

# Meters and More

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*Energy@Home Workshop - Milano, 26 November 2013*

# Overview

1. Meters & More Association
2. Committee for Communication Activities
3. Technical Committee for Product Certification
4. Technical Committee for Protocol Specifications

# Meters and More Association

## Meters and More AISBL: the Association

A non-profit organization with the following objectives:

- Adopt, maintain and evolve an **open communication protocol** for **smart metering solutions** within well defined open rules
- Promote **smart metering standardization**
- Promote the existence of a range of **interoperable devices, applications and services** by promoting open industry specifications
- **Provide a certification process** to assure products compliance with Meters and More specifications
- Drive **protocol evolutions** by creating a place where the Association Members may propose and **evaluate enhancements** and approve them within well defined open rules.

## Meters and More AISBL: Members

### FULL MEMBERS

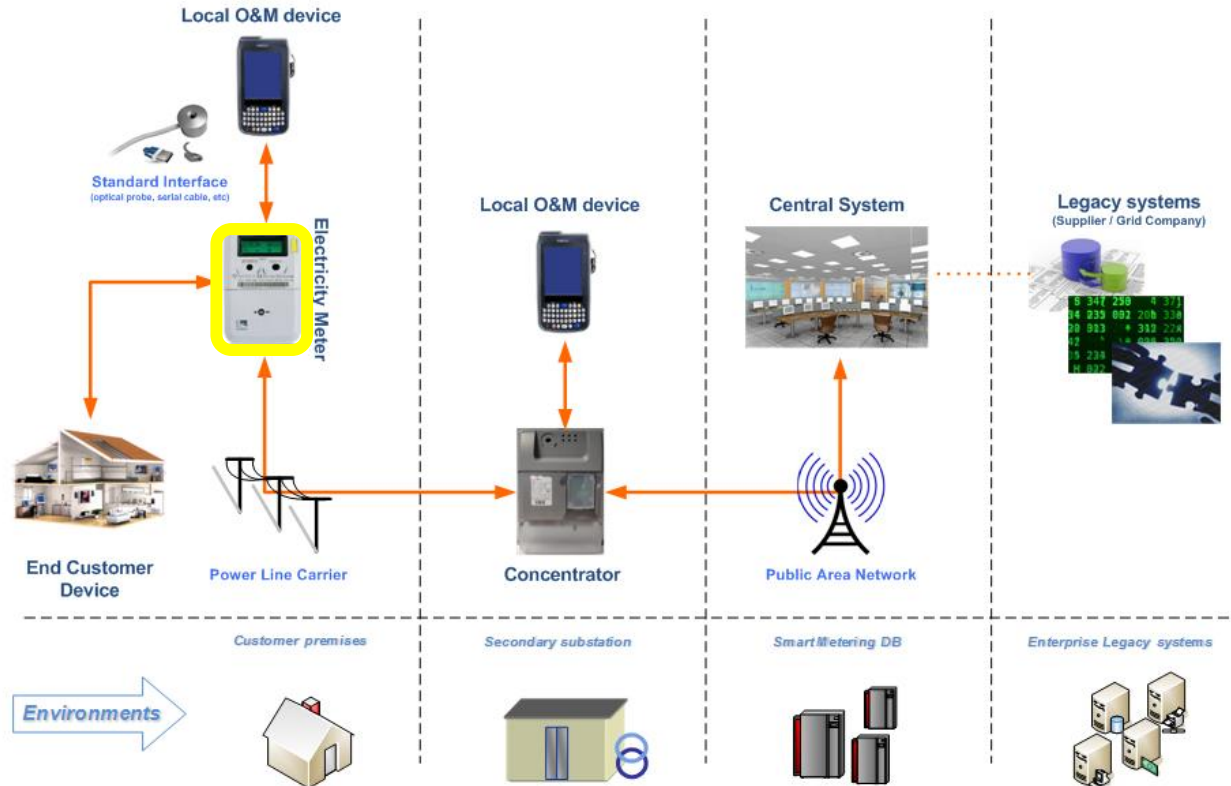


### ASSOCIATED MEMBERS



AUGUST 2013

# Meters and More: System Architecture



Meters and More defines a large number of **communication interfaces**, supporting **remote** and **local** communication with the meter device

