

# Conclusions on DCC's delivery plan for SMETS1 Services

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# Table of Contents

- Executive Summary .....3**
- 1. Structure of this document .....4**
- 2. Draft DCC Plan for Consultation.....5**
- 3. Responses to consultation questions .....5**
- 4. Programme Status Update .....12**
- 5. DCC conclusions .....14**
  - 5.1 Assumptions and dependencies.....14
  - 5.2 Summary of changes to the plan.....17
  - 5.3 Confidence in delivery .....19
  - 5.4 Next steps .....20
- Annex A –Milestone Table .....21**
- Annex B –Plan on a Page.....23**
- Annex C –DCC Integrated Plan on a Page.....24**

## Executive Summary

In the initial stages of the smart meter roll-out across Great Britain, a number of Energy Suppliers installed first generation smart devices (known as SMETS1 devices) in consumers' homes. SMETS1 devices installed by one Energy Supplier, however, are not always interoperable with and supported by another supplier's systems. The Data Communications Company (DCC) has been developing a plan for the incorporation of SMETS1 meters into its national network. It provides important shared benefits for industry and consumers; particularly the ability for all SMETS1 customers to maintain their smart services following a decision to switch suppliers. Second generation or SMETS2 meters will be operated via the DCC's national network from the outset and allow smart switching between suppliers as standard.

Following a direction to develop its SMETS1 delivery plan from Government, DCC first consulted with energy market participants on a draft of the delivery plan. The plan was issued for consultation on 12 May 2017, and included a set of questions seeking views on DCC's approach, the milestones included in the plan, and the timetable for delivery.

Consultation feedback has been invaluable, providing DCC with insight into its customers' views. Many customers supported the overall delivery approach, but noting the ambitious nature of the plan, proposed that its timetable should be extended to ensure both DCC and its customers have enough time to build and robustly test their systems. This feedback has been echoed in DCC's bilateral engagement with prospective SMETS1 service users. DCC has listened to this feedback and amended its proposals accordingly.

In June 2017, the Department for Business, Energy and Industrial Strategy (BEIS) provided DCC with guidance on how to refine and simplify the design options relating to how meters are integrated, the interface DCC's customers will use to connect to it and guidance on pre-payment functions and security. This guidance has provided DCC with further insight into how the SMETS1 service should be delivered. DCC has continuously engaged with its service providers, BEIS and industry parties to develop these options in more detail and obtain the necessary analysis and evidence enabling BEIS to reduce these options even further.

Based on the information received from respondents and Government, and from DCC's early findings, DCC has concluded that the target date at which the SMETS1 service could be first made available to customers is set at the end of November 2018, with incremental functionality and capability introduced over 7 months, with the final scope of the Service in place by the end of June 2019. In summary, the reasons for adjusting the SMETS1 service delivery timeline are as follows:

- General feedback and concern from industry, querying the feasibility of the timetable, notably around users readiness to test and enrol;
- the inclusion of additional time to work through the complexities surrounding the architectural design of the SMETS1 service and for the detailed design to be effectively captured in revised regulatory documentation;
- the inclusion of additional time required to conclude and formalise the enduring commercial arrangements with existing and new service providers;
- the inclusion of additional time to support a larger scope for the Initial Operating Capability (IOC) and a longer period of testing i.e. the extended testing phase for SIT to 5 months; and

- the effective planning and delivery of the SMETS1 service alongside DCC's other activity in 2018 (including the provision of dual-band Communications Hubs) . This will reduce the risk of contention in DCC's testing environments and allow customers to plan for changes to their systems.

We note that design and implementation path optionality still exists in the plan. DCC expects to receive further guidance and direction from Government as it provides BEIS with additional information gathered through ongoing engagement with service providers and customers. DCC continues to maintain a set of assumptions, dependencies and risks to the plan and is reviewing these continually with a view to providing BEIS with sufficient cost information, security analysis, delivery confidence and project plans for different meter populations by 17 November 2017. DCC will continue to gather this data beyond this milestone and will ensure BEIS is kept informed of significant updates as they proceed through their consultation.

Given the proximity in delivery dates with SMETS2 R2.0, DCC will continue to monitor progress of both plans on a regular and on-going basis, at industry meetings to ensure timely analysis and mitigation of any issues arising that may affect the respective schedules.

## 1. Structure of this document

This document summarises the plan submitted to the Secretary of State in accordance with Condition 13 of the Smart Meter Communication Licence (the Licence). It comprises 4 main sections. **Sections 2 and 3** provides an overview of the four distinct phases of the delivery plan, as well as a summary of the feedback which has been received in response to the 5 specific questions asked in the consultation. **Section 4** outlines a status update of the activities set out in the SMETS1 delivery plan and provides a status update covering the areas of work which DCC has undertaken, across the different phases. **Section 5** sets out DCC's overall conclusions in light of the total evidence gathered (from the consultation, wider stakeholder engagement and guidance/instruction from BEIS) and the most appropriate way to deliver the SMETS1 service.

A revised milestone table, an updated plan-on-a-page and a DCC Integrated plan-on-a-page are set out in Annexes A, B and C respectively.

## 2. Draft DCC Plan for Consultation

On the 12 May 2017, DCC issued a consultation on its draft plan for the delivery of a SMETS1 service, following a Direction from the Secretary of State, and in accordance with Condition 13 of the Smart Meter Communication Licence (the Licence). As is the case with the development of all plans, in accordance with Condition 13 of the Licence, the proposed content of such plans requires to be consulted first with the Smart Energy Code (SEC) Panel and all SEC Parties. This document constitutes DCC's consideration of the answers received in response to this consultation, as well as its submission of the final draft plan for approval by the Secretary of State.

