

Consultation

On the delivery plan for SMKI Service Continuity

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1. Executive Summary

Context

The Data Communications Company (DCC) provide services that enable Smart Metering systems to be installed and operated in premises across Great Britain. The Public Key Infrastructure (PKI) estate underpins the security of this infrastructure. The following sit under this umbrella:

- The Smart Meter Key Infrastructure (SMKI) and Infrastructure Key Infrastructure (IKI) services currently provided under the Trusted Service Provider (TSP) contract with British Telecom (BT).
- The DCC Key Infrastructure (DCCKI) is a further PKI service intrinsic to the Smart Meter programme. DCCKI is currently hosted within the Data Services Provider (DSP) and supports certificate signing and communications encryption across the gateway and to end devices. NB DCCKI is <u>not</u> within the scope but will be referred to later.

The TSP contract, which provides the SMKI and IKI services, will expire in March 2025 (with an option to extend an additional year to March 2026). To avoid any potential compromise to the security of the DCC network, DCC are exploring options for the implementation of a replacement SMKI and IKI solution that, at a minimum, provides the services currently offered by the TSP contract. This is to ensure that there is service continuity after the TSP contract expires.

The replacement of the existing SMKI and IKI solutions presents an additional opportunity to improve value for money, portability¹ and reduce the complexity of PKI management across the estate. It could also develop a platform that can address the risk of technology obsolescence and adapt over time to emerging threats or increased demand from wider DCC programmes.

The plan

On 12 May 2023 DCC was directed by the Secretary of State to produce an implementation plan for the SMKI Service pursuant to condition 13B.2 of the DCC Licence and this document is our consultation on that plan. The consultation closes on 1 September 2023.

DCC has developed a balanced plan which builds on lessons learned from managing the TSP and other PKI arrangements and includes better ways of working agreed with industry. Currently, DCC is at the early stages of the programme delivery and is focussing on the definition of the new solution and the development of the Outline Business Case in preparation for commencing an Invitation to Tender (ITT) in Q1 of 2024. Later stages will focus on procurement and then design, build, test and transition to the new service.

In order to reflect on progress with industry at key stages, we have proposed three control points: (1) the first at the completion of the Outline Business Case; (2) the second at the conclusion of the commercial process and completion of the Final Business Case; and (3) the third and final control point at the end of the design phase. The later milestones in this plan (post issuing of the ITT) are likely to be subject to change as the programme evolves and as the scope of the programme is refined. The plan for the high-level approach to the management of existing and future Certificate Authorities will be refined once at Full Business Case stage when the selection process for the SMKI Service solution is completed, as most of these activities will be dependent on the option approved. This includes Root management, certificate transfer and impacts to Registration Authorities operations.

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¹ Portability in this context is the avoidance of technological and/or supplier lock in via the use of industry recognised standard systems and code which are well documented i.e. avoiding proprietary solutions where possible.

Next steps

This consultation is intended to inform our customers and other stakeholders and provide for a clear understanding of DCC's planned activity in order to replace the existing TSP contract. We welcome input and comment in response to the questions within this consultation. We intend to hold a customer webinar on 11 August 2023 and the consultation will close on 1 September 2023.

Following the evaluation and consideration of responses to the consultation questions, the milestones (set out in Appendix B) will be presented to the Department for Energy Security and Net Zero (the Department) for approval on 25 September 2023. They will then be submitted to the Implementation Managers Forum (IMF) for inclusion in the Smart Metering Joint Industry Plan (JIP). DCC will be monitored against delivery of these milestones.

A summary of key milestones in the plans is set out in the table below. The full set of milestones is included in Appendix B.

Milestone	Description	Date
Outline Business Case Submission	All DCC Internal approvals complete. Outline Business Case issued to the Department for review	2 Nov 2023
Department decision on non-Objection to Outline Business Case	Non-objection to OBC confirmed by the Department	12 Dec 2023
Control Point 1 (Outline Business Case)	DCC to consider whether a further LC13B consultation is required	15 Dec 2023
Transition approach confirmed	DCC will share with industry its approach to transition	23 Aug 2024
Full Business Case Submission	All DCC Internal approvals complete. Full Business Case issued to the Department for review	24 Sep 2024
Current contract extension (plus one year)	Current contract provision for a 1-year extension to March 2026 invoked and in-place	30 Sep 2024
Department decision on non-Objection to Full Business Case	Non-objection to FBC confirmed by the Department	1 Nov 2024
Control Point 2 (Full Business Case)	DCC to consider whether a further LC13B consultation is required	26 Nov 2024
Contract Signature	Contract signed and awarded, vendor onboarding in progress. Detailed design phase initiated.	3 Dec 2024
Design, Built, Test – Designs Complete	Detailed design complete and approved by the DCC Cross- Functional Design Authority (CFDA)	31 Mar 2025
Transition Plan Complete	Detailed transition plan complete and approved by the DCC Cross-Functional Design Authority	31 Mar 2025
Control Point 3 (end of design)	DCC to consider whether a further LC13B consultation is required	31 Mar 2025
Design, Build, Test – PIT commences	Start of PIT phase subject to earlier TAG approval of the Test Approach Documents and PIT entry criteria being met	1 Jul 2025
Design, Build, Test – PIT exit	All PIT Exit approvals in place	15 Aug 2025
Design, Build, Test - SIT Commences	Start of SIT phase after successful PIT Exit and SIT entry criteria met	18 Aug 2025

