

DCC reporting – additions for MAPs and Meter Manufacturers

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*We believe in making Britain more connected,
so we can all lead smarter, greener lives.*

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Appendix – report guide business logic details

Subject to change and requires
approval to proceed

Mismatched CH variant info: blank if correct variant installed

ch_variant The variant that has been installed at that address

ch_correct_variant The variant that is required according to the CSP WAN coverage checker

gateway Only valid for VMo2 Identifies if a Comms Hub is the 'Gateway' to the network for other Comms Hubs in the mesh environment. (See figure 1 below) Yes No TBC Or Null NB.

Non comm bucket info: blank if device is communicating

Level 1 bucket_1 DCC check the device against a list of known conditions, e.g. “the device is in the returns process” or “the device is not rf noise compliant”.

The device is assigned to one of these conditions, a.k.a. placed into one of these “buckets”. The conditions are checked in a defined sequence, i.e. first check for condition ‘A’, if no match, then check for condition ‘B’ etc. If a device is listed as having condition ‘B’ then it may also match other conditions which are further along the sequence, e.g. conditions ‘C’, ‘F’ and ‘M’. The intent is to resolve the condition listed in the report to try to restore communications. The device will either then start communicating or be assigned another condition to be resolved. The definitions of the conditions for the buckets can be found in Appendix A – Table 7

Level 2 bucket_2 Bucket_2 contains level 2 supporting information within the context of the bucket_1 value. For example, if bucket_1 indicates a device is running old firmware, bucket_2 will indicate how old the firmware is. If bucket_1 indicates a device is not commissioned, bucket_2 will indicate the status of the device. Descriptions of the bucket_2 values can be found in Appendix A – Table 7

Level 2 last_supplier_operated_date_time The datetime when the device was last operated by a Supplier. Possible values: • Datetime of format YYYY-MM-DD HH:MM:SS • NULL means device not operated by a Supplier.

Monthly read data: for 4.6.1 scheduled daily reads, 4.8.1 monthly profile reads and 8FOA alerts

For each of the 3 categories (SRV 4.6.1, SRV 4.8.1, alert 8FOA) the following data:

Attempts The number attempted in the month

Success Count The number succeeded in the month

Error Count The number failed in the month

First Error The day of the month where the first error occurred, 0 if no error

Last Error The day of the month where the last error occurred, 0 if no error

First Success The day of the month where the first success occurred, 0 if no success

Last Success The day of the month where the last success occurred, 0 if no success

Failed COS data: only for devices which have a failed COS

attemptstatus Whether or not the SEC Party has sent a 6.23 SRV for this meter point registration 1 – Yes 0 – No

n27alertsnt Has a N27 Alert been sent from the device. 1 – Yes 0 – No

internal_cos Is the Change of Supply to the same SEC Party? 1 – Yes 0 – No

last6.23response Response code of the last 6.23 SRV

last6.23attemptdate Date of the last 6.23 SRV

last6.23response Response code of the last 6.23 SRV 26 last6.23attemptdate Date of the last 6.23 SRV

Meter is_chatty flag - true or false

To identify Devices generating an excessive number of Alerts. The qualifying criteria for a device-alert combination appearing on the report is if the number of device alerts meets or exceeds the device alert threshold on any day within the 7 days prior to the report date. The device alert threshold is set to 300 alerts per day for device alerts sent to non-DNO parties.

Original FW, date last updated: for both meter & CH

original_firmware_version Firmware version which was on the device when it was added to the SMI Data from 6-Dec-23 String (8)

