RobMoSys

H2020—ICT—732410

RobMoSys

COMPOSABLE MODELS AND SOFTWARE FOR ROBOTICS SYSTEMS

DELIVERABLE D1.1:

QUALITY MANAGEMENT PLAN

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THIS PROJECT HAS RECEIVED FUNDING FROM THE *EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME* UNDER GRANT AGREEMENT NO. 732410

Project acronym: RobMoSys

Project full title: Composable Models and Software for Robotics Systems

Work Package: WP 1

Document number: D1.1

Document title: Quality Management Plan

Version: 1.0

Due date: March 31th, 2017

Delivery date: 07/04/2017

Nature: Report (R)

Dissemination level: Public (PU)

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Executive Summary

The purpose of this manual is to define the quality indicators, tools and processes to be applied during the RobMoSys project in order to ensure the quality of all project deliverables, support and track the successful and timely implementation of the project's objectives.

Content

1 Introduction

The purpose of this manual is to define the quality indicators, tools and processes to be applied during the RobMoSys project in order to ensure the quality of all project deliverables, support and track the successful and timely implementation of the project's objectives. This deliverable outlines the project's Key Performance Indicators (KPIs), which are specific and measurable in alignment with project objectives and main milestones. The KPIs form the basis for the Quality Assurance Task (T1.3) and all quality control procedures that will be established. The definition of KPIs includes enumerated performance indicators, framework of metrics with associated targets for each applicable timeframe. Monitoring of KPIs will be continuous and will be reported annually with the Project Periodic Reports.

The present document, thus, defines the main project's quality policies, procedures, criteria for and areas of application, roles, responsibilities and authorities.

It describes the quality procedures which are going to be used to monitor the project's working processes and ensure smooth project progress.

The structure of this document is as follows:

- **Section 2** briefly introduces the RobMoSys project and describes its nature and objectives.
- **Section 3** gives an outline of the management structure of the RobMoSys project together with the project bodies, the main roles and the responsible persons.
- **Section 4** contains a brief overview of the work packages and their major responsibilities together with the responsible lead participants.
- **Section 5** presents in detail the major principles of the Quality Assurance, Key Performance Indicators and Risk Management, which are set for the RobMoSys project in order to assess the quality of the project process and results.

2 Brief Description of the Project

RobMoSys is aimed at building an open sustainable ecosystem around public, royalty-free and implementation-driven software platform standards that will ease the development of new smart applications in multiple sectors.
In that respect, the project fulfils two main complementary missions:

- Establishing a common methodology based on the use of composable software models; that is, making sure that no (so called "hidden") assumptions are being introduced that cannot be relied upon at runtime.
- Nourishing an ecosystem of methodology-based tool chains to support and automate the implementation of the methodology; that is, the focus is on parts of the (vertical) integration of robotics systems, showing how such development and integration could be done well and consistently, rather than on trying to cover all possible needs in all possible directions in which the wider community is interested in.
  Thus, RobMoSys' objective is to organize the platforms for digitization of robotic systems by establishing a common methodology based on the use of composable software models and by nourishing an ecosystem of methodology-based tool chains to support and automate the implementation of the methodology.

3 Outline of the Project Management Structure

The project structure is designed to handle the most important aspects of management, namely decision-making, IPR policy, technical and administrative management, advisory functions and assessment. The overall management of the project will be facilitated by a consistent and formal approach. In any event, this detailed internal Project Plan defined in the preliminary stage of the project supports the contractual Work Plan of the project and to form the basis of the administrative structures and procedures to be used within its management. The reporting lines and decision making procedures are described in detail in the following sections.

3.1 Project Bodies and Main Roles

Project Coordination Team (PCT)

The project coordination team will be responsible for the planning, execution and controlling of the project.

The PCT is composed of:
Project Coordinator (PC), which acts as the primary contact point for the European Commission and is responsible for the overall project coordination and management. This comprises reporting to the Commission on progress, changes in the project consortium, or the project work plan as well receipt of feedback on the research results of each work package.
The main management task of the project coordinator is to ensure that the work packages and tasks achieve the expected results and the project makes adequate and timely progress towards achieving its objectives based on these results. Furthermore, the coordinator will convene and chair the regular technical meetings of the project steering committee.

