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1. Introduction

The present document constitutes the Quality Plan for the COPRAS project, an FP6 specific support action addressing IST calls 1, 2 and 3 aiming to improve the interface between IST research projects and standardization, and discusses the quality assurance mechanisms and procedures that have been defined by the project's consortium partners.

The purpose of quality assurance is to ensure tasks, objectives and results that have been defined for specific parts of the project remain in line with COPRAS' overall goals, also in view of circumstances and requirements changing along the road. This document therefore describes the procedures and mechanisms the COPRAS consortium partners will install to ensure the project will achieve its qualitative and quantitative objectives with respect to the services it intends to provide to research projects as well as to the standardization community, and with respect to the deliverables it will produce.

The Quality Plan's main point of reference is the COPRAS Implementation Plan. This describes in detail the project's overall objectives and goals, the structuring of the project in different Work Packages (WPs), its methodological steps, timelines and milestones and the way the project and its resources are managed. The Implementation Plan establishes an integral part of the Quality Plan and it is attached to this document as Annex A.

The Quality Plan provides tools, procedures and criteria ensuring the project will meet its operational goals within the timeframes indicated in the Implementation Plan while using the available resources. It will indicate how the project will anticipate and deal with bottlenecks, how it will be able to respond to delays caused by external factors and which processes will be put in place to ensure the project and its deliverables meets the qualitative and quantitative targets.

2. Quality Plan objectives

In order to improve communication, cooperation and exchange between research and standardisation, COPRAS will install a platform through which FP6 IST projects, wishing to upgrade their deliverables, can cooperate with relevant standardization working groups in the most efficient and cost effective way. Moreover, building this cooperative structure will enable COPRAS to produce generic information and guidance material on how to incorporate and facilitate interfacing between IST research and standardization already at an early stage during research projects' life cycles.

In order for the project to produce useful results it is necessary to identify tools, criteria and procedures that will support those managing the project as well as those evaluating it, to ensure the project will actually meet the goals it has set for itself, and to ensure the project's results, deliverables and other output it produces meet the high quality levels required to make them useful to research projects, standards bodies, Commission Project Officers and other stakeholders.

Tools, criteria and procedures allowing COPRAS to ensure the required levels of quality are achieved, can be separated in two groups, addressing the two types of activities that have been identified in the project's Implementation Plan, i.e. 'project management activities' and 'project support activities'.

As far as project management activities are concerned, the objective of these tools, procedures and criteria is to ensure:

- i) tasks are executed within the timeframe specified in the Implementation Plan, milestones are achieved and deliverables are submitted for approval to the COPRAS Steering Group (CSG) according to plan; this will also encompass:
 - a. the management and allocation of the project's available resources;
 - b. the management of bottlenecks and the balanced execution of parallel tasks;
 - c. the anticipation of external circumstances and – if applicable – the adaptation of the project's planning;
- ii) tasks specified and executed under the respective Work Packages are evaluated on a per call basis (i.e. FP6 IST calls 1, 2 and 3) for the purpose of improving processes, results, deliverables and other output in following calls addressed by COPRAS; this evaluation includes:

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- a. methodological steps defined and followed;
 - b. quality and quantity of actual results and deliverables;
 - c. feedback from relevant stakeholders such as research projects, Commission Project Officers or representatives of standardization working groups;
- iii) high quality information documents and deliverables are produced for the purpose of reporting to the European Commission.

With respect to project support activities, tools, criteria and procedures have the objective to ensure that:

- i) the Work Package-specific methodological steps will be executed as planned and the qualitative and quantitative targets for the results will be met;
- ii) possible complications specific to the work and results in certain Work Package are pre-identified for the purpose of contingency plans being put in place at an early stage during the execution of the work.

The following chapters will describe in more detail how COPRAS will achieve these objectives with respect to project management activities and project support activities.

3 Project management activities: working and management structure

One of the cornerstones to the success of the COPRAS project is an efficient and coherent working and management structure. This structure, that can be found in section 6.1 of the Implementation Plan in Annex A, encompasses 4 layers, being the consortium partners, the COPRAS Steering Group, the Project Manager and the project team. For each of these layers, the following sections will describe how constitution, working methods and communication principles have been defined to achieve the objectives as described in the previous chapter.

3.1 The consortium partners

The COPRAS consortium encompasses the three European Standardization Organizations (ESOs) involved in ICT standardization as well as the World Wide Web Consortium (W3C) and the Open Group; all five consortium partners are members of the ICT Standards Board, the coordinating forum for ICT standardization in Europe. Through this membership, as well as through their liaisons with standards bodies or industry groups working on a global level (e.g. ITU, IEC, ISO, IETF) the consortium partners have access to the complete spectrum of standardization activity in the field of ICT, that may be relevant to projects in the Information Society Technology (IST) area.

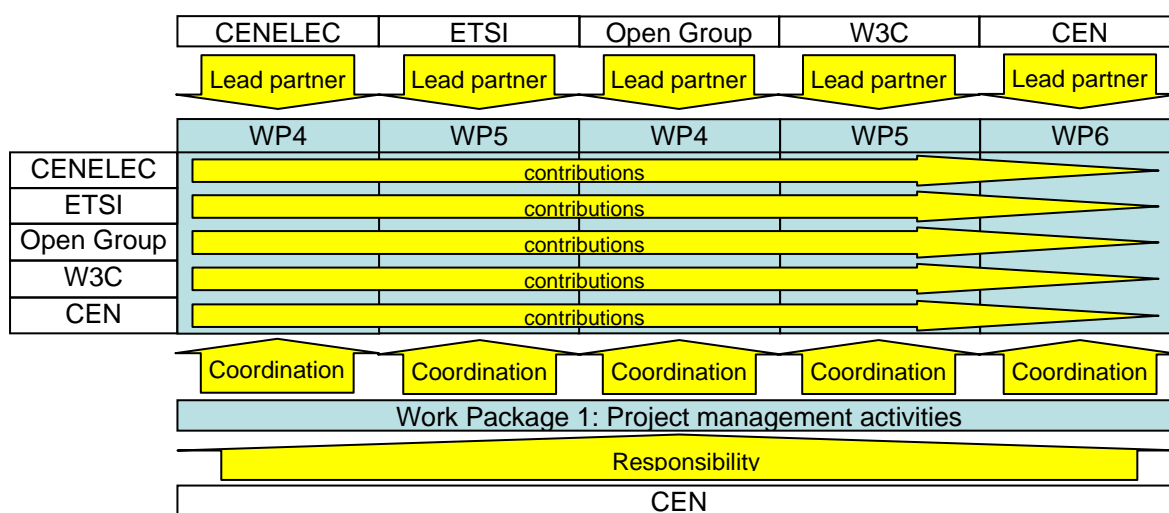
As this access is a vital element in the project achieving its results, COPRAS will have to ensure sufficient and balanced input from each of the consortium partners to processes and deliverables across all tasks and Work Packages as specified in the Implementation Plan. For this purpose each consortium partner will contribute resources to the project team throughout the whole lifetime of the project and ensure its input to all project support activities encompassed by Work Packages 2 through 5. Consequently each consortium partner will:

- i) contribute actively to the preparation of the Information Package and questionnaire;
- ii) contribute actively to the criteria for selecting projects in WP3;
- iii) contribute to the preparation of Standardization Action Plans in the respective areas of competence;
- iv) contribute actively to the preparation of brochures and generic guidance material;
- v) actively promote the project and its objectives to the standards community and other relevant organizations or consortia.

In addition, consortium partners will each bear the responsibility as a lead contractor for the execution of tasks, processes and results in one of the five Work Packages covering the project support activities. A more detailed description of these responsibilities as well as their distribution over the five consortium partners is given in section 6.1.3 of the Implementation Plan.

The balancing of responsibilities is summarized and visualized in the following diagram.

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3.2 The COPRAS Steering Group (CSG)

To ensure equal and balanced contributions from all consortium partners to the management of the project as well, the CSG is made up of 5 Members representing the 5 consortium partners, and the Project Manager, who also assumes the role of secretary to the Steering Group. The CSG will appoint one of the consortium partners' representatives as its Chairman.

The CSG will bear the overall responsible for the management of the project and – in view of its responsibilities towards the project's quality management – will:

- i) monitor the project's progress and performance, and when applicable decide on appropriate measures to make the necessary adjustments;
- ii) monitor the project structure and if applicable decide on necessary adjustments;
- iii) oversee liaison and coordination activities with other standards bodies and industry consortia;
- iv) ensure overall quality requirements are met;
- v) ensure formal deliverables to the European Commission are approved and;
- vi) oversee the project's budget in terms of financial and human resources.

The CSG will work by consensus but when needed will take decisions by voting. If this is the case, decisions will be made by simple majority, however at least 4 of the 5 CSG members will either have to be present at the meeting or presented by written proxy. With respect to the voting procedure, every CSG Member has one vote, with the exception of the Project Manager who does not have a vote, and the Chair having a casting vote.

The CSG will meet on a quarterly basis. Its meetings will be scheduled between the point where the project achieves certain milestones and the point where corresponding deliverables have to be submitted to the Commission. This will enable the CSG to ensure the project is progressing according to plan while on the other hand controlling the quality levels of the formal deliverables. The CSG meeting schedule can be found in section 6.3 of the Implementation Plan.

The Project Manager will submit a report to each of the SCG meetings containing all the information necessary for the CSG to perform its tasks as described above. In addition to this, the Project Manager will inform the CSG on a day to day basis in case guidance or decisions from the CSG are needed to ensure the project will reach its goals as well as its quality targets. In these cases the Project Manager and Chairman of the CSG will arrange for the issues to be addressed and decided upon outside the CSG meetings (e.g. electronically), following identical principles and procedures.

3.3 Project Manager

The COPRAS Project Manager is responsible for the project achieving its milestones and producing its deliverables according to schedule. In order to be able to execute this task, he will manage a team of experts from the consortium partners, that is responsible for carrying out the work specified under the different WPs in the way described in section 3.1 above as well as in section 6.1.3 of the COPRAS Implementation Plan.

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The Project Manager will monitor and adjust the project's overall work plan (see also Annex 1 to the COPRAS Implementation Plan) and management of resources in such a way that all tasks can be executed in a balanced way and bottlenecks are circumvented as much as possible. He will pay specific attention to the inter-dependencies of milestones and deliverables and ensure timelines relating to the communication and cooperation between research projects, standardization working groups and COPRAS are met.

In case the Project Manager anticipates COPRAS may not be able to achieve certain milestones in time (or may not be able to achieve the necessary quality level for deliverables), depending on circumstances causing the delays, he may decide to:

- i) rationalize the work in certain tasks in such a way that the project will be able to achieve the respective milestones but will remain able to achieve its overall quality targets (e.g. by limiting the number of aspects to be taken into account when the number of research projects with relevant standards related output rises substantially over the anticipated amount);
- ii) transfer resources between tasks in such a way that this does not jeopardize the project achieving future milestones or quality targets (e.g. when experience shows certain tasks require more resources than anticipated while others within the same WP require less);
- iii) adjust the way of working within the limitations of the project's budget (e.g. by relying less on electronic communication and more on physical meetings or by rearranging the allocation of work between the project team, standardization working groups and research projects);
- iv) introduce alternative or additional tools or working methods that will improve the overall efficiency of the project team and those cooperating with it (e.g. web-based working methods or communication tools);
- v) move tasks and milestones to earlier or later points in time during the project's lifetime, in such a way that it does not cause the project to exceed its 36 month lifespan and does not jeopardise the quality of the results and deliverables at the end of the project (e.g., the final versions of brochures and generic material or the Open Meeting report).

