First results
of the Cooperation Platform
for Research and Standards

Presentation at BB Europe, 9th December 2004

Session 6: "Standardization"

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COPRAS addresses the link between IST research and standardization

- FP6 Specific Support Action (SSA) addressing projects in 18 Strategic Objectives in calls 1 & 2
- 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
- Project started 1st February 2004 and will run until 31st January 2007

Project was initiated by 5 European organisations cooperating in ICTSB

Collaborative group of organisations concerned with standardization and related activities in ICT
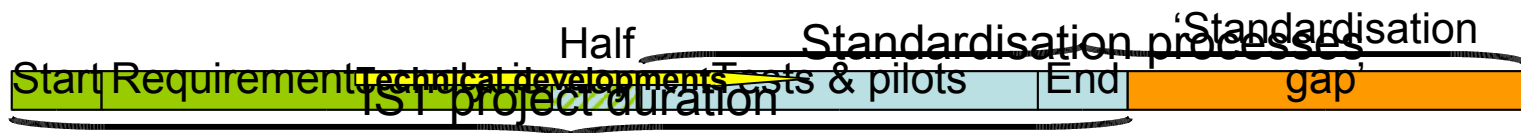
Standards bodies						Industry Groups
		ERTICO RosettaNet	EBU ATM Forum		EICTA ECBS	
	CEN CENELEC ETSI	**W3C The Open Group**	ECMA International TeleManagement Forum		OASIS DVB OMG	
			Internet Society			

COPRAS was initiated by the 3 European Standards Organizations together with W3C and The Open Group, but backed by the ICTSB
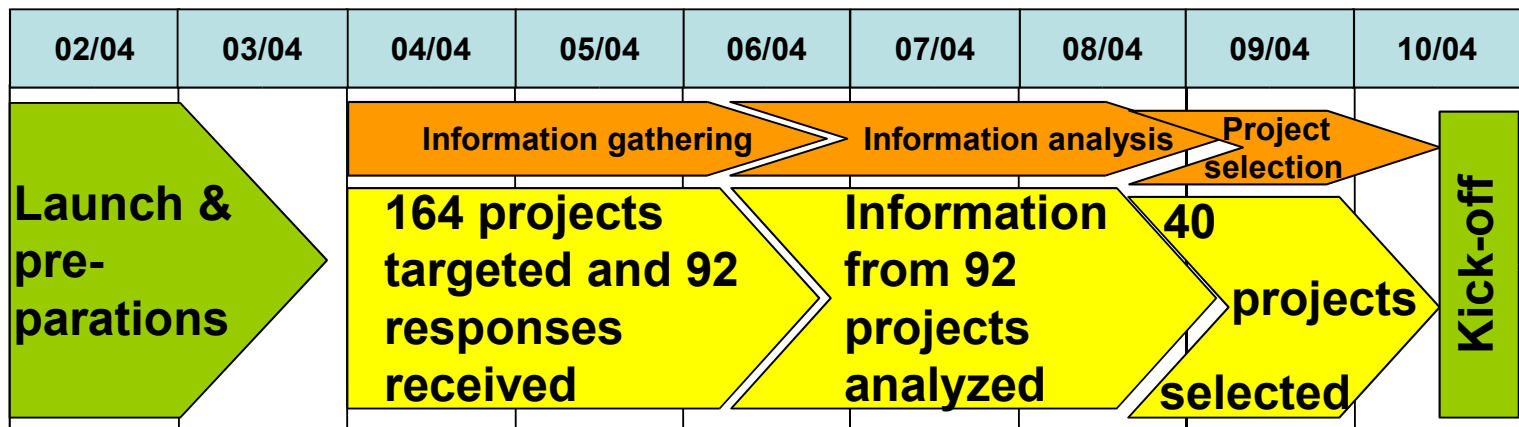
Background, objectives & rationale behind the COPRAS project

- Interfacing with standardisation is required but the 'right' body may not always be easy to find

- Standardisation activities are many times already underway with respect to many aspects in IST

- Structuring cooperation will reduce overlap and save resources on the side of research projects

- Cooperation at an early stage will make research results available earlier to industry & society

Start	Requirements	Technical developments	Tests & pilots	End	

Half

Standardisation processes

'Standardisation gap'