Finally, the PC will be responsible for ensuring that the consortium agreement including issues of intellectual property rights and any other legal documents are properly prepared and managed.

Technical Manager. This role will ensure that the scientific and technological objectives of the project are met. The Technical Manager (or Scientific Manager) will cooperate closely with Work Package Leaders and deliver a really significant contribution to the scientific and technology coordination of the project.
Innovation, Dissemination & Exploitation Board (IDEB). The IDEB reports to the coordinator, collaborates with the steering committee, and is concerned with all matters relating to the dissemination and communication of the results of RobMoSys, the management of the knowledge acquired in the course of the project, innovation aspects, and quality of provided services. Furthermore, it is concerned with all matters relating to the exploitation of the results of the project, the management of the knowledge acquired during the project, IPRs. The members of the IDEB will primarily be selected from the commercial partners, but with a representation from the research partners, being IPR owners. **The Innovation, Dissemination & Exploitation Board is headed by the Innovation, Dissemination & Exploitation manager.**
Quality Assurance Supervisor (QAS). The QAS will cooperate with the PC, with the responsibility to ensure that an effective Quality Plan is developed and to ensure that the quality assurance function is being effectively executed. Each work package Leader will assume the role of Quality Controller and take responsibility within that work package for implementing and executing the quality control procedures defined in the Quality Plan. A number of Quality Assessors will be designated from the staff of the partners of the Consortium, to take responsibility for assessing quality. The Quality Assessors will conduct their reviews on a defined periodic basis, and will report their findings to the PC.

Project Coordination Team

Role	Partner	Name	Contact Details
Project Coordinator	Sara Tucci	CEA	sara.tucci@cea.fr
Technical Manager	Christian Schlegel	HSU	schlegel@hs-ulm.de
Innovation, Dissemination and Exploitation Manager	Gael Blondelle	EFE	gael.blondelle@eclipse.org
Quality Assurance Supervisor	Christophe Leroux	CEA	christophe.leroux@cea.fr

Table 1: Project Coordination Team

Project Steering Committee

The project steering committee is the major decision-making committee of the RobMoSys project. It comprises one **principle investigator** (PI) from each project partner. The steering committee will meet each half a year. The purpose of the meetings is to discuss in detail the progress of the project and to decide its general technical direction. The steering committee will decide, whether the progress in each work package is acceptable, and if necessary, it will decide to amend the work plan, shift resources or initiate contingency actions. The steering committee will further discuss and decide on the project nuances, issues of intellectual property rights, and major disputes. In cases, where the project coordinator feels the need to discuss urgent matters with the whole steering committee in addition to the regular meetings (2 times per year), he will convene an additional electronic meeting of the steering committee. Each member of the steering committee has one vote, which may be made by proxy, if necessary. Preferably, decisions of the steering committee are taken by consensus. If this turns out not to be possible, decisions will be taken by majority vote with the project coordinator retaining the casting vote.
In cases, where the PC brings forward arguments that a decision of the steering committee may jeopardize the whole project by deviating from targeting the outcomes expected by the European Commission, the implementation will be delayed until feedback from the Commission has been received. The project coordinator will be responsible to seek advice from the commission immediately after such a decision has been made and embargoed.

Work Package Leaders

As outlined in the work plan, for each work package a work package leader (WPL) has been allocated. WPLs are senior investigators of the project partners. The work package leaders report directly to the project coordinator and are responsible for monitoring and reporting on progress in their work package and for the production and on the timing of the deliverables.

Work Package Task Leaders

For each task in a work package task leader (TL) will also be allocated. Work package task leaders will also organize meetings of the corresponding task teams, whenever it appears to be necessary to discuss the further progressing of work in the work package

4 Work Packages Description

Work Package 1: Project management and Quality assurance (CEA). This WP guarantees the successful realization and conclusion of the project including the project administration and control, risk management, problem handling and quality assurance on management levels.

Work Package 2: Methodology, (meta)models, tooling (HSU). This WP provides the modeling foundations for the project: (meta-) meta-models and the methodology to other technical work packages. Prototypical tooling and tool-chains are also included in this WP.