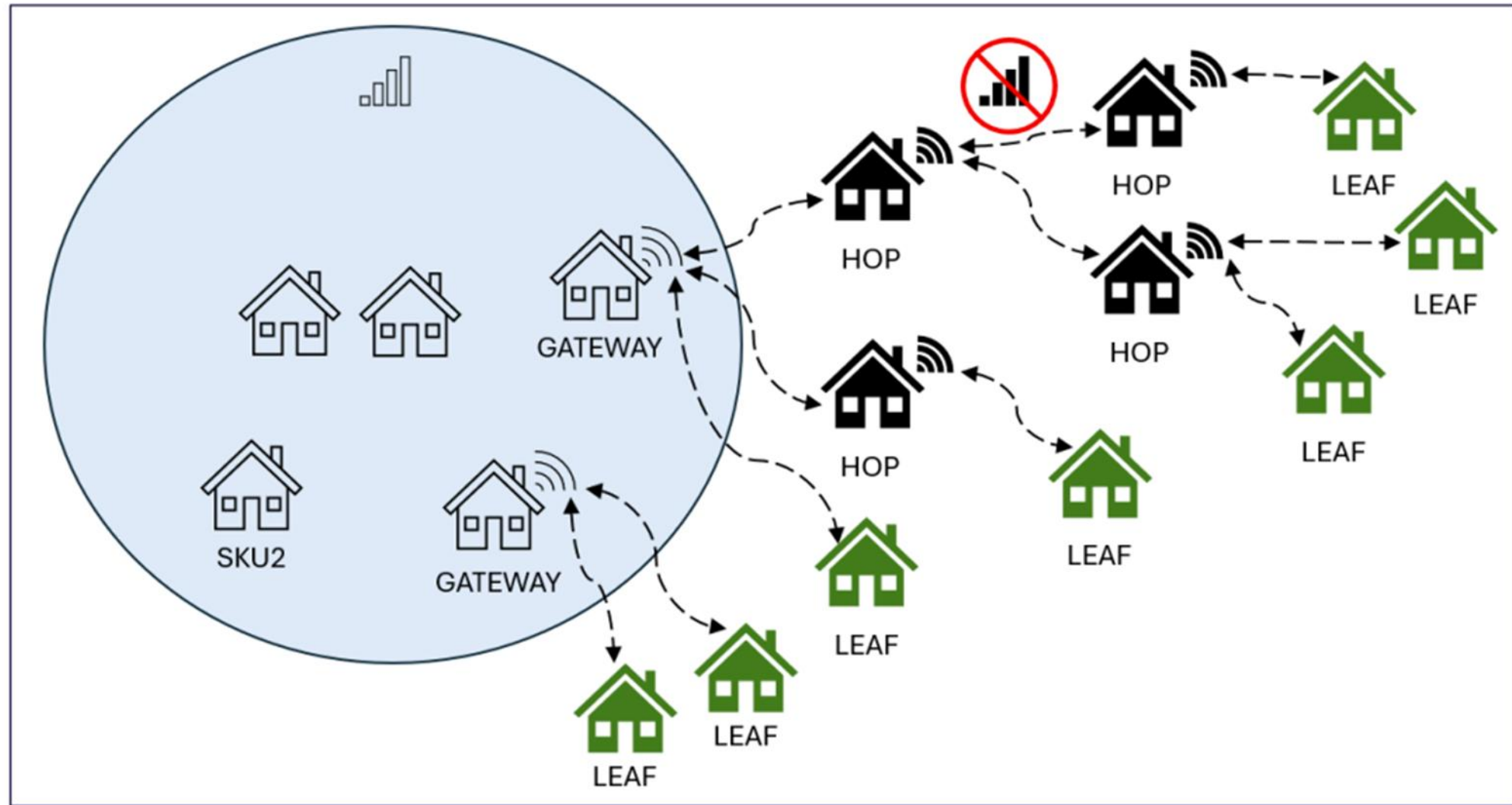
latest_firmware_change_datetime The date and time the current Firmware was set within SMI NB. In the time portion SS will be set to 00 NULL if there has been no change to the firmware within the SMI Data from 6-Dec-23 Date/Time - DD/MM/YYYY HH:MM:SS

Mesh report mesh_type only for VMO2 mesh compatible CH (delivery path TBC)

The status of the CH when the most recent data was obtained: Possible values are:

- **SKU2** : The CH has no dependent CHs.
- **GATEWAY** : The CH has mobile connectivity and dependent CH(s).
- **HOP** : The CH is part of the communications path between a gateway CH and leaf CH(s), i.e. has dependent CH(s).
- **LEAF** : The CH has no mobile connectivity and is reliant on another CH for connectivity.

Figure 1 - Example CH network topology



Appendix A – Hierarchy of bucket values

Table 7 - Bucket value & content definitions

Bucket_1 value	Description of Bucket_1 condition	Bucket_2 content
Invalid_Meter_Point	The meter point has failed DCC validation.	<blank>
Returns_Process	The communication hub associated with the device is in the DCC returns process	A concatenation of the returns record id and the return status.
Non_Commissioned	A non-communicating with CH and/or meter not currently in a commissioned state, suggesting an incomplete commissioning (or decommissioning) process.	The status of the CH and Meter, e.g. "Comms Hub Status=C Device Status=INC"
Extra_Meters	There is more than 1 meter of this meter type (i.e. ESME or GSME) at the premises	Number of devices of that type at the premises.
Non_Operated_Subsequent_Comms	A non-communicating meter which has not been operated by any service user within the previous 35 calendar days. There is evidence the meter has communicated since it was last operated (but not in the last 35 days).	Number of days since the meter was operated, e.g., "36". Blank means not operated since 1-Jan-24.
Known_Issues	Either: PLMN: Comms Hubs become non communicating due to an issue on the firmware which causes the device to use the voice network instead of data. or	"plmn" or "odc"

