# Installer Skills and Competencies for Comms Hub only exchange activity

## The Transition from 2/3G to 4G – Comms Hub only exchange activity

### Introduction

The SEC Panel's Communications Transition Group (the CTG) is currently considering the requirements for Field Staff undertaking smart meter Comms Hob only exchange activity for the forthcoming rollout of 4G Comms Hubs in the Central & South CSP regions, due to start towards the end of 2025.

As part of these considerations, CTG is now seeking input from RECCo on any potential impacts and requirements from a REC Metering Code perspective, as Energy Suppliers begin their planning activities, including considerations on the workforce required to complete the rollout of 4G Comms Hubs by the end of 2033. Areas where we are seeking RECCo considerations and views are highlighted in each of the relevant sections throughout this paper, and summarised on Page 6.

### Background

As a result of the UK's Mobile Network Operators announcing their intention to close-down 2G and 3G Mobile Networks by 2033, the Smart DCC has put a programme of work in place to introduce a new 4G Communications infrastructure to support smart meters in the Central and South CSP regions. The current DCC Programme Plan will see delivery of 4G Comms Hubs to energy Suppliers in July 2025.

From July 2025 onwards, Energy Suppliers will be required to replace all existing SMETS2 Comms Hubs that connect via 2/3G before the end of 2033. Energy Suppliers will also need to replace all existing SMETS1 smart metering equipment with SMETS2 equivalents across all three CSP regions, using 4G Comms Hubs in the Central and South CSP regions, and Long Range Radio Comms Hubs in the North CSP region.

For the more straight forward SMETS2 exchange of 2/3G Comms Hubs with new 4G Comms Hubs, this activity can be undertaken without the need to de-energise or 'power-down' the Smart Electricity Meter (ESME).

***CTG's current assumption is that Comms Hub only exchange activity does not necessarily need to be carried out by a fully skilled/qualified smart meter installation engineer. CTG has also questioned whether or not organisations undertaking Comms Hub only exchange activity need to be a Meter Equipment Manager party at all? In order to qualify this assumption, the SEC Panel's Communications Transition Group (CTG and its members) has taken an action to understand relevant industry Metering-Focused Code requirements, and identify any potential cross-code impacts (and in particular, the REC Metering Code) that either proves or disproves that the current assumption that operatives undertaking Comms Hub only exchange activity do not necessarily need to be fully skilled/qualified meter installation engineers is a correct***

***and accurate assumption. CTG is now seeking RECCo's view on this assumption, and other areas of clarification as identified throughout this paper.***

For the avoidance of doubt, CTG and its members recognise that in in a limited number of scenarios, there may be a requirement for the 'powering-down' of the ESME in order to re-establish connectivity to the SM-WAN. In these scenarios, Energy Suppliers will make the necessary arrangements for a fully skilled/qualified smart meter installation engineer to attend site to carry-out this activity and replace the Comms Hub as part of that visit.

**Expected/assumed activities to be undertaken on-site**

As Energy Suppliers will be seeking to undertake/deliver the Comms Hub only exchange activity as cost effectively as possible, the current expectation and assumption is that in the majority of cases, a dedicated Comms Hub exchange workforce is likely to be deployed to carry out a Comms Hub only exchange activity for a SMETS2[1] scenario, rather than using existing, fully qualified/accredited smart meter installation workforces.

As noted in the current 'documented process' below, the Comms Hub only exchange can and will (in the vast majority of cases, although we have to accept that some Energy Suppliers may wish to 'power-down' the ESME using fully qualified/accredited smart meter installers) be undertaken without the need to 'power-down' the ESMS/interrupt the electricity supply to the ESME. As such, ***Field Staff undertaking this activity will not be working on DNO-owned equipment (cut-out fuse, or tails between the cut-out fuse and the ESME etc). Therefore the current assumption is that there will be no requirement for Field Staff undertaking Comms Hub only exchange activity to report on DNO Asset Condition. Please confirm this assumption is acceptable/correct.***

It may be the case however that Energy Suppliers might use the opportunity of a site visit to undertake additional activities such as replacing batteries within Gas Smart Meters (GSMEs), or rectifying issues associated with non-communicating smart metering equipment that could be resolved without powering-down the EMSE. Where additional activities are to be undertaken, it will be the responsibility of the relevant MEM organisation to ensure Field Staff are appropriately skilled/qualified/trained to undertake any additional on-site activities. Any such 'additional activities' are not for consideration by CTG.

CTG accepts that there are general Health & Safety related requirements for any Field Staff undertaking activities at the electricity metering point (and Gas metering point is the Electricity and Gas meters are co-located). Consideration will need to be given as to the training requirements in this area, and how Field Staff should report dangerous/potentially dangerous situations arising from a visual observation/inspection during their on-site activity. Similarly, the identification and reporting of evidence of Energy Theft must also be considered as part of the general activities and responsibilities of Field Staff undertaking Comms Hub only exchange activity. In both the dangerous/potentially dangerous and Energy Theft scenarios, relevant parties will need to ensure that they have appropriate processes in place to report these to the relevant electricity/gas suppliers and/or relevant Network Operator.

