



Deliverable D1.1

**Project Handbook, Quality Plan
& Risk Management**

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LIST OF ABBREVIATIONS

CUT: Cyprus University of Technology

ERISS: European Research Institute in Service Science

JADS: Jheronimus Academy of Data Science

JRA: Joint Research Activities

PMS: Project Management Structure

SC: Steering Committee

PC: Project Coordinator

STCTM: Scientific-Technical Content and Training Manager

DELIC: Dissemination, Exploitation and Link with the Industry Committee

EXECUTIVE SUMMARY

The purpose of the **Project Handbook, Quality Plan & Risk Management** document is to provide a single point of reference on the quality that will be governed during the course of the DESTINI project. The deliverable in hand defines the project organization, roles and responsibilities, with emphasis on the quality control and quality assurance activities that will be carried out in relation with risk management issues. It describes how the project will execute its day-to-day activities from a quality and project management perspective and ensures that standards and templates are produced and followed, and that processes and procedures are defined with their execution being continuously monitored and improved. A reference is also provided to the necessary mechanisms and structures for the management and administrative coordination of the project, capitalizing on the governance, change management, communication plan, project plan, phases and activities, milestones and deliverables, as well as the reporting roles and responsibilities for all the partners. Finally, this document defines the form and way of writing the deliverables and producing dissemination material (e.g. templates, structure, standard format, handling according to dissemination level, etc.), outlines the means of communication and exchange of information between the partners for gathering information from the partners for reporting (both technical and financial) and describes the process to review/accept deliverables.

1. PROJECT SCOPE AND OUTCOMES OVERVIEW

1.1 Introduction

DESTINI proposes a series of coordination and support actions for promoting research in the area of Smart Data. It brings together two internationally recognized scientific groups from the Netherlands (ERISS/JADS) and Italy (UNIROMA1) that collaborate with Cyprus University of Technology (CUT) aiming at strengthening CUT's research and scientific profile in the relevant area. DESTINI targets to facilitate transfer of scientific knowledge and expertise, as well as of best research practices from ERISS/JADS and UNIROMA1 to CUT. The ultimate goal is that the research group of CUT increases its research capacity and prowess, by investigating a number of significant and hot topics in the field of Smart Data Processing and Systems of Deep Insight. We envisage that a number of high-quality research results may be produced during and after the duration of the project; this will enable CUT to significantly increase its international standing in the research community, by both achieving related publications in the top-tier scientific journals and conferences of our research area, as well as by producing new tools that will benefit industrial and business stakeholders. Close cooperation between the partners of DESTINI will take the form of knowledge acquisition and transfer through personnel exchanges, expert visits, organization of workshops and summer schools with lectures delivered from ERISS/JADS and UNIROMA1, participation in international scientific conferences/workshops, development of joint training sessions and mobility programs for early stage researchers, and establishment of strong links with the market/industry.

1.2 Project Scope

DESTINI will be built around a shared research vision in Smart Data Processing and Systems of Deep Insight established by strategically partnering CUT with international leading European counterparts that have an established record in the field. Scientific and technological excellence will be achieved by the effective and durable integration of the research capacities of the participants. The international leading partners have the "name-recognition", reputation and experience to confer the greater visibility, credibility and prestige that DESTINI needs to become a major player in the region and Europe. The leading partners will contribute to the effective development of the research and innovation potential of CUT through knowledge transfer, sharing of research results, expertise, reputation, and access to international networks (see Figure 1).

The international leading partners aim to take CUT to the next level and help it become an innovative, world-leading research organization where the notion of bold and creative thinking,

excellence and discovery pervades all aspects of research and results in high impact scientific breakthroughs essential to innovation and knowledge transfer activities that, at the same time, tackle key economic and societal issues in Cyprus and the surrounding region.



Figure 1. The scope of DESTINI project

1.3 Milestones

To keep the project under tight control, the project is structured along six main milestones to mark the completion of a critical phase in the project or a work-package. The DESTINI milestones essentially revolve around the successful transfer of knowledge from the two leading institutions to CUT and the formation of a strong scientific background on the topics and sub-topics of interest for executing future research steps; these are complemented by establishing a close collaboration with stakeholders and other strategic partnerships, and engaging early-stage researchers.

The milestones and months of realisation (in square brackets) are as follows:

Milestone 1: Identification of the scientific backbone, core concepts, enablers, gaps, weaknesses, challenges, problems and best practises within the Smart Data Processing and Systems of Deep Insight areas of research. [M3]

Milestone 2: Execution of gap analysis and evaluation of CUT's current research status and potential on the JRAs of focus within the area of Smart Data Processing and Systems of Deep Insight, and formulation of DESTINI's Research & Innovation Agenda. [M5]

Milestone 3: Formation of the core stakeholders' collaboration basis for continuously receiving feedback and preparing the ground for future joint funding proposals and piloting activities. [M8]

Milestone 4: Launching of joint training and mobility programs for the engagement and integration of early stage researchers. [M8]

Milestone 5: Development of strategic research partnerships globally to pursue sustainability and attract EU and national funding in the future. [M24]

Milestone 6: Development of a strong scientific background on Smart Data Processing and Systems of Deep Insight. Enhancement of CUT's research capacity, effectiveness and potential. [M36]

Milestone 7: Assessment of DESTINI's progress thus far with emphasis on training and knowledge transfer activities. [M18]

The DESTINI milestones are explicitly associated with the work-packages and tasks described in the following section.

1.4 Work Package Structure

The DESTINI work-plan closely follows the project objectives. Figure-2 graphically presents the work breakdown structure in work-packages (WPs) and their interconnections.

To meet the project objectives, the work in DESTINI is organized in six WPs. One for coordination and management (WP1); one for scientific analysis and review of the proposal's JRAs to identify gaps and define a research and innovation agenda for CUT (WP2); one for supporting training and transfer of scientific knowledge from the leading partners to CUT (WP3); one for team building with strategic partners and engagement of stakeholders to form working groups and networks and facilitate future experimentation and validation on real-world problems (WP4); one for involving early stage researchers in the project by developing joint programmes of mobility, training and mentoring (WP5); and finally, one for dissemination and exploitation activities to promote the project objectives locally and globally (WP6).

Figure 2 shows DESTINI's Pert chart, which illustrates graphically the interactions of its main components. The work-plan uses the scientific analysis, the gap analysis and capacity

development planning (WP2) to form the research and innovation agenda and describe the Key Knowledge Areas that will constitute the axes of the training, knowledge transfer and acquisition activities for CUT members (WP3). Next, CUT utilises the knowledge captured (WP3) to extend its collaboration network by partnering with other research organisations globally and to tackle the research targets by engaging local practitioners and formulating real-world pilot cases for preliminary investigation (WP4). WP4 also investigates future funding opportunities and examines the formation of consortia for submitting new proposals for funding at EU or national level in the future. Finally, the identified research gaps that exist in the local community (WP2) are used as input in (WP5) to develop joint programmes of training and mobility for attracting early stage researchers and for overcoming the aforementioned gaps.

