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## **SECMP0046 ‘Allow DNOs to control Electric Vehicle chargers connected to Smart Meter infrastructure’**

### **Working Group Meeting 6**

**20 March 2019, 14:00 – 16:00, Gemserv Offices**

### **Meeting summary**

#### **Recap on previous SECMP0046 Working Group meetings**

The Working Group meeting began with SECAS providing an overview of the modification and a recap on some of the discussions and conclusion from the previous Working Group meetings. This overview included:

- Summarising the issue of Electric Vehicles charging potentially overloading Low Voltage networks;
- All previously proposed solutions which have been discounted;
- Current market and commercial methods available to avoid the overloading issue;
- Agreed solution of using Home Area Network (HAN) Connected Auxiliary Load Control Switches (HCALCS) to control charging of Electric Vehicles; and
- Essential Service Requests required for the DNOs to alter charging via HCALCS (and optional Service Requests for Boost Button).

#### **Requirements to allow DNOs to control Electric Vehicle charging via HCALCS**

##### **Interaction with SECMP0019 and SECMP0025**

At Working Group Meeting 5, modifications [SECMP0019 ‘ALCS Description Labels’](#) and [SECMP0025 ‘Electricity Network Party Access to Load Switching Information’](#) were mentioned as they have or may have implications on this modification. These were looked into by SECAS and the Working Group was updated on what is impacted, or possibly will be impacted.

SECMP0019 is a closed modification that standardises naming conventions for Auxiliary Load Control Switches (ALCS) and HCALCS labels, which would be read using Service Request Variant (SRV) 7.7 ‘ReadAuxiliaryLoadSwitchData’. However, it is not mandatory for Suppliers to apply this standardised list of labels. It was agreed that this modification should propose that this labelling is made mandatory, allowing for the DNO to know what devices are connected and ensure they are only sending Service Requests to the HCALCS connected Electric Vehicle Charger.

SECMP0025 seeks to enable DNOs to have the ability to access information from the Smart Metering System. This modification includes allowing DNOs access to SRV 7.7, allowing them to read

ALCS/HCALCS lists. SECAS updated the Working Group on the latest status of SECMP0025. This modification was recommended to be rejected by the Change Board, however the report was sent back to Panel by the Authority requesting clarification around the implementation costs be included. The Panel agreed these amendments, and the Change Board once again recommended that SECMP0025 be rejected. SECMP0025 is currently with the Authority awaiting decision.

## Whitelisting and Joining of HCALCS

SECAS raised the possibility of DNOs Whitelisting and Joining the HCALCS after installation. Currently only Suppliers have the ability to do this, so if the DNOs were to Whitelist and Join the HCALCS, they would need the ability to send further Service Requests. Discussions of this within the Working Group bought up that there were further activities required beyond the Whitelisting and Joining, and if Suppliers are doing this, then who would send those further commands.

There were concerns that in the event a HCALCS needed to be installed in haste (i.e. approaching high energy demands heading into winter), there may be delays if the DNO needed to contact the Supplier to send these relevant commands. It was also discussed that it may be best if the DNOs took on as much of these responsibilities as possible in installing, Whitelisting and Joining the HCALCS device. This may also be of interest to Suppliers, as it would not put as much of a burden on them.

Following this discussion, it was noted that if the DNO is granted access to the required Service Requests to Whitelist and Join the HCALCS, they would only be able to do so to new devices, as the corresponding GBCS Use Cases would need to be updated, and therefore require a firmware update. The Working Group agreed that allowing the DNOs to send the necessary requests to Whitelist and Join HCALCS should be added as an optional business requirement.

## Other requirements and their possible governance

### BEIS Competition

In previous Working Groups there was discussion as to whether the HCALCS connected charger would cut supply to the Electric Vehicle when the DNO send the Service Request, or if it would reduce the amperage, lowering the speed of charging. SECAS discussed that this should not be covered in this modification as it would be determined by how the charger would interpret the HCALCS signal, and that this would be determined by the winner of the BEIS competition. BEIS gave a brief update on the competition, where five contracts have been awarded for feasibility studies for design and trial. Further information can be found [here](#).