[1] *Note for SMETS1 – the site visit would be a full kit replacement visit, i.e. all SMETS1 assets (CH, meters, etc…) would be replaced by SMETS2 equipment – this would require a fully skilled / qualified smart meter installation engineer*.

**Current 'documented' processes for Comms Hub only exchange**

Appendix A of the Smart DCCs Comms Hub Installation and Support Materials, which are a formal SEC Subsidiary Document (SEC Appendix I), sets out the steps that an operative needs to take to remove and install a SMETS2 Comms Hub (both steps required to complete the Comms Hub only exchange process). The steps to remove and install are documented as follows:

*A.3. Communications Hub removal procedure*

*A.3.1 Where a Supplier Party removes a Communications Hub, the Supplier Party shall:*

*(a) Step 1 - Remove or break the security seal;*

*(b) Step 2 - Remove the M4 retaining screw located on the front faceplate of the Communications Hub to enable its removal from the ICHIS compliant host;*

*and (c) Step 3 - Slide the Communications Hub from the ICHIS compliant host, ensuring that the Communications Hub guide rails remain within the U-Channel of the Electricity Smart Meter, Cradle or Hot Shoe.*

*A.1. Fitting procedure*

*A.1.1 A Party shall ensure that all reasonable precautions are taken to avoid electrostatic discharge whilst handling the Communications Hub.*

*A.1.2 A Supplier Party shall ensure that all reasonable precautions are taken to avoid electrostatic discharge when installing any Communications Hub and Communications Hub Auxiliary Equipment.*

*A.1.3 The Communications Hub shall be mounted vertically above the ICHIS compliant host, ensuring that the Communications Hub Variant labelling text on the front face is horizontal.*

*A.1.4 A Party may mount a Communications Hub on an ICHIS compliant host that is powered.*

*A.1.5 A Supplier Party shall fit a Communications Hub in accordance with the steps set out below:*

*(a) Step 1 - Align Communications Hub guide rails with the U-channel of the ICHIS compliant host;*

*(b) Step 2 - Slide the Communications Hub on to the ICHIS compliant host, ensuring that the Communications Hub guide rails remain within the U-Channel of the ICHIS compliant host;*

*(c) Step 3 - Press the front faceplate in order to connect the Communications Hub to the interface of the ICHIS compliant host, applying hand pressure only; and*

*(d) Step 4 - Screw in the M4 retaining screw located on the front faceplate of the Communications Hub to fasten it to the ICHIS compliant host.*

***Based on steps above, CTG and its members note the requirement to 'break' the security seal between the Communications Hub and ESME, and of course, a requirement to 're-seal' once the Comms Hub exchange has been successfully***

***completed. CTG is now seeking a view on whether or not the seal between the Comms Hub and ESME needs to be a 'Specified Seal' or 'Indicative Seal' as defined in Appendix 19 of COMCoP (Requirements for the sealing of Metering Equipment and related DNO Equipment). CTG notes that in terms of the ICHIS compliant host located on the ESME:***

- ***The ICHIS host terminal/conductor will be live if the ESME is not powered-down; however***
- ***The DCC's ICHIS Specification document states that "***It is not mandatory for the DC power supply to be isolated in the Host. The Host manufacturer may choose for it to be referenced to the phase conductor (which shall be likely in ESMEs using a resistive shunt for current measurement), or to the mains neutral conductor. Therefore, the Device design shall include appropriate insulation or isolation if it includes any exposed parts"***; and***
- ***Contact with the ICHIS host terminal/conductor is unlikely to be possible without the use of a small, sharp object, the risk of which is no different to the risk of a person using a small, sharp object to access EMSE meter terminals from underneath the meter, which are protected in the form of a meter terminal cover (which only prevents access to the meter terminals from 'front on access'); therefore***

***CTG is now seeking a view on any potential issues that might prevent the progression of a Modification to the COMCoP to change the current Seal requirement for Communications Equipment from 'Specified Seal' to 'Indicative Seal'.***

**Requirement to notify DNOs if activity is likely to generate an AD1 (loss of comms) alert**

CTG has noted the current and ongoing industry discussions relating to DCUSA Change Proposal DCP419 which is proposing a requirement on relevant DCUSA parties to provide DNOs with advance notification of site-visits that will result in interruption of the electricity supply at premises where smart meters are installed. CTG has noted that so far, agreement on a solution has not been reached, with an expectation that based on differing support on potential solution options between DNO and Supplier parties, a decision is likely to be referred to the Authority to determine.

As the exchange of a Comms Hub will result in the generation of an AD1 alert (alerting relevant parties of a loss of power to the Comms Hub as a result of the Comms Hub removal from the ESME host), further consideration of the impact of Comms Hub exchange activity will need to form part of the DCUSA DCP419 Working Group recommendation/solution proposed, and any Authority decision. CTG notes that importance of the need for the DCP419 Working Group and the Authority to be fully aware of the potential impacts that its decisions or proposals may have on the Comms Hub exchange programme, especially as parties are already considering innovative rollout approaches that might be needed in order to deliver the Comms Hub replacement programme as cost efficiently as possible.