Design, Build, Test – SIT Exit	Internal approvals in place (Test Assurance, CRB) and completion report submitted to TAG	14 Nov 2025
Design, Build, Test – UIT Commences	UIT Window opens to enable customer testing to commence	24 Nov 2025
Live Service Criteria: Go-live submission	SEC Panel to consider the evidence submitted by DCC against live service criteria and make a recommendation to the Department	2 Jan 2026
Design, Built, Test – UIT Ends	UIT Window closes	16 Jan 2026
Live Service Criteria: Go-live decision	Live Services Criteria decision by the Department	6 Feb 2026
Go Live	New service goes live (infrastructure only)	12 Feb 2026
Transition Start (by Certificate Authority)	Transition activity commences.	13 Feb 2026
Transition Complete (full service is on new platform and live	Transition activity is complete	31 Mar 2026

2. Introduction and Context

2.1. The Programme

- 1. The PKI Enduring Services (PKI-E) Programme is a DCC initiative geared towards the procurement of the Trusted Service Provider (TSP) contract. It seeks to ensure the continuity of the SMKI Service beyond the current TSP contract end date (March 2026 including the one-year extension) so there is no threat to the security of the DCC network.
- 2. The minimum scope of the Programme is to ensure continuity of the TSP Service beyond the current contract end-date. Depending on which option is progressed in terms of the final service, this may include migration of current certificates and key material to any new service and the decommissioning of the current service components. The solution will be specified to ensure there are no barriers to adding additional PKI solutions at a later date, such as the DCC Key Infrastructure (DCCKI) currently hosted within the DSP. However, any additional PKI solutions are not part of the scope of this Programme.
- 3. The design, build and test phases of the plan and the associated milestones are based upon assumptions on the solution that will be procured. DCC has included control points in the plan to review these milestones as more information becomes available. DCC will consider whether another LC 13B consultation is required to update future milestones at each of these control points.
- 4. It should be noted that on 2 August and 7 August 2023, the Smart Energy Code Administrator and Secretariat (SECAS) will hold workshops with the SMKI Policy Management Authority (PMA), the Security Sub-Committee (SSC) and the Department to discuss DCC's transition approach and wider Certificate strategy which could inform the assumptions made in this plan.

2.2. Secretary of State's Direction for the Plan for the continuity in the provision of the SMKI Service

- 5. On 12 May 2023, DCC was Directed in accordance with Condition 13B.2 of the DCC Licence to produce an implementation plan for continuity in the provision of the SMKI Service. The Direction sets out the following requirements relating to the SMKI Service.
 - i. The plan must set out the activities which DCC (including its current or any future External Service Providers) will need to undertake, and the deliverables which it will need to produce in order to enable delivery of this element of the Network Evolution Arrangements. The activities and deliverables must extend from the present to the future point in time when the SMKI Service is being operated in a business-as-usual manner under a successor contract.
 - ii. The plan must set out descriptions, timelines and interim milestones with associated dates for these activities and deliverables of the DCC (including its current or any future External Service Providers).
 - iii. The plan must identify the key interactions (including, but not limited to, use of test environments and release into the production environment) with other changes that DCC is progressing in timescales that affect the introduction of this element of the Network Evolution Arrangements, which may include (but is not limited to) the interactions with business as usual operations and interactions between the plan and other elements of the Network Evolution Arrangements.
 - iv. The plan must identify any activities, deliverables and events which are deemed as outside the control of DCC and its External Service Providers, and upon which DCC is

dependent in order to deliver this element of the Network Evolution Arrangements in accordance with the dates set out in the plan. Such dependencies may include decisions of relevant governance fora, in particular the SEC Panel and its Sub-Committees, and the Secretary of State. The plan must identify the date by which each such dependency will need to be met and how DCC will manage and facilitate these dependencies.

- v. Without limiting the generality of the above and taking account of lessons learnt by DCC to date, the plan must include details of engagement approaches envisaged, timelines and milestones for:
 - a. the steps leading up to the competitive procurement of new or amended Relevant Service Capability, including those associated with submission of business cases to the Secretary of State pursuant to Condition 16.6B of the DCC Licence;
 - b. ensuring that DCC does not need to rely on the current SMKI Service Provider beyond the timeframe determined by the duration of the current contract and its terms;
 - c. timely and effective industry and consumer representative engagement on their business needs;
 - d. design, development, build, testing and migration of software and hardware changes to the DCC Systems and (if relevant) Communications Hubs, plus any associated User trialling and testing, device interoperability testing and deployment into live operations;
 - e. any changes to the Smart Energy Code or to any licence conditions which are required to underpin this element of the Network Evolution Arrangements; and
 - f. the development of the go live decision-making framework to support the changes going live (including, but not limited to, independent external audit reports and the involvement of SEC Panel and its sub-committees).
- vi. The plan must provide for reporting of progress against the plan monthly (and where requested by the Secretary of State, more frequently) to the Department for Energy Security & Net Zero, the Implementation Managers Forum (IMF), the SMKI PMA and any other bodies specified from time to time by the Secretary of State for such purpose.
- vii. The plan must be submitted to the Secretary of State for approval (along with the other documents mentioned in Condition 13B.4 of the DCC Licence) no later than 25 September 2023
- 6. Accordingly, DCC has developed an Implementation Plan that meets the requirements of this Direction for the SMKI Service, and this document forms our consultation with the SEC Panel and all SEC Parties on the implementation plan in accordance with the requirements of Condition 13B.3 of the DCC Licence.
- 7. This document is structured as follows:
 - Section 3 of this document sets out the Plan activities and deliverables, including descriptions of different phases and timelines.
 - **Section 4** considers the delivery of the Plan against DCC's other deliverables over the plan lifetime, as well as in the context of broader industry change.
 - Section 5 considers the dependencies and assumptions which must be met in order to deliver and the dates by which they can be met.

