



FEEDBACK CLOSURE SUMMARY
Communications Hub and Network (CH&N)

01 April 2021 - 31 March 2022

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Classification: DCC Controlled

1. Introduction and Context

1.1. Background

Customers are central to decision-making at DCC, and we capture all feedback and report back to customers as part of our engagement methodology. Prior to making decisions, we regularly seek customer input through a variety of different forums and consultation approaches. The feedback loop and summary reports were introduced in 2020-21 and enable us to ensure we are delivering what customers want.

When creating the feedback summary report, we ensure the engagement objectives were met. You are receiving this summary feedback report as part of our commitment to keep you updated on key engagement activities which have taken place. We hope you find this report useful.

1.2. Network Evolution: Communications Hubs and Networks

The Communication Hubs and Networks (CH&N) programme forms part of DCC's Network Evolution Portfolio. The objective of this programme is to update both the Communications Hubs and the Network that they use to 4G operability to mitigate the risk of 2G/3G sunsetting.

DCC has a 6-stage process for delivering change activities. Development of this activity is currently at:

- Stage 2 (shape): Define detailed requirements, approach, plans and resourcing.

1.3. The purpose of our engagement in 2021/22

In April 2021, the DCC consulted industry on the assumptions within the CH&N Cost Benefit Analysis (CBA). The Panel recognised and supported the business need of the programme to deliver a Minimum Viable Product (MVP) in time for early intercept of the main Smart metering rollout. DCC discussed the scope of the changes that will be required to deliver 4G Communications Hubs; the Minimum Viable Product (MVP). In October 2021 the Panel provided a recommendation on the optional requirements. The recommendation and the views of industry have been included in the DCC's Final Business Case, submitted to BEIS 11 April 22.

2. Feedback received and DCC decision

Engagement sought customers' views on the topics set out in the table below.

DCC has analysed the feedback provided and views of customers. This section presents an overview of the feedback received and DCC's response to each theme. Our response to each feedback theme is categorised as follows:

- Category A: We will incorporate the feedback into our activity. We will say whether or not we believe any fundamental amendments to the activity are needed as a result of the feedback.
- Category B: Feedback cannot be considered now. We will give an estimated date when an update can be given.
- Category C: We will not be taking feedback forward. We will say why.

Milestone	Feedback theme	Feedback	DCC response and reason
Full Business Case	Road Map - The roadmap consists of the additional options & potential changes to the CH&N services on a 2-5-year horizon. This will be prioritised through regular reviews with TABASC & Ops Group and implemented following the delivery of the MVP.	Ops Group requested more information on the process and governance relating to the proposed roadmap.	Category A DCC is developing a full view of the roadmap, we have agreed a 6 monthly review cycle with Ops Group and TABASC. The first version will be shared in June.
		Ops Group questioned whether there has been consideration of SEC DP169 'Managing SEC Obligations and Customers Right to Refuse a SMART Meter' and whether this could be managed more effectively by a hardware or software change through the 4G CH&N programme.	Category B DCC, noting that this had not been raised previously, agreed to investigate further but outlined that any consideration or output from the Modification process could result in an entry to the roadmap.

		<p>During the discussions with TABASC and Ops Group, the Sub-Committees expressed concerns that there could be items left on the roadmap which may never be delivered.</p>	<p>Category B</p> <p>Over the next two years, the priority will be delivering the MVP, and during that time the DCC will not be delivering any of the road map items. After the completion of the delivery of the MVP for the programme, the DCC will begin to look again at the road map items.</p>
		<p>The Ops Group requested clarity on what the priority items would be and when DCC will make decisions regarding when and how the road map items can and should be delivered.</p>	<p>Category B</p> <p>The DCC has committed to engage with industry after the completion of the MVP delivery to discuss what the prioritisation ought to be. DCC is very clear that it should not be for DCC to unilaterally identify the priorities, and that they must be based on user needs as reflected by the Sub-Committees. Therefore, this will be reviewed on a 6 monthly review cycle with Ops Group and TABASC.</p>
		<p>The Ops Group highlighted a desire to have a slimmer CH and a Smart meter capable of operating in a 'dumb' mode'. This could later be activated.</p>	<p>Category B</p> <p>DCC agreed for these to be added to the road map, which will be shared with Ops Group and TABASC in June.</p>
	<p>The CH&N FBC - This follows the Greenbook Treasury Approach, as it falls under the LC16 Condition.</p>	<p>Ops Group raised concerns with the business case for the 4G Dual Band Comms Hub (DBCH) considering the issues identified with the current implementation of 2G/3G DBCHs.</p>	<p>Category A</p> <p>DCC have been in the process of negotiations for both Single Band and Dual Band, to understand the full implications of each approach. As there are significant differences in terms of cost, benefit and contract terms with each approach, DCC</p>

