

# **OPEN Project**

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# **Abstract**

This document is the OPEN Quality Plan. It allows the Project Management to monitor the project in a methodical and regular way.

#### **OPEN Partners:**

CNR-ISTI (Italy)
Aalborg University (Denmark)
Arcadia Design (Italy)
NEC (United Kingdom)
SAP AG (Germany)
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Id Number: D8.1

# **Table of Contents**

1.	QUA:	LITY PLAN	2
	1.1	QUALITY POLICY	3
		QUALITY ASSURANCE	
		QUALITY ROLES AND RESPONSIBILITIES	
	1.3.1	Quality Assurance Board (QAB)	
	1.3.2	Quality Manager	5
	1.4	OPEN QUALITY PLAN AND QUALITY SYSTEM	
	1.4.1	Review and Issue	5
	1.4.2	Distribution	5
	1.4.3	Revision	6
	1.4.4	Contract review	6
	1.4.5	Conformance	6
	1.4.6	Acceptance criteria	7
	1.4.7	Non-conformance	7
	1.4.8	Non-conformance Reporting	7
	1.4.9	Detection of causes and corrective actions	8
	1.4.10	Preventive actions	9
	1.4.11		
	1.4.12	2 Meetings	9
	1.4.13	200000000000000000000000000000000000000	
	1.5	QUALITY CONTROL	
	1.5.1	Project Deliverables	12
2.	TABI	LE	18

Title: Quality Plan	Id Number: D8.1

# 1. Quality Plan

The aim of the quality plan is to provide a mechanism to monitor and continually improve the project quality through a small set of rules, which should help to improve the quality of the process and the results without complicating too much the activities of the project partners. The Quality Assurance principles underpinning the project are:

- To supply methods, standards and procedures adapted to the specific project environment, materialised by a Quality Plan (QP) that indicates:
  - Organisation of the work team
  - Roles and responsibilities of each participant
  - Time schedules
  - Development, testing, configuration, acceptance and maintenance quality criteria
  - Procedures, for acceptance and quality control
  - Plan for control action
- To assist and advise the project team in its effort of producing results of utmost quality;
- To prepare and exercise controls in order to take a permanent and critical view on the project progress vis-à-vis objectives.

This QP applies to all project activities with the exception of the Partner's financial issues.

The Quality System includes:

- 1. The Quality policy
- 2. The Quality plan
- 3. Project organisation, responsibilities and authority
- 4. Contract review
- 5. Project planning and control
- 6. deliverables and their preparation

Title: Quality Plan	Id Number: D8.1

All of this shall be fully co-ordinated and integrated in order to help ensure that the project meets the requirements and expectations of both the EU and the Partners.

# 1.1 Quality Policy

In accordance with the project targets, the Project Management Committee (PMC) representing the Consortium Members intends to achieve quality to fully meet requirements of the Co-financer (EU) and Partners in order to:

- Develop the different project phases at a high quality level
- Comply with the co-financer's and Partners' requirements
- Work with a managing system consistent with the quality plan in order to guarantee quality to both EU and the Partners
- Adopt plans whereby planning, implementation, check and review phases have been defined and/or responsibilities have been assigned (who's doing what)
- Adopt appropriate management processes to cope with project difficulties
- Activate scheduled controls to meet formal project requirements as well as partners approved requirements in order to allow full monitoring of project development
- Run a Consortium working in full co-operation in terms of communication and information with a view to the constant improvement of the project.

This policy shall be adopted and distributed at each partner's level.

# 1.2 Quality Assurance

Quality Assurance is concerned with co-ordination of project activities, quality assurance and control, assessment and evaluation of the overall performance of the project, final production of deliverables, monitoring of resource use, participation to clustering activities, and other administration tasks. The Project Co-ordinator is responsible of the overall project's quality and can delegate the coordination of the quality assurance activities - that will be assessed during the overall duration of the project - to a Quality Manager.