Work Package 3: Basic Building Blocks (KUL). This WP provides the models and the prototypical tooling for motion and perception stacks. The WP will design, write and documents as well the related prototypical software. Modeling and the methodology to obtain software is 100% compliant to specifications defined in WP 2. More complete modeling, tooling and software is obtained through the first wave of Open Calls.

Work Package 4: Pilots (SIE). This WP provides the models and the prototypical software for Pilot Cases. Modeling and the methodology to obtain software is 100% compliant to specifications defined in WP2. More complete modeling, tooling and software to showcase Pilot applications are obtained through the second wave of Open Calls.

Work Package 5: Open Calls (TUM). This WP manages the process and procedures to run the two rounds of Open Calls. Tier-1 workshops are also included in this WP to help project members to prepare and monitor the Open Calls.

Work Package 6: Dissemination (TUM). This WP includes all the dissemination activities aiming at securing adoption in the industrial and software community.

Work Package 7: Exploitation (CEA). This WP includes exploitation-related activities as the establishment of an exploitation plan and sustainability activities aiming at engaging the eco-system behind the duration of the project. Business models and strategies for sustainability will be explored, including the possibility to create an organization (e.g. foundation) supporting the developments of RobMoSys after the project lifetime.

Work Package 8: Ethics Requirements (CEA). This WP sets out the 'ethics requirements' that the project must comply with and monitors their fulfillment.

List of work packages

Work Package number	Work package title	Lead participant name
WP1	Project Management and Quality Assurance	CEA

WP2	Methodology, (Meta)Models, Tooling	HSU
WP3	Basic Building Blocks	KU Leuven
WP4	Pilots	SIEMENS
WP5	Open Calls	TUM
WP6	Dissemination and Community Building	TUM
WP7	Exploitation	CEA
WP8	Ethics Requirements	CEA

Table 2: List of the project's work packages

5 Quality Assurance, Key Performance Indicators and Risk Management

5.1 Quality Assessment

RobMoSys will assess its progress via a number of internal and external control procedures, including regular meetings at key project milestones, project reviews and audits and a quality management plan.

For the project deliverables, the RobMoSys project adopts at least the following quality criteria:

- Timeliness;
- Balanced structure with respect to content and resources;
- Appropriate usage of tables, figures;
- Usability, ease of implementation, appropriate user guide;
- Measurement of project progress.

Quality assurance actions include the following: standard format for given types of documents, coding standard, documented process for software developments that will include design and code reviews, conformance to design with reviewed test plans, management of all documents and software by a configuration control system, plan for control actions, methods, standards and procedures for

- Organization of working teams with roles and responsibilities of each participant,
- Time schedules, development, testing, acceptance and maintenance quality criteria, procedures for acceptance and quality control.

At the beginning of the project and as a result of the deliverable D1.1: Quality Management Plan (due Month 3), the project's Key Performance Indicators are defined in detail for each WP with specific and measurable KPIs. The KPIs will form the basis for the Quality Assurance Task (T1.3) and all quality control procedures that will be established. The definition of KPIs includes enumerated performance indicator with associated targets for each applicable timeframe. Monitoring of KPIs will be continuous and will be reported annually with the Project Periodic Reports.

5.2 Deliverable Tracking and Quality Assurance

To ensure the quality of Deliverables, an internal review process has been defined. The main goal of this process is to establish internal feedback by partners who did not directly participate as editor to the Deliverable before submitting the Deliverable to the European Commission. The review process is shown in the Figure below.