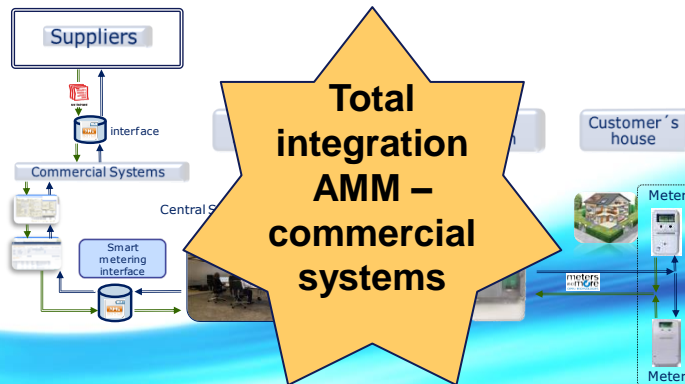
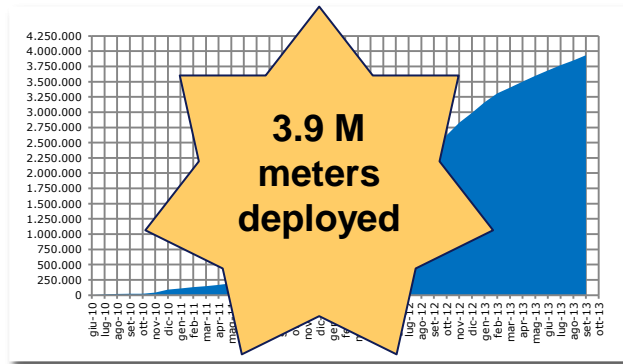
## Meters and More: Technology

### Protocol Services

- Meter **remote configuration**
- **Data reading** and **command execution**
- **Acknowledgement** on operations
- **Alarms** (tampering, low voltage, malfunctions)
- **Data security** management with 128-bit AES encryption and authentication
- **Network** management
- Meter **remote software upgrade**

