

From Standards to Interoperability

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Prologue

3rd Energy Package



by 2020:
80% of the households
have Smart Meters

> 200'000'000 metering points

> 40'000'000'000 € investment



EUROPEAN COMMISSION
ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL
New Approach Industries, Tourism and Transport
Construction, Pressure Equipment and Lifting Machinery

Mandate M441

- > improve customer awareness
- > adaptation of demand
- > Smart Metering

- ... lack of standards, or
- ... slow updating of existing standards...
- > hamper the uptake of innovation

- ... create EU standards
- ... utility meters (E, G, W, H)
- > **enable interoperability**

The general objective of this mandate is to create European standards for the interoperability of utility meters (water, gas, electricity, heat), which can then improve the means by which customers' awareness of actual consumption can be raised in order to allow timely adaptation to their demands (commonly referred to as 'smart metering').

Background and justification

The Competitiveness Council has identified a need for European standards, or the slow updating of existing standards, whilst standardisation that is not in line with innovation to both domestic and foreign markets. The Council invited industry and other stakeholders to accelerate their cooperation in the development, implementation and use of standards supporting innovation in relation to the sustainable industrial policy and other areas particularly relevant for innovation. It also recommended fully utilising synergies.

Goals:

- standards on Communications: 9 months
- standards on Extended Functionality: 30 months

Making the M/441 happen

The Initiator



EUROPEAN COMMISSION
ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

New Approach Industries, Tourism and CSR
Construction, Pressure Equipment, Metrology

Brussels, 12th March 2009
M/441 EN

Standardisation mandate to CEN, CENELEC and ETSI in the field of measuring instruments for the development of an open architecture for utility meters involving communication protocols enabling interoperability

The Contributors



OPEN meter

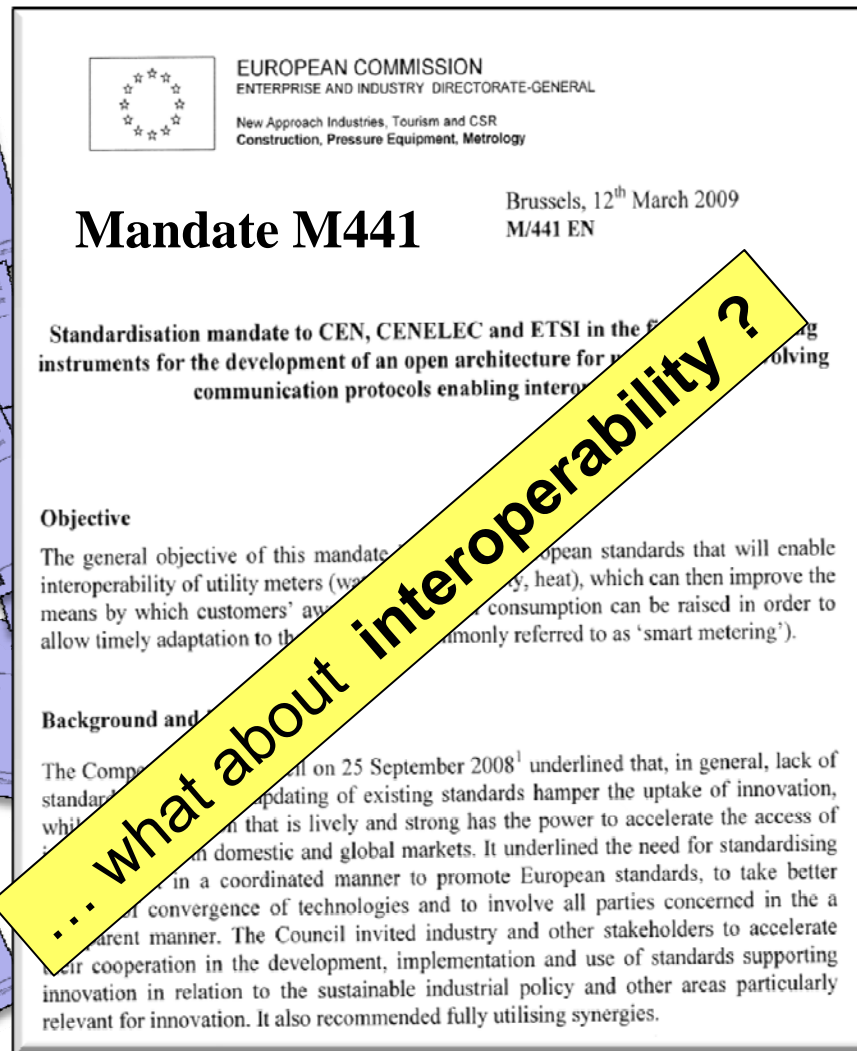
Open Public Extended Network metering




The Process Owners



... and the result of all these activities



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Brussels, 12th March 2009
M/441 EN

