



Communications Hubs & Networks Consultation on Transitional and Enduring Regulatory Changes

Your chance to shape the regulatory changes required to
support the Communications Hubs & Networks programme

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1. Introduction and Context

1. The Data Communications Company (DCC) is Britain's digital energy spine, supporting the transformation of the energy system. DCC is licensed by the Government and regulated by the energy regulator Ofgem to connect smart meters in homes and small businesses across Great Britain to a single secure, digital network. DCC supports the roll-out of second-generation (SMETS2) smart meters, as well as the migration of existing first-generation (SMETS1) meters onto its network.
2. The Communications Hubs and Networks Programme (CH&N) is a DCC initiative geared towards defining and delivering future-proof Communications Hubs & Networks in the Central and South regions with an efficient supply chain and a targeted longevity of at least 15 years. To ensure this longevity of smart functionality DCC is developing a solution to allow for the introduction of new Communications Hubs (CHs) which use the 4G network. To achieve this, DCC established the CH&N Programme to assess development and implementation options for a 4G solution.
3. In its conclusions on the revised delivery plan for the CH&N Programme,¹ DCC proposed a number of milestones in its LC13B milestone table. One of which is 'Conclusions on enduring and transitional legal text regulatory changes for the programme' with a milestone date of 31 October 2023, also included in the Joint Industry Plan (JIP).

1.1. Background and Approach to Regulatory Change Delivery

4. On 10 February 2023, DCC consulted on its initial assessment of regulatory changes that will be required for the 4G solution, outlining the anticipated changes required to several Smart Energy Code (SEC) Subsidiary Documents (SSDs), DCC owned documents and Main Body SEC changes (see Appendix A for the initial scope of regulatory changes). Following consideration and analysis of the responses to that consultation, DCC published a conclusion on 31 March 2023.²
5. As set out in that consultation, the approach to regulatory change required to support the CH&N programme will be managed via separate consultation processes:
 - proposed amendments to the DCC Licence and the main body of the SEC will be consulted on by the Department for Energy Security and Net Zero (The Department) and are being consulted upon in parallel with this consultation;³
 - proposed amendments to the SSDs or other SEC required documents will be coordinated through DCC-led consultations. This document comprises one such consultation.
6. DCC expects that changes to the main body of the SEC will be enacted by the Secretary of State using powers conferred under section 88 of the Energy Act 2008, with changes to SEC Subsidiary Documents being delivered following Direction from the Department using powers conferred under Condition 22 of the DCC Licence and Section X of the SEC.
7. Where changes to supporting documentation are needed, for example the Comms Hub Ordering Policy (CHOP), DCC will be following the change governance process prescribed for each on a case-by-case basis, following the conclusion of this consultation and the Secretary of State's consultation main body SEC changes. If changes are needed to documents governed by Smart Energy Code

¹ [Conclusions on the revised delivery plan for the CH&N Programme | Smart DCC](#)

² [Regulatory Changes for the Communications Hub and Network Arrangements | Smart DCC](#)

³ <https://smartenergycodecompany.co.uk/latest-news/department-for-energy-security-and-net-zero-smart-metering-implementation-programme-consultation-on-changes-to-the-dcc-licence-and-the-smart-energy-code-for-the-4g-communications-hubs-networks-prog/>

Administrator and Secretariat (SECAS), DCC will recommend the changes and the suggested timetable for their implementation.

8. Since the conclusion on scope and the completion of low-level design, DCC has undertaken further analysis of the potential regulatory changes required to the SEC SSDs and this has resulted in the proposals set out in this document.
9. Section F13 of the SEC places an obligation on DCC to produce a Network Evolution Transition and Migration Approach Document (NETMAD). DCC is required to develop and consult on a first version of the NETMAD. This document is required to include, amongst other things, any rules required to support the transition to and implementation of the DCC 4G service.
10. DCC has been engaging with Energy Suppliers since 15 February 2023 on a transitional strategy through a series of workshops, reviews and engagement with the SEC Panel and subcommittees. On 30 June 2023, DCC published its conclusions on this engagement, which provided the basis for the content of the NETMAD that is proposed in this consultation document.⁴
11. This document also indicates any areas that are outstanding that might require further SSD/NETMAD changes and the next steps on them.

1.2. Purpose of the consultation

12. The purpose of this consultation is to obtain views on proposed changes to SSDs to support the introduction of 4G CHs into the Central and South regions and the new proposed NETMAD document. This consultation will close on Friday, 29 September 2023.
13. This consultation is expected to impact the following Parties:
 - Large Suppliers;
 - Small Suppliers;
 - Electricity Network Operators;
 - Gas Network Operators; and
 - Other SEC Parties.
14. The following parts of the SEC will be impacted:
 - Appendix H 'CH Handover Support Materials' (CHHSM)
 - Appendix I 'CH Installation and Maintenance Support Materials' (CHIMSM)
 - Appendix AD 'DCC User Interface Specification' (DUIS)
 - New Appendix: NETMAD

⁴ [Conclusions on 4G Transition Strategy following collaborative workshops | Smart DCC](#)