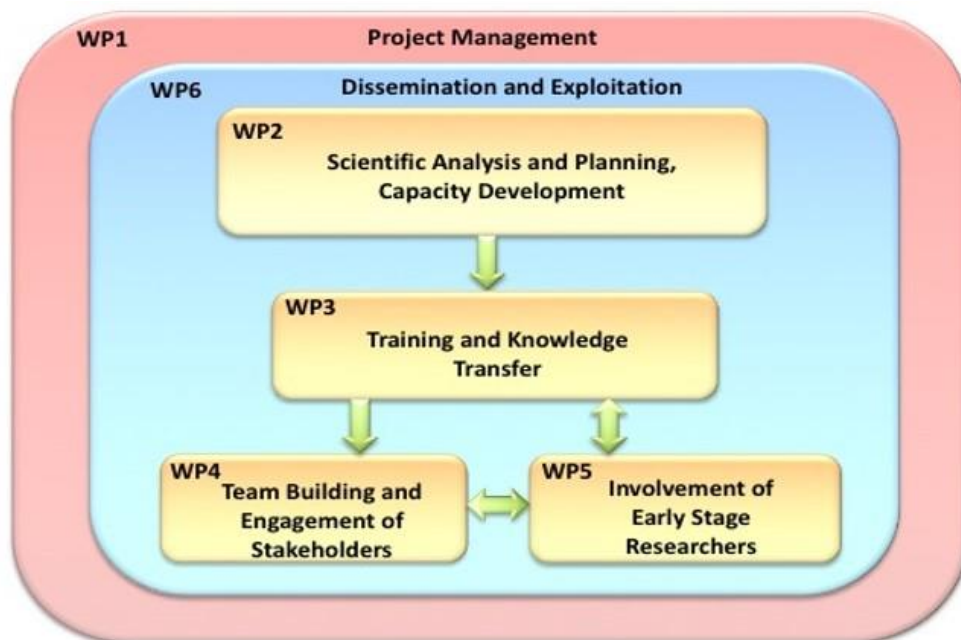


Figure 2. DESTINI's work-plan and work-package structure.

The content of the work-packages is briefly described below:

WP1 – Project Management: Provides coordination between the project's consortium and management of all project activities to ensure the completion of all parts of the proposed project in a timely and efficient manner and in a way that the scientific, technological, financial and stakeholders' expectations are fully met. It also handles all administrative work and communication with the EU for fulfilling financial and procedural obligations.

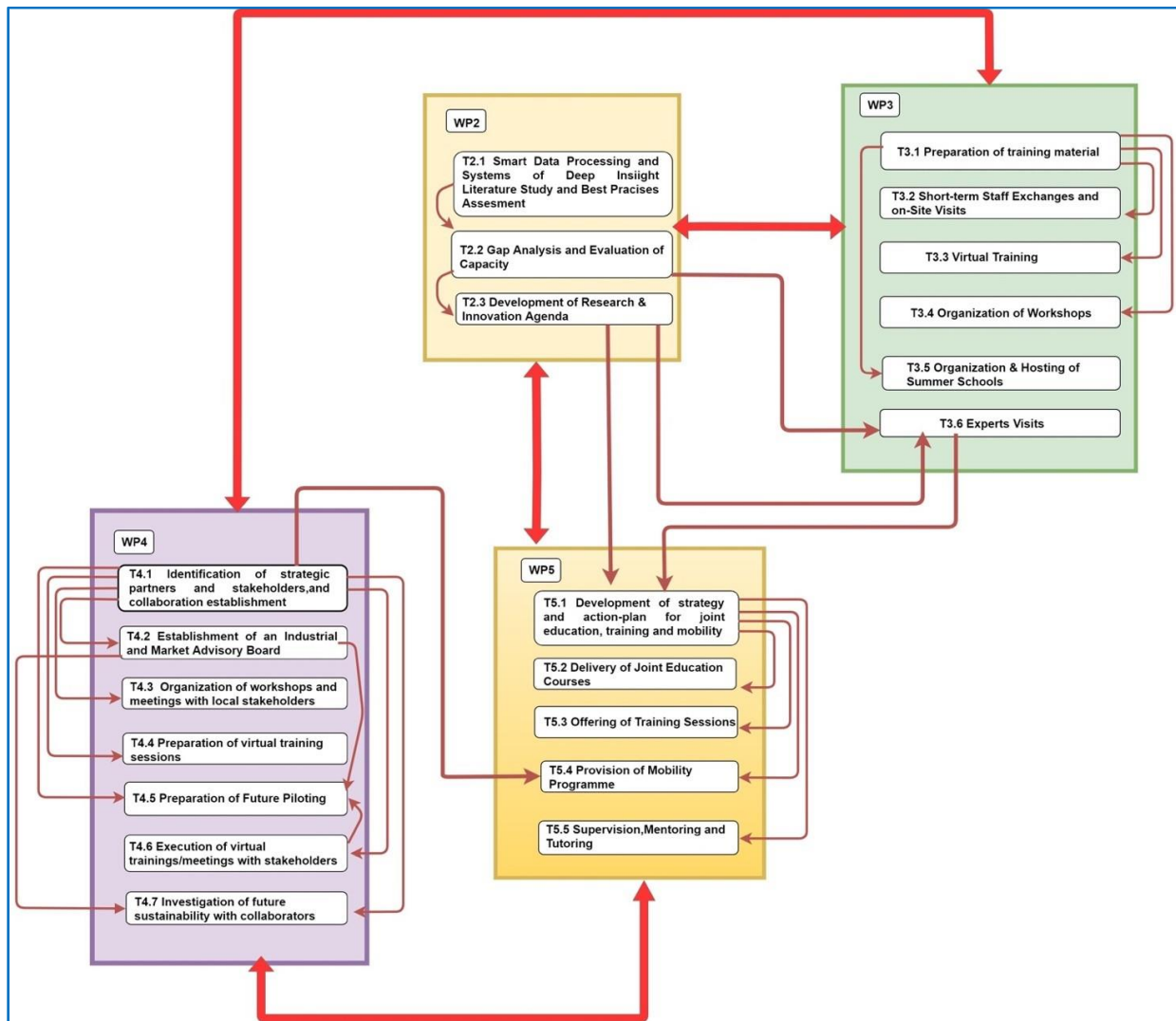


Figure 3. Graphical representation DESTINI’s main components interaction for knowledge transfer and acquisition (Pert chart).

