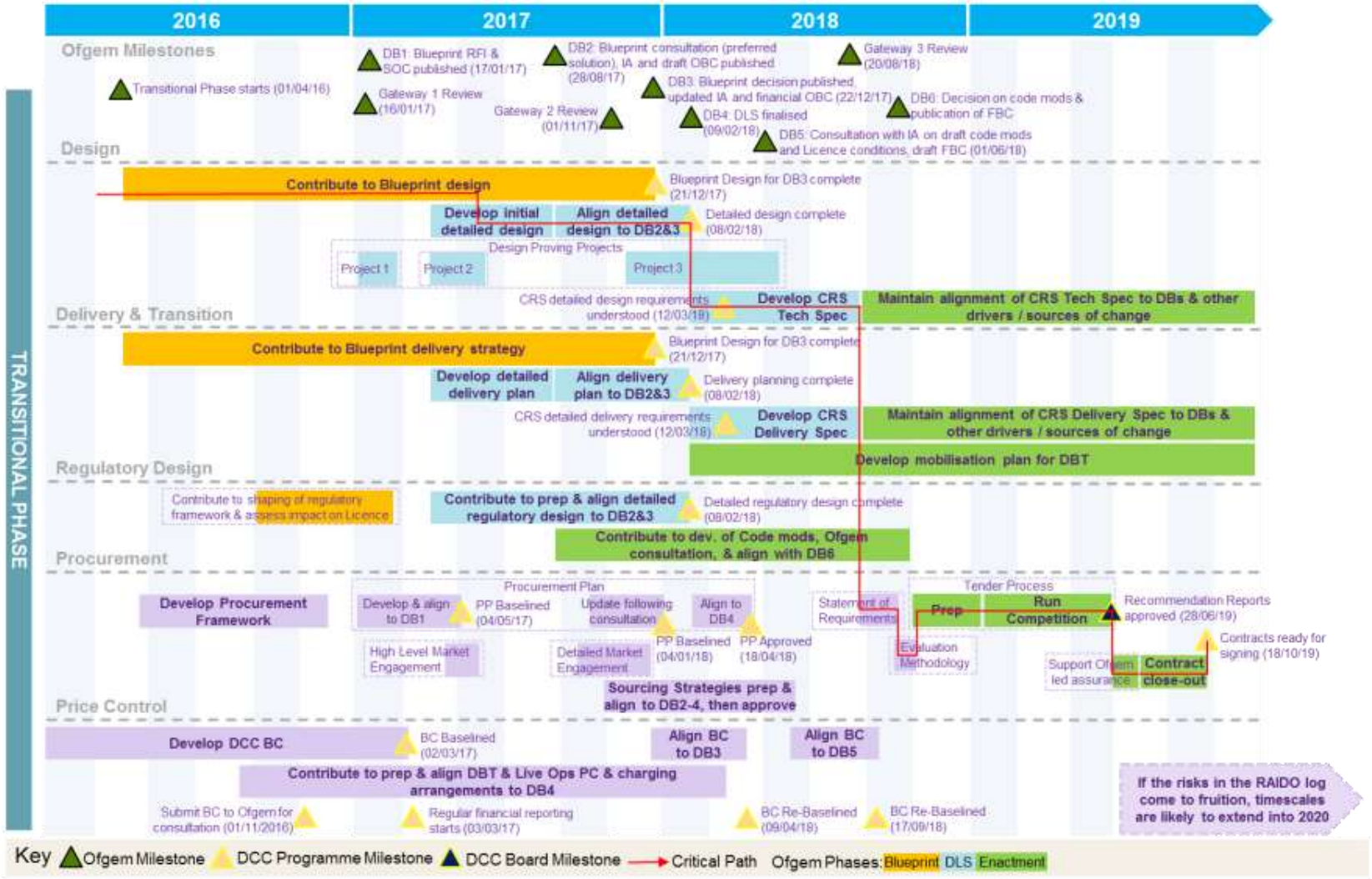

Figure 8 - High level DCC timeline

8.3 Phasing

127. The plan is structured around the key workstreams defined by the Switching Programme:

- Design
- Delivery and transition
- Regulatory design
- Procurement
- Price control.

128. It also includes a set of activities for DCC's input into Ofgem's programme-level management documents and activities, such as the Ofgem Business Case, consultations and Gateway Reviews.

129. Within each phase, activities are structured around the Blueprint, DLS and Enactment phases.

8.3.1 Summary of key activities

130. DCC's contribution to the Switching Programme has two purposes:

- to provide advisory services to support the Ofgem-led definition of the end-to-end switching arrangements, of which the Centralised Registration Service is just one part
- to ensure that the procured CRS will meet the requirements defined by the programme.

131. The programme plan also sets out activities that are required to manage DCC's input to the Switching Programme. This includes ongoing programme management, including planning, reporting and managing changes in scope.

132. At the start of each phase, DCC will agree ways of working with Ofgem. The exact nature of DCC's role will depend on the programme governance structures that are in place, for example, the role of the workstream Design Teams and User Groups during the DLS and Enactment phases.

133. A description of the key activities during each phase in included below.

Blueprint phase

134. Key DCC activities within the Blueprint phase relate to leading and contributing to the development of high level products which will form part of Design Baseline 1. DCC will review and update these Blueprint products based on industry feedback following the Blueprint RFI and consultation on Design Baseline 2. DCC will also develop, baseline and commence reporting against the DCC Switching Business Case during the Blueprint phase.

135. DCC will seek a degree of input from its SMIP resource as part of its response to the RFI and to review key design documents. The DCC Switching Programme team will ensure that there is no impact on the delivery of SMIP as a result of the resource requirements associated with these activities. Our approach to using existing DCC resource is described in more detail in Section 9.4.

136. Following Design Baseline 1, DCC's focus will shift to the more detailed design work as part of the DLS phase which overlaps significantly with the Blueprint phase. DCC expects that the parallel activities relating to the Blueprint RFI and consultation on Design Baseline 2 will be relatively light-touch.

Detailed Level Specification phase

137. Within the DLS phase, the Ofgem Switching Programme will define the detailed design of the new switching arrangements. Within this activity, DCC will lead and contribute to the development of detailed products which will be aligned with Design Baselines 2 and 3. Wherever DCC leads on the development of a product, the product remains under Ofgem ownership. As noted in Section 6, DCC's role and responsibilities during the DLS phase are currently under discussion with Ofgem. Once Ofgem has provided further clarity on these areas, the changes will be incorporated and an updated version of the DCC Switching Business Case will be issued as appropriate.

138. The detailed design products developed by DCC and other programme participants, under Ofgem's oversight, will define clear and unambiguous requirements for the operation of the end-to-end switching arrangements, including:

- detailed business processes that will underpin the switching arrangements in line with policy decisions in the Blueprint phase
- a detailed data model to underpin the end to end detailed business processes
- the required solution architecture, with detailed interactions between components
- operational requirements and non-functional requirements (e.g. security, performance, acceptance criteria, business continuity and disaster recovery).

139. Once Ofgem has confirmed that the detailed design is complete, the design will be handed to DCC to transpose these requirements into a technical specification for the CRS. Note that the technical specification includes requirements relating to the delivery of the CRS as well as the design requirements.

140. As part of defining the CRS technical specification, DCC will define the CRS interfaces. We will work in collaboration with industry to make decisions regarding whether existing interfaces and connections (such as the DCC User Interface and Registration Data Interface) will be used and/or impacted. As part of its design work, DCC will define the data items and attributes that it will process under the Ofgem switching data model and define artefacts such as message schemas and error conditions.

141. DCC will not be responsible for defining the processes, interactions, data models, or system components to be used within any other industry party's boundary i.e. beyond the CRS interface.

142. DCC has allowed for an impact assessment to be carried out by its existing Service Providers to identify any impact of the design on the smart meter communication service, such as the Transitional and Enduring Change of Supplier architecture.

143. To support the detailed design work and development of the technical specification, DCC proposes to commission a project to prove the design. This activity is intended to identify any issues or areas for improvement within the design so that they can be resolved at an early stage, and so that industry can participate in the proving process. This should reduce the risk of fundamental design issues emerging later in the programme, when they are more costly to fix. The proving project will provide the programme with increased confidence that the design will operate as intended, based on firm evidence. Further detail on the objectives of the proving project is included in Section 9.5.

144. Following production of the technical specification, DCC will maintain the alignment of the document with any changes resulting from the evolving design baselines and with the programme workstreams, including regulatory changes.

145. DCC will undertake two stages of market engagement based on the requirements and design during the DLS phase, prior to commencing its procurement of the CRS solution. This will comprise a high level market engagement at the beginning of the DLS phase, followed by a more detailed market engagement later in the DLS phase as the design is more fully developed. DCC will also develop the Procurement Plan and Sourcing Strategies, and will complete these products once the design is finalised at Design Baseline 4, at the conclusion of the DLS phase.

Enactment phase

146. During the Enactment phase, DCC will execute the procurement and contracting of the CRS, contribute to the development of code modifications, and mobilise for the DBT phase, which will follow the Enactment phase.

147. Once the CRS technical specification is complete, DCC will transpose this into a Statement of Requirements which will underpin the procurement of the CRS. DCC will produce the tender packs and contract schedules before carrying out the tender process, evaluation and contract negotiation prior to contract signature.

148. DCC will contribute to the development of the code modifications and support Ofgem's consultation activities, including providing support during the review of consultation responses and resulting revisions to the code modifications.

149. DCC will mobilise for the DBT phase, which will follow the Enactment phase.

8.3.2 Industry engagement

150. DCC recognises the importance and value of engaging with industry throughout the Transitional Phase. To date we have primarily been engaging with industry through Ofgem's Switching Programme governance. We have also discussed DCC's role in the Switching Programme at the October 2016 DCC Industry Day.

151. We intend to extend our engagement with industry in relation to the Switching Programme. Learning from our experience of engaging with industry through the SMIP, we intend to engage with industry stakeholders through individual meetings with the DCC Programme Director, through DCC Industry Days and through DCC's Industry Partnership Managers.

152. DCC is also considering establishing a Switching Advisory Group with industry, which would provide industry oversight of DCC's Switching Programme on areas such as scope, timescales and risks. During the development of the technical specification, DCC may run Design Forums with industry similar to the Design Forums run with industry during the SMIP.

153. DCC also proposes to introduce a non-financial incentive relating to stakeholder satisfaction. The proposal is set out in Appendix F.

8.3.3 Duration

154. The DCC Switching programme plan reflects the key programme-level milestones and design baselines as set out in Ofgem's high level programme plan shared on 29 June 2016 and on Ofgem's detailed programme plan V6 shared on 22 July 2016. DCC's approach to planning the duration of activities is therefore primarily top-down, based on the time available between key milestones in Ofgem's overall programme plan.

155. However, we have also used our experience to plan some activities bottom-up, particularly where the activities are under DCC's control, such as the procurement execution activities during the Enactment phase. This has resulted in some contention with the overall Ofgem programme plan, but DCC considers that this results in an achievable delivery timeline.

156. The validity of planned activities and their durations have been tested with DCC colleagues and Ofgem Switching Programme workstream leads.

8.3.4 Effort

157. DCC has estimated the level of resource effort that will be required to deliver each of the activities, based on our current understanding of the requirements for those activities. These estimates are based on our experience of delivering similar activities and have been tested with DCC colleagues and with Ofgem Switching Programme workstream leads. As described in previous sections, there is inherent uncertainty in estimating the level of effort that is required to deliver planned activities.

8.4 Capabilities

158. Based on the planned activities, we have considered the skills and knowledge that will be required to successfully deliver these activities and identified a set of resource capabilities as a result.

159. The capabilities required and their key areas of responsibility within DCC's planned activities are summarised in Table 9 below. Note that this refers to types of capability that are required and do not exactly align to individual roles/job titles. All capabilities are captured within the DCC programme plan and are mapped against the relevant activities.

Capability	Focus areas
Support Services	
Commercial	▪ Support procurement of CRS ▪ Support procurement of other capabilities (e.g. proving of design) as required
Finance	▪ Develop and maintain DCC Switching Business Case for activities during the Transitional Phase ▪ Reporting against DCC Switching Business Case ▪ Contribute to development of price control and charging arrangements for the DBT and Live Operations phases
HR	▪ Manage recruitment of permanent and contractor resource ▪ Recruitment administration ▪ Day-to-day HR support for management of permanent resource
Industry Liaison	▪ Engagement with programme governance and industry stakeholders
Legal	▪ Support draft and review of contract schedules ▪ Support commercial negotiations with CRS providers ▪ Provide ad hoc legal advice as required
Programme	
Programme Director	▪ Lead the DCC Switching Programme ▪ Interfacing with Ofgem and industry ▪ Lead DCC responses to Ofgem consultations

Capability	Focus areas
Programme Manager	▪ Programme and project management of DCC activities ▪ Project management oversight of proving activities ▪ Planning and mobilisation for all phases
Programme Management Office	▪ Planning and reporting of DCC activities, including regular reporting to Ofgem ▪ Change control and scope management ▪ Maintenance of programme management artefacts
Programme Advisory	▪ Provision of advisory services, specifically bringing deep industry expertise to the DCC Switching Programme
Design	
Lead Technical Architect	▪ Define and maintain technical requirements for the CRS ▪ Support CRS procurement from a technical requirements perspective
Solution Architect	▪ Develop solution architecture for the end-to-end switching arrangements ▪ Define and maintain design of interfaces and messaging for the CRS ▪ Support CRS procurement from an interfaces and messaging perspective
Business Analyst	▪ Contribute to development of business model and business processes for the end-to-end switching arrangements ▪ Define and maintain model and business processes for the CRS ▪ Support CRS procurement from a business model and business process perspective
Data Architect	▪ Develop data model for the end-to-end switching arrangements ▪ Define and maintain data architecture for the CRS ▪ Support CRS procurement from a data architecture perspective

Capability	Focus areas
Data Analyst	▪ Develop data cleansing strategy and plans for the end-to-end switching arrangements ▪ Define and maintain data cleansing requirements for the CRS ▪ Support CRS procurement from a data cleansing perspective
Process Architect	▪ Develop detailed business processes for the end-to-end switching arrangements ▪ Define and maintain detailed business processes for the CRS ▪ Support CRS procurement from a detailed business process perspective
Security Architect	▪ Contribute to development of security strategy for the end-to-end switching arrangements ▪ Define and maintain security design for the CRS ▪ Support CRS procurement from a security perspective ▪ Participate in industry security forums relating to security of new Switching arrangements
Service Architect	▪ Contribute to development of service management model for the end-to-end switching arrangements ▪ Define and maintain service management design for the CRS ▪ Support CRS procurement from a service management perspective
User Experience / Interface Designer	▪ Define and maintain design approach for the CRS web interface(s), usability testing approach, example wireframes for the CRS Service Provider(s) ▪ Support CRS procurement from a user experience perspective
Proving	▪ Capability to execute proving of design during the DLS phase
Delivery	

Capability	Focus areas
Delivery Lead	▪ Develop Testing Strategy and Plan, Post-implementation Strategy and Plan and Systems Integration Strategy and Plan for the end-to-end switching arrangements ▪ Define and maintain delivery and transition requirements for the CRS ▪ Support CRS procurement from a delivery and transition perspective
Integration Analyst	▪ Develop Systems Integration Strategy and Plan for the end-to-end switching arrangements ▪ Define and maintain systems integration requirements for the CRS ▪ Support CRS procurement from a systems integration perspective
Test Lead	▪ Develop Testing Strategy and Plan for the end-to-end switching arrangements ▪ Define and maintain testing requirements for the CRS ▪ Support CRS procurement from a testing perspective
Test Analyst	▪ Design the detailed CRS test strategy and test planning
Configuration Manager	▪ Development of the DCC's configuration management approach for Switching. ▪ Set up and maintenance of DCC's configuration management systems
Environment Manager	▪ Development and elaboration of DCC's environment strategy in relation to Switching, to ensure that the Delivery Strategy, Transition Strategy, Systems Integration Strategy, and Post-Implementation Strategy are realised in the Switching solution's environments. ▪ Liaison with the wider DCC teams to ensure alignment of environment strategy and best practices
Release Manager	▪ Development and elaboration of DCC's Release Strategy for Switching to ensure alignment with ,the Delivery Strategy, Transition Strategy, Systems Integration Strategy, and Post-Implementation Strategy

Capability	Focus areas
Service Owner	▪ Support DCC mobilisation and planning for DBT phase ▪ Review Transition Strategy and plans, operational requirements, and alignment to DCC's operational organisation
Commercial	
Business Architect	▪ Develop and maintain DCC Switching Business Case for activities during the Transitional Phase ▪ Reporting against DCC Switching Business Case ▪ Contribute to development of price control and charging arrangements for the DBT and Live Operations phases
Price Control Lead	▪ Develop and maintain DCC Switching Business Case for activities during the Transitional Phase ▪ Contribute to development of price control and charging arrangements for the DBT and Live Operations phases
Price Control Consultant	▪ Develop and maintain DCC Switching Business Case for activities during the Transitional Phase ▪ Contribute to development of price control and charging arrangements for the DBT and Live Operations phases
Procurement	
Procurement Lead	▪ Develop Procurement Framework, Procurement Plan and Sourcing Strategies ▪ Lead market testing of design and requirements ▪ Lead procurement of CRS
Procurement Consultant	▪ Support market testing of design and requirements ▪ Support procurement of CRS
Regulation	
Regulation Consultant	▪ Contribute to development of regulatory arrangements ▪ Contribute to development of code modifications
Technical Drafter	▪ Draft the technical specification documentation

Table 9 - Capabilities and key focus areas

8.4.1 DCC Switching Programme team structure

160. Based on the capabilities required to carry out each activity and the level of effort required for each activity, we have generated a resource profile that shows the FTE requirement per capability, which generates the number of roles that DCC will recruit.