The plan issued out for consultation set out the timetable, activities and the approach being proposed by the DCC to enable the delivery of the SMETS1 service in the most economic and efficient way possible, across four distinct phases as follows:

- an **Initiation Phase** – in which DCC submitted its final Initial Enrolment Project Feasibility Report (IEPFR) to the Department for Business, Energy and Innovation Strategy (BEIS), enabling BEIS to decide and/or provide direction and guidance on the options set out in the IEPFR. Additionally, during this phase DCC has continued to further explore the SMETS1 market to obtain a better understanding of the time and cost implications of the integration path options; technical feasibility; both new and existing service provider capabilities; as well as preparing itself for the next phase within this programme i.e. the discovery phase;
- a **Discovery Phase** – in which DCC has sought to gauge capability and better inform BEIS as to which delivery option(s) is/are most appropriate through commercial negotiation and initial development activity with Smart Meter System Operators (SMSOs), as well as the incumbent and new Service Providers;
- a **Development Phase** – in which DCC seeks to commence with the development of the Integration Path solutions to improve understanding of delivery confidence, cost information, as well as to include a BEIS checkpoint for decisions to proceed; and
- a **Transition & Enrolment phase** – in which DCC will seek to finalise the development and integration testing of its solution(s), and enable suppliers to carry out user integration testing with the DCC before undertaking any necessary end-to-end testing and enrolment activities.

The consultation also included a milestone table setting out planned dates for key activity, supported by two plans-on-a-page, along with an assessment of the assumptions and dependencies on which the plan is based.

## 3. Responses to consultation questions

Within its consultation, DCC requested industry to consider five specific questions. In total, 18 organisations responded, providing direct responses to some or all of the questions together with higher level comments on the overall delivery plan. Respondent groups included large and small energy suppliers, distribution networks, trade organisations, as well as other smart metering market participants. A high-level overview of the responses against each of the questions is summarised below.

Q1

Please provide your views on DCC's proposed approach to delivery, for example whether the phases are appropriate and the parallel activity with prospective SMETS1 Service Providers.

15 parties responded to question 1 directly. Whilst several agreed that the phases set out in the plan seemed appropriate, some respondents suggested they should have a standard naming convention. It was noted that there were milestones, but not necessarily clear success criteria for exiting phases of the plan.

Several responses noted concerns regarding the approach, including querying how parallel activities will be coordinated for effective decision making. Some respondents noted that some level of parallel activities seemed sensible to drive the best value from prospective Service Providers. One respondent queried whether the DCC has the required resource for the needed parallel activity as set out in the plan.

Respondents offered the following suggestions for additional content that they considered necessary to be captured in the plan:

- the need to factor in the considerable impact of migration on suppliers, including their back office systems and in particular with regard to the variable number of services these would need to cater for; not only different current SMETS1 offerings but also differences between SMETS1 and SMETS2. Respondents generally felt the need for more detail on migration;
- the need for the defined testing of migrated cohorts through Change of Supplier (CoS) processes before SMETS1 services go into production, with firmware needing to be thoroughly tested; and
- in respect of commercial decision making, one respondent stressed the need for a cautious approach on contract finalisation, noting that the predicted timings for commercial discussions seem optimistic.

There was a desire for the December 2017 BEIS decision to be brought forward in order to provide further time to build and prepare for testing. One respondent indicated that the phases were only appropriate as long as there was clarity on all optionality by June 2017. Many respondents stressed their desire to maintain strong stakeholder engagement.

One respondent suggested it was opportune to add a closure / benefits realisation phase, noting that it was vital that the approach to managing SMETS1 meters is based on overall costs, as opposed to merely being focussed on speed. One respondent also questioned the feasibility of achieving the SMETS1 services in a cost-effective manner on one platform.

### DCC's response

DCC notes that several respondents expressed overall support to the approach set out in the plan, but in particular recognises industry's views and concerns regarding the impacts of migration. In regards to transition and migration, it should be noted that DCC has and continues to engage bilaterally with key stakeholders to explore in more detail the testing services that will be built into the plan once design and procurement activities provide more certainty in terms of scope and timing. These will be made available to customers in terms of transitional testing requirements, alongside rules relating to migration, in further detail in subsidiary documentation, including a Testing Approach Document for SMETS1 as well as the introduction of a supporting Transition and Migration Approach Document (TMAD).

Regarding comments relating to the timeliness of the December 2017 decision by BEIS, DCC notes that the response from BEIS in June 2017 has provided an early indication of how the SMETS1 service will be delivered.

With respect to DCC's resourcing, it should be noted that DCC has built up dedicated teams to ensure the efficient delivery of the SMETS1 service alongside any other parallel activities. This includes dedicated procurement and commercial teams who are ensuring cost-effective and efficient processes, focussing on delivering value-for-money for customers.

**Q2**

**Do you think the milestones in the plan are appropriate – are there any additional milestones you would expect to see at this stage?**

15 parties responded to question 2 directly. Generally, respondents were of the view that the proposed milestones seemed appropriate. Several others suggest additional milestones could or should be added, including:

- for users – testing of migration and operation of their own cohorts;
- decisions on when and how cohorts should be enrolled for each cohort;
- detail of further SEC Subsidiary Document tranches;
- firmware/configuration updates for meters; and
- specific meter testing ahead of the SMETS1 service's Initial Operating Capability (IOC).

Several respondents considered that the milestones focussed on intangible events, as opposed to more tangible, specific deliverables such as products, or the availability of services.

One respondent considered that it would be useful to understand the criteria which are being used by BEIS in its decision making with regard to whether milestones have been met.

Further comments noted that milestones are heavily reliant on assumptions and decisions that, at the point of consultation, are yet to be made by BEIS, and that timely and pragmatic decisions are needed to reduce delay. Finally, respondents queried what the consequences would be if the milestones were not met.

### **DCC's response**

DCC notes that most respondents considered the milestones to be appropriate, and expects that further, more specific milestones will be added to the plan in due course as the plan progresses to the development phase.

In respect of when decisions will be made on when and how meter cohorts are expected to be enrolled, it should be noted that such decisions will be based on DCC's engagement and discussions with BEIS as well as customers as part of the ongoing work to develop the arrangements relevant to migration.

Regarding the implications for DCC failing to deliver against milestones in the plan, DCC expects that these will be subject to an incentive regime governed under DCC's Licence as has been the case for its other SMETS2 delivery plans.

It should furthermore be noted that in recent months, and where possible, DCC has identified clear milestones relevant to the testing of services as well as the delivery of subsidiary documents.

In terms of clearly identifying the criteria which will be used by BEIS in making a decision with regard to whether milestones have been met or not, it should be noted that BEIS is minded to consult on this matter in due course.