2. Proposed changes to enduring regulation

15. This consultation proposes enduring regulatory changes that are required to introduce 4G Comms Hubs into the Central and South parts of the DCC System as well as the transitional arrangements that are required to enable this.
16. The introduction of 4G Comms Hubs means that DCC will be introducing new service providers and functionality within the DCC Total Systems, which will require the requisite testing. Once 4G Comms Hubs are capable of being installed, 2/3G Comms Hubs and 4G Comms Hubs will be operating in parallel in Central and South. The SEC needs to be amended to reflect this situation. This is being done by introducing main body SEC changes which are being consulted on by the Department, with SEC Subsidiary Documents (SSDs), including a new document – the NETMAD – that are being consulted on through this document by DCC.
17. The proposed amendments to the SSDs include changes to Service Request Variants (SRVs) in DUIS to enable interrogation as to whether there is 4G connectivity in a specific geographical location in Central and South, as well as whether there is a 4G Comms Hub.
18. As DCC introduces the 4G capability onto its network, it is necessary to incorporate transitional provisions into the SEC, primarily covering:
 - the period where a limited number of 4G Comms Hubs are installed on the DCC System to allow Parties and DCC to gain confidence in the DCC System (referred to as Initial Pallet Validation (IPV) within the CH&N delivery plan);
 - the ordering of Communications Hubs for the purposes of IPV; and
 - the introduction of a transitional 4G Coverage Checker which will allow Parties to check whether a location is capable of connecting to the 4G WAN prior to go live of the 4G systems, following which coverage data will be available via the BAU processes of sending a DUIS SRV or a query via the Self Service Interface (SSI).
19. The remainder of Section 2 of this document sets out details of the proposed enduring changes relating to the existing SSDs, and Section 3 provides details of the new SSD housing transitional rules, being the NETMAD.
20. Section 4 sets out details of potential further regulatory changes that will be required to the regulatory framework such as the requirements related to the new interim Order Management System (OMS).

2.1. Multiple Wider Area Network (WAN) Variants in Central and South Geographical Regions

21. DCC has identified necessary changes to SSDs to reflect the availability of the new 4G Communications Hub WAN Variant in the central and south Geographical Regions and to distinguish requirements from current Communications Hub WAN Variants.
22. We propose adding a new definition in SEC Appendix H 'Communications Hub Handover Support Materials (CHHSM)' and SEC Appendix I 'Communications Hub Installation and Maintenance Support Material (CHIMSM)'. This definition will be for a '4G Cellular Communications Hub' to set out the WAN Variant which can use 4G cellular radio technology to connect to the 4G cellular WAN.
23. Furthermore, to distinguish 2G/3G WAN Variants from the new 4G WAN Variant, we propose:

- amending the existing definition for a 'Cellular Communications Hub' to distinguish that it uses 2G/3G mobile cellular radio technology; and
- amending the existing definition for a 'Mesh Communications Hub' to distinguish that it uses 2/3G mobile cellular radio technology and wireless mesh.

24. Annex E of the CHIMSM sets out the equipment that DCC is required to supply. This is done by region, and DCC is proposing to add a new version of equipment to the Central and South Region at E.2 being the 4G Comms Hub Variant. DCC is also proposing to amend Table 2 of Annex E by adding the details of the 4G Comms Hub.
25. To further make provision for the addition of the 4G Comms Hub, DCC is proposing to Amend Table 3 of Clause E.3 of Annex E to the CHIMSM, by adding the 4G WAN Variant to the table.
26. The introduction of the new 4G WAN Variant alongside the existing 2/3G WAN provides the opportunity for a decision to be taken regarding which CH to install, for the time that both 4G CHs and 2/3G CHs are available and where a premises is in coverage for both 2/3G and 4G. The decision on which CH to install is an important one, which we do not consider something that should be enforced in the SEC without full engagement with all affected stakeholders. Rather than compel a Supplier Party to install 4G CH, at this stage DCC has included new drafting in clause 4.1 of the CHIMSM which allows Supplier Parties to decide which type of CH to install. DCC will continue to engage with stakeholders, including the Department, through Q4 2023 to consider this important policy point and therefore this amendment may be subsequently altered to reflect any policy decisions regarding whether and when to cease installation of 2/3G CHs.

CH&N Q1

Do you agree with DCC's proposal to amend the CHHSM and CHIMSM to distinguish between 2/3G WAN Variants and 4G WAN Variant, and that at this stage DCC should not amend the SEC to compel the installation of a certain type of WAN variant? Do you have any detailed comments on the relevant changes to the legal drafting? Please provide a rationale for your views.

2.2. SM WAN coverage information

27. DCC is required to provide installing Parties with information regarding SM WAN coverage at potential Installation Locations including the WAN Variant required for each Installation Location and, where applicable, any necessary Communications Hub Auxiliary Equipment. This information is currently made available via the SM WAN Coverage Database which can be accessed by DCC Users either via the SSI, or through the DCC User Interface in response to SRV 12.1 (*Request WAN matrix*).

2.2.1. Self Service Interface (SSI)

28. DCC has identified the change needed to the SSI which will provide new SM WAN 4G Coverage Database information and will be consulting on changes required to the SSI in due course. Technical details relating to the SSI are not set out in an SSD, and instead are governed through a process set out in the SEC (in Section H8.15A) and overseen by the SEC Panel. DCC anticipates consulting with SSI Users and the SEC Panel (through its Operations Sub-Group) on changes to the SSI process in September 2023.
29. DCC understands that the Department will be consulting on changes to Section H8.16(f) to require the provision of SM WAN information for the different networks in a region where there is more than one SM WAN variant. DCC will not be providing this functionality until the start of the IPV phase. In the lead up to IPV, DCC will be providing an interim coverage checker, which will provide

Users with the opportunity to check 4G coverage prior to the start of IPV. We describe this in more detail in Section 3 covering the new NETMAD SSD.