- Section 6 sets out the risks and opportunities associated with the Plan, including dependencies identified in Section 5, and how DCC will mitigate and manage these.
- Section 7 focuses on DCC's customers and their engagement during the delivery of this plan, as well as DCC's perspective on the key milestones and phases that will impact them over the lifetime of the programme.

2.3. Timetable for consulting on and submitting the Plan

8. The Department have requested that the Plan is submitted to them by no later than 25 September 2023. In order to maximise stakeholder engagement, we will be developing the plan to the following timeline.

Date	Activity
28 July 2023	Consultation Opens
11 August 2023	Customer Webinar
1 September 2023	Consultation Closes
25 September 2023	Conclusions submitted to the Department along with final LC13B Programme Plan

3. Plan Activities and Deliverables

3.1. Delivery Approach

- 9. The TSP contract is an agreement between DCC and BT that covers the provision of the SMKI and IKI services. The contract ends on 31 March 2025, with an option to extend a further year to 31 March 2026. The services provided under the TSP contract constitute Relevant Service Capability under the DCC Licence and are subject to provisions in Licence Condition 16² which require that DCC ensures that the Secretary of State does not object to the procurement of Relevant Service Capability before entering into arrangements for its provision. As with its other core programmes (e.g. Communications Hubs and Networks), DCC will be following the HM Treasury Green Book³ guidance to develop its Outline and Full Business Cases for the procurement of the SMKI Service, which will follow the submission of the Strategic Outline Case.
- **10.** DCC has commenced this process, with a Strategic Outline Case submitted to the Department on 30 May 2023. Our Strategic Outline Case sets out the strategic, economic, commercial, financial and management cases for the programme, and describes at high-level our intended approach to delivery.
- **11.** This involves a full, competitive commercial process to procure a solution which ensures continued SMKI Service capability, followed by a period of design, build and test of the new capability and its deployment into live operation. We describe each of these aspects of the programme plan and associated deliverables in this Section 3.
- 12. The plan for this programme is based upon feedback obtained from the market via an RFI and from experience with the TSP Tactical solution. The TSP Tactical solution was a move between the previous end-of-life certificate signing solutions and new hosting arrangements within BT in 2021. This amounted to a very similar move as is required by the re-procurement referred to in this document. The principal differences being it involved the incumbent Service Provider and there was no need to re-develop a portal as that was re-used in its current form.
- **13.** DCC's current contract provides for a period of termination assistance beyond the end date of the contract. Should it be required, this period of termination assistance can be used to complete transition at any point in 2026.
- **14.** The delivery approach will have no degradation of service for our customers. The Programme will deliver against the mandatory requirements, including any functional and non-functional requirements set out in the SEC.
- **15.** DCC has set out control points at key points in the programme to validate the plan to reflect any emerging details. DCC will engage with industry and customers regarding any refinements to the plan at these control points.

3.2. Outline Business Case and Control Point 1

16. In the interest of promoting fair competition and understanding the solutions available on the market, DCC is running a competitive tender to evaluate provider interest in delivering the SMKI Service. DCC started this with a request for information (RFI), released to the market on 10 February 2023, accompanied by a virtual briefing event and a clarification drop-in session to support Service Providers in understanding the purpose of the RFI. The response submission deadline expired on 17 March 2023 and was followed by clarification workshops at the end of

² In accordance with Conditions 16.6A – 16.6C of DCC's Licence.

³ The Green Book is <u>guidance issued by HM Treasury</u> on how to appraise policies, programmes and projects, and the use of monitoring and evaluation before, during and after implementation.

April 2023. The output information from both of these engagement activities has been used to support the business case that DCC is building.

- 17. DCC will submit its Outline Business Case to the Department on 2 November 2023. Control Point 1 is aligned to the expected non-objection of the Outline Business Case and stage 1 of DCC's internal governance process. At this stage, we will have chosen our preferred option for procurement and will consider whether another LC 13B consultation is required to update future milestones.
- **18.** An ITT will then be released in January 2024, inviting potential Service Providers to propose a solution for DCC's consideration. This will be followed up with additional engagement during Q2 2024, to discuss DCC's requirements and clarify elements of the ITT responses.
- **19.** Following a period of evaluation and down-selection, a minimum of two preferred Service Providers will be invited to negotiate directly with DCC during Q2 2024. The Final Business Case will be submitted to the Department on 24 September 2024. We are planning that this will lead to a non-objection from the Secretary of State to procure the continued SMKI Service in November 2024.

3.3. Full Business Case and Control Point 2

- **20.** The conclusion of the commercial process and selecting the Service Provider to deliver the continued SMKI Service will be the second Control Point in the plan. DCC will use this time to validate its plan for the design, build, test and transition of the SMKI Service, and propose any amendments to the plan at this point. At this stage, we will have chosen our preferred Service Provider and will consider whether another LC 13B consultation is required to update future milestones.
- **21.** Control Point 2 is aligned with the expected non-objection by the Department to the Full Business Case and binding contractual terms with the successful bidder, allowing DCC to have greater certainty over deliverables. DCC will also engage the Competent Independent Organisation (CIO) at Control Point 2 to validate the approach to security.
- 22. Following Control Point 2, DCC will sign the contract with the successful bidder and undertake its design, build, test and transition activity, which we expect to start in late Q4 2024, and conclude in Q1 2026, aligned to the expiry of the current contract in March 2026. We expect this to be relatively straight-forward, and it will build on lessons learned by DCC in delivering design, build, test and transition phases in other programmes.