161. The DCC programme team structure in the period up to the completion of the DLS phase (DB4) is illustrated in Figure 9. During this period DCC will primarily be contributing to the design of the end-to-end switching arrangements in an advisory capacity. The DCC programme team structure in the period from DB4 to the end of the Transitional Phase is illustrated in Figure 10. During this period DCC will be producing the CRS technical specification and delivery specification, undertaking the procurement of the CRS, supporting regulatory changes and putting in place the commercial arrangements for DCC's role in the DBT and Live Operations phases.

162. In each figure, the structure includes both permanent and temporary (i.e. contractor and consultant) roles and represents the maximum resource requirement for each individual role during that period. Each role is rounded to the nearest FTE. DCC will not necessarily have all of these roles in place at a single point in time.

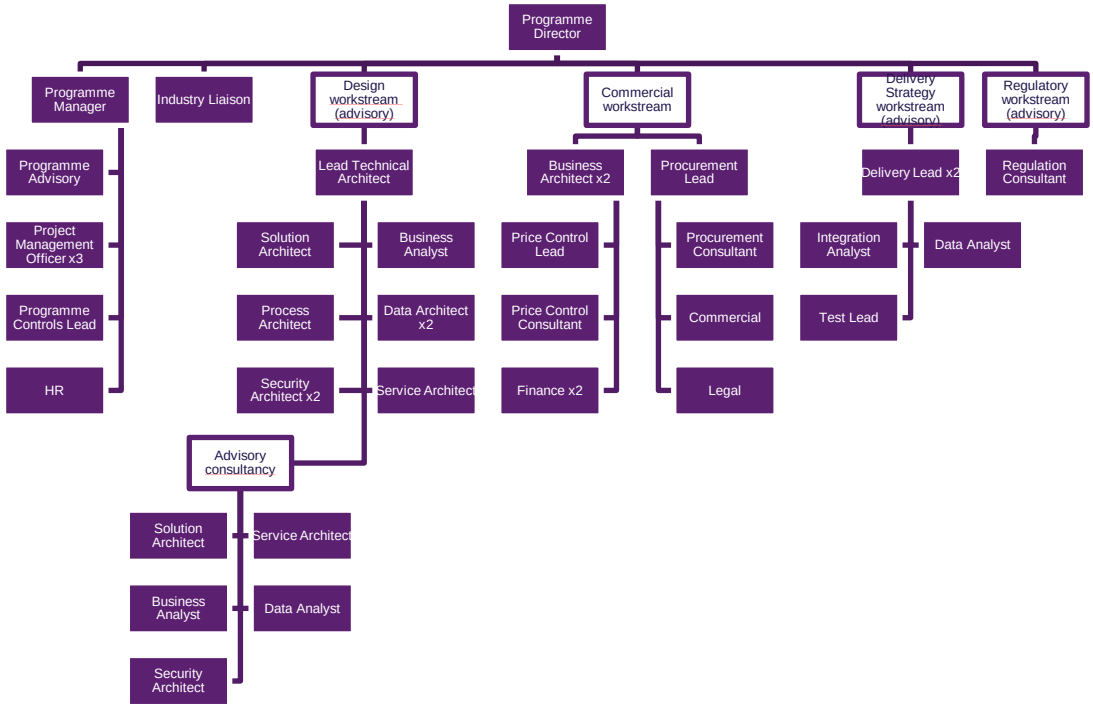

Figure 9 – DCC Switching Programme team structure – maximum planned resource requirement in period up to completion of Detailed Level Specification phase (DB4)

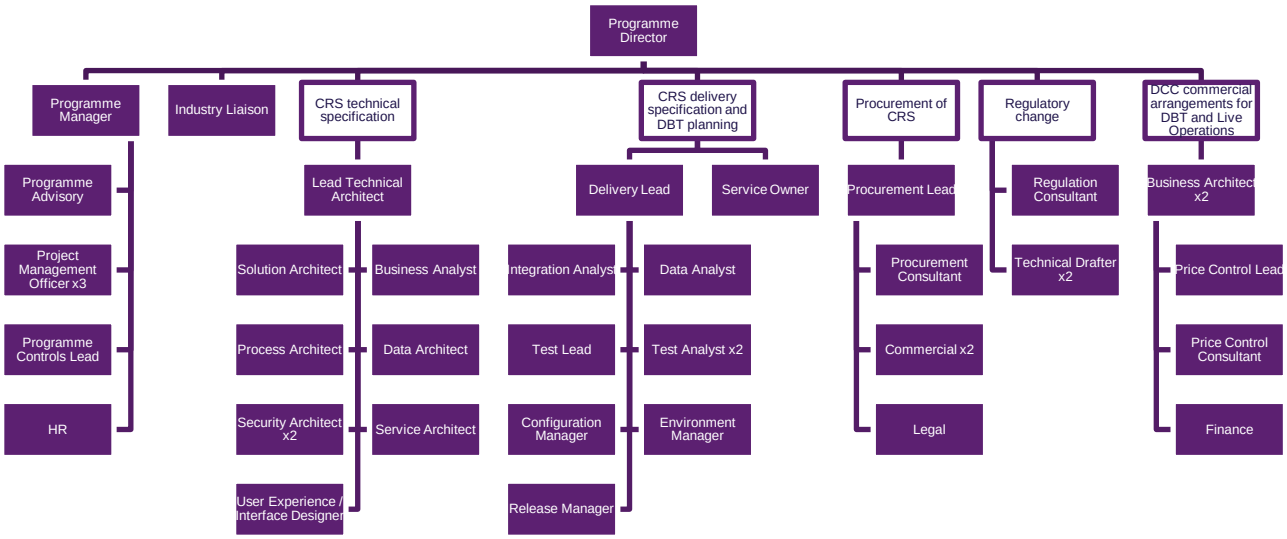

Figure 10 - DCC Switching Programme team structure – maximum planned resource requirement in period between DB4 and end of Transitional Phase

8.5 Sourcing approach

8.5.1 Options assessment

163. DCC has considered four options to resourcing its delivery activities during the Transitional Phase:

- Option 1 – Use existing resource
- Option 2 – Recruit Permanent Employees
- Option 3 – Use contractors/consultants
- Option 4 – Mixed model: combination of permanent employees, contractors and professional services

164. The key criteria DCC has taken into account when assessing the options are:

- ensuring costs are economic and efficient, in relation to the duration for which capability is required
- avoiding impact on implementation and operation of the smart meter communication service

- ability to retain knowledge and ensure continuity of resource where this is beneficial
- access to relevant skills
- flexibility to adapt to changes in requirements.

Option 1 – Use existing resource

165. The first option is to use existing resource from within DCC to deliver all roles.

Advantages

166. This would minimise the additional cost of recruitment and on-boarding of new staff to deliver activities as part of the DCC Switching Programme. It would ensure that knowledge and experience gained through DCC's initial years of operation are transferred into the DCC Switching Programme.

Disadvantages

167. The vast majority of existing DCC resources are focused on delivery of the core SMETS2 Programme. Using existing DCC resources, particularly during the first half of the Transitional Phase, will impact delivery of the smart meter implementation programme.

Conclusion

168. DCC considers that this option is not appropriate due to the potential impact on the delivery of the smart meter implementation programme. DCC will establish a separate team to deliver its activities as part of the Switching Programme but may use resource from existing central support functions (e.g. finance, commercial) where it is certain that there will be no impact on the delivery of the smart meter communication service.

Option 2 – Recruit Permanent Employees

169. The second option is to recruit permanent staff to deliver all roles.

Advantages

170. This would potentially increase continuity and retention of knowledge throughout the Transitional Phase and potentially into implementation of the procured CRS solution. It would be lower cost than using contractors to fill all roles.

Disadvantages

171. Some roles are associated with short-term activities. In these instances, the use of permanent staff would be an inefficient use of resource if there is not a sustained resource requirement.

172. Some specialist skills are more readily accessed through contractor or consultancy resource so DCC may be unable to recruit permanent resources in the timescales required. DCC's experience in recruiting roles to SMIP has demonstrated that for particular specialist or technical roles, it is not possible to recruit on a permanent basis over any timescale.

173. In the event that requirements change at short notice, the lead time associated with recruiting permanent employees is likely to cause delays. DCC would also incur permanent recruitment costs and liability for exit costs, e.g. redundancy, compared to filling the roles using contractors.

Cost

174. Recruiting permanent staff to deliver the DCC activities is forecast to cost £26,419k.

Conclusion

175. Due to the programmatic nature of the deliverables, recruitment of permanent employees to fill all roles is unlikely to be an efficient and economic approach to meeting the requirements. DCC's experience to date also shows that it is very challenging and time consuming to recruit sufficient high calibre individuals to fill all permanent vacancies. However, recruiting permanent employees to fill some individual roles is a highly desirable and viable approach where there is a consistent resource requirement and benefits associated with continuity and knowledge retention.

Option 3 – Use contractors/consultants

176. The third option is to use externally sourced consultants or contractors to deliver all roles. This could include:

- Using contractors to deliver all roles
- Using a combination of contractors and consultants
- Using one or more consultancies to deliver all roles.

177. If DCC chose to use consultancy resource, this could be procured on the basis of:

- Individual work packages
- Multiple work packages
- All work packages.

Advantages

178. Using either consultancy or contractor resource would enable DCC to access the resources and specialist skills required, without incurring the longer term cost liability of a permanent recruitment. This approach would also allow DCC the flexibility to adapt to potential changes to requirements, subject to a suitable change control process for consultancy contracts.

179. Letting multiple work packages to a consultancy provides a single point of accountability for multiple projects, which is more straightforward to manage than many individual contractors or many different consultancies.

180. Using consultancy services also allows for contractual enforcement to support timely delivery of outputs to defined quality criteria. There is also a natural incentive for consultancies to deliver to a high quality in order to win further work in future,

Disadvantages

181. The daily cost of consultant and contractor resource will be higher than equivalent permanent resource. Using contractors or consultants to fill all roles runs the risk of knowledge being lost upon exit, particularly in the transition from the Transitional Phase to commencing implementation.

182. The cost of consultancy resource will be higher than the cost of contractor resource. In addition, running a tender process for consultancy services, particularly for multiple work packages, is likely to be more time consuming than sourcing contractor resource.

183. It may not be possible to source appropriately skilled resource for all work packages or multiple work packages from a single consultancy.

184. The interests of consultancies are likely to be different to those of the Switching Programme as they will naturally seek to expand their scope of work. This can be mitigated through close monitoring and scope management.

Cost

185. Recruiting contractor and consultancy staff to deliver the DCC activities is forecast to cost between £25,891k and £29,262k, depending on the blend of contractor and consultancy staff used.

Conclusion

186. Using contractors and/or consultants to fill all roles is unlikely to be an economic and efficient approach to meeting the requirements, due to the increased costs and risks relating to lack of continuity and knowledge retention. However, the use of contractors or contractors to fill some roles is a viable approach where the duration of the requirement is not sufficient to justify a permanent resource, where there is a requirement for specialist skills, or where the requirement is urgent.

Option 4 – Mixed model

187. The fourth option is to adopt a mixed model, filling roles with a combination of permanent staff, contractors and consultancy services.

Advantages

188. Recruiting permanent employees for roles where there is a consistent resource requirement and where suitable candidates are identified provides continuity through the Transitional Phase and as the Switching Programme moves into implementation.

189. Using contractors for roles would allow DCC to fill medium term resource requirements, access specialist skills and allow the flexibility to adapt to any changes in requirements.

190. Using consultancy services for short term or intermittent requirements will allow DCC to access specialist skills and allow the flexibility to adapt to any changes in requirements.

Disadvantages

191. None

Cost

192. By deploying a mixed staffing model, the forecast staff costs are £15,349k.

Conclusion

193. Following the option appraisal, option 4 represents the best balance of cost, knowledge retention and flexibility.

8.5.2 Selected approach: mixed model

194. DCC will use a dedicated, discrete programme team to support the Switching Programme to ensure that there is no impact on the delivery of the smart metering communication service. However, some activities will require input from central DCC functions, such as finance and communications. Where this input cannot be accommodated by existing resources, we will recruit additional dedicated resources to ensure there is no detrimental impact on the smart metering communication service. This approach to reflecting the costs of central DCC functions is set out in Figure 11 (points 1 and 2) and fully explained in Section 9.4. DCC will be required to justify any additional central resource through its annual price control reporting.

Identifying permanent and temporary resource

195. The activities and associated resource effort set out in the DCC Switching programme plan generate a monthly FTE resource profile for each role in MS Excel format, which is imported to the cost model.

196. In order to identify which roles should be filled by permanent staff and which by temporary staff (contractors or consultants), the cost model applies a set of business conditions. These conditions drive calculations that automatically determine which roles would be more economically and efficiently fulfilled by permanent resource or by temporary resource, and whether that temporary resource is through direct contractors or a consultancy service. These conditions are outlined in Figure 11 (points 1, 3 and 4).

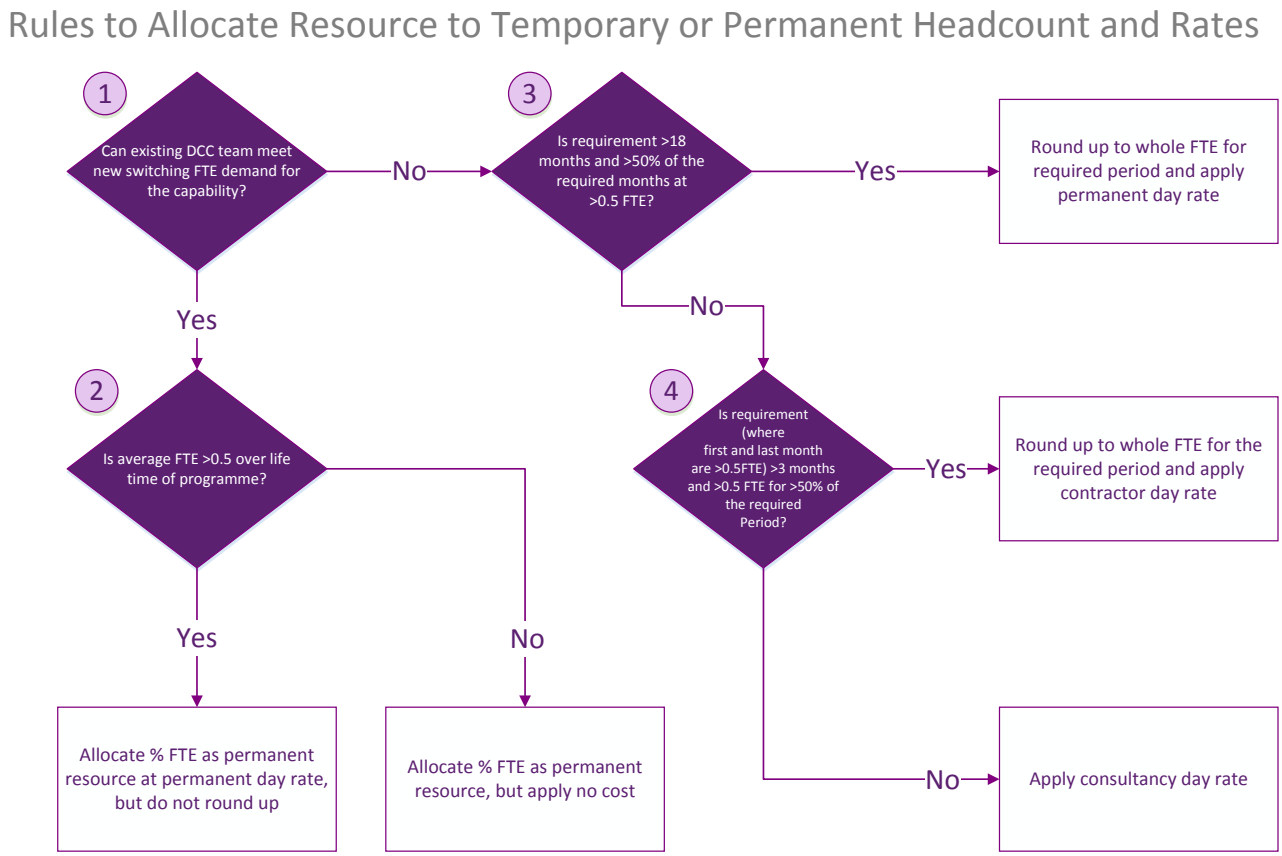

Figure 11 - Rules to allocate resource to temporary or permanent headcount

197. The business conditions are primarily based on whether there is a consistent resource requirement. Within the model this takes the form of a calculation that checks whether the FTE profile for each resource type meets both of the two following conditions:

- the resource type is required for at least 18 months
- the resource type is required for at least 50% of the months within the required period at a level equal to or greater than 0.5 FTE.

198. If both of these conditions are true, the resource requirement will be rounded to the nearest whole number and treated as permanent resource. Any remaining resource requirement will be treated as temporary resource.

199. To determine whether the temporary resource requirement should be fulfilled through direct contractors or consultancy services, the model checks whether the role is required for at least three months, starting at a level equal to or greater than 0.5 FTE for at least 50% of the required period. This required period is defined as the range between the first and last month where the resource type is required at >0.5FTE).

200. This approach provides transparency and consistency across the calculation of the programme budget. Automating the calculation of FTE requirements reduces the need for DCC to manually review the resource budget every time an element of the plan changes.

Given the uncertainty surrounding the programme plan, DCC considers this to be an economic and efficient approach to modelling the anticipated resource profile during the Transitional Phase.

201. The monthly FTE profile for DCC's involvement in switching generated using these business conditions is outlined in Figure 12.