In order to enable the CSG to execute its tasks and responsibilities as defined in this Quality Plan, the Project Manager's quarterly report will address the following aspects of the project:

- i) the status of the work plan including:
 - a. a review of tasks executed and milestones achieved;
 - b. an overview of the deliverables produced and an assessment, based on the evaluation reports produced by the lead partners (see also section 3.4), whether these are in line with the specific WP's objectives as well as with the project's overall objectives;
 - c. a preview of the tasks, milestones, deliverables and – if applicable – issues or anticipated bottlenecks for the next quarter;
 - d. adjustments in the planning of tasks and/or milestones and the rationale behind these adjustments;
 - e. if applicable, proposals to adjust the structure of the project of the planning of deliverables;
- ii) the management of resources:
 - a. an overview of the resources budgeted for specific tasks and resources actually spend;
 - b. an overview of changes in the allocation of resources for the executed as well as the remaining part of the project;
 - c. a qualitative and quantitative assessment of the project team and – if applicable – an overview of required adjustments and/or contributions from consortium partners;
- iii) the actions undertaken with respect to the promotion of the project, the dissemination of its results and the establishment of liaisons with standards bodies and standardization working groups;
- iv) an overview of the communication and cooperation with the European Commission and Project Officers.

The Project Manager is the central point in the project's quality management chain. He addresses, managers and – if necessary – escalates issues put forward by the project team, or by the project's external stakeholders such as standardization working groups, research projects or Project Officers.

3.4 Project team

At any time during the project, each of the consortium partners will have at least one representative or (technical) expert on the project team to ensure input from all partners is secured throughout the project's lifetime. The make up of the team may however change from time to time depending on the tasks it is focusing on and the specific skills and experience required at a given point in time. The Project Manager, in cooperation with the lead partner for a specific task or WP, will ensure the make up of the team is optimized in view of its tasks at any time during the project.

The lead partner for a specific WP will be responsible for the tasks as described in section 6.1.3 of the Implementation Plan. Each time when the work in a specific WP for one of the three calls has been completed, the lead partner will provide an evaluation report to the Project Manager addressing the following issues:

- i) a short description of the deliverables and the levels of quality the team has been able to reach;
- ii) an overview of the resources spend;
- iii) a qualitative and quantitative assessment of the consortium partner's contributions to executing the tasks, achieving the milestones and producing the deliverables;
- iv) an assessment of the qualitative and quantitative levels of the contributions received from research projects and standardization working groups;
- v) all feedback from consortium partners, standardization working groups, Project Officers, research projects and other stakeholders, relevant to improving the results of the project and the quality of its overall output and deliverables;
- vi) recommendations with respect to addressing projects in subsequent calls.

As a correct and timely signaling of possible deviations is important in order to optimize the projects results as well as to formulate corrective actions, the lead partner, in addition to the tasks described in section 6.1.3 of the Implementation Plan, will signal to the Project Manager at the earliest possible point in time all issues that may affect the project's time plan or the quality of its deliverables and results. These issues include the internal aspects (e.g. available resources) as well as the external aspects (e.g. contributions from research projects). The Project Manager, in cooperation with the lead partner, will address these issues and take the appropriate measures as described in section 3.3.

4 Project support activities & contingency planning

Quality assurance mechanisms and procedures focusing on project support activities, address work in WPs 2, 3 and 4. The following sections describe the procedures the project will follow to reach its targets in WPs 2, 3 and 4, and will also describe which contingency measures will be taken in case (external) developments complicated the project reaching these targets.

It should be noted that in addition to these procedures, the project's promotional activities encompassed by WP5 will also contribute considerably to the project achieving its results and long term goals. These tasks however are not addressed here as they are discussed separately in the projects Dissemination and Exploitation Plan.

4.1 WP2: Surveying FP6 IST research projects and gathering project information

Work Package 2 encompasses the information gathering process and as such established the foundations for the work in other WPs. The major part of this information will have to be provided by the research projects themselves and will be gathered by means of a questionnaire.

To ensure deliverables in WPs 3 and 4 will meet the highest quality levels, the response target, which is the main criterion to measure the success of the activities in this Work Package, is as high as 50%. In order to achieve this, the following procedures will be implemented:

- i) COPRAS will ensure it has an overview of all relevant projects in either one of the 3 calls it addresses containing all data, necessary for the project to carry out the work in all WPs.

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- ii) Information Packages and questionnaires will be tailored to specific Strategic Objective areas in order to focus on issues specific to particular areas, increasing the response rate;
- iii) In parallel to project coordinators, the relevant Commission Project Officers for that specific Strategic Objectives will also receive the information package and questionnaire for the purpose – if applicable – of giving guidance to COPRAS as well as to the targeted projects;
- iv) Project coordinators will have at least one month to fill out and return the questionnaire, giving them sufficient time to consult the members of their consortium if necessary (e.g. in case the information COPRAS requires is deemed sensitive or confidential);
- v) Projects that have not responded within this timeframe will be send a reminder and will be invited to respond within 2 weeks; those still not responding within that timeframe will be contacted by telephone;
- vi) In case of non-response (i.e. the project does not return the questionnaire and does not inform COPRAS otherwise either), COPRAS will ask the respective EU Project Officer for guidance.

The COPRAS consortium partners are confident the procedures as described above will enable the project to reach a 50% response rate. However, there may still be issues preventing this, such as the fact that some projects might not be comfortable with sharing confidential information with external experts. Steps to overcome these and other difficulties, such as insufficient response or feedback not being provided in time, would include:

- Re-focusing the information material in such a way that it is specific to these projects and send it again to the respective project coordinators, asking for a reply within a fixed deadline;
- Seeking additional guidance from Commission Project Officers in addressing (potential) conflicts between COPRAS and IST research projects (e.g. related to non-cooperation or confidentiality issues);
- Concentrate on those projects that do not see any issues related to confidentiality with respect to their cooperation through COPRAS;
- Evaluate the possibility of meeting the project's overall response target for WP2 by focusing – or re-focusing – stronger on projects in other calls;
- Evaluate the possibility of compensating a lower-than-targeted response rate in WP2 through increasing the number of selected projects in WP3.

4.2 WP3: Information analysis and project selection

Tasks in Work Package 3 cover the analysis of the information gathering report, the definition and application of project selection criteria and the organization of the kick off meeting. The work will be largely based on the achievements in WP2 and will aim to select at least 8% of the projects that were addressed in the previous Work Package.

The main procedures leading to the list of selected projects are described in section 4.1.2 of the Implementation Plan. However, in order to ensure the quality of the deliverables it is vital to ensure sufficient and balanced input from all consortium partners as well as from other relevant industry groups (either ICTSB-members or not) into the process of analyzing the information and defining the selection criteria.

Therefore, during this phase in the project, the lead partner in cooperation with the Project Manager will ensure input from all relevant standards bodies and industry groups finds its way into the analysis and selection process, either through direct contacts with relevant standardization working groups arranged through one of the members of the project team or through liaisons with other ICTSB members or standards bodies outside the ICTSB arranged through the CSG. In order to achieve this the lead partner in cooperation with the Project Manager will define all potentially relevant standards bodies and industry groups and allocate the responsibility for contacting these to the different members of the project team in the most logical way (e.g. based on the standardization activities the respective consortium partners are – or will be – engaged in).

Despite these efforts, COPRAS may end up with a list of projects which is too short or too long, simply because of discrepancies or complementarities between IST research and ongoing standard-

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ization activity are higher or lower than expected. In case, the list of selected projects is too short, the Project Manager, in cooperation with the lead contractor for WP3 will:

- Evaluate the possibility of compensating the number of selected projects by reviewing – and widening – the analysis as well as the selection criteria and the amount of standards bodies and industry groups involved in the process for the purpose of selecting additional projects;
- Evaluate the possibility of meeting the project's overall response target for WP3 by focusing – or re-focusing – stronger on projects in other calls.

In case, the list of selected projects is too long in view of the resources planned to support the work in further WPs, the Project Manager, in cooperation with the lead contractor for WP3 will:

- Evaluate whether re-allocation of resources or the improvement of the project's efficiency may allow COPRAS to address a larger-than-expected number of selected projects;
- Evaluate whether certain projects could be included when COPRAS addresses other calls;
- Evaluate – if necessary – whether additional resources can be made available by the consortium partners or other relevant industry groups in view of the relevance of the standardization issues addressed by the research projects;
- Scrutinize the analysis as well as the selection criteria for the purpose of drawing up a more suitable list of potential participants, whilst ensuring that non-selected projects are given advice on how to interface with standardization.

The focal point for the activities as described in this section are the three kick off meetings, planned to finalize the work in WP3 and to jump-start the work in WP4. Thorough preparation of these meetings, involving standardization working groups as well as research projects, is essential to generate the best possible results and to maximize participation and feedback from both selected research projects and relevant standardization working groups. To allow for this preparation and to secure attendance of all relevant participants, at least one month is left between the selection of projects and the kick off meeting.

4.3 WP4: Development of appropriate standardization paths

The main task encompassed by WP4 is the development of Standardization Action Plans. This work largely relies on research projects coming forward with their contributions to standardization. Therefore, during this phase each one of the COPRAS project team members will work closely together with a number of individual selected research projects and standardization working groups relevant to these projects, and coordinate the identification and precise definition of mutual contributions.

The activities will be based upon the follow-up steps defined at the kick off meetings concluding the activities in WP3. In order to secure the adequate implementation of these steps the lead contractor, in cooperation with the Project Manager will ensure:

- i) a time schedule for the delivery of mutual contributions, fitting into the overall planning of the COPRAS project, is agreed by the parties and monitored on a regular basis by the respective member of the COPRAS project team;
- ii) deviations with respect to the agreed follow-up and time schedule are addressed through:
 - a. re-allocation of resources;
 - b. adjustment of the interfacing tools and increased efficiency of the working methods;
 - c. re-accommodation of the work to COPRAS WP4 activities addressing other calls;
- iii) meetings are organized as applicable between selected projects, standardization working groups and COPRAS (e.g. for the purpose of presenting contributions)
- iv) proper communication mechanisms between COPRAS, individual selected projects and relevant standardization working groups are installed and maintained;
- v) progress is reported on a regular basis to the Project Manager.

Nevertheless, activities in WP4 may face complications, for example when standardization working groups are not available or capable of providing solutions required or are not able to agree on (elements of) a Standardization Action Plan. In this case, as well as in situations caused by external

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circumstances that cannot be addressed by applying procedures as described above, it will be considered:

- whether the consortium partners could offer a consensus platform where the respective research project's output can be successfully processed;
- to review and adjust the follow-up steps originally agreed by the parties in such a way that it does not prevent COPRAS from achieving its overall targets.

Once Standardization Action Plans enter the execution phase, they do not fall into the scope of the COPRAS project anymore. However, a 'rolling work programme' (see also section 4.3 of the Implementation Plan) addressing this execution phase will be maintained to monitor research projects' progress in passing their output through standards bodies and to produce additional feedback for the improvement of COPRAS' processes and results.

5 Expected results

The quality assurance mechanisms and procedures described in the previous sections, addressing the project management activities as well as the project support activities will allow COPRAS to achieve the results as summarized in chapter 7 of the Implementation Plan.

They enable the COPRAS Steering Group, the Project Manager and the lead contractors for the various Work Packages to manage and coordinate the project in such a way the services, processes and deliverables COPRAS will produce will achieve the quality levels required. This will also ensure the project's achievements with respect to the optimization of the interface between research and standardization are well sustainable and can be maintained beyond the project's lifetime.

During the project's three-year lifespan however, circumstances may occur that cannot be addressed either by the quality assurance and management procedures or by the contingency measures described in this document. In order to ensure the continuation of the project in these situations, the COPRAS Steering Group will take the appropriate measures, if necessary in conjunction with the relevant Commission Project Officers.