2.2.2. DCC User Interface Specification (DUIS)

30. In order to minimise and limit the impact to Users caused by changes to the DUIS, DCC is planning to introduce changes associated with the implementation of 4G Comms Hubs with the next scheduled DUIS update, scheduled as part of the June 2024 SEC Release. This release will create a new version of DUIS (v5.3).
31. However, as these changes are part of the CH&N programme for which the associated regulatory change is being delivered under Departmental transitional governance, the regulatory changes needed to DUIS to introduce 4G will be made by the Department. The other changes to DUIS for the June 2024 SEC Release will be made via the SEC modifications process. It is the culmination of these two sets of changes that will result in DUIS v5.3.
32. The availability of WAN coverage is set out in the DUIS through SRV 12.1. This SRV is being changed to allow for the incorporation of the 4G WAN as a response to the SRV. This will allow Users to interrogate the WAN availability for both 2/3G and 4G.
33. DCC is also proposing a change to SRV 8.2 to allow for the reading of the Inventory to allow Users to determine the presence of a 4G Comms Hub in a Smart Metering System.
34. DCC is of the view that both of these changes are essential for the proper functioning of a 4G Comms Hub as part of a Smart Metering System.
35. It should be noted that even though the DUIS changes will be implemented as part of the June 2024 SEC release, it will not be possible for DCC Users to be able to ascertain whether 4G WAN coverage exists via DUIS SRVs until the main 4G service goes live in December 2024 which is when the functionality will be made available. DCC will be providing coverage data ahead of this time through an interim coverage checker, described in Section 3.2 of this document.
36. We also note that the requirement to upgrade to DUIS version 5.3 is not compulsory in June 2024 or December 2024. However, without upgrading in December 2024, either as an individual DCC User or through a Managed Service Provider, Suppliers will not be able to determine whether the 4G WAN is available through use of the 12.1 SRV, though it should be noted that from December 2024 such data will also be available via the SSI. Those Users who do not upgrade to DUIS v5.3 when using SRV 8.2 on a premise with an installed 4G Communications Hub, for DUIS versions prior to v5.3, if the device's CSP Region is a 4G region then the CSPRegion element will not be included in the Response (as there is no supported enumeration value to use). This XML element is optional in the current definition.
37. E120103 is an additional new Response Code for DUIS v5.3 onwards to cover the error scenario which is currently unhandled in previous DUIS versions (i.e. http 500 response), where CSP/WAN Provider does not respond to the coverage check request sent by the DSP. Receiving a Response Code rather than a http response is better practice and brings this error scenario in line with existing Response Code definitions.

CH&N Q2

Do you agree with DCC's proposal to amend DUIS to provide for the changes necessitated by the incorporation of 4G Comms Hubs and to do so as part of the June 2024 SEC release? Do you have any detailed comments on the relevant changes to the legal drafting? Please provide a rationale for your views.

2.3. Logistics

38. In procuring new capability for 4G CH delivery, DCC has ensured that the SEC obligations are reflected in the new DCC service provider contracts covering the logistics service for the 4G CH.
39. This means that there are no planned changes to the SEC to accommodate the new logistics service. However, DCC has identified a benefit to the new arrangements being that the vehicles that will be used to deliver Comms Hubs have a greater capacity than their 2/3G counterparts. Vehicles delivering 4G CHs are able to deliver the same number of Comms Hubs as in the North Region, with an increased number of pallets (up from the current 40 pallets to 52 pallets, which is equivalent to an additional 10,752 Comms Hubs).
40. DCC is accordingly proposing a change to the CHIMSM to reflect the increased capacity by adding an additional column to table 2 in the CHIMSM, which will provide details relating to 4G delivery packaging and differentiating between 2/3G and 4G. DCC notes that the new column reflects that there is only one version of the 4G Comms Hub and that there is accordingly only one version of packaging that will be delivered.

CH&N Q3

Do you agree with DCC's proposal to amend the CHIMSM to reflect the new logistics arrangements? Do you have any detailed comments on the relevant changes to the legal drafting? Please provide a rationale for your views.

2.4. Testing Services

41. DCC initially identified in the scope analysis consultation that there may be minor amendments relating to the procedural and technical requirements for Testing Services provided in accordance with SEC Section H14. Since the completion of low-level design, we have completed a full review and have not identified any changes to the SEC, particularly SEC Appendix J (the Enduring Testing Approach Document (ETAD)).
42. DCC can confirm that the existing SEC requirements for the provision of SMETS2+ Testing Services support the 4G SM WAN and 4G CH solution. Furthermore, there are no additional changes or requirements for Testing Participants using Testing Services for 4G services.
43. Whilst no regulatory changes have been identified, DCC will add supporting information to the 'Guide for Testing Participants' (which is not an SSD, but a document controlled by DCC and referred to in the SEC) in relation to Remote Test Labs for 4G SM WAN and Test Communications Hubs for 4G. This document is required to be published under SEC Section H14.3 on the DCC Website and DCC will update this prior to CH&N User Testing.

CH&N Q4

Do you agree with DCC's proposal that there should be no changes to the ETAD? Do you have any detailed comments on this proposal? Please provide a rationale for your views.

