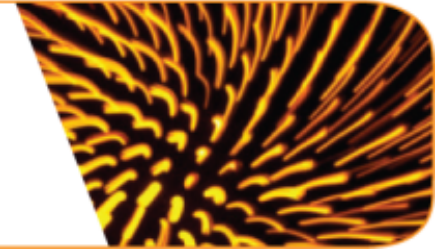


## European ICT standardization, research and innovation – making parallel lines meet

John Ketchell, Innovation CEN-CENELEC  
Ghent Conference, 15 December 2010

# Contents



- A bit about us (not too much)
- ICT Standardization in Europe – a challenging environment
  - Policy issues – towards reform?
    - Standards and research
  - How can we improve matters?

# The actors



**The European Committee for Standardization**



**The European Committee for Electrotechnical Standardization**



**The European Telecommunications Standards Institute**

= the European Standards Organizations ("ESOs")

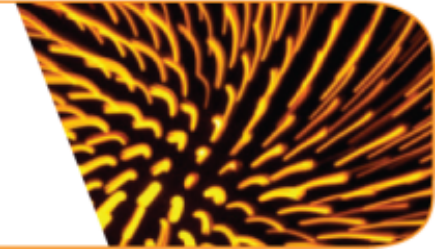
+ International standards bodies (ISO, IEC, ITU-T, UN-ECE)

+ some major consortia (ASTM, IEEE, etc)

+ hundreds of industry standards consortia....

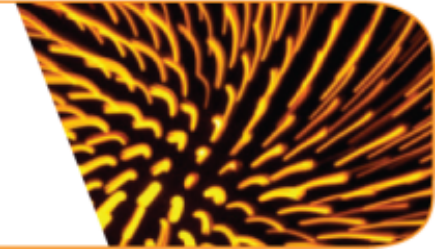
***Is this landscape too fragmented for European needs?***

# CEN-CENELEC convergence



- We have combined back offices
- We now have 31 national members (Croatia just joined)
- Mostly now they are common entities
- The topics for standards are converging
- So, as of 1 January 2010, we have the CEN-CENELEC Management Centre under one Director-General
- But the two entities will remain separate – global partners ISO and IEC remain
- Efficiency savings in support functions; better synergies

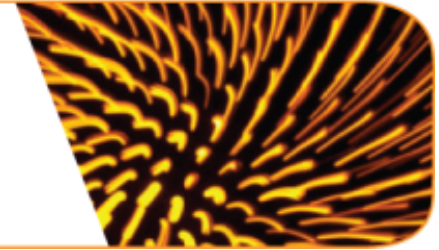
# Contrasting systems



- European traditions in standards-making are:
  - Backed by EU legal provisions (Directive 98/34)
  - Ensuring a level playing-field (the single market)
  - Societally inclusive – all stakeholders
- US traditions are:
  - Supporting competition
  - Industry-dominated
  - But sometimes more regulatory than Europe!
- BRIC traditions?
  - China shows signs of the European approach
  - Others have less resource to participate

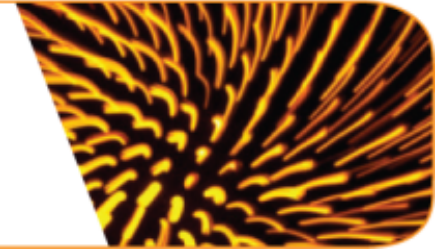
*It's important we continue our inclusive approach*

## But poor resourcing, poor image?



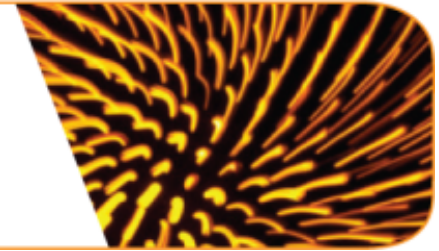
- ✂ *Not much money in standards (CEN 14m€ c/f research budgets)*
- ✂ *But 60000 experts in CEN - many may be engineers but how many are innovators?*
- ✂ *Do some companies think standards are for mature markets? Do people in research understand that ESOs have offered fast, innovative processes for decades?*
- ✂ *Is globalisation losing Europe standards opportunities? And what about European needs?*
- ✂ *Do we even have the companies in Europe?*

# Successes and failures - a tradition of EU action



- The European Commission has supported standardization for decades
- Special arrangements for ICT standardization date back to the 1980s
- The '80s and early '90s: OSI – European inputs into a regional system of base standards (in ISO/IEC JTC1) and profiles (produced in three regional organizations)
- 1988 – creation of ETSI as a third European Standardization Organization
- Results – the GSM... and OSI as a forgotten niche

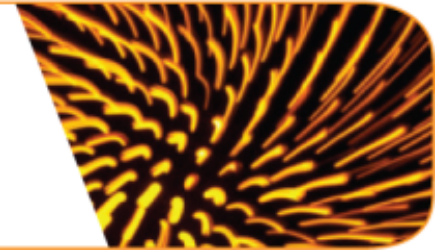
# Slow decline or essential added-value?