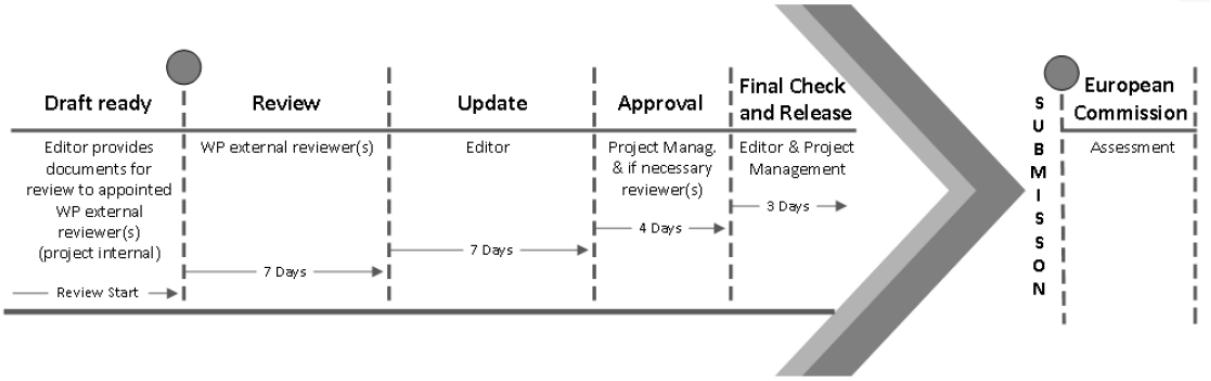

Figure 1: Internal Reveiw Process

The table below presents an overview of the deliverables, related work packages, their due dates, the beneficiary in charge of drafting the deliverable (Editor), the beneficiary in charge of reviewing (Reviewer) and giving feedback to Editor, and the beneficiary who will act as a "rapporteur" and provide a consensus report in case that Editor and Reviewer are in conflict and cannot reach agreement.

Workpackage number	Deliverable number	Deliverable name	Due date	Lead Beneficiary	Contributors	Beneficiary in charge of revision	Rapporteur
WP1	**D1.1.**	Quality Management Plan	**M3,** M9, M15, M21, M27, M33	CEA	ALL	TUM	PC
	D1.2.	Periodic Progress Report	**M6** , M18 M30 M42	CEA	ALL	TUM	PC
	D1.3	Annual Report	**M12** , M24, M36	CEA	ALL	TUM	PC
	D1.4	Final Project Report	M48	CEA	ALL	TUM	PC
WP2	**D2.1**	Modeling Foundation Guidelines and Meta-Meta-Model Structure	**M6**, M18, M33	HSU	CEA,KUL,SIE,TUM	PAL	PC
	D2.2	Initial preparation of (meta-)models, prototypical DSLs, tools and implementation	M6	HSU	CEA,KUL,SIE,TUM	PAL	PC
	D2.3	Improved (meta-)models, prototypical DSLs, tools and implementations	M27	HSU	CEA,KUL,SIE,TUM	COMAU	PC
	D2.4.	Final (meta-)models, prototypical DSLs, tools and implementations	M48	HSU	CEA,KUL,SIE,TUM	COMAU	PC

WP3	**D3.1.**	First motion and perception stack contributions to Call text for third party funding	M6	KUL	CEA,KUL,TUM	SIE	PC
	D3.2	First draft of software for motion, perception stacks and world model stacks	M18	KUL	SIE,CEA,KUL,TUM	PAL	PC
	D3.3	Second motion, perception and world model stacks contributions to Call text for third party funding	M27	CEA	SIE,CEA,KUL,TUM	PAL	PC
	D3.4	Improved software for full motion, perception and world model stacks	M36	KUL	SIE,CEA,KUL,TUM	COMAU	PC
	D3.5	Prototype tooling for motion, perception and world model	M36	HSU	CEA,KUL,TUM	SIE	PC
	D3.6	Composable software for full motion, perception and world model stacks	M48	KUL	SIE,CEA,KUL,TUM	PAL	PC
	D3.7	Composable tooling for motion, perception and world model	M48	HSU	CEA,KUL,TUM	SIE	PC
	D3.8	Full documentation of motion, perception and world model stacks	M48	KUL	SIE,CEA,KUL,TUM	COMAU	PC
WP4	**D4.1**	First report on progress of Pilot Cases	M12	KUL	SIEMENS , CEA, HSU, TUM, PAL, COMAU	EFE	PC
	D4.2	Second report on progress of Pilot Cases	M24	KUL	SIEMENS , CEA, HSU, TUM, PAL, COMAU	EFE	PC
	D4.3	Third report on progress of Pilot Cases	M36	KUL	SIEMENS , CEA, HSU, TUM, PAL, COMAU	EFE	PC
	D4.4	Final report on progress of Pilot Cases	M48	KUL	SIEMENS , CEA, HSU, TUM, PAL, COMAU	EFE	PC
WP5	**D5.1**	Open Call I preparation	M6	TUM	CEA,HSU,KUL	EUR	PC
	D5.2	Open Call II preparation	M27	TUM	CEA,HSU,KUL	EUR	PC
	D5.3	Tier-1 conclusive remarks and recommendations	M48	CEA	TUM,HSU,KUL	SIE	PC
	D5.4	Evaluation and selection report for Open Call I	M12	TUM	CEA,HSU,KUL	SIE	PC
	D5.5	Evaluation and selection report for Open Call II	M33	TUM	CEA,HSU,KUL	COMAU	PC
	D5.6	Progress Report on Open Call I Experiments	M18	TUM	CEA,HSU,KUL	EUR	PC
	D5.7	Final Report on Open Call I Experiments	M27	TUM	CEA,HSU,KUL	EUR	PC
	D5.8	Progress report on Open Call II Experiments	M39	TUM	CEA,HSU,KUL	EFE	PC
	D5.9	Final report on Open Call II Experiments	M48	TUM	CEA,HSU,KUL	EFE	PC

