
# D1.3 INTERNAL QUALITY ASSURANCE PLAN

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# Executive summary

Deliverable D1.3, Internal quality assurance plan, defines the general approach to quality assurance and the procedures to be followed for partner documentation and deliverable production. The document describes: communication procedures between participants; procedures for the production, review and distribution of deliverables; procedures for risk assessment and contingency strategies; a general approach to quality standards.

This deliverable has been created specifically for the DiDIY Project, describing the quality procedures to be followed for the duration of the Project.

After its formal release, updated versions will be possible.

| Revision history | | | |
|---|---|---|---|
| **Version** | **Date** | **Created / modified by** | **Comments** |
| 0.0 | 23/03/15 | Massimilano Bromuri | First, incomplete draft, for MO internal circulation. |
| 0.1 | 24/03/15 | Luca Mari | Extensions, fixes, etc.<br>First distribution to SB. |
| 0.2 | 30/03/15 | Luca Mari | Extensions, fixes, etc. |
| 1.0 | 31/03/15 | Luca Mari | Fixes after comments by SB members.<br>Approved version, submitted to the EC Participant Portal. |

## Table of Contents

# 1. Introduction

## *1.1 Purpose of the internal quality assurance plan*

The internal quality assurance plan documents the necessary information required to effectively manage project quality from project planning to delivery. It defines project quality policies, procedures, criteria and areas of application, and roles, responsibilities and authorities.

This document is an integral part of management planning and is closely connected with deliverable D1.1, Project management plan.

It has been prepared in an early stage of the Project, in order to demonstrate and provide the consortium with the assurance that:

- the Grant Agreement requirements and conditions have been reviewed;
- an effective quality planning has taken place;
- the quality system is appropriate.

## *1.2 Application area*

The procedures and criteria specified in this document shall be applied by all partners.

Each partner supervises and checks the work performed by its own staff in accordance with this document.

This document is to be interpreted with reference to:

- the Grant Agreement (GA);
- the Consortium Agreement (CA).

## *1.3 Document evolution procedure*

Different events may cause the content of this document to be modified, for example:

- changes of project characteristics;
- changes in techniques or tools.

Any partner may request changes, but each change must be analysed by the Project Steering Board (SB).

## *1.4 Terms and acronyms*

| | |
|---|---|
| EC | European Commission |
| GA | Grant Agreement |
| CA | Consortium Agreement |
| SB | Steering Board |
| TB | Technical Board |
| PC | Project Coordinator |
| WP | Work Package |
| WPL | Work Package Leader |

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| MO | Management Office |

# 2. Quality management approach

## *2.1 Objectives*

The purpose for managing quality is to validate that the Project deliverables are completed with an acceptable level of quality. Quality management assures the quality of the Project deliverables and the quality of the processes used to manage and create the deliverables.

The quality management identifies these key components:

| **Objects of quality review** | **Quality measure** | **Quality evaluation methods** |
|---|---|---|
| Project deliverables | deliverable quality standards;<br>completeness and correctness criteria | quality control activities |
| Project processes | process quality standards;<br>stakeholder expectations | quality assurance activities |

The following is a brief explanation of each of the components of the internal quality assurance plan:

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| Project deliverables and processes | the key Project deliverables and processes subject to quality review |
| deliverable quality standards<br>and<br>completeness and correctness criteria | the quality standards that are the measures used to determine a successful outcome for a deliverable;<br>the completeness and correctness criteria describe when each deliverable is complete and correct as defined by the customer; deliverables are evaluated against these criteria before they are formally approved |
| process quality standards<br>and<br>stakeholder expectations | the quality standards that are the measures used to establish if Project work processes are being followed;<br>stakeholder expectations describe when a Project process is effective as defined by Project stakeholders; an example is the expectation to be regularly informed monthly of Project status |
| quality control activities | the quality control activities that monitor and establish that Project deliverables meet defined quality standards |
| quality assurance activities | the quality assurance activities that monitor and establish that the processes used to manage and create the deliverables are followed and are effective |

## *2.2 Responsibilities*

Effective collaboration requires Project co-ordination, clear rules for communication and unambiguous mechanisms for decision-making. These principles are detailed in deliverable D1.1, Project management plan. Whilst everyone in the Project has a responsibility to deliver high quality deliverables and project outcomes, the key project roles in this area are as follows.

### 2.2.1 Project Coordinator

[CA – Section 6]

[GA – Annex I Part B – 2.3.2 Management structure and procedures]

The Project Coordinator (PC) main task will be to ensure coordination between all partners as well as having an overall responsibility on the organization, plan and control of the Project. The PC will also serve as interface with the European Commission to communicate and report technical, financial and other information related to the development of the Project.