Bucket_1 value	Description of Bucket_1 condition	Bucket_2 content
	ODC: This is an issue in FOC where device certificates can't be rotated resulting in the certificates expiring & the comms hub going non communicating.	
GSME_Battery	The most recent device alert from the GSME indicates a battery issue. 8F1F = 10% battery. 8F1D = 0% battery.	"8F1D" or "8F1F"
Non_Operated_No_Subsequent_Comms	A non-communicating meter which has not been operated by any service user within the previous 35 calendar days. The last operation was unsuccessful and there is no evidence the meter has communicated since then.	Number of days since the meter was operated, e.g., "36". Blank means not operated since 1-Jan-24.
RFnoise_NonCompliant	The (SMETS2) ESME is non rf-compliant. Either the device is non_compliant or was installed after the derogation period ended. Any GSMEs installed at an effected premises are also marked as rfnoise_noncompliant	"non_compliant" or "non_compliant_derog"
RFnoise_Derogated	The (SMETS2) ESME is not rf-compliant but was installed during the derogation period. Any GSMEs installed at an effected premises are also marked as rfnoise_derogated.	"compliant_derog"
Known_Issues	The communications hub appears on the PDP report, VMO2 confirmed HAN loss report or WNC empty HAN report.	"han" or "pdp"
Coverage_Unsupported	The (SMETS2) CSP coverage checker does not contain the postcode & CSP combination and in some cases does not contain the postcode at all (for any CSP region).	"Unsupported Postcode" or "Unsupported Postcode & CSP"

Bucket_1 value	Description of Bucket_1 condition	Bucket_2 content
Coverage_None_or_Partial	The (SMETS2) CSP coverage checker indicates the postcode & CSP combination associated with the premises has no coverage, or partial coverage (i.e. some premises have coverage and some don't).	"None" or "Partial"
CSP_Exclusions	The CSP has identified the communication hub as being a non-compliant installation	The CSP exclusion reason, e.g. "Not Communicating For More Than 60 Days"
CSP_Network_Level_Data	The CSP is unable to contact the Comms Hub associated with the meter.	A composite description comprising the offline period (where available) and the status of the Comms Hubs, e.g. "101:ACTIVE - MS PURGED" means the offline period is 101 days and the status is "ACTIVE – MS PURGED"
Intermittent	A non-communicating device which has transitioned from communicating to non-communicating on more than one occasion since 1-Jan-24.	The number of times the device has transitioned from communicating to non-communicating since 1-Jan-24, e.g. "3".
DMC_NC%	There are over 1,000 connected devices with this combination of model and firmware and over 20% of the devices are non-communicating.	Percentage of devices that are non-communicating for the CSP & postcode combination, e.g. "60.39"
Old_Firmware	Firmware is 'N-3' or older.	Firmware age, e.g. "N-5"
Postcode_NC%	There are 5 or more connected devices with this combination of CSP and postcode and over 20% of the devices are non-communicating.	Percentage of devices that are non-communicating for the CSP & postcode combination, e.g. "20.41"

Bucket_1 value	Description of Bucket_1 condition	Bucket_2 content
>365_Days	No evidence of communication seen for at least 12 months.	The last communicating message age, e.g. "366". If blank, then the device hasn't communicated since 1-Jan-24.
Network_Errors	The most recent SRV response was a timeout.	The most recent SRV response, e.g. "E21"
Validation_Errors	The most recent SRV response was a DSP validation error, i.e. the request was rejected and not delivered to the meter.	The most recent SRV response, e.g. "E4"
Network_Errors	The non-communicating device doesn't meet any of the conditions to be included in another bucket.	The most recent SRV response, e.g. NULL.
Communicating_Non_Commissioned	A communicating meter not currently in a commissioned state, suggesting an incomplete commissioning (or decommissioning) process.	The status of the communicating meter, e.g. "INC"
Communicating_Supplier_Non_Operated	A communicating meter which has not been operated by any supplier within the previous 35 calendar days.	The number of days since the communicating meter was last operated by a supplier, e.g. "100" means not operated for 100 days. Blank means the meter has not been operated by a supplier since 1-Jan-24.

Remediation_Attempt	Identifies if a 6.11 (irrespective of Response Code) has been sent since the last Clock Drift alert (8FOC) has occurred. Four potential values: Successful Remediation - (6.11 sent since last clock drift successfully), Unsuccessful Remediation - (6.11 sent unsuccessfully since last clock drift),
Latest_Clock_Drift	Not Attempted since last clock drift - if 6.11s have been sent in the past but pre-date the latest clock drift Not attempted - if no 6.11 has ever been sent to that device
Latest_Sync	Datetime stamp for the most recent SRV 6.11 (blank if none has been sent) attempted to that device. Note that this includes both successful and unsuccessful attempted SRV 6.11. See ResponseCode for more information.
ResponseCode	Response Code for the latest 6.11 SRV. 'I0' is Success. All others are errors. The most common error seen so far is a timeout one (E21). There is a short Appendix featuring definitions of the most common response codes at the end of this document.
Synchronisation_Date	Datestamp of the last 6.11 datetime i.e. datestamp from column Latest_Sync
Previous_Clock_Drift	Datetime of the previous time a device has alerted a clock drift. Will be earlier than "Latest Clock Drift" column or blank if this is the first 8FOC alert from that device.

Additional devices



Business Term	Definition
Device	From SEC means one of the following individual devices: (a) an Electricity Smart Meter; (b) a Gas Smart Meter; (c) a Communications Hub Function; (d) a Gas Proxy Function; (e) a Pre-Payment Interface Device; (f) a HAN Connected Auxiliary Load Control Switch; and (g) any Type 2 Device.