**Q3**

**Please provide your overall views on the timetable for the plan. DCC is specifically interested in views relating to timing and assumptions underpinning user readiness for test activity.**

13 parties answered question 3 directly. Whilst one respondent welcomed the ambitious nature of the plan, a majority of respondents expressed concern around the feasibility of meeting the milestones within the timetable; notably user readiness to test and enrol. Comments to support this concern included that:

- there was an absolute requirement to make transition seamless, given that real energy consumers depend on SMETS1 services;
- it was an incorrect assumption to expect users' readiness to test in 2018;
- key dependencies for prospective SMETS1 service users include having finalised design documents. Changes to back-office systems required on the back of these should not be under-estimated;
- design, build and test activity over 5 months between BEIS decisions and IOC would not be possible if design remains undecided; and
- there was a requirement to be sufficiently robust to deal with resourcing challenges.

It was noted that the timelines set out by DCC implied some re-use of existing infrastructure. One respondent pointed out that no migration activity was planned in, and that the impact of enduring releases needed to be considered alongside the integration of Customers' systems with a new DCC SMETS1 service.

Supportive of a cohort-by-cohort approach, respondents are expecting a transparent process for prioritising each cohort. Respondents considered that BEIS should have a role to play in the agreement and application of the prioritisation of the cohorts.

With the enrolment date of the first cohort (in April 2018) being before the proposed SMETS1 end date for installations (in July 2018), clarification was sought from DCC on how this would work.

Finally, one respondent stated that suppliers and meter asset providers (MAPs) would be impacted by a staggered enrolment, and that it would be necessary to consider how SMETS1 compliant meters can have their firmware upgraded, as well as to understand what the approach will be to enrol these.

### **DCC's response**

DCC acknowledges the concerns raised by many respondents regarding the plan timetable, and DCC has revised the plan in light of this feedback and further insight gathered from DCC's bilateral engagement. Whilst some parties felt that it was wrong to assume user readiness for testing in 2018, DCC's engagement with stakeholders suggests it is fair to maintain this assumption (for at least a subset of customers).



DCC absolutely recognises the critical importance of a smooth and seamless transition to operations for SMETS1 service users given that energy consumers will rely on this service from day 1 of its operation. DCC is engaging closely with energy suppliers to ensure that consumers' needs are understood and taken into account.

DCC is aware that BEIS have corresponded with Energy Suppliers regarding the end-date for SMETS1 installations, and will continue to monitor this alongside the development of the SMETS1 service. In relation to points raised regarding the enrolment and management of SMETS1 meters, DCC expects to set out further detail in the TMAD, and will continue to work with customers and other industry parties to ensure there is a holistic approach to managing device firmware.

In terms of effectively managing and coordinating the release of the SMETS1 service alongside DCC's other, forthcoming enduring releases, it should be noted in particular that the current SMETS1 service delivery plan integrates the assumptions on which the delivery plan for Release 2.0<sup>1</sup> is based. Integrating the plans of both programmes serves the purposes of:

- preventing misalignments between the different programmes; and
- allowing DCC to benefit from any opportunities which may arise as a result of existing synergies between the programmes.

**Q4**

**Do you agree with the assumptions and dependencies set out in the consultation? Please provide a rationale for your views. Are there others which have not been included?**

13 respondents answered this question directly, providing mixed responses relating to the assumptions. Whilst many respondents agreed with the assumptions set out in the consultation, several raised points for consideration, including:

- questioning the dependency between procurement and the completion of the high level designs, as well as the BEIS decision in June 2017;
- contesting whether the assumption that timely delivery of milestones in the plan can be achieved in the context of the testing environments available and the various DCC System Releases planned, noting evidence suggested this was not the case.

One respondent separately commented that it seemed highly unlikely that SMSO security models would not change.

Several respondents suggested additional assumptions to be included in the plan, those being that:

- the solution supports the lowest common denominator of currently used services;
- enrolled devices can have firmware upgrades within acceptable timescales;
- externally procured services are delivered on time; and
- suppliers' resources are available to support the project given the parallel timelines of other major industry programmes.

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<sup>1</sup> Release 2.0 introduces dual-band functionality to DCC's Communications Hubs as well as implementing issue and change resolution proposals relating to the Technical Specifications and the GB Companion Specification further to industry consultation.

Fewer respondents commented on the dependencies in the plan. Of those which did respond, the general view was that these were implicitly aggressive in nature but nevertheless sensible. Some respondents suggested additional dependencies in the plan, including one between cohort plans, and the overall plan.

It was further noted that the delivery of the plan is absolutely dependent on BEIS providing clear direction.

### DCC's response

DCC has reviewed and revised (in some cases closing) assumptions on which the plan is based. DCC will continue to engage with BEIS and its customers to ensure that risks, assumptions and dependencies are tracked and updated as the plan progresses.

The SMETS1 delivery plan includes a series of iterative work streams in order to make a SMETS1 Service available at the earliest opportunity. DCC and BEIS have agreed a regular rhythm for the exchange of information relating to procurement and design, to inform BEIS decision making.

In regards to the timely delivery of milestones in the context of various testing environments and DCC System Releases, DCC has produced an integrated plan to ensure that the SMETS1 service is successfully delivered alongside its other principal activity in 2018. DCC will hold fortnightly meetings to ensure that progress across the different programmes is closely monitored.

Security assumptions in respect of SMSOs have changed on the basis of BEIS' 16 June 2017 letter. As such, system hardening controls have now been incorporated into the SMSO security assessment framework, which itself builds on the relevant requirements set out in Section G of the SEC. DCC has initiated the process of undertaking the security audits of SMSOs.

In response to the point raised relating to the provision of firmware upgrades, DCC has been working with stakeholders in its DCC User Design Fora to consider how the SMETS1 Service can support firmware upgrades. Proposals will be set out in the SSDs and be subject to the appropriate consultation process before finalisation.

In relation to the procurement of external services to design, build, test and operate the SMETS1 Service, every effort has been made to procure the required services in a timely manner.

