Department for Energy Security & Net Zero
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The Authority (Ofgem), the SEC Panel, SEC Parties
and other interested parties

16 June 2025

Dear Colleague,

SMART METERING IMPLEMENTATION PROGRAMME: CONCLUSIONS ON LEGAL DRAFTING CHANGES FOR VIRTUAL WAN

On 23 April 2025 the Government issued a consultation[1] on the proposed changes to gas and electricity supply licences, the smart meter communication licences and the Smart Energy Code (SEC) needed to support the arrangements for Smart Metering Systems connected to the DCC via the internet.

The consultation closed on 30 May 2025 and five responses were received. Respondents were broadly in favour of the proposals, although several specific points were raised.

As explained in Annex 1 we have made some adjustments to the originally proposed drafting changes in light of the responses received.

We will now lay the draft changes before Parliament in accordance with the procedure required by section 89 of the 2008 Energy Act.

Yours sincerely,

James Cosgrove
Deputy Director
Smart Metering Implementation Programme

(An official of the Department for Energy Security & Net Zero authorised to act on behalf of the Secretary of State).

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[1] DESNZ conclusions on policy proposals for VWAN and further consultation on licence and SEC changes - Smart Energy Code

Annex 1 Response to the April 2025 consultation on proposed changes to licence conditions and to the main body of the SEC to support the Virtual WAN Arrangements.

Annex 2 Changes to the DCC Licence, Gas and Electricity Supply Licences and the Smart Energy Code (other than Section L) to implement the Virtual WAN Arrangements.

Annex 3 Changes to the Smart Energy Code Section L.

Annexes 2 and 3 are published separately.

ANNEX 1: Response to the April 2025 consultation on proposed changes to licence conditions and to the main body of the SEC to support the Virtual WAN Arrangements.

1. Background

1.1. On 23 April 2025 the Government issued a consultation[1] on the proposed changes to gas and electricity supply licences, the smart meter communication licences and the Smart Energy Code (SEC) needed to support the arrangements for Smart Metering Systems connected to the DCC via the internet.

1.2. Five responses to the consultation were received.

2. Summary of Changes Made

2.1. The table below summarises the changes made to the legal text in light of the consultation comments.

Reference	Change Made	Reason
gas SLC 43.20A and elec SLC 49.20A	Condition expanded into two separate conditions.	Limb (c) of the original drafting now applies to the supplier who supplies the site, rather than the supplier who provided the VWD.
gas SLC43.26(a) and elec SLC49.26(a)	Change of “is” to “its”	Typographical error
SEC Section A: definition of “Issue”	Change reference to DCCKI to be a reference to VWKI.	Typographical error.
SEC Section A: definition of VWKI Eligible Subscriber	Change reference from L18.6 to L18.6(a).	Increased cross referencing precision.
SEC Section A: definition of “VWKI Services	Change reference from L18 to L18.1.	Increased cross referencing precision.

3. Comments Received and Government Response

3.1. One respondent said that it was difficult to comment on the new obligations in isolation without also being able to see the obligations that will be added for the more complex scenarios – “especially surrounding Change of Supplier, Change of Tenancy and Change of Broadband Provider”, where the role of the energy supplier becomes both complex and diluted. They went on to say that it was critical that the proposed longer-term amendments are shared as soon as possible and that they expected that potential consumer issues will be explored within appropriate forums. Another respondent also raised concerned about the additional needs of those in the private rented sector where they believed suppliers often have less sense of who is renting a property, and whether VWAN operating in prepayment mode will be safe and appropriate for them. They believed that there were likely to be issues with prepayment properties going off supply between tenancies. They stated that it may be appropriate for suppliers to place the meter into credit mode and then evaluate whether VWAN prepay remains safe and appropriate for the new occupier.