3.4. Design and Control Point 3

- **23.** The completion of the Design phase will be the third and final Control Point in the plan, prior to build, test and transition. At this stage, detailed design and transition plans will be complete and any regulatory changes confirmed. DCC will consider whether another LC 13B consultation is required to update future milestones.
- 24. At this stage, little is known about the detailed design, build, PIT and SIT stages of the programme as DCC are still assessing the various options. DCC have included dates for these phases of the programme based on high level assumptions of timeframes. As DCC engages with potential vendors and moves through the market engagement, procurement and contracting activities, a clearer view on the build, PIT and SIT activities will emerge. At this stage DCC expects to follow a similar testing approach to that used in the delivery of the TSP Tactical solution (see section 3.1

for more detail on the TSP Tactical Solution)⁴ with a standard regulatory SEC approach to PIT, SIT and UIT. The Test Approach will be defined and agreed with the Testing Advisory Group (TAG).

3.4.1. User Integration Testing

25. DCC is proposing an eight-week window for UIT following confirmation of SIT Exit to allow customers to validate their processing against any new TSP Service (note that this spans the December 2025 Christmas period). DCC encourages customers to participate in the UIT phase and will report the outcome to the Operations Group.

Question 1	Is there anything further that you would like us to consider within our planning activities? Please provide any details.
Question 2	Do you agree with the proposed LC13B plan? Are there any milestones that you consider should be included that are not? Please provide a rationale for your views.

3.5. Lessons Learned

DCC have, through the experience gained in managing the TSP and other PKI arrangements, identified the following key lessons which it will apply to the SMKI Service Programme:

1. **Including contingency in plans:** Previous programmes have issued non-contingent plans which has led to frequent slippage. This programme intends to include reasonable contingency in future plans, factoring in estimates for long-duration activities such as the design, build and test phase.

The plan for this programme is based upon feedback obtained from the market via an RFI and from experience with the TSP Tactical solution. The milestone for completion of transition is scheduled for March 2026 which aligns to the current contract end date (including the one-year extension). DCC's current contract also provides for a period of termination assistance beyond the end date of the contract. Should it be required, this period of termination assistance can be used to complete transition at any point in 2026.

- 2. Ensuring clarity in requirements: DCC will avoid high-demands placed upon subject matter experts which in the past has posed an issue in ensuring they have sufficient input to the generation of clear, high-quality requirements, which can in turn lead to misunderstandings in requirements between DCC and potential Service Providers. This programme intends to ensure there is mutual understanding on requirements by planning subject matter expert engagement in advance and engaging regularly with industry. DCC will also engage industry on the requirements via the SECAS-led workshops with the SMKI PMA and the SSC in August 2023.
- **3.** Baseline of requirements and detailed designs ahead of build and test phase: Previous programmes have moved into the build and test phase without stable requirements and designs, resulting in delays and re-work driven by a high volume of test defects.
- 4. Shift testing left: Previous programmes have found defects during the systems integration test phase which could have been identified much earlier on during PIT. The programme intends to conduct much more thorough testing in PIT as well as enhancing governance around PIT exit. This

⁴ The TSP Tactical solution was a move between the previous end-of-life certificate signing solutions and new hosting arrangements within BT in 2021 and amounted to a very similar move as required by the PKI re-procurement referred to in this document the principal differences being it involved the incumbent supplier and there was no need to re-develop a portal as that was re-used in its current form.

should result in defects being found and fixed earlier which will reduce the risk of slip in later test phases.

5. **Governance and customer engagement:** DCC will ensure there is sufficient time for these activities in the programme delivery plan. The programme will complete all relevant governance, stakeholder and customer engagement activities, subject to the time constraints of the programme overall.

Question 3

We would welcome comments on DCC's lessons learned. Are there any we have not listed, or lessons in the list which should be discounted?

3.6. Transition and Decommissioning

- 26. Conceptual solution options and architectures for the SMKI Service are still being considered and evaluated. It will be some time before logical and physical architectures are defined for the target solution chosen and more specific transition strategies, approaches and detailed plans can be developed.
- **27.** DCC will develop a transition approach during the shape⁵ and design stages of the Programme (see Appendix A for timelines). The main consideration when developing this approach will be to minimise impact to DCC's customers and to prevent any detrimental impact to consumers.
- **28.** The transition approach will be based upon the moving of key material to the new Service Provider solution under suitable controls. This will be in line with industry/regulator risk appetite and the requirements of the SEC.
- **29.** This transition activity will be closely related to the approach DCC adopted in 2021 for the TSP Tactical Solution. The principle of moving key material is fundamental to ensuring minimum impact on the industry by avoiding unnecessary rotation of Device certificates. The low-level detail could vary dependent on the Supplier selected. We do, however, have experience courtesy of the tactical approach and more recently with the Enduring Change of Supplier (ECoS) Programme, in the procedures of shifting key material between sites/systems.
- **30.** The transition approach will be built upon the outcomes of the SECAS-led workshops in August 2023. The level of detail around the transition approach will be developed and refined in more detail in the Outline Business Case and Full Business Case. The final transition plan will be confirmed at the end of the design phase in line with the milestone table.
- **31.** DCC will set out more detail in relation to the transition in subsequent industry and customer engagement and will agree the approach with the Department, the SEC Sub-Committees and other stakeholders.
- **32.** Decommissioning activities where required will commence after transition to any new service with infrastructure components being securely destroyed with witnessing where required.