Annex A: COPRAS Implementation Plan



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1. Introduction

Standardization in the area of information and communication technologies (ICT) and “near market” research go hand-in-hand. At a global level, major vendors of ICT hardware and software have a heavy spend on research, witnessed by the often furious pace of technology change. In order to ensure that state of the art technologies can actually be used by the market, standards are vital, and, conversely, research needs to take due account of the requirements for inter-operable standards.

In the European context, it is important to ensure an efficient interface between the standards communities and the IST research community is therefore important to the success on both sides. Such an interface will support projects wishing to upgrade their deliverables into standards, and it will also help reinforce the eEurope objectives, which aim at a wider deployment of IST and a leading position for Europe in the technological issues at the centre of the knowledge economy.

The close link between standardization and research aspects of eEurope activities is also reflected in the obligation placed upon research projects under the Framework Programmes to “*inform the Commission and European Standardization bodies about knowledge which may contribute to the preparation of European or, where appropriate, international standards or to an industrial consensus on technical issues*”.

The Cooperation Platform for Research and Standards (COPRAS) is an FP6 Specific Support Action project addressing this requirement in a generic way. COPRAS aims to optimize the interface between research and standardization. The project was initiated by five member organizations of the ICT Standards Board and focuses on research projects in Thematic Priority Area number 2, “Information Society Technologies” (IST).

The present document is the Implementation Plan for the COPRAS project. It establishes an integral part of the project’s Quality Plan and describes how the project is structured and managed, which methods will be applied and which activities will be deployed in order for the consortium partners to meet their objectives and achieve their goals within the timeframes specified.

The Implementation Plan articulates the project’s objectives and outlines the different methodological steps the COPRAS consortium partners will follow in order to identify the ‘COPRAS community’ (i.e. those FP6 IST projects that will generate standards related output) and the ‘COPRAS programme’ (i.e. the selected projects from the COPRAS community in cooperation with which tailored Standardization Action Plans will be developed).

The purpose of this document is to provide structure and guidance to those working on the COPRAS project as well as to those managing and evaluating it. It includes the project’s work plan and defines timelines, resources, deliverables and milestones for the different tasks in the six Work Packages (WPs) that constitute the structure of the project.

2. Consortium Partners & focus areas

The COPRAS project launched 1 February, 2004 and will be carried out by the following consortium partners:

1. European Committee for Standardisation (CEN, coordinating partner)
2. European Committee for Electrotechnical Standardisation (CENELEC)
3. European Telecommunications Standards Institute (ETSI)
4. The Open Group
5. World Wide Web Consortium (W3C)

All consortium partners are members of the ICT Standards Board (ICTSB), the coordinating forum for ICT standardization in Europe; ICTSB currently includes ten other member organizations that are industry standards consortia with a European presence. This allows them to offer the IST research community an entry point to a broad spectrum of ongoing or planned standardization activities, either conducted by themselves or by other members of the ICTSB. Also, they can facilitate access to specialized standardization working groups focusing on the specific items addressed by research projects.

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As many aspects of IST require standardization for the purpose of defining and assuring inter-working of systems and technologies, standardization work is already underway in many of the areas identified as Strategic Objectives for FP6 IST calls 1 & 2, and in many cases spearheaded by one of the COPRAS consortium partners. Taking into account these areas as well as the interests represented by fellow ICTSB members, COPRAS has identified the following Strategic Objectives as its prime focus areas:

Strategic Objectives in Call 1		
2.3.1.1	Pushing the limits of CMOS, preparing for post-CMOS	
2.3.1.2	Micro and nano systems	
2.3.1.3	Broadband for all	prime focus
2.3.1.4	Mobile and wireless systems beyond 3G	prime focus
2.3.1.5	Towards a global dependability and security framework	prime focus
2.3.1.6	Multimodal interfaces	prime focus
2.3.1.7	Semantic-based knowledge systems	prime focus
2.3.1.8	Networked audio-visual systems and home platforms	prime focus
2.3.1.9	Networked businesses and governments	prime focus
2.3.1.10	eSafety of road and air transport	prime focus
2.3.1.11	eHealth	prime focus
2.3.1.12	Technology-enhanced learning and access to cultural heritage	prime focus

Strategic Objectives in Call 2		
2.3.2.1	Advanced displays	
2.3.2.2	Optical, opto-electric, photonic functional components	
2.3.2.3	Open development platforms for software and services	prime focus
2.3.2.4	Cognitive systems	prime focus
2.3.2.5	Embedded systems	prime focus
2.3.2.6	Applications and services for the mobile user and worker	prime focus
2.3.2.7	Cross-media content for leisure and entertainment	prime focus
2.3.2.8	GRID-based systems for solving complex problems	prime focus
2.3.2.9	Improving risk management	prime focus
2.3.2.10	eInclusion	prime focus

In all prime focus areas one or several consortium partners have already deployed standardization activities. Although this is not yet the case for areas 2.3.1.1 & 2.3.1.2 in call 1 or areas 2.3.2.1 & 2.3.2.2 in call 2, during the course of the COPRAS project, consortium partners may decide to address these Strategic Objectives as well if there is a clear requirement to do so (e.g. the start of standardization activities in this area by one of the partners).

When addressing these areas, the COPRAS project will include ‘Networks of Excellence’ (NoE), ‘Specific Targeted Research Projects’ (STREP) as well as ‘Integrated Projects’ (IP). It will not focus on ‘Programme Level Accompanying Measures’ (PALM), ‘Specific Support Actions’ (SSA) or ‘Future and Emerging Technologies’ (FET). Decisions with respect to projects and prime focus areas in call 3 will be taken at a later stage during the course of the project, once the necessary information on this third call will be made available by the European Commission.

3. Goals & Objectives

One of the important aspects of ICT development is to enable standardization and research to proceed in parallel as much as possible. This will enable cross-fertilization, ensuring the standards community can rapidly receive contributions from the research community (thus reducing overlap and allowing them to better organize the flow of relevant material) as well as ensuring research projects are familiar with the latest developments in standardization. If standardization opportunities can be recognized at a relatively early stage during the course of research projects, specifications and standards can be developed quicker, contributing to their acceptance on a global level and boosting the competitiveness of the European industry in general.

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In order to achieve this, the interface between standardization and research will have to function in the best possible way. COPRAS aims to optimize this interface and to facilitate the various aspects of cooperation and communication between IST research projects and standards bodies. It will first of all achieve this by acting as a platform for FP6 projects wishing to meet their contractual obligation to interface with the standards world, and wishing to upgrade their deliverables. In addition it will prepare generic information on the interfacing between research projects and standardization activities, to be used to guide those proposing or evaluating projects and to support Project Officers in subsequent calls, both for FP6 and beyond.

COPRAS will survey FP6 IST projects in successive calls for standards-related output and will define Standardization Action Plans together with selected projects. These will either enable projects' participation in existing standards groups or will serve to promote new standardization activities. In addition, the project will facilitate standardization bodies' contributions to research by informing projects on the current state of affairs in standardization with respect to those activities most relevant to their specific project.

In more detail, the project's objectives can be described as follows:

- To survey projects in calls 1 & 2, gathering the information necessary for the purpose of defining the COPRAS community, while ensuring feedback from at least 40-50% of projects addressed;
- To ensure participation in the COPRAS programme of at least 8-10% of projects in the prime focus areas, and to develop and implement Standardization Action Plans in cooperation with these selected projects, to enable cross-fertilization between standardization and research.
- To enable and improve cooperation and communication between research projects pursuing similar standardization objectives – either within the same Strategic Objective area or across different areas – for the purpose of building consensus with respect to these objectives.
- To establish and maintain a liaison with the standards community, enabling an adequate flow of information on relevant standardization activity to research projects within the COPRAS community and the COPRAS programme.
- To promote the outcome and results of the project through the ICTSB among the standardization community in order to promote further cooperation and – when applicable – to initiate new standardization work items.
- To produce generic material, giving an overview of organizations and competences in the standardization arena, giving support and guidance to those involved in organizing, executing or evaluating future IST calls.

By providing a catalytic focal point for interfacing between IST research and standardization, COPRAS enables projects to overcome a potential barrier to cooperation by allowing them to avoid the workload of trying to find which of the many standardization and specification organizations is most relevant to their specific project. The Platform therefore provides research projects with a cost-effective way of meeting their contractual obligation of setting up an interface with the standards world and gives them a means to validate their work with a wider audience.

4. Project structure and methodological steps

The COPRAS project is structured into six Work Packages (WPs) that are listed in the table below. Each of these WPs contains a coherent set of tasks covering a specific aspect of the project.

WP	Description
1	Project Management
2	Gathering of Project Information
3	Information Analysis and Project Selection
4	Development of appropriate Standardization Paths
5	Promotion, Dissemination and Liaison
6	Strategic evaluation and coordination

The Work Packages can be divided into two groups: WPs 1, 5 & 6 cover tasks, milestones and deliverables throughout the entire life time of the COPRAS project, while WPs 2, 3 & 4 follow a series of systematic chronological steps through the consecutive FP6 IST calls, aiming to identify the COPRAS community and to establish the COPRAS programme. The following section will first define the tasks that constitute the work in WPs 2, 3 & 4.

4.1 Establishing the COPRAS community and programme

COPRAS will address FP6 IST research projects in the first 3 calls, while applying identical methodological steps and processes for each of the calls. At the end of this process, the following will have been identified:

- a COPRAS community (i.e. a group of research projects that has standards related output and would benefit from interfacing with the standards world), and;
- a COPRAS programme (i.e. a group of selected projects that will define Standardization Action Plans, together with the consortium partners).

The following section will describe the project's methodological steps leading to the establishment of the COPRAS community and programme.

4.1.1 WP2: Surveying the projects and gathering project Information

The project's first objective is to ensure all projects that have standards-related output are actually being assessed to participate. This will be achieved through the following steps.

- 1) A list of projects will be assembled, containing for each project the relevant contact details (e.g. project coordinator, web site), the basic information on the project (e.g. type of project, number of partners, lifetime), as well as a short description of the project. This information will largely be obtained from the European Commission and through other public channels, and will be used as a basis to pre-select and contact projects for the purpose of gathering additional information.
- 2) A questionnaire will be developed to obtain detailed information from individual research projects. This questionnaire will focus on the generic aspects of projects' involvement with, and expectations from standardization, as well as on the aspects that are specific to relevant output in each of the Strategic Objective areas addressed (e.g. *'Broadband for all'*, *'Mobile and wireless systems beyond 3G'*, etc.). For this purpose, questionnaires will have a generic section as well as a part that is specific to each of these Strategic Objectives.
- 3) An information package will be produced, introducing COPRAS to research projects and inviting them to participate. The package will contain general information on interfacing between research and standardization and the exploitation of research through standardization. Moreover, it will outline COPRAS' purposes and underline benefits for research projects and other stakeholders (e.g. the industry, the standardization community and the eEurope initiative). Similar to the questionnaire, the information package will be specific to the Strategic Objective area that is relevant to the targeted project.
- 4) The information package will be sent to research projects' contact persons electronically, together with the questionnaire. Respondents will be invited to react within one month, either electronically or through regular mail. The information package, as well as the questionnaire will also be downloadable from the COPRAS web site (www.copras.org).
- 5) One month after sending out the information package and the questionnaire the team responsible for WP2 will start structuring and evaluating the information received. If necessary it will approach research projects directly for additional information, send out reminders or – in case this does not generate the required – contact the respective project coordinators directly, urging them to return the questionnaire. This intensive method, as displayed in the table below, is expected to generate a response rate of 40-50%.