Potential models such as street-by-street approaches, or unplanned/opportunity-based models (i.e. during a boiler service appointment, the boiler engineer could exchange the Comms Hub whilst on-site) may be restricted, and therefore potential cost efficiencies/reductions for the 4G Comms Hub exchange programme cannot be realised if

there is a requirement to pre-notify of Comms Hub replacement activity to DNO's in advance.

CTG will continue to monitor progress in this area and work with the relevant organisations accordingly.

**Requirement for consumer/customer to be present**

Returning to the theme of seeking to deliver the Comms Hub exchange programme as cost efficiently as possible, ***CTG is seeking confirmation on a current assumption that as the Comms Hub exchange process does not require the interruption to the electricity supply to the premises, it is not necessary for the consumer/premise occupant to be present when the Comms Hub replacement activity takes place. This may be particularly relevant to premises with outside meter boxes, where a Comms Hub exchange could be undertaken without the need to enter the premises.***

Whilst decisions have yet to be made on what approaches Energy Suppliers will take to complete the Comms Hub exchange programme, there is a clear expectation (and agreement on this expectation from Energy Suppliers) that consumers/premise occupants will be notified in advance that they plan to visit their premise to carry out the Comms Hub exchange, and as part of this, if a consumer expresses a wish to be present whilst the Comms Hub exchange, Energy Suppliers will be expected to notify the consumer with a date and approximate time that the Comms Hub exchange visit will take place (noting that it is likely that the Energy Supplier will be unable to specify the time of the activity taking place if approaches such as street-by-street rollout are deployed).

**Requirement to assess skills/competencies and qualifications of Field Staff undertaking Comms Hub only exchange activity**

CTGs members have raised the question as to whether or not attempts have been made, or need to be made at a Code Level to assess what level of skills, competencies or qualifications are needed for Field Staff likely to undertake Comms Hib only exchange activity.

***Having consider this request, it is the view of the CTG Chair as a result of a review of the current REC Metering Code that the responsibility for completing such assessments lies with the relevant party responsible for carrying out such activities, and not an activity that is currently the responsibility of (or planned in future) an industry Code Body/Manager. CTG is now seeking confirmation that this view is correct.***

**Field Staff Training**

As Energy Suppliers are responsible for Comms Hub exchange activity, Energy Suppliers will need to fully assess training needs for any Field Staff undertaking this activity on their behalf. Energy Suppliers are also responsible for ensuring that all Field Staff undertaking Comms Hub exchange activity receive the relevant training packages prior to them carrying out Comms Hub exchange activities.

***Whilst responsibility for the assessment of training needs lies with Energy Suppliers (as MEMs) under the REC Metering Code arrangements, CTG believes it would be beneficial for there to be some form of centrally-led activity to ensure all parties agree and understand requirements before embarking on the development of relevant training packages. It would be helpful to understand if this is an activity that could be undertaken under a relevant REC Forum, or if this is something that must be progressed elsewhere (i.e. a sub-group of CTG members or another relevant industry group or training body, with outcomes/proposals presented to a REC Forum for recommendation/approval?).***

**Questions that CTG is seeking a REC view on:**

1. CTG assumes that a Comms Hub exchange does not need to be carried out by a fully skilled/qualified smart meter installer. CTG is seeking confirmation that this assumption is correct.
2. Do parties/organisations undertaking Comms Hub only exchange activity need to be Meter Equipment Manager (MEM) parties? .
3. Field Staff undertaking Comms Hub exchange activity will not (typically) power-down or de-energise the electricity supply/ESME. As such, the current assumption is that Field Staff undertaking this activity will not be required to report on DNO Asset Condition. CTG is seeking confirmation that this assumption is correct.
4. CTG is seeking a view on any potential issues or blockers that could prevent the progression of a REC Modification to change the current classification of the Seal between the Comms Hub and ESME from a Specified Seal to an Indicative Seal.
5. The current CTG assumption is that because there is no requirement to interrupt the electricity supply in order to exchange a Comms Hub, there is no requirement for the consumer to be present for a Comms Hub only exchange visit (in cases where access to the consumers premise is required). CTG is seeking confirmation that this assumption is correct.
6. The current CTG assumption is that the responsibility for completing assessments of the skills/competencies and qualifications required for Comms Hub only exchange activity lies with the relevant party responsible for carrying out such activities. CTG is seeking confirmation that this assumption is correct.
7. CTG believes it will be beneficial for a Code Body (i.e. REC), or similar to lead some form of centrally-coordinated activity to ensure all parties agree and understand training requirements for Field Staff undertaking Comms Hub only exchange activity before embarking on the development of relevant training packages. Is this something that could be undertaken by a REC group/sub-committee or does it need to be undertaken elsewhere?