Question 4

We would welcome any early views on transition and decommissioning from our Stakeholders. Please provide as much detail as possible.

⁵ The Shape stage and includes defining detailed requirements, delivery approach and confirming the resource plan.

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3.7. Regulatory Change

- **33.** As with other DCC delivery programmes, it is possible that changes to the regulatory framework are required to underpin the SMKI Service. There are a number of considerations and variables which may have an impact on the extent and timing of these changes. These include:
 - **a.** Whether the Service that DCC procures seeks to introduce future capability improvements or will provide a like-for-like service as set out in the SEC. Which of these is delivered will depend on stakeholder views and cost-benefit analysis.
 - **b.** Whether the Service will introduce a new Service Provider. We expect that there would be additional complexity where DCC provides the SMKI Service through a new Service Provider which could introduce more transitional requirements on DCC and SMKI Service Users.
- **34.** At this stage in the programme, DCC is not able to precisely set out the timing of these changes. However, DCC has added milestones in Appendix B setting out when we expect the scope of these regulatory changes to be confirmed. Any changes will be made sufficiently in advance of the start of Users' involvement in testing.
- **35.** Considering the current proposed milestones, DCC believes any regulatory changes need to have been confirmed by end of March 2025.

4. Plan interactions with other DCC and industry change

36. The delivery of the SMKI Service Programme will take place during a period of significant change in the energy sector. In this section we assess the key changes in which DCC is involved and set out how we propose to manage contention across this portfolio of change.

4.1. Smart Energy Code Releases

- **37.** The SEC releases that will take place up to the design, build and test phase of the programme are being tracked within DCC. Whilst the content of each is not finalised, we can anticipate probable change and use this to develop our approach to manage contention. It will be important that testing requirements for DCC Users are understood for SEC releases and that impacts on the testing in the SMKI Service plan (and vice versa) are also understood.
- **38.** Whilst the scope of change for 2025 and 2026 SEC Releases is unknown, DCC will monitor approved SEC modifications scheduled for these releases and add, remove and/or manage risks as they arise.
- **39.** It is highly likely that the February 2025 and February 2026 SEC Releases will be document only (non-DCC System impacting) SEC Releases, and DCC is not planning for any system changes, associated testing, or go-live governance for system readiness.

4.2. Network Evolution – Communications Hubs and Networks

- **40.** DCC is due to start the enduring supply of 4G Communications Hubs on 30 June 2025, in alignment with the current approved LC13B plan for its Communications Hubs and Networks programme. DCC is of the view that the testing phases related to the transition to 4G Communications Hubs will be complete when the SMKI Service Programme enters its testing phases.
- **41.** From July 2025, DCC will be transitioning to 4G Communications Hubs and it is anticipated that this will be completed during the testing phase of the SMKI Service Programme and that there will accordingly be no contention between the two programmes.

4.3. Data Services Provider (DSP) – DCCKI considerations

- **42.** PKI-E will be focused on reprocuring the TSP Service, which is the largest of the PKI applications, which needs to be in place ahead of the current contract end date of March 2026.
- **43.** The procurement of DSP and PKI-E are not dependent on each other. However, placing extensibility arrangements within the new contract will allow accommodation of other PKIs as a subsequent initiative if required. This would avoid blocking any such strategic changes as these programmes develop and limits any dependency complications on the part of this procurement. For the avoidance of doubt, the DCCKI⁶ hosting option would only be aimed at the signing service element, and the repository would remain in the consuming service as per SMKI, in this case DSP.

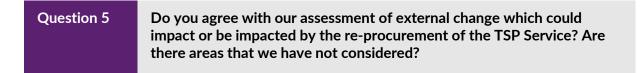
⁶ DCCKI is the PKI hosting currently within DSP for several uses principally protecting the communications to devices. As part of the DSP re-procurement it has been suggested the Certificate Authority for DCCKI would sit well within the TSP as historically it was commissioned after TSP had been set-up. This fits in with PKI strategy but cannot be confirmed at this stage, so as to ensure no barriers are put in place as part of this re-procurement.

This allows for better alignment in governance of certificate issuance and certificate utilisation as we have with TSP.

4.4. Market-wide Half Hourly Settlement

- 44. Elexon are currently overseeing a transition to market wide half-hourly settlements (MHHS) for all energy consumers for this Ofgem sponsored programme. This programme will require significant change across the industry and will impact DCC.
- **45.** The MHHS SEC Modification MP162 has been approved by Ofgem to introduce a new DCC User (Meter Data Retrieval Agents MDRA) and Party to the SEC who can retrieve the data on behalf of electricity suppliers for settlement purposes. DCC is working with our contracted service providers to fulfil the MHHS requirement of additional capacity to accommodate over 17,000 half-hourly readings per year per meter. The DCC's MHHS required changes are planned to go-live in the June 2024 SEC Release. This supports the wider programme timings, with migration of consumers to half-hourly settlements due to start in April 2025 and complete in October 2026.

46.



5. Dependencies and assumptions

47. In this section we set out the external dependencies and assumptions – i.e. those over which DCC does not have direct control – that underpin the plan. The tables below capture these.