3. NETMAD

3.1. NETMAD – context and rationale

44. Following our engagement in the workshops and the position set out in the conclusions to engagement document, DCC is proposing legal drafting to be incorporated as the first version of the NETMAD to be designated by the Department as a new SEC Appendix.
45. This section sets out the various content that DCC considers can now be incorporated into the NETMAD. Each subsection corresponds to a section in the NETMAD where we describe the intention behind the content.
46. Elements of the NETMAD document need to be incorporated into the SEC at different times. There are provisions relating to the governance for IPV, and the interim Coverage Checker that should be incorporated before the end of 2023, with DCC proposing that these are designated in the middle of November 2023. DCC understands that the Department intends to make changes to the main sections of the SEC to make provision for the inclusion of 4G Comms Hubs as a WAN variant, but at the time of the first designation of the NETMAD these will not form part of the SEC. Consequently any definitions used in the first version of the NETMAD that will eventually be located in Section A of the SEC, will need to be housed temporarily in the first version of the NETMAD, until such time as the Section A changes have been made.
47. DCC notes that there is additional content that will need to be added to the NETMAD that DCC is currently unable to consult on as commercial arrangements have not been finalised. Details of this content includes minimum 2/3G orders, refurbishment of 2/3G Comms Hubs and the residual supply of 2/3G Comms Hubs. DCC is still finalising its Order Management Solution for IPV. Once this has been finalised, DCC will consult on proposed content to the NETMAD including Ordering and Forecasting.
48. As the NETMAD is a transitional document, DCC is proposing that the NETMAD should cease to apply one year after the volume supply JIP milestone (scheduled for June 2025). This assumption has been made on the basis that transitional arrangements will have ended by this date and that all enduring regulations for 2/3G and 4G forecasting and ordering are in place. DCC notes that there may be transitional elements that need to continue after this date and if this occurs, the drafting proposes that the Secretary of State can amend this date by direction following consultation.

3.2. Definitions

49. DCC is proposing a number of definitions in the NETMAD that will provide clarity on the proposed content.
50. The definitions include:
 - **4G Communications Hub** provides for the 4G variation of a Communications Hub.
 - **4G SMWAN** sets out the part of the SMWAN that will be used for 4G mobile technology.
 - **Carton** is the smallest package of communications hubs that can be ordered being 14 communications hubs.
 - **Completion Report** which is the report that DCC will prepare which will set out why it is of the view that IPV has been completed.

- **Initial Pallet Validation** (IPV) which describes the initial trialling that will take place prior to volume manufacture which will allow Energy Suppliers to commission with the DCC 4G communications hubs that have been installed in the premises of consumers;
- **Initial Pallet Validation Approach Document**, which will be a document that will set out the approach to IPV;
- **Initial Pallet Validation Stage** which provides a definition for the period during which IPV occurs.
- **JIP Milestone** which is a milestone in the Joint Industry Plan which is also defined in this section.
- The **Joint Industry Plan (JIP)** which is the Joint Industry Plan that has been agreed at the Smart Metering Design Group meetings, and is based on the LC13B plan approved by the Secretary of State on 9 February 2023. This has been included to identify important milestones for NETMAD; and
- **DCC's Microsoft SharePoint** which is the platform that DCC currently uses to share and provide information to SEC Parties.

CH&N
Q5

Do you have any comments on the legal drafting? Please provide a rationale for your views.

3.3. Coverage Checker

51. In its conclusions following the workshops, DCC indicated that there will be a comprehensive coverage checker that will be made available through the SSI at the start of IPV. Section 2.2.2 of this document additionally makes provision for this data to be available via DUIS SRVs. However, as a result of engagement in the workshops, DCC is going to provide an interim version of the coverage checker that will allow Energy Suppliers to prepare for ordering for IPV and will enable Users to support their 4G Communications Hub ordering and forecasting activities that will occur prior to the enduring coverage checker becoming available.
52. The interim coverage checker is an offline database (not dynamically updatable) that is searchable by postcode and postal outcode which will indicate whether a property at a specific address within a postcode has 4G coverage. DCC anticipates that this information will be the same as at go-live in December 2024. This ability aligns with the SEC requirements. However, DCC notes that the current 2/3G coverage checker is searchable by address (which is not a SEC requirement) and that the interim coverage checker will not be searchable in this manner, but only by postcode and postal outcode which will return a list of addresses which can then be individually selected. The enduring coverage checker will be searchable by address and postcode.
53. The interim coverage checker will also not be available through the SSI, but will be a separate database that DCC will make available through DCC's Microsoft SharePoint. DCC notes that from go-live in December 2024, Users should no longer use the interim Coverage Checker but should use the SEC defined processes of the SSI or DUIS.
54. DCC has proposed a section in the NETMAD that provides the obligation on DCC to provide the interim coverage checker, and sets out the manner in which it can be searched. It also requires DCC

to keep the checker up to date and should new versions be released, and to notify Suppliers when that happens.

CH&N
Q6

Do you agree with DCC's proposal for the inclusion of a temporary coverage checker? Do you have any detailed comments on the legal drafting? Please provide a rationale for your views.

3.4. Initial Pallet Validation (IPV)

55. IPV is a phase during which Energy Suppliers will have the opportunity to install a limited number of 4G Comms Hubs in premises, which will allow Suppliers and DCC to trial the operation of 4G Comms Hubs in the live environment prior to volume manufacture.
56. Previously, DCC has carried out similar activity, which has proved to be successful. The workshops DCC held with stakeholders on CH&N transition focussed strongly on IPV and there was considerable support for the process. There were also a number of suggestions from Energy Suppliers that further developed the IPV phase that DCC is proposing.
57. This phase provides benefit to both DCC and Users as it enables DCC to ensure that 4G Comms Hubs work correctly on the DCC Systems in the production environment and will not cause issues with the DCC Total Systems or impact DCC network performance. Energy Suppliers will be able to test their own systems in a live environment and gain confidence that the 4G Comms Hubs operate as expected.
58. As DCC will not be in a position to support the installation of 4G Comms Hubs prior to the LSC: go-live decision JIP milestone, the proposed NETMAD contains an obligation that prevents installation of a 4G Comms hub prior to this milestone and that Energy Suppliers will support DCC by providing information that is requested of them for the planning, coordination and undertaking of Initial Pallet Validation. The proposed NETMAD also includes a clause that Energy Suppliers are not entitled to replace a Mesh Communications Hub with a 4G Comms hub during the Initial Pallet Validation Stage.

