



Consultation on the VWAN Arrangements

Issued: 18 September 2026

Respond by: 17:00 on 30 October 2026

Contact: consultations@smartdcc.co.uk

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1. Background and context

1. This consultation sets out, and seeks your views on, changes to the SEC to support the Virtual Wide Area Network (VWAN) service.
2. We are seeking your responses to the questions set out in this consultation by **17:00 on Friday 30 October 2026**.

1.1. The VWAN arrangements

3. VWAN enables smart meter installations in areas with no network coverage by securely routing data through the consumer's home internet to the DCC. This is managed by a Virtual Wide Area Network Communications Hub (VWCH), which automatically switches between 4G cellular (the Smart Metering Wide Area Network (SM WAN)) and the home internet (the Virtual WAN) depending on signal strength.
4. The 4G Release 2 project will deliver a range of defect resolutions, maintenance activities and design enhancements to support the continued reliability, stability and ongoing improvement of the 4G service. Several of these enhancements have been informed by lessons learned during the VWAN Soft Launch phase. To support the introduction of these changes, an Initial Pallet Validation (IPV) phase will commence on 6 October 2026, enabling Energy Suppliers to install a limited number of 4G Release 2 Communications Hubs within a controlled pilot environment.
5. As part of this release, a small number of enhancements are intended to strengthen the VWAN service. Consequently, this consultation seeks views on a limited set of proposed regulatory changes to support these enhancements. The proposed changes are predominantly clarificatory in nature and are intended to improve the clarity and effectiveness of the existing regulatory framework.

1.2. Scope and structure of this consultation

6. This consultation seeks your views on the proposed changes to two SEC Subsidiary Documents to support VWAN in addition to a number of consequential changes to the SEC Main Body. Section 2 of this document sets out the proposed changes to the SEC documents and the redlined changes to the affected documents are available in Attachments 1-3. A summary of these changes is below:
 - SEC Appendix I 'CH Installation and Maintenance Support' – clarification on when a Supplier Party should use Service Request 8.14.1 or 8.14.2.
 - SEC Appendix BA 'VWAN Interface Specification' – clarification on the requirements relating to VWAN Manufacturers.
 - SEC Section F 'Smart Metering System Requirements' – updated to clarify when DCC will receive a Power Outage Event (AD1) Alert.
7. This consultation also seeks your views on the proposed re-designation date for the relevant SEC subsidiary documents. Section 3 of this consultation document sets out the proposed date for this.
8. This consultation is expected to impact all SEC Parties.
9. This consultation closes at **17:00 on Friday 30 October 2026**. Following this, DCC will provide a report to the Department by **4 December 2026** containing its consideration of the responses. We will publish this conclusions document on the DCC website.

2. Proposed changes to the VWAN arrangements

10. This section sets out the proposed changes to the impacted SEC documents.

2.1. No SMWAN CH Installation Procedure

11. SEC Appendix I 'CH Installation and Maintenance Support Materials' clause 4.9 has been amended to clarify where a Supplier Party wishes to leave a CH installed at a premises without establishing a connection to the SM WAN, then they must submit one of the following:
 - Service Request 8.14.1 if the CH has connected to the VWAN Interface; or
 - Service Request 8.14.2 if the CH has not connected to the SM WAN or the VWAN Interface.
12. DCC's internal systems will automatically detect and flag instances where a CH has birthed and is operating via VWAN in a location where the 4G coverage database showed "True". This data will be used to support WAN assurance and will improve the accuracy of the coverage database.

2.2. VWAN Interface Specification

13. Updates have also been made to SEC Appendix BA 'VWAN Interface Specification' to improve the clarity and testability of the requirements applicable to Virtual WAN Device (VWD) Manufacturers. The changes clarify the expected Message Queuing Telemetry Transport (MQTT) client behaviour, including QoS 1 operation, CleanSession, a 120-second Keep Alive value, PUBACK (publish acknowledgement) handling, message retention and the non-persistence of transient message queues across restart or loss of power.
14. The proposed changes also clarify the retry behaviour to be applied by a VWD, including the use of the common retry strategy for inter-PAN join failure and response codes identified as retrievable. Further clarification has been added on message size, including the relationship between Javascript Object Notation (JSON) messages, Base64 encoded payloads, Zigbee Tunnel messages, Great Britain Companion Specification (GBCS) Protocol Data Units (PDUs), General Block Transfer (GBT) and firmware transfer blocks. These updates confirm that the VWD continues to act as a transparent relay and does not perform VWD-specific fragmentation, reassembly or interpretation of application payloads.
15. These changes are recommended to support implementation consistency and future assurance but are not expected to be a prerequisite for the current VWAN solution to operate, including integration of the VWD with the VWCH and Virtual WAN Provider (VWP).

2.3. Power Outage Events

16. SEC Section F 'Smart Metering System Requirements' clause 4.9 has been updated to clarify that DCC does not receive a Power Outage Event (AD1) Alert in circumstances where a Communications Hub is communicating with the DCC via the Virtual WAN Interface.

3. Designation of the SEC changes

17. We are proposing that, subject to the timely receipt of DCC's conclusions report on this consultation the Department will re-designate SEC Appendix I and SEC Appendix BA and make the consequential change to SEC Section F, on **18 December 2026**, or as soon as reasonably practicable within one month thereafter as a contingency measure if required.

4. Next steps

18. Following the closure of this consultation, DCC will assess respondents' views and amend the proposed updates to the SEC documents as required. DCC will then submit the updated SEC documents to the Department for approval by the Secretary of State.

DCC is aiming to provide a report to the Department by no later than **4 December 2026**. This report will contain DCC's consideration of the responses to this consultation as well as the

proposed updated versions of the SEC documents. DCC will publish its conclusions document on its website.

5. Consultation questions and how to respond

19. We are seeking your views on the following questions:

Q1	Do you agree with the proposed amendments to SEC Appendix I 'CH Installation and Maintenance Support Materials' in relation to the No SM WAN CH Installation Procedure? <i>Please provide any comments you may have on the proposed changes and your rationale for your views.</i>
Q2	Do you agree with the proposed amendments to SEC Appendix BA 'VWAN Interface Specification' to support VWD Manufacturers?
Q3	Do you agree with the proposed amendments to SEC Section F 'Smart Metering System Requirements' concerning the Power Outage Event (AD1) Alert? <i>Please provide any comments you may have on the proposed changes and your rationale for your views.</i>
Q4	Do you agree with the proposed re-designation date for SEC Appendix I and SEC Appendix BA of 18 December 2026 (or as soon as reasonably practicable within one month thereafter)?

20. Please provide responses using the attached response form by **17:00 on Friday 30 October 2026** to DCC at consultations@smartdcc.co.uk.

21. Consultation responses may be published on our website (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 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.

22. If you have any questions about this consultation, please contact us at consultations@smartdcc.co.uk.

6. Attachments

23. This consultation includes four attachments:

- Attachment 1: Proposed changes to SEC Appendix I for VWAN
- Attachment 2: Proposed changes to SEC Appendix BA for VWAN

- **Attachment 3:** Proposed changes to SEC Section F for VWAN¹
- **Attachment 4:** Consultation response template

¹ Note that SEC Section F is also subject to change following the Department's conclusions on proposed SEC changes in July 2026. The conclusions and SEC Section F changes can be found here: [DESNZ Conclusion and further consultation on SEC Changes for VWAN - Smart Energy Code](#)