- During the last two decades, we have continued European ICT standardization work
- Often this is against a flood of consortia specifications:
  - A lot of nice technologies
  - IT industry driven by innovation
  - But there's lack of interoperability
  - Solutions in search of markets (web services?)
  - End-users are confused/lacking power to change
  - People stick to tried and trusted solutions, eg EDI is still there (and works – but not for SMEs)
  - Policy makers look for new GSMs

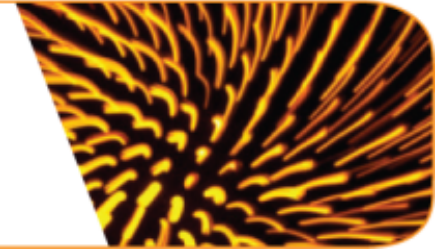


# Convergence



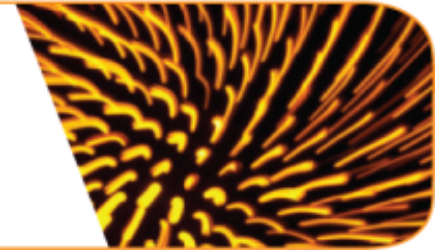
- All three European bodies – and their global counterparts - are active in ICT
- In general, ETSI is handling “infrastructure” issues, electronic communication aspects
- CEN and CENELEC are handling the application aspects – and we link to “traditional” standards areas
- Increasingly, topics are convergent:
  - Many “new” areas require collaboration – eg Intelligent Transport, RFID, eHealth, eBusiness
  - Resource-strapped stakeholders cannot afford to be everywhere

# EU standards policy review



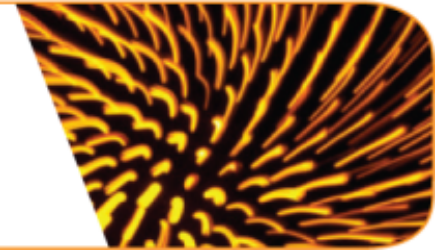
- Time this happened!
- Standardization was increasingly “invisible”
- ICT was first: study leading to White Paper in 2009
- Then the rest: Expert Panel for the Review of the European Standardization System (EXPRESS):
  - 30 experts selected by the Commission
  - Acting in their personal capacities
  - Providing a “vision” of European standardization in 2020
  - Proceedings not really public, but some national members and “Presidents” of the three ESOs were on the panel

# Implementing policy change



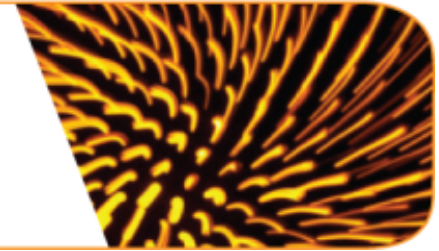
- European Parliament: “Report on the future of European Standardization”:
  - Committee on the Internal Market and Consumer Protection
  - Approved 21 October
- Commission “legislative package” in 2011:
  - Will amend the relevant EU standards legislation
  - Issues - service standardization, balanced representation, ICT “high level platform” for stakeholders...
  - And “recognising” consortia specifications

## What about “recognition”?



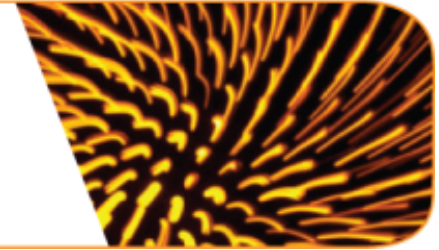
- First question is why? Consortia specifications seldom provide what Europe requires for legislative reference purposes/interoperability
- Second issue is what about national implementation aspects? All European Standards are published at national level = meeting local and linguistic requirements
- Third issue is transparency – for many consortia participation is not adequate, costs are high and deter (eg) user communities
- Consortia and ESOs are complementary not simple alternatives to one another

