



OPEN meter

Open Public Extended Network metering



Work Package: WP5
Type of document: Deliverable
Date: 16.06.11

Energy Theme; Grant Agreement No 226369

Partners: Iberdrola, Itron, ADD, ERSE, CTI, DLMS UA, EDF, Endesa, Enel, Kema, L+G, RWE, STMicroelectronics, University Karlsruhe, uSysCom, ZIV Medida

Responsible: Landis+Gyr

Public

Circulation: **Confidential**

Restricted

Title: Second Report on status of standardisation **Version:** 1.0 **Page:**1/11

D 5.8

SECOND REPORT ON STATUS OF STANDARDIZATION

DUE DELIVERY DATE: 01.01.2011

ACTUAL DELIVERY DATE: 16.06.2011

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Energy Theme; Grant Agreement No 226369

Title: D5.8 Second Report on status of standardisation **Version:** 1.0 **Page:**2/11

Document History

Vers.	Issue Date	Content and changes
1.0	16.06.11	Released for publication by TB

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1 Executive summary

In order for the OPEN meter Project to profit from the thrust created by the mandate M/441 the OPEN meter deliverables had to be adapted the standardisation framework requested by CENELEC WG02. Thanks to the high quality of the validation process performed in the OPEN meter project CENELEC accepted the OPEN meter proposals as “draft Technical Specifications”. CENELEC will launch the circulation of the OPEN meter proposals through the National committees for comments by June 2011. The comments will be available for the next CENELEC WG02 meeting in September 2011. We can expect that the OPEN meter proposals become official “Technical Specifications” in February 2012.



2 Notations, abbreviations and acronyms

CENELEC	European Committee for Electrotechnical Standardization (also CLC)
EN	European Norm
IEC	International Electrotechnical Commission
IF	Interface
IP	Internet Protocol
OPEN meter (OM)	Open Public Extended Network metering
PRIME	Powerline Intelligent Metering Evolution
B-PSK	Binary Phase-Shift Keying
S-FSK	Spread Frequency-Shift Keying
SMCG	Smart Metering Coordination Group



3 The OPEN meter WP5 deliverables

The deliverables correspond to the deliverables D5.1, D5.2 and D5.3 as originally planned in the "Description of Work" for the OPEN meter project. The purpose of these documents is to close the standardization gaps identified in the D2.x deliverables. The D5.x contributions are the result of the research work documented in D3.x. The technologies and protocols of the D5.x proposals to CENELEC have been scrutinized by means of several prototypes and products from different manufacturers – the test results are documented in D4.x.

It should be noted that

- D5.4 "Formal Specification of Wireless technologies suitable for use in OPEN smart multi metering systems" has been omitted because there are no gaps identified in D2.x. which correspond to the M/441 mandate.
- D5.5 "Formal Specification of Other valid technologies suitable for use in OPEN smart multi metering systems" has been omitted because there are no standardization gaps identified in D2.x for "Other" technologies.
- Due to the mandate M/441 the deliverable D5.9 ("CENELEC Workshop Agreement preparatory documents and CENELEC Workshop") was substituted by OPEN meter contributions to the M/441 CENELEC TC13 WG02 meetings of 03.-04.03.2010, 23.-24.06.2010, 05.-06.10.2010, 25.-26.01.2011 and 03.-05.05.2011.

NB: besides the OPEN meter deliverables the members of WP5 also elaborated the formal documents according to the rules of CENELEC/IEC (comp. Table 1).

4 The OPEN meter proposals in the M/441 environment

The OPEN meter proposals cover interfaces C and G2 as defined in Figure 2 of the SMCG report "Functional reference architecture for smart metering systems (V0.4.3)". The corresponding interfaces of the OPEN meter architecture are: MI1-CI1 and CI2-SI2. In addition, OPEN meter proposes a solution supporting local communication for the Meters&More suite.

