



Smart Grid Standardization in CEN-CENELEC

Presented by Tony Field – 13th May 2010



Agenda

- 1) Smart Grid overview
- 2) Overview of standards bodies
- 3) EC Task Force Security / Privacy
- 4) CEN-CENELEC-ETSI JWG for Smart Grid

Smart Grid Background

- **Definitions**
 - Multiple definitions depending on organisation
 - In most cases integrating; energy efficiency, security of supply, DR/LC, PEV's, distributed generation.
- **Extended value from smart metering**
- **3rd Energy Package / ESCO Directive**



European Standardization Organizations

European Committee for standardization

(non-electrotechnical and non-communications)

European Committee for electrotechnical standardization

European Telecommunications Standardization Institute



The three recognized European bodies for standardization in support of the European legal framework (Directive 98/34/EC)

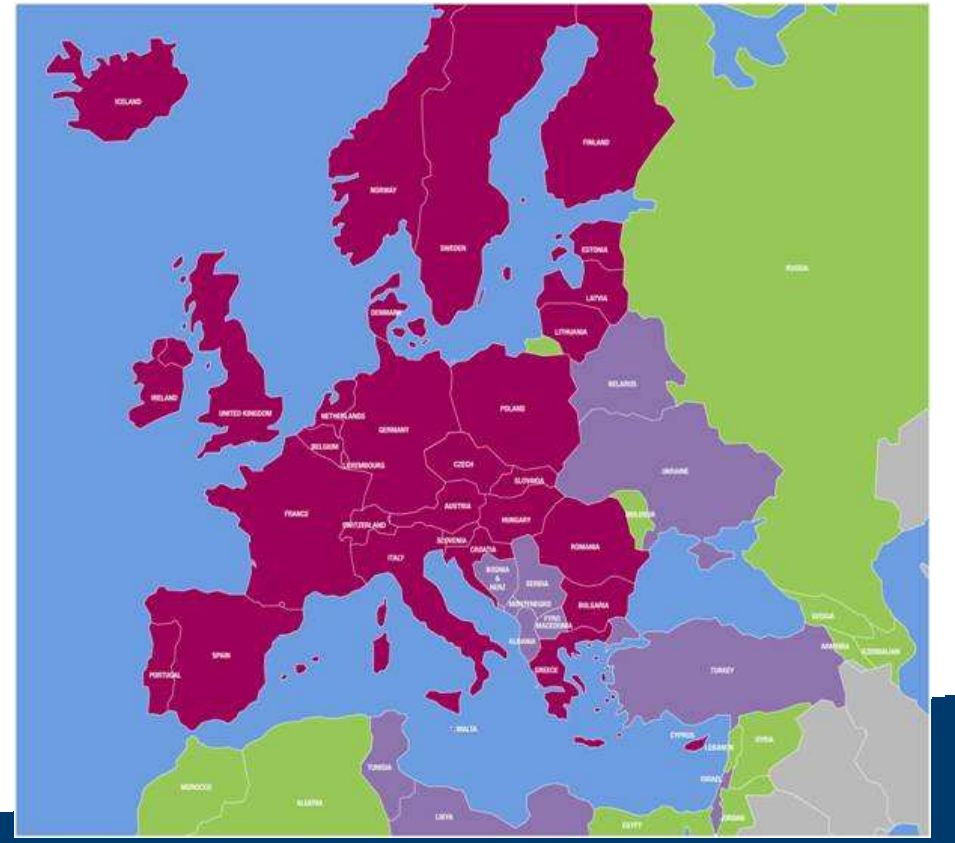
Mission: To prepare *voluntary* standards that help to develop the Single European Market

CEN and CENELEC

31 Members

- 27 EU Members
- 3 EFTA Countries
- 1 Neighbourhood policy country (Croatia)

- Affiliates
- Cooperating Partners / Trade Federations + Associations
- Associate Members



■ CENELEC MEMBERS ■ CENELEC AFFILIATES ■ EU NEIGHBOURING COUNTRIES

Europe and the Smart Grid (1)

EU: 20-20-20 Target: by 2020:

- cutting greenhouse gases by 20%
- reducing energy consumption by 20% through increased energy efficiency
- meeting 20% of our energy needs from renewable sources