# Standards and the Digital Agenda



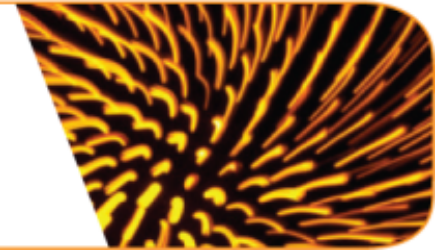
- CEN-CENELEC agree the diagnosis – standards environment weak, lack of interoperability, fragmented markets, cross-border barriers
- We have reservations about the remedy:
  - a more inclusive approach is needed
  - We can offer involvement of societal stakeholders and national involvement
  - We have better guarantees of universal acceptance than standards consortia
- But in any case we are already active in many of the digital agenda areas

# The innovation issue



- All in a sudden, standards are critical for innovation:
  - Commission Communication to Council, spring 2008
  - Council Conclusions, autumn 2008 (29 recommendations)
  - Innovation Union, October 2010
- ✂ *Loss of European jobs in the global economy?*
- ✂ *Panacea in a recession?*
- ✂ *Lead Markets? Green agenda?*
- ✂ *SMEs?*

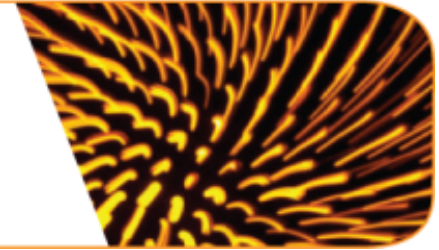
# Research and standards – nothing new



- EU RACE and ACTS programmes, 80s and 90s:
  - Conditional for research projects to contribute to standards-making
  - One factor in the success of the GSM
- Standards, Measurement and Testing Programme:
  - The old EU DG XII
  - Enabled standards bodies to commission research

✂ *Why did we lose these close links?*

## Standards/research – some research...



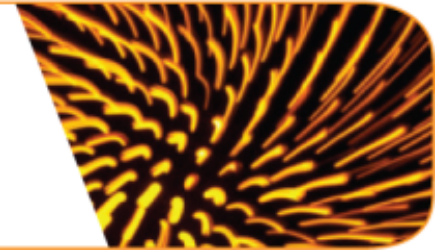
- COPRAS Project (FP6) in ICT:  
CEN/CENELEC/ETSI/W3C/The Open Group
- Assessed FP6 projects under the Information Society Technologies Programme
- Tried to support some projects through the standards process
- Made recommendations, produced guidance
- Ageing but still valid

- [www.copras.org](http://www.copras.org)



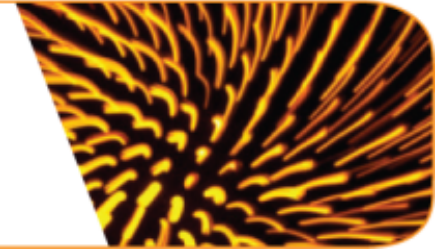


## ...and its conclusions



- Standardization is an essential component for boosting innovation
- Starting standards activity early provides better chances for being successful
- Still too many barriers for projects to participate in standardization
- More tools are needed to support projects
- Standards organizations should market the benefits
- Research programmes should provide funding for standards resources

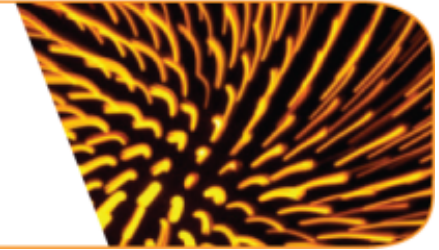
## Fast, flexible arrangements ...



- CEN and CENELEC Workshops and ETSI Industry Specification Groups:
  - Open standards platforms
  - Fast deliverables (6-18 months' duration)
  - Suited to innovative topics
  - Very many linked to research projects
  - Funding can come through the projects
- Only a very few recent examples:
  - *Global Interoperable eBusiness Test Beds (collaborative with US (NIST) and Korea)*
  - *European electronic health insurance cards*
  - *eInvoicing in Europe (a major activity to facilitate business adoption of global standards)*