IST project duration

As a first step, COPRAS surveyed and analyzed projects in FP6 call 1

- Most Strategic Objectives, including 'Broadband for all' and 'Mobile and wireless systems beyond 3G' addressed with questionnaires
- Standards related feedback analysed
- 'tier 1' projects & 'tier 2' projects selected
- Individual pre-meetings & plenary 'kick-off'

02/04	03/04	04/04	05/04	06/04	07/04	08/04	09/04	10/04

Launch & pre-parations

Information gathering → Information analysis → **Project selection**

164 projects targeted and 92 responses received

Information from 92 projects analyzed

40 projects selected

Kick-off

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 broadband areas

- 39 projects approached in 'Broadband for all' & 'Mobile and Wireless systems beyond 3G'
- 21 responses received (54%)
- 6 tier 1 projects selected
- 4 tier 2 projects selected
- 2 SSA/CA projects approached for cooperation

Information analyzed from	Tier 1 projects	Tier 2 projects	SSA/CA projects
BREAD, BROADWAN, CAPANINA, DIADEM FIREWALL, E-PHOTON-ONE, GANDALF, LASAGNE, MUSE, OPERA, SATNEX, U-BROAD, 4MORE, ACE, B-BONE, MAESTRO, OBAN, PHOENIX, PULSERS, SIMPLICITY, UBISEC, WINNER	OPERA, GANDALF, CAPANINA, 4MORE, B-BONE, MAESTRO	BROADWAN, U-BROAD, PHOENIX, SIMPLICITY	BREAD, SPECTRUM

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

Plenary level

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

Break-out sessions

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

8 projects and 6 standards bodies and/or working groups represented

- 8 out of 12 selected broadband projects participated in the kick-off meeting
- Representatives from several relevant standards groups

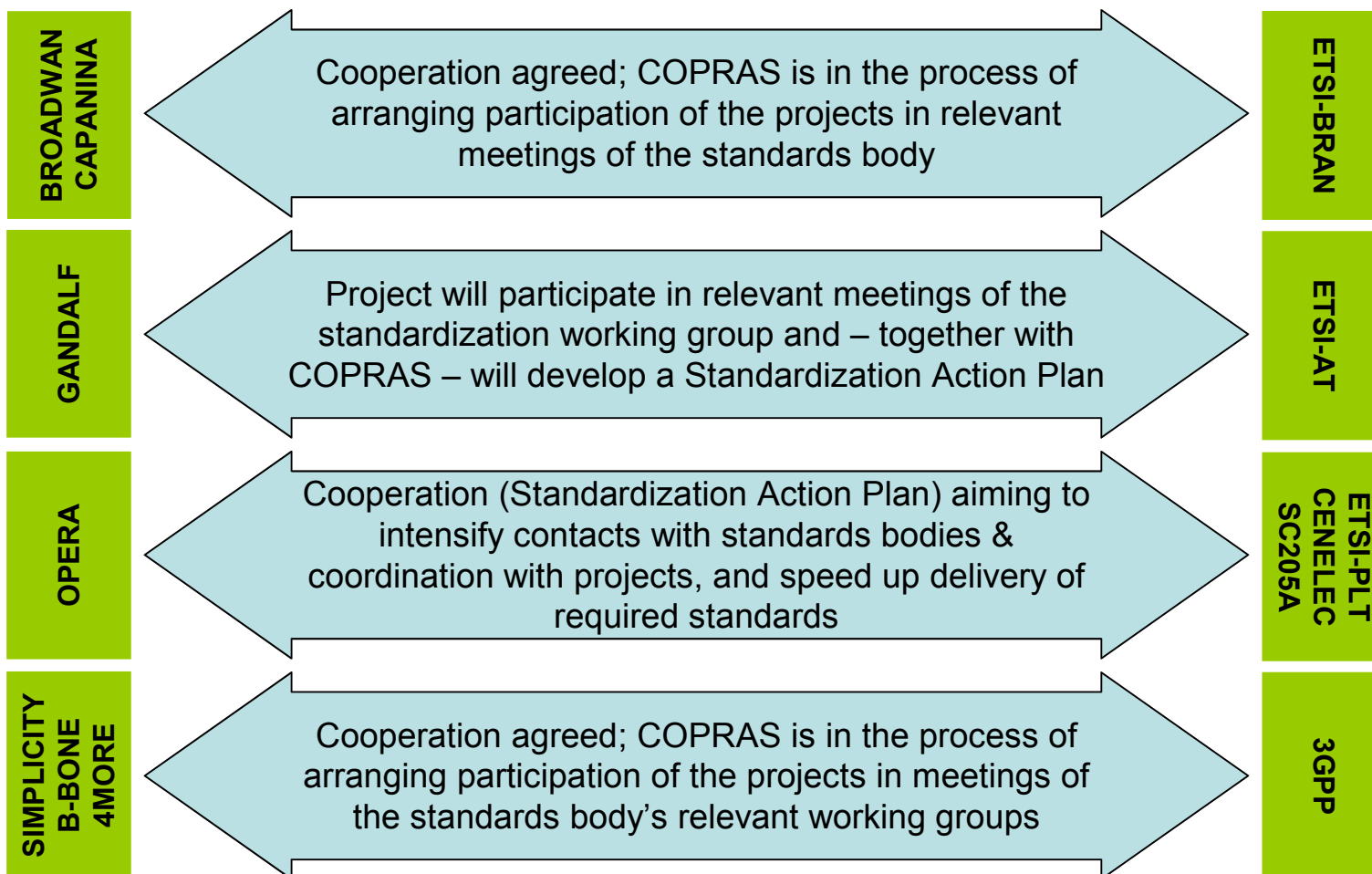| Strategic Objective	Participating projects	Relevant represented standards bodies or working groups
Broadband for all	BREAD, BROADWAN, OPERA, GANDALF, CAPANINA	3GPP
		CENELEC SC205A (PLC)
		ETSI OCG Emtel
Mobile and wireless systems beyond 3G	4MORE, SIMPLICITY, B-BONE	ETSI TC-ATN NGN@Home
		ETSI SES
		W3C