Title: Quality Plan	Id Number: D8.1

# 1.3 Quality Roles and Responsibilities

The project will ensure that the outcomes of the work packages are of high quality and are produced on time and within budget constraints, and at the same time to allow for strategic and tactic flexibility in directing the project towards market orientation.

# 1.3.1 Quality Assurance Board (QAB)

This organism is particularly devoted to the quality assessment, quality improvement through remedial actions, risk management and risk solution/contingency plans definition and monitoring. Its objective is to reduce the time for decision taking and actions implementation in case of quality improvements or risk reduction actions are to be implemented.

The QAB is composed by permanent members and by specific referees in charge of providing information and advice on the specific issue/risk to be addressed. Permanent members are the Project Coordinator, the Quality Manager, one internal expert assigned by each Partner (at least Senior Researcher or Partner Project Coordinator). Additional members are the WP/task leaders of specific WPs (or tasks if requested) for which the quality problem is detected or potential risks are foreseen/assessed.

For all deliverables the QAB will have independent supervision by experts proposed by the QAB and approved and appointed by the PMC. Such experts are experts working in the organizations participating in the project but not directly involved in the writing of the deliverable under revision.

The QAB is also responsible to agree on details between the Consortium and the experts in terms of:

- timing for delivery of peer-review reports (workflow of peer-review activities),
- aspects to be particularly assessed, format of peer-review reports.

The QAB has a privileged communication line (conference calls, email, and phone) to immediately address issues and problems. In

Title: Quality Plan	Id Number: D8.1

exceptional occasions the QAB members can meet to better analyse problems and find the most appropriate action plan and solutions.

Decisions taken by the QAB may not need the approval of the PMC in case of urgency.

All decisions and plans are reported within one week from the decision in the project's web site Management area and all Consortium partners are informed.

# 1.3.2 Quality Manager

The Quality Manager (QM) will check, monitor and report on the overall project's quality (deliverables, project's activities, project's outcomes and results) versus contractual commitments and obligations, giving advice on corrective actions in case of insufficient performance or of inadequate compliance to the committed results.

He is responsible for the set-up of the quality system and quality procedure (Quality Plan) and for the continuous monitoring of its evolution.

The main activities and responsibilities of the Quality Manager are:

- ensure the setting up, coordination and maintenance of the quality system;
- verify the compliance to the quality procedure by all Consortium partners;
- report to the Project Coordinator and to the Project Management Committee whether the quality system is working properly and, if not, propose necessary changes.

# 1.4 OPEN quality plan and quality system

#### 1.4.1 Review and Issue

The OPEN Quality Plan will be approved and authorised by the Project Management Committee.

#### 1.4.2 Distribution

The OPEN Quality Plan is distributed to:

- Project Participants
- The Project Officer of the EU Commission as an official deliverable

#### 1.4.3 Revision

Any Partner of the project may request modification of the OPEN Quality Plan and procedures.

Partners shall propose modifications to the QM. If the proposed change is agreed, then it will be followed by the documentation change control procedure.

The procedure adopted for issuing the OPEN Project Quality Plan and procedures shall be followed also for revisions. Once revisions are approved they will be distributed to the partners.

Obsolete versions are maintained and archived by the QM.

#### 1.4.4 Contract review

Changes proposed by the EC shall be reviewed and approved by the Project Management Committee. The impact of the proposed change shall be assessed and agreed by the Partners. The OPEN Project Coordinator shall then respond to the EC Project Officer with either an impact statement or the Consortium's approval of the change. The proposed change shall only be binding when the EC and the OPEN Consortium have both approved and agreed this in writing.

Changes proposed by any Partner shall be documented on a Change Request Form fully defining the impact of the proposed change on all Partners. This shall be reviewed and approved by the Project Management Committee. If approved, the OPEN Project Coordinator shall then propose the change to the EC Project Officer. The proposed change shall only be binding when the EC Project Officer has approved and agreed this in writing.