Consequences for the electricity grid

Smart Grid is the answer

Europe and the Smart Grid (2)

European Task Force on Smart Grids (European Commission, Nov.2009):

- to advise on policy and regulatory directions at European level
- to coordinate the first steps towards the implementation of Smart Grids under the provision of the Third Energy Package
- standardization requirements are part of the remit

Task Force Structure



EC Task Force on Smart Grids

- Input from 19+ EU organisations
- Assess the need for additional regulation in the area of Security and Privacy
- Make recommendations to the EU Commission
- To be completed by End of May 2010

Group 2 Regulatory Reform

- Work streams 1-3: Definitions/Inventory EU/Benchmark with other industries/countries
- Work stream 4: Recommendation for Open Standards
- Work stream 5: Recommended Framework
- Work stream 6: Recommendation on SG benefits and risks for stakeholders -
- Work stream 7: Business Case Smart Metering / Smart

CEN-CENELEC's informal meeting of 8 March

Invitees: all stakeholders (70+ representatives were invited), including Commission, regulators, industry and standardisers (IEC, ETSI, JTC1, ...)

Objectives:

- To get an overview of developments
- To identify the need/scope for European standardization actions

Meeting's agenda (1)

Presentations from European Commission:

- Activities of the European Task Force for Smart Grids
- Task Force's Expert Group 1 – Regulatory functionalities for Smart Grids and Smart Meters (includes standardization)
- DG Research: state of play in the EU research field

Meeting's agenda (2)

Stakeholders' statements:

- Electricity Regulators
- Electricity industry
- Transmission systems operators
- Renewables
- Consumers
- ICT Industry – Digital Europe
- Research - Smart Grids ETP (European Technology Platform)

Meeting's agenda (3)

Standardization activities

- IEC Smart Grid Strategic Group
- ISO/IEC JTC1 SWG-Smart Grid
- CEN/CENELEC/ETSI Smart Meter Co-ordination Group
- ETSI
- NIST - Framework and Roadmap for Smart Grid Interoperability Standards
- DKE - Normungsroadmap E-Energy /Smart Grid Deutschland
- (Japan's roadmap was mailed to the participants after the meeting)

Follow-up

Joint Presidents' Group of CEN-CENELEC-ETSI is asked to create an informal joint working group to:

- prepare a European standards roadmap (overview/recommendations) by end 2010
- advise Commission on need/contents of standardization mandate
- discuss split of work if such a mandate is issued

Informal JWG – a “Focus Group” (1)

Participation:

- National CEN-CENELEC members
- ETSI Board representatives
- European associations representing stakeholders
- Research entities
- European standards groups (European TCs, Smart Meter Co-ordination Group etc)
- Observers of the European Commission DGs and of the EFTA Secretariat; from IEC and ISO (from the Central Secretariats and/or from interested Technical Bodies)

Smart Grids FG – tasks (1)

1. Refine its scope in order to ensure that it complements and not duplicates the work already done under the smart meter and electrical vehicles activities, and other groups within Europe
2. Advise (through the ESOs nominated representatives) the EC Task Force on Smart Grids and its Expert Groups on the current standardization landscape, including work in progress
3. Taking due account of the emerging Task Force recommendations prepare an overview of specific European standardization requirements concerning the Smart Grid

Smart Grids FG – tasks (2)

4. Match these requirements against existing international standards and all relevant work in progress in standards bodies, and build on existing international and European standardization work
5. Make recommendations as to how missing issues should be covered by standardization, by whom and on what timescale (noting the primacy of international standardization e.g. using the IEC-CENELEC Dresden agreement).
6. Propose to the ESOs how to respond to any European Commission mandate
7. Liaise with other European initiatives, including the Smart Grids ETP

Smart Grids FG – Timescale

To deliver a stable version 1.0 of the overview and roadmap before 30 December 2010. Updates of the overview and roadmap will be made to reflect discussions as they continue

The Focus Group will be released of its task before 30 June 2011, unless the JPG would decide that prolongation of the Group's activities is needed

Next steps

First meeting of the Focus Group in Brussels
on 31st May

Further meeting pattern to be decided

Contact points

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