# Endesa roll-out key figures

## Endesa Smart metering roll-out: Current situation





# Committee for Communication Activities

## Activities

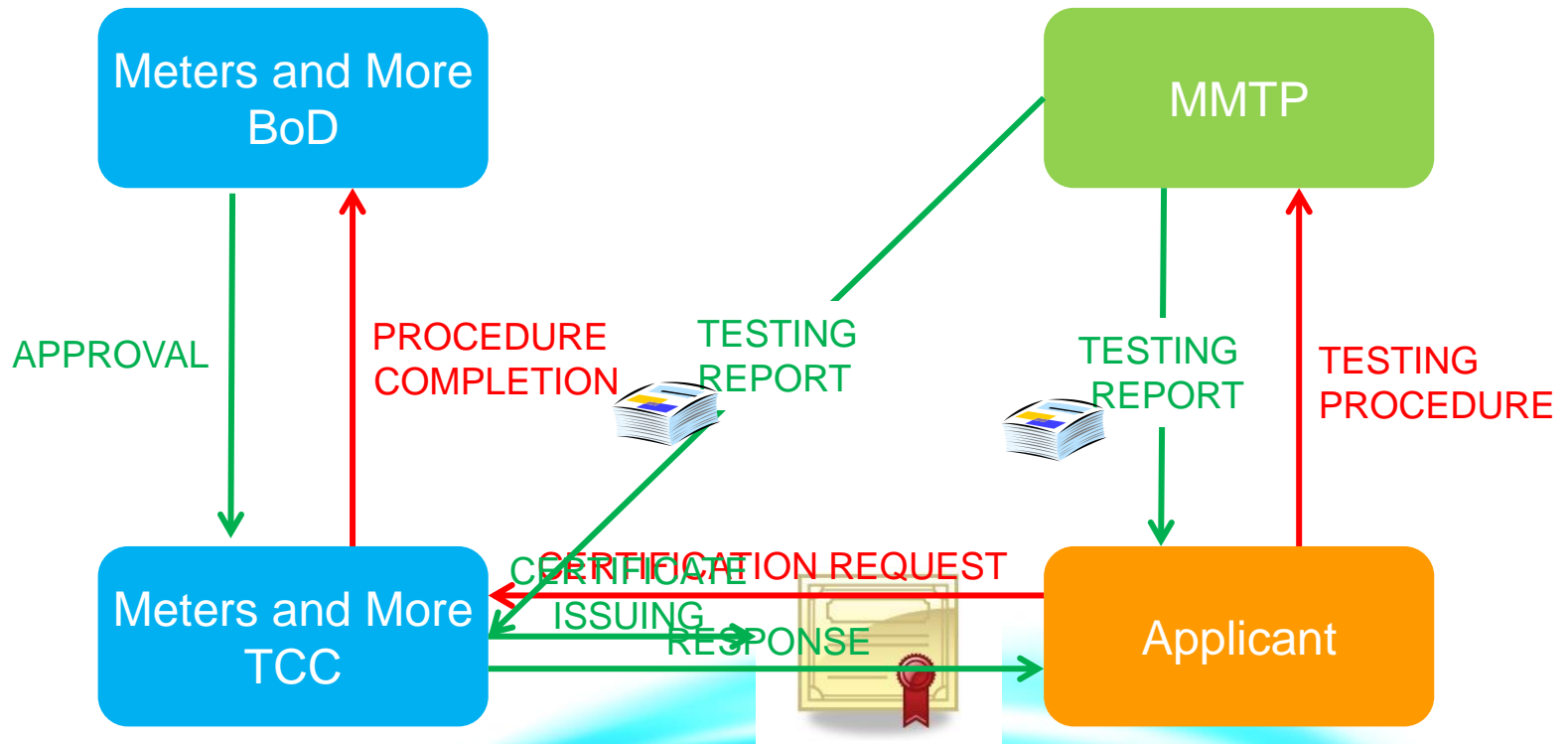
- Communication activities coordination
  - Papers and Conferences
  - Web site
- Sponsorship
  - Fairs
  - Conferences
- Brand Management
  - Logo
  - Promotional materials