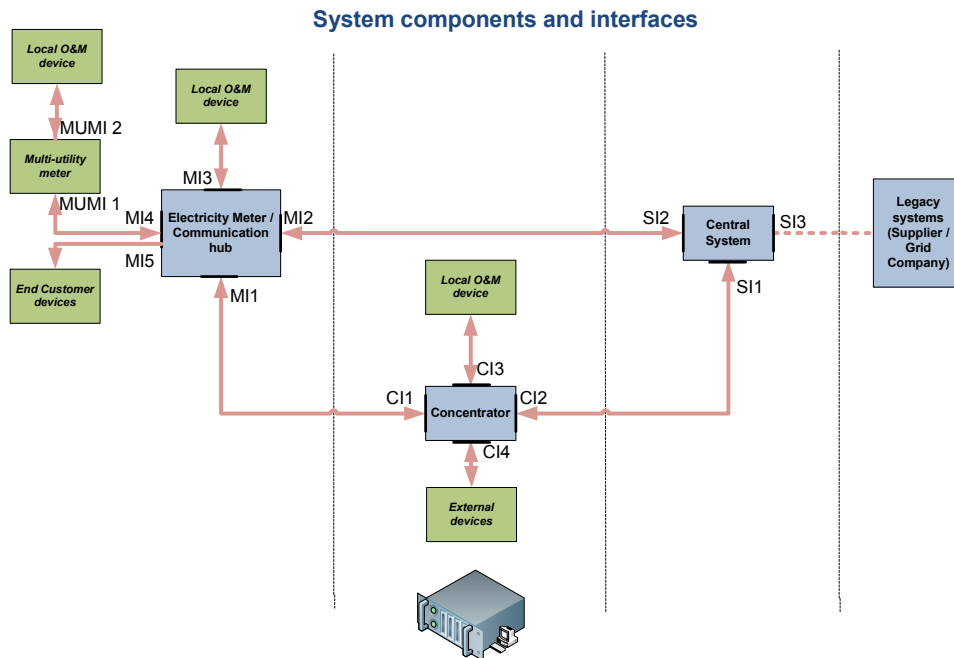


Figure 1: OPEN meter system architecture (comp. D3.2)

Table 1 shows the relation between the OPEN meter interfaces and documents and the corresponding M/441 (CENELEC) interfaces and documents. All CENELEC documents which fit into the existing standards framework become part of the EN/TS 52056 series, whereas the documents not fitting into the 62/52056 series will have different numbers assigned by CENELEC.

OM IF	SMCG IF	OM deliverables	Del. in DoW ¹	CENELEC documents
All	All	Data Base and Data Structures: D5.1.3.1 for the Meters&More suite	D5.1	EN/TS 5ZZZZ-6
MI1-CI1	C	Profiles: D5.2.1 PLC based on PRIME OFDM D5.2.2 PLC based on G3 OFDM D5.2.3.2 PLC based on B-PSK for Meters&More	D5.2 D5.2 D5.2	EN/TS 52056-8-4 EN/TS 52056-8-5 EN/TS 5ZZZZ-8

¹ Deliverables as planned in the „Statement of Work“: D5.1: Services, D5.2: Architecture, D5.3: PLC



OM IF	SMCG IF	OM deliverables	Del. in DoW ¹	CENELEC documents
		PLC Lower layers: D5.3.1 based on PRIME D5.3.2 based on G3 D5.3.3 based on B-PSK for Meters&More Application Layer: D5.1.3.2 for the Meters&More suite	D5.3 D5.3 D5.3 D5.1	EN/TS 5VVVV-1 EN/TS 5VVVV-2 EN/TS 5ZZZZ-4 EN/TS 5ZZZZ-5
CI2-SI2	G2	Profiles: D5.2.3.3 IP for the Meters&More suite	D5.2	EN/TS 5ZZZZ-9
MI3	-	Profiles: D5.2.3.1 Local data exch. for the Meters&More suite	D5.2	EN/TS 5ZZZZ-2