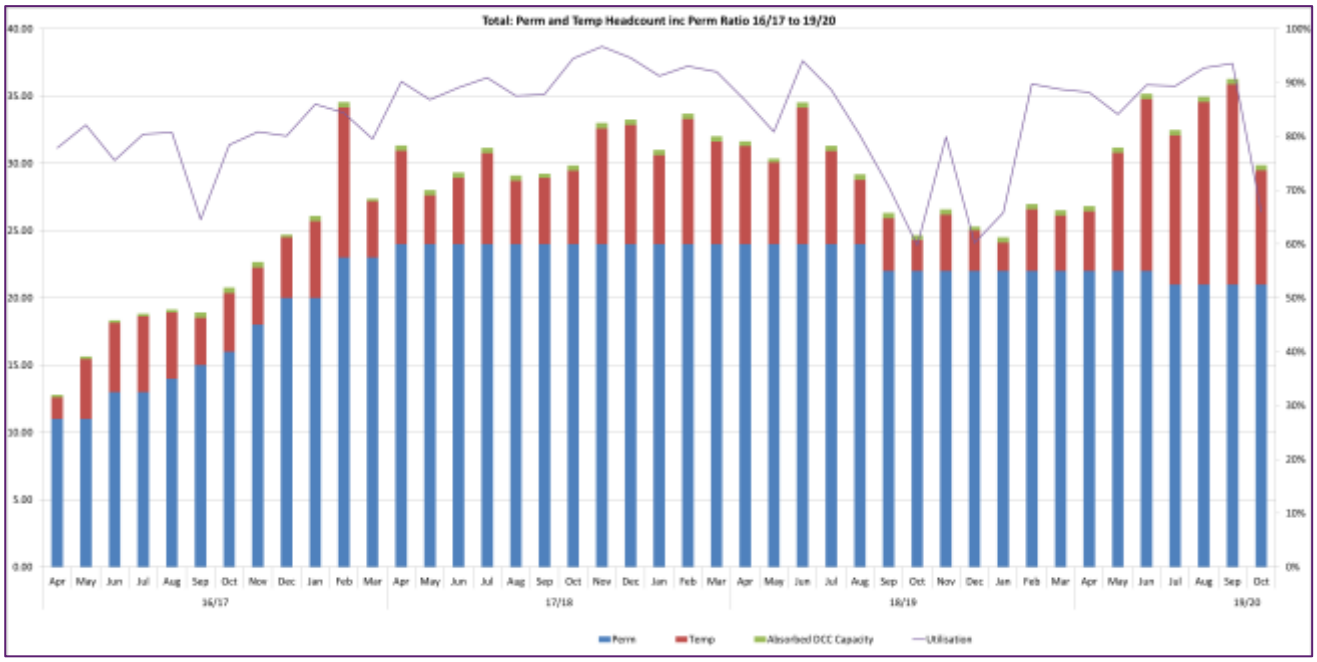

Figure 12 - FTE profile by source

202. An overview of the split of staff numbers and costs across the different sources of resource is provided in Figure 13.

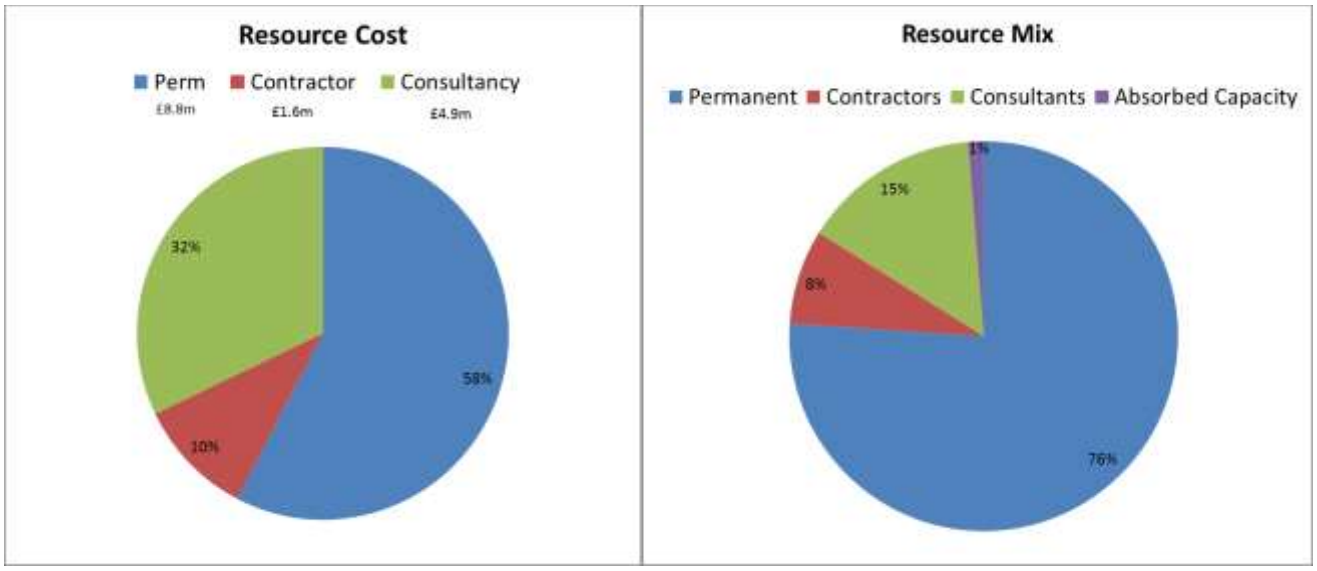

Figure 13 - Staff sourcing breakdown

203. A detailed breakdown of the resource types required by DCC by source, shown as FTE months, is provided in Table 10, Table 11 and Table 12. Please note that the 'Commercial' category includes resource to develop DCC's business case and design the Price Control and Charging arrangements for Switching.

Perm staff (FTE months)	16/17	17/18	18/19	19/20	Total
Total	**197**	**288**	**274**	**150**	**909**
Support services	29	36	36	21	122
Design	55	96	82	42	275
Delivery	16	36	36	21	109
Programme	42	48	48	28	166
Procurement	12	24	24	10	70
Regulation	7	12	12	7	38
Commercial	36	36	36	21	129

Table 10 - Permanent resource breakdown

Contractor staff (FTE months)	16/17	17/18	18/19	19/20	Total
Total	**4**	**22**	**26**	**42**	**94**
Support services	0	0	6	7	13
Design	4	14	8	0	26
Delivery	0	0	0	35	35
Programme	0	0	0	0	0
Procurement	0	0	0	0	0
Regulation	0	8	12	0	20
Commercial	0	0	0	0	0

Table 11 - Contractor resource breakdown

Consultancy staff (FTE months)	16/17	17/18	18/19	19/20	Total
Total	**55**	**56**	**33**	**32**	**177**
Support services	6	9	9	11	36
Design	23	25	7	4	59
Delivery	1	2	1	4	8
Programme	16	9	9	9	44
Procurement	0	3	0	0	4
Regulation	0	1	3	0	4
Commercial	10	6	4	2	23

Table 12 - Consultancy resource breakdown

8.5.3 Drivers for potential variance

204. When DCC recruits for individual roles, there may be instances where we vary from the forecast profile of permanent and temporary resource and choose to recruit temporary resource rather than permanent resource, or vice versa. This may be due to the following considerations:

- specialist skills – where activities require specialist skills or knowledge, we will consider whether these skills are more likely to be accessible via permanent staff or via specialist contractors or consultancies
- challenges in recruiting permanent roles – where DCC has been unable to attract suitable candidates for a permanent role, DCC may recruit contractor or consultancy resource in order to meet the required timescales. This is a genuine risk based on DCC's experience of recruiting resource to support SMIP
- urgency – where new requirements emerge at short notice, or where directed by Ofgem in order to meet compressed timescales, DCC may recruit contractor or consultancy resource in order to meet the required timescales, due to the shorter lead time compared to recruiting permanent resource
- SMIP resource availability – suitable resource may become available to DCC as SMIP reaches key milestones, which may provide a pool of energy sector knowledge and experience that it would be economic and efficient to redeploy onto the Switching programme
- judgement relating to tactical resourcing approach – DCC may vary from the resource forecast generated by the cost model in order to better suit the circumstances at that particular point in time. For example, where the resource forecast suggests that a small proportion of an additional FTE is required for a short period of time, DCC may be able to use existing resource to meet the additional demand, for example through overtime or using spare capacity.

205. DCC has an internal change control process through which all new recruitment activity has to be justified to a Change Control Board prior to making offers to staff. DCC decisions relating to the resourcing approach for individual roles will be justified through DCC's annual ex post price control reporting.

9 Costs

206. This section explains our approach to calculating costs and provides an overview of the cost model, which is included in full at Appendix D. A diagram of the business view of the cost model is included within the cost model to help navigation between the various worksheets.

207. The DCC cost model has been quality assured internally by cost modelling resource outside of the DCC Switching team and is also under review by Ofgem. This internal assurance will continue through until the DCC Switching Business Case is baselined in April 2017.

9.1 Summary of cost to industry

208. The total estimated cost to industry associated with delivering the baseline scenario is summarised in Table 13. These costs represent DCC's forecast of the likely costs it will incur in the Transitional Phase of the Switching Programme for the purpose of generating a realistic budget and to feed into the overall Ofgem-owned Switching business case.

209. Further to its business case, DCC will provide a full and thorough justification of all of its costs incurred in support of the Switching Programme as part of its annual ex-post price control submission to Ofgem. The business case does not authorise DCC to incur specific costs in advance of its annual price control submission. However, the costs forecasts provide a level of transparency that helps to set industry expectations and provides the opportunity for Ofgem to identify at an early stage where it believes DCC has not fully understood its requirements and is either over or under estimating the likely effort involved.

210. Approximately half of this cost to industry is related to providing resource to support Ofgem programme activity to define the design, delivery, commercial and regulatory arrangements for Switching as a whole. The other half is related to the cost of DCC specifying and procuring the CRS elements to the overall Switching arrangements.

(£k)	RY 16/17	RY 17/18	RY 18/19	RY 19/20	RY 20/21	Total
Total cost to industry	**6,642**	**9,483**	**8,010**	**5,983**	**8**	**30,127**
Total base costs	**4,293**	**5,479**	**4,301**	**3,167**	**0**	**17,240**
Staff costs	*3,867*	*4,579*	*3,936*	*2,967*	*0*	*15,349*
Non-staff costs	*427*	*900*	*365*	*200*	*0*	*1891*
Materiality threshold	**863**	**1882**	**1917**	**1478**	**6**	**6,146**
Contingency	*600*	*988*	*1057*	*844*	*6*	*3,495*
Management reserve	*263*	*894*	*860*	*633*	*0*	*2,651*
Overhead	**490**	**699**	**591**	**441**	**1**	**2,222**
Margin	**996**	**1,422**	**1,202**	**897**	**1**	**4,519**

Table 13 - DCC baseline scenario costs

211. Staff costs are described in Section 9.4, non-staff resource costs are described in Section 9.5 and corporate overhead is described in Section 9.6. Contingency and management reserve is explained in Section 11 and margin is set out Appendix F.

212. All costs detailed in this business case are stated in real terms i.e. they exclude any allowance for inflation.

9.2 Recovering switching costs in the Transitional Phase

213. All of the costs set out in Table 13, relating to the Transitional Phase of the Switching Programme have been, or will be, recovered through the Fixed Charge, as set out in DCC's Charging Methodology[16]. However, DCC's allowed revenue will ultimately only be confirmed following the annual ex-post price control review by Ofgem.

214. The Fixed Charge is calculated by dividing a prudent estimate of DCC's allowed revenue (except costs which relate to: the provision of Communications Hubs; Elective Services; Alternative HAN; or services which attract an Explicit Charge) by all metering systems which are to be (but may not yet be) installed or enrolled to the DCC system. Note that DCC recovers a prudent estimate of costs through its charges. The intent of the prudent estimate is to ensure that DCC remains cash positive and is able to meet its financial commitments during each month. DCC will return any surplus in the prudent estimate to SEC Parties by way of the correction factor as explained below.

215. The Fixed Charge is payable by five charging groups, each of which are weighted according to our estimated demand of each group's usage of the DCC service. Those groups and the corresponding weightings are set out in Table 14 below.

Charging group	Weighting
Import electricity suppliers	49%
Export electricity suppliers	8%
Gas suppliers	37%
Electricity distributors	6%
Gas transporters	0%

Table 14 - Charging group and weighting

216. The Fixed Charge is set out in the Charging Statement which is published in April of each year. The Charging Statement sets all charges, ex ante, for that Regulatory Year. The RY 2016/17 Charging Statement (published on 1 April 2016) included forecast efficient costs associated with the Switching Programme which were forecast to be incurred during RY 2016/17. The efficient costs forecast to be incurred in RY 2017/18 will be included in the Charging Statement which is due to be published on 1 April 2017 and so on.

217. Concurrently we publish Indicative Charging Statements each quarter which set out an up to date view of charges for the following Regulatory Year. This is published to provide early notice to Parties of potential changes to charges. The indicative statements will be used to communicate any forecast changes in allowed revenue due to inflation. We also publish

[16] https://www.smartdcc.co.uk/charges/charging-methodology/

indicative budgets each quarter which provide a longer term, but high-level, forecast of allowed revenue.

218. Where costs in a given Regulatory Year is under or over recovered (that is to say that the charges collected are greater or less than actual allowed revenue in that year), then the difference is returned or collected from Parties through the 'correction factor' adjustment, which is estimated in the subsequent Regulatory Year and applied in the next Regulatory Year after that.. Where there is an over-recovery that is greater than 10% of allowed revenue, and is not sufficiently justified by DCC, then Ofgem has the power to direct a penalty interest to apply to any or all of that over-recovery.

219. Staff costs will be charged to industry based on actual rates paid by DCC, not those from the rate card included within the cost model, which is used for forecasting purposes only.

220. For the avoidance of doubt, contingency and management reserve will be included within the charging statement, as the programme should expect that these costs will be incurred by DCC. The programme requirements are not stable at present beyond the Blueprint phase and this represents prudent programme budgeting. There will be formal controls on the use of contingency and, in particular, management reserve, and the definition of these items and the associated controls surrounding them are detailed in Sections 11 and 12.

9.3 Cost drivers

221. Staff costs are primarily driven by the duration of activities, the amount of resource effort required to deliver the activities and the cost of resource to deliver the activities. The DCC Switching programme plan generates a monthly FTE resource profile for each resource type, based on the duration, effort and capabilities required to deliver each activity. The cost model applies business conditions to generate a profile of permanent and temporary resource by resource type. The generation of this profile is explained in Section 8.5.2.

222. The permanent rate card is applied to the permanent resource profile, the contractor rate card is applied to the contractor resource profile, and a blended consultancy day rate to the consultancy resource profile, in order to generate a base resource cost for the baseline scenario. This includes recruitment costs and on-costs for all permanent roles recruited. The approach to the cost of resource provided by central DCC functions is explained in Section 9.4 below.

223. Non-staff resource costs are summarised in Section 9.4. Some cost items are driven by the number of staff, such as office space, tools and IT equipment. Other non-staff resource costs relate to delivery activities, for example design proving services and other professional services that may be required.

224. The contingency element of the materiality threshold is driven by the probability weighted cost associated with the high scenario and with quantified risks not directly related to the high scenario. The management reserve element of the materiality threshold is driven by the level of uncertainty associated with estimating the costs of activities to be delivered later in the Transitional Phase. This is explained in more detail in Section 11.

225. The rationale for the corporate overhead charge is explained in Section 9.6 below and the rationale for the level of margin is set out in Appendix F.

9.4 Staff costs

226. The annual cost of each resource type is summarised in Table 15. A mapping of resource roles against each resource type is provided in Table 19.

Staff Costs (£k)	RY 16/17	RY 17/18	RY 18/19	RY 19/20	Total
Total staff costs	**3,867**	**4,579**	**3,936**	**2,967**	**15,349**
Support Services *(e.g. Legal, HR, Financial, Commercial, Industry Liaison)*	411	518	651	667	2,246
Design *(e.g. Solution, Process, Data, Security, Service Management)*	1,485	1,859	1,145	547	5,036
Delivery *(e.g. Delivery planning, Testing, DBT mobilisation)*	213	369	331	791	1,704
Programme *(e.g. Programme Director, Programme Manager, PMO)*	874	714	716	516	2,821
Procurement *(e.g. Procurement Lead, Procurement consultant)*	158	320	239	115	832
Regulation *(e.g. Regulation Lead, CRS Technical Drafter)*	68	268	380	57	773
Commercial *(e.g. Price Control, Business Architecture)*	658	530	474	275	1,937

Table 15 - DCC staff costs

227. The cost by permanent, contractor or consultancy resource for each resource type is summarised in Table 16, Table 17 and Table 18.

Permanent Resource Costs (£k)	16/17	17/18	18/19	19/20	Total
Total	**2,159**	**2,702**	**2,568**	**1,417**	**8,846**
Support Services	242	336	336	196	1,109
Design	556	742	696	387	2,381
Delivery	477	538	538	314	1,867
Programme	276	268	268	156	969
Procurement	37	231	143	22	432
Regulation	166	223	223	130	740
Commercial	405	364	364	212	1,346

Table 16 - Permanent resource costs

Contractor Resource Costs (£k)	16/17	17/18	18/19	19/20	Total
Total	**76**	**402**	**466**	**631**	**1,575**
Support Services	-	-	114	133	247
Design	76	261	139	-	476
Delivery	-	-	-	498	498
Programme	-	-	-	-	-
Procurement	-	-	-	-	-
Regulation	-	142	213	-	354
Commercial	-	-	-	-	-

Table 17 - Contractor resource costs

Consultancy resource costs (£k)	16/17	17/18	18/19	19/20	Total
Total	**1,632**	**1,475**	**903**	**919**	**4,928**
Support Services	169	257	276	382	1,084
Design	765	648	179	116	1,708
Delivery	22	60	21	112	215
Programme	424	235	236	237	1,132
Procurement	-	80	9	10	99
Regulation	-	29	70	-	100
Commercial	252	166	110	63	591

Table 18 - Consultancy resource costs

Resource types	Resource roles
Support services	▪ Finance ▪ Legal ▪ Commercial ▪ IT ▪ Industry Liaison ▪ HR
Design	▪ Business Analyst ▪ Data Analyst ▪ Data Architect ▪ Process Architect ▪ Lead Technical Architect ▪ Security Architect ▪ Service Architect ▪ Solution Architect ▪ User Experience Designer
Delivery	▪ Interface Analyst ▪ Delivery Lead ▪ Configuration Manager ▪ Environment Manager ▪ Service Owner ▪ Release Manager ▪ Test Analyst ▪ Test Lead
Programme	▪ Programme Director ▪ Programme Manager ▪ Programme Management Officer ▪ Programme Advisory
Procurement	▪ Procurement Lead ▪ Procurement Consultant
Regulation	▪ Regulation Consultant ▪ Technical Drafter
Commercial	▪ Business Architect ▪ Price Control Lead ▪ Price Control Consultant

Table 19 - Role categorisation

9.4.1 Resource rate card

228. In order to forecast the costs associated with the planned resource profile, DCC has developed a rate card that includes both permanent and contractor rates for each identified role. The purpose of the resource rate card is to enable DCC to establish a realistic programme budget for the Transitional Phase of the Switching programme at an early stage. However, all actual resource costs incurred by DCC will be reported and justified through our annual ex-post price control submission.

