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Action:	**For Decision**

Data Quality RFI: Responses and Proposed Next Steps

1. Purpose

This document summarises the responses received to the SECAS Request for Information: Data Quality sent out in September 2018.

It sets out an overview of the issues and proposes a set of next steps to address the issues raised.

Confidential Appendix A provides the details of each of the responses.

2. The Questionnaire and Known Issues

The RFI identified a set of known data quality issues and asked Parties a series of questions to ascertain the impact of the issues. These issues related to:

1. DCC Data Service Provider (DSP) overwriting RDP records once received;
2. CSP WAN Coverage Data address data inconsistencies compared to RDP records;
3. DCC Smart Meter Inventory (SMI)- multiple gas meters at single site showing in the DCC SMI;
4. Incorrect labelling of SMETS (S1, S2 NSS etc) in traditional Industry records (ECOES / DES);
5. Smart Meter Inventory DCC Service Flag not being updated;
6. CSP WAN Coverage Checker;
7. SMI update frequency; and
8. Ability to change the device status

3. Party Responses

13 completed responses were received, with several other responses noting that they were not sufficiently advanced in their SMETS2 roll-out programmes to have encountered these issues.

Completed responses were received from six suppliers (three large and three small), five distribution businesses, one user solution provider; and one from the DCC.

The responses to each question are summarised below and the individual responses are detailed in the spreadsheet included as confidential Appendix A.

4. Initial Analysis of Responses

Several significant issues that manifest as data quality problems were raised. Given the potential impact on installations and Change of Supplier processes and other operations, it is imperative that the root causes of these are identified and resolved before the large-scale roll-out of SMETS2 meters.

The table overleaf summarises the initial analysis of the key issues and proposes next steps.

The following points should be noted:

- Issue Description: Provides a summary of the information provided by respondent(s).
- Category: Describes either the expected cause of the issue or the key impact.
- Resolution Timeframe: An indicator of the perceived complexity of the issue, or number of sub-issues that may contribute to the problem. A likely indicator of the effort required of all resolvers.
- Owner: A proposal for the organisation that should lead on the issue resolution. SECAS is seeking SEC Panel's approval for these recommendations. The principle applied is:
    - Where resolution of the issue is in the gift of the DCC, the DCC will be owner
    - Where the cause / resolution of the issue is wider than DCC, SECAS will be the owner, unless a resolving party is already identified.

  The owner will require support and input from several sources, including DCC, Suppliers and Network Operators in most cases.

  Regardless of the owner, SECAS recommends that progress is reported to, and tracked, by a Panel Sub-Committee.
- Note / Proposed Action: Additional information and a high-level proposal for resolution.

Issue Description	Category	Resolution Timeframe	Owner	Note / Proposed Action
There are multiple, inter-related issues with "off supply" alerts being generated during meter installations and firmware upgrades. There is a further issue with the corresponding "supply restored" alert not being received, or possibly not being recognised. In addition, some alerts are being received outside the required service time. These are major issues for DNOs who are required to respond to these alerts.	Install & Commission	Long	SECAS	Establish working group to identify root causes. For each root cause, set out a process and / or technical solutions.
Incorrect DNO Certificates being placed on meters at installation: DNOs locked out of 5% to 10% of installed meters: Energy Suppliers can, and do, put the wrong NO certificate on the meter which means that DNOs cannot communicate with the meter. The investigation will need to establish whether this is the cause of the missing N42 issue mentioned by some DNOs.	Install & Commission	Medium	SECAS	There are varying reports of the prevalence of the issue, but all suggest a significant level. DCC has provided suppliers with data for them to check; this could be managed under Ops Group along with SMKIPMA for resolution.
DCC Data Service Provider (DSP) overwriting RDP records once received; An issue was reported to Ops Group, that 800k records had been overwritten by DSP. DCC believe this has been resolved but at least one party believes it is still happening.	Change of Supplier	Medium	DCC	Liaise with party to ascertain whether this remains an issue then resolve. Some suppliers have voiced concerns at Ops Group; there is a need to understand what is wrong with definitive examples and trace back why this is happening.
CSP WAN Coverage Issues: Data address data inconsistencies compared to RDP records, concerns that address data is missing for some RDP records although scale not confirmed. SSI WAN coverage checker inaccuracies. SSI shows a postcode and house number as having “No WAN”, yet a SMETS2 meter is installed and connected to the WAN.	Install & Commission	Medium	DCC	Reconciliation of RDP and DCC data – need to understand why differences occur; should reflect RDP as industry standard. DCC continuing work to refine the WAN coverage data.