**Q5**

**Please provide any comments you have on the proposals for user engagement.**

10 respondents answered question 5 directly. Whilst generally very much welcoming user and stakeholder engagement, with respondents especially supportive of the continuation of the productive bilateral engagement that the DCC has been undertaking, the following specific observations were made:

- BEIS's Technical Business and Design Group (TBDG) has yet to convene the proposed SMETS1 subgroup;
- there was a need to have early engagement with stakeholders via the DCC SMETS1 Design forum;
- there had been a lack of strategic industry engagement, noting that elements of the programme require industry coordination, oversight and approval;
- further engagement with suppliers was welcomed across the board;
- not all industry stakeholders have access to materials presented to BEIS's Smart Metering Transitional Governance fora (e.g. TBDG), and that this should be addressed;
- there should be cohort specific engagement (i.e. between suppliers, service providers and DCC where suppliers were using the same service providers and/or technologies);
- meter manufacturers need to be fully engaged; and
- engagement with the SEC Panel Security Sub-Committee (SSC) was welcomed.

### DCC's response

DCC recognises the support and input from all industry stakeholders throughout the development of the SMETS1 programme. For that reason, DCC has extensively engaged with customers, both on a bilateral and multilateral basis. In respect of the latter, it should be noted that DCC has widely engaged with customers via e.g. SMETS1 User Design fora<sup>2</sup>, BEIS's Technical Business and Design Group (TBDG)<sup>3</sup>, as well as more strategic committees such as SMDG.

As the SMETS1 programme matures, DCC is committed to continue to maintain the appropriate level of bilateral and multilateral engagement with stakeholders, via SMETS1 User Design fora, to focus on particular issues such as testing, migration and transition (as the requirements for these elements become clearer through the development process).

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<sup>2</sup> 7 SMETS 1 User Design Fora have been held by DCC since the beginning of July 2017.

<sup>3</sup> 4 TBDG sub-group meetings have been held to date to review and comment on regulatory documents prior to formal DCC consultation. Relevant documentation and outputs from the TBDG sub-group meetings have been distributed and made available to all interested parties.

## 4. Programme Status Update

The table below provides a general status update of the activities set out in the SMETS1 delivery plan, covering the areas of work which DCC has undertaken to date, during the initiation, discovery and development phases.

Activities	Status	
	Achieved/Completed	Ongoing/Forthcoming activities
<b>Design and Consult</b>	<ul style="list-style-type: none"> <li>The initial findings of DCC's High-Level Design (HLD) were released to BEIS on the 6 August 2017.</li> <li>SSDs have been updated in order to reflect the provisions required to enable the SMETS1 service. A first tranche of SSDs<sup>4</sup> has been shared with industry through TBDG sub-group, and DCC will issue them for consultation on the 14 November 2017, subject to BEIS' review.</li> </ul>	<ul style="list-style-type: none"> <li>Work is being carried out in parallel by DCC to determine the requirements which will underpin the arrangements needed during testing, transition and migration. DCC will consult on the associated regulatory documents - SVTAD and TMAD, respectively on 10 November 2017 and 5 February 2018.</li> <li>The second tranche of SSDs<sup>5</sup> will be shared with industry through TBDG sub-group, before formally being consulted on and baselined in quarter 1, 2018.</li> </ul>
<b>Existing DSP Activity</b>	<ul style="list-style-type: none"> <li>DCC has undertaken an assessment of the User Interface options from a time and cost implications perspective. The initial feedback from the Full Impact Assessment (FIA) undertaken by the Data Services Provider (DSP) has just been received.</li> </ul>	<ul style="list-style-type: none"> <li>DCC will analyse the outcome of the FIA and report back to BEIS the outcome either before or as a part of the Data Set analysis on 17 November 2017.</li> </ul>
<b>SMSO Activity</b>	<ul style="list-style-type: none"> <li>DCC has closely engaged with SMSOs to seek their support to establish costs and timescales for the required technical changes to their systems;</li> <li>DCC agreed development contracts with 2 of the SMSOs with security audits for these SMSOs being underway.</li> </ul>	<ul style="list-style-type: none"> <li>DCC continues to hold bi-lateral meetings with other SMSOs with the view of formalising development and enduring contracts;</li> <li>The initiation of the audits of the other SMSOs remains dependent on those organisations formally being contracted.</li> </ul>

<sup>4</sup> Tranche 1 SSDs comprises Service Request Processing Document, DCC User Interface Specification, Message Mapping Catalogue, Inventory Enrolment and Withdrawal Procedure, CPL Requirements Document, Organisation Certificate Policy, SMKI Interface Design Specification (SMKI IDS) and SMETS 1 Supporting Requirements document.

<sup>5</sup> Whilst the exact scope of Tranche 2 SSDs has yet to be defined, it is expected that the SSDs within this tranche will mainly seek to amend the service management arrangements for SMETS1.

Activities	Status	
	Achieved/Completed	Ongoing/Forthcoming activities
<b>S1SP Activity</b>	<ul style="list-style-type: none"> <li>DCC has appointed a Service Provider as its software development partner to develop IP4.</li> </ul>	<ul style="list-style-type: none"> <li>S1SP software is currently being developed.</li> </ul>
<b>FCSP Activity</b>	<ul style="list-style-type: none"> <li>DCC has consulted with CSPs to assess how best to implement security controls for CSPs.</li> </ul>	<ul style="list-style-type: none"> <li>Further evidence on the nature of the CSP controls is currently being sought from the respective CSPs, and is expected to be submitted in October 2017.</li> <li>Validation from CSPs on security controls will also be sought during Quarter 4, 2017.</li> </ul>
<b>Network &amp; Hosting Activity</b>	<ul style="list-style-type: none"> <li>DCC has identified the procurement path for the procurement of the network and hosting activities.</li> </ul>	<ul style="list-style-type: none"> <li>Procurement expected to be undertaken in Quarter 4, 2017.</li> </ul>
<b>User Activity</b>	<p>Regular and extensive engagement with customers outside of the formal consultation process, including:</p> <ul style="list-style-type: none"> <li>Initial workshops to introduce concepts of ‘customer journey’ and initiate thinking about how to prepare for enrolment;</li> <li>7 DCC SMETS1 User Design Forums with focus on commercial and technical change that must be undertaken prior to enrolment;</li> <li>4 BEIS-led TBDG sub-group meetings to review and comment on regulatory documents prior to formal DCC consultation; and</li> <li>A number of bilateral planning workshops took place with customers.</li> </ul>	<ul style="list-style-type: none"> <li>Further TBDG sub-group and DCC SMETS1 User Design Forum meetings are expected to be held in Quarter 4, 2017 to review and comment on regulatory documents prior to formal DCC consultation.</li> </ul>

## 5. DCC conclusions

DCC has taken into consideration consultation responses, DCC's bilateral planning engagement, its learning through the discovery phase, and direction from BEIS in response to its IEPFR submission as it finalised its SMETS1 Delivery Plan.