WP6	D6.1	Dissemination plan (updated within the first month of each year, on an annual basis)	**M3,** M13,M25, M37	TUM	ALL	CEA	PC
	D6.2	Foundation Supporters	M48	EUR	EFE,EUR,COMAU,PAL,SIE	CEA	PC
	D6.3	Eclipse project and Eclipse project proposal	**M12** ,M24, M36,M48	EFE	HSU,KUL,CEA	EUR	PC
	D6.4	Reports of experts workshops	**M12** , M24, M36,M48	HSU	KUL,TUM,CEA	SIE	PC
WP7	D7.1	Exploitation Plan (Annually Updated)	**M12** ,M24, M36,M48	SIE	ALL	HSU	PC
	D7.2	Business Models for the Ecosystem (Annually Updated)	**M12** ,M24, M36,M48	CEA	EFE,EUR,TUM	KUL	PC
	D7.3	Sustainability Plan (Annually Updated)	**M12** ,M24, M36,M48	CEA	EFE,EUR	KUL	PC
WP8	D8.1	Requirement No.1	**M12** ,M24, M36,M48	CEA		TUM	PC

Table 3: List of the deliverables

As the table 3 shows, in potential conflict situation and disagreement between the Editor (lead beneficiary) and the Reviewer (beneficiary in charge of revision), the resolution of the conflict will be escalated in the following steps:

- First, the beneficiaries will inform the WP leader about the conflict occurred.
- The WP leader will organize the WP team to discuss the issue. In case of disagreement or no decision the team will inform the Project Coordinator (PC). The latter will try to resolve the conflict or disagreement.

Table 4 gives an overview of the significant project milestones including related WPs, lead beneficiaries responsible for reaching them, and estimated date. To ensure the smooth and successful progress of the project, the Work Package Leaders will provide a short report with the description of the process after the milestone has been reached. This report is to be submitted both to the Project Coordinator and to the Quality Assurance Supervisor. In case the milestone has not been reached, the report should contain the reasons with the new estimated date.

Overview of the project milestones

Milestone number	Milestone name	WP	Lead beneficiary	Estimated date
M1	Management structure finalized	1	CEA	4
M2	Consortium has met (Kickoff workshop)	1	CEA	4
M3	Contract Ready	1	CEA	4
M4	Personnel has been employed	1	CEA	4
M5	Work has been started	1	CEA	4
M6	Management structure in place	1	CEA	4
M7	Specs 4 Building Blocks	2,3,5		6
M8	Free Access Webinar Platform Launched	6	TUM	6

M9	Communication to Applicants (Building Blocks)	1,5		12
M10	Completion of projects from open calls with their demos (Open Call I)	5	TUM	24
M11	Specs 4 Pilots	2,4,5		27
M12	Communication to Applicants (Pilots)	1,5		33
M13	Completion of projects from open calls with their demos (Open Call II)	5	TUM	45
M14	Final Specs	2	HSU	48

Table 4: Overview of the project's milestones

5.3 Key Performance Indicators

The Key Performance Indicators reflect those aspects, which are important to make RobMoSys a success. Monitoring of the progress of the project objectives will be done through Key Performance Indicators (KPIs), which will be monitored annually.