			<p>have included both options in the Full Business Case submitted to BEIS on 11 April 22.</p> <p>We have begun discussions with customers on the CH&N transition. These will continue and will result in a regulatory consultation on the transitional approach document. This is a chance for customers to continue to feedback on lessons learnt from the 2G/3G DBCHs.</p>
	<p>Security of Universal Integrated Circuit Card (eUICC) - This is a SIM that is capable of being an eSIM, this allows switching without access to the CH.</p>	<p>The SSC discussed the use of an embedded eUICC with the ability to be configured later as an eSIM.</p> <p>The SSC asked DCC to have further conversations with NCSC as this proposal goes forward to ensure it remains secure.</p>	<p>Category B</p> <p>This is a pending item to discuss with NSCS; it has been issued along with the others to their front door process with BEIS and DCC are waiting for availability.</p>
	<p>Additional Memory - Following engagement with customers and BEIS, it was agreed that some of the functionality would be removed from the MVP, however DCC would request quotes on the optional requirements. Following the review, it was agreed that the MVP would include Additional Memory only.</p>	<p>TABASC asked the DCC to provide clarifications as to how additional memory would benefit the MVP product.</p>	<p>Category A</p> <p>Enhanced Buffering and Storage Capacity means that there is increased message buffering in case of WAN outage.</p> <p>Increased memory size also provides separate storage capability of FW image storage for PPMID and HCALC.</p> <p>Future proofing Comms Hub memory for increase in FW size HAN and WAN.</p> <p>Buffering would increase the success rate of firmware upgrades and the number of steps/chunks/messages firmware would need to be broken into.</p>

			Additional storage capacity meant that CHs could go longer between uploads of meter readings without losing data.
		<p>TABASC queried who would have access to the debug data or any other data streams introduced because of the MVP CH, noting that it could contain a lot of information related to the Home Area Network (HAN), some of which could be seen as sensitive.</p> <p>The TABASC therefore considered that there needs to be adequate controls in place to ensure the integrity and security of this data.</p>	<p>Category B</p> <p>DCC agreed to investigate this during the design phase, currently scheduled to begin by the end of June. DCC will bring the CH design to TABASC at the relevant point.</p>
		TABASC noted that although increasing Random Access Memory (RAM) and Read Only Memory (ROM) will support additional Device capabilities in the future, Central Processing Unit (CPU) utilisation also needs to be considered to ensure that the MVP CH can provide the required levels of service throughout its 15-year lifetime.	<p>Category A</p> <p>DCC has confirmed that one of the ways in which the inclusion of additional memory would improve CH performance is by increasing the performance of the CPU. WAN module upgrade in NE CH to LTE Cat 1 will also provide the processor with increased efficiency and speed than the present Comms Hub processor, this will guarantee 15years lifetime.</p>
		TABASC queried whether the additional memory being introduced at this stage would still be viable for implementation of software containerisation later.	<p>Category B</p> <p>DCC noted that there are several ways in which containerisation can be implemented later and agreed that it will undertake further and detailed analysis of containerisation technologies during its roadmap exercise with TABASC and Ops Group, beginning in June.</p>

	HAN (Home Area Network) and WAN (Wider Area Network) architecture	The TABASC questioned the degree of the separation between the HAN and WAN architectures in the MVP product, and whether it may be possible that a HAN failure could lead to a WAN failure and vice versa.	<p>Category A</p> <p>DCC explained that the HAN stack is split, and that only the application layer of the ZigBee stack is present on the host processor. As a result, it is unlikely that a WAN outage will lead to a HAN outage as they are run on separate modules.</p>
	Operational Options – In the CH&N Cost Benefit Analysis the Options were included.	<p>TABASC considered that for Option H (Service in the North Region), a £10m-£24m price range for achieving 98% coverage in the CSP North Region is an attractive option and agreed that this should be kept as a contractual option.</p> <p>In addition, TABASC considered Option I (Service to 99.5% Meter Locations in the North Region) to be linked to Option H and if implemented alongside it, could bring about synergies during implementation. TABASC therefore agreed that Option I should also be considered as a contractual option alongside Option H.</p>	<p>Category A</p> <p>Following the recommendation of the Sub-Committees, DCC has included Option H as an option in the supplier contract that can be taken up at a future date and subject to a future business case.</p> <p>However, Suppliers are unable to provide a price to achieve 99.5% coverage in the North region without significant network investment which would be cost prohibitive at present. Therefore, Option I is not included in the supplier contract. Current discussions outside of this programme on possible introduction of Cellular in the North are not clear that this wide coverage would be required.</p>
		Option 3 was the Communications Hubs Collection Service. Ops Group shared that the large suppliers had their own processes and were unlikely to use the service.	<p>Category A</p> <p>No supplier has shown any interest in this option. Ops Group agreed to keep it on the list for now,</p>