Permanent resource

229. For permanent roles, on-costs have been added to base salaries before being converted into a permanent staff day rate for cost modelling purposes. A summary of the items included in on-costs, central DCC costs and the corporate overhead is included in Table 20. For the avoidance of doubt, no item contained within the on-costs for permanent staff is accounted for within the corporate overhead charge (Section 9.6) or central DCC costs (Section 9.4.2).

On-costs	Central DCC costs	Corporate overhead

▪ National Insurance
▪ Pension
▪ Bonus
▪ Travel/car allowance
▪ Expenses
▪ Training
▪ Phone
▪ Health insurance
	▪ Desk space
	▪ Meeting rooms
	▪ Facilities management
	▪ IT helpdesk
	▪ DCC HR and recruitment resource
	▪ DCC commercial resource
	▪ DCC legal resource
	▪ DCC finance resource
	▪ DCC regulation resource
	▪ Pre-existing DCC SMIP design and delivery staff
		▪ Central Capita services which underpin all Capita contracts including DCC. Services provided through the overhead charge include:
		  ▪ payroll
		  ▪ accounts payable/accounts receivable
		  ▪ tax and treasury services
		  ▪ insurance
		  ▪ internal audit
		  ▪ public relations
		  ▪ HR policy and oversight
		  ▪ IT policy and oversight
		  ▪ policy monitoring
		  ▪ corporate travel portal
		▪ Group corporate management costs – Head Office and executive oversight

Table 20 – Summary of items included in on-costs, central DCC costs and corporate overhead

230. These on-costs have been calculated based on the on-costs currently being incurred by DCC for similar roles – the level of on-cost varies slightly depending on the seniority of role. The on-cost multiplier being applied for each role is included within the rate card in the cost model (Appendix D).

231. Permanent recruitment costs are also reflected in the cost model. Agency fees for contractors (at 15%) are also included – in reality this fee will vary by source and role level.

232. DCC has benchmarked these rates based on:

- similar roles in the Hays Paynet database
- the cost of similar roles previously recruited by DCC

- the cost of similar roles previously recruited by the DCC Switching Programme team in previous roles.

233. The base salaries included in DCC's budget for permanent resource capabilities are detailed in Table 21. This is supported by benchmarking data from Hays PayNet, which maps similar job roles based on actual payroll data supplied by organisations. This approach to benchmarking permanent salaries is consistent with DCC's annual price control submission.[17]

234. A salary range is provided against each role to reflect the spread in the resource market. The forecast for salaries is based on pay levels within the 50th and 90th centile values as they are most aligned to the market in which DCC operates in for the Switching Programme. The programme is based in central London to ensure access to DCC management and central resources and to make use of any existing office space; salaries reflect this location. The programme requires experienced professionals, typically with advanced technical skillsets and energy experience. Recruits also need to possess the ability to deliver in a fast-paced, high pressure programme environment on national scale across a complex multi-party stakeholder landscape. Given that these skills and requirements are comparable with those required by high-calibre professional IT transformation services, DCC considers that these roles are likely to be consistent with salaries in the upper range of the salary benchmarks provided.

235. For some roles, no comparable role was found in the PayNet database, so DCC has made a judgement on the appropriate level for the role to provide a salary range for benchmarking, based on the cost of similar roles previously recruited by DCC and the cost of similar roles previously recruited by the DCC staff in previous roles. The roles where no comparable role was found are indicated by 'n/a' in the job role column in Table 21.

236. Table 21 also details the permanent salaries converted to a fully loaded day rate and the day rate where the same resource type is sourced through a temporary contract.

Temporary resource

237. Contractor rates in the cost model allow for contractor margin (i.e. the rates allow for a 15% agency fee). However, no DCC margin is included in Table 21 for either permanent or contractor resource – this is only applied to the overall cost base.

238. Within the lifetime of the programme, where a Capita business can supply temporary resource to fulfil a DCC resourcing requirement, it must demonstrate value for money through a competitive sourcing process. Where DCC chooses to use resource from a Capita businesses internal rates are used (i.e. rates that do not include margin) to ensure that Capita does not secure additional margin over and above that agreed for DCC.

239. Unlike permanent resource, the contractor rates are not benchmarked against a formal database. DCC takes advice on likely rates from recruitment agencies when vacancies are identified and also benchmarks against historical contractor rates at DCC. Candidates selected for interview are typically based on a representative spread around the anticipated rate so that a value for money assessment of candidates can be made.

[17] Following a review of the market for the provision of benchmarking services DCC identified two suppliers that met its requirements, who were then invited to provide a demonstration and quotes. Following this process, DCC has concluded that the use of the Hay Group methodology and 'PayNet' tool provides the most useful benchmarking information, in the most cost-effective and practical-to-use tool

240. The day rates of some resource types sits outside of this table. This includes:

- Consultancy resource –a blended day rate is applied, based on the average rate for a Level 4 consultant from DCC's framework contract for consultancy services
- Legal resource – a standard day rate is applied for all legal requirements based on previously incurred costs
- PWC resource – specific day rates have been used to align with the total cost agreed for the procured design services. PWC resource was competitively procured and is managed by DCC on behalf of Ofgem, in order to provide some additional resource into the design of the end-to-end Switching arrangements.

[Table redacted]

Table 21 - Permanent employee salary benchmarking

241. All permanent and temporary DCC roles will be advertised in the open market to ensure an economic and efficient resourcing approach. All consultancy resource will be sourced through DCC's existing consultancy services framework, in line within the DCC procurement strategy. Where Capita wishes to provide contractor or consulting resource to the Switching programme, it will be required to follow this approach.

9.4.2 Central DCC resources

242. Central DCC resources are primarily defined as the support functions required to enable daily operation of DCC activity across all of its programmes and operations. This resource is dedicated to DCC activity. Key central DCC resources include:

- people resources – IT helpdesk, HR, recruitment, commercial, legal, finance, regulation
- non-people resources – desk space, meeting rooms, facilities management.

243. In addition to the support functions, central DCC resources also include any pre-existing SMIP design and delivery staff, whose input will be required intermittently in the programme. There will be some impact on existing deliverables that DCC will need to update based on our involvement in the Switching Programme, such as the Business Handover Plan.

244. As a principle, the Switching Programme will use existing DCC resources where either:

- there is a requirement to validate the alignment of proposed switching arrangements with delivery of the smart meter communication service or any other DCC programme, for example Enrolment and Adoption of SMETS1 meters. This will be captured in the product and activity descriptions and reflected in DCC's resource plan
- it is the most economic and efficient use of resource whilst ensuring that there is no impact on SMIP delivery.

245. DCC proposes that where the additional demands of the Switching Programme cannot be serviced through existing central DCC resource, additional capacity will be sourced as required and will be allocated to the DCC Switching Programme. Where additional resource is required due to new demands on DCC SMIP at the same time as the Switching Programme, the cost apportionment will be set accordingly.

246. Where any of the new demands of the Switching Programme can be absorbed by existing central DCC resource, no costs will be allocated to the DCC Switching Programme unless over 50% of a specific resource is required. For example, where a resource is forecast to be used for 60% of the time on Switching, 60% of the resource cost will be allocated to Switching and 40% to SMIP. This will ensure that the cost of these resources is not double-counted.

247. This may mean that the true cost of DCC's involvement in the Switching Programme is slightly underestimated or overestimated. However, DCC considers that this is proportionate approach given the cost required to establish and monitor an internal cross-charging arrangement that does not currently exist across DCC. All material contributions to the Switching programme (i.e. those of more than half day blocks) will be time sheeted, whether the costs meet the cross charging conditions or not. This will allow DCC to monitor the efficiency of its resource and whether the demands on resource is increasing or reducing relative to the baseline plan.

248. Where a proportion of central DCC resource exceeds this threshold and has the appropriate share of cost allocated to the DCC Switching Programme, it will be fixed for the forecast period for which the resource is required and not adjusted each month. This level can be reviewed periodically for each role depending on the level of variance in actual time spent compared to the original forecast.

249. 100% of each resource's time will be included in the final annual DCC ex post price control submission regardless of which programme cost centre they are reported under. Resource costs split in this way will be made explicit.

250. The forecast use of existing DCC central staff is outlined in Table 22.

Absorbed Capacity (FTE Months)	16/17	17/18	18/19	19/20	Total
Total	**3**	**5**	**5**	**3**	**15**
Support Services	-	-	-	-	-
Design	-	-	-	-	-
Delivery	-	-	-	-	-
Programme	-	-	-	-	-
Procurement	-	-	-	-	-
Regulation	1	2	2	1	7
Commercial	2	2	2	1	8

Table 22 - Absorbed DCC capacity

9.5 Non-staff resource costs

251. The majority of the DCC costs are staff-related; however, some non-staff costs are included within the programme budget as detailed in Table 23.

252. The categories included within non-staff costs are:

- Software and laptops
- Office space
- Communications and training
- Assurance and Design
- Design Proving

Non-staff resource costs	16/17	17/18	18/19	19/20	Total
Total	**426,744**	**900,309**	**364,711**	**199,584**	**1,891,348**

Table 23 - Non-staff resource costs

253. A budget for additional office space has been included where the capacity of current DCC premises is exceeded[18] (currently any resource requirement above 8 FTE).

[18] DCC continues to regularly assess and analyse its current and longer term requirements for office space. The methodology used seeks to balance: over-investment in capacity, resulting in low utilisation and thus an inefficient ongoing and future accommodation cost; and under-investment in capacity, which would result in accommodation that cannot deliver requirements such as collaboration between DCC and its Service Users and Partners. The review and report provided by Capita's Real Estate business supports the DCC's space

254. Costs for the professional services effort to establish a solution for time sheeting, forecasting and reporting to underpin the ex post plus financial reporting process has been provisioned. No software costs to support this solution are included in the cost forecast as DCC is planning to use MS Project, SAP and BPC, which are already provisioned with existing DCC charges. In addition, a budget for other software tools is included to ensure that the programme management and design functions can operate to required levels (tools including Confluence and Abacus are being considered).

255. At the request of Ofgem, provision as also been made for six-monthly satisfaction surveys to support the stakeholder satisfaction incentive mechanism and independent external assurance of:

- the DCC delivery plan at DB4
- DCC achievement of incentivised milestones (three milestones in scope)

256. Professional audit and compliance services currently sourced by DCC are not included within the budget for Switching as it is assumed that the switching programme can be delivered within the existing DCC budget for this area.

257. DCC considers proving of the design as an essential part of the design phase and has provisioned costs for sourcing a proving service.

258. DCC currently intends to commission three design proving projects. The first two projects are intended to prove the design of key elements of the design that are high risk and/or critical to the successful operation of switching. This may include:

- consultancy resource to map the existing process maps into a modelling tool and synchronisation of a draft set of CRS, UK Link and MPRS data elements.
- a procured exercise to create a sample native XML database for the CRS switching service and Market Intelligence Service. Research objectives could include:
  - Demonstrating the persistence of registration data
  - Researching the implications for data integrity and stewardship
  - Investigating its use for holding asset data that is not centrally stewarded
  - Investigating how reports of asset data can be generated and their usefulness.

259. The third project is currently intended to create an enduring end-to-end design proving tool that can be maintained and kept aligned to the design as it develops. Research objectives could include:

- Constructing a draft XML schema for CRS for publication to industry

management strategy and states that DCC are unable to do anything further to improve its use of the space within the constraints of the headcount and collaborative model.

- Researching the submission and processing of multi-part registrations
- Using DTS flows to feed data to an MIS
- Creating a draft web services to simulate instant objections
- Creating a draft registration web service
- Researching data handling and stewardship of premises address data
- Researching existing switching process behaviours by use of existing industry data warehouses
- Creating a functional simulation of registration using existing industry data warehouses and draft web services

260. DCC has included an allowance for its existing Service Providers to carry out an impact assessment on the design on the smart meter communication service, for example, relating to the impact on the Transitional and Enduring Change of Supplier architecture.

9.6 Corporate overhead

261. A corporate overhead charge is included within DCC's Switching costs and is defined as DCC's contribution to:

- the central Capita services which underpin all Capita contracts including DCC. Services provided through the overhead charge include:
  - payroll
  - accounts payable/accounts receivable
  - tax and treasury services
  - insurance
  - internal audit
  - public relations
  - HR policy and oversight
  - IT policy and oversight
  - policy monitoring
  - corporate travel portal
- Group corporate management costs – Head Office and executive oversight.

262. DCC and its parent company do not have a formal cost allocation policy. The overhead charge, defined as 9.5% of cost, was itemised in the successful Capita bid to operate DCC, and as such, has been validated through a competitive tender process.

263. DCC acknowledges that Ofgem would welcome greater insight into the overhead charge, and the benefits that accrue to DCC through being able to access Capita Group services. As a result, DCC has provided a more detailed justification for its corporate overhead charge through its recent annual 2015/16 ex post price control submission. The overhead charge for the Switching Programme is included within this justification.

264. The corporate overhead charge enables Capita to function as a business and all of its businesses are required to make a contribution to its underpinning corporate services and management oversight.

265. Using an overhead charge to recover these costs from each business unit is a common business practice for this type of operation. The nature of an overhead charge is that:

- it simplifies the recovery of costs for providing common services, e.g. payroll, where demand is likely to be variable, and hence cost would be incurred in monitoring and charging for usage.
- it allows central costs to be covered, which due to their intangible nature are difficult to value objectively e.g. executive management oversight.

266. The payment of the overhead charge is included within the intercompany trading agreement between Smart DCC Limited and Capita Business Services Limited (a Capita Group Company that is also DCC's parent company).

267. Taking account of both the benefits obtained from our parent company and the need to make a contribution to central costs, DCC considers that the overhead charge represents value for money to the consumer. This is further supported when the alternative costs of DCC establishing and operating these functions as a standalone entity are taken into consideration.

268. Within the annual ex post price control reporting, the corporate overhead charge is allocated against a 'shared services' category, even though it also includes group corporate management costs. This is done for reasons of simplicity and will continue to be the case for reporting the Switching Programme's contribution to the corporate overhead. The Switching Programme's contribution to corporate overhead can be reported separately from the wider DCC contribution, if required.

269. For the avoidance of doubt, where some functions are listed under both DCC central costs and corporate overhead e.g. IT and HR services, this is complementary resource not a duplication of resource. The DCC services are dedicated to DCC delivery, whereas the corporate overhead resources provide strategic oversight and support.

9.7 Costs of scope scenarios

270. The costs associated with the high scenario, baseline scenario and low scenario are summarised in Table 24. Note that this comparison is based on staff and non-staff resource costs only and does not include the corporate overhead charge, contingency, management reserve or margin. These costs are indicative only.

Scenario base costs - staff and non-staff costs) (£k)	RY 16/17	RY 17/18	RY 18/19	RY 19/20	RY 20/21	Total	Variance from base scenario
Baseline scenario base cost	**4,293**	**5,479**	**4,301**	**3,167**	**0**	**17,240**	**0%**
Staff Costs	**3,867**	**4,579**	**3,936**	**2,967**	**0**	**15,349**	**0%**
Support Services	411	518	651	667	0	2,246	0%
Design	1,485	1,859	1,145	547	0	5,036	0%
Delivery	213	369	331	791	0	1,704	0%
Programme	874	714	716	516	0	2,821	0%
Procurement	158	320	239	115	0	832	0%
Regulation	68	268	380	57	0	773	0%
Commercial	658	530	474	275	0	1,937	0%
Non Staff Costs	**427**	**900**	**365**	**200**	**0**	**1,891**	**0%**
Low scenario base cost	**4,148**	**4,574**	**2,757**	**2,392**	**0**	**13,871**	**-20%**
Staff Costs	**3,721**	**3,674**	**2,392**	**2,193**	**0**	**11,980**	**-22%**
Support Services	411	500	564	369	0	1,844	-18%
Design	1,362	1,267	98	286	0	3,014	-40%
Delivery	190	167	257	724	0	1,339	-21%
Programme	874	714	716	516	0	2,821	0%
Procurement	158	268	107	-12	0	520	-37%
Regulation	68	227	176	34	0	505	-35%
Commercial	658	530	474	275	0	1,937	0%
Non Staff Costs	**427**	**900**	**365**	**200**	**0**	**1,891**	**0%**
High scenario base cost	**6,028**	**9,017**	**8,249**	**5,540**	**0**	**28,834**	**67%**
Staff Costs	**5,601**	**8,117**	**7,884**	**5,341**	**0**	**26,943**	**76%**
Support Services	587	761	1,147	1,407	0	3,902	74%
Design	2,193	3,874	3,049	1,109	0	10,224	103%
Delivery	306	646	585	1,226	0	2,763	62%
Programme	1,250	1,022	1,023	738	0	4,034	43%
Procurement	228	607	568	357	0	1,759	112%
Regulation	97	449	835	111	0	1,492	93%
Commercial	940	759	678	393	0	2,770	43%
Non Staff Costs	**427**	**900**	**365**	**200**	**0**	**1,891**	**0%**

Table 24 - Scope scenario cost comparison

10 RAIDO

271. The RAIDO log sets out the risks, assumptions, issues, dependencies and opportunities that underpin the DCC Switching Business Case for its activities during the Transitional Phase. The RAIDO log fulfils several purposes:

- it identifies the key planning assumptions and dependencies that underpin DCC's delivery approach, DCC Switching programme plan and forecast costs and the known risks and opportunities associated with delivery against the DCC Switching Business Case. Note that we are yet to add all external dependencies pending a series of joint planning exercises with Ofgem. This is a key priority following the submission of the DCC Switching Business Case.