The Key Performance Indicators reflect those aspects, which are important to make RobMoSys a success.

During the General Assembly at M3, the consortium collectively decided to keep the number of KPI small, preferring to have a small number of strong KPIs. Strong KPIs imply ambitious target values in the area of dissemination, exploitation, and sustainability since the success of the project is directly related to the uptake of the proposed approach.

KPIs are presented in the following table, describing:

- Performance Indicator Identifier
- Description
- Related WP
- Target Value
- How to track the performance and when
- Beneficiary in charge of confirming that the indicator/target has been met

Id	Description	WP	Target Value	Tracking	Milestones	Beneficiary in charge
Coaching Services						
KPI.CS.1	N° of companies requesting RobMoSys coaching services (individual solicitations of companies interested to adopt and	6,7	Positive trend per year (positive slope in the trend line)	Trace in the Tuleap Collaborative Tool	Report KPI in progress report	KUL

	deploy the RobMoSys approach internally)					
KPI.CS.2	N° of EU projects requesting RobMoSys coaching services (individual solicitations of projects interested to adopt and deploy the RobMoSys approach internally)	6,7	Positive trend per year (positive slope in the trend line)	Trace in the Tuleap Collaborative Tool	Report KPI in progress report	CEA
KPI.CS.3	N° of organizations and individuals participating to Educational Workshops	6	Positive trend per year (positive slope in the trend line)	Trace in the Tuleap Collaborative Tool	Report KPI in progress report	KUL
Community Involvement						
KPI.CI.1	Coverage of Open-call Topics in terms of N° of submitters per Topic	5	No significant unbalance in the distribution of participants w.r.t. proposed topics and non-zero participation per each topic.	Trace in the Open-call Monitoring Tool	Report KPI in progress report	TUM
KPI.CI.2	Interested organizations for RobMoSys sustainability as N° of "potential" founders	7, 6	Positive trend per year (positive slope in the trend line)	List of foundation supporters in D6.2	Report KPI in Progress Report	EUR

KPI.CI.3	Software Community activity expressed as trend in the N° of Committers, Downloads, Usage, Regularity of releases	6	Positive trend, start to be monitored during the experiments of the first Open-call	Trace in software repositories used (Eclipse, GitHub, etc)	Report KPI in Progress Report	EFE
Tooling Support (Platform)						
KPI.TS.1	Coverage of the technical scope in terms of the distribution of tools supporting the meta-model depending on the ratio of the meta-model covered (e.g. N tools supporting 10%, M tools supporting 20%, …K tools supporting 100%) with distinction between commercial and open-source tools	2,3	Positive trend in the number and in the coverage for each tool, at least one open-source tool covering 100% of the meta-model (reference implementation)	Trace in the Monitoring Tool, Tuleap	Report KPI in Progress Report	CEA
KPI.TS.2	Coverage of the technical scope in terms of the distribution of tools providing V&V and code generation features	2,3	Positive trend in the number and in the coverage for each tool, at least one open-source tool covering minimal V&V and code-generation features	Trace in the Monitoring Tool, Tuleap	Report KPI in Progress Report	HSU

			(reference implementation)			

Table 5: List of Key Performance Indicators

5.4 Risk Management

To guarantee the achievement of the objectives of the RobMoSys project, it is essential to identify and understand the significant project risks.

The continuous risk management process is based on the early identification of, and the fast reaction to, events that can negatively affect the outcome of the project. The frequent meetings of the project bodies therefore serve as the main forum for risk identification. The identified risks are then analyzed and graded, based on impact and probability of occurrence.

Technical risks were analyzed and graded, based on their probability of occurrence in order to answer the governing question: "How big is the risk and what its impact is?" Knowing how a risk impacts the project is important as several risks of the same type can be an indication of a larger problem.