3.2. We shared some of our thinking on prepayment consumer journeys in our 16 January 2025 consultation[2] on the policy framework for Smart Metering Systems connected to the DCC via the internet. The VWAN Subgroup (under the Technical and Business Design Group (TBDG)) is considering the details of how various processes will work in practice. To the extent that it is identified that further legal changes are needed as a consequence of this work, we will include them in the pre full go-live [3]consultation. To date, the group has discussed different use cases, including Change of Supplier, Change of Tenancy and Change of internet provider, but no requirement for further legal changes has been identified. We are of the view that these scenarios can be accommodated into the existing design and we are not currently proposing to make any further changes for these scenarios. As a result, where there is a change of consumer in a VWAN served premises, the supplier would be required to seek consent from the new consumer if it wishes to operate the smart metering system in prepayment mode (as well as consent to use the new consumer's broadband).

3.3. One respondent suggested including wording to make it clear that the internet connection needs to be permanent to the property in order to support VWAN. They stated that a "Customer's internet connection" could be interpreted as being attached to their phone or tablet, which would then only be able to communicate with the Virtual WAN Device when the customer was at home.

3.4. We recognise the potential issues should intermittent Internet connectivity be used however the use of mobile services are common in domestic premises and we do not think they should be ruled out. Should we identify issues relating to the use of mobile services in soft launch we can make changes for full go-live if warranted.

3.5. One respondent commented on the proposed drafting in gas and electricity standard licence conditions (SLCs) 28.1(d) and 28.7(f) suggesting that these requirements (relating to providing information to the consumer about Smart Metering Systems that use VWAN operating in prepayment mode, and requiring the consent of the consumer to operate such a Smart Metering System in prepayment mode) should apply not just when a Smart Metering System is provided, but also when considering switching an existing Smart Metering System that relies on VWAN into prepayment mode.

3.6. Our understanding is that these obligations do apply when a supplier is considering switching an existing Smart Metering System into prepayment mode because the definition of prepayment meter in condition 1 of gas and electricity supply licences is as follows:

> **Prepayment Meter** includes any Gas/Electricity Meter operating in a mode which requires a Domestic Customer to pay Charges for the Supply of Gas/Electricity in advance, and ***references to the installation or removal of a Prepayment Meter includes the switching of any Gas/Electricity Meter to or from such a mode***;

3.7. One respondent said that the proposed drafting in gas SLC 43.20A and electricity SLC 49.20A was confusing as it was not clear whether the obligations applied at the time of provision of a Virtual WAN Device or whether they were ongoing maintenance obligations.

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[2] https://smartenergycodecompany.co.uk/desnz-further-conclusions-on-smart-meters-connected-to-the-dcc-via-the-internet-and-further-consultation-on-the-associated-policy-framework/

[3] We anticipate a consultation on the proposed additional obligations following soft launch in 2026.

3.8. In light of this comment, which we agree with, we have separated out the proposed obligations into two separate conditions one which applies to a supplier providing a Virtual WAN Device and one which applies where a supplier supplies a premises which relies on the use of a Virtual WAN Device. Please see updated conditions for gas - SLC 43.20A and 43.20B and electricity SLC 49.20A and 49.20B.

3.9. One respondent queried why the VWAN arrangements were dealt with in a proposed new gas SLC 43.20A and electricity SLC condition 49.20A whereas for electricity the Alt HAN provisions had been integrated into the main text of SLC 49.4.

3.10. VWAN, is about WAN establishment and maintenance rather than HAN establishment and maintenance and so differs from AltHAN. Conditions 43 (gas) and 49 (elec) have longstanding provisions in them regarding establishment and maintenance of the WAN and we did not want to interfere with those longstanding provisions as a consequence of introducing new arrangements for VWAN. We therefore made separate provision for VWAN. Similar considerations apply to our proposed treatment of “Free of Charge” where we have made separate provision for VWAN rather than seeking to integrate the drafting into the equivalent drafting for AltHAN Equipment.

3.11. Two respondents pointed out a typographical error in the proposed ‘Free of Charge’ definition in gas SLC43.26(a) and elec SLC49.26(a). We have corrected this error. We have also corrected an erroneous reference to the DCCKI Certificate Policy rather than the VWKI Certificate Policy in the proposed revised definition of “Issue”, following a comment from the SEC Panel’s Security Sub Committee (SSC).

