EUA Response to the DCC Consultation on a revised approach to the delivery of DCC Release 1.3

EUA represents a wide cross-section of the energy industry including, Networks, Meter Installers, Meter Asset Providers, Meter Asset Managers, Meter manufacturers, Communication Hub Manufacturers and Communication and Data System Providers and have been a major influence in the energy industry for almost 120 years. EUA or its members are represented on most of the Smart Meter Programme work groups with BEIS, DCC, NSAP, BSI and other standards bodies and also have contributed to the specifications debates throughout the whole of the Smart Programme.

I this instance we are providing the collective response of our meter manufacture member community to the DCC consultation on a revised approach to the delivery of DCC release 1.3. We trust the these responses will provide useful guidance and input to the consultation and would welcome the opportunity to discuss any aspect of this consultation or the wider smart metering programme should that be required.

RESPONSES:

Based on meter testing of R1.2 testing we discovered some fundamental issues, some of which resulted in IRP's being raised, that would not have been discovered until late in the project, end to end testing at the earliest, which would have resulted in a further delay in Suppliers being able to complete testing and install meters in the field.

Issues identified that potentially would not have been discovered until late in testing include

- ZigBee Stack issues
- Tunnel not opening during installation
- GSME retry required after successful CBKEs (IRP485)
- Devices required to automatically reset counters if commands are incomplete (IRP477)

The use of emulators: EUA members are not happy for the DCC to base the SIT exit criteria on emulators only. We feel this is not the correct approach as it does not reflect the enduring setting. For example:

1) What are the assurances that emulators meet the SEC Appendix T device selection criteria?
2) Are the selected emulators SMETS compliant?
3) Are they ZigBee Certified?
4) Have they been subjected to the DLMS conformance testing?
5) Have they been through any mandatory or regulatory testing?
6) What Security Characteristics were considered in their design and implementation?
7) How close are they to the enduring devices (meters)? From a gas perspective it is very important that any emulator FULLY simulates the operation of the gas meter. Specifically, it is NOT listening for incoming RF messages most of the time (only a few seconds every 30 minutes). We have numerous examples where such simulators not reflecting true gas meter operation have masked serious failings within the overall system architecture/functionality.
8) Who specified the emulator?

9) How much testing these emulators been subjected to prior to their use by the DCC
10) Other questions to address the emulator's logistics, design methodology, design team, manufacturing, metering experience, and most importantly design change process.

Encourage the use of real meters: EUA members would like the DCC to use real devices as these reflect the real enduring setting, we also believe that the use of devices will give both the DCC and the industry the assurance that they need for the following reasons

1) Devices are designed, implemented and manufactured following the SMETS define process
2) Designed with careful attention to the Security Characteristics
3) Devices are ZigBee certified,
4) Where applicable, devices have been through the DLMS certification / conformance testing.
5) Devices have been through other industrial and regulatory testing,
6) Designed, implemented and manufacturer by metering experts that will be involved with the rollout.
7) True reflection to the enduring setting,
8) Will support the selection criteria as stated in the SEC device methodology,
9) Their use will provide the industry with the needed confidence and assurance
10) DCC has already used them in R1.2
11) Meter manufacturers are experts in their devices and requirements, so this experience can be utilised when needed, especially if the test does not go as expected.

Encourage the DCC to use the Instrumental hubs: We strongly recommend the use of industrial and engineering hubs, as these help in understanding the system behaviour and offer the industry the means to perform system analysis. Without this the result can lead to different interpretation and could affect the test result.

Provide the industry with access to the DCC triage facilities.

E**ncourage the DCC to provide remote testing and debug facilities**: Remote testing is very convenient to all parties including the DCC, as this will speed up the validation of devices and would result in accelerating device delivery. However, for remote testing to be successful, we feel that some debug facilities are needed.

Recommend the DCC to publish the defects and findings as soon as they occur: The DCC do publish a weekly test report, it would be of immense important if they also include a section that addresses the issues encountered that week. This would enable us to discuss them and agree solutions.

Communicate all fixes: if the DCC accept to publish the defects as suggested above we also recommend them to publish and share the fixes as soon as they been successfully test and verified.

Regression testing: We understand that the DCC does perform regression testing, but the industry hope that it is also used whenever changes are introduced to any component in the system, as any changes could potentially introduce side effects that

could possibly affects previously tested features, setting and use cases. If however, the DCC already use this, then it is fine and we recommend that they carry on using that approach.