### 5.1 Assumptions and dependencies

DCC set out a range of assumptions and dependencies in its consultation on the draft SMETS1 Delivery Plan. Of these, several can be closed, as follows:

There is **no dependency between finalising high level requirements and procuring new capability**, as this procurement activity is covering base development capability and as such these activities can run in parallel.

This assumption can be closed as this approach has begun.

Similarly, there is **no dependency between a BEIS IEPFR June decision and procuring new capability**.

This assumption can be closed as this approach has begun

**A User Interface which uses the DCC User Interface Specification message format is selected as part of the IEPFR options decision.**

This assumption can be closed as the BEIS letter of 16 June down-selected Option UI3

Whilst these assumptions can be closed, others have proved to be invalid, or have a high likelihood of being invalid. On that basis, DCC has set out a number of key risks associated with the SMETS1 Delivery Plan. DCC has also added to the assumptions and dependencies that remain valid. These are set out in the tables below.

#### 5.1.1 Risks

Ref	Description	Impact	Management Strategy
R1	In order to effectively manage and coordinate the release of the SMETS1 service against R2.0, the plans of both programmes have been integrated for efficiency gains and to prevent misalignment between the different programmes. A potential delay in R2.0 may have a potential impact on the delivery of the SMETS1 Service.	Delay to IOC, 30 Nov 18.	Regular reviews between both programmes will seek to minimise the risk to SMETS1, R2.0 and/or potential other releases misaligning.

Ref	Description	Impact	Management Strategy
R2	Our assumption that SMSOs would not need to make system changes to meet security requirements prior to DCC integration has proven to be invalid, but may require updating once security assessments have concluded. The time required for SMSOs to upgrade their services means they may not be ready for the proposed IOC date.	Delay to IOC, 30 Nov 2018.	This risk will be resolved following the SMSO security assessments allowing SMSO-specific security controls to be defined.
R3	From design work, the number of Service Request Variants (SRVs) required at IOC is higher than initially envisaged. This may be compounded by potential requirements for elective services to be delivered at the same time. Development and test time of this larger SRV set could delay launch of the service.	Delay to IOC, 30 Nov 2018, and potentially some customer enrolment.	Where time is determined to be the driving factor, work with BEIS and customers to consider if and how SRVs are prioritised to support the IOC and subsequent release schedule.
R4	SMETS1 SMSOs/CSPs and prospective Software developers may not be able to provide robust cost information to DCC that allows DCC to furnish BEIS with the information it needs to consult and conclude on enrolment of meter cohorts— due for consultation in the new year based on information being provided from DCC by 17 Nov 2017.	Delay to BEIS GO/NO-GO decision in Mar 2018.	Work with SMETS1 SMSOs/CSPs and prospective Software developers to ensure their data sets are aligned to the BEIS requirements.
R6	Energy Suppliers' business change is complex and may take longer than the draft SMETS1 Delivery Plan, meaning that they may not be ready to undertake user testing of the DCC SMETS1 service for the proposed IOC date and/or prepare for transition / enrolment in the timescales.	Delay to IOC, 30 Nov 2018, and/or the benefits that would be realised at IOC with SMETS1 service users in place.	Work with Energy Suppliers and BEIS to determine how best to achieve a sufficient level of readiness for SMETS1 service users at IOC.
R7	SVTAD and TMAD seek to set out the arrangements, required by industry required during transition. A delay in delivering such requirements risks delays to Energy Suppliers being unable to test and enrol their systems and devices.	Delay to IOC, 30 Nov 2018.	Engage closely with all stakeholders to ensure the policies and principles underpinning the TMAD and SVTAD are robustly tested with industry before formally being consulted on.

## 5.1.2 Assumptions

Ref	Description	Impact if incorrect
A1	DCC Delivery Approach – DCC deploys an iterative, flexible development approach where delivering new capability and as opportunities allow for other elements of the service whilst building in the need for consultation with, and an approach that works for DCC's stakeholders.	Inflexible development approach leads to delay overall development timelines and IOC, 30 Nov 2018.
A2	Energy Suppliers can manage the testing and transition to live of their business systems given the proximity of release dates for SMETS1 and R2.0.	Delay to IOC, 30 Nov 2018 and enrolment.
A3	All participants required for testing will commit sufficient resources to allow SIT testing to complete within 5 months and that Interface Testing for IOC, 30 Nov 2018, can be time-boxed to no more than 2 months in order to achieve the required schedule.	Delay to IOC, 30 Nov 2018 and enrolment.
A4	The process for phased enrolment that may result from BEIS' cohort-by-cohort decisions on enrolment be agreed by BEIS and DCC so that the regulatory and release governance for any deployments of functionality between IOC and FOC is as streamlined, efficient and cost effective as possible.	An incremental update to IOC, and FOC itself may be delayed if governance and change control cannot enable requisite change over the 7 month period between IOC and FOC.
A5	Energy Suppliers and SMETS1 SMSOs/CPSs will continue to support the enrolment strategy that allows FOC to be achieved no later than 7 months after IOC.	Potential delay to FOC.
A6	That the timely delivery of milestones can be achieved in the context of the testing environments available and the various DCC System Releases scheduled during lifetime of the plan, and that any related risks that are identified can be mitigated or retired	Delay to development timelines and IOC.
A7	No additional material changes being identified to SSDs, which will require further and/or longer consultation.	Delay to IOC, 30 Nov 2018.