WP2 – Scientific Analysis and Planning, Capacity Development: Outlines a thorough research analysis to identify core concepts, state of the art methods, models and techniques, challenges, weaknesses and best practises within Smart Data Processing and Systems of Deep Insight. In addition, a gap analysis as well as an evaluation of the CUT’s research standing and capacity on the Smart Data Processing and Systems of Deep Insight JRAs is performed to develop a research and innovation agenda, focusing on key areas that guide transfer of knowledge.

WP3 – Training and Knowledge Transfer: Presents the actions to support successful transfer of knowledge, best practises and research skills from the leading institutions to CUT to tackle the research challenges that exist within the JRAs and the key knowledge areas identified in WP2. These actions mostly refer to organisation of summer schools and workshops, delivery of virtual training sessions, exchanges short-term staff, expert visits and short-term on-site trainings at the leading institutions' labs and infrastructure.

WP4 – Team Building and Engagement of Stakeholders: Describes the actions needed to be taken from the consortium to engage industrial and business stakeholders and establish direct communication channels for feedback and collection of real-world data that will facilitate experimentation and validation and prepare the road for future piloting. Suggests methods and actions followed by the consortium to extend the community and networks of strategic research collaborators, and support sustainability by attracting EU and national funding in the future.

WP5 – Involvement of Early Stage Researchers: Develops and executes a plan for joint education and training programmes between the members of the consortium. Devises and applies a mobility programme to help attracting early stage researchers within the consortium and beyond, describes training and mentoring activities offered to researchers and outlines incentives, like the announcement of PhD topics in high-demand and popular subjects, scholarships and local support for relocation.

WP6 – Dissemination and Exploitation: Describes how the knowledge acquired will be disseminated to academia, researchers, industrial and businesses stakeholders, and the general public, demonstrating how they can benefit from the DESTINI's knowledge base and preliminary research results, and supporting sustainable engagement of SMEs and practitioners in WP4 for future research activities and project discoveries. Also, it includes preparatory activities for producing survey papers/technical reports and presenting short papers or work in progress targeting at receiving feedback from the research community of highly recognised international conferences and workshops.

WP7 – Ethics requirements: This work package sets out the 'ethics requirements' that the project must comply with. It includes one task and its associated deliverable related to the management of the data protection in DESTINI.

1.5 Deliverables

Table 1 provides the list of the project's major deliverables order per WP, indicating the responsible partner and the delivery month.

Table 1. List of DESTINI's major deliverables

| No. | Deliverable name | WP | Short name of lead particip. | Type | Diss. level | Delivery date (month) |
|-----|--|----|------------------------------|------|-------------|-----------------------|
| 1.1 | Project Handbook, Quality Plan & Risk Management | 1 | CUT | R | C | 1 |
| 6.1 | Project Website | 6 | CUT | W | PU | 1 |
| 6.2 | Social Networks Accounts | 6 | CUT | W | PU | 1 |
| 6.4 | Dissemination Strategy & Outreach Plan | 6 | UNIROMA1 | R | C | 2 |
| 2.1 | Survey on Smart Data Processing and Systems of Deep Insight Current Research and Future Challenges | 2 | CUT | R | C | 4 |
| 2.2 | Gap Analysis and Evaluation of Capacity Report | 2 | UNIROMA1 | R | C | 5 |
| 2.3 | Research & Innovation Agenda | 2 | ERISS/JADS | R | C | 5 |
| 1.2 | Data Management Plan | 1 | CUT | ORDP | C | 6 |
| 5.4 | Mobility Portal | 5 | CUT | R | C | 6 |
| 5.1 | Strategy and actionplan for joint education, training and mobility | 5 | CUT | R | C | 7 |
| 6.3 | Project Dissemination Support Material | 6 | CUT | R | PU | 12 |
| 3.3 | Summer Schools & Workshop Proceedings 1 | 3 | CUT | R | PU | 15 |
| 4.2 | Minutes of the Industrial and Market Strategic Advisory Board 1 | 4 | CUT | R | PU | 15 |
| 4.3 | Stakeholders Meetings: Discussions' minutes and notes 1 | 4 | CUT | R | C | 22 |
| 4.4 | Stakeholders Training Material and Webinars 1 | 4 | UNIROMA1 | R | PU | 22 |
| 5.3 | Report on content for training sessions 1 | 5 | ERISS/JADS | R | PU | 22 |
| 6.7 | Project Dissemination Support Material 2 | 6 | CUT | R | PU | 24 |
| 6.5 | Minutes and notes of workshops, meetings with stakeholders, open days and informative events | 6 | CUT | R | C | 31 |
| 3.1 | Report on Training Content, Material, Webinars | 3 | UNIROMA1 | R | PU | 34 |
| 3.2 | Experts Visits' Minutes and Notes | 3 | ERISS/JADS | R | C | 34 |
| 3.4 | Summer Schools & Workshop Proceedings 2 | 3 | CUT | R | PU | 34 |

| | | | | | | |
|------|---|---|------------|---|----|----|
| 4.1 | List of DESTINI's strategic partners and stakeholders | 4 | CUT | R | C | 36 |
| 4.5 | Report on Real-World Problems Identified for Future Piloting | 4 | CUT | R | C | 36 |
| 4.6 | Report on Future Ideas for Proposals | 4 | ERISS/JADS | R | C | 36 |
| 4.7 | Report on Strategic Research Partnerships | 4 | CUT | R | C | 36 |
| 4.8 | Minutes of the Industrial and Market Strategic Advisory Board 2 | 4 | CUT | R | C | 36 |
| 4.9 | Stakeholders Meetings: Discussions' minutes and notes 2 | 4 | CUT | R | C | 36 |
| 4.10 | Stakeholders Training Material and Webinars 2 | 4 | UNIROMA1 | R | PU | 36 |
| 5.2 | Report on best practices for Supervision, Mentoring and Tutoring | 5 | ERISS/JADS | R | C | 36 |
| 5.5 | Report on content for training sessions 2 | 5 | ERISS/JADS | R | PU | 36 |
| 6.6 | Survey papers, technical reports, short papers, posters, working- progress papers | 6 | ERISS/JADS | R | PU | 36 |
| 6.8 | Project Dissemination Support Material 3 | 6 | CUT | R | PU | 36 |

Type:

R: Document, report (excluding the periodic or final report).

W: Websites and Social Network accounts.

