

Smart Meter Design Sub Group 3 (SMDSG3) – Meeting #4 Note

Note of discussion and actions from SMDSG3 Meeting No. 4

From
Date and time of Meeting
Location

Shaun Scullion
25 October 2010
10:00-16:00
Ofgem

1. Present

1.1. Ofgem –Janet Townsend-Stojic, Peter Morgan, Shaun Scullion

1.2. SMDSG3 members:

AMO	Ian Dobson
British Gas	Gareth Williams
EDF Energy	Nick Slocombe
BEAMA	John Parsons
ERA	Simon Harrison
Eon-UK	Mark Roberts
ESTA	Tony Taylor
SBGI	Ben Barry
ICoSS	Steve Mulinganie
Intellect UK	Simon Higgins
RWE Npower	Bob Dryden
ENA	David Brogden
SSE	Andrew Monks
Utilita	Phil Ketless
First Utility	Dave Wurtzler
Scottish Power	Graham Weir

2. Apologies

2.1. SMDSG3 members:

Gemserv	
Consumer Focus	
Good Energy	
Ofcom	

3. Introductions

3.1. Round table introduction of each SMDSG3 member.

4. SMDG Feedback

4.1. Ofgem provided feedback from the last SMDG:

- SMDG are content with progress thus far.
- Of particular SMDG interest was the SG reaction to some of the more consumer-focussed aspects of the SG work and in respect of that, SMDG debated how consumer interests could can be better represented than presently.

- SMDG were conscious of the challenging timeframe of the SG work. They considered whether to seek to pull forward something from SG1 on the SM Technical Specification.

5. Review of previous actions

Confirm if LPG / oil meters are in scope?	Ofgem have passed to their Markets section to provide a statement (w/c 25 Oct).
Teleswitching – Review list of variants	On agenda for meeting 4.
Flood alerts using teleswitch service – Follow up issue with network companies / DEFRA	Not completed.
Check IA to see if button provision on meters is included in cost assumption	On agenda for meeting 4.
Confirm cost of minimum options for meter interface– 2 buttons or keypad	On agenda for meeting 4.
Refer IHD 2 way communication functional requirement (PPM) to sub group 1	Completed.
Options and costs (equipment and installation) regarding non wireless SMS solutions	Not completed.
Refer WAN coverage technical issue to DCG (Geographical access issue)	Completed.
Options for inaccessible / hard to reach site locations (flats)	Will go forward to the HAN Workshop.
Cost of putting in aerials for hard to reach households	EDFE had circulated a short analysis indicating a ballpark cost of approx £300 per aerial which may well fall considerably if bulk-purchased. However, also we should also factor in extra cost for staff training to work at height etc and PPE kit etc.
Discuss with BRE what can be done regarding housing design standards and	Not completed

their impact on SMS	
Refer load limiting to SG1 to clarify it applies to import only	Completed
Find out what interface groups (IDES, SMIT) are doing regarding different faults and their descriptors.	Not completed.
Paper on in premise fault issues and what are the roles and responsibilities around these (interim and DCC), including firmware case study	BG (GW) had prepared 2 proposed process maps (not yet distributed) on configuration changes and firmware upgrades (Action to Distribute?).
Revised standard BS7856 document to be circulated to the group (terminal connections)	Not complete. EDFE to send round by 29 Oct.
Check prevalence and remedial costs associated with semi concealed installations due to risk of water damage (e.g. top hat solutions)	Not complete. OnStream to send round by 29 Oct.
Circulate amended Technical issues log and evaluation criteria for most prevalent items	Completed.
Prioritise the Technical issues (with a view to selecting the top ones for discussion in SG3 deliverable 1)	Completed.
Refer pulse output functional requirement to sub group 1	Completed.
Pulse output issues paper (what is the issue, what is its prevalence, etc.)	Completed. ESTA sent through to Ofgem on 21 Oct.

6. Technical issues

- 6.1. **Meter variants (pulse)**. Ofgem lead a review of the updated (since last meeting) "Variants Analysis" table.
- 6.2. ESTA had polled their members (8 responses) and sent in the resulting pulse output statistics to SMDG. From existing non-dom electricity and gas meters – approx 140k

total number of meter points identified where pulse output is being used (mainly gas, perhaps 75% or more).

6.3. Approximately 1.5 million U6 meters are currently identified as non dom.

6.4. The group concluded that:

It (SG3) should *not* recommend requiring a pulse in the Functional Requirements, instead proposing supplier opt-outs for a) non-dom customers and b) CT electricity meters (for domestic customers). The group believed that suitable solutions for these classes of consumer who wanted to go 'Smart' was being developed (but would not of course include an IHD and gas valve).

6.5. The group also concluded that:

- A 4 terminal single-switch meter was a suitable SM baseline but twin-elements and 3-phase as well as a 2A auxiliary switch needed to be included in the scope of work
- For the interim period, the Technical Specification should highlight variant meters.
- Some analysis work was required to understand the current occurrence and usage levels of the variant meters proposed. (see actions).

7. Review and agree selection criteria

7.1. Ofgem led a review of the table of technical issues identified at last meeting. Feedback from the group on their own priority issues from the issues against weighted criteria resulted in a ranked list. This was again reviewed by the group, as well as options for resolution.