CH&N
Q7

Do you have any detailed comments on the legal drafting? Please provide a rationale for your views.

3.4.1. IPV Approach Document and Governance

59. In its conclusions following the workshops, DCC set out that it would provide for an IPV governance framework in the NETMAD, whereby DCC would produce an Initial Pallet Validation Approach Document (IPVAD) which would be considered and approved by the SEC Panel or its nominated subcommittee. The approach is similar to the process for the Test Approach documents set out in Appendix AQ – the SEC Variation Testing Approach Document for CH&N Arrangements.
60. The IPV approach document would set out IPV entry and exit criteria and the manner in which any disagreements between DCC and the SEC Panel/subcommittee over whether those criteria had been met, or disagreements on the content of the IPVAD, would be resolved. DCC has accordingly proposed NETMAD drafting that sets out that DCC will produce an IPV Approach Document that includes the entry criteria for IPV, exit criteria for IPV, the process to resolve IPV incidents and details of a completion report to be compiled by DCC.

61. The process to be taken is set out in the NETMAD whereby DCC will submit a copy of the IPVAD to the SEC Panel or its' nominated subcommittee. DCC and the SEC Panel would try to reach agreement on the content, but if this is not possible, DCC would refer the disagreement to the Secretary of State for a final determination.
62. Where appropriate, DCC will be able to provide a revision to any approved IPVAD which will follow the same process as for the creation of the IPVAD. DCC also proposes an obligation on itself to comply with the content of the IPVAD and that IPV will only start once the SEC Panel or its nominated subcommittee has determined that the IPV entry criteria have been met.
63. Completion of IPV will only take place once the SEC Panel or its nominated subcommittee has determined that it is completed in accordance with the exit criteria in the IPVAD. In order to allow the SEC Panel or its nominated subcommittee to make this decision, DCC will provide a completion report to the SEC Panel or its nominated subcommittee which will set out that DCC is of the view that IPV has completed. DCC will provide supporting documentation to evidence that the exit criteria have been met.
64. The SEC Panel or its nominated subcommittee will then confirm that IPV has completed or provide details as to why the exit criteria have not been met. DCC may then update the report to provide the information that the SEC Panel or its nominated subcommittee requires to make its decision.
65. Any disagreement on whether the exit criteria have been met can be submitted to the Secretary of State for Determination. Once the completion report has been finalised, DCC will publish it on the DCC website (with appropriate redactions).

CH&N Q8

Do you agree with DCC's proposal that DCC should produce an IPV Approach Document and that the IPVAD should be reviewed and approved by the SEC Panel or their nominated subcommittee, with disagreements over this determined by the Secretary of State? Do you have any detailed comments on the legal drafting? Please provide a rationale for your views.

CH&N Q9

Do you agree the SEC Panel or their nominated subcommittee should decide whether the IPV entry criteria have been met, with disagreements over this determined by the Secretary of State? Do you have any detailed comments on the legal drafting? Please provide a rationale for your views.

CH&N
Q10

Do you agree with DCC's proposal that DCC should produce an IPV completion document and that the SEC Panel or their nominated subcommittee should decide whether IPV has been completed based on the exit criteria set out in the IPV Approach Document, with disagreements over this determined by the Secretary of State? Do you have any detailed comments on the legal drafting? Please provide a rationale for your views.

3.4.2. Ordering 4G Comms Hubs for IPV

66. IPV ordering was discussed in the workshops and DCC set out the views in the conclusion document. DCC concluded that there will be no forecasting for IPV Communications Hubs and the general rules relating to ordering in the SEC would need to be varied as a result.
67. For IPV, there will be a single month in which 4G Comms Hubs can be ordered, which will be the month prior to the milestone "Initial Pallet Orders" in the JIP. However, DCC will be engaging with Energy Suppliers prior to this date to facilitate a smooth process for the ordering of 4G Comms Hubs for IPV.
68. IPV orders must be placed with the DCC specifying the number of cartons required by the Energy Supplier. As set out in the conclusions document, DCC has a limited number of Comms Hubs that are available for IPV being 10 pallets, (640 cartons or 8960 Comms Hubs). Any order must consist of at least one carton and a maximum of 64 cartons which is equivalent to one pallet.
69. IPV orders will be placed by Energy Suppliers by email in which the Energy Supplier will set out the number of Comms Hubs it wishes to order including (as per the BAU rules for ordering) one delivery location, which must include a delivery address, the opening hours, and the name, email address and telephone number of a nominated contact. The Energy Suppliers will provide a delivery date within one month prior to the Initial Pallet Supply JIP Milestone. If the order does not contain the correct information in relation to numbers of CHs (e.g, where the order does not comply with the minimum or maximum order requirements, or the number of comms hubs ordered is not divisible by 14 (i.e. it is not in terms of a carton)) DCC will have the right to amend the order in this regard, and will do so at its discretion. DCC would then confirm any changes via email. Where any other information required in the order is missing, DCC will notify the Supplier to provide them the opportunity to correct it so that the order is eligible for processing.
70. An important aspect of the ordering process is to make provision for the possibility that there may be a greater demand for Comms Hubs than the 10 pallets that are available for IPV. This was discussed in the workshops and it was agreed that where this occurs, there should be a commensurate reduction for all Energy Suppliers that placed an order in excess of 16 cartons.
71. As a result, DCC is proposing content that sets out how orders will be prorated in the event that demand exceeds supply. This will be done by reducing the order request quantity of all Parties who placed an order of more than 1 layer (16 cartons, 224 Comms Hubs). The proposed solution will reduce the quantity of all those Parties one carton at a time, until the same number of cartons have been removed from each Party and the aggregate number of order requests can be met by the DCC. At this point there may be a small number of unallocated cartons, if so these cartons will be randomly allocated to Parties who have had their orders reduced. A Party's allocation will not be reduced below 1 layer (16 cartons).
72. If, following the first opportunity to order, a portion of the 10 pallets of Comms Hubs remain unallocated, DCC will contact Parties that placed orders and offer them the opportunity to place further orders for cartons in a second round.
73. If second round carton orders in aggregate are less than the number of cartons available in the second round, no further opportunity to order those that still remain available will be made. However, if second round order requests are in excess of the cartons available in the second round, DCC shall reduce each Supplier's additional order by a carton. DCC will repeat this round of reductions until aggregate demand can satisfied. Should there be cartons unallocated after the reduction rounds have completed, DCC will randomly allocate those cartons to those parties who requested additional hubs and had their additional request reduced.