- it identifies the costs associated with the high and low scenarios. The cost of the requirements associated with the high scenario are captured in the Risks sheet and the cost of the requirements associated with the low scenario are captured in the Opportunities sheet. The majority of costs are calculated based on the estimated impact on the tasks directly related to the scenario. Where this is not possible, the cost impact is based on a proportion of either the average monthly resource run rate for all DCC resources deployed on the programme or the average monthly resource run rate for a single workstream. These calculations are included in the Risks lookup and Opportunities lookup sheets of the cost model

- it identifies the cost of the contingency allowance that forms a key element of the materiality threshold, which is explained in Section 11. This is based on two components:

  - the total estimated cost impact of each of the variations in scope associated with the high scenario materialising, weighted according to the probability that each variation will materialise

  - the total estimated cost impact associated with additional risks not directly related to the scope scenarios, weighted according to the probability that each risk will arise. These risks are labelled as 'non-scenario risks' in the Risks sheet.

272. Probability ratings are based on DCC's current judgement and have been reviewed by Ofgem. The RAIDO log will be maintained as a live programme document and ratings will be updated as required.

273. Opportunities recorded in the RAIDO do not affect DCC's baseline cost forecast i.e. they do not offset the risk allowance that make up the contingency sum. Opportunities solely provide transparency to users on potential cost savings. DCC considers this appropriate as we are an early stage of the programme, where uncertainty is greatest, and based on our experience of defining and managing contingency on major programmes.

274. The current RAIDO included in Appendix E determines the materiality threshold based on our current assessment of risks. The RAIDO will be maintained as a live programme management tool. When updating the DCC Switching Business Case under the process set out in Section 12.2 we will reflect the status of the RAIDO log at that time in considering whether any change to the materiality threshold is required.

275. DCC has summarised the top risks to the DCC Switching Programme in the extract from the RAIDO below (Table 25).

Risk ID	Category	Risk	Description	Potential Impact	Status	Pre mitigation scoring	Cost impact	Cost impact x probability
R006	Non-scenario risk	Ofgem review approach does not result in timely, quality outputs	There is a risk that the multiple stages of review prior to approval result in delays to product approval or additional rework Products are required to be progressed through multiple governance bodies in order to be approved. Also, there is a risk that because the content generated by the design teams does not go through full review until the final step in the process, they will have different views on areas where the Design Team have already reached consensus, leading to rework	Extended timescales for DCC activities and additional effort required to update and complete products	Open	3 - Possible (20% to <50%)	£1,723,992	£603,397
R016	Non-scenario risk	Gaps in solution design	There is a risk that the creation of the technical specification raises issues or gaps in the solution, requiring further design work. This risk could be due to: - business processes that do not exhaustively define what the solution is required to deliver - the method used to capture business processes and define required data is open to ambiguity of interpretation - the lack of overarching architecture capability ensuring coherence of data, process, application, organisation and technology leads to a risk of gaps or inconsistencies in the solution	Incomplete requirements leading to increased DCC time and effort, particularly related to detailed design work. Potential delays to procurement activity resulting in increased DCC time and effort, potentially leading to increased costs	Open	4 - Likely (50% to <70%)	£830,008	£498,005
R030	Non-scenario risk	Contract closure	For reasons outside of DCC's control, the commercial negotiations with CRS provider/s may take longer than planned to ensure an appropriate outcome is achieved	Increased DCC effort	Open	3 - Possible (20% to <50%)	£1,206,794	£422,378
R008	Non-scenario risk	Planning for Procurement when there is significant uncertainty	As the Procurement Plan will be produced without certainty of the exact requirements, there is a risk that DCC underestimate the effort and time that is required to procure the CRS.	Procuring the CRS may take a significantly different amount of time, resource and cost than included in the plan	Open	3 - Possible (20% to <50%)	£563,019	£197,057
R029	Non-scenario risk	Increased use of temporary resource	The perm resource targets cannot be met resulting in increased use of temporary resource.	Increased staff costs	Open	3 - Possible (20% to <50%)	£2,856,315	£999,710
Balancing line for the additional risks							£ 4,414,413	£ 774,812
Total							**£ 11,594,542**	**£ 3,495,359**

Table 25 - Key risks

11 Materiality thresholds

11.1 Definitions

Original baseline – DCC's core costed solution set out in the version of the DCC Business Case that is updated following consultation (v3.0) (published March 2017).

Revised baseline – DCC's updated core costed solution set out in a subsequent version of the DCC Business Case (version controlled, i.e. v4.0, v5.0 against the original baseline).

11.2 Overview

276. This section sets out the purpose, form and level of the materiality thresholds relating to DCC costs and the conditions for the publication of a revised version of the DCC Switching Business Case.

277. DCC is responsible for ensuring that its costs in relation to the Transitional Phase of the Switching Programme are economic and efficient. This applies to the costs associated with the baseline scenario and any additional costs, regardless of whether or not these exceed the materiality threshold defined in this section. DCC is required to justify its expenditure on the Switching Programme through its annual ex post price control reporting.

278. The additional controls set out in this section support the ongoing monitoring of DCC actual and forecast costs as part of the ex post plus price control arrangements for DCC's activities during the Transitional Phase. The controls provide transparency to stakeholders on changes to DCC costs relating to the Switching Programme, while also providing an appropriate cost tolerance within which DCC can manage risk and scope change. The arrangements for monitoring and reporting are set out in Section 12.

279. The materiality threshold sets the tolerance level for variance from the baseline DCC costs. If this materiality threshold is exceeded, DCC will be required to update and publish a revised DCC Switching Business Case. In the regular reporting set out in Section 12, DCC will then report actual and forecast costs against the revised baseline (whilst also not losing reference to the original baseline).

280. It is reasonable to expect that changes will arise as part of the Switching Programme. The materiality threshold is intended to reflect a realistic cost allowance both for known and quantified risks and for unforeseen change. DCC considers that it is prudent to expect that these costs will be incurred.

11.3 Principles

281. In determining the materiality threshold for updating and republishing the DCC Switching Business Case, DCC has considered the following factors:

- Proportionality – DCC considers that the materiality threshold should be proportionate to the size of the cost base to which it is applied, in order to ensure that the cost incurred by all parties in administering any change is not higher than the cost of change itself

- Uncertainty – given the early stage of the Switching Programme, there are a number of uncertainties relating to DCC's scope and activities, some of which are known and some of which are currently unknown. These are likely to result in changes to DCC costs. DCC considers that the materiality threshold should provide flexibility for DCC to manage change within an appropriate tolerance

- Transparency – the arrangements relating to materiality thresholds should provide industry stakeholders with transparency on material changes to DCC costs and provide clarity on how and when stakeholders will be engaged if costs exceed the materiality threshold. Where possible, the materiality thresholds should be based on quantified risks in order to provide traceability to specific areas of uncertainty

- Simplicity – the arrangements relating to materiality thresholds should operate and be reported in a way that can be easily understood by all parties.

282. DCC has considered whether materiality thresholds should be set for each of the solution scenarios. Since DCC will monitor and report variances against the forecast costs associated with the baseline scenario, we consider that the most appropriate approach is to set materiality thresholds for the baseline scenario only, rather than for each of the solution scenarios. We consider that this will provide an appropriate level of transparency to industry stakeholders on changes to DCC's costs. As described below, the materiality threshold will be reviewed each time there is an update to the baseline.

11.4 Form and level of the materiality threshold

283. The materiality threshold is a tolerance band over and above DCC's baseline costs and consists of two components:

- contingency

- management reserve.

284. This reflects an allowance for the potential impact of both known uncertainties and unknown uncertainties on DCC costs. This approach is illustrated in Figure 14.

11.4.1 Definitions

285. Contingency comprises a weighted cost allowance that reflects the likelihood that the high scenario and other quantified risks will materialise. This is based on the estimated cost impact of each of the scope variations associated with the high scenario materialising, weighted according to the likelihood of each variation materialising. This could include, for example, Ofgem requiring DCC to lead on an area of activity that DCC was previously expecting to contribute only. This excludes major scope changes that were not considered as part of the high scenario. Contingency also includes a weighted allowance for the likely cost impact of quantified risks materialising. Given that the contingency reflects the

weighted probability that a range of different risks will materialise, it is realistic to expect that these costs will be incurred.

286. The management reserve is a cost allowance for unforeseen change that cannot reasonably be anticipated at this stage of the Programme. This is based on a proportion of the cost base to reflect the level of uncertainty. The management reserve is intended to allow for the costs of both minor and major changes. Examples of unforeseen change include a policy change resulting in a major change to the scope of the work DCC is required to undertake; unforeseen complications with a solution option that result in an increased level of effort to achieve the same outcome; or a complete re-plan of the programme. It is realistic to expect that unforeseen changes will emerge during the period of the Transitional Phase and so DCC considers that it is prudent to expect that these costs will be incurred.

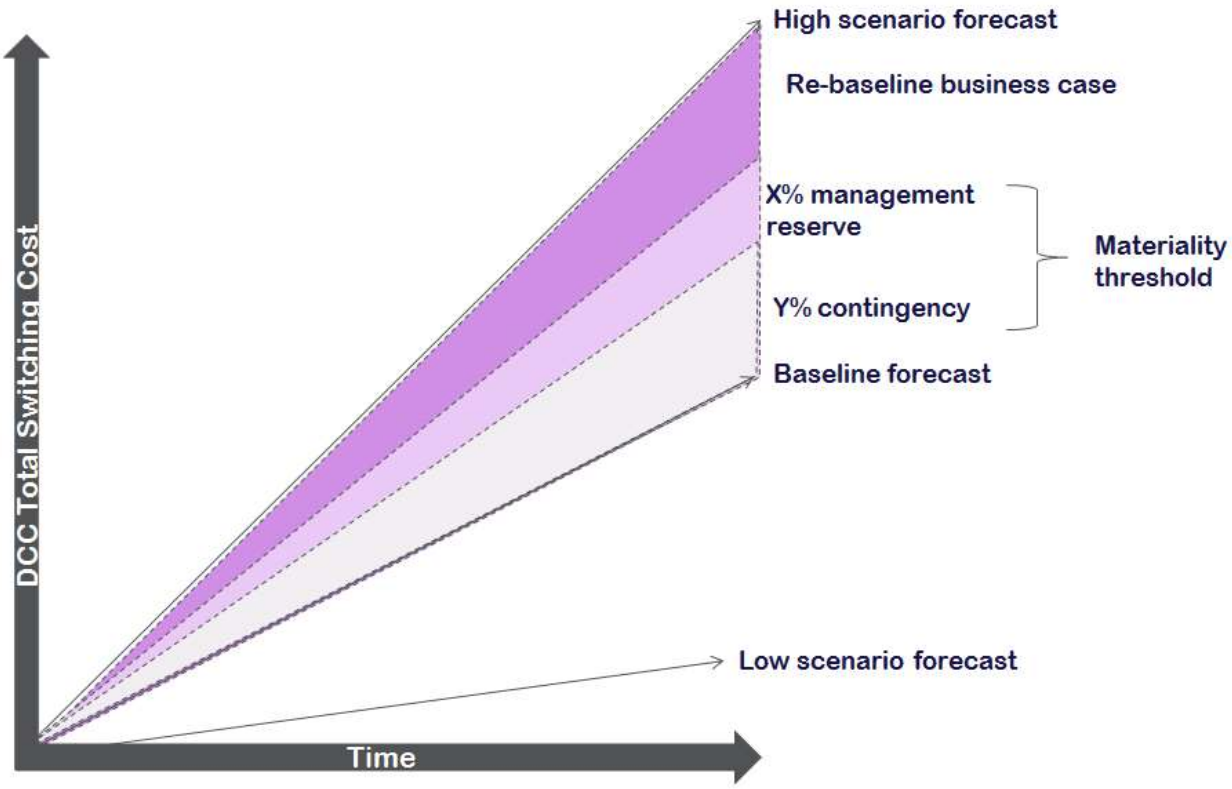

Figure 14 - Components of the materiality threshold (for illustrative purposes only)

11.4.2 Level of the materiality threshold

Contingency

287. The contingency component is calculated based on two components:

- the total estimated cost impact of each of the scope variations associated with the high scenario materialising, weighted according to the likelihood of each variation materialising

- for example, if the additional estimated cost associated with a scope variation is £100k and there is an estimated 20% likelihood of the scope change materialising, this would result in £20k being included within the contingency allowance. The estimated cost and likelihood of each scope variation arising is included in the Risks sheet of the cost model

- the likelihood percentages assigned to risks have been defined based on judgement by the DCC Switching team based on exposure to the Switching Programme to date, and wider professional programme experience. In addition the Ofgem Switching team has reviewed and validated these values based on its judgement and what can be reasonably foreseen.

- the total estimated cost impact of additional identified areas of risk not directly related to the scope scenarios, weighted according to the likelihood of each risk materialising. These are calculated in the same way as the scope variations in the Risks sheet of the cost model and are labelled as 'non-scenario risks'.

288. The weighted cost of each scope variation and risk is time-bound based on planned activities associated with the high scenario or risk.

289. The proposed contingency allowance is £3,495k. This is equivalent to 20% of the total cost base associated with the baseline scenario.

Management reserve

290. The management reserve is calculated based on a proportion of the costs associated with the baseline scenario. This is based on programme management best practice and benchmarks and reflects the level of uncertainty associated with DCC's role in the Switching Programme at each phase.

291. The proposed management reserve comprises:

- 5% of the Blueprint baseline costs, which equals £166k

- 10% of the DLS baseline costs, which equals £298k

- 20% of the Enactment baseline costs, which equals £2,186k.

292. This reflects the greater level of certainty relating to the requirements of DCC's contribution during the Blueprint phase and the relatively lower level of certainty relating to the requirements during the DLS and Enactment phases.

293. Where there is overlap between programme phases, the management reserve associated with the later phase will take precedence. This is in contrast to contingency, which is related to time-based activities rather than programme phases.

294. The proposed management reserve is £2,651k, which is equivalent to 15% of the total cost base associated with the baseline scenario.

Total materiality threshold

295. The total materiality threshold is the sum of the contingency and management reserve, which is equal to £6,146k or 35% of the cost base associated with the baseline scenario (see Figure 15).

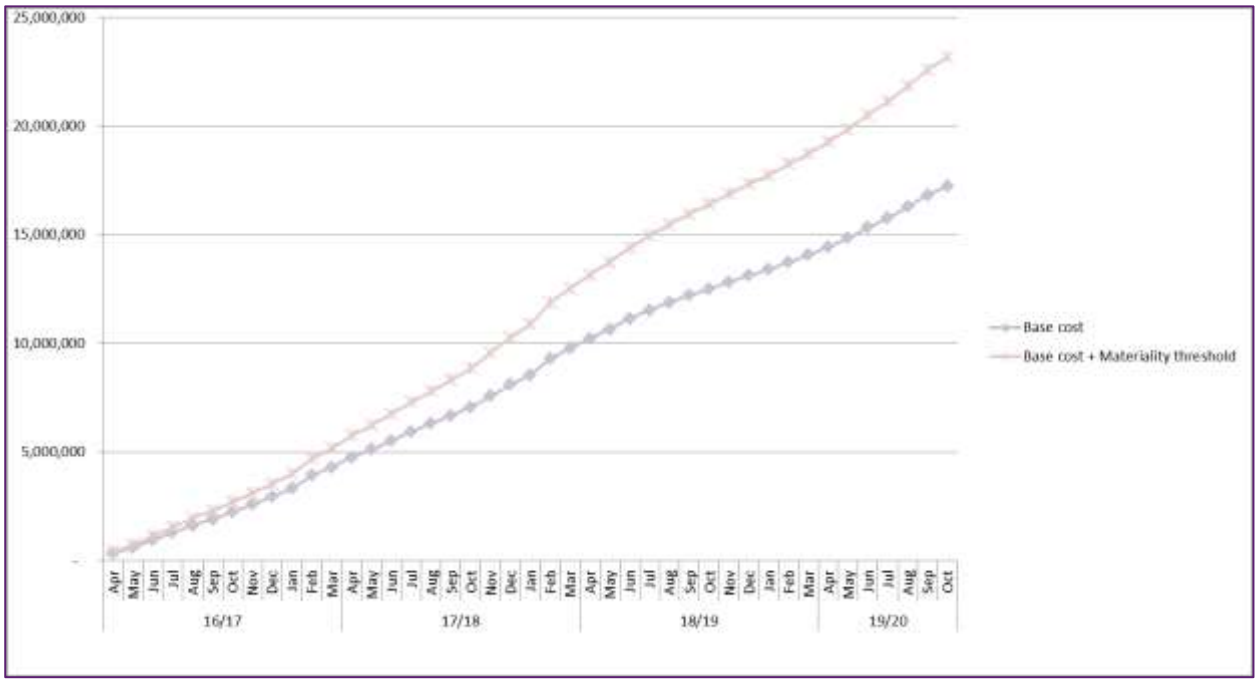

Figure 15 – materiality threshold profile

11.5 Reviewing the materiality threshold

296. When updating the DCC Switching Business Case under the process set out in Section 12.2, we will review the materiality thresholds associated with DCC costs, based on the latest information relating to DCC's scope and activities and the residual level of risk and uncertainty. This may include retiring risk over time.