The risks defined in the DoA, will be graded into low/medium/high risk levels.

low	low probability of occurrence and low impact
medium	low/high probability of occurrence and High/low impact
high	high probability of occurrence and high impact

The risks will be monitored on a regular basis and an updated risk table will be provided within the Periodic Reports.

In addition to the above-mentioned tools and procedures, the project partners' profound experience with H2020 projects implicates a high level of competence, expert knowledge, skills and qualifications, which further increases the quality of the project work. Furthermore, besides these hard skills, also soft skills, such as motivation, team spirit, and interpersonal interaction contribute to high quality project performance.

Table 6 shows the list of risk identified for the project.

Risk Number	Description of risk	WP Number	Proposed risk-mitigation measures
1	Unclear work and/or tasks responsibilities (Impact High, Risk Low). Specific tasks and – in case of core tasks – the whole project may be delayed.	WP1	The workplan of RobMoSys shows clear responsibilities of Work Packages and Tasks. Retain payments to beneficiaries payments are linked to timely delivery. Regular meetings (Video, Skype, phone and in person) to discuss the workflow openly.
2	RobMosys's visibility too low (Impact High, Risk Low). RobMoSys proposes different instruments (Tier- 1, Open-Calls, RiF and CoC), that could cause some dispersion and loss of efficiency in the global communication.	WP6	A clear communication plan including presentations at broad-spectrum and specific events will likely resolve this problem – just as we did very successfully within ECHORD and ECHORD++. Outreach to new potential communities is also secured by specific actions ca ried out by two foundations that hopefully will have a multiplier effect in their respective already established communities. The first list of members gathered for the Tier-1 group already witnesses the interest that the different communities may have in the project. Platforms and facilities will be chosen depending on the requirements and recommendations gathered during the project life- time.
3	Lack of acceptance by stakeholders (Impact High, Risk Low). RobMoSys proposes a technical solution based on a model-driven approach that can be tailored to stakeholder specific needs, but practitioners could refuse more formal, not code-based approaches.	WP6	Special information events, targeted campaigns and training will be undertaken. The project aims at show- ing the benefits of the approach since the very beginning through trials during the Tier-1 workshops especially targeted to software developers. Feedback will be taken into account to remove blocking points. RobMoSys will create related software projects in different platforms, such Eclipse, and web-based repositories, such as GitHub.
4	Lack of visibility of Open Calls with respect to SME (Impact Low, Risk Medium). The Open Call visibility is secured by an intensive dissemination and communication activity, however, the funding rate could prevent SMEs to apply.	WP5	To this end RobMoSys plan to intensively interface with Fortissimo 2 project, the first to run an I4MS project with Open Call, and that is successfully attracting a huge amount of SMEs.
5	Beneficiary bankruptcy (Impact Medium, Risk Low). Potential risk of a failure of a specific cascade funding project.	WP1,WP5	Rapid alert system due to additional reporting duties for beneficiaries with weak financial validation. Replace beneficiary Financial risk is safeguarded by guarantee fund. The Open Call Selection Process will steer at getting more than one project on a specific technical objective that must be achieved.
6	Delayed start of experiments and other instruments (Impact High, Risk Medium-High). No sound planning of resources and timeline possible for beneficiaries. Experiments cannot deliver the intended results on time. Project duration likely to be extended (cost- neutral). Bad image of the project and demotivation of SMEs to participate in future EU- funded projects.	WP5	Amendments. Communication of this timetable to the beneficiaries. Beneficiaries that do not meet start deadlines will be postponed to the next batch or replaced. Beneficiaries with complete documentation can start their experiments without prior signature of Amendment.

Table 6: List of Risks

6 Conclusions

This Project Quality Plan demonstrates that quality aspects are taken into account in a variety of processes and activities within the RobMoSys project. The project aims at obtaining a high degree of quality, where outcomes are achieved in terms of the effectiveness and efficiency of working practices, as well as products and standards of project deliverables and outputs. This plan seeks to establish the procedures and standards to be employed in the project, and to allocate responsibility for ensuring that these procedures and standards are followed. The project management team (monitors that the above-described processes are fulfilled). In case of any deviations to the planned work the management team is in charge of taking necessary mitigation measures. The plan is effective throughout the lifetime of the project, and open to revision if necessary.