SECAS highlighted the concerns they received from OLEV regarding if Electric Vehicle charging supply was cut. These include damage to the battery, activation of car alarms, and that charging may not reinitiate without physically unplugging and re-plugging the charger. It was stated that as the reaction to the HCALCS signal is likely be determined by the BEIS competition, these concerns are not likely to be addressed as a result of this modification. However, these issues would occur in a network failure induced by an overload regardless, and they should be a consideration if avoidable, although should not hinder the progression of SECMP0046.

BEIS also mentioned that information had become publicly available, on the day of Working Group meeting 6, that there is a new proposed Smart Meter Equipment Technical Specifications (SMETS) device. This device would be similar to HCALCS, however will have more granular settings rather than binary. It would have the ability to throttle charging in 10% increments from 0% to 100% (11 settings). It was queried by another Working Group attendee as to why are we progressing with

SECMP0046 if this new SMETS device is to be developed. However, BEIS stated that the outcome of SECMP0046 is likely to influence the DNOs' ability to use this proposed device.

### **Reporting, Consent, and compensation**

Ofgem confirmed with SECAS outside the Working Group that the reporting requirements currently in place for DNOs is sufficient to cover reporting for the use of HCALCS to alter Electric Vehicle charging. However, Ofgem raised concerns that the modification may have difficulty getting approved without accompanying governance around this, either within the SEC or elsewhere. SECAS raised this in the Working Group meeting, asking members' opinions on where governance of consent and compensation may be covered.

There was much discussion regarding consent, including where it should be governed, if it is required, and how it should be gained. There were thoughts that consent could be governed within the Distribution Connection and Use of System Agreement (DCUSA), however it was proposed that it could be covered within the SEC. This could be outlined in the SEC, as something along the lines of 'If a DNO is to send the relevant Service Request, then they must have the appropriate consent from the consumer to do so'. Some Working Group attendees queried as to whether consent was a requirement, as the use of HCALCS to alter Electric Vehicle charging was a backstop emergency, when all other method of load reduction have failed.

The Working Group also discussed if consent is a requirement, then how should it be gained: would it be sought by the Supplier or the DNO? There were also queries as to if this should be blanket consent or if consent should be gained case by case when the Electric Vehicle chargers are installed. This discussion evolved into what compensation, if any, would need to be in place when gaining consent. Some Working Group members commented that there would be no point in asking for consent if there was no compensation, as they thought that there would be little to no uptake of customers in such a case. Not all Working Group members agreed with this. Some Working Group members queried whether any compensation arrangement needed to be included in regulation.

Also raised was that when altering load using HCALCS there is a possibility that there will be a conflict with Time of Use Tariffs. In such a scenario, compensation would need to be a requirement. The governance of compensation was briefly discussed, and it was thought that consent may be governed within the SEC; however it was felt compensation would need to be governed elsewhere.

### **Possible DCUSA governance**

In the previous Working Group, the period of time that the Electric Vehicle would have its charging reduced/off was discussed. It was decided that it was not likely to be covered under SECMP0046 and was suggested that it possibly could be governed within DCUSA. SECAS followed this up with DCUSA and got confirmation that it would likely be covered under DCUSA Schedule 8 'Demand Control', however may require some rewording of existing provisions.

It was also mentioned that Section 8.1 of DCUSA Schedule 8 may negate the requirement for gaining consent in an emergency situation. It was said in the Working Group that this was not written with this intent and that it may require rewording if it is to cover the usage of HCALCS to alter load.

### **Next steps and further actions**

The following actions were recorded from the meeting:

- SECAS will meet with the DCC and the Proposer to develop and agree a set of business requirements. These will be presented to relevant Sub-Committees and published on the SEC website for wider comment before being issued to the DCC for a Preliminary Assessment. The Working Group would not be expected to meet again until after this had been completed.