ORDP:

Dissemination level:

PU: Public, fully open, e.g. web

C: Confidential, restricted under conditions set out in Model Grant Agreement

2. PROJECT MANAGEMENT

2.1. Overall Project Management Approach

DESTINI, as a multi-cultural and a multinational cooperation project, targets to bring together two worldwide leading academic institutions with proven record of scientific and research excellence in the areas of interest to transfer knowledge, state-of-the-art methodologies, processes and best practises to CUT over a period of 36 months to raise CUT's capacity in producing significant research and innovative results. A sound and flexible management structure will be followed for the effective management of the project. Transparent decision-making processes will be set up focusing on defining the research and innovation agenda, and the basic training steps from the very beginning, being at the same time flexible as regards the sub-areas and subjects of future focus based on the information that will become available at

each stage as knowledge transfer and formation progresses. Contingency plans will be derived to handle the inherent uncertainty present when addressing research issues through lectures, seminars, mentoring and tutoring. In addition, clear and realistic decision-making processes, communication pathways and prompt reporting mechanisms necessary to execute successfully every coordination and support action to knowledge acquisition will be defined and adopted.

The project management objectives are shown in Figure 4 and follow a rigorous approach to support the project in all its phases throughout the three years and beyond, and to focus and adapt accordingly to the specific objectives and needs of each project phase.

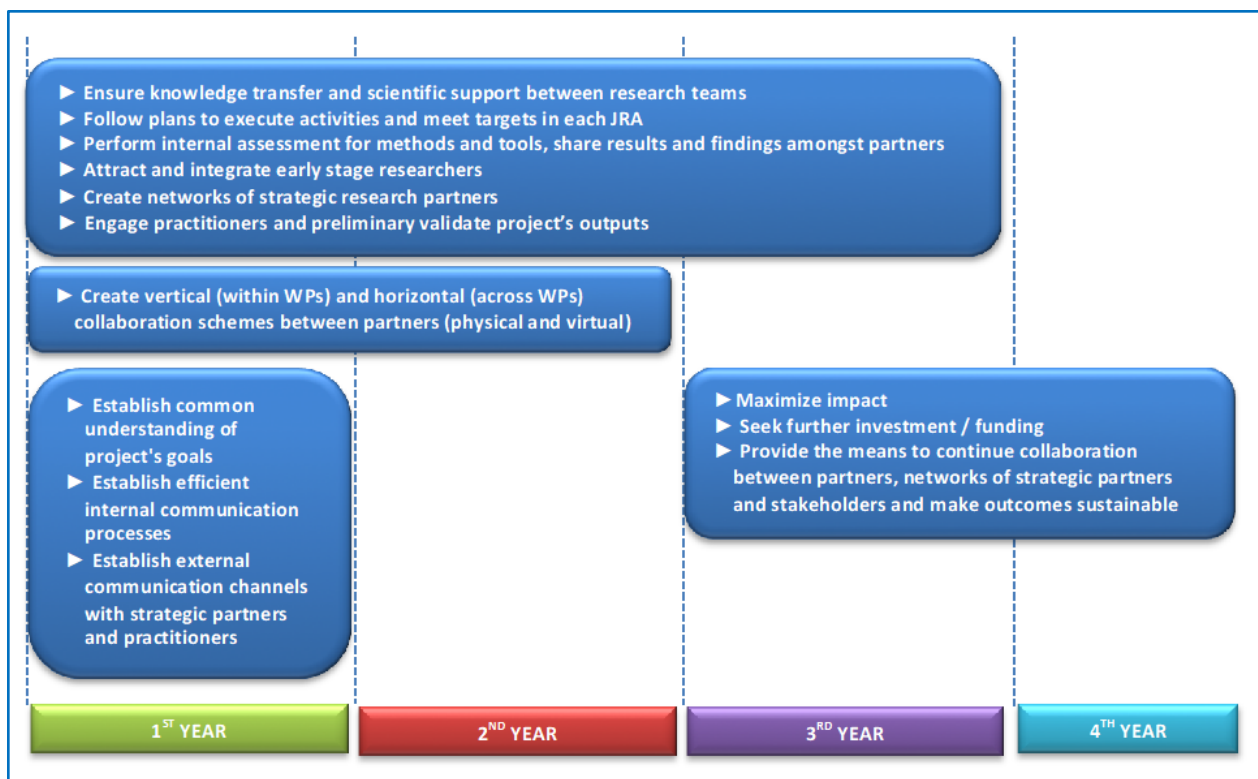


Figure 4. DESTINI's project management objectives

2.2. Project Management Structure

DESTINI's Project Management Structure (PMS), which is depicted in Figure 5, is fairly simple (the project involves only three partners), but very robust, scalable and agile. Small research teams will be formed to address specific research challenges outlined in the tasks described in the work

packages; therefore, flexibility and smooth coordination are key management factors. The PMS is analysed in the consortium bodies and roles described below.

Steering Committee (SC)

The SC is the highest decision-making board and its main task is the project governance. It consists of one representative of each partner and is chaired by the Project Coordinator. More specifically, the representative of UvT is Prof. dr. ir. M. Papazoglou, UNIROMA1 is represented by Prof. M. Mecella, while the coordinator is Prof. A. S. Andreou from CUT. This body will have the overall responsibility of all technical, financial, legal, administrative, ethical, dissemination, exploitation, intellectual property and innovation issues of the project. It will monitor and assess the actual progress of the project, while it assumes the overall management responsibility on behalf of the partners, takes decisions on work-plan, resource allocation, evolution of the consortium and engagement of industrial partners and stakeholders, identifies breaches, defaulting partners and remedies, and approves appointments to the other consortium bodies.

Project Coordinator (PC)

The PC will be responsible for the overall management, communication and coordination of the entire project. The PC will act as the intermediary between the partners and the European Commission, monitor compliance by the partners with their obligations, control the implementation of the whole project, control the project's resources and budget, handle the financial aspects of the project, control the schedule of activities and the allocation of manpower, ensure the effectiveness of the project's internal communication, apply quality assurance, deal with risk assessment and mitigation plans, undertake quality control of contractual deliverables, ensure that all deliverables will be available on time to the Commission and/or project partners, liaise with and report to the European Commission on all matters concerning the project. The partner CUT will act as Project Coordinator with Prof. A.S Andreou, and will work closely with the Work package Leaders and the SC.

Scientific-Technical Content and Training Manager (STCTM)

The STCTM will work closely with the SC and PC and will be responsible for the overall project scientific and technical content and training activities which will strengthen the scientific background of CUT and create the dynamics for enhancing its research profile. STCTM will ensure the scientific cohesion and research excellence of the project and oversee the organization of the scientific workshops, summer schools and meetings, trainings, material and content, as well as supervise the quality of deliverables produced by the WPs. The STCTM will be provided by

partner UvT and will be Prof. dr. ir. M. Papazoglou who has a long and proven experience in the areas touched upon by DESTINI.

