



The ICT standards scene

Commission Project Officers, 15 February 2006

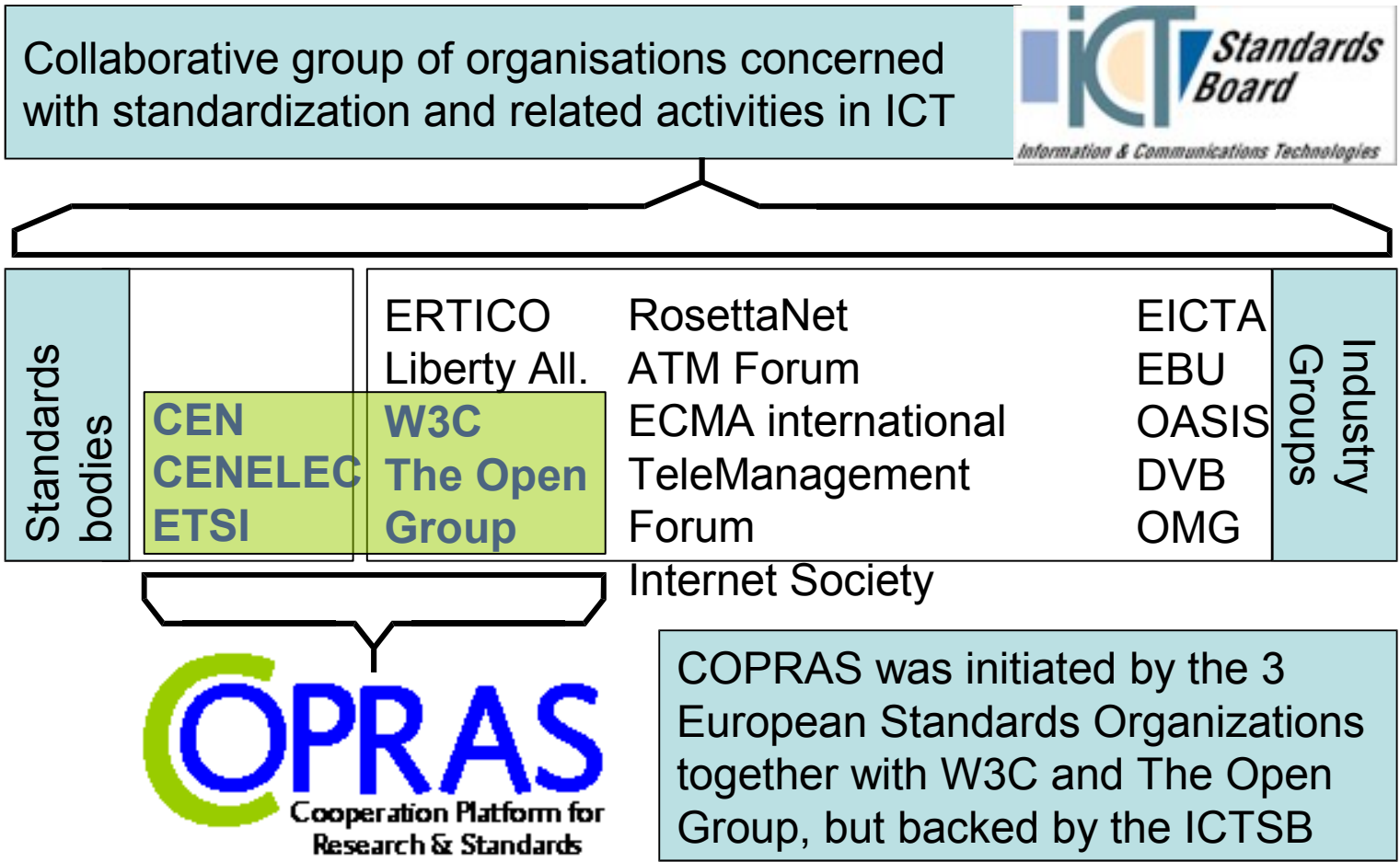
John Ketchell, CEN Director, Pre-Standards and Chair, COPRAS SG



COPRAS – the ICT standards interface platform

- Stimulate interaction & exchange between FP6 projects in calls 1, 2 & 3 and standardisation groups
- Act as a facilitating platform for projects wishing to upgrade their deliverables through standardisation
- Prepare generic information on RTD/standards interfacing guiding those proposing or evaluating future projects
- Start: 1st February 2004
- End: 31st January 2007

COPRAS' roots lie with European standardisation bodies & the ICTSB



The ICT standards paradox

- ICT standardization constitutes a multi-million dollar “business”
- Just one example of the consequences – market from IEEE 802 LAN standards, over 15bn dollars p.a. [Isaak, 2004]
- The efforts put by the ICT industry to draw up standards are phenomenal (though largely unquantified!)
- The paradox – the full potential to help business/society is not yet fully realised:
 - The “technical” activities are often not visible enough
 - The target users do not know about them, or the standards do not take user needs into account
 - There are far too many standards activities in different bodies
 - The standards are not inter-operable