Multiple installed meters at a premise: In some cases, this appears to be due to the supplier aborting a meter install and using a different meter to complete the install. However, the first meter is not decommissioned so the DCC systems record that there are two meters commissioned for a single MPAN. There may be other reasons.	Install & Commission	Medium	SECAS	Working party to identify cause and propose resolution.
Issues with data in existing industry systems, e.g. Incorrect labelling of SMETS (S1, S2 NSS etc) in traditional Industry records (ECOES / DES) and disconnect in the gas market between the CPL and GSME models being entered into MDD by SPAA. The CPL is updated on request by the Manufacturer. The SPAA MDD is only updated once per month by the Supplier.	Install & Commission	Long	Cross code work	Needs cross code working.
There appears to be an issue with the speed and/or frequency of updates to both SMI and SMKI, and in particular with the DCC Service Flag not being updated.	TBC	TBC	DCC	Respondents to provide specific examples and the DCC to identify the root causes.
Voltage data, configuration settings and alert thresholds not aligned to specification: DNOs have seen that for some meters the voltage data which is retrieved from the voltage log has the decimal point in the wrong location and the incorrect number of significant figures. In some cases Voltage data is not aligned to the hour or to the half hour: Meter voltage data is recorded in 30 minute increments however the 30 minute increment is not aligned to the hour and therefore voltage data is misaligned across premises and meters. In addition, measurement periods are not always 30 mins.	Operation	TBC	DCC	Liaise with meter manufacturers to identify cause and resolve.

5. Other Comments

Several Parties raised the point that it was important that all data quality issues should be identified and prioritised at this early stage of the programme to avoid problems as the roll-out scales up. The view was also expressed that the exercise should be repeated in six months' time once a wider group of Suppliers and a larger number of meters could be included.

One Supplier expressed the view that it was too early to get a full view of the data quality issues arising from or impacting the smart metering rollout and that data quality needs an ongoing focus rather than a one-off piece of work. The Supplier is seeing several operational issues for which the root cause is yet to be determined – some of these may arise as a result of data quality issues but detailed analysis is proving challenging.

6. Further Analysis and Oversight

While the issues identified above appear to be the most pressing, they are far from the only ones raised by the industry, as the spreadsheet in appendix A demonstrates. There would appear to be significant industry support for the establishment of a data quality forum or working group to collate, analyse, prioritise and address these issues.

SECAS would recommend this group to review and prioritise the Consolidated List and identify sponsors for the associated work packages. Given the complex, cross industry nature of many of these issues, SECAS believes it is best placed to lead this activity. Expected SECAS effort: 15 - 20 days over four to six elapsed weeks to coordinate the initial analysis, prioritisation and outcome reporting. The start date is dependent upon agreement to proceed and gaining industry support.

Responsibility for planning the resulting work packages will depend on the results of this first phase. SECAS recommends that it would report progress and use the Operations Group and / or TABASC as a steering group.

7. Recommendations

The Panel is requested to:

- **NOTE** the contents of this paper;
- **CONSIDER** the establishment of a data quality working group to take forward the analysis, prioritisation and remediation work already commenced; and
- **AGREE** the recommendations in the section 4 regarding specific issues and section 6 regarding analysis of other issues and commission the necessary SECAS work.

Alan Bateman

SECAS Team

2 November 2018

Attachments:

Appendix A – Data Quality Request for Information responses