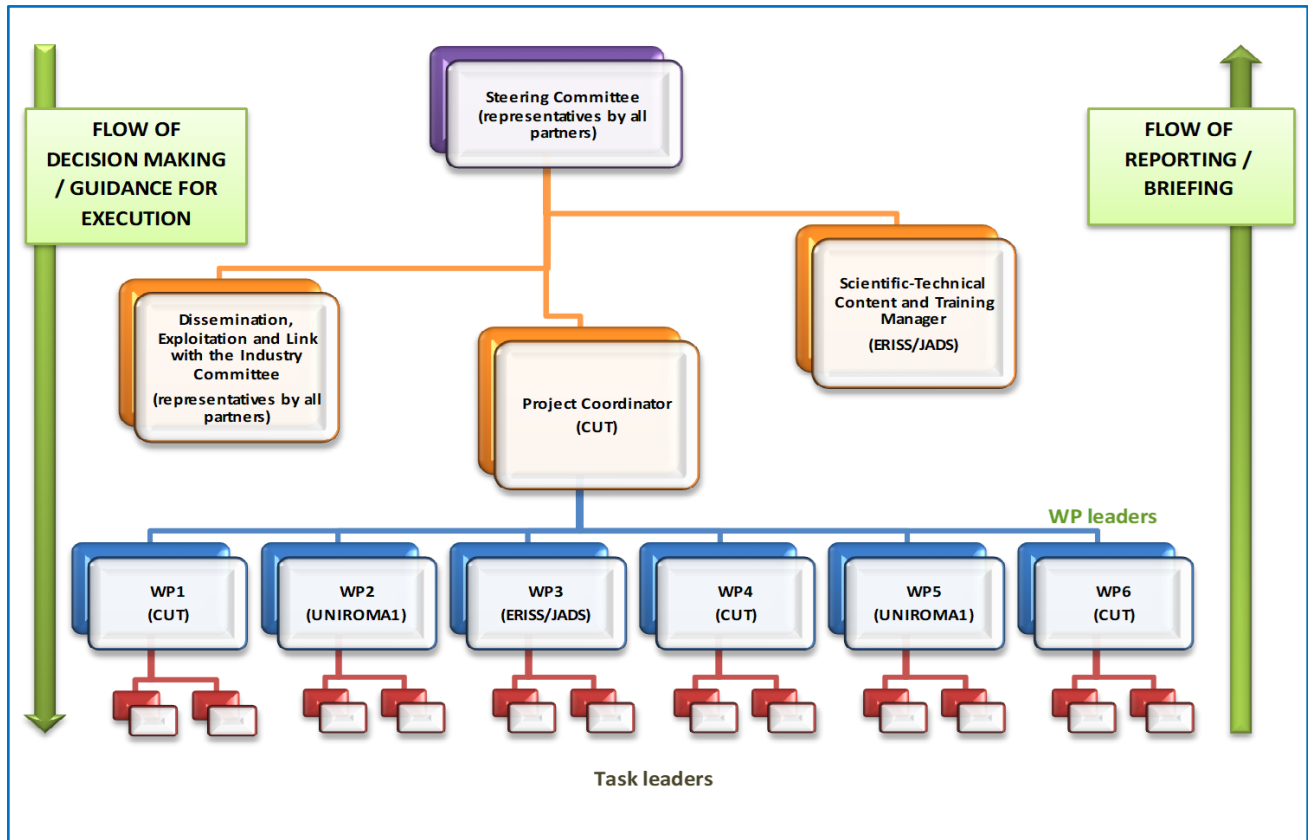


Figure 5. The DESTINI's project management structure

Dissemination, Exploitation and Link with the Industry Committee (DELIC)

DELIC will work closely with the SC and PC and will be responsible for the dissemination and exploitation of the project's goals, as well as to establish strong links with the local industry activities of the DESTINI project. It will include representatives by all partners with expertise in the commercialization of R&D and with strong links with the local ICT market. DELIC will work to raise public awareness of the project ideas, ensure wide dissemination of the project results, share best practices and lessons learnt with both the wider research community and practitioners, outline the strategy for knowledge management and protection, agree on and develop the overall exploitation plan, identify opportunities to ensure the continuation of the project, e.g. continuation of the collaboration between partners through Erasmus agreements and pursue of further EU or national funding for conducting research and exploiting or marketing its results. DELIC will be actively involved in the activities of WP6 Dissemination, Communication

and Exploitation, and will meet in project meetings or workshops or summer schools, and/or on demand (physically or through conference calls) whenever deemed necessary.

Work package Leader / Task Leader

The WP Leader is responsible for implementing the WP plan and for the scientific and technical integrity of the relevant WP contractual deliverables. The partners that have undertaken a WP/Task leadership role are shown in Figure 5. Each WP leader coordinates, monitors, and assesses the progress of the work package to ensure that performance, budget, and timelines are met. She also proposes the agenda in the respective meetings and approves deliverables produced in the WP. In cooperation with the Project Coordinator and/or Scientific-Technical Manager, work package leaders are responsible for the integration of their results to succeeding tasks or work packages.

The Task Leader is responsible for the coordination of work on associated deliverables, has a similar role to the one of the WP Leader above, though at the level of Task.

2.3. Consortium agreement

Before the start of the project a consortium agreement has been prepared and signed by all partners. This agreement defines specific operational procedures for the different project bodies described above. This includes amongst other aspects the responsibilities of the parties and their liabilities towards each other as well as the governance structure, financial provision, access rights and IPR issues. The consortium agreement also describes the decision making structures and defines the General Assembly is the ultimate decision-making body. Decisions taken by the General Assembly include the content, e.g. changes in the work packages, financial issues and intellectual property rights. This body also has the right to decide on the evolution of the partnership (e.g. entry of new partners in the form of stakeholders or other institutions with no funding obligations), and the project as such (e.g. termination of the project and breaches).