### 5.1.3 Dependencies

Ref	Description	Delivered by	Dependent Activities	Date
D1	SMETS1 SMSOs/CSPs and prospective Software developers provide DCC with sufficiently detailed information to allow DCC to provide robust cost information (including on potential security measures) to enable BEIS consultation and decisions on the makeup of the SMETS1 service prior to the Transition & Enrolment Phase.	SMETS1 SMSOs/CSPs and prospective Software developers.	Information submissions to BEIS.	17 Nov 17
D2	SMETS1 SMSOs/CSPs, the SMETS2 DSP and prospective Software developers continue to align with DCC's iterative design, build, test and release process and will achieve the timelines required for IOC.	SMETS1 SMSOs/CSPs, the SMETS2 DSP.	Development and test timelines.	3Q17 to 3Q18
D3	BEIS GO/NO GO decision is made by end March 18, accepting that necessary prior agreed information has been provided to BEIS by 17 Nov 17 in accordance with the plan.	BEIS	Customers ready to enrol for IOC.	End Mar18

## 5.2 Summary of changes to the plan

Based on these revised assumptions and dependencies, and in considering the risks to the delivery, DCC has made changes to the delivery plan as set out below.

### 5.2.1 Additional activities in the plan

#### Testing activity

Based upon the Initiation and Discovery Phase learning, as well as customer feedback, DCC proposes that it should extend the testing phase to a total of 8 months, including a 5 month period for System Integration Testing (SIT), followed by 2 months of User Interface Testing (UIT) and 1 month for Transition to Operations (TTO). DCC considers that the TTO phase will facilitate the cut-over to the production environment and Operational Acceptance of the SMETS1 solution by DCC through governance.

This approach will be further investigated during the remainder of the Development phase and the test plan will be summarised in the SEC Variation Test Approach Document (SVTAD) on which DCC will be consulting in November 2017.

## Release approach

DCC currently plans to achieve the full SMETS1 service via three releases of capability:

- Initial Operating Capability (IOC);
- Middle Operating Capability (MOC);
- Final Operating Capability (FOC)

These releases will provide the availability of the SMETS1 Service to support the existing meter types on a cohort by cohort basis. The testing and release process for FOC and MOC is currently still being worked out in more detail such that the most effective and efficient testing time for these releases can be determined. The process for migrating the data and then the enrolment of the meters into that service will be set out in the TMAD, which will be consulted on in February 2018.

The sequencing of cohorts across these releases will be recommended to BEIS on 17 November 2017 based upon confidence in the plans for technical delivery and the readiness of service providers to support the development timescales. BEIS will make the final decision in respect of the sequencing.

## Migration and Enrolment activity

DCC recognises that IOC will provide the earliest opportunity for enrolment. The process and phasing for the enrolment of meters through IOC, MOC, FOC, and beyond, will continue to be developed by DCC as it continues to engage with its enduring service providers and SEC Parties.

In regards to transition and migration, it should be noted that DCC has been engaging bilaterally with key stakeholders to define and determine the arrangements required for the enrolment of existing SMETS1 devices. Initial principles and assumptions on migration have been shared with industry through a DCC SMETS1 User Design Forum in September 2017. Feedback from the industry is currently being taken into consideration, explored in greater detail and refined, before agreeing the policies and principles in area with customers later in the programme. The output of these arrangements will be summarised in the TMAD, which will be consulted on 5 February 2018.

## 5.2.2 Amended milestones

### Consultation on SEC Subsidiary Documents

To ensure that draft SSDs are of sufficient quality prior to consultation, and offer stakeholders sufficient time to assess proposed new regulatory content as it is developed, the start date for consultation on the first tranche of affected SSDs has moved from 31 August 2017 to 14 November 2017. This would lead to the baselining of SSDs by 17 January 2018 (from 31 October 2017). The second tranche of SSDs will be shared with industry through TBDG sub-group, before formally being consulted on and designated in the first quarter of 2018.

### Time between finalisation of SSDs to start of UIT

DCC has included an 8 months of activity between the completion and baselining of SMETS1 SSDs and the start of User-Integration-Testing. DCC considers this time will provide a reasonable opportunity for new Service Users to react to changes to existing DUIS based user interfaces for the purposes of testing.

## **Integrated plan of SMETS1 Service and R2.0**

2018 will be a year of significant activity for DCC and it is imperative that DCC manages change effectively during this period. DCC has been working with BEIS and the SEC Panel to explore options to ensure holistic planning of these activities to ensure that SMETS1 is successfully delivered alongside its other principal activity in 2018. This includes the provision of a R2.0, increased functionality delivered through R1.4 as well as managing change requests made as part of industry-raised proposals to modify the SEC. DCC has produced, and shared in a number of forums, an integrated plan of its activities for 2018. As part of the review process for SMETS1, DCC will assess the impact of any changes to the timelines on the plan on other DCC programmes to ensure successful delivery of all programmes.

In order to manage these activities and any contention between our environments, DCC has implemented an approach to DSP system development whereby features from multiple programmes can co-exist in the same code base. These features can be enabled through switches, which are managed by software configuration.

During the timeframe of SMETS1 there will be a number of other programmes using the SIT and UIT environments. Our cross programme scheduling takes this into account. DCC are working to ensure the cut-over period for environments is minimised to reduce downtime in testing.

The integrated DCC plan for 2018 is attached at **Annex C**.

## **Enduring Commercial Activities**

Enduring contract negotiations with service providers have taken longer than initially envisaged, and as set out in the original SMETS1 delivery plan. Whilst the revised delivery plan reflects more realistic timescales.

## **5.3 Confidence in delivery**

Whilst DCC has amended some of the key delivery milestones in the plan, engagement with stakeholders and prospective service providers has given DCC a greater degree of insight into the risks that will jeopardise its delivery. These risks are not insignificant and, where they become issues, have the potential to further affect plan milestones. The plan also remains dependent on the continued support and engagement of SMETS1 customers and prospective Service Providers.

DCC has continued to pursue both Implementation Paths options i.e. IP4 (Integrate to meter) and IP5B (Integrate to SMSO) with equal vigour. The delivery date for IOC is however different across both paths. BEIS' GO/NO-GO decision will make a determination as to which path should be carried forward. The IOC timeline will therefore be dependent on that decision as will the final timelines for MOC and FOC.

The link between SMETS1 Delivery Plan to that of R2.0 marks the earliest non-contingent IOC as Nov 18. DCC also notes that any use of contingency in R2.0 or SMETS1 will impact this date.

At this stage it is not proposed that contingency is built-in to this plan. However, DCC will be monitoring progress and the potential need for contingency on an on-going basis and will be reporting to SMDG and IMF members on a monthly basis. The decision to communicate and subsequently utilise a programme contingency will be made following engagement with programme stakeholders but remains a BEIS decision.