T=0	Send out information package and questionnaire
T+4 weeks	Send out reminders to project coordinators that have not responded
T+6 weeks	Contact project coordinators still not responding directly

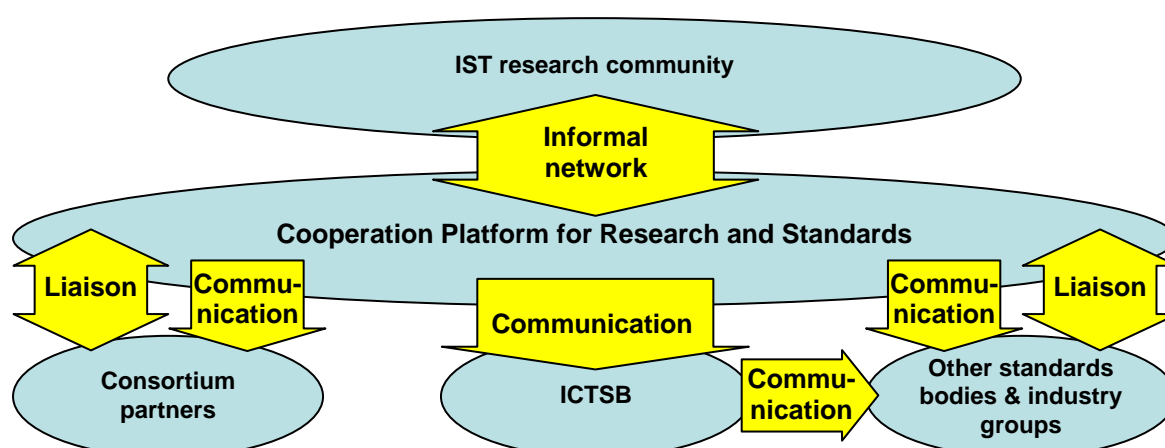
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T+7 weeks	Close information gathering process and start production report
T+9 weeks	First draft information gathering report available

- 6) Nine weeks after sending out the information package and the questionnaire, all information received will be compiled and structured in a comprehensive report that will serve as a basis to select those projects that are most suitable to enter the COPRAS programme.

Throughout the process described above, COPRAS will build up an informal network with those research projects that have standards related output or touch upon standards related issues, and will build up a communication and liaison structure with relevant standardization working groups from consortium partners as well as – through the ICTSB – other organizations and industry groups. This will be done – among others – by keeping projects updated regularly on the steps COPRAS is going through and by making relevant output available in a ‘closed user group environment’ on the COPRAS web site. Further information on the establishment and maintenance of contacts between COPRAS and research projects can be found in section 6.1.4.

Communication processes and liaisons within this COPRAS community can be visualized as follows:



4.1.2 WP3: Information analysis and project selection

Taking the information gathering reports as a basis, the tasks in WP3 encompass the definition of the COPRAS programme, i.e. the selection of FP6 IST research projects with whom Standardization Action Plans will be developed. This will be done through the following steps:

- 7) Following its approval by the COPRAS Steering Group (CSG) the information gathering report will be analyzed by the team responsible for WP3, in order to identify communalities, trends, key issues and inter-project relationships from a standardization perspective. Projects' expected output will be logically grouped taking into account the elements relevant to standardization. This may lead to combining projects addressing different Strategic Objective areas). In addition, it will be determined which ongoing or planned standardization activities (either undertaken by the consortium partners, ICTSB members or other relevant standards bodies or industry groups) match projects' requirements in terms of information input emerging from the information gathering report. The results of this analysis, which will encompass a period of 6 weeks for each of the first two calls, will be contained in a report that will be submitted to the CSG.
- 8) As a second step a set of criteria will be developed to short list those projects that will be invited to contribute standardization related output to COPRAS and develop Standardization Action Plans. These criteria cannot be pre-defined as they may vary from call to call, or even between Strategic Objective areas (i.e. criteria applied to select projects in the '*Broadband for all*'-area may differ from criteria applied to select projects in the '*Mobile and wireless systems beyond 3G*'-area). However, they can be grouped into 3 categories:
- i) Criteria that are related to (ongoing) standardization activity (e.g. is there a clear relationship between the expected output of a research project and standardization work already in process in one of the standardization bodies?);

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- ii) Criteria that are related to the processes adopted by research projects (e.g. will output be available on time for it to be considered by the COPRAS project; is the output in the public domain; are resources available to work on standardization issues, do projects actually 'need' COPRAS' support or are they capable to arrange interfacing with standardization by themselves, etc.);
- iii) Criteria that are related to the substance of research projects' output (e.g. how essential are certain expected results likely to be to standardization and/or how essential can standardization be to the project's results or even beyond).

During the process of selecting projects for participation in the COPRAS programme, the Project Manager and the project team will specifically involve and consult the relevant Commission Project Officers.

- 9) Based on the selection criteria, the team responsible for WP3 will propose a short list of projects to the CSG, thus establishing the 'COPRAS programme'. Target will be to include at least 8% of the number of projects originally contacted in the information gathering process.
- 10) Upon approval of the short list by the CSG, for each call, selected projects as well as relevant representatives from the standards community will be invited to take part in a kick off meeting, aiming to jump-start cooperation between (groups of) research projects and standardization working groups. The kick off meeting will focus on the following issues:
 - i) To present the results of the analysis of the information gathering report and the rationale behind the selection of projects for participation in the COPRAS programme;
 - ii) To present the actual ongoing standardization work selected projects can benefit from by receiving input as well as the work they could contribute to;
 - iii) To demonstrate the concrete benefits per individual project or group of projects resulting from participation in the COPRAS programme;
 - iv) To agree with selected projects on concrete follow-up steps aiming to start the process of defining in detail contributions from research projects to standardization as well as vice versa.

The report from the kick off meeting (which may of course be held in conjunction with a "routine" meeting of the relevant standards group) will be put forward for approval by the CSG and will conclude the tasks encompassed by WP3.

4.1.3 WP4: Development of appropriate standardization paths

WP4 focuses on working with the selected research projects towards standardization of RTD results and encompasses the actual development of Standardization Action Plans. The work will take a 'tailor-made' approach rather than a generic one, and focuses on each of the selected projects or clusters of related projects separately. At this stage, and also during the actual execution of Standardization Action Plans, COPRAS will closely involve standardization working groups that are appropriate for the standards related research results from the projects.

- 11) Following the outcome of the kick off meeting, COPRAS will define in detail, together with the selected projects and the relevant standardization working groups the respective contributions, during a period of 10 weeks. This will include:
 - i) The description of the actual deliverable;
 - ii) The industrial and technical rationale motivating standardization;
 - iii) The expected impact of the deliverable, both in a qualitative and quantitative sense;
 - iv) Possible 'issues' involved (e.g. related to industrial or IPR policy).

Contributions from research projects for example can be complete technical specifications, additions or amendments to existing specifications or standards, guideline specifications, open technology reference implementations, best practice documentation, codes of conduct or other relevant output.

- 12) For each of the contributions from the selected research projects the relevant standardization working group(s) with which to interface will be identified. Primarily this will concern consortium partners, but when appropriate also other standards bodies, both formal and informal,

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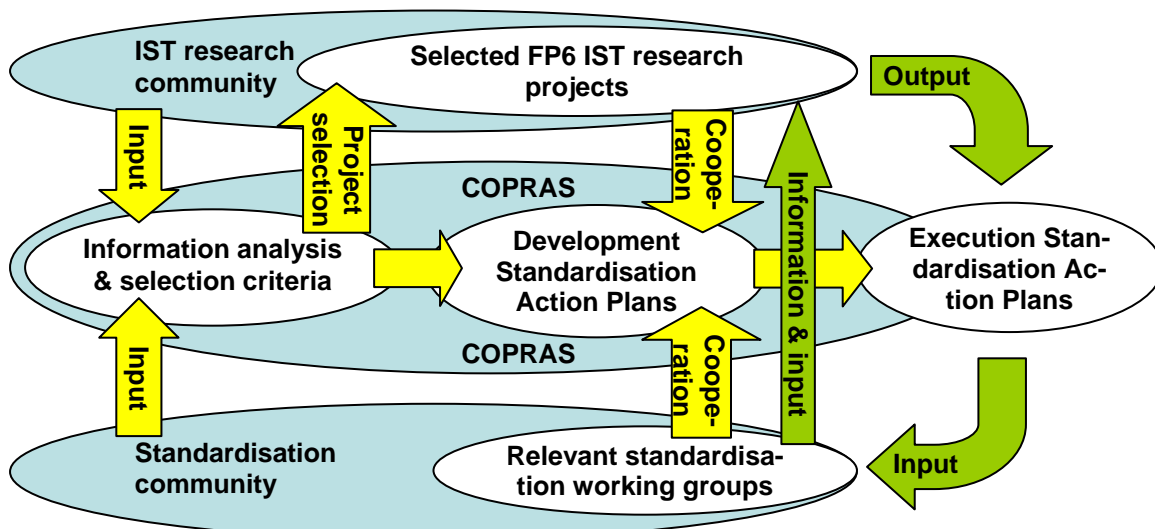
will be involved. This step will be carried out in parallel to the previous step (11) and specify:

- i) The rationale why a specific working group and/or process is selected to progress a specific research project results towards standardization;
 - ii) Other standardization working groups and research projects liaisons are required during the standardization process;
 - iii) How a contribution fits into ongoing standardization work;
 - iv) What the input a standardization working group will provide to a selected research project will look like and how this will be provided;
 - v) Expected time schedules for processing the contribution through the respective standards body or industry group;
 - vi) An assessment of the chance the cooperation will be successful in progressing existing or creating new standards (i.e. deliver tangible results towards standardization)
- 13) Upon completion of the previous steps, Standardization Action Plans will be identified and tailored to the requirements of individual research projects. The Action Plans will merge the results from the two previous steps and will include the following elements, ensuring coherent and successful implementation:
- i) Strategy to be undertaken for achieving industrial standardization and take-up of the selected research project or cluster of projects results;
 - ii) Tasks to be completed for the actual standardization processes stated in the form of chronological steps, timelines and milestones;
 - iii) Resources required to execute the plan as well as identifying from where resources will be made available;
 - iv) Contingency plans (e.g. what will need to be done in case timelines and milestones originally set cannot be met).

The process of developing Standardization Action Plans will typically take approximately 8 weeks for a selected project. Once established, the Action Plans can be executed by research projects and identified standardization working groups. During this phase the consortium partners will continue their support to projects in those areas where they have relevant expertise in order to accelerate standardization.

The project expects to undertake the initial steps of each Action Plan but recognizes that in some cases, the completion of the Action Plan may extend beyond the duration of the COPRAS project. Although the actual execution of the Standardization Action Plans are not within the scope of the COPRAS project, it will provide and maintain an overview of the status of all the Action Plans that are in the execution phase, in a 'rolling work programme' (see also section 4.3).

WP3 and WP4 together establish the COPRAS programme which, together with its associated processes, can be visualized as follows:



4.2 Promotion, dissemination and liaison

In view of the project's goals and objectives, communication, liaison, promotion and dissemination of its objectives and results will require COPRAS' specific attention. This will help achieve the principal objective to establish a COPRAS community and a COPRAS programme, and ensure the guidelines, mechanisms, tools and processes COPRAS develops and installs will remain in place for IST research projects and standards bodies during future Framework Programmes. For this purpose COPRAS will deploy the following activities:

- Development of a dedicated web site that will serve as a central communication mechanism and cooperation tool for the project;
- Arrange liaisons with relevant organizations, industry consortiums and working groups in the standardization community;
- The development of an interim as well as a final set of brochures documenting individual results of the cooperation between research projects and standards bodies;
- The development of (interim) generic material, giving guidance to the proper establishment and maintenance of the interface between IST research projects and standards bodies;
- Promotion of the project, its objectives and its (interim) results at relevant seminars, trade shows and conferences;
- The organization of an Open Meeting towards the end of the project's lifetime, for the purpose of promoting the project's results and aggregating feedback from the IST research community.

The deployment of these activities as well as the corresponding milestones and formal deliverables will not be addressed here as they are described in detail in the project's 'Dissemination and Exploitation Plan' (Deliverable D04).