297. DCC considers that it would be appropriate to allow flexibility to review and update the methodology for calculating the materiality thresholds as part of the planned updates to the DCC Switching Business Case.

298. Any change to the materiality threshold (whether the amount or the methodology for calculating the amount) due to a reactive update to the DCC Switching Business Case or at planned review point will be raised within Programme governance and agreed by Ofgem.

11.6 Applying the materiality threshold

299. We anticipate that Ofgem programme decisions will be the primary driver of changes to costs and that Ofgem will communicate changes in DCC's role and scope to industry through programme governance. The arrangements for providing transparency on these decisions are described in Section 12. DCC is responsible for assessing the impact of decisions that affect the scope of DCC's activities in the Programme. DCC is responsible

for ensuring that any additional costs are economic and efficient, regardless of whether the costs are within the materiality threshold, and is required to justify that this is the case through its annual ex post price control reporting.

300. As such, there is no formal process within Ofgem Programme governance to approve DCC's use of contingency and management reserve. However, DCC must explain any actual and forecast variance from the costs associated with the relevant baseline scenario through the monitoring and reporting arrangements set out in Section 12. Note that DCC will also report on any realised opportunities which result in lower costs.

301. DCC may draw down costs up to the materiality threshold for both additional spend relating to known uncertainties and unforeseen change. DCC may exceed the calculated allowance for contingency as a result of identified scope variations materialising; or may exceed the calculated allowance for management reserve as a result of unforeseen change resulting in additional costs within the total materiality threshold in either case. If the materiality threshold is exceeded, DCC will be required to update and republish the DCC Switching Business Case, which will include a revised baseline whilst keeping reference to the original baseline.

12 Monitoring and updating the DCC Switching Business Case

302. This section explains the planned approach to monitoring DCC's delivery against the DCC Switching Business Case and describes the triggers for updating and re-baselining the DCC Switching Business Case. It sets out how stakeholders will be engaged as part of DCC's reporting and during the process of re-baselining the DCC Switching Business Case.

12.1 Monitoring and reporting

303. DCC is required to justify its expenditure on the Switching Programme through its annual ex post price control reporting. DCC will also report regularly on its costs as part of the ex post plus arrangements for DCC's activities relating to the Transitional Phase. DCC will also report separately on its delivery progress through Ofgem programme governance. These monitoring and reporting arrangements are described in more detail below.

12.1.1 Financial reporting

Ex post price control reporting

304. DCC is required to justify its expenditure on the Switching Programme through its annual ex post price control reporting (by 31 July of each relevant year).

305. DCC costs relating to the Transitional Phase of the Switching Programme will be formally reported and justified under the same price control reporting arrangements as DCC's smart metering costs[19]. As such, DCC will explain material variances between its incurred costs and:

- the costs set out in the Licence Application Business Plan (which did not include any DCC costs related to the Switching Programme); and
- the costs set out in DCC's latest approved forecast for that Regulatory Year.

306. This approach is illustrated in in Figure 16 below.

[19] These arrangements are set out in Condition 37 of the Smart Meter Communication Licence

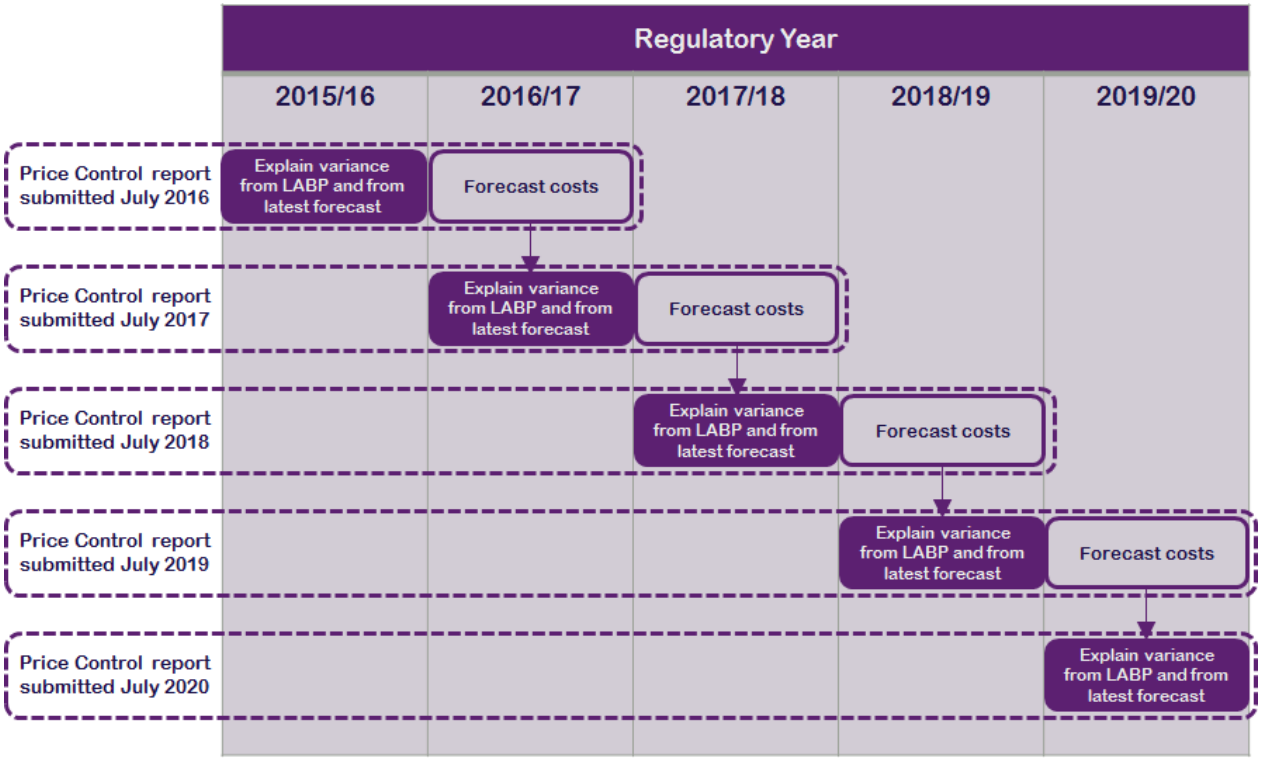

Figure 16 – Time periods for reporting variance through price control

307. In addition, in its annual price control submission, DCC will also report on any variance between the costs it has incurred on the Switching Programme and the forecast costs set out in DCC's original baselined DCC Switching Business Case. Due to differences in the timings for reforecasting and the different criteria for including costs within the forecast included in DCC's price control reporting (e.g. level of certainty), this variance is unlikely to align exactly with the variance from the annual regulatory forecast.

308. DCC's reporting will be based on updated Regulatory Instructions and Guidance (RIGs).

309. DCC's price control submission is likely to reference information included in the DCC Switching Business Case and in DCC reports provided to Ofgem to support regular financial reporting meetings, as described below.

310. In the 2015/16 Price Control submission, DCC included its costs incurred in relation to the Switching programme for that regulatory year (<£200k).These costs are currently under consideration by Ofgem. No cost forecast for the Switching Programme for 2016/17 was included in the 2015/16 Price Control submission, as it did not meet the certainty criteria for inclusion and in acknowledgement of this business case.

Regular financial reporting

311. Under the ex post plus arrangement for the Switching Programme, DCC will report to Ofgem regularly on its financial performance against the original baselined DCC Switching Business Case and the latest revised baseline DCC Switching Business Case, where applicable. Ofgem will not approve the regular report but the report will provide Ofgem with an opportunity to highlight any major concerns as soon as they emerge.

Purpose

312. The purpose of the regular DCC and Ofgem meetings will be to:

- report on DCC financial performance against the original and current DCC Switching Business Case and explain any actual or forecast variances from baseline costs
- provide an opportunity for Ofgem to provide views about DCC's progress on products/activities against the financial forecast for those products and activities, DCC priorities and DCC resources for DCC to take into account
- decide whether to trigger an update to the DCC Switching Business Case based on the conditions defined in Section 11.

Attendees

313. The regular financial reporting meeting will be attended by DCC and Ofgem only. Attendees will include representation from financial and wider programme perspectives.

Reporting information

314. DCC will provide reporting information relating to actual and forecast DCC costs to support the regular financial reporting meetings.

315. The exact reporting information to be provided will be agreed between DCC and Ofgem before the DCC Switching Business Case is baselined in March 2017, but it likely to include:

- A summary of incurred costs, including:
  - last period's incurred costs, compared to the original baseline costs for that period and, if applicable, latest baseline costs for that period (cost baselines will be clearly linked to DCC Switching Business Case versions)
  - an explanation of variance from the latest baseline, e.g. early or deferred expenditure, changes in scope, changes in programme timescales or overspend (including relevant supporting detail from the cost model and DCC Switching programme plan). Note that variances may be either above or below the baseline costs
  - total spend to date compared to total baseline costs to date
- An update on forecast costs, including an:
  - update on the monthly and total forecast for the remainder of the Transitional Phase
  - explanation of forecast variances from latest baseline (as per categories above)

- Metrics relating to the materiality threshold, such as:
  - the percentage and value of the materiality threshold that has been drawn down
  - the percentage and value of the materiality threshold that is remaining
  - if the materiality threshold is exceeded, the value by which it is exceeded
  - associated with the conditions for triggering an update to the DCC Switching Business Case, e.g. the number of reporting instances in which total costs are forecast to exceed the threshold, the number of instances in which costs incurred in that reporting period exceed the threshold.

12.1.2 Programme delivery reporting

316. Separately, DCC will report on its delivery progress through Ofgem programme governance. This will include reporting on DCC's progress against the DCC Switching programme plan, on the timeliness, scope and quality of delivery and key risks and issues affecting DCC delivery. DCC's reporting information will be aligned with Ofgem's reporting requirements for the Switching Programme. A summary of the regular financial monitoring information will be tailored to feed into the programme report, including a dashboard of material highlights. Attendees will include the Ofgem Programme Director and DCC Programme Director.

12.1.3 Reporting to industry stakeholders

317. We expect that Ofgem programme decisions will be the primary driver of changes to costs and that Ofgem will communicate changes in DCC's role and scope to industry through programme governance.

318. DCC will provide regular updates to industry stakeholders on its delivery against the DCC Switching Business Case via regular programme governance forums, for example the Switching Programme Delivery Group (SPDG). These updates will cover:

- explanation of any variance from baseline costs within the materiality threshold
- explanation of any costs exceeding the materiality threshold
- notification if Ofgem has instructed DCC to update and republish the DCC Switching Business Case.

319. This will be supported by a summary version of the regular financial monitoring report provided by DCC to Ofgem.

320. DCC will also provide updates to industry through DCC's quarterly finance webinars and through other DCC forums as appropriate.

12.2 Updating the DCC Switching Business Case

12.2.1 Purpose

321. DCC may occasionally be required to update and re-publish the DCC Switching Business Case. The purpose of re-baselining the DCC Switching Business Case is to reflect material changes in the scope, activities or assumptions that underpin the original baseline DCC Switching Business Case. Re-baselining the DCC Switching Business Case results in a revised set of forecast DCC costs and associated materiality thresholds during the Transitional Phase.

12.2.2 Triggers

322. The triggers for DCC to re-baseline the DCC Switching Business Case may be either:

- planned – DCC will update the DCC Switching Business Case at key milestones with Ofgem's Switching Programme plan. These are anticipated to be following Design Baseline 3 (currently planned for December 2017) and Design Baseline 5 (currently planned for June 2018). These planned updates are intended to reflect the increased certainty relating to DCC scope and activities that is expected at these points
- reactive – DCC will update the DCC Switching Business Case by exception if:
  - the materiality threshold has been exceeded and Ofgem subsequently instructs DCC to re-baseline the DCC Switching Business Case
  - Ofgem instruct DCC to re-baseline the DCC Switching Business Case on an ad hoc basis, for example following a major unforeseen scope change.

323. Any decision to update and re-publish the DCC Switching Business Case will be discussed by joint DCC and Ofgem governance as part of the regular financial reporting meetings. Ofgem will be responsible for instructing DCC to update and re-publish the DCC Switching Business Case.

Conditions for reactive update to the DCC Switching Business Case

324. Given the early stage of the Programme, DCC considers that it would be reasonable to allow some flexibility for this joint governance to judge when the DCC Switching Business Case should be updated and republished, based on evolving experience. However, DCC considers that the following factors should be taken into account:

- whether total forecast costs are expected to exceed the total materiality threshold
- whether this continues to be the case over several reporting periods
- whether incurred costs repeatedly exceed baseline costs.

325. DCC does not propose that strict conditions should be in place relating to these factors in order to trigger an update and republication of the DCC Switching Business Case.

326. In line with the principle of proportionality and to mitigate the risk of DCC being required to update and republish the DCC Switching Business Case as a result of short-term increases in cost, DCC considers that the total forecast costs should exceed the total materiality threshold and should be forecast to do so in several reporting periods in order to trigger an update and republication of the DCC Switching Business Case. This situation is illustrated in Figure 17.

327. To mitigate the risk of DCC providing optimistic reforecasts, where costs incurred in that reporting period regularly exceed the materiality threshold for that period, but the total cost is not forecast to exceed the total materiality threshold, Ofgem may request that the DCC Switching Business Case is republished.

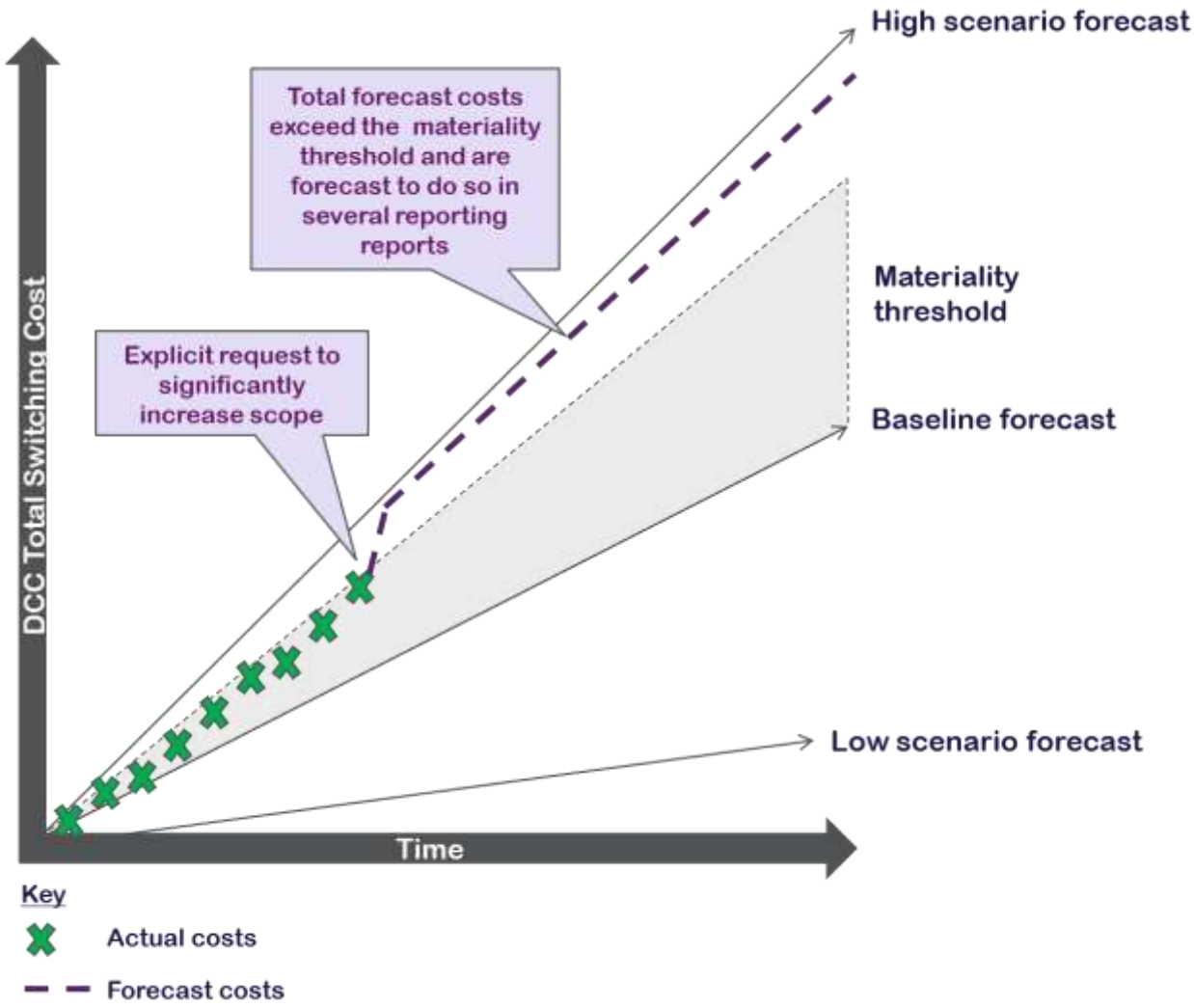

Figure 17 – Example: forecast to exceed the total materiality threshold in x reporting instances

Timing of reactive updates to the DCC Switching Business Case

328. In line with the principle of proportionality, DCC considers that it would not be economic and efficient to re-publish the DCC Switching Business Case as a result of exceeding the materiality threshold when either:

- less than 6 months remain until the end of the Transitional Phase
- less than 3 months remain until the next planned update of the DCC Switching Business Case, as described below.