## 5.4 Next steps

In accordance with its regulatory requirements, DCC is submitting this plan (in the form of the Milestone table set out in **Annex A**) to the Secretary of State for Approval.

## Annex A – Milestone Table

DCC proposes that the following milestones form the plan to which it must undertake all reasonable steps to implement (historic milestones are included for completeness); in accordance with Condition 13 of the Licence (should the Secretary of State approve the plan).

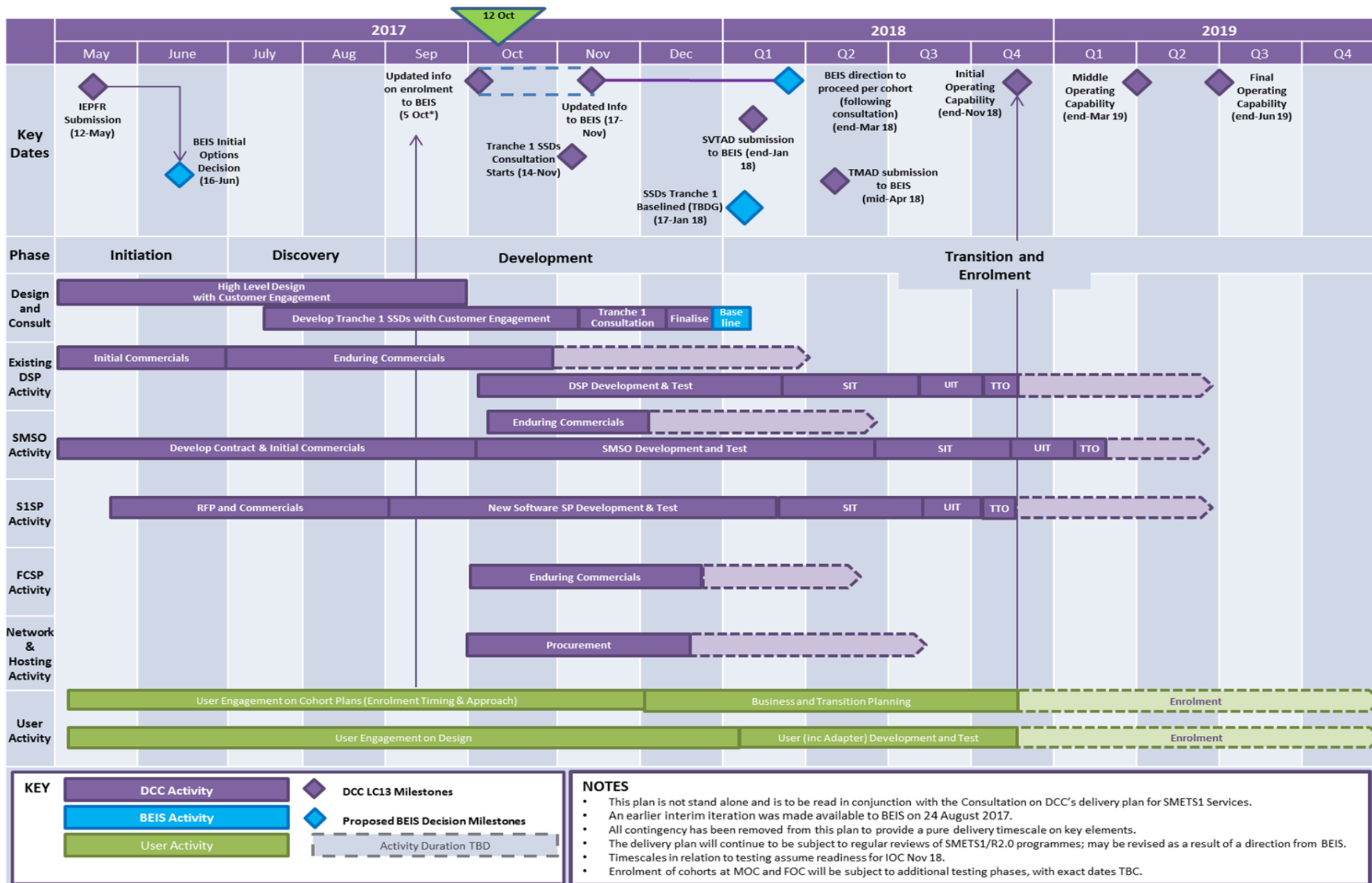
ID	Milestone/event	Description	Date
1	IEPFR submission	Issue of final document updated following consultation.	12 May 17
2	LC13 Plan published for consultation	Issue of document to SEC Parties for consultation.	12 May 17
	<i>BEIS Options Decision</i>	<i>Initial decision from BEIS on delivery option(s) which will inform and refine DCC's activities in the Discovery Phase.</i>	16 Jun 17
3	Updated Information from DCC to BEIS (1)	DCC to provide BEIS with available information to support decision-making.	5 Oct 17 <sup>*6</sup>
4	SVTAD Consultation Start	This milestone represents the start of the consultation on the SVTAD through the TBDG process.	10 Nov 17
5	Tranche 1 SSDs consultation starts	First period of consultation engagements begins.	14 Nov 17
6	SVTAD Consultation closes	This milestone represents the end of the consultation on the SVTAD through the TBDG process.	1 Dec 17
7	Tranche 1 SSDs consultation closes	First period of consultation engagements closes.	12 Dec 17
8	Updated Information from DCC to BEIS (2)	DCC to provide BEIS with available information to support decision-making.	17 Nov 17
9	SVTAD Submission to BEIS	DCC formally submits SVTAD to BEIS.	31 Jan 18
10	TMAD consultation start	This milestone represents the start of the consultation on the TMAD through the TBDG process.	5 Feb 18
11	IOC SIT start	This milestone represents the point at which DCC commences the system integration test phase for IOC.	28 Feb 18
12	TMAD consultation closes	This milestone represents the end of the consultation on the TMAD through the TBDG process.	2 Mar 18
	<i>BEIS Direction</i>	<i>BEIS to provide direction to DCC to proceed on a per cohort basis</i>	30 Mar 18
13	TMAD Submission to BEIS	DCC formally submits TMAD to BEIS.	9 Apr 18

<sup>6</sup> \*An earlier interim iteration was made available to BEIS on 24 August 2017.