4.3 Strategic evaluation and coordination

Throughout the project COPRAS will assess the ongoing results, from qualitative and quantitative perspectives. This assessment will involve the following steps:

- Upon the conclusion of a specific work package, for each of the three calls a short standardized evaluation report will be provided by the lead contractor responsible for the execution of the respective Work Package (see also section 6.1.3); this report will assess the methods used as well as the results achieved, from qualitative and quantitative perspectives, and will make recommendations with respect to improving processes and results in subsequent calls the project will address;
- Starting with the execution of the first set of Standardization Action Plans, COPRAS will keep track of the status of all these Action Plans that are in the execution phase (the 'rolling work programme') and monitor the benefits and results both research projects and standards bodies or industry groups are achieving for themselves through the COPRAS platform.
- Halfway through the project's lifetime as well as at its end, evaluation reports will be produced. These will aggregate the Work Packages' qualitative and quantitative assessments, as well as the results research projects and standards bodies have achieved through their cooperation, in comprehensive documents. The reports will seek to give an overview of the number and quality of contributions actually made by research projects to standards bodies through COPRAS.

In addition to serving as a generic tool to coordinate the project and improve its results, the evaluation reports will provide policy input to the European Commission and the standards community with respect to the most effective way to arrange interfacing between research projects and standardization. In addition, the evaluation reports may provide input for the generic material (see also section 4.2) that will be developed towards the end of the project, to give guidance to Project Officers as well as to those proposing and evaluating research projects, as to how the interface between research and standardization can best be established, applied and maintained.

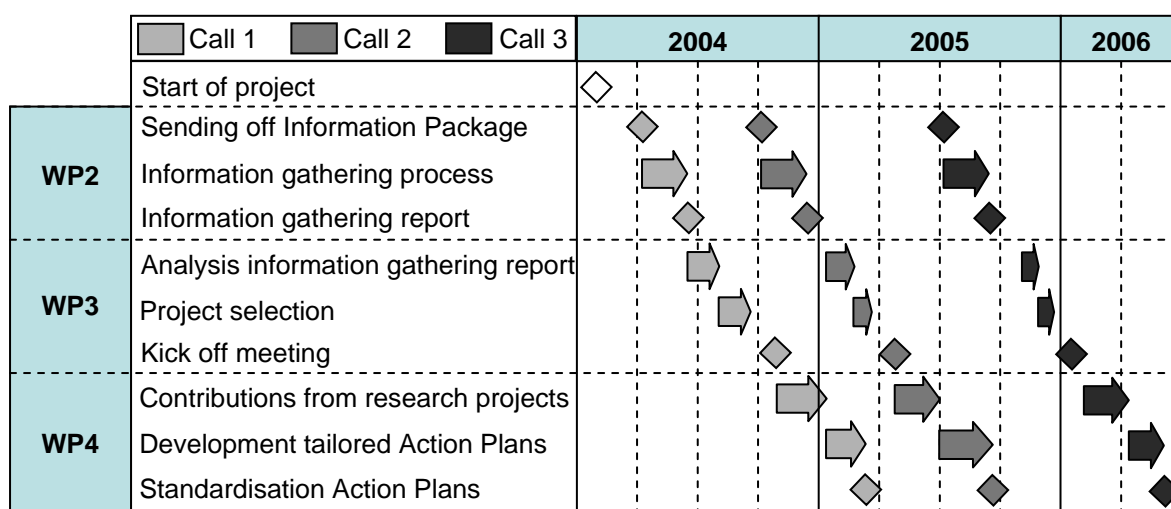
5. Project planning, milestones & deliverables

The COPRAS project was launched on 1st February 2004 and will continue for 36 months, until the end of January 2007. During this period the project will survey research projects in FP6 IST calls 1, 2 and 3 for standards related output; it will analyze the information and select projects, and it will define Standardization Action Plans together with selected projects.

The following sections outline the planning of tasks, deliverables and milestones for WPs 2, 3, 4, 5 and 6 per Work Package. WP1, encompassing the management of the project, will be addressed in chapter 6. A chronological overview of all milestones and corresponding formal deliverables can be found in Annex 2.

5.1 Planning WP's 2, 3 and 4 methodological steps & processes

COPRAS will carry out the work as described in the previous chapter during three consecutive cycles, thus addressing all projects in each of the three calls, as indicated in the following overview.



In taking a sequential approach it will allow feedback to improve processes and results through consecutive cycles. A complete overview of the project planning, tasks, milestones and deliverables can be found in Annex 1.

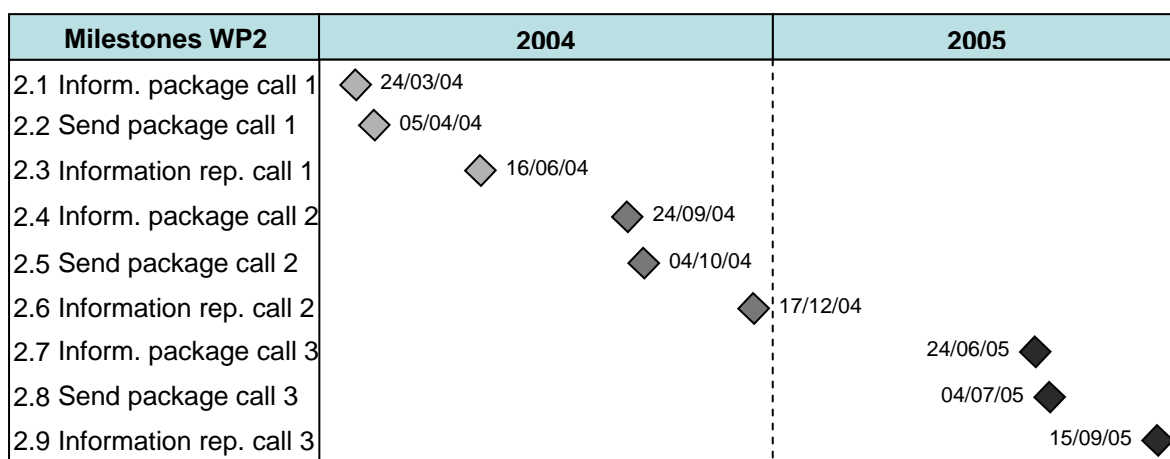
5.2 WP2, WP3 & WP4 milestones & deliverables

For each of the WPs milestones have been defined, corresponding with the project's methodological steps and the formal deliverables (see also the relevant tables in this section). For WP2, these milestones relate to:

- i) availability of the information package and questionnaire for each of the calls;
- ii) sending out the information packages to the respective research project coordinators and;
- iii) availability of the information gathering reports.

This generates 9 milestones (3 for each call) for WP2 as displayed in the graphic below.

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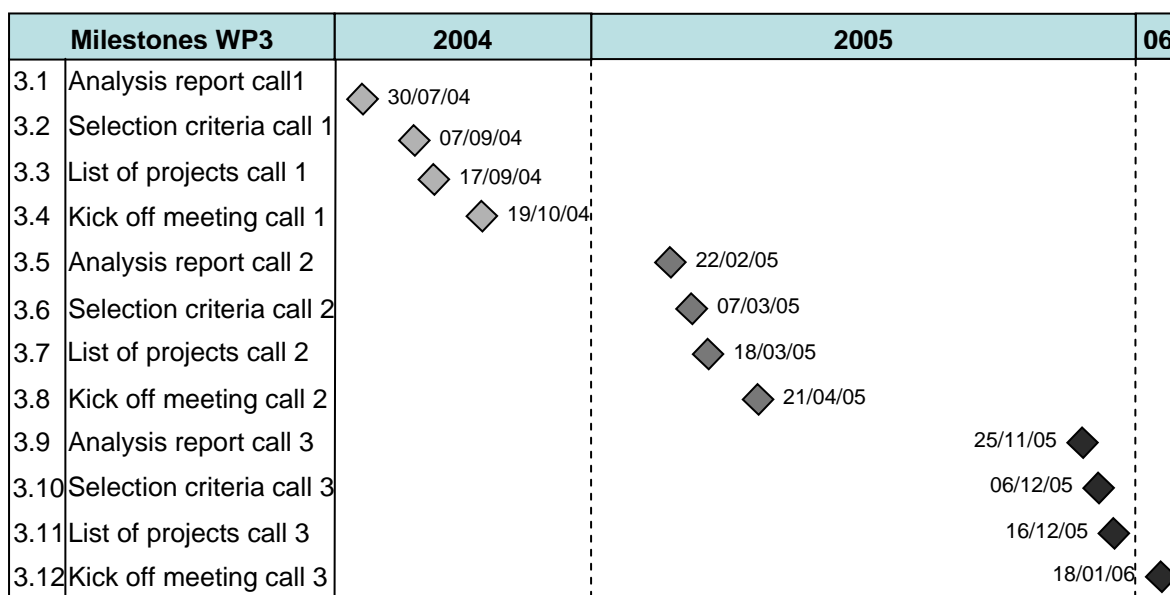
Milestones 2.1, 2.3, 2.6 and 2.9 correspond with formal deliverables as indicated below:

Deliverable	Title	Date	Type of deliverable
D02	Information package	31/03/04	Brochure & questionnaire
D05	Information gathering report for call 1	30/06/04	Report
D09	Information gathering report for call 2	31/12/04	Report
D18	Information gathering report for call 3	30/09/05	Report

For WP3, covering the analysis of the information gathering reports and definition of criteria for short listing projects, three types of milestones have been defined. These relate to:

- i) the availability of the report analyzing the information gathering report;
- ii) the availability of the criteria for selecting research projects for the COPRAS programme;
- iii) the availability of the list of selected projects;
- iv) the kick off meeting, starting the work on Standardization Action Plans.

This generates 12 milestones, displayed in the graphic below.



All WP3 milestones correspond with formal deliverables as indicated in the table below:

Deliverable	Title	Date	Type of deliverable
D06	Analysis information gathering report for call 1	29/10/04	Report
D07	List of selected projects for call 1	29/10/04	Report
D08	Report of the kick off meeting for call 1	29/10/04	Report
D12	Analysis information gathering report for call 2	29/04/05	Report
D13	List of selected projects for call 2	29/04/05	Report
D14	Report of the kick off meeting for call 2	29/04/05	Report
D20	Analysis information gathering report for call 3	31/01/06	Report

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D21	List of selected projects for call 3	31/01/06	Report
D22	Report of the kick off meeting for call 3	31/01/06	Report

WP4 will generate relevant contributions from research projects to standardization bodies and define tailored Standardization Action Plans. Two types of milestones have been defined here:

- i) the report listing the defined contributions to and from research projects as well as the standardization working groups these projects will interface with during the execution of their Standardization Action Plan;
- ii) the actual Standardization Action Plans per individual selected project.

This generates 6 milestones, as indicated in the following graph:

Milestones WP4	2005	2006
4.1 List of contributions call 1	◆ 13/01/05	
4.2 Stand. Action Plans call 1	◆ 11/03/05	
4.3 List of contributions call 2	◆ 29/06/05	
4.4 Stand. Action Plans call 2	◆ 20/09/05	
4.5 List of contributions call 3		◆ 11/04/06
4.6 Stand. Action Plans call 3		◆ 06/06/06

Milestones 4.2, 4.4 and 4.6 correspond with formal deliverables as indicated in the table below:

Deliverable	Title	Date	Type of deliverable
D11	Standardization Action Plans for call 1 projects	31/03/05	Report
D16	Standardization Action Plans for call 2 projects	30/09/05	Report
D24	Standardization Action Plans for call 3 projects	31/08/06	Report

Tasks, milestones and deliverables for Work Packages 2, 3 and 4 have been scheduled in such a way that they deliver their input at that point throughout the project's lifetime where it serves to optimize the dissemination and evaluation of the project's results (e.g. through the production of brochures highlighting individual research projects' standardization achievements, the development of generic guidance material and organization of the Open Meeting). For this reason the processes aiming to establish the COPRAS programme will have been completed several months before the project's main dissemination milestones are scheduled, as the following section will show.