74. Any party who has had their order request amended as a result of these processes will be contacted by DCC to be informed of their revised order quantity and the reasons for the amendment.
75. Once the IPV order requests have been placed by email and any amendments have been effected, DCC will notify each Supplier Party of its accepted final order. DCC will deliver those Comms Hubs for IPV on the delivery date that has been determined.
76. When 4G changes are made to the main sections of the SEC and to the enduring SSDs, those rules will apply in respect of the 4G Communications Hubs ordered for IPV. This includes, for example, arrangements applying at the point of delivery of Communications Hubs and the CH Handover Support Materials. Those changes may not have been made prior to IPV orders being placed, therefore the NETMAD drafting includes an acknowledgement that those rules will apply in respect of the 4G Comms Hubs ordered for IPV.

**CH&N
Q11**

Do you agree with DCC's proposals relating to the ordering of Comms Hubs for IPV? Do you have any detailed comments on the legal drafting? Please provide a rationale for your views.

4. Additional regulatory changes for CH&N not being consulted on at this time

77. At the time of writing, there are a number of items that are still under consideration by DCC which are required to support the roll out of 4G Comms Hubs. DCC anticipates further changes to the SEC and SSDs, on which DCC will consult as appropriate.

4.1. Completion of Transition of cessation of 2/3G Installation and future arrangements for ordering 2/3G hubs

78. As discussed in the workshops, DCC is currently discussing the end of 2/3G supply with its service providers. As part of this discussion, DCC is trying to determine how and when this supply will end, which includes the question of the requirement of a minimum number of orders that will be necessary to keep the manufacturing capability open.
79. Closely linked to the end of 2/3G manufacturing is the ability to provide refurbished Comms Hubs. DCC is of the view that the outcome of the commercial discussions will provide clarity on the need for refurbishment and the need for any regulatory changes to support the refurbishment of 2/3G Comms Hubs.
80. Once the discussions on the ending of 2/3G supply and the need for refurbished Comms Hubs has been finalised, DCC will consider the forecasting and ordering arrangements currently in the SEC and may present proposed changes to the SEC to facilitate efficient ordering and forecasting requirements.
81. DCC anticipates being able to conclude on these discussions with its Service Providers around the time that it concludes on this consultation. Once these discussions have been completed, DCC will engage with Parties and consider the regulatory options. DCC then plans to consult on any proposed changes in the first quarter of 2024, concluding before the end of June 2024. DCC does not anticipate that any changes would immediately be required to the main body of the SEC to reflect any amendments in this area.
82. On 12 July 2023, DCC held a workshop in which it engaged with Parties on the question of bulk returns of Comms Hubs. As this issue covers Comms Hubs across all regions, DCC is not proposing any changes to the regulations relating to bulk returns, but instead is in the process of raising a SEC modification for consideration of the issue amongst SEC Parties.

4.2. Managing 2/3G Mesh Communications Hubs

83. The replacement of Mesh Comms Hubs is an important aspect of the transition to 4G Comms Hubs which needs to be carefully managed to ensure that energy consumers do not lose their smart connectivity. DCC is considering the options for Mesh Comms Hubs and anticipates convening a workshop to discuss this question with Industry. DCC intends to host a workshop on this topic in September 2023. A further consideration that will be discussed in this workshop will be the requirement for 2/3G residual Comms Hub supply. If required, DCC will host further workshops to finalise a policy approach on these subjects.
84. Once these discussions have been finalised, DCC will develop regulatory changes to the SEC. DCC anticipates consulting on these changes in quarter 1 of 2024 alongside any additionally proposed NETMAD changes, concluding before the end of June 2024.

4.3. Interim Order Management

85. DCC is in the process of developing an interim Order Management System (OMS) for CH&N. DCC has carried out some initial engagement on the OMS, and intends to have a workshop on 27 September 2023 to discuss the proposed solution and obtain Users' opinions to help to develop the solution. DCC is of the view that further changes will be required to the regulatory framework including changes to the NETMAD to provide for this interim solution. As with requirements relating to Mesh Comms Hubs, DCC intends to consult on proposed content for the NETMAD in the first quarter of 2024, concluding before the end of June 2024.

4.4. Transitional Changes to forecasting and ordering lead times for 4G CHs

86. As discussed in the workshops on transition. DCC anticipates making changes to the Forecasting and Ordering Rules for the first two months of enduring Comms Hub supply. This will be to reduce the SEC mandated Forecasting and Ordering timeframes to ensure a timely start to supply.

