First results of the Cooperation Platform for Research and Standards

Presentation at D2 Concertation meeting, 2\textsuperscript{nd} December 2004
Palais de la Méditerranée, Nice

Bart Brusse, COPRAS Project Manager
COPRAS addresses the link between IST research and standardization

- SSA project set up by ETSI, CEN, CENELEC, W3C & Open Group addressing projects across FP6
- Improve interfacing between FP6 IST projects and standards bodies
- 2 Prime goals:
  - Act as a facilitator to FP6 IST projects wishing to upgrade their deliverables through standardisation
  - Prepare generic information on RTD/standards interfacing guiding those proposing or evaluating future projects
Steps surveying, analyzing and selecting projects in call 1

- 10 Strategic Objectives, including ‘Networked audio-visual systems and home platforms’ addressed with questionnaires
- Standards related feedback analysed
- 25 ‘tier 1’ projects & 15 ‘tier 2’ projects selected
- Pre-meetings with tier 1 projects September ‘04

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<tr>
<td>Launch &amp; preparations</td>
<td>Information gathering</td>
<td>Information analysis</td>
<td>Project selection</td>
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<td>164 projects targeted and 92 responses received</td>
<td>Information from 92 projects analyzed</td>
<td>40 projects selected</td>
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A set of transparent criteria was used to select projects

• **Primary criteria**
  – Is the issue addressed by a project relevant to the activities of one of the consortium partners, one of the ICTSB members or to the activities of a standards body outside the ICTSB
  – Has the project a clear view of the standardization activities they seek to deploy
  – Is a standards body a project would interface with sufficiently experienced in a particular domain and are they capable of seeing the standardization paths projects have identified

• **Secondary criteria**
  – Does a project have resources available for standardization activities
  – Is a project’s timing (in terms of its capabilities of defining a Standardization Action Plan) in line with COPRAS’ timing
  – Are standards bodies, a project seeks to interface with, already pre-identified or not
Selected tier 1, tier 2 and SSA/CA projects in NAVSHP area

- 19 projects approached in ‘Networked audio-visual systems and home platforms
- 17 responses received (89.5%)
- 3 tier 1 projects & 2 tier 2 projects selected
- 1 SSA project approached for cooperation
- Additional projects wishing to cooperate with COPRAS will not be excluded

Information analyzed from

<table>
<thead>
<tr>
<th>Tier 1 projects</th>
<th>Tier 2 projects</th>
<th>SSA/CA projects</th>
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<tbody>
<tr>
<td>COHERENT, DANAЕ, E-NEXT, ENTHRONE, ePerSpace, INSTINCT, MCDN, MediaNet, META-CAMERA, MHP-CONFIDENCE, MHP-KDB, OLGA, TEAHA, TIRAMISU, UNIVERSE, VISNET, WCAM</td>
<td>ENTHRONE, UNIVERSE</td>
<td>AVISTA</td>
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Kick-off meeting with selected projects 14th October in Brussels

- Jump start cooperation between selected projects and standardization working groups
- Share information on ongoing standardization work & cluster projects that have shared interests
- Generate feedback from projects with respect to support COPRAS intends to provide and discuss concrete next steps

- General introduction to COPRAS
- Overview possible ways to standardize output research projects

- Broadband access
- Security issues
- Semantic-based systems & languages
- Smart houses & home networking
- eLearning

Plenary level

Break-out sessions
7 projects and 6 standards bodies and/or working groups represented

- All of the 5 selected NAVSHP projects participated in the kick-off meeting
- DVB/DLNA, ETSI, W3C, CENELEC and SmartHouse representatives were present as well

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<th>Strategic Objective</th>
<th>Participating projects</th>
<th>Break-out session</th>
<th>Represented standards bodies or working groups</th>
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<tr>
<td>Broadband for all</td>
<td>OPERA</td>
<td>PLC</td>
<td>CENELEC SC205A</td>
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<tr>
<td>Networked audio-visual systems and home platforms</td>
<td>ENTHRONE</td>
<td>Smart houses &amp; home networking</td>
<td>DVB-CM HN / DLNA</td>
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<td></td>
<td>ePerSpace</td>
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<td>DVB-TM AVC</td>
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<td>MediaNet</td>
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<td>ETSI TC-ATN NGN@Home</td>
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<td>TEAHA</td>
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<td>SmartHouse</td>
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<td></td>
<td>UNI-VERSE</td>
<td>Semantic</td>
<td>W3C</td>
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Standardization issues addressed by ‘NAVSHP’ projects