5.3 WP 5 & 6 milestones and deliverables

Many of the tasks and processes encompassed by WP5 (as described in more detail in the 'Dissemination and Exploitation Plan') and WP6 cover the entire project's lifespan. The scheduling of the associated milestones however should be understood in conjunction with the delivery of results from the COPRAS programme, as there is a strong interdependency. Therefore, WP5 and WP6 milestones are concentrated at the end of the project as shown in the following graph.

Milestones WP 5 & 6	2004	2005	2006	07
5.1 Web site	◆ 24/03/04			
5.2 Dissemination plan	◆ 16/04/04			
5.3 Interim generic material		◆ 29/07/05		
5.4 First set of brochures		◆ 14/10/05		
5.5 Final generic material			24/10/06 ◆	
5.6 Final set of brochures			24/10/06 ◆	
5.7 Open Meeting			31/10/06 ◆	
5.8 Report Open Meeting			14/11/06 ◆	
6.1 Interim evaluation report		30/09/05 ◆		
6.2 Final evaluation report				22/12/06 ◆

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Virtually all of these milestones correspond with formal deliverables, as indicated in the table below:

Deliverable	WP	Title	Date	Type of deliverable
D01	5	COPRAS Web site	31/03/04	Web site
D04	5	Dissemination and Exploitation Plan	29/04/04	Report
D15	5	Interim generic material	31/08/05	Report
D17	6	Interim evaluation report	30/09/05	Report
D19	5	First set of brochures	31/10/05	Brochures
D25	5	Open Meeting report	31/01/07	Report
D26	5	Final set of brochures	31/01/07	Brochures
D27	5	Final generic material	31/01/07	Report
D28	6	Final evaluation report	31/01/07	Report

Contrary to Work Packages 2, 3 and 4, milestones and due dates for formal deliverables falling under WP5 and WP6, are relatively far apart. This has been done to maximize the mutual beneficial effects of these milestones and underlying processes (notably in view of the Open Meeting) and to allow their output being taken into account in the final reporting concluding the project.

6 Project & resource management

COPRAS will draw the resources it requires for project management and execution of tasks primarily from its five consortium partners. The availability, as well as the allocation of these resources across different WPs and FP6 calls is described in this chapter.

In addition, the project's management structure, the organization of the work across the WPs, and the way COPRAS has organized its regular reporting, internally as well as externally are described.

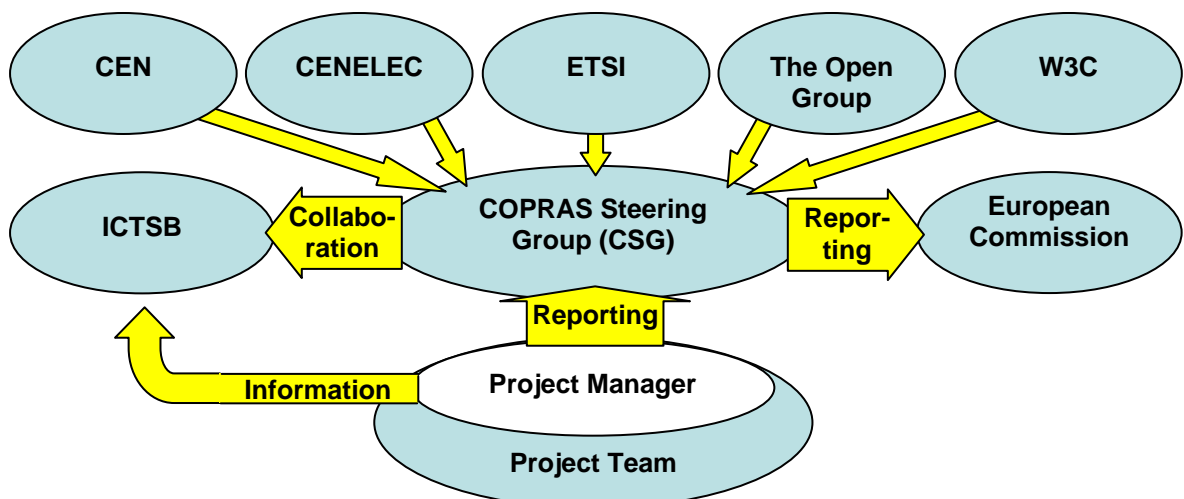
Finally, the project team's modus operandi with respect to its cooperation with research projects and standards bodies is outlined, and the scheduling of milestones along the formal deliverables for WP1 covering project management activities, is discussed.

6.1 Project management & reporting structure

COPRAS has 4 'layers' carrying out activities relevant to the management of the project, the execution of tasks, or liaisons with partner organizations:

- i) the consortium partners that together establish;
- ii) the COPRAS Steering Group that appoints;
- iii) the Project Manager who in his turn assembles;
- iv) the project team.

This structure is displayed in the following graph, together with the interfaces between layers and relevant external parties.



6.1.1 COPRAS Steering Group

The COPRAS Steering Group (CSG) is responsible for the overall project management, in accordance with guidance provided by the European Commission. It consists of 5 members representing the five consortium partners, and meets on a quarterly basis throughout the projects lifetime. The Project Manager will function as the secretary to the CSG and produce the minutes of the meetings that will be included in the annual reporting to the European Commission (i.e. the progress reports [D10 & D23] and the final report [D29]).

The CSG will monitor the progress of the project and will – if necessary – adjust the tasks that have been defined for the different Work Packages. It will approve the project's formal deliverables produced by the project team before these are being sent to the European Commission. Further the CSG will oversee and approve the management of the project's financial and human resources, as reported on a regular basis either by the Project Manager or by the individual consortium partners.

Although the COPRAS Project Manager may be asked from time to time to provide relevant information on the project's progress and result directly to the ICTSB, primarily the CSG will conduct communication and cooperation with the other members of the ICTSB and – when considered appropriate – will arranging liaisons with other standards bodies or industry groups either within the ICTSB or on a global level.

6.1.2 Project Manager

The COPRAS Project Manager is appointed by the CSG and is the central coordinating contact person for the project. He heads the project team that consists of representatives and technical experts from the consortium partners. He is responsible for the project progressing as planned and the project team achieving its milestones and producing its deliverables according to schedule.

The Project Manager will oversee the progress of the project on a day to day basis and ensures the quality as well as the quantity of the results by taking the necessary measures with respect to the availability of resources, the prioritization of tasks or the coordination and communication between team members and/or external parties.

He will manage the balance between the project team's activities (see the following section), for example when it is working on separate tasks addressing separate calls at the same time, and will re-allocate resources if this proves to be necessary to achieve milestones in time. The Project Manager will make sure processes are in line with the project's original objectives and will produce the targeted deliverables; in this respect he may decide to re-direct or re-structure processes if this is required to archive the project's goals.

In order to support the promotion of the project and the dissemination of its results, the Project Manager will help to promote the project's objectives among the other members of the ICT Standards Board, standards bodies operating on a global level and other industry groups involved in standardization activities. Moreover, if required during the course of the project, he will coordinate input from these organizations into the COPRAS project.

The Project Manager will report in writing to the CSG on a quarterly basis and will keep the Steering Group informed at any time during the course of the project if so required. These reports will contain adequate information on the overall status of the project and its progress, on the tasks that were completed, on milestones that were achieved, on resources that were spend and – if applicable – on other issues that require addressing by the CSG. He will arrange the formal approval from the CSG for all deliverables, either by submitting these during one of the CSG meetings or by organizing approval through electronic correspondence.

At the end of the first two periods of 12 months, the Project Manager will produce a progress report for the European Commission, analyzing the status of the project with respect to its original planning in terms of time and resources, and highlighting the milestones and results that have been achieved and the deliverables that have been produced. He will submit these reports as formal deliverables to the CSG. Towards the end of the project, the Project Manager will produce his final report overlooking the entire 36-month period of the COPRAS project.

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Half way during the projects lifetime as well as at the end, the Project Manager will produce interim and final evaluation reports, aggregating and analyzing the assessments of the processes and the results achieved from the work carried out in the different Work Packages addressing the different calls (see also section 6.1.3).

The Project Manager will pay specific attention to promoting the project and its goals among relevant stakeholder such as standards bodies, Commission Project Officers and research projects as well as to the dissemination of its results. He will organize the Open Meeting at the end of the projects lifetime together with the project team and ensure participation of all relevant stakeholders in this meeting.

6.1.3 Project team, organization of work & lead contractors' responsibilities

The work on the COPRAS project is divided into project support activities (covered by WP2 through WP6) and project management activities (covered by WP1). While the coordinating partner (CEN) will assume responsibility for most of the work with respect to the latter, for each of the 5 WPs covering project support activities, one of the consortium partners will take on the task as lead contractor, as shown in the following table.

CENELEC	WP2: Gathering project information
ETSI	WP3: Information analysis and project selection
The Open Group	WP4: Development of appropriate standardization paths
W3C	WP5: Promotion, dissemination and liaison
CEN	WP6: Strategic evaluation and coordination

The actual work on the COPRAS project will be done by a project team consisting of one or more representatives and technical experts from each of the consortium partners, with the Project Manager representing the coordinating partner. In principle this team will carry out all of the activities encompassed by WP2 through WP6 although the consistency of the team may vary depending on specific Work Package or tasks to be dealt with at a give point in time. The Project Manager, in close cooperation with the lead contractor for a specific WP, will ensure the project team has the adequate resources, both from a qualitative as from a quantitative perspective, to execute the tasks falling under a given Work Package.

The technical expert in the project team representing the consortium partner that is the lead contractor for a specific Work Packages will be responsible for:

- initiating the work at the start of a specific Work Package or task and make a proposal with respect to the input that is required from other members of the project team;
- proposing which standardization working groups, industry consortiums, FP6 IST research projects or other entities to establish contact with and defining input from as well as output to these groups and projects related to the specific task or work package;
- proposing the structure of reports or other deliverables falling under the respective Work Package, taking on the role as editor and ensuring the timely delivery of all required input for these documents;
- signaling issues possibly causing delays in the execution of tasks or the delivery of milestones to the Project Manager;
- evaluating processes and results achieved at the conclusion of the work addressing each of the calls, to serve as input for the project's interim and final evaluation reports.

If considered necessary to ensure the quality of the project's processes and the timely delivery of its results, the Project Manager may require other project team members to assume one of these tasks, taking into account the resources each of the consortium partners has made available for the COPRAS project.

6.1.4 Working contacts

The project team will structure its work, including contacts with standards bodies, research projects or other entities primarily using electronic means of communication, cooperation and production.

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For this purpose, restricted access areas will be defined on the COPRAS web site and mailing lists will be installed for communication within the project team, between research projects and the project team and between standardization working groups and the project team.

In addition to its electronic working structure, the project team will have a number of physical meetings. These will be organized at the beginning as well as at the end of WP3, thus facilitating the migration of work and results from WP2 to WP3 and from WP3 to WP4. The project team's meeting at the end of WP3 will be scheduled a day before the kick off meeting with selected projects. Also, for preparation purposes, the team will meet a day before the Open Meeting.

Further to these occasions – and within the project's budgetary limits – physical meetings of the project team, as a whole or in part, may occur where the CSG or the Project Manager decide this is necessary in order to improve or ensure the quality of the working processes or results.