4.5. Changes to support financing arrangements for 4G CHs

87. In Q1 2023 DCC consulted on changes to the SEC that would allow for the financing of 4G CHs and also for the design, build and test phase of the CH&N Programme. These changes were approved by the Secretary of State and incorporated into the SEC in June 2023. DCC understands that, as part of the Department's consultation on main body SEC changes, it will set out its position on any further changes to the SEC on financing arrangements for 4G CHs.

4.6. Changes to SEC Mandated documents

88. There are additional changes to SEC Mandated documents that DCC anticipates will be made, including the Communications Hub Supporting Information (CHSI), to require alignment to the new 4G solution in areas such as the labelling and ASN format section; the CHOP, to include new definitions for the 4G CH, installer training materials; the Statement of Service Exemptions Document to provide exemption categories for the new 4G WAN service; as well as the Intimate Communications Hub Interface Specification (ICHIS), to include new radio noise-level thresholds for new CHs.

Q12

Do you think there are any other changes that DCC should consider that could have an impact of the SEC?

5. Next Steps

89. Following the closure of this consultation, DCC will take into account respondents' views. DCC will amend the SEC Appendix H – Communications Hub Handover Support Materials (CHHSM), SEC Appendix I – Communications Hub Installation and Maintenance Support Material (CHIMSM), and SEC Appendix AD – DCC User Interface Specification (DUIS) as appropriate and will submit an amended version of the CHHSM, CHIMSM and DUIS to the Department for Energy Security and Net Zero (The Department) that it considers suitable for re-designation into the SEC by the Secretary of State.
90. DCC is aiming to provide a report to The Department by no later than 31 October 2023. This report will contain DCC's consideration of the consultation and its responses as well as a version of the NETMAD and the aforementioned SSDs. DCC will publish this conclusions document on its website.
91. The proposed content of the NETMAD relating to the Coverage checker and the IPV governance are required as soon as possible. DCC has discussed the designation of the NETMAD into the SEC with the Department. It is proposed that, subject to timely receipt of DCC's report and copies of relevant stakeholder responses to this consultation, the Department will designate the NETMAD into the SEC on 24 November 2023 or within one month thereafter.
92. In order to expedite the designation of the NETMAD, DCC is also seeking views on behalf of the Department on the proposed date for designation of the NETMAD as well as the draft direction which is presented in Attachment 1 of this consultation document for stakeholder consideration.
93. DCC is of the view that it will be necessary to update the NETMAD to incorporate any transitional obligations relating to 4G forecasting and ordering. DCC will set out its views on the content that should be incorporated into the NETMAD as part of its planned consultation in the first quarter of 2024.
94. DCC has discussed the re-designation of the CHHSM, CHIMSM and DUIS with the Department and it is proposed that, subject to timely receipt of DCC's report and copies of relevant stakeholder responses to this consultation, the Department will re-designate the CHHSM and, CHIMSM alongside the activation of the main body SEC changes in Q4 2024. A designation notice for these documents will be consulted upon closer to that time. The DUIS updates for 4G will need to be designated in time for the June 2024 SEC release. As mentioned previously, these changes are being designated by the Department, and in order to facilitate this DCC is seeking views on behalf of the Department on the proposed date for designation of the 4G changes into DUIS, as well as the draft direction for that designation set out in Attachment 2. It is proposed that, subject to timely receipt of DCC's report and copies of relevant stakeholder responses to this consultation, the Department will designate the revised version of DUIS into the SEC on 27 June 2024 or within one month thereafter.

Q13

Do you agree with the proposed 24 November 2023 (or, if necessary, as soon as reasonably practicable within one month thereafter) for the designation of the NETMAD using the draft notification at Attachment 1?

Q14

Do you agree with the proposed re-designation of 27 June 2024 (or, if necessary, as soon as reasonably practicable within one month thereafter) for the updates to DUIS for 4G using the draft notification at Attachment 2?

6. How to Respond

Please provide responses by 17:00 on 29 September 2023 to DCC at consultations@smartdcc.co.uk.

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. Please note that responses in their entirety (including any text marked confidential) may be made available to the Department for Energy Security and Net Zero (The Department) and the Gas and Electricity Markets Authority (the Authority). Information provided to The Department or the Authority, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004). If The Department or the Authority receive a request for disclosure of the information, we/they will take full account of your explanation (to the extent provided to them), but we/they cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

If you have any questions about the consultation documents, please contact DCC via consultations@smartdcc.co.uk.

7. Attachments

- Attachment 1: Draft Direction Text NETMAD
- Attachment 2: Draft Direction Text DUIS
- Attachment 3: Response template
- Attachment 4: SEC Appendix H – Communications Hub Handover Support Materials (CHHSM)
- Attachment 5: SEC Appendix I – Communications Hub Installation and Maintenance Support Material (CHIMSM)
- Attachment 6: SEC Appendix AD – DCC User Interface Specification (DUIS)
- Attachment 7: Draft Network Evolution Transition and Migration Approach Document (NETMAD)

Appendix A – Initial Scope of Regulatory Changes for CH&N

Table 2: Impacted Documents identified as requiring amendment in our initial consultation on scope of regulatory change (NB Section references refer to the original document in which this table was included)

