GL Noble Denton

CEN/TC 237 Presentation to the MAMCoP Board

Jim Sibley Chairman CEN/TC 237

Current CEN/TC 237 Activities

- Amendment to EN 12405-1 2005/prA2, Gas meter –Conversion devices - Volume conversion devices
  - Accepted by Professor Kochsiek the then CEN Consultant to the MID for progression
  - Voting launched via the Unique Acceptance Procedure (UAP) on 2010 02 18
- prEN 12405-2: Gas meter –Conversion devices - Energy conversion devices public enquiry launched 2009 10 18 and closes on 2010 03 08
- prEN 12405-3 Gas Meters - Conversion devices – Flow computers, preliminary Work Item raised on 2009 04 22 - WG recently held their first meeting
- prEN 12480: Gas meter – Rotary displacement gas meters, is to be revised and the standard should be launched for public enquiry shortly
- CEN/TR 16061: Gas meters – Smart gas meters to be launched for Technical Committee Approval on 2010 03 18 and closes on 2010 06 18
- EN 1359: Gas meters – diaphragm gas meters new work item raised for a revision
  - First working group meeting took place on 2010 02 13/14
- Gas meters – Additional functionalities Work Item raised 2009 07 24

prEN Gas meters – Additional functionalities

- **Scope -** An over-arching standard for gas meters which will allow additional functionalities to be added to gas meters covered by the Directive 2004/22/EC, as appropriate to the specific technology. The following additional functionalities will be considered:
  - Remote index reading;
  - Data display;
  - Data communicated;
  - Interval data-logging;
  - Separate registers and recovery of data;
  - Prepayment;
  - Remote control/automatic shut-off;
  - Time clock.
- These functionalities could be integral to the meter or via a directly connected module. This standard will rely functionalities on work carried out by experts also working under the Mandate M/441, e.g. Communications, to transmit data from and/or to the meter

- The intention is that standard will cover all the above functionalities but selection will be optional. i.e. Selection of functionality is then at the discretion the purchaser

- Working Group meeting monthly – seen as a high priority Work Item

SM-CG Functionalities

- The European Standards Organisations (CEN/CENELEC and ETSI) Smart Meters Coordination Group (SM-CG) has Six envisaged functionalities

1. Remote reading of metrological register(s) and provision to designated market organization(s)
2. Two-way communication between the metering system and designated market organization(s)
3. To support advanced tariffing and payment systems
4. To allow remote disablement and enablement of supply and flow/power limitation
5. Communicating with (and where appropriate directly controlling) individual devices within the home/building
6. To provide information via web portal / gateway to an in-home/building display or auxiliary equipment

prEN Gas meters – Additional functionalities (Cont)

- Will cover all meter technologies providing the base meter meets the relevant European Standard
  - e.g. EN 1359 for Diaphragm gas meters
- The standard will
  - cover the additional functionalities that come out of the SM-CG report
  - cover the communications hardware - protocols will be covered by CEN/TC 294
  - consider meters that incorporate correction devices
  - consider meters that incorporate conversion devices (how to deal with errors?)
  - a valve in the meter (but the pressure loss across the meter will remain as in the base standard)
- The standard will exclude (in this version)
  - download of metrological software

prEN Gas meters – Additional functionalities (Cont)

- The working Group is paying particular attention to the requirements of the MID
  - Annex 1 Essential Requirements and especially 8.1
    - shall not be influenced in any inadmissible way by the connection to it of another device, by any feature of the connected device itself or by any remote device that communicates with the measuring instrument.
  - and 10.5
    - If it can be remotely read it shall in any case be fitted with a metrologically controlled display accessible without tools to the consumer
- The Working Group is using WELMEC 7.2 for software as guidance
- Battery life is a critical issue for gas meters
- Some standards have no requirements for electronic indexes
  - This new standard will include specific requirements for the electronic index and be used as a supplement to the base standard e.g EN 1359 for Diaphragm gas meters
- Harmonization of the standard not a requirement by the SM-CG