5.1. Dependencies

Ref	Title	Who	Remediation	Description
D1	Review and non- objection to Outline Business Case	The Department	Provide non-objection in line with the published plan.	DCC's Licence requires that DCC submits its proposals for TSP procurement to the Secretary of State and the procurement can only proceed where they do not object. We will do this through the submission of the Business Cases to the Department ahead of contract award. DCC will not progress to ITT without this dependency being met
D2	Review and non- objection to Full Business Case	The Department	Provide non-objection in line with the published plan.	DCC's Licence requires that DCC submits its proposals for TSP procurement to the Secretary of State and the procurement can only proceed where they do not object. We will do this through the submission of the Business Cases to the Department ahead of contract award. DCC will not progress to contract signature without this dependency being met
D3	SEC Panel to provide a view to DCC on SEC Party business needs as well as User costs as a result of the Programme	SEC Panel SEC Parties	Work with the SEC Panel on implementing the Programme Assurance Policy (PAP) and provide options analysis as the Programme develops	The PAP requires DCC to share with Users critical artifacts as the Programme develops to enable them to reach informed opinions about the value of the business needs

5.2. Assumptions

Ref	Title	Description
A1	The current Contract for the TSP Service will be extended by 1-year to 31 March 2026	DCC will extend the contract with the current TSP Service provider in line with the provision to do so in the current contract
A2	There is no hard dependency between the PKI-E Programme and the DSP Programme	The functionality currently delivered by the DSP (e.g, SMKI Repository, DCCKI) will remain with the DSP for the duration of the PKI-E Programme
A3	PKI-E Programme testing will be carried out against the current DSP system and scope	The functionality currently delivered by the DSP (e.g, SMKI Repository, DCCKI) will remain with the DSP for the duration of the PKI-E Programme
A4	The existing Certificate Authorities will be moved to the new service	This will avoid unnecessary impacts to Service Users and Devices
A5	DCC has planned sufficient time for the design, build and test phases	At this stage we do not know the preferred option or Service Provider. DCC assume the milestones for design, build and test milestones are deliverable based upon responses received to the RFI and DCC's experience with the TSP Tactical Solution. DCC has included control points to validate these milestones at the appropriate stages.
A6	Extensibility will not materially impact the complexity or timescales of the Programme	Extensibility is in excess of a minimum viable product (MVP) solution. DCC does not believe this would materially increase the costs, complexity, or timescales of the solution but we will review and validate this assumption at control point 1 (Outline Business Case).

Question 6	Do you agree with our assessment of dependencies for the re- procurement of the TSP Service? Are there any which are not included but should have been?
Question 7	Do you agree with our assumptions for the re-procurement of the TSP Service? Are there any which are not included but should have been?

6. Risks and Opportunities

48. In this section we set out the risks associated with the delivery of the plan.

6.1. Risks and opportunities

49. The table below sets out the risks associated with the plan that DCC has identified.

Ref	Description	Impact	Mgt Strategy
R1	The re-procurement and transition to a new TSP service does not complete in sufficient time ahead of the current TSP contract end- date	The duration of the design, build, test and transition phases may be an underestimate, resulting in a risk that the new service is not ready by the TSP contract expiry date.	DCC will ensure continuity of service through the termination assistance provisions in the current contract if required. This would enable transition to occur throughout 2026.
R2	External Governance may lead to delay	Delays in external business case governance may impact the timeline for implementing the replacement solution which could result in a lapse of the PKI service.	Mitigated through regular and early engagement with external stakeholders, captured in a stakeholder engagement plan. The stakeholder engagement plan will include what is required from stakeholders to support business case development and governance.
R3	External technology changes or threats may diminish the effectiveness of the SMKI Service	Significant technological advancements and their adoption may pose a threat to the security arrangements put in place by a PKI service (e.g. quantum cryptography).	Mitigated through continuous monitoring of the security landscape to identify advances and assess their impact on the implemented PKI service. The service is to be sized to be able to meet future demand and adopt latest approaches to addressing advances in PKI.

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Do you agree with our assessment of risks associated with the reprocurement of the TSP Service? Are there any which are not included but should have been?

7. Customer Journey and engagement

7.1. Overview

50. In this section we set out the sequential key points in the delivery of the plan which will impact or require action from customers. We also describe the engagement we will undertake during the delivery of the plan, and the role of industry in go-live decision-making points.

7.2. Customer Journey and key milestones

Activity	Description	Date
Consultation on Plan (this document)	DCC will consult on the plan for the Programme with industry and provide industry with the opportunity to feedback any impacts as a result of the plan	Q3 2023
Customer Impacts	DCC engages customers to highlight potential customer impacts arising from any change	Q1 2025
Participation in UIT	Customers encouraged to participate in UIT	Q4 2025
Readiness for Service Transition	DCC engages customers to ensure readiness for Service Transition	From Q4 2025

7.3. Engagement during plan delivery

51. The table below sets out DCC's planned engagement with stakeholder governance bodies during the delivery of the plan.

Activity	Description	Date
Business Needs and Requirements	DCC will engage with customers across the Sub-Committees to outline and understand the requirements that need to be met for the business and users	Q1 2023
Solution Options/Business Case (OBC/FBC)	Engaging with customers to provide justification for why the programme should go ahead and detailing any potential solution options that have been developed for discussion and review	From Q2/3 2023
Impact Assessments (User and SEC)	DCC will investigate the scope and approach and potential impacts to Users and SEC to build an informed view of how to proceed the programme	Q3/4 2023
Design Options	DCC will work up detailed design with the successful bidders and will engage primarily with the SMKI PMA, the SSC and the Technical Architecture and Business Architecture Sub-Committee (TABASC) and on these following contract award and ahead of detailed design finalisation	Q1 2025
Test Approach Documents	DCC will continue to liaise with the TAG and testing stakeholders on any revised requirements to support testing for the programme	Q2/3 2025