A very confused picture

- Traditionally, “standards” are produced by formal bodies with “national” processes – delegations, comment process on drafts, national voting etc
- In traditional sectors, this comes from a need to harmonise very different national or regional standards, ie to remove barriers to trade
- In ICT, few national issues – indeed it’s the reverse as technologies generally don’t take account of local requirements!
- In ICT, hundreds of “standards bodies”:
 - requirement to be quick – formal standards take too long, creating new bodies is easier (but expensive!)
 - proprietary behaviour by ICT vendors, highly competitive but fragmented environment, maximisation of IPR licensing revenues
 - even large companies find it difficult to keep a strategic progress track...

Formal global bodies...

- ISO – the International Organization for Standards:
 - Members are national standards bodies worldwide
 - Committees of national delegations draw up standards/specifications
 - Presence in ICT at generic level (principles) and specific level (case by case, some “historic accidents” e.g. MPEG)
 - Covering what the others do not...
- IEC – the International Electro-technical Commission:
 - Members are national standards bodies, usually but not always same as ISO members
- ITU – the International Telecommunication Union:
 - Members are national administrations, but industry participation in activities (“Study Groups”)
- UN/ECE - United Nations Centre for Trade Facilitation and Electronic Business
 - Electronic Data Interchange and certain other eBusiness standards issues



....and formal European ones (“the ESOs”)

- CEN (European Standards Committee):
 - Members are 29 national standards bodies (EU, EFTA, Romania)
 - Equivalent to ISO (also to UN-ECE on eBusiness standards)
 - Covering what the others do not...
 - CEN/ISSS = “marketing name” for ICT standards work
- CENELEC (European Committee for Electro-Technical Standardization):
 - 29 national members, not always the same ones as CEN
 - Equivalent to IEC
- ETSI (European Telecommunication Standards Institute):
 - Direct membership of industry (manufacturers and service providers), administrations, end-users, etc.
 - Currently 688 members from 55 countries
 - Equivalent to ITU
- All three are formally recognised by EU (Directive 98/34)
- European Standards (ENs) have a special status

Informal European bodies...

- Thankfully, not too many of these!
- Generally, they have a relationship with the ESOs
- European Information & Communications Technology Industry Association (EICTA) – limited technical work relevant to CENELEC
- European Broadcasting Union (EBU) – specifications for broadcasting (fed to CENELEC and ETSI)
- European Committee for Banking Standards (ECBS) – being subsumed by European Payments Council

...and global ones

- Hundreds of them!
- Some are genuinely global, many are US-driven, a few are Japanese
- Ranging from the Advanced Access Content System (www.aacsla.org) to the ZigBee Alliance (www.zigbee.org)
- Many are proprietary – i.e. “standardizing” a particular company’s technology
- Some are broadly-based and multi-topic, e.g. Ecma international, OASIS, The Open Group, W3C; most are “single issue”
- Some feed into International Standards (usually ISO/IEC JTC1 “Information Technology”); most do not
- Some lists, e.g. <http://www.cenorm.be/iss/consortia>

The IPR issue

- Time-consuming debates in standards bodies and consortia!
- Most “open standards bodies” admit IPRs in their standards
- Some such bodies insist on royalty-free licensing for such IPRs
- Many – including the formal bodies – require IPRs to be licensed on “fair, reasonable and non-discriminatory” terms and conditions
- NB “open standards bodies” not to be confused with “open standards” – a phrase being used in different senses by different groups...
- For further discussion, see ICTSB publication “critical issues in ICT standardization” at

<http://www.ict.etsi.org/publications.htm>



CENELEC

ETSI



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Isn't there any co-ordination?

- ICT Standards Board (ICTSB) in Europe: three ESOs plus 14 consortia (European or with some European presence):
 - discussion forum
 - co-ordination of some standards programmes (e.g. electronic signatures, electronic fee collection, eAccessibility, smart houses)
- Global collaboration amongst formal bodies
- ISO/IEC/ITU/UN-ECE MoU on eBusiness standards (also consortia and CEN participation)
- Global Standards Collaboration (telecomms, ITU plus regional/national standards bodies)
- Similar global standards co-ordination on eHealth; eAccessibility

What COPRAS can do

- Clearly, COPRAS partners aren't doing it all, but we do a fair chunk between us
- If we don't currently do it, then we know someone who does (but NB there are still many untapped subjects, especially in applications, needing standards for interoperability)
- By helping the ICT research community with its standards interfacing, we can:
 - avoid pitfalls
 - avoid projects re-inventing wheels
 - encourage projects to make use of standards
 - encourage projects to contribute to them



Thank you for your attention!

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