2.4. Project Management Processes

2.4.1. Decision-Making and Conflict Resolution

A voting scheme based on consent and transparency is adopted in DESTINI for resolving conflicts and making decisions. All decision-making bodies with the responsibilities described in the above

section (project management structure) are committed to apply these fundamentals. In the course of the project the partners will agree on and develop the technical and scientific content to be delivered as new knowledge to CUT supporting future research ideas. The objective would be to reach agreement first by informal contact, followed by official confirmation via e-mail, letter or agreed written minutes. Decision will be taken at the level that is concerned, e.g. on Task/WP level if decisions affect only the respective Task/WP or will be escalated up to the Steering Committee if they have to do with fundamental changes in the workplan or the approach for knowledge acquisition and transfer of best practises. Any member of a consortium body (described above) shall be represented at any meeting of such consortium body and may appoint a substitute to attend and vote at any meeting. Each consortium body shall not deliberate and decide validly unless all three participating partners are present or represented (quorum). Each member of a consortium body present or represented in the meeting shall have one vote. Defaulting parties may not vote. Decisions shall be taken by a majority of two-thirds (2/3) of the votes cast.

2.4.2. Communication and Collaboration

Internal communication between the project stakeholders will be continuous and will utilise all means available through ICT technology nowadays (email, texting/chatting tools, social networks, videoconferencing tools, etc.), in the appropriate level of detail and format according to the information to be exchanged. Documentation from/to the Commission or other projects, or any other source or type of information deemed relevant (papers, articles, blogs, etc.) will be circulated as appropriate. A dedicated common storage space will be created on open and free access storage platforms (e.g. Dropbox, Google Drive). This space will be used by all partners and will be the central point of reference for the documents that will be produced, shared and circulated for the project. A specific hierarchical tree structure will be used to organise the stored files in specific folders for easy search and retrieval.

For all matters within the scope of the project, there will be no limitations on access to information from the partners. In addition, the project will hold various physical meetings hosted by the partners. At least two to four general meetings are planned yearly to hold planning sessions (within the scheduled trainings, workshops and summer schools) and guarantee consistency and integrity of the project, as well as dedicated workshops for knowledge sharing and technology transfer between the partners. SC meetings will be held in this context.

External Communication will be established through the launch and continuous update of the project's website, which will also constitute the central point of communication between the partners and practitioners/stakeholders in the local software market and the general public. The

outcomes of the project shall be published as presentations which shall be made available on the project’s website. These efforts will be accompanied by workshops or meetings with stakeholders and the general public (i.e. in the form of open lectures) which will be held regularly as described in the work plan to raise awareness, ensure high visibility of the project results, and establish the grounds for the use of the results in everyday practice.

2.4.3. Risk Management: Assessment and Mitigation Plans

The success of DESTINI depends on the effectiveness of the risk management process which will provide the means for monitoring, evaluating and controlling/handling potential project risks. This process will follow proven techniques (such as the Project Management Institute’s methodologies, cf. <http://www.pmi.org>) and a disciplined way of eliminating risks or reducing their likelihood and/or impact through the execution of three major activities put forward in a continuous closed cycle, which will be iterated for each project milestone: (a) Risk Identification: Determining the risks that may affect the project and documenting their characteristics; (b) Risk Quantification (Analysis): Assessing their probability of occurrence and impact and analysing their effect on project objectives. Prioritizing risks is based on the following scales: Impact: Insignificant, Low, Moderate, Major, Catastrophic; Probability of Occurrence: Very Low ($\leq 20\%$), Low (21-40%), Moderate (41-60%), High (61-80%) and Very High (81-100%); (c) Risk Monitoring and Control: Tracking identified risks and implementing risk response plans throughout the project.

The overall management structure of the project and relevant instruments implement several mechanisms to avoid or minimize potential risks. The Project Coordinator with the cooperation of the Steering Committee and the Scientific-Technical Content and Training Manager, as well as of the rest of the project management roles (WP and Task Leaders), will be mainly responsible to handle risks and inform all partners when necessary.

The first iteration of the risk management procedure identified the risks described in Table 2, along with their analysis and mitigation plans to be adopted so as to avoid or minimize their influence on project objectives. This list will be regularly updated as the project progresses.

Table 2. Potential risks for the DESTINI’s project implementation

| | | |
|---------------------|---|--|
| Risk | 1 | Research targets are broad, complex and/or not adequately addressed |
| Description | The project may be overly ambitious and knowledge transfer on the research areas identified may prove difficult to tackle | |
| WPs involved | 2, 3, 4 and 5 | |

| | | | |
|--|--|---|-----|
| Risk Impact | Major | Probability of Occurrence | Low |
| Proposed risk mitigation measures | <ul style="list-style-type: none"> • Research investigators are recognized experts in the fields relevant to the project and lead several large-scale projects. They also have adequate scientific and research background to address all training challenges of the project. Partners in DESTINI have been carefully selected on the basis of scientific capacity, research eminence, success record, experience and long-standing contributions to the field. • Progress will be continuously monitored, and plans will be adjusted when necessary. • Means of effective communication will be rigorously applied at all project stages. • Appropriate internal reviews will be established to assure the relevance, quality and project performance. | | |
| Risk | 2 | Ineffective Communication and planning | |
| Description | The desired level of communication is not achieved and planning of activities suffers | | |
| WPs involved | All | | |
| Risk Impact | Major | Probability of Occurrence | Low |
| Proposed risk mitigation measures | <p>The project management procedure identifies roles and responsibilities that ensure effective communication at all levels. Frequent progress control exercised by the PC, accompanied by regular dedicated technical meetings and frequent teleconferencing or electronic discussions (e.g. through Skype), will identify any problems or bottlenecks early. This in turn will ensure effective communication and smooth progress.</p> <p>The work-plan and WP structure have been planned and defined thoroughly using project milestones to achieve unhindered continuity of work in critical junctions in the project lifecycle. The project follows a sequential, incremental and step-by-step training and knowledge development approach.</p> <p>The two scientifically leading partners, UvT and UNIROMA1, have long-standing collaborations. A main criterion for their selection, in addition to excellence and expertise, was the ease of communication and integration.</p> | | |
| Risk | 3 | Resources are inadequate to handle the tasks | |
| Description | The tasks are too many or too complicated to be handled by the resources assigned | | |
| WPs involved | All | | |
| Risk Impact | Moderate | Probability of Occurrence | Low |
| Proposed risk mitigation measures | Partners in DESTINI are seasoned professionals, researchers and scholars, and especially the scientifically leading institutions (UvT and UNIROMA1), that will deliver knowledge to CUT have a long distinguished track record in education and research, abundant formal partnerships, and involvement in numerous large-scale projects who have successfully addressed similar problems in the past. Therefore, there is rich experience of the consortium in task scheduling and resources allocation. In addition, the project partners maintain large research networks of personnel, resources and infrastructure that can be drawn upon to mitigate such unforeseen incidents. | | |

3. SWOT Analysis

SWOT is an easy and straightforward tool that provides a general picture of the positive and negative aspects of a project and its environment. SWOT can be a good complementary tool for analyzing the project and redefining its strategy when and if this is deemed necessary. The analysis provides useful information revolving around four main axes, (i) strengths, (ii) weaknesses, (iii) opportunities, and, (iv) threats. The DESTINI’s consortium recognizes the importance of SWOT for defining the strategy that will be followed, addressing the following questions during the lifetime of the project:

- How to make best use of strengths and opportunities?
- How to best minimize weaknesses by making best use of opportunities?
- How to make best use of strengths by reducing risk of threats?
- How to best minimize weaknesses even with the expected threats?