# Technical Committee for Product Certification

## Working Packages

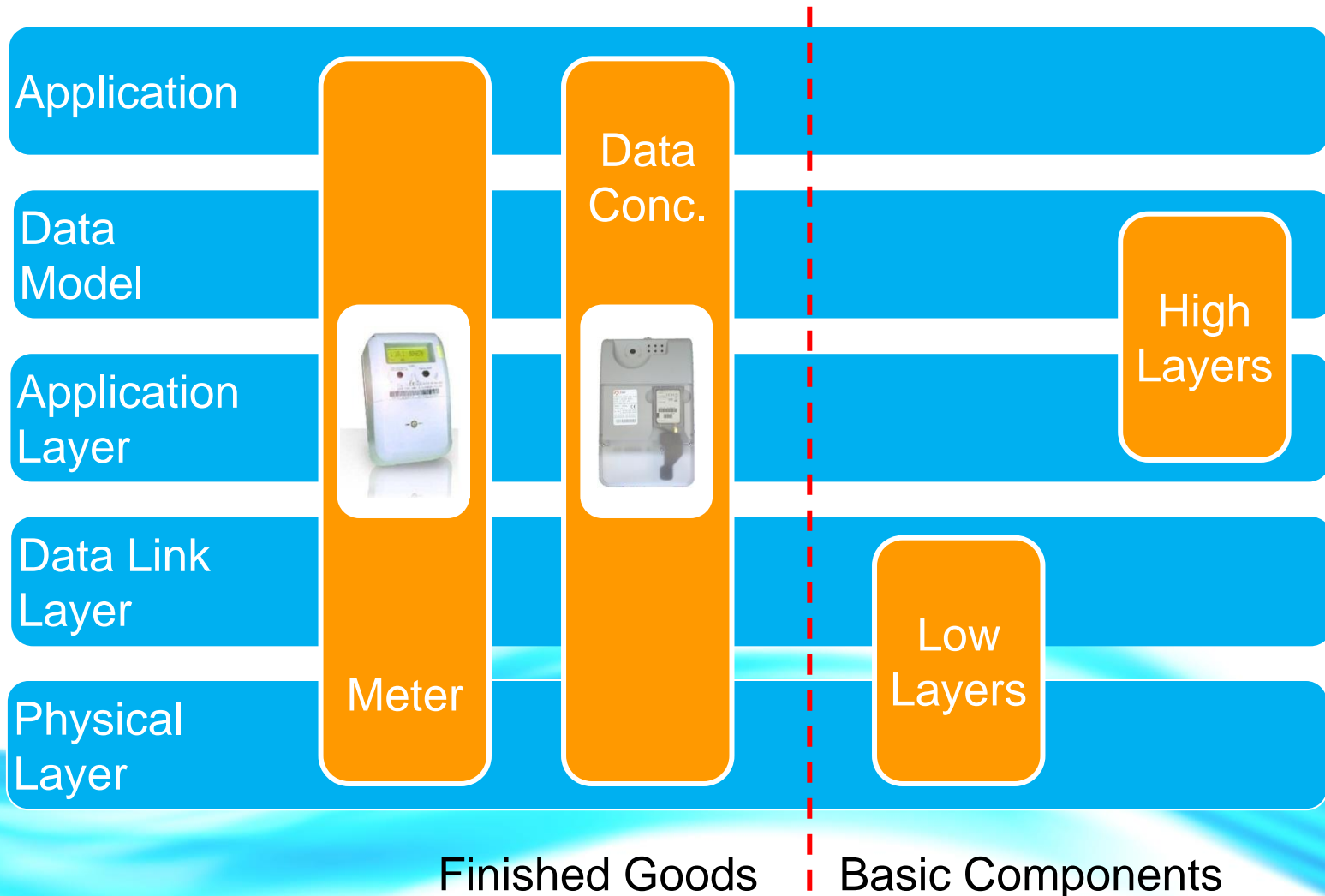
- WP1 – Physical Layer
- WP2 – Data Link Layer
- WP3 – Application Layer PLC Network
- WP4 – Data Model
- WP5 – Tools
- WP6 – Test Provider Requirements
- WP7 – Certificate Drafting
- WP8 – Application Layer Public Network (IP)
- WP9 – Basic Components
- WP10 – Golden Sample Certification

# Certification Process



**STEP 2:**  
**PRODUCTION OF CERTIFICATE**

# Meters and More Compliant products



# Technical Committee for Protocol Specification

## Working Groups

- WG1 – Lower Layers Specifications
- WG2 – Application Layer and Profiles specifications
- WG3 – End Customer Devices



## **Meters and More: promotion of Standardization**

- 2009-2011 Detailed analysis and testing within the OPEN Meter project:
  - Meters and More is one of the technologies suggested by the OPEN Meter project to become a standard.
  - It was the only technology for which no further recommendations were necessary, mainly due to its robustness and proven mass deployment.
  - Publication of revised Meters and More specifications on OPEN Meter website ([www.openmeter.com](http://www.openmeter.com))
- 2010 Establishment of the Meters and More association as an open non-profit association:
  - specifications and technology become available to all interested parties, without IPR limitations.
- 2011 Acceptance by Cenelec TC13 as a NWIP 13
- Q4 2011 Decision by Meters and More to extend the specs to additionally support DLMS/COSEM object model