PIT Testing	DCC will update customers and feedback on progress with PIT Testing to the TAG	Q2/3 2025
SIT Testing	DCC will update customers and feedback on progress with SIT Testing to the TAG	Q3/4 2025
Transition Planning	DCC will engage with customers to provide transparency over progression of transition activities and to seek endorsement for a "go-live" decision	Q4 2025 / Q1 2026
Readiness for Go-Live	DCC will prepare a final readiness report once all steps have been completed. This report includes views from the SSC, SMKI PMA, Operations Group and the TAG on Live Service Criteria, Component readiness and risks/issue mitigation for SEC Panel recommendation and determination by the Department	Q4 2025 / Q1 2026
Go-Live and Operational Updates	DCC to engage regularly with the Operations Group on operational readiness and transitional arrangements to support the role of the SEC Panel in Go-Live decision making	From Q3 2025
Lessons Learned	Identify and share lessons learned with industry	Q2/2 2026

7.4. Governance and Stakeholder engagement

- **52.** Engagement with all stakeholders, including the Department, the SEC Sub-Committees and our customers will occur throughout the lifecycle of the programme. DCC has already engaged with the SEC Panel, the SMKI PMA, the SSC and the Operations Group in relation to establishing the business needs as part of the development of the Strategic Outline Case ahead of issuing an RFI as part of market engagement.
- **53.** DCC will continue to engage with the SEC Panel and its Sub-Committees in relation to the Secretary of State direction set out above ahead of Outline Business Case and Full Business Case non-objection from the Department with particular reference to validating the business needs.
- **54.** Given the impact this Programme has on the security architecture, DCC will ensure the SMKI PMA and the SSC are kept informed and are adequately consulted throughout the duration of the Programme. DCC will also engage the CIO to provide independent security assurance of the solution.

7.5. Wider Industry Engagement

- **55.** DCC is planning to engage more widely with industry through consultation on the transition approach (which is likely to have the biggest impact on SEC Parties) and on any proposed changes to the SEC which would be amended under Secretary of State powers.
- **56.** DCC will also share updates on the DCC Website, partner newsletters, at the quarterly finance forum and at the small and independent suppliers' forums as appropriate.

7.6. Implementation Managers Forum and Smart Metering Delivery Group (SMDG)

57. Once the plan is baselined, DCC will provide regular updates on progress towards the identified milestones at the IMF and SMDG monthly meetings.

Question 9	you support DCC's proposals for engagement with stakeholders ng the delivery of the plan? Please tell us why.	
Question 10	Are there any changes that DCC users would like to see included within the scope of the procurement?	

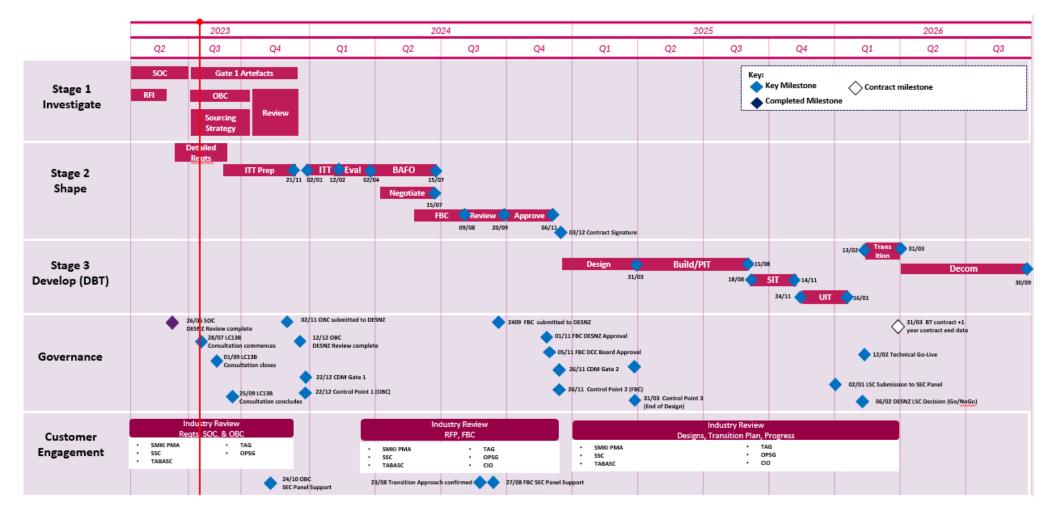
8. Next Steps

- **58.** This consultation closes at **17:00 on Friday 1 September 2023**. Please email your response to consultations@smartdcc.co.uk.
- **59.** DCC reserves the right not to publish, or to delay publication of, referenced material or documents and/or respondent feedback for confidentiality, commercial, compliance and/or legal reasons.
- **60.** Subject to paragraph 59:
 - **a.** consultation responses may be published on our website www.smartdcc.co.uk. Please state clearly in writing whether you want all or any part, of your consultation to be treated as confidential. It would be helpful if you could explain to us why you regard the information you have provided as confidential.
 - **b.** Please note that responses in their entirety (including any text marked confidential) may be made available to the Department and the Gas and Electricity Markets Authority (the Authority), who are subject to public law duties and obligations as regards such information and its publication, entirely separate to DCC.
- **61.** If you have any questions in relation to this consultation, please contact DCC via consultations@smartdcc.co.uk.