Standardization issues addressed by 'Broadband for all' projects

Project	Standardization objectives	Current situation/issues
BROADWAN	Next generation wireless access at low and high frequencies; hybrid networking; radio wave propagation information for wireless access network design guidance	Active in ETSI BRAN & WiMAX; membership issue; relevant committees have to be identified; presence & presentations will be arranged
OPERA	Equipment & system requirements; measurements, disturbance voltage, radiation, immunity & approval testing	Contacts in place with CENELEC SC205A; contact with the ETSI PLT TB needs to be intensified
GANDALF	Simultaneously feeding of wireless and wire-line access networks; demonstration new optical feeder configuration & wireless DOCSIS transmissions	Review existing standards; studies, into interoperability and coexistence of wireless and wire-line access technology; arrange involvement in ETSI AT Digital work
CAPANINA	Broadband access using mm-wave bands from 'High Altitude Platforms; possible broadband mobile standards, e.g. ITU-R WP 9B, IEEE 802.16 and IEEE 802.20,	Access to ETSI BRAN standards needs to be arranged; membership issue; contacts with the proper committee will be arranged
BREAD	Analysis of standardization landscape and technology gaps	Project will participate in COPRAS consultation activities; COPRAS will support BREAD activities

Standardization issues addressed by 'Mobile & wireless B3G' projects

Project	Standardization objectives	Current situation/issues
B-BONE	Transmission & reception equipment & component (MC-CDMA and MIMO); interconnection and inter-working of wireless infrastructures; new modulation & coding techniques for broadband radio access networks; broadcasting & multicasting over 3G	Issues identified driven by 3GPP; link to 3GPP will be arranged in order to provide inputs to ongoing work
4MORE	Transmission & reception equipment & components (multi-antenna MC-CDMA technology); cellular aspects; system-on-chip design (PHY & MAC layers)	Cooperation with MAGNET & WINNER; standardization plan already published but cooperation through COPRAS may lead to more efficiency; participation arranged in activities of 3GPP TSG RAN
SIMPLICITY	GSM and UMTS SIM; Bluetooth; high-layer re-configurability; adaptation of user devices; standardization of the user profile, Bluetooth profile and ontology	Project wishes to contribute to W3C for the definition of OWL and to contribute to 3GPP; Standardization Action Plan will be elaborated together with 3GPP and W3C