#### 1.4.5 Conformance

Title: Quality Plan	Id Number: D8.1

"Conformance" is defined as compliance of an activity, process or deliverable to the requirements, procedures and standards specified in the Quality Plan, project procedures, or specification documents.

# 1.4.6 Acceptance criteria

The EC will determine that the project is complete and has met their requirement by reference to the deliverables defined in the project programme.

Acceptance criteria for deliverables shall be:

- Coherence (e.g. uniform terminology and notations, standards for specifications)
- Conciseness (only concise reliable and useful information).
- Completeness (complete information within files concerning existing constitutive elements)
- Self-Evaluation (self descriptive function giving explanations on how a deliverable is conceived)
- Trace ability (root investigation through elaboration to determine origin and connections of specific information)

#### 1.4.7 Non-conformance

By "Non-conformance" is meant the partial or complete lack of compliance of the results of an activity, process or deliverable to requirements, procedures and standards as specified in the Quality Plan, project procedures, or specification documents.

The detection of non-conformances in activities or components of the Project is vital for the elimination of errors that may impair the quality of the Project.

# 1.4.8 Non-conformance Reporting

Title: Quality Plan	Id Number: D8.1

Anyone should detect a non-conformance in an activity of the Project. Once detected a non-conformance shall promptly notify to the task leader, who will identify the cause of the non-conformance and the person who is responsible for that part of the Project.

Non-conformance reports consist of four sections:

- Identification data of the output/activity
- Non-conformance description
- Guidelines for the elimination of the non-conformance
- Form distribution.

#### 1.4.9 Detection of causes and corrective actions

The detection of causes is aimed at eliminating the causes of non-conformances (components, personnel, sub-provider, etc.).

Causes may be:

- Related to internal activities,
- Related to external activities.

Verification and Corrective Actions for Non-Conformances Related To Internal Activities

Outputs deriving from internal activities that are defined as non-conforming shall be verified and they may then be:

- Revised so as to meet the requirements stated;
- Accepted with or without intervention following the authorisation of the Project Management Committee.

Revised outputs shall be tested again in order to assess their conformity.

Verification and Corrective Actions of external Non-Conformances

Title: Quality Plan	Id Number: D8.1

Outputs that are catered for by subcontractors / suppliers that are found not to conform may be:

- Revised by the partner responsible for the subcontractors / suppliers so that they meet the Project's requirements;
- Revised by the subcontractor so that they meet the Project's requests.

Non-conformance outputs that undergo the first two types of corrective action shall be controlled in order to be accepted.

#### 1.4.10 Preventive actions

All staff working for the Partners while Project activities are being developed shall be invited to make proposals to improve working processes and the management of activities and also to prevent the occurrence of situations that may impair the quality of activities.

Anyone who feels that a preventive action is needed shall promptly notify the task leader.

## 1.4.11 Sub contractors

A partner subcontracting part of its activity will perform it within its own budget and will remain fully responsible for the performance of the subcontractor.

# 1.4.12 Meetings

#### 1.4.12.1 Frequency

The Project Coordinator organises a consortium meeting at least every four months. Meetings are convened by the Project Coordinator with at least fifteen calendar days prior notice with an agenda.

#### 1.4.12.2 Meeting Purpose

During the consortium meetings, the partners inform the consortium about their activities and task progress. Each active WP and tasks is then discussed and decisions are taken together if necessary. The partners may inform the coordiantor about possible difficulties and problems they may encounter. The Project Coordinator should be able to manage that kind of issues.

The meeting is also an opportunity for the Project Coordinator to emphasise on the deadlines to achieve tasks and deliver reports and deliverables.

During the meeting, the partners decide on when and where the next meeting will take place.

## 1.4.12.3 Agenda

The agenda includes:

- Location
- Date
- Participants
- Apologises
- Items to be discussed and presented

The Project Coordinator prepares the agenda which is disseminated within the consortium. The partners have a week to add their comments to the agenda. The final version of the agenda is then disseminated. If modified, the agenda needs to be approved once again during the meeting.

