



Communications Hubs Consultation on changes to the RF Noise Derogation in the ICHIS

Your chance to comment on changes to the Radio Frequency
(RF) Noise Derogation specified in the Intimate
Communications Hub Interface Specification (ICHIS)

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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 our network.

1.1. Background

2. Smart Energy Code (SEC) Section H12.5 requires the DCC to keep the Intimate Communications Hub Interface Specification (ICHIS) under review to ascertain whether the specification remains fit for purpose as envisaged by the SEC. At its discretion the DCC may consult with Parties as to whether they consider the specification to be fit for purpose.
3. The ICHIS defines the mandatory features required to ensure that an Intimate Communications Hub can be used with any ICHIS compliant Host (the side of an ICHIS interface which provides power and physical mount for a Device. It defines a common interface between the Communications Hub and Electricity Smart Metering Equipment (ESME).
4. Part F of the ICHIS describes requirements and testing pertaining to the Radio Frequency (RF) implementation of Hosts (SMETS2+ ESME) such that they do not adversely affect other radios included in the Communications Hub. ICHIS Part F sets out the requirements for radiated (wireless) RF interference.
5. In Quarter 4 2018, DCC consulted on and amended the ICHIS to temporarily adjust the RF noise limits applicable to ESME at the various frequencies. This was due to manufactured ESME emitting RF noise above the set limits and assurance was required for parties that ESME that were close to meeting the specified limits could be installed for a temporary period whilst ESME versions were being refined which were compliant with the limits.
6. This resulted in a period of derogation (the "Derogation Period"), initially up to and including 30 September 2019, during which parties would be permitted to continue to install ESME which exceeded the limits set in Part F of the ICHIS. The following derogated limits were implemented:
 - a temporary relaxation to the limit of RF interference that a Host may emit in the 423MHz WAN frequency to equal or below 17dB;
 - a temporary relaxation to the limit of RF interference that a Host may emit in the 900MHz WAN frequency band to equal or below 6.5dB;
 - a temporary relaxation to the limit of RF interference that a Host may emit in the 2.4GHz HAN frequency band to equal or below 4dB, and;
 - an introduction of a limit that a Host may emit in the 868 MHz HAN frequency band to 5dB and a temporary relaxation to that limit of equal to or below 7dB.
7. In September 2019 DCC published a consultation and amendments were made to the ICHIS to extend the Derogation Period further to 31 March 2020.

1.2. Purpose of the consultation

8. The purpose of this consultation is to set out proposed changes to the ICHIS Part F in relation to the RF noise Derogation Period and to seek parties' feedback.
9. This consultation is expected to impact Large and Small Suppliers, and Other SEC Parties.
10. Parties can respond to this consultation by emailing consultations@smartdcc.co.uk. This consultation will close on the 23 December 2022 at 17:00.

2. Amendments to ICHIS Part F

2.1. RF Noise Derogation

11. Following the end of the Derogation Period (31 March 2020), DCC observed a high volume of non-compliant ESME installed in both Communications Service Provider (CSP regions). Through engagement with industry via bilateral discussions and forums such as the SEC Operations Group (OPSG) it was established that there was a large amount of non-compliant stock held by parties which were compliant under the derogation but exceeded the enduring limits.
12. Having considered the length of time understood to be needed by parties to install remaining stock that is compliant under the derogation and potential impacts on Wider Area Network (WAN) and Home Area Network (HAN) coverage or service levels, DCC proposed to extend the Derogation Period up to and including the 31 March 2021 for all frequency bands.
13. However due to the impacts of the Covid-19 pandemic, which caused smart meter installations to drastically decrease for a prolonged period, DCC amended the proposal to extend the Derogation Period up to and including the 31 March 2022. This proposed extension to the Derogation Period was communicated to impacted stakeholders bilaterally and to SEC Parties via the SEC Operations Group (OPSG).
14. Whilst this updated approach to the derogation was communicated to SEC Parties, it has not been formally amended in the extant version of the ICHIS, which still refers to a March 2020 date. In order to align the ICHIS to how the Derogation has been managed, DCC proposes to make retrospective changes the following sections of the ICHIS to correctly define the period in which temporary RF limits applied for installations up to and including the 31 March 2022:
 - F5.0 Installation of a Host emitting RF noise at 423MHz
 - F6.0 Installation of a Host emitting RF noise in the 900MHz band
 - F7.0 Installation of a Host emitting RF noise in the 2.4GHz (HAN) band
 - F8.0 Installation of a Host emitting RF noise in the 868MHz (HAN) band
15. ESME compliant with the temporary RF noise limits set out in these parts of the ICHIS which were installed up to and including 31 March 2022 shall continue to be deemed compliant.
16. Any ESME which exceeds the enduring limits installed after 31 March 2022 will be deemed non-compliant and DCC will work with parties to agree a remediation plan for these installation to minimise the impact to the network.

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Do you agree with the proposed changes to Part F? Please provide your rationale.

3. Next Steps

17. Following the closure of this consultation, DCC will take into account respondents' views. DCC will amend the ICHIS as appropriate and will publish an amended version of the ICHIS on the DCC Website along with a DCC response document outlining the decision.

4. How to Respond

18. Please provide responses by 17:00 on 23 December 2022 to DCC at consultations@smartdcc.co.uk.

19. 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 Business, Energy and Industrial Strategy (BEIS) and the Gas and Electricity Markets Authority (the Authority). Information provided to BEIS 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 BEIS 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.
20. If you have any questions about the consultation documents, please contact DCC via consultations@smartdcc.co.uk.

5. Attachments

- Attachment 1: ICHIS DRAFT v2.4 – Tracked Changes
- Attachment 2: ICHIS RF Noise Derogation Response Template