First steps arranged with individual projects after the kick off meeting

BROADWAN CAPANINA → Cooperation agreed; COPRAS is in the process of arranging participation of the projects in relevant meetings of the standards body → **ETSI-BRAN**

GANDALF → Project will participate in relevant meetings of the standardization working group and – together with COPRAS – will develop a Standardization Action Plan → **ETSI-AT**

OPERA → Cooperation (Standardization Action Plan) aiming to intensify contacts with standards bodies & coordination with projects, and speed up delivery of required standards → **ETSI-PLT CENELEC SC205A**

SIMPLICITY B-BONE 4MORE → Cooperation agreed; COPRAS is in the process of arranging participation of the projects in meetings of the standards body's relevant working groups → **3GPP**

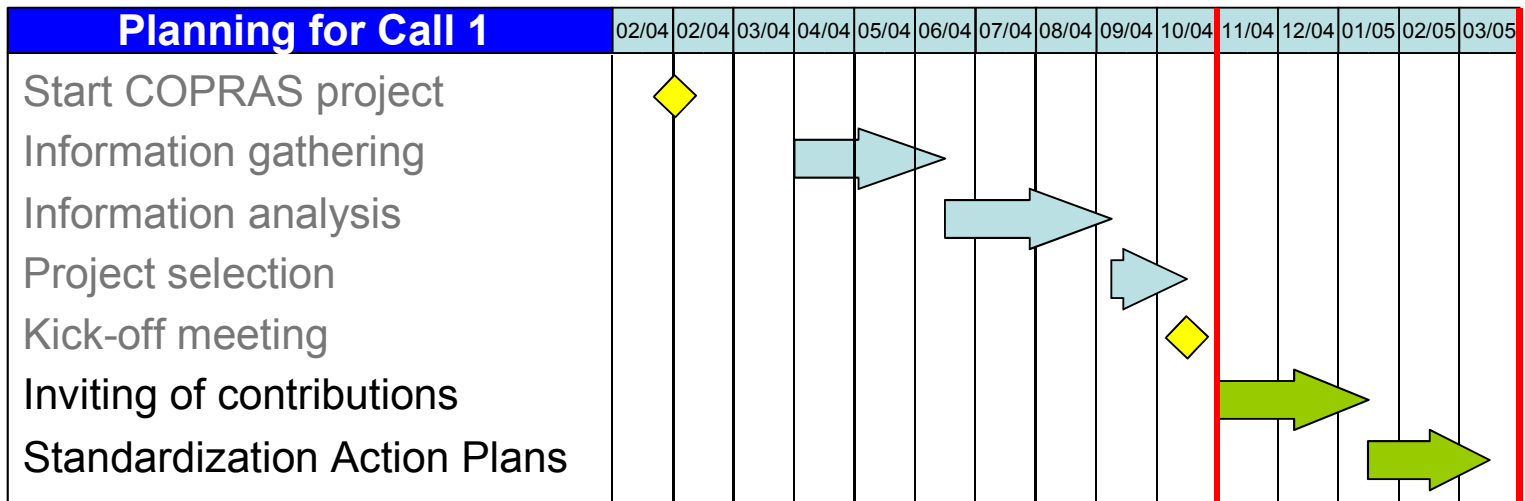# Some concrete results form the Broadband access break-out session

- Concrete cooperation was initiated between various projects and standards bodies

- Liaisons between other projects and the relevant standards bodies will be put in place by COPRAS

- In several cases cooperation is already arranged through consortium partners' regular contacts

- Membership issue and availability of standards related documentation to projects addressed

- Various next steps defined, ranging from the definition of Standardization Action Plans to mutual cooperation and coordination

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 activity
- Analysis current standards environment
- Deliverables from projects & support COPRAS
- Schedules, actions, resources & responsibilities

Planning for Call 1	02/04	02/04	03/04	04/04	05/04	06/04	07/04	08/04	09/04	10/04	11/04	12/04	01/05	02/05	03/05
Start COPRAS project		◆													
Information gathering				➤											
Information analysis						➤									
Project selection								➤							
Kick-off meeting									◆						
Inviting of contributions											➤				
Standardization Action Plans													➤		

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

Thank you for your attention & feedback

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