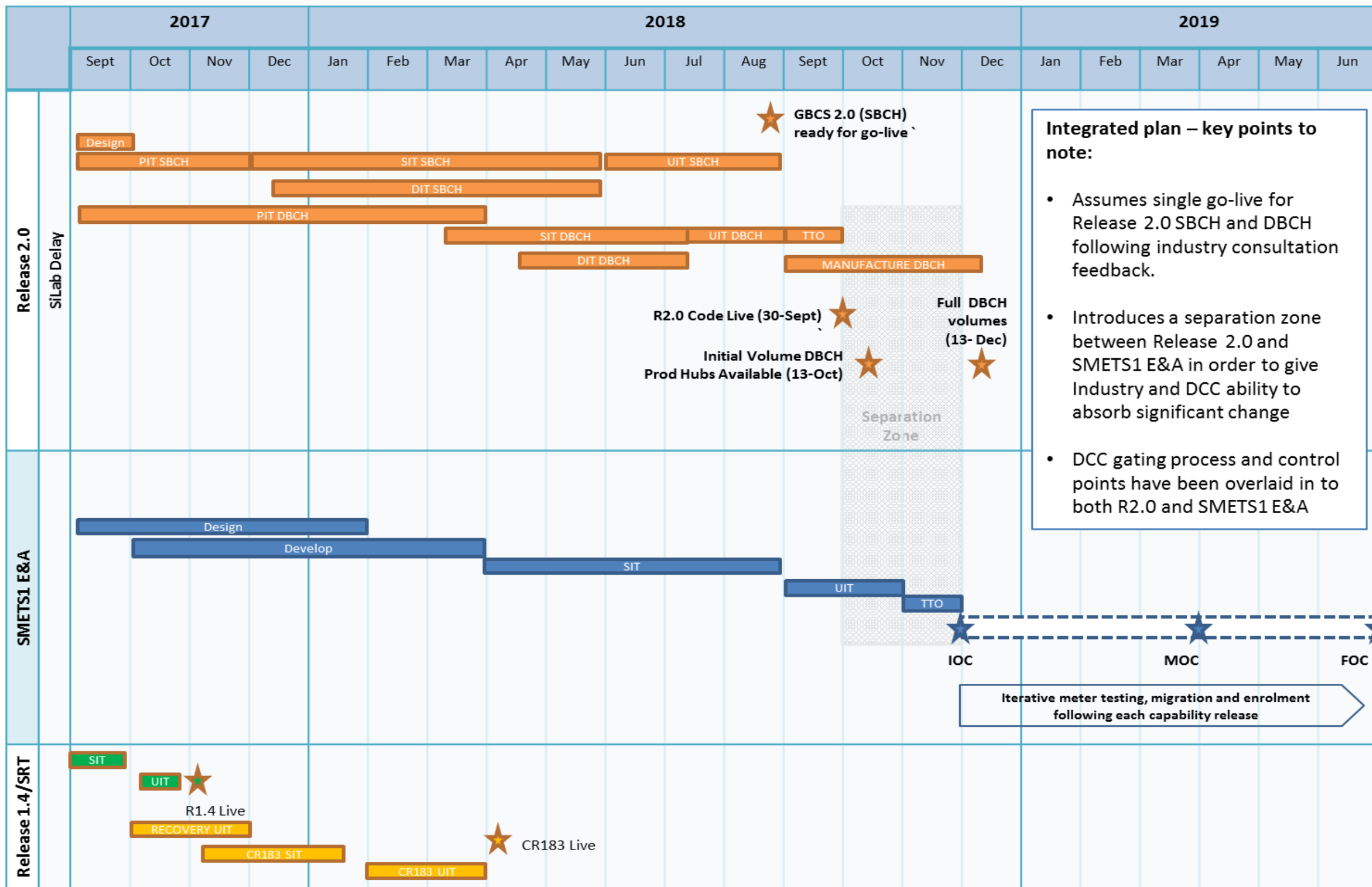
14	IOC SIT complete	This milestone represents the point at which DCC concludes the system integration test phase for IOC.	30 Aug 18
15	IOC UIT start	This milestone represents the point at which UIT entry criteria has been met for cohorts for IOC.	31 Aug 18
16	IOC UIT complete	This milestone represents the point at which the UIT phase has been completed.	30 Oct 18
17	IOC	Earliest delivery of DCC operational readiness to provide a SMETS1 service in relation to at least one meter cohort.	30 Nov 18
18	MOC SIT start	This milestone represents the point at which DCC commences the system integration test phase at MOC.	TBC
19	MOC SIT complete	This milestone represents the point at which DCC concludes the system integration test phase for MOC.	TBC
20	MOC UIT start	This milestone represents the point at which UIT entry criteria has been met for cohorts being enrolled at MOC.	TBC
21	MOC UIT complete	This milestone represents the point at which the UIT phase for MOC cohorts has completed.	TBC
22	MOC	Interim releases to facilitate the phased delivery of additional meter cohorts as well as any additional functionalities.	31 Mar 19
23	FOC SIT start	This milestone represents the point at which DCC commences the system integration test phase at FOC.	TBC
24	FOC SIT complete	This milestone represents the point at which the DCC concludes system integration test phase for FOC.	TBC
25	FOC UIT start	This milestone represents the point at which UIT entry criteria has been met for cohorts being enrolled at FOC.	TBC
26	FOC UIT complete	This milestone represents the point at which the UIT phase for FOC cohorts has completed.	TBC
27	FOC	Earliest delivery of DCC operational readiness to provide a SMETS1 service in relation to the final meter cohort.	30 Jun 19

**Numbered milestones constitute those which form part of the formal plan that DCC proposes is submitted to the Secretary of State and against which progress is assessed.**

# Annex B – Plan on a Page



# R2.0, SMETS1 E&A & R1.4 – Non-contingent plans



**Integrated plan – key points to note:**

- Assumes single go-live for Release 2.0 SBCH and DBCH following industry consultation feedback.
- Introduces a separation zone between Release 2.0 and SMETS1 E&A in order to give Industry and DCC ability to absorb significant change
- DCC gating process and control points have been overlaid in to both R2.0 and SMETS1 E&A