329. Within these time windows, any breach of the materiality threshold would be reported to industry through programme governance as set out above.

12.2.3 Process for updating the DCC Switching Business Case

330. The process for updating the DCC Switching Business Case is summarised in Figure 18. There will not be a formal consultation on any update to the DCC Switching Business Case, other than in exceptional circumstances. Any requirement for formal consultation would be instructed by Ofgem.

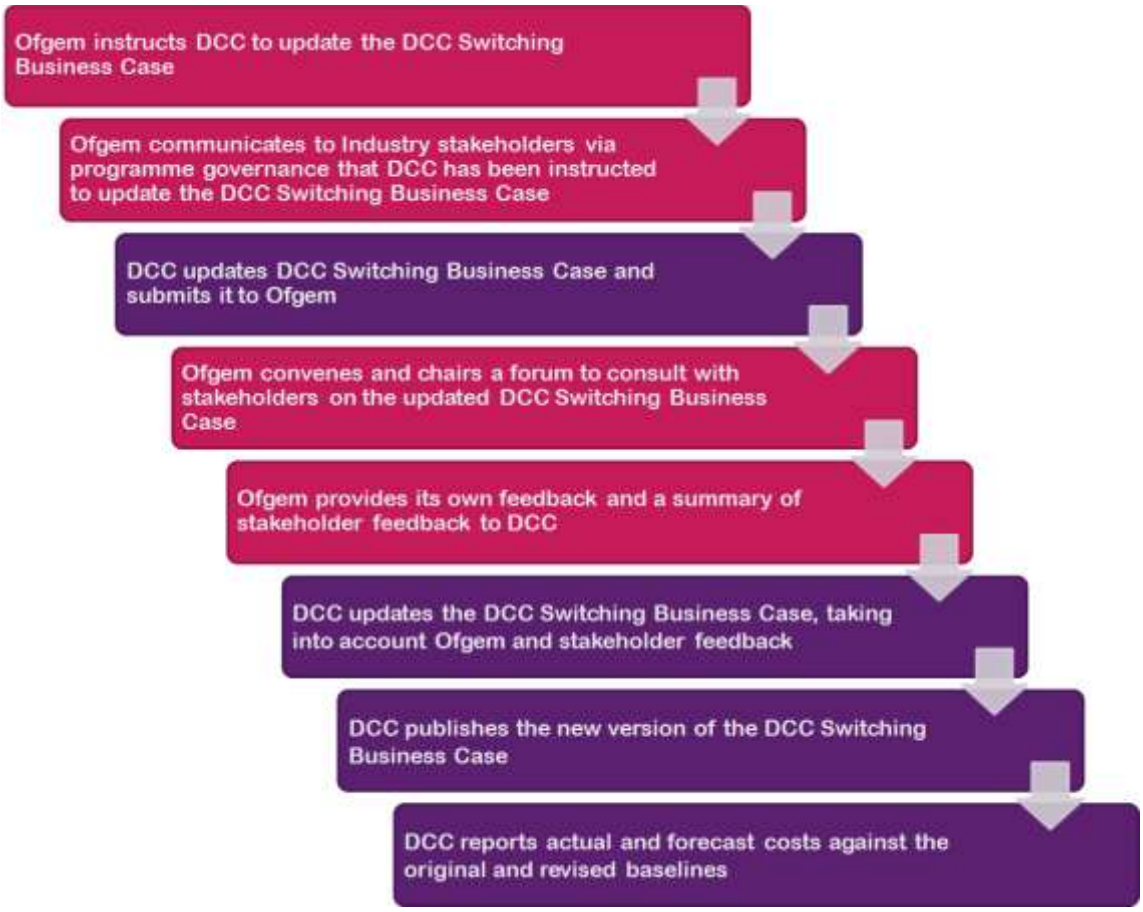

Figure 18 – Process for updating the DCC Switching Business Case

Appendix A – Requirements Traceability Matrix

See file: Appendix A – Reqts Traceability Matrix v2.0

Appendix B – Product Breakdown Structure

See file: Appendix B - PBS v2.0

Appendix C – DCC Switching Programme timeline

See file: Appendix C – DCC Switching Programme Plan v2.0

Appendix D – Cost model

[Cost model redacted]

Appendix E – RAIDO

See file: DCC Switching RAIDO v2.0

Appendix F – Margin and incentives

13.1 Overview

331. This section sets out DCC's proposals in relation to:

- DCC's expected return for our work in relation to the Transitional Phase of the Switching Programme
- the incentive framework for DCC's activities during the Transitional Phase.

332. DCC's proposed rate of return is based on proposals or analysis around a number of supporting features which collectively form DCC's margin proposal. These features are shown in Figure 19 below.

Figure 19 – Features of margin proposal

333. The margin, as discussed in this DCC Switching Business Case, represents a return to DCC for the delivery and management of DCC's role during the Transitional Phase of the Switching Programme. This margin will be recovered through DCC charges in effect from April 2017 onwards.

334. DCC expects that the DBT and Live Operations phases will present an opportunity to incorporate a meaningful incentive framework for DCC's activities. DCC's role will be critical to the successful implementation of change to the energy supplier switching process and, as such, DCC anticipates that a performance incentive framework will apply during those programme phases. Margin and incentives for DCC's role during the DBT and Live Operations phases of the Switching Programme will be set separately from this DCC Switching Business Case.

13.2 Agreed principles

335. Working collaboratively through the Price Control Design Team (comprising DCC and Ofgem representatives), DCC and Ofgem developed a set of principles relating to determining the margin proposals. The principles are that the margin should:

- reflect the nature of the activities, the market returns for activities of this type and the level of risk to DCC of the Transitional Phase activities, e.g. specialist skills
- be calculated by applying DCC's marginal rate of return on economic and efficient costs
- be set ex ante in accordance with Ofgem's direction in early 2017
- be directed by Ofgem with a mechanism for both DCC and Ofgem to apply for an adjustment.

13.3 Summary of margin proposals

336. Based on consideration of each of the factors outlined in Figure 19, DCC proposes a rate of return of **15%** to set the margin for the Transitional Phase of the Switching Programme. The overriding rationale for this proposal is that DCC considers this rate of return to be commensurate with the commercial expectations of the parent company and in line with benchmarked comparator organisations.

337. The other elements of DCC's proposal in relation to margin are summarised below. We propose that:

- the margin is calculated as a fixed rate of return of 15% of revenue, based on all DCC costs in the Transitional Phase. This is calculated as 'margin' as opposed to a 'mark-up', where the margin value = x/(1-y)-x, where x = cost; y = % rate of return
- the fixed rate of return is set ex ante for the entire Transitional Phase (RY 2016/17 – RY 2019/20)[20]
- the forecast margin is recovered via DCC charges in effect from April 2017 onwards (subject to any ex post adjustments following the ex post price control assessment)
- there is a mechanism for both DCC and Ofgem to apply for an adjustment to the fixed rate of return in the event of a significant change to DCC's role and/or risk profile.

338. This proposal is based on the incentives framework outlined in Section 13.8 and DCC's assessment of the risks we face during the Transitional Phase, which is detailed in Section 1.10.

[20] Except for the margin relating to RY2016/17, which would be set during RY 2016/17 and be recovered during RY 2017/18

339. Based on the rate of return of 15% and the forecast costs associated with the baseline scope scenario, the forecast value of the margin to be recovered is set out compared to the forecast DCC costs in Table 26.

(£k)	RY 16/17	RY 17/18	RY 18/19	RY 19/20	RY 20/21	Total
Total costs (including materiality threshold)	5,646	8,061	6,809	5,086	7	25,608
Margin	996	1,422	1,202	897	1	4,519

Table 26 – Proposed margin values (based on forecast costs)

13.4 Margin calculation (cost base)

340. DCC proposes that the margin should be calculated as a fixed rate of return (%) of the total costs (CRS Internal Cost[21] plus CRS External Costs[22]). Note that the rate of return is calculated as a margin (rate of return = margin value/(margin value + total costs)) rather than a mark-up (rate of return multiplied by total costs). DCC would apply the rate of return to any external subcontractors e.g. external consultancy, which under the term in the licence would be defined as CRS Internal Costs. The only External Costs identified to date are those likely to be incurred by relevant Fundamental Service Providers (specifically, the Data Services Provider) in assessing the impact of the CRS design on the existing SMIP design and service.

341. This approach ensures that DCC is rewarded for the delivery of activity for which it is commercially accountable and is not incentivised to provide all required services in-house.

13.5 Fixed percentage rate of return

342. DCC proposes that the margin is calculated as a fixed percentage rate of return rather than a fixed absolute figure, as this allows the margin to flex with cost changes, reducing the need to reopen the margin. This approach is suitable for changes to costs relating to activities of a similar nature to those already anticipated, and to which the same rate of return is therefore applicable. This approach is particularly suitable given the uncertainty in relation to programme scope at this stage and it achieves the principles of simplicity and proportionality, given the relatively low cost base.

343. Under this approach, the forecast margin would be recovered through DCC charges. The final value would be calculated based on the Allowed Revenue as determined by Ofgem as part of its ex post price control assessment. Where there was a difference, this would result in a corresponding adjustment to the CRSPA term within Ofgem's direction on margin and incentives.

[21] means in relation to each Regulatory Year the sum of the costs (excluding Internal Costs, External Costs, Pass-through Costs, Centralised Registration Service External Costs and Centralised Registration Service Pre-Agreed Costs) that were economically and efficiently incurred by the Licensee for the purposes of the provision of Mandatory Business Services

[22] means in relation to each Regulatory Year the actual amount of the costs that were economically and efficiently incurred by the Licensee in procuring Fundamental Registration Service Capability during that period.

344. It is important to note that Ofgem would retain its power to disallow any costs that it deems to be inefficient, therefore neutralising any potential perverse incentive for DCC to increase costs in order to secure additional margin. Furthermore, under the ex post plus arrangement, Ofgem will be able to further scrutinise any changes to DCC's costs on a regular basis.

13.6 Adjustment mechanism

345. Notwithstanding the proposal for a fixed rate of return, DCC proposes that there should be a mechanism to reopen the rate of return itself in the event of a significant change. There may be events where there is a material change to the factors outlined in Section 13.1, such as:

- a significant change to DCC's role within the Switching Programme, leading to a change in DCC's risk profile in relation to the Transitional Phase
- a change to the incentive framework.

346. DCC considers that an adjustment mechanism is appropriate as it would ensure that the rate of return remains appropriate in relation to the nature of DCC's activities during the Transitional Phase. The mechanism could be initiated by either Ofgem or DCC and could result in an increase or decrease in the rate of return, where justified.

347. It is not envisaged that this mechanism would need to be used based on the scope changes that are reasonably foreseeable, however, it provides an element of protection for both parties in the event of significant unforeseen scope change.

13.7 Commercial expectations

348. There is a clear precedent for the parent company's (Capita's) expected rate of return for DCC activity. For example at the time of the application for the Smart Meter Communication Licence, the rate of return was set at 15% of Internal Costs and was established through competition. Therefore this is the closest example of the competitively set commercial expectations of the appropriate level of margin.

349. Switching is a complex national transformation programme, and it will become increasingly challenging as we progress through the Transitional phases. DCC's commercial expectations reflect the skills, effort and commitment that we invest in ensuring successful programme delivery.

350. The rate of return should be comparable to that expected by professional services organisations, should Ofgem have sourced these programme management, design, delivery and procurement services from the open market.

13.7.1 Internal margin benchmarking

351. The proposed margin also reflects the commercial decisions relating to the viability of this project compared to similar work elsewhere, that is, the opportunity cost for undertaking this activity.

352. As a comparator, Capita has reported underlying operating margins in the range of 13.4% and 14.2% over the last five years. In addition, Capita's Digital & Software Solutions division, which is most closely aligned to the IT transformation services which DCC is supplying to this programme, achieved an underlying operating margin of 24.8 and 25% in the last two years. This return reflects the balance of supply and demand for the skills and experience required to deliver complex IT programmes.

13.7.2 External margin benchmarking

DCC-wide benchmarking

353. DCC commissioned Europe Economics (EE) to provide advice on the assessment of DCC's rate of return for its core services and its role in developing and delivering the Central Registration Service (CRS) in support of Ofgem's Switching Programme. The full report has been provided to Ofgem under separate cover.

354. In order to assess DCC's allowed rate of return, EE employed a margins-based methodology. In doing so, it conducted a qualitative analysis of DCC's business model followed by a market analysis of actual net margins achieved by comparator firms. The identification of comparators was based on the key insights from the qualitative analysis, thus ensuring comparability and relevance in the comparator firms chosen. EE considered this to be a more robust approach, relative to applying a Weighted Average Cost of Capital (WACC) figure to an estimate of capital employed in DCC, given the asset-light nature of its business.

355. The margins-based approach has been adopted in regulated sectors in recent years and the required margin is normally estimated by examining the EBIT margins achieved by other similar asset-light businesses as the regulated entity in question. These businesses are used as comparators, potentially with adjustment for different levels of implied risks (e.g. operational risk, input cost risk etc.).

356. EE selected five benchmark organisations (TalkTalk; PayPoint; Worldpay; Onecom and Endava), based on analysis which highlighted characteristics similar to those of DCC:

- Asset composition – whether the comparator is asset light or not.
- Similarity of business model, including:
  - the nature of the business – whether the candidate comparator is IT heavy, has external contractors and is unique to the industry it operates in
  - Geographical scale– whether it operates in the UK only
  - Client base – whether it has a regional client base consisting of both households and businesses
- Risk profile – how similar are the risks faced to those of DCC?

357. The EBIT analysis of these organisations led EE to recommend a rate of return of between 15 to 17 per cent range for DCC's core smart metering services, whilst a slightly (but not greatly) lower return should be expected for DCC's role in the Switching Programme.

DCC Switching Programme Transitional Phase benchmarking

358. In order to provide benchmarking specifically aligned to the IT transformation professional services DCC is providing in the Transitional Phase of the Switching Programme, DCC has also analysed the financial performance of the firms on its Consultancy Services Framework. This analysis is summarised in Table 27.

359. This provides appropriate benchmark data, as these firms specialise in providing transformation services into large programmes and are supporting Ofgem and DCC in this capacity on the Switching Programme.

[Table redacted]

Table 27 - Professional Services margin benchmarking

13.8 Incentives

360. This section sets out the key elements of DCC's proposed application of performance incentives to its activities during the Transitional Phase of the Switching programme. The proposal seeks to define an incentive framework that is practical to implement and supports the desired outcomes for the Switching programme.

13.8.1 Principles for incentives

361. Through the Price Control Design Team DCC and Ofgem developed a set of design principles against which potential incentives would be assessed. These principles have been designed to ensure that incentives are only applied where they bring genuine benefits to the programme. DCC wholly supports the use of incentive regimes when they are applied in an appropriate context.

362. It was agreed by the Design Team that any incentive should:

- ensure there is no duplication of rewards and penalties with existing incentives[23] – e.g. under the Operational Performance Regime (OPR)[24]
- encourage behaviour that is aligned with the desired outcomes for the Switching programme i.e. time, quality, cost
- be proportionate i.e. it would be disproportionate to develop a complex incentive regime for an immaterial financial value
- be capable of being measured objectively and unambiguously
- have quantified limits to risk as well as reward

[23] These include:
a. Incentives to be economic and efficient, in order to avoid costs being disallowed through DCC's annual price control regime - downside
b. Incentives not to over-recover costs from SEC Parties, through the penalty interest rate regime - downside
c. Incentives to deliver quality, through potential granting of future contracts - upside
[24] As set out in Schedule 4 of the Smart Meter Communication Licence

- feature an upside incentive as well as downside, in order to balance risk and reward (note that this could apply to a package of incentives)
- not create perverse incentives, that is, incentivising one outcome in a way that creates an unintended consequence of compromising other key outcomes
- measure performance of activities which are within DCC's reasonable control.

13.8.2 Assessment of potential incentives

363. As part of the Price Control Design Team's planned work on incentives, DCC identified potential areas to which incentives could be applied and assessed these against the principles outlined above. The assessment is included as Appendix G. DCC's analysis concluded that there was no compelling rationale for the application of incentives.

364. However, subsequently, Ofgem has expressed a preference for DCC to operate under a performance incentive regime with incentives relating to timeliness of product delivery and stakeholder satisfaction. DCC has some concerns with incentivising the timely delivery of activity as it may perversely encourage DCC to:

- prioritise time over quality and lead to missed opportunities to improve quality and reduce time and cost in later phases of the programme.
- be overly cautious in its planning to reduce the risk of late delivery, which may result in longer delivery timescales
- make compromises in the procurement approach it plans to adopt such that it prioritises faster delivery over depth or breadth of competition

365. DCC's main concerns for incentivising stakeholder satisfaction are that:

- the measurement of effectiveness is subjective
- good programme delivery does not always equate to satisfied stakeholders. For example, it may be in the interests of the programme for DCC to challenge vested interests in relation to the current arrangements or to challenge the quality of the design work carried out by other parties, where doing so results in a more robust design that better meets the objectives of the programme

366. Due to these concerns, DCC considers that it would be preferable not to introduce incentives during the Transitional Phase. However, in order to support Ofgem's preference for performance incentives during the Transitional Phase, DCC has developed a proposal that seeks to:

- mitigate some of the challenges of implementing incentives during the Transitional Phase
- ensure that the incentives could be practically implemented and monitored.

367. DCC's proposals for time-based incentives and stakeholder satisfaction incentives are explained below.

13.8.3 Time-based incentive

Application of incentive

368. A time-based incentive places DCC margin at risk based on whether DCC delivers specific milestones by agreed dates.

369. In line with the principles agreed by the Price Control Design Team, the incentives should apply only to DCC activities where DCC has a high level of ownership and control. The incentive should therefore be applied to the activities underpinning DCC's specification and procurement of the CRS solution, and not to DCC's professional advisory activity supporting Ofgem in designing and planning for the delivery of end-to-end switching arrangements.