			however given the lack of interest, DCC removed this option.
	Transition – Engagement to capture industry views to feed into the Transition Approach Document	<p>DCC began engagement with industry through workshops in September 2021 to discuss the CH&N Transition. This covered a number of sessions to discuss the scope of the transition and then began to review specific topics such as IPV requirements.</p> <p>Industry raised that a consultation on the Transition Approach Document would be preferred. Industry also fed back on the IPV Strawman.</p>	<p>Category B</p> <p>DCC confirm that any topics that require industry consultation will result in a formal consultation.</p> <p>Following on from the IPV session DCC will plan a webinar in June to give customers an update on the IPV section of the Transition Approach Document.</p> <p>DCC will then plan future Transition workshops to cover;</p> <ul style="list-style-type: none"> • Forecasting and Ordering • Mass Manufacture <p>Dates will be provided for these two workshops following the LC13 Consultation in June.</p>
Contract Award	Engagement - post contract award	IMF members raised uncertainty around the specifics of the procurement decisions & procurement timeline, as they feel that they have not been engaged during this time.	<p>Category B</p> <p>The Full Business Case was submitted to BEIS on 11 April, including a recommendation from the DCC board. DCC expect to award the contract by the end of June 2022.</p> <p>DCC will share a contract status update in a letter to all SEC parties by the end of May 2022. Following the contract award, DCC will brief all Sub Committees and raise this at the Quarterly Finance Forum (QFF). DCC will also share the engagement plan at these channels, and we will continue to review on a regular basis.</p>

			Following on from the contract award, DCC will engage with customers as per the CH&N engagement plan. This includes all artefacts that has been committed to ahead of Gate 2.
		IMF asked if customers would get full briefing and transparency on the 4G contracts after award.	Category A DCC will publish copies of the redacted contracts on the DCC website. If it will benefit customers, DCC will brief customers on the key contract obligations and terms.
		IMF asked how 4H CH&N RAID assumptions and risks were being updated and reflected in the business case. Specifically, regarding the implications due to the delays from the original timeline.	Category B DCC intends to publish an updated Cost Benefit Analysis (CBA) to SEC Committee members, Quarterly Finance Forum attendees and those who responded to the original CBA consultation, outlining any changes in July.
		IMF asked about the DCC plan to engage wider stakeholders including Meter Manufacturers and Meter Asset Providers (MAP) once the initial procurement is completed.	Category B DCC will continue to engage with MAPs and will be attending CMAP, which is the association body for companies that invest in smart meters and associated technologies. This will cover the 4G CH&N scope as agreed with CMAP Chair.
	Testing - Ensuring the testing scope & approach meet customer needs	IMF asked how the in-home interoperability of 4G CH with installed meter-sets will be assured.	Category A Existing SMETS2 requirements as specified in SEC apply to 4G CH&N. DCC are in the process of agreeing a Device Selection Methodology (DSM) with TAG. This methodology will determine the list of devices we

			are going to test against during PIT. The methodology will capture some installed meter sets but not all. To ensure we test across a range of meter sets, DCC consulted industry through a consultation open 24 December 21 to 4 February 22 & a supporting webinar on 11 January 2022.
		IMF asked how DCC will assure that testing design and assumptions take account of the needs of Meter Manufacturers and Energy Suppliers to do their own testing.	<p>Category A</p> <p>The Device selection methodology consultation was open to Energy Supplier and Meter Manufacturers. DCC can confirm that 3 device manufactures attended the workshop & 1 device manufacturer responded to the DSM consultation.</p>

3. Conclusion

- This concludes the engagement on the Business Case & MVP, following the Contract Award, DCC will share the updated Cost Benefit. Next priorities for YR22/23 will focus on the delivery of the MVP with engagement focused on the LC13 replan, Test Approach & Transition. Engagement will also begin on the prioritisation of the CH&N roadmap.
- Further information on our customer engagement process can be found at www.smartdcc.co.uk/customer-engagement .