Impacted Documents	Impacted Content
SEC Section A 'Definitions and Interpretation'	Potential consequential changes will be needed throughout Section A, including definitions of the SM WAN.
SEC Section F 'Smart Metering System Requirements'	The introduction of a new Section F13 to introduce the NETMAD into the SEC
SEC Appendix H 'CH Handover Support Materials'	<p>Appendices H and I contain the bulk of CH related information and it is expected that a full review of both of these SSDs will need to take place once more detail on the final solution is known. A preliminary review has taken place and a list of impact areas can be found in Section 6.1.</p> <p>An example of a probable change is to remove references to the 2G/3G Special Installation Mesh Communications Hub included in Appendix H.</p>
SEC Appendix I 'CH Installation and Maintenance Support Materials'	As with Appendix H, a full review of this SSD will take place once more information on the final solution is known but it is highly likely that changes will be required, and these have been included in Section 6.2 of this Consultation.
SEC Appendix AD 'DCC User Interface Specification'	DCC have identified changes to Service Requests related to providing information required for the SM WAN Coverage Database. Detail on this can be found in Section 6.4.
Guide for Testing Participants	Information related to ordering test CHs and remote test lab services will need to be added to reflect the change to 4G CSP and changes to SP offerings.
Intimate Communications Hub Interface Specification (ICHIS)	<p>The ICHIS will require updates to include new frequency bands for the new CH. The Appendices of the ICHIS will also need to be updated with the details for the new Communications Hub Antennae Structure (CHAS) (4G CH) unit, the rationale for the CHAS selection, the new antenna placement diagram for the new 4G CH and the noise limits for the two new frequency bands.</p> <p>More detail on these changes can be found in Section 7.1</p>
Communications Hub Supporting Information (CHSI)	The CHSI is expected to require alignment to the new 4G solution in areas such as the labelling and ASN format section which currently refers to WAN Variant CHs. A full review will take place once more detail on the final solution is known. More detail on these changes can be found in Section 7.2. Y
Communications Hubs Order Policy (CHOP)	The CHOP will need to be updated to include new definitions for the 4G CH, and existing definitions for Single Band Communications Hub (SBCH) and Dual Band Communications Hub (DBCH) will also need to be changed. The details behind these proposed changes have been included within Section 7.3.
Statement of Service Exemptions (produced pursuant to DCC Licence)	Updates to include additional Service Exemption Categories for the 4G WAN Service Provider, set out in Section 8 of this document.

Table 3: Documents identified as potentially requiring amendment in our initial consultation on scope of regulatory change

Potentially Impacted Documents	Impacted Content
SEC Section A 'Definitions and Interpretation'	There may be an impact to the charging and CH related definitions depending on the outcome of the consultation on CH&N Finance changes. ⁵
SEC Section H 'DCC Services'	<p>Changes to the SSI to accommodate the introduction of a 4G WAN and 4G CHs and the coverage checker will require updates, and the presentation of information to SEC Parties might change. This may have an impact on SEC Section H 'DCC Services'.</p> <p>Additionally, there may be changes to SEC Section H to accommodate the potential Service Provider Performance Measurement differences between the 4G WAN and 4G CHs Service Providers from the existing Service Providers.</p>
SEC Section J 'Charges'	There may be a requirement for further amendments to be made to SEC Section J and K (beyond those already proposed in our consultation on changes to support CH&N Financing) to reflect amended charging arrangements.
SEC Section K 'Charging Methodology'	There may be a requirement to amend charging related definitions in SEC Section A and where the definitions are referenced throughout the SEC.
SEC Section M 'General'	We have included SEC Section M as an area of the SEC that may be impacted (further to the changes we have set out in our consultation on CH&N CH Financing).
Enduring Testing Approach Document (ETAD)	There could be minor amendments to the ETAD to accommodate 4G CHs and the 4G WAN.

⁵ An update on this is provided in paragraph 88 of this consultation document.

Attachment 1

This attachment contains the text that The Department plans to designate the NETMAD.

Draft Direction Text

This direction is made for the purposes of the smart meter communication licences granted under the Electricity Act 1989 and the Gas Act 1986 (such licences being the "DCC Licence") and the Smart Energy Code designated by the Secretary of State pursuant to the DCC Licence (such code being the "SEC").

Words and expressions used in this direction shall be interpreted in accordance with Section A (Definitions and Interpretation) of the SEC.

Pursuant to Condition 22 of the DCC Licence and Section X5 (Incorporation of Certain Documents into this Code) of the SEC, the Secretary of State directs that, with effect from [DD MM YYYY], the Network Evolution Transition Migration Approach Document is hereby designated and incorporated in the form set out in Annex [XX] to this direction.

For the avoidance of doubt such designation of the Network Evolution Transition Migration Approach Document shall be without prejudice to anything done under the DCC Licence or the SEC on or after this document first being designated, or to the continuing effectiveness of anything done under this document prior to its re-designation (which shall have effect as if done under the re-designated document).

This direction is also being notified to the SEC Administrator.

Attachment 2

This attachment contains the text that The Department plans to use for direction of changes to the DUIS.

Draft Direction Text

This direction is made for the purposes of the smart meter communication licences granted under the Electricity Act 1989 and the Gas Act 1986 (such licences being the "DCC Licence") and the Smart Energy Code designated by the Secretary of State pursuant to the DCC Licence (such code being the "SEC").

Words and expressions used in this direction shall be interpreted in accordance with Section A (Definitions and Interpretation) of the SEC.

Pursuant to Condition 22 of the DCC Licence and Section X5 (Incorporation of Certain Documents into this Code) of the SEC, the Secretary of State directs that, with effect from [DD MM YYYY], the DCC User Interface Specification previously designated and incorporated into the SEC as Appendix AD is hereby re-designated and incorporated in the form set out in Annex [XX] and [YY] to this direction.

For the avoidance of doubt such re-designation of the DCC User Interface Specification as Appendix AD shall be without prejudice to anything done under the DCC Licence or the SEC on or after this document first being designated, or to the continuing effectiveness of anything done under this document prior to its re-designation (which shall have effect as if done under the re-designated document).

This direction is also being notified to the SEC Administrator.