Mandate M441

Standardisation mandate to CEN, CENELEC and ETSI in the field of smart meters for the development of an open architecture for smart meters involving communication protocols enabling interoperability

Objective

The general objective of this mandate is to develop European standards that will enable interoperability of utility meters (water, gas, electricity, heat), which can then improve the means by which customers' awareness of energy consumption can be raised in order to allow timely adaptation to the needs of the market (commonly referred to as 'smart metering').

Background and

The Commission's Communication on 25 September 2008¹ underlined that, in general, lack of standardisation and updating of existing standards hamper the uptake of innovation, while a standardisation environment that is lively and strong has the power to accelerate the access of innovation in domestic and global markets. It underlined the need for standardising in a coordinated manner to promote European standards, to take better account of the convergence of technologies and to involve all parties concerned in the a more transparent manner. The Council invited industry and other stakeholders to accelerate their cooperation in the development, implementation and use of standards supporting innovation in relation to the sustainable industrial policy and other areas particularly relevant for innovation. It also recommended fully utilising synergies.

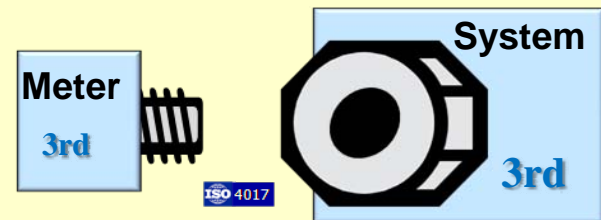
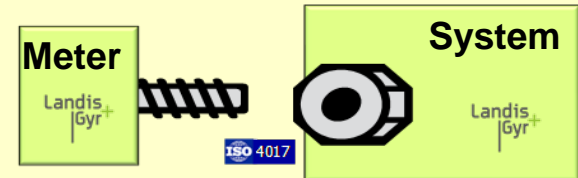
... some standards

Conformance to Standards and Interoperability

Standards



Conformant Products

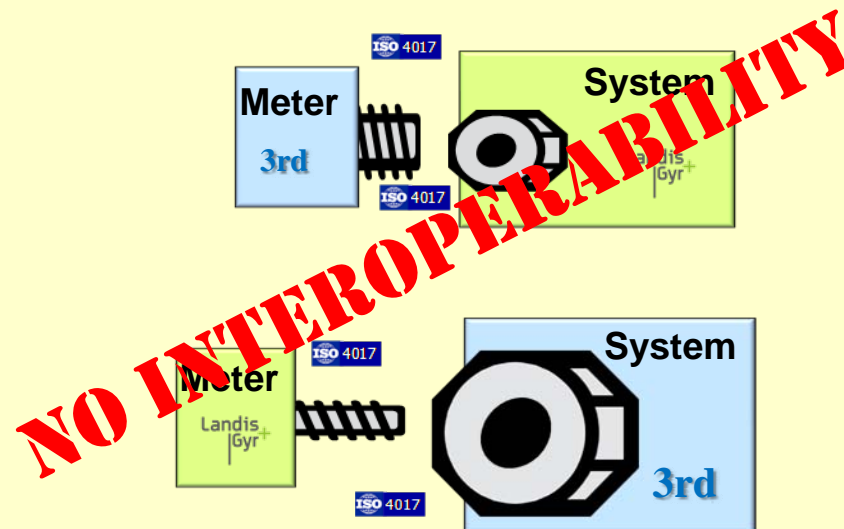


Conformance to Standards and Interoperability

Standards



Conformant Products



Interoperability today:

ICG meters:

yes

Smart Meters:

partial



From open standards to interoperable products

**Projekt „Linky“
300'000**



**Projekt „Prime“
100'000**



iDis

From the Wires

**Iskraemeco, Itron and Landis+Gyr
Announce IDIS, Interoperable
Specifications According to Open
Standards for Utilities Across
Europe, Middle East and Africa**

Standard Interfaces Will Spur Rapid Development of
Smart Metering

by: PR Newswire
Sep. 23, 2009 02:01 AM

REUTERS



Folk-Theorem on Interoperability

The two conditions to achieve
Interoperability:

Necessary condition:
availability of **Standards**

Sufficient condition:
commitment to **Invest**

thank you
for your
attention



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