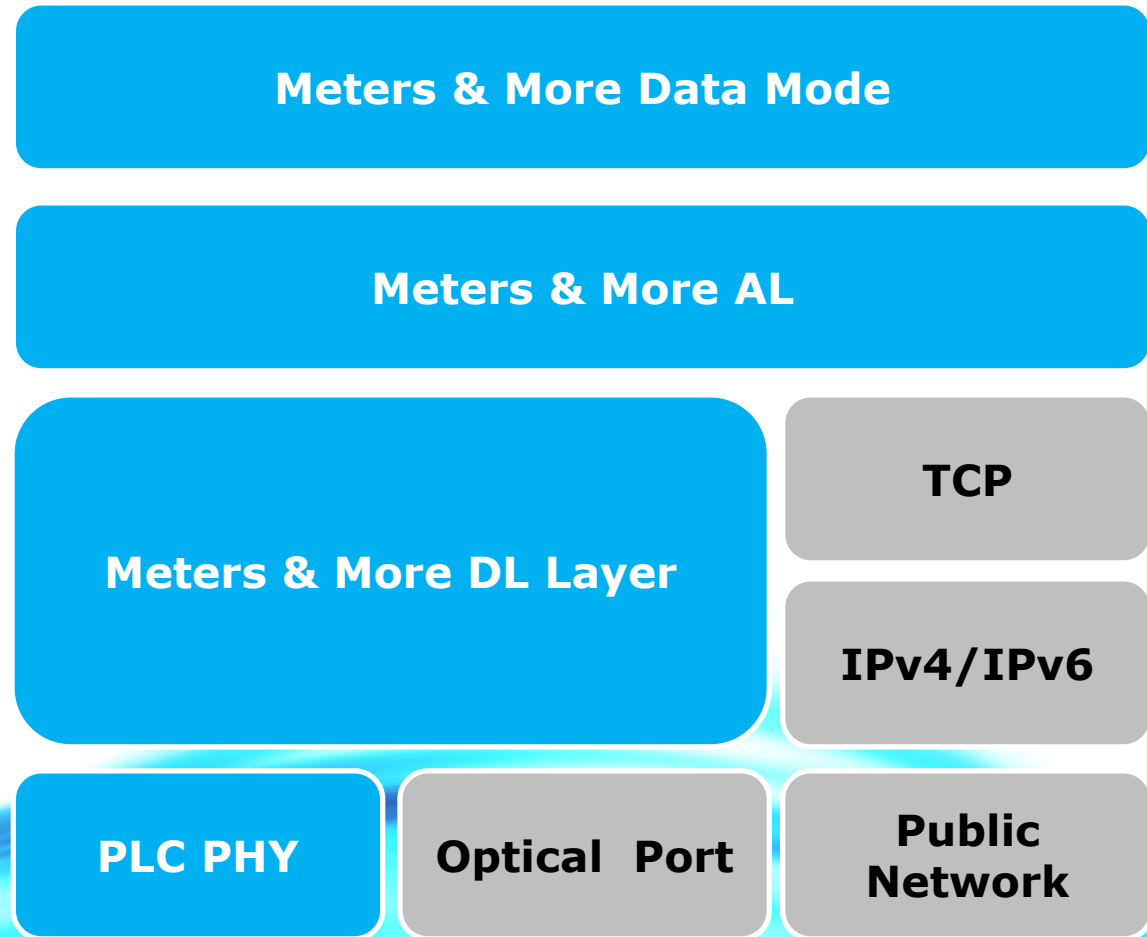
## Meters and More: promotion of Standardization

- Q1 2012 Meters and More requests its Technical Committee for Meters and More Protocol Specifications to work on these additional extensions.
- Q2 2012 Decision confirmed by agreement within Cenelec TC13 that all TC13 standards need to (additionally) harmonize with the DLMS/COSEM object model.
- Q3 2012 Meters and More and Cenelec TC13 WG02 establish Technical Liaisonship.
- Q4 2013 Submission of **final** extended specs to CENELEC TC 13.