1	Is there anything further that you would like us to consider within our planning activities? Please provide any details.
2	Do you agree with the proposed LC13B plan? Are there any milestones that you consider should be included that are not? Please provide a rationale for your views.
3	We would welcome any early views on transition and decommissioning from our Stakeholders. Please provide as much detail as possible.
4	We would welcome comments on DCC's lessons learned. Are there any we have not listed, or lessons in the list which should be discounted?
5	Do you agree with DCC's assessment of interaction with other programmes. Are there any interdependencies that DCC has not identified, or incorrectly identified? Please provide a rationale for your views.
6	Do you agree with our assessment of dependencies for the re-procurement of the TSP Service? Are there any which are not included but should have been?
7	Do you agree with our assumptions for the re-procurement of the TSP Service? Are there any which are not included but should have been?
8	Do you agree with our assessment of risks associated with the re-procurement of the TSP Service? Are there any which are not included but should have been?
9	Do you support DCC's proposals for engagement with stakeholders during the delivery of the plan? If not, please tell us why.
10	Are there any changes that DCC users would like to see included within the scope of the procurement?

9. List of Consultation Questions

Appendix A – Plan on a Page



Appendix B – Milestone Table

#	Key Milestones	Description	Target Dates
1.	Strategic Outline Case Complete	All DCC Internal approvals complete and no objections from the Department	26 Jun 2023
2.	SEC Panel and Panel Sub-Committee engagement completed prior to Outline Business Case submission	SEC Panel and Panel Sub-Committee are updated and their views on business needs are captured and taken into account before submission of the Outline Business Case	24 Oct 2023
3.	Outline Business Case Submission	All DCC Internal approvals complete. Outline Business Case issued to the Department for review	2 Nov 2023
4.	Department decision on non-Objection to Outline Business Case	Non-objection to OBC confirmed by the Department	12 Dec 2023
5.	Control Point 1 (Outline Business Case)	DCC to consider whether a further LC13B consultation is required to update future milestones. If applicable, a request will be made to the Department	15 Dec 2023
6.	Proposed scope of regulatory change	DCC will confirm the high-level regulatory change anticipated at this stage	15 Dec 2023
7.	ITT Pack Issued	Tender pack issued to bidders.	2 Jan 2024
8.	Tender Submissions	Deadline for tender submission	12 Feb 2024
9.	Best and Final Offer (BAFO) Pack Issued	Vendor response evaluation complete and BAFO pack issued	23 Apr 2024
10.	Transition approach confirmed	DCC will share with industry its approach to transition	23 Aug 2024
11.	SEC Panel and Panel Sub-Committee engagement completed prior to Full Business Case submission	SEC Panel and Panel Sub-Committee are updated and their views on business needs are captured and taken into account before submission of the Full Business Case	27 Aug 2024
12.	Full Business Case Submission	All DCC Internal approvals complete. Full Business Case issued to the Department for review	24 Sep 2024
13.	Current contract extension (plus one year)	Current contract provision for a 1-year extension to March 2026 invoked and in-place	30 Sep 2024
14.	Department decision on non-Objection to Full Business Case	Non-objection to FBC confirmed by the Department	1 Nov 2024
15.	Control Point 2 (Full Business Case)	DCC to consider whether a further LC13B consultation is required to update future milestones. If applicable, a request will be made to the Department	26 Nov 2024
16.	Contract Signature	Contract signed and awarded, vendor onboarding in progress. Detailed design phase initiated.	3 Dec 2024
17.	Design, Built, Test - Designs Complete	Detailed design complete and approved by the DCC Cross-Functional Design Authority (CFDA)	31 Mar 2025
18.	Transition Plan Complete	Detailed transition plan complete and approved by the DCC Cross-Functional Design Authority (CFDA)	31 Mar 2025
19.	Confirmation of regulatory change	DCC will confirm the final proposals for any regulatory drafting changes needed for the PKI-E programme along with plans for its delivery.	31 Mar 2025

20.	Control Point 3 (end of design)	DCC to consider whether a further LC13B consultation is required to update future milestones. If applicable, a request will be made to the Department	31 Mar 2025
21.	Design, Build, Test – PIT commences	Start of PIT phase subject to earlier TAG approval of the Test Approach Documents and PIT entry criteria being met	1 Jul 2025
22.	Design, Build, Test – PIT exit	All PIT Exit approvals in place	15 Aug 2025
23.	Design, Build, Test - SIT Commences	Start of SIT phase after successful PIT Exit and SIT entry criteria met	18 Aug 2025
24.	Design, Build, Test – SIT Exit	Internal approvals in place (Test Assurance, CRB) and completion report submitted to TAG	14 Nov 2025
25.	Design, Build, Test - UIT Commences	UIT Window opens to enable customer testing to commence	24 Nov 2025
26.	Live Service Criteria: Go-live submission	SEC Panel to consider the evidence submitted by DCC against live service criteria and make a recommendation to the Department	2 Jan 2026
27.	Design, Built, Test – UIT Ends	UIT Window closes	16 Jan 2026
28.	Live Service Criteria: Go-live decision	Live Services Criteria decision by the Department	6 Feb 2026
29.	Technical Go Live	New service goes live. This is infrastructure only prior to any transition activity	12 Feb 2026
30.	Transition Start (by Certificate Authority)	Transition activity commences. This is expected to include migration of CAs from the old service to the new service. Details will be confirmed in the Transition Plan	13 Feb 2026
31.	Transition Complete (full service is on new platform and live	Transition activity is complete	31 Mar 2026
32.	TSP Contract End Date (including one- year extension)	Contract-end date of the current TSP Service (excluding any Termination Assistance services and decommissioning)	31 Mar 2026
33.	Original service decommissioning starts	Decommissioning of the old service components commences	1 Apr 2026
34.	Original service decommissioning ends	Decommissioning of the old service components completes. Decommissioning report and audit trail provided	30 Sep 2026