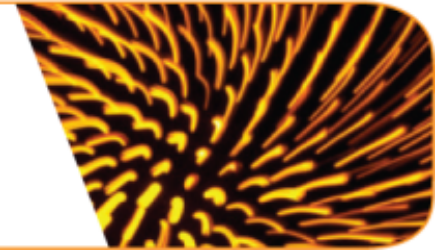


## And a future blueprint



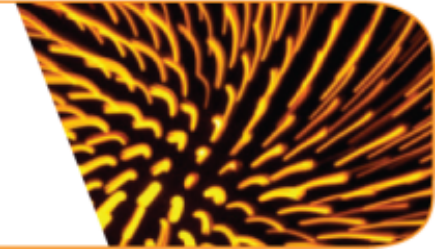
- Programming new areas – RFID, smart meters, smart [electricity] grids: all under way
- We need far more interoperable material for EU users: eBusiness, eHealth, eLearning, Intelligent Transport Systems – stop the fragmentation!
- We need to be closer to the consortium environment:
  - Consortia provide the technology standards
  - We need to make them usable in an interoperable manner
  - We need more dialogue (consortia are reluctant)

# Why?



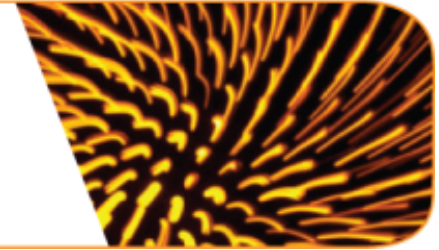
- Technology providers/vendors have the global reach and resource
- The ESOs have unrivalled national networks (31 countries in CEN and CENELEC)
- We also link to the international formal processes
- How many consortia have an office in Lithuania, how many produce specifications in Italian?
- We can tap into end-users, national administrations, SMEs, etc.
- The synergies are badly under-exploited – why don't we try to improve matters?

## Questions to conclude



- *How can we ensure that standardization is systematically on research projects' radar?*
- *How can we create standards that can enhance Europe's employment and technological capabilities in global markets?*
- *How can we reduce this awful fragmentation of effort?*
- *How can we stop IPR problems ?*
- *Can we work together – ESOs and consortia - for interoperability?*

Thank you!

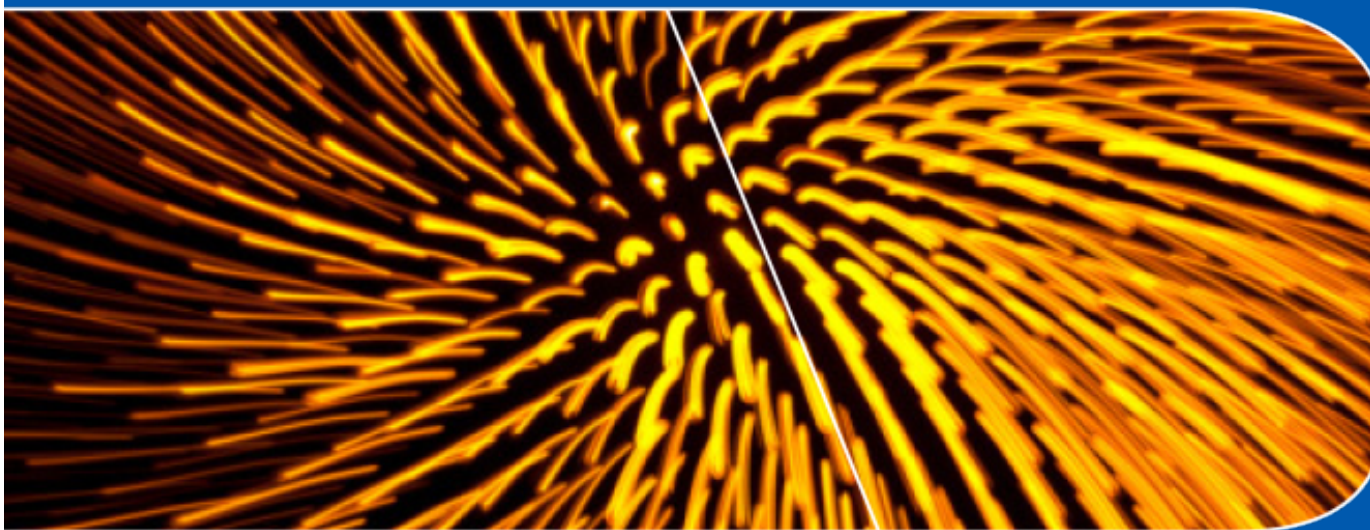


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[jketchell@cencenelec.eu](mailto:jketchell@cencenelec.eu)

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