All management structure boards, including the Steering Board and the Technical Board, will be chaired by the PC.

### 2.2.2 Steering Board

[CA – Section 6]

[GA – Annex I Part B – 2.3.2 Management structure and procedures]

The Steering Board (SB) is the supervisory body for the Project execution, being the ultimate decision-making body of the Consortium. More specifically, the SB is responsible for:

- monitoring towards the objectives of the Project;
- decisions on significant modifications of the Project work plan;
- any unforeseen subjects that may come up affecting the Consortium.

A mailing list, sb@didiy.eu, has been set up and shall be maintained throughout the duration of the Project to support the communication among members of the SB.

### 2.2.3 Technical Board

[GA – Annex I Part B – 2.3.2 Management structure and procedures]

The Technical Board (TB) is responsible for the scientific strategy of the Project in the long term as well as its execution and for the quality control of both tasks performed and results obtained.

The TB will be composed by all the Work Package Leaders (WPLs) and the PC, and will cope with the organization of the scientific and technical work of each WP along the Project (i.e., review the work performed in each period and planning the activities for the next one). In particular, the TB is in charge of:

- achieving the technical objectives of the WPs;
- reviewing the WP plans;
- managing the tasks of each WP;
- quality control and performance of generated data/procedures;
- making technical decisions in each WP;
- informing the SB of decisions, milestones and potential problems.

A mailing list, tb@didiy.eu, has been set up and shall be maintained throughout the duration of the Project to support the communication among members of the TB.

### 2.2.4 Work Package Leaders

[GA – Annex I Part B – 2.3.2 Management structure and procedures]

Each WPL is responsible for the technical and scientific aspects of specific work related to her/his individual WP.

Within her/his respective WP and for the duration of the WP, each WPL has the responsibility to achieve all the planned deliverables within the schedule and with the contractually allocated financial and human resources. The WPL shall work in close collaboration with all WP participants, as well as with other WPLs whose work results could be interrelated. S/he is expected to identify risks as early as possible, be responsible for the implementation of solutions for problems and followup to ensure effective remedies. The WPL shall report work progress and achievements to the PC through email or teleconference means.

## *2.3 Critical Path Analysis*

To understand where and when key quality reviews need to take place, a critical path analysis has been undertaken to identify the major dependencies between WPs. This analysis shows the following key milestones [GA – Annex I Part A – 1.3.4. WT4 List of milestones]:

| Milestone number | Milestone title | WP number | Lead beneficiary | Due date (month) | Means of verification |
|---|---|---|---|---|---|
| MS1 | Project startup | WP1, WP2, WP3, WP4, WP8 | LIUC | 6 | This milestone will be verified in terms of Project coordination setup (WP1); knowledge framework completed (WP2); background knowledge for analysis acquired (WP3 and WP4); basic dissemination infrastructure setup (WP8) |
| MS2 | Knowledge framework revision | WP2, WP3, WP4, WP8 | LIUC | 15 | This milestone will be verified in terms of first revision of knowledge framework completed (WP2); analytical research setup completed (WP3 and WP4); dissemination |

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| | | | | | infrastructure fully operative (WP8) |
| MS3 | Analytical research completed | WP3, WP4, WP5, WP6, WP7 | LIUC | 24 | This milestone will be verified in terms of analytical research completed (WP3 and 4); exploratory research fully operative (WP5 and 6); integrative modelling fully operative (WP7) |
| MS4 | Final knowledge framework release | WP2, WP3, WP4, WP8 | LIUC | 30 | This milestone will be verified in terms of final revision of knowledge framework completed (WP2); analytical research setup completed (WP3 and WP4); dissemination infrastructure fully operative (WP8) |

# 3. Project quality control

## *3.1 Quality methods*

The focus of quality control is on the deliverables of the Project. Quality control monitors Project deliverables to establish that the deliverables are of acceptable quality and are complete and correct.

The deliverables will be assessed for completeness and fitness through an organized quality inspection to be conducted both during the development of deliverables and at the end to mark the completion and approval of deliverables.

The deliverables of the Project to be tested for satisfactory quality level and the partners responsible for reviewing such deliverables are listed in [GA – Annex I Part A – 1.3.2 WT2 list of deliverables].

## *3.2 Quality assurance*

The focus of quality assurance is on the processes adopted in the Project. Quality assurance ensures that Project processes are used effectively to produce quality project deliverables.

The key factor of this action are:

- quality standards and stakeholder expectations for that process;
- quality assurance activity – such as a quality audit or reviews – that will be executed to monitor that Project processes are properly followed;
- how often or when the quality assurance activity will be performed.