Table 1: OPEN meter and M/441 (CENELEC) interfaces and documents

OPENmeter Deliverables into the Cenelec M/441 standards framework

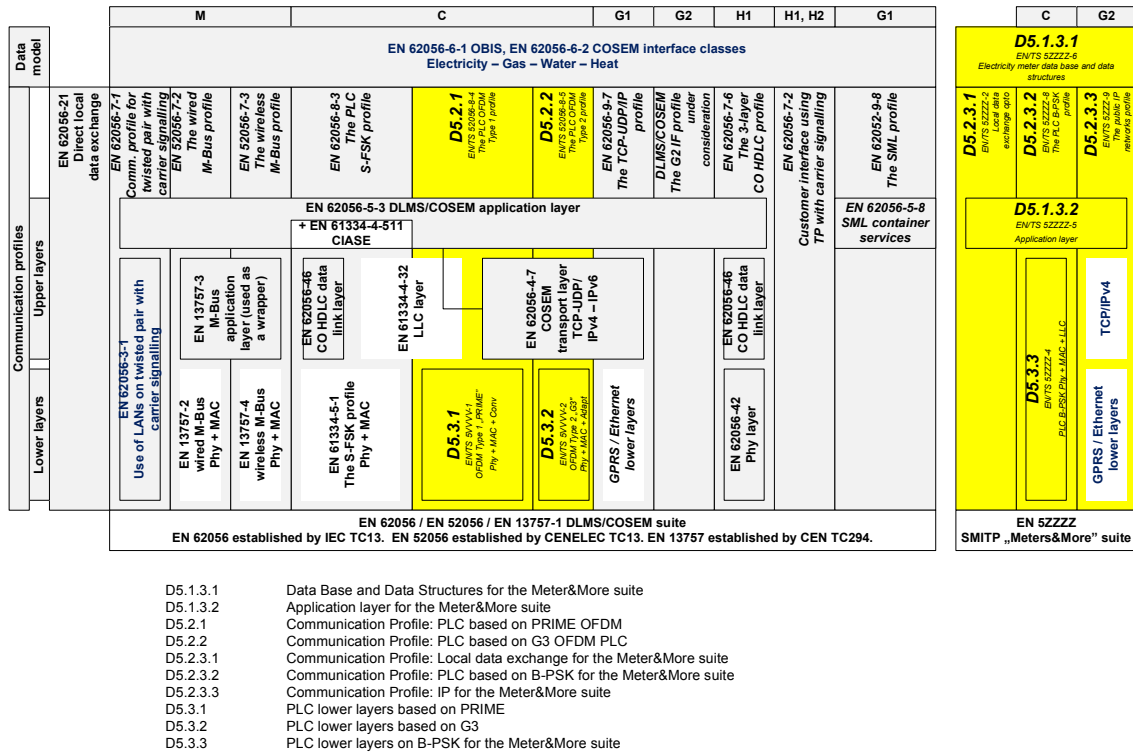


Figure 2: OPEN meter documents in the CENELEC standards framework

The Open meter deliverables D5.1.x.x, D5.2.x.x and D5.3.x form the basis for the contributions of the OPEN meter project to CENELEC within the Smart Metering Mandate M/441. Figure 2 shows the how the OPEN meter documents are integrated into the existing CENELEC standards framework.

The document structure of Figure 2 is the result of intensive discussions between OPEN meter partners and the CENELEC standardization group TC13 WG02 responsible to implement the M/441 mandate.

Thanks to the high quality of the validation process performed in the OPEN meter project CENELEC accepted the OPEN meter proposals as “draft Technical Specifications”. CENELEC will launch the circulation of the OPEN meter proposals through the National committees for comments by June 2011. The comments will be available for the next CENELEC WG02 meeting in September 2011. We can expect that the OPEN meter proposals become official “Technical Specifications” in February 2012.

A transformation of the “Technical Reports” into “International Standards” may be envisaged in a later phase. However, in order to avoid any conflict between IEC



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(global) and CENELEC (European) standards the transformation to standards shall be performed by IEC and then taken over by CENELEC.

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