3.12. One respondent queried why there was a reference to incremental charges for gas and electricity in the definition of “Free of Charge”, and how this applied to consumers who did not have a net import of electricity because, for example, they exported energy due to having solar power generation capability. Another asked whether the drafting was intended to mean that costs will be recovered by suppliers through general billing of all customers. i.e. socialised across the supplier’s customer base.

3.13. The purpose of the licence drafting is to make it clear that where a supplier provides a VWD, the supplier cannot levy an up-front fee for the costs of the VWD itself (unless the consumer has agreed to a VWD with additional enhanced functionality). The supplier can however recover the costs of a VWD through incremental charges that it levies on its customer base ***in general*** for their use of gas or electricity. Precisely how the supplier does this is a matter for them (subject to any other relevant regulatory requirements), but it does not necessarily mean that the costs of providing VWDs will be recovered only from incremental charges levied on those customers that have been provided with a VWD.

3.14. One respondent asked why if “enhanced functionality” was providing additional consumer benefits, then why this was not the default.

3.15. We are not expecting that a consumer would have any significant interaction with a VWD other than allowing it to be connected to their internet, since on a day-to-day basis, its function is simply to route messages to and from the Virtual Wan Communications Hub and to and from the DCC over the internet. We do envisage however that suppliers may wish to integrate VWD functionality into devices with wider functionality that is not directly related to its operation as a VWD – for example Consumer Access Devices, or indeed a device with any other functionality that the supplier might consider the customer would benefit from. We do not envisage that such enhanced functionality would be enhanced functionality that relates to its operation as a VWD.

3.16. One respondent queried whether the obligation on maintenance of connections to the VWD could be interpreted as also including a contribution to the property's internet bill.

3.17. We do not think the obligations can be interpreted as giving suppliers an obligation to contribute towards a property's internet bill. The proposed obligations on suppliers are to take all reasonable steps to maintain the connection between the Virtual WAN Device and the Virtual WAN Communications Hub, and not do anything that compromises the connection between the Virtual WAN Communications Hub and the DCC. The proposed drafting would therefore simply require the supplier not to do anything to compromise the connection to the consumer's internet, rather than giving them an active obligation to maintain that connection.

3.18. One respondent asked whether the SSC could review the documentation associated with the ETSI standard directly, to minimise the risk of devices being taken off the approved list unexpectedly.

3.19. We have developed the proposed SEC changes regarding the ETSI standard with the SSC and believe that the position that has been reached is a reasonable one – which balances security and the need to avoid being over prescriptive given the function that VWDs perform. We have also given some discretion to the SSC to determine the timescale in which VWDs need to be upgraded to meet the ETSI principles. We will keep the arrangements under review during the soft launch phase of the programme, including an open dialogue with SSC, and to the extent that the need for further changes emerges, we will progress them.

3.20. One respondent asked whether the proposed changes to SEC Section H5.4 were strictly necessary. We think that the change is needed to make it clear that the DCC is required to Enrol Smart Metering Systems installed in premises that are listed on the Statement of Service Exemptions where VWAN has been installed in those premises.

3.21. One respondent asked whether the changes to the Self-Service Interface would be included as part of the Future Service Management (FSM) initiative being implemented by the DCC. We can confirm that we have discussed this with the DCC and that they have confirmed that the VWAN related changes will be supported under FSM.

3.22. One respondent asked for confirmation that the requirement to gain customer consent to connect a VWAN Device to their internet did not need to be sought each time a VWAN Device disconnected and re-connected to the consumer's internet. We are of the view that once permission to connect is given, then the permission endures until it is withdrawn by the consumer and so would not need to be re-sought in cases where the VWAN device disconnects and then re-connects (e.g. if the consumer has switched their internet router off and back on).

3.23. One respondent stated that VWD manufacturers should be required to efficiently notify the SSC of relevant incidents or material vulnerabilities. Doing so, could protect energy consumers who have VWAN-based model combinations installed, and that it was unclear if the current drafting required reporting of vulnerabilities.

3.24. The proposed drafting does require a VWD Manufacturer to notify the SSC if it becomes aware that a VWD does not meet the principles of ETSI 303 645 (or is no longer capable of being upgraded to meet such principles). We have discussed the proposed requirements that should be placed on VWD Manufacturers with the SSC and we will keep the arrangements under review during the soft launch phase (including with the SSC) and add further requirements if this proves necessary.