Table 3 presents the first SWOT matrix that has been drawn based on collectively analyzing the answers provided by the consortium.

The analysis will be revisited on a yearly basis so that the consortium records any changes to the four axes resulting in from the progress of the project.

Table 3. SWOT analysis for the DESTINI project

| |
|---|
| Strengths |
| <ul style="list-style-type: none"> • The partners teaming with CUT are two leading institutions in the areas of the project and their scientific knowledge and research expertise, as well as their man-power and technological infrastructure, will significantly contribute to the success of the project. • CUT’s team has recently successfully completed a similar project under the same call. • CUT’s team, as well as of the other two partners, consist of enthusiastic and dedicated people that are research oriented and eager to expand their knowledge. • There are clear synergies and complementarity between the partners of this project something which will ensure flow of knowledge between the groups and enable smooth interaction in multi-disciplinary scientific topics in the areas of interest. |
| Weaknesses |
| <ul style="list-style-type: none"> • Heterogeneous or incompatible Cloud infrastructure, simulators, platforms and tools between the partners • Heavy workload and busy schedules for the faculty and senior researchers restrict the options of suitable dates/times for collaborative activities (site visits, discussion, virtual conferences etc.). |

| Opportunities in External Environment |
|---|
| <ul style="list-style-type: none"> • Good network of external to the project's consortium research collaborators • Strong links with industrial collaborators on behalf of the UvT and CUT. • Lack of standardization in services formal definition offers ample room for proposing new standards to cover this gap. |
| Threats in External Environment |
| <ul style="list-style-type: none"> • Most of the project's activities rely on big data gathering which is a tedious procedure. • The relevant topic is a fast-changing technological framework • Reluctance of stakeholders, or the software industry in general, to embrace or adopt the results of the project due to strict internal policies followed in companies |

4. REPORTING

4.1. Activity reporting

Activity reporting assists project management, and the European Commission, to monitor project progress, achievement of milestones and difficulties encountered. During the course of the project, activity reporting will be conducted in three forms: (a) Periodic Reports prepared twice, one at the middle and one at the end of the project as reported in WP1 (Project Management) to be submitted to EC; (b) Reports on the training material, discussion minutes/notes, best practices, analysis and surveys as these defined and required in the context of WPs 2,3,4 and 5 to be submitted to EC; (c) Timesheets for the distribution of the effort per partner and the corresponding financial expenditure, to be submitted to EC.

An overview of the activities conducted in each of the reporting periods will be contained in this document. The document will include a description of the progress concerning the project objectives, milestones and deliverables set for the specific period, any problems found and what actions were taken to solve those problems. Finally, financial reporting will be included in the reports at the end of each year, with justifications of the costs made and financial statements from each partner.

4.2. Types of reports

There are five different categories of reports/deliverables:

- i. Dissemination
- ii. Project Management / EU
- iii. Training Material
- iv. Discussions minutes & notes
- v. Research papers / material

4.2.1. Dissemination reports

The first category involves the material that will be used for disseminating the progress and intermediate results of the project. It mainly involves

- electronic and printed leaflets/flyers (1 or two pages long), banners and posters (1-3m long and 1-2m wide)
- the official project's web-site including general information about the project, its milestones and objectives, description of the consortium, the work activities and the deliverables, as well photos and videos from training sessions, news and contact information
- social network accounts and appropriate posts (Facebook, Twitter and LinkedIn)

4.2.2. Project Management / EU reporting

This category includes deliverables for internal use to manage the project, as well as formal periodic reports delivered to the EU. The former consists of a report on CUT's publications during the last 3 years prior to the start of the project and the present document. The latter involves 2 periodic management reports, one in month 18 and one at the end of the project on month 36. An overview of the activities conducted in each of the reporting periods will be contained in this document. Each periodic report will include a description of the progress concerning the project objectives, milestones and deliverables set for the specific period, any problems found and what actions were taken to solve those problems. Finally, financial reporting will be included in the reports at the end of each year, with justifications of the costs made and financial statements from each partner.

4.2.3. Training material reporting

This is the one of the most important categories of documents that will be produced in the context of the project. It involves recording of the material that is used during the lectures, seminars, talks and demos performed during site visits, virtual meetings, workshops and virtual conferences which essentially expresses the type, length and depth of knowledge exchanged between the partners, stakeholders and researchers.

The training content will be depended on the Key Knowledge Areas that are covered in each work package as described in the proposal and guided by the research agenda and the corresponded JRAs. It is noted though that deviation from the KKAs is both acceptable, as well as desirable, in cases where the expertise of the partners or recent scientific and/or research developments within the broader areas covered by the project, which are related to recent work by the partners or the relevant scientific and/or industrial community, necessitate such shifting.

The template that will be used for documenting the knowledge and expertise exchanged through training activities is provided in Appendix D.

4.2.4. Discussions minutes & notes reporting

This category is the second most important one for the project's report as it records the minutes and notes taken from the discussions performed. The discussions will mainly be performed as follow-ups of previous seminars, talks and lectures, and will involve suggestions for jointly addressing research issues and problems in the Key Knowledge Areas covered. The target of these reports is to document potential research targets and innovative ideas for further investigation.

The template to be used is given in Appendix C. The structure of the relevant documents involves research areas or axes, accompanied by other sources of forms of documents that complement the corresponding material, like published papers or reports, URLs, software tools and platforms, simulators, etc.

4.2.5. Research papers/material reporting

The project targets at the production and publication of research papers in the form of surveys and/or work-in-progress. Since the objective of DESTINI is primarily to share knowledge and expertise among its partners for strengthening their capacity in conducting research and not the production of research papers per se, the number of anticipated research publications is limited.

Nevertheless, if the ground for producing innovative research results becomes fertile as the project progresses, then the partners will pursue their publication in highly respectable scientific conferences and journals. The type and length of these papers will vary according to the thematology, the type (conference, journal, book chapter) and the specific instructions to authors for complying with formatting constraints. The production of the relevant documents follows a stable pattern with specific months (e.g. 8, 12, 14, 24, 27, 36) but may also be performed at any stage of the project provided that research ideas are investigated, and associated results are developed.