Good working contacts and communication between the project team, research projects and standardization working groups are vital to the success of the project but not exclusive to any of the tasks or Work Packages. They need to involve all consortium partners and will have to be established when building the COPRAS community, and maintained throughout its lifetime. The responsibility for the initial establishment is distributed over the partners in the following way:

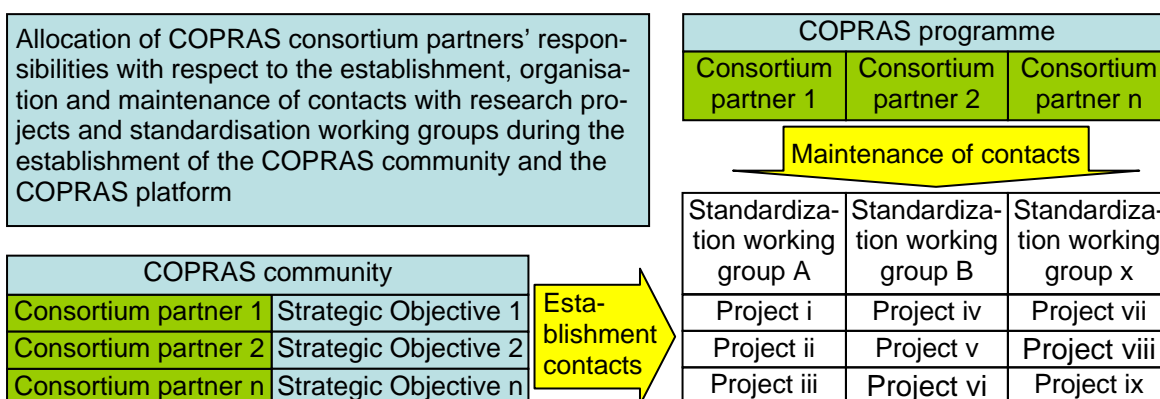
Contacts with projects in Strategic Objective areas in call 1	Partner responsible
Broadband for all	CENELEC
Mobile and wireless systems beyond 3G	ETSI
Towards a global dependability and security framework	ETSI
Multimodal interfaces	W3C
Semantic-based knowledge systems	W3C
Networked audio-visual systems and home platforms	CENELEC
Networked businesses and governments	CEN
eSafety of road and air transport	The Open Group
eHealth	CEN
Technology-enhanced learning and access to cultural heritage	The Open Group

Contacts with projects in Strategic Objective areas in call 1	Partner responsible
Open development platforms for software and services	CENELEC
Cognitive systems	W3C
Embedded systems	The Open Group
Applications and services for the mobile user and worker	ETSI
Cross-media content for leisure and entertainment	CEN
GRID-based systems for solving complex problems	W3C
Improving risk management	ETSI
eInclusion	CEN

Contacts will be established between the representative of the responsible partner in the COPRAS project team and the coordinators of the research projects. When starting the development of the COPRAS programme however, selected projects may be clustered depending on their expected working relationship with standardization working groups. As this may occasionally re-group research projects across the borders of the different Strategic Objective areas, responsibility for maintenance of contacts with selected projects in the COPRAS programme will be combined with the responsibility to establish contacts with standardization working groups, which will be allocated to consortium partners based on their working group's relevance to interfacing with specific clusters of projects.

The systematic of allocating contacts during these phases is indicated in the following figure:

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Once contacts have been established, the relevant standardization working groups as well as research projects (whether participating in the COPRAS community or the COPRAS programme) will be kept informed regularly on the development of the COPRAS project. Information will be provided electronically. The level of detail as well as the level of specification of the information will depend on the phase of the project (e.g. updates on the work in WP2 and WP3 will address Strategic Objective areas only, while updates during WP4 may be tailored to individual projects).

6.2 Resources

In terms of resources, a total of 72,71 man/months is available for the COPRAS project. Contributions from the five consortium partners are distributed over the six WPs as indicated below.

	CEN	CENELEC	ETSI	Open Group	W3C	Total
WP1	3,70	0,00	1,00	0,00	0,00	4,70
WP2	1,10	2,50	1,60	1,60	1,60	8,40
WP3	1,10	2,23	3,00	4,50	4,50	15,33
WP4	1,10	3,50	4,00	5,70	5,70	20,00
WP5	3,00	3,00	3,00	3,00	3,00	15,00
WP6	6,40	0,88	0,00	1,00	1,00	9,28
Total	16,40	12,11	12,60	15,80	15,80	72,71

With respect to the distribution of resources over the three calls COPRAS will be addressing, half of the project's resources will be focused on the first call, while 2/3 will be attributed to the second call, leaving 1/6 to cover the work involved in addressing the third call. This distribution is shown in the table below.

Resources available per call	Call 1	Call 2	Call 3	Total
WP2 (all consortium partners)	4,20	2,80	1,40	8,40
WP3 (all consortium partners)	7,67	5,11	2,55	15,33
WP4 (all consortium partners)	10,00	6,67	3,33	20,00
Total (all consortium partners)	21,87	14,58	7,28	43,73

This spread of resources is based on the number of projects expected to be included in the COPRAS community and the COPRAS programme across the three calls, as well as on the fact that experience build up throughout the course of the project will decrease resource requirements for later calls.

6.3 WP1 Milestones & deliverables

The quarterly meetings of the CSG as well as the progress reports and the report that will be produced by the Project Manager every 12 months, establish the milestones for WP1. Steering Group meetings will be scheduled around the different WPs, enabling the CSG to give guidance to the project team and to execute its responsibility to approve milestones and formal deliverables in the most effective way. CSG meetings are indicated in the following graph, together with the other WP1 milestones.

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Milestones WP1	2004	2005	2006	07
1.1 1 st CSG meeting	◆ 06/02/04			
1.2 Quality plan available	◆ 16/04/04			
1.3 2 nd CSG meeting	◆ 20/04/04			
1.4 3 rd CSG meeting	◆ 23/06/04			
1.5 4 th CSG meeting	◆ 21/10/04			
1.6 1 st Progress report		◆ 10/02/05		
1.7 5 th CSG meeting		◆ 17/02/05		
1.8 6 th CSG meeting		◆ 22/04/05		
1.9 7 th CSG meeting		◆ 22/09/05		
1.10 8 th CSG meeting			◆ 24/01/06	
1.11 2 nd Progress report			◆ 14/02/06	
1.12 9 th CSG meeting			◆ 21/02/06	
1.13 10 th CSG meeting			◆ 23/06/06	
1.14 11 th CSG meeting			◆ 21/11/06	
1.15 Final report			◆ 16/01/07	
1.16 12 th CSG meeting			◆ 23/01/07	

These milestones correspond with the following formal deliverables. Minutes of CSG meetings will be attached as annexes to the progress reports and the final report.

Deliverable	Title	Date	Type of deliverable
D03	Quality Plan (including Implementation Plan)	29/04/04	Report
D10	First progress report	28/02/05	Report
D23	Second progress report	28/02/06	Report
D29	Final report	31/01/07	Report

The deliverables and milestones for WP1 conclude the description of the planning of the COPRAS project as well as its Implementation Plan.

Planning, resource allocation, working methods and milestones as described will be reviewed on a regular basis by the Project Manager and the CSG and may be adjusted throughout the course of the project. This may consequently lead to updated versions of this Implementation Plan which will be published on the project's web site once approved by the CSG.

7 Targeted results

The COPRAS project aims to install a coherent set of mechanisms and tools facilitating the actual cooperation and communication between research and standards. COPRAS will also prepare generic guidance material helping those proposing or evaluating research projects, and Commission Project Officers, to integrate a standards interface in research proposals as early as possible. .

When quantifying the goals COPRAS has set out for itself with respect to the results of the activities in WPs 2 & 3, the following figures emerge after applying the relevant percentages to the number of research projects targeted in the Strategic Objective areas of call 1:

Targeted Strategic Objective areas	Total of projects in Call 1	Target response rate (50%)	Short list target (8%)
Broadband for all	18	9	1
Mobile & wireless systems beyond 3G	21	11	2
Towards a global dependability and security framework	16	8	1
Multimodal Interfaces	14	7	1
Semantic-based knowledge systems	15	8	1

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Networked audio-visual systems and home platforms	19	10	2
Networked businesses and governments	23	12	2
eSafety of road and air transport	14	7	1
e-Health	20	10	2
Technology-enhanced learning and access to cultural heritage	16	8	1
TOTAL	176	90	14

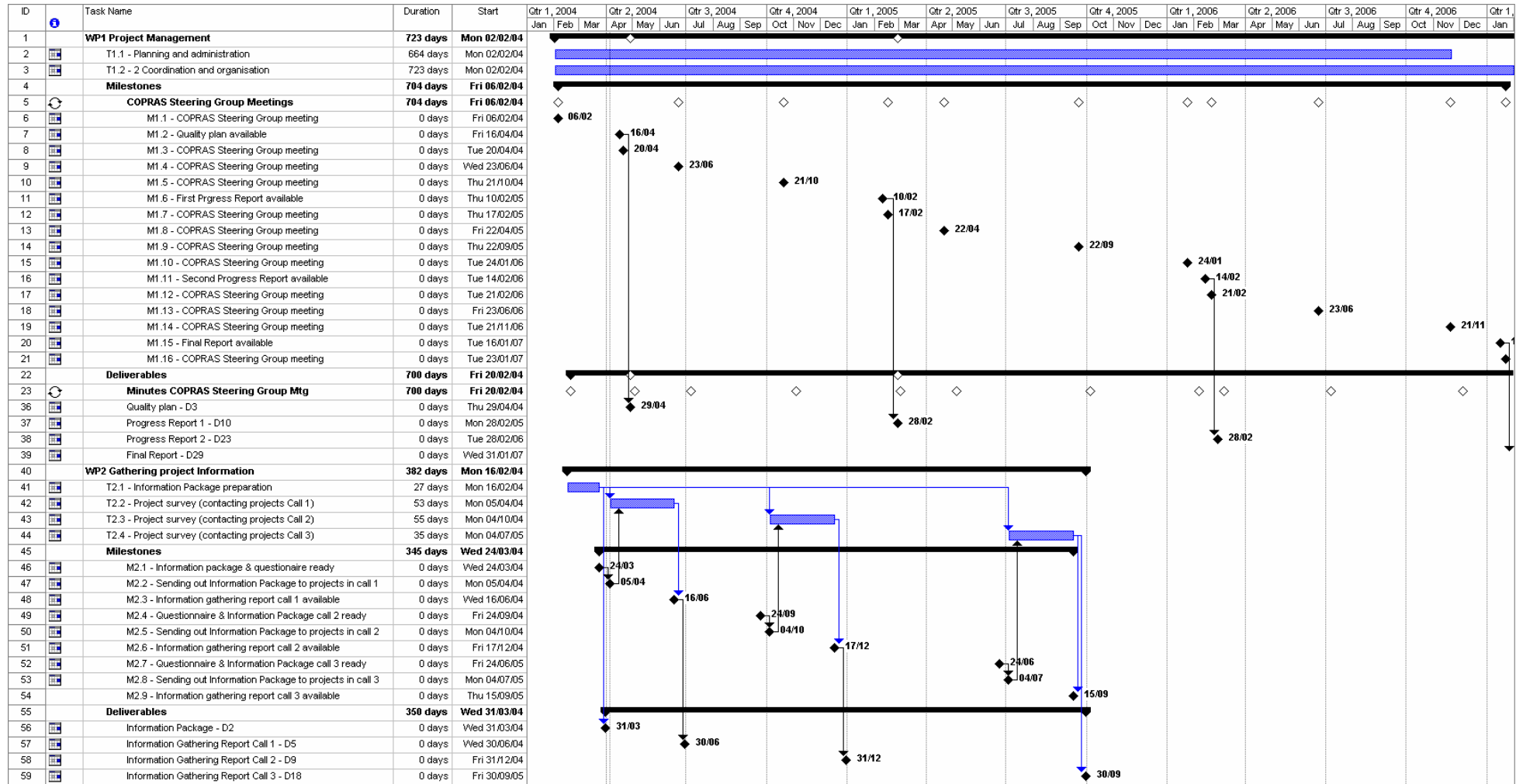
Figures for the Strategic Objectives covered by calls 2 and 3 will be defined at a later stage during the course of the COPRAS project.