#### 1.4.12.4 Location

The meeting takes place at the country and premises of the Project Coordinator or partners. Each partner can suggest hosting the others for the meeting in its country.

#### 1.4.12.5 Minutes

The Project Coordinator prepares the meeting's minutes which summaries what have been said at the meetings and future actions. The minutes include:

- Location
- Date
- Participants
- Apologises
- Agenda
- Report on main decisions
- Future actions

The minutes of the meetings are disseminated to the partners without delay. The minutes will be considered as accepted if, within fifteen calendar days from receipt, no party has objected in a traceable form to the Project Coordinator. If so, there are some comments to the minutes, a new version is released taking into account the comments.

#### 1.4.13 Documents

All technical documents will be based on the style sheet of the document "OPEN template\_NEW.doc" that is available on the OPEN web site.

#### 1.4.13.1 Document Information

In the cover page of the document the following pieces of information should be specified:

- Title of Document: The title of the document
- Author(s): The list of the contributors
- Affiliation(s): The list of the affiliations of the contributors
- Date of Document: The date when the document has been produced
- OPEN Document: The identification number of the document within the Project (see 1.5.1.9 section for numbering of official documents)
- Distribution: The distribution level of the document (eg.: public/internal, ..)

Title: Quality Plan	Id Number: D8.1

Keyword List: The list of keywords relevant for the document

• Version: The version of the document

#### 1.5 QUALITY CONTROL

Project Planning and control addresses such issues as Estimating, Planning and Tracking of project time and costs. It also deals with the way these will be reported within the Consortium, and to the EC. All of these procedures are defined shall be adhered to for the entire duration of the project.

# 1.5.1 Project Deliverables

All deliverables (documents and software) produced within the OPEN project will be subject to quality control by the team members responsible for its production (task leaders / WP leaders).

The members responsible for reviewing the deliverables will be dynamically set up in such a way that at least one member of the review team of each deliverable should be a person internal to the project but not having contributed to writing the deliverable.

For document deliverables the quality check will examine and assess the following aspects:

- Formal aspects
  - Compliance to standard format
  - Completeness of reference data (authors, versions, dates, references to other documents etc.)
  - Indication of reviewers comments (if applicable) and of the actions taken to comply to reviewers' recommendations
- Content aspects
  - Relevance with respect to the objectives of the document
  - Completeness of the content
  - Readability of the document (structure of the content, cross-references, etc.)

- Schedule and punctuality:

- All deliverables shall undergo a peer-review therefore they must be sent to the coordinator at least *5 weeks* before the date of delivery to the E.C., to enable the review by the experts and the implementation of the recommended corrections by the responsible partner(s).
- Then, the review team will have then 4 weeks to read the deliverable and to provide detailed constructive comments and suggestions, in order to produce an updated version of the deliverable. Such an updated version should be sent to the coordinator and the QM at least *1 week* before the official delivery date to the E.C. in order to enable a further quality check and approval before the official submission.

Document deliverable reviewing will be under responsibility of each partner. Internal reviewing will be set up within the consortium and will be performed as follows:

- Contributions to deliverables: reviewed by task leader
- Overall deliverable: reviewed and quality-checked by task leader/WP leader partners. The team responsible for reviewing the deliverables will be dynamically set up in such a way that at least one member of the review team of each deliverable should be a person internal to the project but not having contributed to writing the deliverable. After the revision, the deliverable will have to be authorised by the QM and the coordinator before official delivery to the E.C.

The coordinator is the sole authorised entity for delivery to the E.C.

### 1.5.1.1 Referencing of documents

Each document shall have a unique identification code, revision number, and date of issue clearly indicated on the outside cover. If the document is confidential, then this should also be clearly indicated.

The following lists documentation types<sup>1</sup> and, where applicable, the security<sup>2</sup> associated with each.

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<sup>1</sup> A short, self-evident description e.g. report, demonstration, conference, specification, prototype...

#### 1.5.1.2 Version control

The issuing Partner shall be responsible for the control of the versions of its project documents and deliverables.

