



ANSI – ESO Conference
Transatlantic Standardization
Partnerships on E-Mobility/Electric
Vehicles, Energy, and Security

October 12, 2011



eMobility – the CEN/CENELEC perspective

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What are our European issues?

- We've tried to understand:
 - Commercial initiatives from global players → conflicts
 - Differences in regional electrical supply requirements (Japan/US/Europe) → options
 - Differences in national wiring rules in Europe → interoperability issues
 - Different needs for home charging, fast charging, types of vehicle, etc. → technical detail
- Europe is a large market and large producer – we don't want to re-invent the international wheel
- Some standards issues are more developed than others
- “Chicken and egg”- lack of standards may deter roll-out, implementation may be needed to standardise

The vehicle standards mandate

- ❑ Mandate = Commission/EFTA request to the European Standards Organizations (ESOs), endorsed by Member States
- ❑ Mandate on electric vehicle standards asks us to:
 - Ensure interoperability and connectivity between the electricity supply and on-board chargers of electric vehicles
 - Ensure interoperability and connectivity between “off-board” chargers and the electric vehicle and removable batteries
 - Consider any smart-charging issues
 - Consider safety risks and electromagnetic compatibility of the charger of electric vehicles in the field of relevant Directives
- ❑ Mandate issued in mid-2010, report now published

Our report

- ❑ CEN-CENELEC Report first published in June
- ❑ 69 recommendations (!) covering:
 - Future organization, links with regulation in Europe
 - Charging parameters (AC, DC, domestic, public, etc)
 - Connectors, plugs and sockets
 - Communications
 - Batteries
 - EMC
- ❑ Standards in this domain are – and have to be – international
- ❑ We will only work ourselves where we need urgent European issues covered

Which are the report's critical issues?

- ❑ Complexity – large number of standards activities relevant, different stakeholder communities that have evolved separately and in different organizations
- ❑ Need for better collaboration to drive the work forward
- ❑ Domestic installations may not be adequate for charging
- ❑ Need to reduce options in chargers/connector standards
- ❑ Work on smart charging and on vehicle-to-grid communication is not yet mature (even business model issues)
- ❑ New standards needed for batteries, detailed adjustments needed for EMC

What we propose to do

- ❑ We're establishing a European-level Co-ordination Group – needed to ensure that the recommendations are being implemented
- ❑ Participation of interested stakeholders – but accompanied by more detailed technical co-ordination between standards committees
- ❑ ISO and IEC need a similar approach: global effort - also including Asian vehicle producing countries - is needed to ensure smooth market introduction
- ❑ We're happy for our Co-ordination Group to work closely with ANSI EVSP on these issues
- ❑ Collaboration on activities for the global level, seeking common stakeholder approaches to the work, etc.?

Thank you for your attention

Our report: www.cen.eu/go/eMobility

Questions/comments: innovation@cenelec.eu

