International standards & International Trade

Standards Matter - BSI
22 June 2017, Edinburgh

Chaesub Lee, TSB Director
ITU Telecommunication Standardization Bureau
ITU-T Standards and Standardization Process

- Not an objective (target or goal): A TOOL
- Enabler, coordinator and Facilitator
- A part of circulated movement: Market \(\rightarrow\) Technology \(\rightarrow\) Standard \(\rightarrow\) Product \(\rightarrow\) User need \(\rightarrow\) Market

**Diagram:**

- **Market Change**
  - New Markets
  - Existing Markets

- **New Technology**
  - Future required technology
  - Existing useful technology

- **New Standards**
  - Future required standards
  - Existing useful standards

- **New products**
  - New User needs

**Steps:**

- Identify Issues
- Develop Standards
Value Chains of Standards Eco-system

- **Standard**
  - + α5
  - - α5

- **Industry**
  - + α4
  - - α4
  - - α3
  - + α3

- **Products**
  - + α1
  - - α1

- **Market**
  - + α2
  - - α2

- **User**
  - - α3
  - + α3

- **Process**
- **Capability**
International Trade Barriers

WTO TBT (Technical Barrier to Trade) recommends 4 principles to clarify and strengthen the concept of international standardization:

- **Impartiality:** All countries should be afforded equal opportunity to influence or participate in international standards processes, ensuring that standards do not favour any particular companies, markets or regions.

- **Effectiveness and relevance:** An effective international standards process responds to relevant demands for technical standards driven by technological advance as well as regulatory and market needs.

- **Coherence:** Cooperation and coordination among international SDOs is essential to avoid the development of conflicting international standards caused by duplications/overlaps of standards work.

- **Development dimension:** International standards should reflect the needs of all the world’s regions and measures should be taken to encourage developing countries’ participation in international standardization.
ITU as an International Standard Organization

Consensus based operation with Our Members

193 MEMBER STATES
800- PRIVATE-SECTOR ORGANIZATIONS
150+ ACADEMIA MEMBERS
EUROPEAN STANDARDS – WHAT DOES INDUSTRY NEED?

• Brexit
• Digital and low carbon challenges
• Can the Commission help?
• What does industry need?

Dr Howard Porter
BEAMA Chief Executive
Immediate past Chairman ORGALIME

Howard.Porter@beama.org.uk
High level of involvement

- Between BEAMA and GAMBICA in the UK we have Membership of 200 standards committees through BSI
- The 2 TAs are the founding members of a new Strategic Standards group ESSAC
- Rodney Turtle, Schneider Electric is on the IEC council and is chairman of ESSAC
- Anne Humberstone is on the IEC SMB
- Andrew Evans is on the IEC CAB
- David Dossett on the CENELEC board

Also in Europe

Howard Porter (BEAMA) is the immediate past chairman of ORGALIME, Graeme Philp (GAMBICA) special standards advisor ORGALIME and other staff are on many Orgalime Task Forces and the European Accreditation Advisory Board.

The views expressed today reflect a combined view from BEAMA, GAMBICA and ORGALIME.
The UK is heading out of the EU

No-one is sure what the rules will be.. especially post June 9\textsuperscript{th}!

UK manufacturers and importers from the EU will still need to adhere to the single Market regulations and the relevant Standards

The full membership of CEN and CENELEC for the UK industry is vital..

For the UK economy and large parts of the EU industry 100\% compatibility with European standards is vital

The advantages of UK involvement in committees all through CEN and CENELEC should not be lost

The UK will of course need to stay fully involved in IEC and ISO
The direction of product and system development across the world is clear:
- A rapid digitisation of industry, buildings and energy networks
- The evolution of low carbon energy production and products and systems
- In combination they provide opportunities for industry, but also great challenges, not least in standardisation
- The speed of product development is increasing all the time – standardisation is too slow, and standards often lag innovation

Examples:
The digital factory – needs digital enabled products, and interoperability
The smart house and smart electricity – products need to be low carbon, using appropriate digital solutions – interoperability key
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Examples:
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The smart house and smart electricity – products need to be low carbon, using appropriate digital solutions – interoperability key
The digital factory – “Evolution from mass production to mass customisation”
Smart homes and smart electricity
• Full inclusion in the structures and work programs of European and international standards bodies of Industry

• The establishment of Strategic standards forums within National Committees for relevant industry sectors, linking with national strategic groups

• Maximum use of smart working practices – allowing more rapid decision making

• Development of efficient but democratic voting structures

• Industry needs to continue to develop skilled standards experts, from the strategic to the detailed
• YES!!

• The Commission needs to understand and respect the difference between standardisation and legislation

• The European regulators need to be fully behind the solutions that industry needs:
  - during and after Brexit
  - in the development of the digital and low carbon future

• The future strength of European industry, including the UK relies on the effective and timely development of standards

• The Commission should do all it can to provide clarity and if possible funding to help companies develop their skill sets to deliver the standards needed for the future.

• And remove barriers as in the following current example:
Delayed citation of harmonised standards in the Official Journal of the EU

Bureaucracy: Dated references, Annex 22, etc...

Presumption of conformity

harmonised standard
What does industry need?