7.2. The technical issues table was amended accordingly at the meeting, amending the entries for issue resolution against each priority issue. Those (priority) issues and recommendations for possible resolution will form the basis for the group's deliverable - a draft paper to SMDG on SM technical issues and their resolution.

8. Review and agree ranking of issues against criteria

8.1. A final list of 'top issues' and proposed resolutions were agreed by the Group (resolutions recorded in the technical issues spreadsheet). The agreed top issues were:

- HAN technology availability and suitability for GB market
- Meter variants
- Local access at the meter
- WAN – poor geographic coverage
- Support for microgeneration (e.g. Feed in Tariff)
- Gas meter battery life

9. Agree key messages for deliverable

It was agreed that Ofgem would produce the draft deliverable for SMDG on 11 Nov. Key messages against each of the top issues were agreed as:

HAN solution availability and suitability for GB market:

- The UK market is complex
- Need to identify potential solutions
- Test and field-trial potential solutions
- HAN issues – take to HAN workshop

Meter variants

- Some meter variance is unavoidable
- Twin-element
- 3 Phase
- Auxiliary switches
- Smart modules for pulse enabled

Local meter interface

- Establish scale of problem at installation
- Set out governance arrangements (CoP)
- 2 meter buttons are included in the IA (confirmed by BEAMA)

WAN – poor geographic coverage

- WAN issues – DGC need to work these out

Support for microgeneration (e.g. Feed-in tariff)

- Programme issue – what is the expectation?
- Not mandatory
- Clarity needed on how it would work
- HAN support of generation meters should be included in Tech Spec.

Gas meter battery life

- No firm requirement analysis to back up 15yr battery life – risk to business case
- Need to define it

10. Any other business

10.1. **RFI on interim interoperability.** Ofgem confirmed that the RFI will be issued by DCG today (25 Oct) and will have elements of the WAN included.

11. Review of actions from meeting today

11.1. Actions carried forward.

Confirm if LPG / oil meters are in scope?	Ofgem have passed to their Markets section to provide a statement (w/c 25 Oct).
Flood alerts using teleswitch service – Follow	Not completed. Paul Smith – ENA, Ofgem

up issue with network companies / DEFRA	
Check IA to see if button provision on meters is included in cost assumption	Ofgem / BEAMA. Complete.
Confirm cost of minimum options for meter interface- 2 buttons or keypad	BEAMA. Complete.
Options and costs (equipment and installation) regarding non wireless SMS solutions	Steve Mulinganie – ICOSS, Tony Taylor - ESTA, Duncan Southgate - SBGI Not completed.
Options for inaccessible / hard to reach site locations (flats)	Will go forward to the HAN Workshop.
Discuss with BRE what can be done regarding housing design standards and their impact on SMS	Ofgem. Not completed
Find out what interface groups (IDES, SMIT) are doing regarding different faults and their descriptors.	BEAMA. Not completed.
Revised standard BS7856 document to be circulated to the group (terminal connections)	Not complete. EDFE (NS) to send round by 29 Oct.
Check prevalence and remedial costs associated with semi concealed installations due to risk of water damage (e.g. top hat solutions)	Not complete. OnStream (BB)to send round by 29 Oct.

11.2. New actions

Collect and collate membership views on the variant meters (twin-elements and 3-phase as well as a 2A auxiliary switch) and report back to SG3.	ERA	01/11/10
Locate and distribute to SG3 any previous Ofgem data on the prevalence of variant meters (twin-elements and 3-phase as	Ofgem	01/11/10

well as a 2A auxiliary switch).		
Produce a range for the prevalence and usage of variant meters (twin-elements and 3-phase as well as a 2A auxiliary switch) and provide estimated costings.	SG3	01/11/10
Amend the "Variants Analysis" table column H to include prevalence and usage of the variant meters (twin-elements and 3-phase as well as a 2A auxiliary switch) t include no. of switches and whether internal or external switches.	Ofgem	01/11/10
Produce an analysis of the 'do nothing' option for the provision RTS.	ENA	01/11/10
Distribute to SG3 ERA's paper re asking suppliers for data on their load-switching customers (i.e. how common are these customers?).	ERA	01/11/10
Raise with SG2 the issue of: 'In the case of meter battery failure, should the supply be disabled? I.e. who controls the off-switch'?	Ofgem	5/11/10
Provide to Ofgem any good examples of SM solutions for multi-occupancy buildings.	All SG3	3/11/10
Ensure that DCG are covering the issue of local (geographic) WAN coverage.	Ofgem	3/11/10
Send the 'key messages' summary of the paper to SG3 members.	Ofgem	01/11/10

12. Risks and issues

12.1. The group reviewed the SMDG Risk & Issues Log, adding 3 new risks:

- Prepayment functionality in meter has not been specified.

- HAN likely to be based on available technology rather than sought functionality.

13. Review of meeting

13.1. The group were pleased with the progress made at the meeting.

14. Date of next meeting

14.1. Monday 1st November 2010 – 10:00-16:00, Ofgem, 9 Millbank, London, SW1P 3GE