370. The overarching period in which incentives could be applied to DCC milestones is therefore from:

- receipt of detailed switching design and delivery specification from Ofgem; to
- award of major CRS contract(s).

371. DCC has considered which milestones are likely to be on the critical path, in order to identify where there may be benefit in incentivising delivery, and which programme products are already planned to be subject to assurance, in order to minimise the additional oversight required. DCC therefore proposes that incentives are applied to the following milestones:

- CRS technical specification complete
- CRS tender packs complete
- Contract award recommendation reports approved.

372. DCC's current planning assumption is that DCC will run three procurement projects, which will likely include major and minor projects. An example of a major procurement project could be to source core software provision, whereas a minor procurement project could be to source professional services support e.g. systems integration.

373. DCC considers that applying incentives to milestones for each of the individual procurement projects would be disproportionately arduous to set up and monitor and would not provide any substantial additional benefit in terms of ensuring overall timely delivery of DCC's activities. DCC therefore proposes that the incentive should be applied only to the milestone that represents the cumulative end point of all major procurement projects, i.e. the point at which the final major procurement tender pack is complete and the point at which the final major procurement contract award recommendation report is approved.

374. DCC considers that it would be counterproductive to introduce a time-based incentive relating to the milestone for 'CRS contracts signed', as this is beyond DCC's reasonable control and

quality should not be compromised for time for this activity. A time-based incentive relating to this milestone may also give the potential Service Providers disproportionate negotiating power.

375. Dates for milestones can only be agreed once:

- Ofgem and DCC have undertaken a joint planning activity in order to develop a detailed baselined programme plan
- DCC's Switching programme plan is integrated with Ofgem's overall Switching programme plan via an agreed series of inbound and outbound dependency milestones
- DCC has commissioned expert assurance of the plan and deliverables to advise on its deliverability and has subsequently confirmed to Ofgem that the plan is deliverable and that it is possible to achieve the milestones linked to the incentives. DCC has assumed that an external provider will carry out this assurance.

376. DCC proposes that the incentive mechanism and the milestones to be incentivised should be defined within DCC's licence. However, to ensure that timely programme delivery is not hindered by disproportionate governance of incentives, DCC proposes that the detail underpinning the milestones, such as the due dates, acceptance criteria, and inbound dependencies, should be defined and managed outside of the licence.

Risk/reward of incentive

377. The time-based incentive is financial, that is, it places a proportion of DCC margin at risk based on whether specific DCC milestones are delivered by the agreed date. In line with DCC's overarching concern relating to the unintended consequences of incentivising time at the expense of quality, DCC does not propose that there should be an upside financial incentive if the milestone is delivered before the agreed date. The financial incentive therefore only has downside, i.e. DCC margin is at risk if milestones are delivered late.

378. In line with the principle that incentives should only apply to activities where DCC has a high level of ownership and control, DCC proposes that the margin placed at risk is proportionate to the percentage of the cost base for DCC activities relating to delivery of the incentivised milestones, i.e. the cost of the CRS specification and procurement activities, and not the cost of DCC's advisory services to Ofgem's design and delivery planning for the end-to-end switching arrangements. The activities that DCC considers are directly related to delivery of the incentivised milestones are highlighted in the DCC Switching programme plan under the flag 'Activities relating to incentivised milestones'. Based on the current forecast costs associated with the baseline scenario, around 25% of the cost base relates to activities to deliver the incentivised milestones.

379. DCC proposes that 100% of the margin associated with these activities is placed at risk. For example, where the cost of the activities leading to delivery of the incentivised milestones represents 25% of total DCC costs within the Transitional Phase, 25% of total DCC margin is placed at risk against the milestones.

380. DCC considers the amount of margin placed at risk should be distributed equally across all three milestones. That is, of the total amount of margin at risk, 33% of the margin would be at risk based on delivery of each of the three milestones. DCC envisages that each of these milestones will be on the critical path and therefore of equal importance in terms of timely delivery. In order to ensure the incentive encourages timely delivery overall, DCC proposes that the equal distribution of margin placed at risk is supported by a recovery mechanism (outlined below) that ensures that DCC is incentivised to deliver the final milestone by the agreed date even if earlier incentivised milestones are delivered late. DCC considers that the combination of placing an equal amount of margin at risk based on the delivery of each milestone, along with the recovery mechanism, provides the simplest approach to incentivising timely delivery of each milestone and incentivising timely delivery overall.

381. In addition, DCC proposes that the level of margin lost once a milestone is missed should be profiled as a reverse s-curve at each agreed milestone, as illustrated in Figure 20. This profile should mean that, if a milestone is missed by a short period of time, DCC is still incentivised to deliver the milestone in a timely manner. For example, if DCC was one day late in delivering a milestone, a high proportion of the margin would still be available to DCC and DCC would be incentivised to deliver as soon as possible as the amount of margin available would reduce if milestone delivery were to be further delayed. The exact profile of the reverse s-curve will be agreed between Ofgem and DCC before the incentive is implemented.

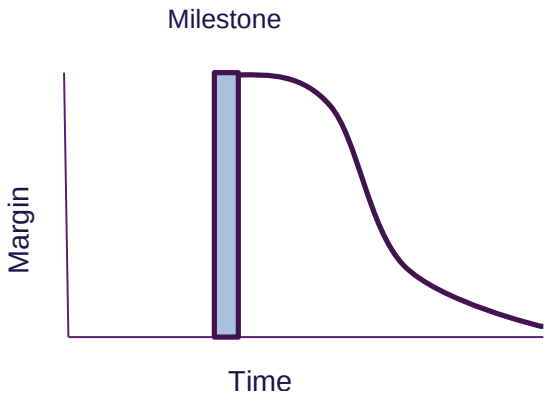

Figure 20 – Reverse s-curve margin profile

382. DCC proposes that a recovery mechanism is deployed which enables DCC to recover margin lost on a previous milestone if subsequent milestones are achieved on time. This would be similar to the recovery mechanism that applies to DCC's SMIP Implementation Milestones. The three proposed milestones are sequential and lead to the approval of the recommendation reports for award of the CRS contract(s), which is on the critical path for the end of the Transitional Phase, therefore a recovery mechanism would be well suited to these activities and would incentivise DCC to minimise delay to the Transitional Phase as a whole.

383. DCC proposes that the forecast margin is recovered through DCC charges. The final margin value would be calculated based on the Allowed Revenue as determined by Ofgem as part of its ex post price control assessment. Where there is a difference, this will result in a corresponding adjustment to the CRSPA term within Ofgem's direction on margin and incentives. Similarly, where there is an adjustment to the costs associated with the activity being measured under an incentives framework, this will also result in an adjustment to the margin placed at risk.

384. In addition to financial downside, there would be a negative reputational impact should DCC deliver its milestones late.

Measurement of incentive

Acceptance criteria

385. Milestone achievement would be based on whether the acceptance criteria defined in the product description have been met for the related product(s). This is intended to mitigate the impact of potential compromises on quality by ensuring a minimum quality level is defined.

386. DCC suggests that acceptance criteria should be unambiguously defined in each product description and the acceptance criteria are approved by both Ofgem and DCC in advance of the incentive arrangement coming into effect.

387. The acceptance criteria in the product description should comprise:

- Time – date for product completion
- Quality – objective criteria that the product must meet.

388. Existing relevant product descriptions should be revisited by DCC and Ofgem to ensure that they are sufficiently unambiguous such that they are capable of supporting the incentive mechanism. Where products cannot be defined in detail now, the product descriptions and acceptance criteria must be agreed by both parties before the incentive mechanism is finalised.

389. Approval of programme strategy and planning products is inherently subjective. However, Ofgem and DCC will jointly need to ensure that acceptance criteria are defined in as objective a manner as possible. Where there is disagreement on whether acceptance criteria have been met, it should be the responsibility of the reviewer to demonstrate why the product does not meet its acceptance criteria and provide a clear written explanation of the remedial action required.

390. All Ofgem or third party products on which incentivised DCC activities are dependent must also have unambiguously defined product descriptions with clear acceptance criteria.

Inbound third party dependencies

391. Any third party activities on which DCC milestone completion is dependent must be specified for each incentivised milestone. The inbound dependencies must be agreed by both Ofgem and DCC in advance of the incentive arrangement that relates to a specific milestone coming into effect. Inbound dependencies should be identified as milestones (with a clear definition, unique reference, and delivery date) in both the Ofgem programme plan and the DCC Switching programme plan once the dependencies have been agreed.

Governance

392. DCC considers that transparent governance of the product review process, that includes both identified reviewers and defined timescales for review, is an important element of the incentive mechanism. This should be tied into existing assurance points to reduce the programme overhead involved. Applicable comments will only be incorporated from reviewers named on the product description.

393. DCC proposes that wholly independent assurance is sourced by Ofgem (either technical or professional depending on the product to assure) to validate whether DCC has met the product acceptance criteria associated with the milestone. This would avoid any conflict of interest in situations arising where DCC considers it has been delayed from meeting its milestone due to delays to Ofgem-owned activity. The independent assurance body must not have been involved in the development of the products or in the Switching programme in any capacity that may prejudice its independence. The terms of reference for the assurance body should be agreed by both DCC and Ofgem in advance of the incentive arrangement coming into effect. Additional activity would be incorporated into DCC's programme plan to support this additional assurance activity. The independent assurance would be paid for by DCC and would be similar to the performance auditor role that assures delivery of DCC's incentivised Implementation Milestones under the SMIP.

Changes to incentive

394. Once the milestone dates have been agreed, DCC suggests that there should be a mechanism whereby both parties are able to request a change to an incentivised milestone (e.g. date, acceptance criteria or inbound dependencies), for consideration by the other party. The dates of incentivised milestone may need to be changed following implementation of the incentive mechanism as a result of factors including:

- need for change identified by Ofgem:
  - a top-down re-plan stemming from its overarching Switching business case
  - a change to DCC's role within the Switching Programme
  - notification of delay to an inbound dependency to a DCC milestone
- need for change identified by DCC:
  - identify an opportunity to increase quality or reduce the risk of error, resulting in a net benefit to the overall programme timeliness (including DBT and Live Operations), which is quantifiable (at least as a ROM)
  - identify that another party outside of DCC's control is likely to miss a milestone which is an inbound dependency to a DCC milestone, with a subsequent impact on DCC's milestone date that is beyond DCC's control.

The definition of conditions for change are to be further developed by Ofgem and DCC.

395. The incentive change mechanism must be responsive to the needs of the programme, therefore DCC proposes that changes to the dates and acceptance criteria of incentivised

milestones should be managed within the wider programme change process (which is not yet defined). This should reduce the management overhead and minimise duplication. This approach will also ensure that any impacts on incentives are considered as part of the assessment of all change by decision makers.

396. DCC expects that a change process should follow the logical process outlined in Figure 21. This process will be further developed by Ofgem and DCC in the Programme workstream.

Figure 21 - Logical change process

397. The process must deliver decisions on requests for incentive changes within a maximum of one month from submission of the formal request, as it is critical that all parties are working from an accurate and authoritative programme plan.

398. There must be clearly defined Switching Programme roles that have the authority to approve changes, including those that impact incentive milestones.

399. DCC considers that industry engagement on changes to the detail contained within product descriptions associated with incentive milestones should only be through programme governance. A requirement for formal industry consultation would likely lead to significant programme delays and therefore be counter to the rationale for deploying a time-based incentive. However, where it is proposed to change the milestones to be incentivised or how the incentive mechanism operates, consultation would be appropriate.

400. Regular programme reporting by both Ofgem and DCC should identify where there is a risk that either the inbound dependency or the DCC product itself is at risk of not achieving an incentivised milestone.

Assumptions

- Ofgem and DCC will undertake joint planning activity to ensure that both Ofgem and DCC plans are integrated via an agreed series of inbound and outbound dependency milestones
- The incentive mechanism will be activated following confirmation by expert external assurance that the plan is deliverable and that it is possible to achieve the milestones linked to the incentives. DCC has assumed that this assurance will take place towards the end of the design phase
- The milestones proposed for incentivisation are on the critical path of the programme. Where this is not the case the milestones should be removed from the scope of the incentive arrangement as it is unlikely to be beneficial to the programme to incentivise accelerated delivery of milestones that are not on the critical path

- Ofgem and DCC are accountable for any third parties working under their respective control in the products they own, and for any delays these parties may cause.

13.8.4 Stakeholder satisfaction incentive

Application of incentive

401. DCC proposes that a reputational incentive is linked to feedback from participants in the Switching Programme on DCC's performance on the Switching Programme. Participants should include other design team members and industry participants at user groups and EDAG. The expected sample size is 50-100 and feedback will not include that of Ofgem as it may introduce a conflict of interests.

402. DCC proposes that a six-monthly survey is conducted to record feedback, comprising both quantitative scoring and qualitative explanations. DCC considers this frequency should allow a reliable baseline to be established and trends to be captured.

403. The survey should be designed and implemented by a third party who specialise in survey design with input from DCC and Ofgem.

Risk/reward of incentive

404. DCC proposes that the incentive has a reputational impact only and that no DCC margin is at risk. Where DCC achieves positive feedback it will support its aim of securing additional work on other energy programmes in future. The incentive could also form the baseline for a potential financial incentive in future phases of the Switching Programme.

405. The non-financial nature of this mitigates some of DCC's concern that there is the potential for vested interest amongst survey participants and that good programme delivery does not always equate to satisfied stakeholders.

Measurement of incentive

406. DCC proposes that the analysis of the results should be conducted by the third party survey organisation, as this ensures independence from any parties involved in the programme. An allowance for carrying out the survey has been included in DCC's non-staff costs.

407. Communication of the satisfaction results with industry should be conducted an annual basis, aggregating survey results to date into a consolidated report. Both DCC and Ofgem should have the opportunity to discuss and challenge the analysis prior to the results being shared with industry.

Changes to incentive

408. Proposed changes to this incentive by either Ofgem or DCC should be submitted into the wider programme change process, in line with the arrangements outlined for the time-based incentive.

Assumptions

409. DCC has not identified any further assumptions in addition to those relating to the time-based incentive.

13.9 Nature of role (risk)

410. Whilst commercial expectations are the overriding factor in in setting the proposed rate of return, DCC has also considered the risk associated with our activities during the Transitional Phase of the Switching Programme, based on the currently defined scope.

411. The risks that DCC faces are described under five categories. These are consistent with the risk categories set out in the DCC Risk Management Strategy[25] which are:

- Programme risk
- Economic risk
- Regulatory risk
- Reputational risk
- Operational risk.

412. DCC recognises that during the Transitional Phase it does not face the risks that would be associated with an ex ante price control regime. However, there are a number of significant risks that DCC faces that have been taken into account in setting the proposed rate of return (in addition to the factors set out in the Commercial Expectations section). The risks that DCC faces are described in Table 28.

Risk category	Description	Mitigation
Programme	▪ Risk of scope change and/or delivery complexity that is greater than anticipated resulting in changes to DCC's baselined plan and budget. This may have an impact on DCC's ability to recover the costs of additional activities. ▪ Risk of changes to the plan that are beyond DCC's control, which may have an impact on DCC's ability to meet the incentivised milestones and recover the margin associated with them. ▪ Absence of documented Ofgem Switching Programme governance and control processes increases	▪ Continued engagement with Ofgem Switching Programme workstreams ▪ Proposal for adjustment mechanism

[25] DCC, 'DCC Risk Management Strategy', 19 December 2013: https://www.smartdcc.co.uk/media/91857/risk_management_strategy_december_2013.pdf

Risk category	Description	Mitigation
	DCC's uncertainty over its ability to deliver against its baselined plan and budget	
Economic	▪ Risk of cost disallowance through annual ex post price control. DCC has produced the DCC Switching Business Case in good faith based on a set of requirements that are currently under development and based on a number of assumptions. As Ofgem does not formally approve the DCC Switching Business Case, there is a risk that DCC's plans are not based on a full and complete set of requirements, which may have an impact on DCC's ability to recover costs ▪ Risk of losing margin if DCC misses incentivised milestones where the incentive mechanism does not recognize activities beyond DCC's control or is not responsive to a fluid set of programme requirements	▪ Regular regulatory reporting required by ex post plus price control arrangement should mitigate the risk of cost escalation through a misinterpretation of requirements and subsequent cost disallowance as this provides an opportunity for Ofgem to raise any concerns as they arise ▪ We will continue to work closely with Ofgem to develop the detail underpinning a challenging but achievable incentive regime ▪ Ofgem and DCC to manage milestones and dependencies against a jointly agreed programme plan
Regulatory	▪ Risk of enforcement proceedings due to DCC failing to meet Ofgem's delivery expectations; this risk increases where there is increasing complexity and interdependency between various parties and workstreams and where Licence obligations are open to interpretation	▪ The likelihood of DCC not meeting its obligations is slim. We have mitigated this risk through ensuring traceability of requirements within the DCC Switching Business Case and regular dialogue with Ofgem to validate our interpretation of deliverables and plan
Reputational	▪ The Switching Programme is a national, government mandated programme in the public eye. The switching process is critical to the operation of the competitive energy retail market. ▪ The reputational risk associated with DCC's activities increases as DCC takes on increased accountability in Ofgem's Switching Programme. The potential impact	▪ Continued engagement with programme workstreams

Risk category	Description	Mitigation
	on stakeholder perceptions of DCC may impact Capita's ability to secure other contracts to deliver national programmes ▪ The time-based incentives may encourage DCC to prioritise time over quality and lead to missed opportunities to improve quality and reduce time and cost in later phases of the programme. This may result in negative stakeholder perceptions that adversely impact Capita's ability to secure other contracts to deliver national programmes	
Operational	n/a	n/a

Table 28 - DCC risk profile of the Transitional Phase of the Switching Programme

Appendix G – Assessment of potential incentives

See file: Appendix G – Assessment of potential incentives