3.25. One respondent did not support the proposed change relating to the treatment of the Interoperability Checker Service under the DCC licence because they did not believe that the Interoperability Checker Service continues to be needed.

3.26. The change that was proposed to the treatment of the Interoperability Service under the DCC licence is only a cosmetic change which does not make any difference to the requirement to provide the service or otherwise. We were simply making a change to simplify the drafting of the DCC licence at a time when making changes to introduce the new VWAN Service into the relevant licence conditions. We continue to be of the view that making this simplifying change is appropriate. We also acknowledge however that separate from the VWAN arrangements, it is also appropriate to review the ongoing need for the Interoperability Checker Service, and we will instigate work to look into this.

3.27. One respondent suggested that we make more precise references to the relevant SEC Sections that define the terms “VWKI Eligible Subscriber” and “VWKI Services”. We have made the suggested changes.

3.28. One respondent noted that the changes refer to the "VWKI SEC Documents” but does not explicitly detail the process for the development and approval of these SEC Subsidiary Documents. We are working with the DCC to develop these documents as well as with the Smart Metering Key Infrastructure Policy Management Authority (SMKI PMA) and the SSC. We are also discussing developments with TBDG and its VWAN Sub-group and intend to designate the relevant documents following consultation upon them. We do not believe that there is a need to include explicit SEC drafting requiring their development. For information we are envisaging the majority of the subsidiary documents that are additionally required or need to be modified for VWAN to be delivered in three main tranches. These tranches include (1) a set of changes that is planned to support both “VWKI live”[4] and arrangements for ordering and delivery of Virtual WAN Communications Hubs; (2) the designation/re-designation/re-designation of a number of documents to coincide with the 6 November 2025 SEC release[5]; and (3) second the soft launch phase itself, currently planned for 29/30 January 2026.

3.29. One respondent said that suppliers should be required to report on VWAN prepayment self-disconnection rates and examination was needed into how energy suppliers record a switch to prepay as voluntary to ensure it is consistent and capturing data in a way that reflects the experience of consumers.

3.30. Our understanding is that Ofgem already collects and monitors information regarding prepayment customer self-disconnection rates and has powers to require additional reporting from energy suppliers under supply licence conditions should it consider this to be necessary.

3.31. One respondent suggested that before VWAN is considered for any prepayment customer, the supplier should undertake an evaluation of how often the household self-disconnects and if they do so with any frequency, VWAN should not be deemed appropriate. They went on to say that while consumers should be made aware of the risks there is also a need to ensure that there are clear processes in place to mitigate the potential detriment these consumers will face if they disconnect.

3.32. Our proposed legal changes are such that Smart Metering Systems that rely on VWAN cannot be operated in prepayment mode without the consent of the consumer, and that

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[4] VWKI live is the point in time from which the VWKI service is switched on under the SEC and therefore the point in time from which VWD Manufacturers can subscribe for VWKI Certificates for their VWDs and have access to the Virtual WAN Provider’s VWKI Certificate.

[5] We are planning to designate the GB Companion Specification (GBCS v4.4) and Communications Hubs Technical Specifications (CHTS v1.7) as well as DCC User Interface Specification (DUIS v5.4) and the Message Mapping Catalogue (MMC) and to re-designate the Technical Specification Applicability Tables (TSAT) accordingly.

suppliers must ensure that consumers are appropriately informed about the consequences of self-disconnection and the steps required to top-up following self-disconnection in circumstances where a VWAN-reliant Smart Metering System is operated in prepayment mode. We also expect suppliers to continue to meet their obligations in condition 28 of gas and electricity supply licences with regard to whether or not it is safe and reasonably practicable in all the circumstances of the case for a Domestic Customer to have a Prepayment Meter.

4. Next Steps

4.1. We have updated the legal drafting in Annexes 2 and 3 to the covering letter to reflect the changes discussed in this document. Our next step will be to lay these changes before Parliament in accordance with the requirements of section 89 of the 2008 Energy Act.

Annexes 2 and 3 are published separately.