## *3.3 Deliverable development*

Each deliverable shall be developed according to the following process.

The WPL or the partner responsible for the deliverable presents, with adequate timing, the proposed structure of the deliverable as well as the task allocation between partners to the PC for approval.

Once the proposal is confirmed by the PC, all partners operate to provide appropriate content to the WPL or the partner responsible for the deliverable.

Each deliverable is then reviewed by the WPL and then by the PC, in order to assess that it is consistent with Project objectives. According to the result of the review, the deliverable is either approved or refused by the PC, who is responsible for the final formal approval for submission to the EC. If it is refused, the deliverable is to be modified taking into account the remarks and then a new review is carried out. The deliverables shall be delivered by the PC to the EC [D1.1 – 3.2.4 Document review and delivery].

## *3.4 Deliverable quality indicators*

At the beginning of the deliverable production process, the PC shall evaluate the proposed structure of the deliverable proposed by the WPL or the partner responsible for the deliverable. The PC shall checks the following indicators:

- the proposed contents are in accordance with the objectives stated in the Project description;
- the allocation of the tasks is realistic and consistent with the roles of the partners in the WP;
- the timetable proposed is realistic and matches the deadline highlighted in the Project description;

During the production of the deliverable, there may be other intermediate phases where the PC is asked to review partial drafts, but because of time constraints this cannot be established as a rule. During the whole process of draft production, each partner shall be responsible for checking the quality of the deliverable as it progresses.

The PC shall evaluate the final draft of each deliverable according to the following quality indicators:

- the deliverable is in accordance with the objectives stated in the GA – Project description;
- the deliverable offers complete documentation on the work done in the corresponding WP;
- the deliverable is compliant with the templates and editing guidelines as outlined within D1.1, Project management plan;
- the deliverable is clear and legible;
- the deliverable is complete;
- the deliverable is useful for the target reader/audience;
- version history is clear and well documented.

## *3.5 Work Package progress*

Each WPL shall be in charge of assuring that the work in the WP is carried out according to schedule and that the expected deliverables are produced.

Each WPL shall be responsible for the technical and scientific aspects as well as for the day-to-day management of specific work related to the WP.

Each WPL shall coordinate the implementation of WP activities as defined in the work plan.

Within her/his respective WP and for the duration of the WP, each WPL shall have the responsibility to achieve all planned deliverables.

The progress of work will be tracked with the following objectives:

- the activity corresponds to Project specifications;
- all steps of development activity are fully documented.

### *3.6 Documentation management*

The documentation management procedure defines standard rules and procedures related to documentation production and is applicable:

- by all partners,
- for all deliverables to European Commission.

The procedure is described in [D1.1 – 3. Documentation management – 4. Archiving and storing – 5. Internal Collaboration Tools].

## 4. Risk management

A detailed analysis of the risks that may potentially affect the smooth Project course is in [GA – Annex I Part A – 1.3.5 WT5 Critical Implementation risks and mitigation actions], as follows.

| **Risk number** | **Description of risk** | **WP number** | **Proposed risk-mitigation measures** |
|---|---|---|---|
| R1 | Problems of coordination | WP1 | Roles for each partner have been clearly identified. Also, the Consortium has been assembled on the basis of its complementarity of skills and fields of actions. This element is a key factor to prevent this risk. |
| R2 | Low performance of partners / commitment decreasing | WP1 | The costs and benefits of the proposal have been adequately presented to Project partners and they are strongly committed to the proposed objectives. Nevertheless, commitment problems might arise and will be discussed and solved in the Consortium bodies. All work will be regularly documented and stored. |
| R3 | Not to be able to intervene with corrective action | WP1 | The Quality assurance and risk management plan will be structured to constantly monitor the progress and allow for flexibility. |
| R4 | Divergence on how to run | WP1 | The Consortium agreement will cover conflict |

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| | the Project | | situations. The first objective to resolve a conflict would be to reach a consensus. However, in case of prolonged divergences, the approval of a two-thirds majority of the partners will be considered conclusive, in order to avoid deadlock in the Project operational progress. |
| R5 | Planned budget is not adequate or balanced | WP1 | The initial budget is in accordance with the planned activities. Continuous monitoring and coordination of project activities are required to avoid problems. |
| R6 | Delays in report delivery by some partners | WP1 | All activities and costs incurred are to be regularly documented and reported to the Coordinator in order to comply with the EC rules but also to assure the Project runs on track. The Management Office will take care of identifying the cause, solving with the interested party potential delays and provide due assistance to the less experienced partners. |