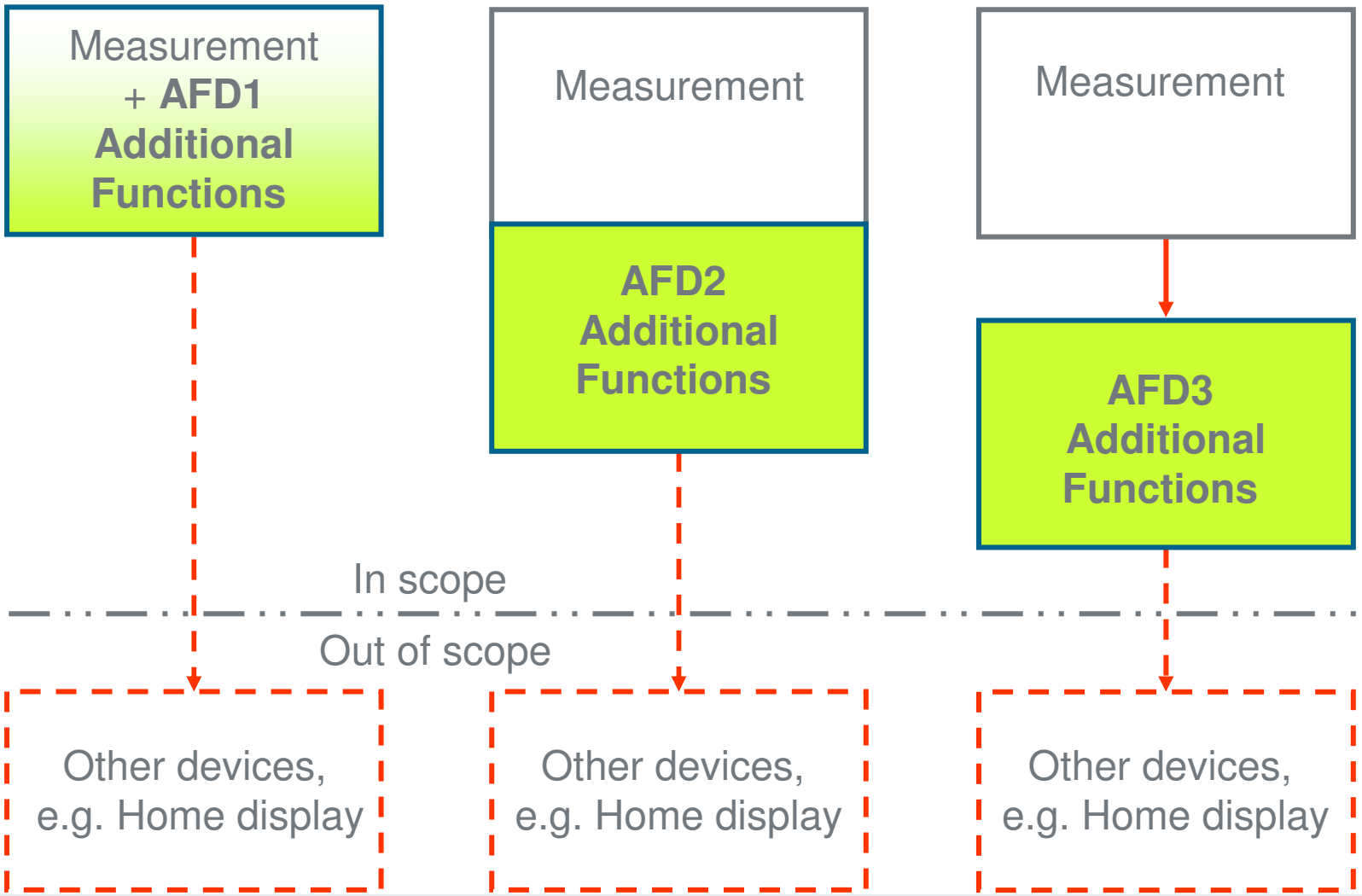
Additional Functionality Device Concept

- When testing the additional functionality device (AFD) determining
  - the location likely to be installed – e.g. location will affect t_{min} and t_{max}
  - influences it could have on the meter is very important

- The Working Group has come up with the concept of assigning
  - AFD1 when an integral part of the meter
  - AFD2 when physically attached to the meter
  - AFD3 when connected/remote from the meter

- This concept should assist the test house when testing the product

AFD1, AFD2 and AFD3



…and finally

- Ian Turner (Chairman of WELMEC WG5 Market Surveillance) has been appointed as the new CEN Consultant to the MID by the Commission
- Ian is comfortable with the interpretation we are proposing
- He wishes to be actively involved in the work of CEN/TC 237

Thank you for your attention!

For further information visit www.gl-nobledenton.com

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