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<th>Project</th>
<th>Standardization objectives</th>
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| ePerSpace  | - Home Platforms (e.g. interfaces between home gateway, access network and distributed home equipment & QoS for wireless technology)  
- Personalization (e.g. security, authentication, privacy and access control)  
- Device communities & profiles standards  
- Rich media object management |
| MediaNet   | - Reference architecture & Home gateway technology  
- Value added differentiated network access services  
- DRM and CP system policy; distributed content storage  
- Quality of Service management for home networks  
- Use cases for personal multimedia communications  
- Network architecture models for video encoding & decoding  
- Post processing & error concealment tools for MPEG4/H.264  
- Advanced techniques for adaptive streaming with MPEG4/H.264 over IP networks |
| ENTHRONE   | - Scalable video & audio, metadata, network quality management and IP management  
- Deliver an integrated management solution (IMS) |
| TEAHA      | - Network independent middleware framework specification & definition of taxonomy  
- Low cost RF solution for inter-working between power-supplied home appliances  
- Ultra low-cost PLC solution & components  
- Residential gateways components |
| UNI-VERSE  | - Real-time protocol for 3D information & audio (Verse) |
Possible clustering of standardization objectives between the 4 projects

TEAHA

Low cost RF-solution

In-home PLC solution

Taxonomy & device communities

Middleware (MHP/OSGi)

Reference architecture & pers. security

Home gateway

End-to-end Quality of Service & resource management

Use cases for personalisation of services

OPERA
(Broadband for all)

MPEG: Metadata

MPEG: Error concealment tools

Content security

Content storage

ePerSpace

MPEG: Scalable video & audio

MPEG: Metadata

MPEG: Error concealment tools

MPEG: Scalable video & audio

MPEG: Error concealment tools

MPEG: Scalable video & audio
Currently deployed relevant standardization activity

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<th>Standardization objectives</th>
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<td>ETSI NGN @HOME</td>
<td>• Home networking architecture requirements: general requirements for inter-working, robustness, heterogeneity; demonstrate open network architecture for provisioning services to the user in &amp; outside the home; home residential gateway architecture</td>
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| DVB-TM AVC               | • Convergence of broadcast and mobile services; interoperability across multiple networks and platforms; content Protection and Copy Management  
  • Audio and Video coding for DVB services over DVB Transport Streams and for DVB services directly over IP; toolbox approach with criteria for considering multiple solutions |
| DVB-CM HN / DLNA        | • **DVB**: Commercial requirements & use cases for home audio-visual networking based on the IP protocol; standardized DLNA & LAN based home network;  
  • **DLNA**: enabling cross industry convergence by establishing a platform of interoperability based on open and established industry standards; guidelines for interoperable products; interoperability framework |
| Smart House              | • Code of Practice (CoP) for smart houses: existing standards related to smart houses (service provider aspect; content, broadcasting, DRM & security; network operators’ aspect and broadband delivery; network termination & residential gateways; customer premises equipment & displays; home networks & in-home communication; user interfaces & privacy aspects; architectures) |
| CENELEC SC205A          | • Signalling on low-voltage electrical installations  
  • Immunity requirements for PLC apparatus and systems |
Possible cooperation interfacing with standards bodies between projects
Cooperation/clustering opportunities from the Smart houses break-out

- Reference architectures & middleware for the broader concept of home networking
- Home gateways definition and interfacing between home and access networks
- Quality of service management of multimedia content distribution over home networks
- Commercial requirements, benchmark applications & services, and use cases for home networking
- Guidelines for usage & inter-working of home networking standards & specifications
- Personal security related issues
Some relevant overall conclusions from the kick-off meeting

- Clear requirement for guidelines how to build in standardization efforts into project proposals
- Many projects have insufficient resources to deal with all standards issues they address
- Projects lack resources for contributing to standards bodies at the end of their lifetime
- Interfacing at an early point is essential in order for projects synchronizing with procedures adopted by standards bodies
- Issues outside COPRAS’ scope may need to be addressed as well (e.g. by the Commission)
Next step: ‘Standardization Action Plans’ defining cooperation

- Objectives & rationale of standardization actions
- Clustering (where appropriate) of projects
- Definition deliverables & arrangements
  - Output from projects & input from standards bodies
  - Arrange participation in appropriate working groups
  - Technical environment and conflicting standards or processes
- Schedules, resources & responsibilities
  - Responsibilities project(s), COPRAS & other standards bodies
  - Time plan for delivery output from, and input into projects
- Dissemination actions
  - Additional awareness projects’ results & standards activity
  - Arrange industry & other decision makers recognition
  - Support of other joint projects (e.g. approaching standards bodies)
Follow-up meeting with ENTHRONE, ePerSpace, TEAHA & MediaNet
01/12

- Agreed actions:
  - Facilitate closer cooperation on standards issues (COPRAS)
  - Draft contents structure Standardization Action Plan (COPRAS)
  - Discuss, agree & fill in contents structure (COPRAS & projects)
  - Discuss additional support COPRAS may give

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We hope to develop a fruitful cooperation between COPRAS, NAVSHP projects, standards bodies and other relevant stakeholders

Thank you for your attention & feedback

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