

Chapter 3 – Overview of the smart metering system functional requirements catalogue

Question 1: Should the HAN hardware be exchangeable without the need to exchange the meter?

Definitely. If there isn't a standard HAN hardware specification, every change will conceivably mean changes by the customer and/or supplier in the home. This could be triggered by the installation of just one small appliance.

Question 2: Are suitable HAN technologies available that meet the functional requirements?

No comment.

Question 3: How can the costs of switching between different mobile networks be minimised particularly in relation to the use of SIM cards and avoiding the need to change out SIMs

At the present time this cannot be achieved. Ofcom could make a ruling that it should be possible to exchange numbers/SIMs between service providers and this would allow it.

More importantly though it should be borne in mind that the mobile networks do not have to be the medium of choice and it is important that this 'problem' is addressed irrespective of the communications provider.

Question 4: Do you believe that the Catalogue is complete and at the required level of detail to develop the technical specification?

No because there is no mention of the real time (not near real time) needs of Network Operators.

Also, whilst there is discussion over WAN data transfer, there does not appear to be any mention of the need for simultaneous signalling from the device into the HAN as well as upstream into a smart grid role

Note that in the appendix on smart grids it states "*i1.29. Our proposals within the Functional Requirements Catalogue have therefore been developed giving consideration to current and likely future smart grid requirements*". The question appears to imply that future smart grid requirements would be met via mobile networks, but no cost/benefit assessment of such approach has been advanced. The question should probably also be related to the cost of switching to alternative technologies such as low power radio or PLC, which are mentioned in 3.25 and 4.39.

There seems to be an unjustified assumption that the WAN/DCC model would provide the necessary overall (ie sensor back to local control action) latency and resilience. The analysis only appears to consider the latency of getting a signal from the smart meter back into the DCC, with no allowance for processing, connectivity modelling and signalling back to the local network for the control action to take place. It is suggested that in a smart grid role, the signalling route might need to be routed from the smart meter via a local aggregator and thence (for normal metering needs) into DCC.

Question 5: Do you agree that the additional functionalities beyond the high-level list of functional requirements are justified on a cost benefit basis?

Yes

Question 6: Is there additional or new evidence that should cause those functional requirements that have been included or omitted to be further considered?

No comment.

Chapter 5 – Achieving technical interoperability

Question 7: Do you agree that the proposed approach to developing technical specifications will deliver the necessary technical certainty and interoperability?

Although we would generally support the proposed approach there is a risk that conflicting views amongst participants may delay agreement being reached. The programme should therefore be ready to mandate a specification if the proposed approach starts to stall.

Question 8: Do you agree it is necessary for the programme to facilitate and provide leadership through the specification development process? Is there a need for an obligation on suppliers to co-operate with this process?

Strong leadership will be essential as it will minimise the risk of delays. An obligation on Suppliers to co-operate with the process may be difficult to enforce.

Question 9: Are there any particular technical issues (eg associated with the HAN) that could add delay to the timescales?

There are a large number of potential issues that will add delays to the timescales unless a very forceful leadership to the whole process is put in place. Decisions on the incorporation of future smart grid functionality will have an impact here, for example simultaneous signalling to HAN and WAN/ local smart grid aggregator.

Question 10: Are there any steps that could be taken which would enable the functional requirements and technical specifications to be agreed more quickly than the plan currently assumes?

No comment