Although Standardization Action Plans will be developed with all of the selected and short listed projects, this is not a guarantee all of these plans will actually lead to tangible results. This is essentially because activities in all standards organizations depend on the willingness of their members or participants to agree to carry them out in accordance with their rules, and provide the necessary resources. Although the actual standards activity is not within the scope – or control – of the COPRAS project any more, COPRAS would nevertheless consider its activities successful when it manages to generate at least six formal contributions of standardization work to be introduced into the processes of standardization bodies.

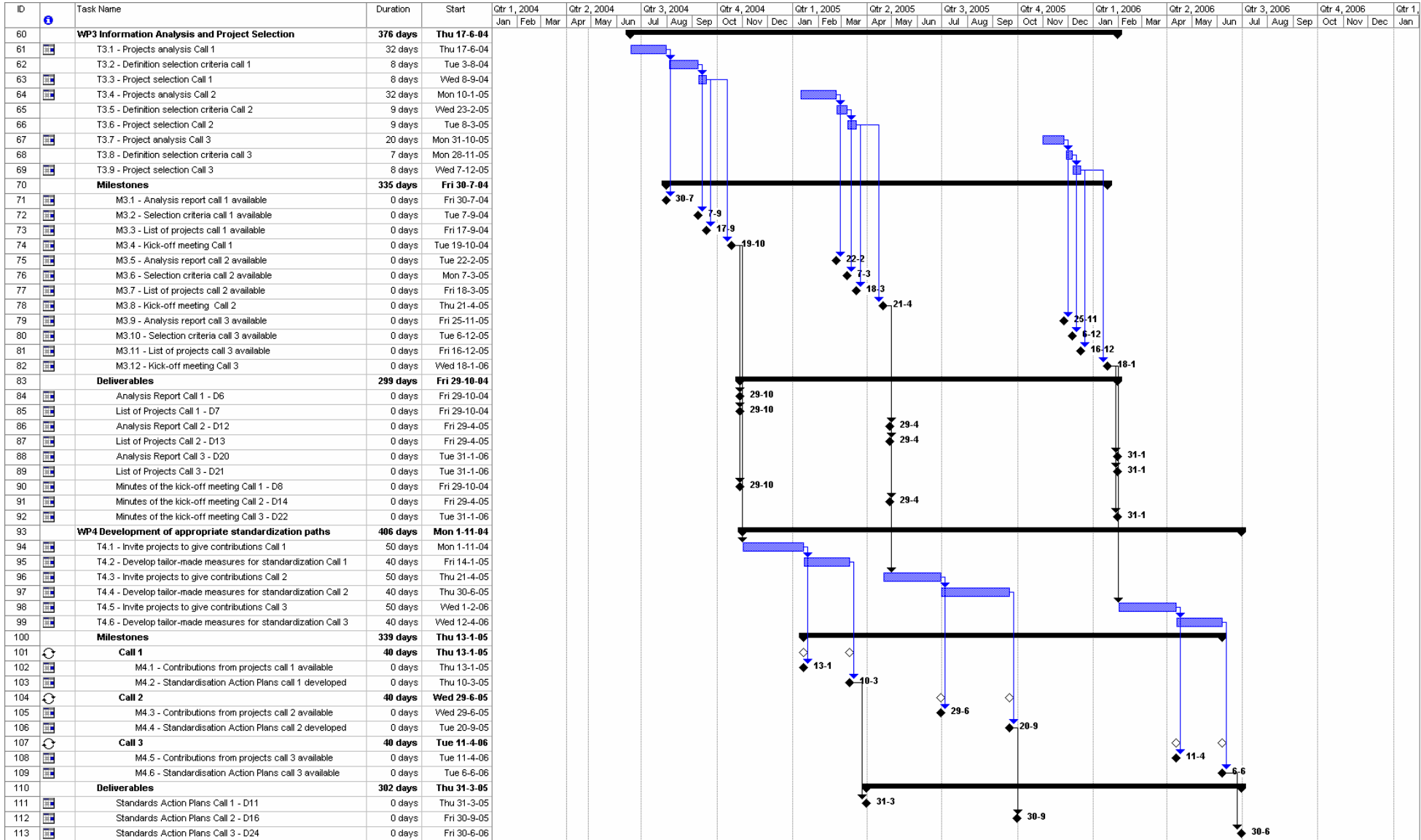
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Annex 1: COPRAS project plan

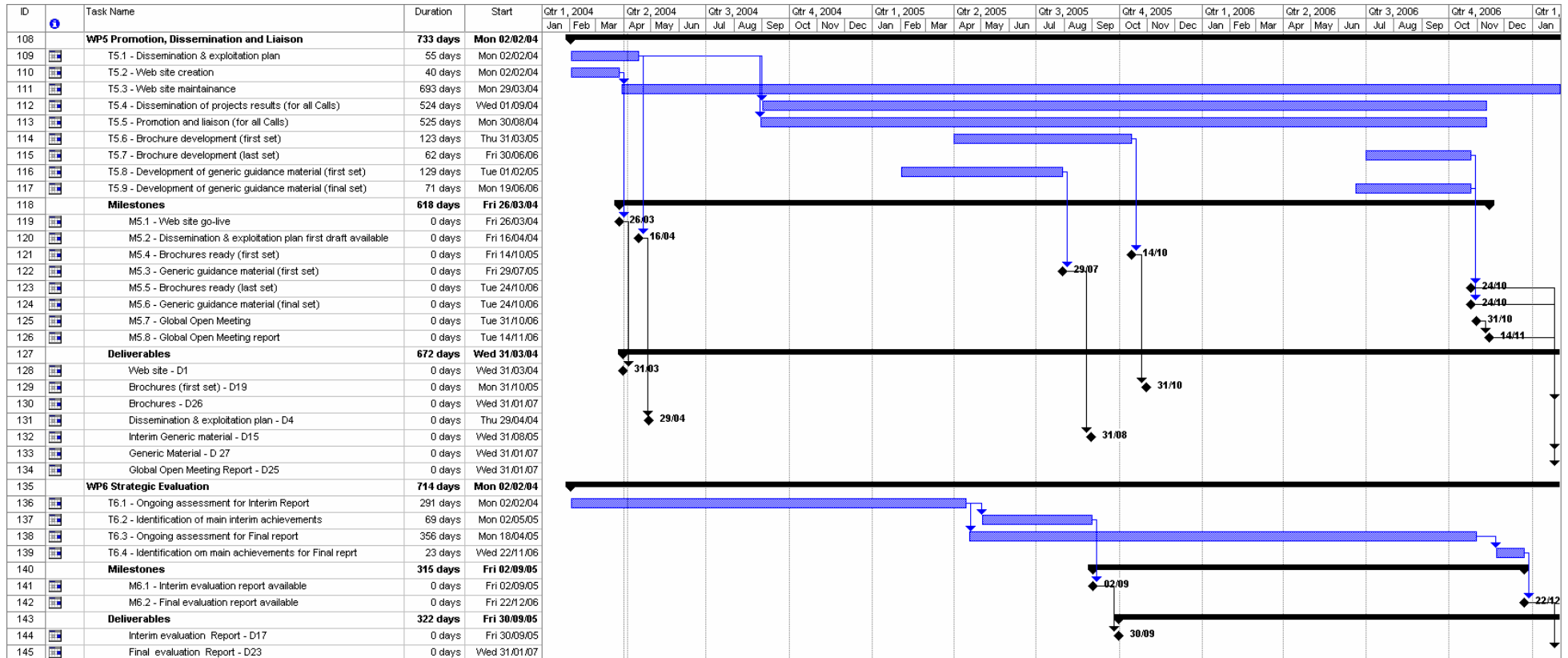
The following pages describe the COPRAS work plan, including tasks, milestones and deliverables for all of the 6 Work Packages over the project's 36 months life-span.



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Annex 2: Milestones & deliverables

The following provides a chronological overview of the COPRAS milestones and deliverables.

Project milestone	#	Date	Corresponding deliverable	#	Date
1 st Steering Group	1.1	06/02/04			
Questionnaire ready	2.3	24/03/04			
Information Package ready	2.4	24/03/04	Information Package	02	31/03/04
Website launch	5.1	26/03/04	Website	01	31/03/04
Quality Plan available	1.2	16/04/04	Quality Plan	03	29/04/04
Dissemination Plan first draft available	5.2	16/04/04	Dissemination & Exploit. Plan	04	29/04/04
2 nd Steering Group	1.3	20/04/04			
Sending out information package call 1	2.5	05/04/04			
Information gathering report call 1	2.6	16/06/04	Inform. gathering report call 1	05	30/06/04
3 rd Steering Group	1.4	23/06/04			
Analysis report call 1 available	3.1	30/07/04	Analysis report call 1	06	29/10/04
List of projects call 1 available	3.2	17/09/04	List of projects call 1	07	29/10/04
Information package call 2 ready	2.7	24/09/04			
Sending out information package call 2	2.8	04/10/04			
Kick off meeting call 1	3.3	19/10/04	Report kick off meeting call 1	08	29/10/04
4 th Steering Group	1.5	21/10/04			
Information gathering report call 2	2.9	17/12/04	Inform. Gathering report call 2	09	31/12/04
Contributions projects call 1 available	4.1	13/01/05			
1 st Progress report available	1.6	10/02/05	First progress report	10	28/02/05
5 th Steering Group	1.7	17/02/05			
Analysis report call 2 available	3.4	22/02/05	Analysis report call 2	12	29/04/05
Standardization Action Plans call 1	4.2	10/03/05	Stand. Action Plans call 1	11	31/03/05
List of projects call 2 available	3.5	18/03/05	List of projects call 2	13	29/04/05
Kick off meeting call 2	3.6	21/04/05	Kick off meeting report call 2	14	29/04/05
6 th Steering Group	1.8	22/04/05			
Information package call 3 ready	2.10	24/06/05			
Contributions projects call 2 available	4.3	29/06/05			
Sending out information package call 3	2.11	04/07/05			
First set of generic material ready	5.3	29/07/05	Generic material (first set)	15	31/08/05
Interim evaluation report available	6.1	02/09/05	Interim evaluation report	17	30/09/05
Information gathering report call 3	2.12	15/09/05	Inform. gathering report call 3	18	30/09/05
Standardization Action Plans call 2	4.4	20/09/05	Stand. Action Plans call 2	16	30/09/05
7 th Steering Group	1.9	22/09/05			
First set of brochures ready	5.4	14/10/05	Brochures (first set)	19	31/10/05
Analysis report call 3 available	3.7	25/11/05	Analysis report call 3	20	31/01/06
List of projects call 3 available	3.8	16/12/05	List of projects call 3	21	31/01/06
Kick off meeting call 3	3.9	18/01/06	Report kick off meeting call 3	22	31/01/06
8 th Steering Group	1.10	24/01/06			
2 nd Progress report available	1.11	14/02/06	Second progress report	23	28/02/06
9 th Steering Group	1.12	21/02/06			
Contributions projects call 3 available	4.5	10/04/06			
Standardization Action Plans call 3	4.6	06/06/06	Stand. Action Plans call 3	24	30/06/06
10 th Steering Group	1.13	23/06/06			
Second set of generic material ready	5.5	24/10/06	Generic material (final set)	27	31/07/07
Second set of brochures ready	5.6	24/10/06	Brochures (final set)	26	31/01/07
Global Open Meeting	5.7	31/10/06			
Global Open Meeting report available	5.8	14/11/06	Open Meeting report	25	31/01/07
11 th Steering Group	1.14	21/11/06			
Final evaluation report available	6.2	22/12/06	Final evaluation report	28	31/01/07
Final report available	1.15	16/01/07	Final report	29	31/01/07
12 th Steering Group	1.16	23/01/07			