5. DELIVERABLES MANAGEMENT

5.1. Naming

Each deliverable will be associated with one unique document identifier to ensure effective version control. The deliverable identifier will be used in the deliverable filename. The deliverable identifier for the working versions of the deliverable will be: <deliverable_number><descriptive_name>_<version_number>.<extension>. The extensions involve word files (doc), Portable Document Format (pdf) and images/graphics (jpeg, gif, bmp, etc.), or any other form of material that will be deemed necessary to accompany the project's information stored. The deliverable identifier for the final version of the deliverable will be: <deliverable_number><descriptive_name>final.<extension>.

5.2. Templates

The deliverable templates will be available on the DESTINI dedicated common storage space. The layout and content of the reports shall conform to the instructions and guidance notes established by the European Commission. The templates will be used by all members of the consortium as the backbone for creating a certain internal document or deliverable.

DESTINI's templates are provided in the Appendix and include Project Meeting Agenda (App. A), Project Meeting Minutes (App. B), Site Visit Agenda (App. C), Training Content (App. D) and Discussion Minutes and Notes (App. E). Finally, as regards Timesheets, the partners will use the templates provided by the EU for recording their activities and costing per month.

5.3. Review Process

All project deliverables will undergo the following in the order indicated: All deliverables prepared by the DESTINI consortium, before being submitted to the European Commission, will undergo an official internal review. The review/acceptance process is organized in 4 main phases:

- (i) Partner responsible for the deliverable - Task Leader and WP Leader
- (ii) Scientific/Technical Content and Training Manager
- (iii) Project Coordinator
- (iv) Steering Committee

Upon final approval by the SC the PC submits the deliverable to the European Commission

The above review process applies to both types of deliverables defined in project description of work: "Report" and "Other".

5.4. Monitoring

The status of the deliverables is continuously monitored at two levels: (a) by the WP/Task leader who is responsible to coordinate his/her team for producing a deliverable on time according to the schedule of the project and with the required level of quality, and (b) by the Project Coordinator. The outcome of monitoring activities shall be visible by all parties.

APPENDICES

APPENDIX A: Project meeting agenda template

PROJECT MEETING AGENDA

| | | | |
|---|--|------------------|--|
| Meeting/Project Name: | | | |
| Date of Meeting: (MM/DD/YYYY) | | Time: | |
| Meeting Facilitator: | | Location: | |

| |
|-----------------------------|
| 1. Meeting Objective |
| |

| 2. Attendees | | | |
|---------------------|---------------------|--------|-------|
| Name | Department/Division | E-mail | Phone |
| | | | |
| | | | |
| | | | |
| | | | |

| 3. Meeting Agenda | | |
|--------------------------|-------|------|
| Topic | Owner | Time |
| | | |
| | | |
| | | |
| | | |

| 4. Pre-work/Preparation (documents/handouts to bring, reading material, etc.) | |
|--|-------------|
| Description | Prepared by |
| | |
| | |
| | |
| | |

APPENDIX B: Project meeting minutes template

PROJECT MEETING MINUTES

| | | | |
|---|----------------------------|------------------|--------------|
| Meeting/Project Name: | | | |
| Date of Meeting: (MM/DD/YYYY) | | Time: | |
| Minutes Prepared By: | | Location: | |
| 1. Meeting Objective | | | |
| | | | |
| 2. Attendance at Meeting | | | |
| Name | Department/Division | E-mail | Phone |
| | | | |
| | | | |
| | | | |
| 3. Agenda and Notes, Decisions, Issues | | | |
| Topic | Owner | Time | |
| | | | |
| | | | |
| | | | |
| 4. Action Items | | | |
| Action | Owner | Due Date | |
| | | | |
| | | | |
| | | | |
| 5. Next Meeting (if applicable) | | | |
| Date: (MM/DD/YYYY) | | Time: | |
| | | Location: | |
| Objective: | | | |

APPENDIX C: Site visit agenda template



Smart Data Processing and Systems of Deep Insight



Site Visit <Rome, Tilburg> <month> <days>, <year>

Agenda

<Day1> <date>

- 09:00 – 13:00 : Talk/Lecture on “<subject> “
- 11:00 – 11:30 : Coffee break
- 11:30 – 13:30 : Talk/Lecture on “<subject> “
- 13:30 – 15:00 : Lunch break
- 15:00 – 17:00 : Round table discussion

<Day2> <date>

- 09:00 – 13:00 : Talk/Lecture on “<subject> “
- 11:00 – 11:30 : Coffee break
- 11:30 – 13:30 : Talk/Lecture on “<subject> “
- 13:30 – 15:00 : Lunch break
- 15:00 – 17:00 : Round table discussion

<Day3> <date>

- 09:00 – 11:00 : Discussion on research perspectives in the areas covered
- 11:00 – 11:30 : Coffee break
- 11:30 – 13:00 : Summary / Closing

APPENDIX D: Training content template

TRAINING CONTENT SHORT REPORT

| | | | |
|---------------------------|--|------------------|--|
| Workpackage: | | | |
| Date: (MM/DD/YYYY) | | Time: | |
| Facilitator: | | Location: | |

| 1. Subject / Short Description |
|--------------------------------|
| |

| 2. Attendees | | | |
|--------------|---------------------|--------|-------|
| Name | Department/Division | E-mail | Phone |
| | | | |
| | | | |
| | | | |

| 3. Training Content | | | |
|---------------------|---------------------------------|---------|------|
| Topic | Type (lecture, discussion, ...) | Trainer | Time |
| | | | |
| | | | |
| | | | |

| 4. Pre-work/Preparation (documents/handouts, reading material, etc.) | |
|--|-------------|
| Description | Prepared by |
| | |
| | |
| | |

APPENDIX E: Discussion minutes and notes template

DISCUSSION MINUTES AND NOTES SHORT REPORT

| | | | |
|---------------------------|--|------------------|--|
| Workpackage: | | | |
| Date: (MM/DD/YYYY) | | Time: | |
| Facilitator: | | Location: | |

| 1. Subject / Short Description |
|--------------------------------|
| |

| 2. Attendees | | | |
|--------------|---------------------|--------|-------|
| Name | Department/Division | E-mail | Phone |
| | | | |
| | | | |
| | | | |
| | | | |

| 3. Discussion notes | | |
|---------------------|------------|------|
| Topic and targets | Introducer | Time |
| | | |
| | | |
| | | |
| | | |

| 4. Pre-work/Preparation (documents/handouts, reading material, etc.) | |
|--|-------------|
| Description | Prepared by |
| | |
| | |
| | |
| | |