## Meters & More original stack

### Features:

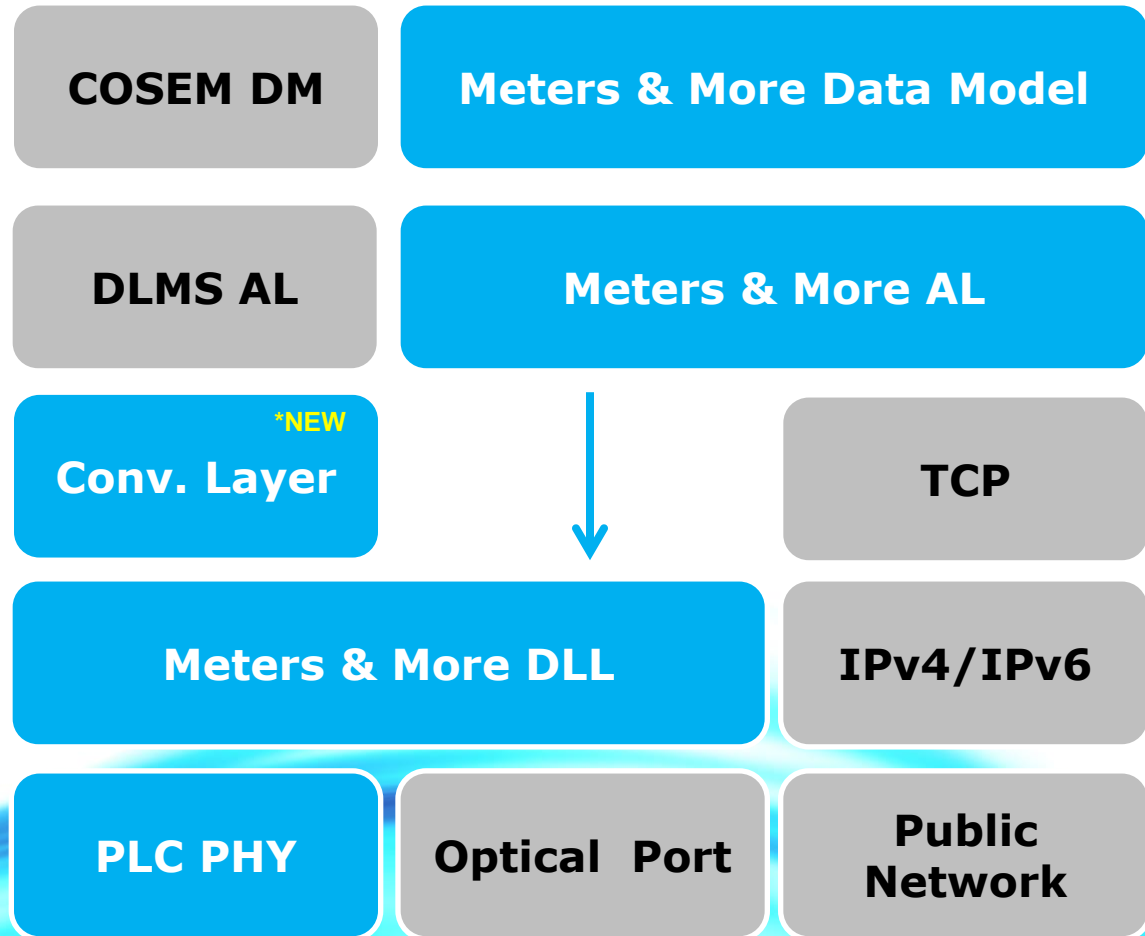
- Three different physical media (PLC, OP, IP over Public network)
- PLC and OP share the same DL layer
- All share the same AL and data model.



# DLMS/Cosem over Meters and More

Features:

- Additional Convergence layer to adapt Meters and More DL to the DLMS AL.
- Implemented new features:
  - Segmentation & Reassembly
  - SAP addressing



# Meters and More for Smart Cities



Smart  
Meter



End  
Customer  
Device



Street  
Lighting



...

... for smart meters... and more ...

**THANK YOU FOR YOUR ATTENTION!**