Deliverables can be updated only by the responsible Partner. However, requests to update the deliverable can be made to the responsible and issuing Partner by any Partner. Each new version of the deliverable shall carry the version control number as defined above, and it shall be reviewed and approved as shown below.

A standard template for all deliverables and reports has been defined by the co-ordinating partner and delivered in the document repository.

Any updated deliverable shall be distributed to all partners by its publication on the web repository or using the most appropriate media (normally via e-mail). Each deliverable shall be accompanied by written notification to all partners. This notification shall be in form either of letter or e-mail.

# 1.5.1.3 Revision log

All the Documents and deliverables have three main categories of involved actors (see Table 1):

- 1. Author(s),
- 2. Approver(s),
- 3. Authoriser(s)

#### 1.5.1.4 Version log

PU. Public;

PP: Restricted to other Programme Participants (Including the Commission Services)

RE: Restricted to a group specified by the consortium (Including the Commission Services)

CO: Confidential, Only for Consortium members (Including the Commission Services)

Title: Quality Plan	Id Number: D8.1

The document version must be inserted in any document. A short description illustrating document version and the appropriate date of realisation must be put in the same table.

#### 1.5.1.5 Distribution list

Documents are distributed to the list of the OPEN Consortium members.

# 1.5.1.6 Documentation change control

Should the need to revise and issue a new copy of a deliverable; the following change control procedure shall be followed:

- Anyone can propose change to Author.
- Author updates document (including Revision Log) for comment / review by Approvers.
- QM will check all the quality standards are followed in updating documents.

Once approved document is formally issued, by the publication on the repository, distributed with new revision number.

# 1.5.1.7 External documents

External documents are issued by:

- The EC,
- Sub Contractors/Suppliers other than the project Partners,
- Other companies involved in a project.

Title: Quality Plan	Id Number: D8.1

Papers from Contractors or other companies shall be controlled by the QM, who will make sure that the material delivered complies with the standards agreed.

# 1.5.1.8Template for documents

A template (or model) for the documents will be provided on the project Web site.

#### 1.5.1.9 Communication

#### Correspondence Identification

All official correspondence will be sent by fax or letter and will be identified by:

The EC project number and the project name

- The originating organisation
- The author
- The date

A unique sender reference ID, as shown below:

- Internal technical reports: "OPEN-M-WPX\_1-R1-V1-Quality Plan.DOC" means first version of the first report of Partner M, entitled Quality Plan, in WPX\_1.
- Official Deliverables: "OPEN-Dx.y.z.ext", where x.y.z is the deliverable numbering according to the Description of Work and ext is the file type (doc or pfd or xls).

Copies of all official correspondence will be retained in the originator and recipient files.

### 1.5.1.10 Correspondence Routes

The Coordinator shall be the channel for submitting all documents to the EC, and for general liaison between the partners and the EC. All general communications and all documentation for the commission must be through the Coordinator.

Copies of all official correspondence between partners must be copied to the Project Director.

Communications around the matters of exploitation may be addressed directly to the EC from the partners without the need to go via the Coordinator. This is only acceptable for communications that are commercially sensitive and confidential.

Preparation of notes of meeting must be planned so that they can be dispatched to all parties of interest by the fifth working day following the meeting. Adequate priority for drafting, typing, collating and issuing must be arranged. The meeting notes must contain the date of the meeting, and the date on which the minutes were typed.

A list of contacts for the OPEN project has been prepared and will be made available by the Coordinator Partner in the project Web site. This will be maintained throughout the project and each change will be notified to all points of contact, and an updated list made available centrally.

Title: Quality Plan	Id Number: D8.1

# 2. Table

	Author(s)	Approver(s)	Authoriser(s)
All deliverables	Involved partners	WP leader Experts	QM + Project Coordinator
Contractual document	Coordinator (Contributions by consortium partners)	PMC	Project Coordinator / PM

Table 1 Revision phase