• A recognition that industry funds and resources the standardisation system

• A reaffirmation of the principle of “presumption of conformity” as embodied in the New Approach

• The continuation of the current voluntary, consensual process of standards writing

• A push back against political involvement (particularly of the European Commission) in the writing of standards

• A reaffirmation of the Chinese wall between Standards writing and the drafting of legislation (although the one may, of course, reference the other)

• BUT the challenges of BREXIT, Digital and low carbon futures on the standards community must be met as outlined.
Supporting Global Growth Through Standardization

John Walter, Chief Executive Officer, SCC
The Standards Council of Canada (SCC)

• Federal Crown Corporation established in 1970:
  – Reports to Parliament through the Minister of Innovation, Science and Economic Development (ISED)
  – Canada’s national standards & accreditation body
  – As a Crown Corporation, SCC can be responsive to both government and industry needs.

• SCC leads the development and use of national and international standards.
  – i.e. SCC provides $1M in support to Canadian technical experts participating in ISO and IEC technical committees
Innovation

• SCC is increasing opportunities for Canada in new and emerging sectors to support innovation, commercialization & market access.
  – 43,800 enterprises in Canada export their products abroad

• Canadian Innovation Pilot Projects: supporting commercial opportunities for Canadian innovators using standards development.
  – Three new standards being developed at ISO and IEC

• Looking for future projects: innovations in CleanTech to support Canada’s climate change policy objectives.
Infrastructure

• Development of standards to improve the resilience of infrastructure in Canada’s North.

• Phase 2 of the Northern Infrastructure Standards Initiative (NISI): development of 7 new Northern infrastructure standards over 5 years

• Development of a state-of-play report on standardization guidance for weather data, climate information, and climate change projections
Free Trade Agreements

- Canada-EU Comprehensive Economic and Trade Agreement (CETA)
  - Conformity Assessment Protocol - implemented through Cooperation Agreement between SCC and the European cooperation for Accreditation (EA)
  - SCC-CEN/CENELEC Cooperation Agreement
  - SCC is a CEN Companion Standardization Body (CSB)

- Canadian Free Trade Agreement (CFTA)
  - Incorporates strengthened standards-related obligations, including:
    - use of international standards
    - mutual recognition of conformity assessment procedures
    - use of Canada’s national standardization network to develop new standards.
SCC-Accredited Standards Development Organizations

AHRI
CSA Group
BNQ
ASTM
NSF
CGSB
UL
ULC

Standards experts. Accreditation solutions.
North American Harmonization

• SCC accreditation of U.S. SDOs means more options for regulators and industry.
  – 132 ASTM committees (out of 143) had Canadian participation in 2014

• Continue to work closely with ANSI and DGN.
  – Industry-driven process for standards-alignment

• Working with industry to develop joint Canada-US standards to reduce duplication and lower transactional costs.
CEN/CENELEC

The practical use of standards:
A manufacturers perspective

Edinburgh : 22/6/2017
An International Group

- **€5** billion of sales in 2016
- Operating profit in 2016 of **€934** million
- **30%** of sales made in new economies in 2016
- Established in more than **90** countries and products sold in nearly **180** countries
- **200,000+** SKU's (exc specials)
- Over **36,000** employees
Connecting people and buildings for over 35 years...

Legrand UK... SIX SPECIALIST BUSINESS UNITS

Aidcall
Jontek
tynetec
Cablofil
Salamandre
Swifts
C2G
Minkels
Ortronics
CP Electronics
Electrak
Bticino
Nuvo
Vantage

THE GLOBAL SPECIALIST IN ELECTRICAL AND DIGITAL BUILDING INFRASTRUCTURES
Innovation: one of our main growth drivers

5% of 2016 sales invested in Research & Development (250 ME)

Circa 3,900 active patents globally

Over 2,000 experts dedicated to R&D

Recent new products launched in the UK include:
- Swiftclip (Swifts cable tray)
- Touch Safe Pro wireless nurse call system
- Intersoc-R workstation solutions
- Salamandre distribution trunking
- Arteor home automation and wiring accessories
A Journey ..

Mechanical/
Electrical/
Electronic/Digital

Products / Systems/Solutions

B to B / B to C

Fast Clockspeed
Toys & Games Industry  < 1 year
Semi-Conductors Industry  1-2 years
Cosmetics Industry  2-3 years

Medium Clockspeed
Car Industry  4-6 years
Beer Brewing Industry  4-6 years
Machine Tools Industry  6-10 years
Pharmaceuticals Industry  7-10 years

Slow Clockspeed
Aircraft Industry  10-20 years
Steel Industry  20-40 years
Building Materials  20-40 years

Digital Infrastructure & Applications
10 years

Electrical Infrastructure & Applications
30 years +

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Challenges of transition to digital...
We all need to keep pace...

- More Products
- More Data
- New players

- White papers become de facto standards
- Interoperability/Backward Compatibility
- Privacy/CyberSecurity
- Ageing resource /Changing skill sets
- Non compliant product/ anti-counterfeit
Why are standards important to Legrand UK?

Improve/Innovate
Inform/Harmonise
Influence
Interoperability
Implement/Phase in and out

We are very aware that digital and electrical infrastructures are increasingly interlinked/interdependent and will need to evolve at an even faster pace in the future.

UK Team: 8 + 1 consultant
ELIOT … Electrical and digital infrastructure at the heart of IoT in buildings

Cloud, Service Providers

Infrastructure Electrical & Digital
- User interface
- Assisted living
- Home systems
- Door entry systems
- Emergency lighting
- Hotel room control
- Lighting management
- Energy management
- UPS
- Metering
- Modular switchgear
- PDU
- Chimes
- and more

Connected Objects

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Connected Objects

Cloud, Service Providers

Infrastructure
Electrical & Digital

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Connected Objects

and more

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Thank you for your attention....

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