



Activity 1.4.1

Quality Assurance and Quality Control Protocol



NATIONAL TECHNICAL
UNIVERSITY OF ATHENS



Città di Prato



FUTURE



PIONEERS
Empowering Communities

INNOMED-UP

Promoting UPcycling in Circular Economy through INNnovation
and education for creative industries in MEDiterranean cities

Work Package (WP1): Project Management
Output (O 1.4): Monitoring and evaluation plan
Activity (A 1.4.1): QA/QC PROTOCOL

QUALITY ASSURANCE AND QUALITY CONTROL PROTOCOL

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GLOSSARY, ABBREVIATIONS AND ACRONYMS

AIR	Annual Implementation Reports
ANSI	American National Standards Institute
ASQ	Excellence Through Quality
BIS	Bank for International Settlements
BO	Branch Office
BZU	Birzeit University
CAF	Common Assessment Framework
CBC	Cross-Border Cooperation
CCIs	Cultural Creative Industries
CCP	Control Contact Point
CRESM	Centre for Economic and Social Research for the South of Italy
DMCS	Description of the Management and Control Systems
EC	European Commission
ECB	European Central Bank
ENI	European Neighbourhood Instrument
EIPA	European Institute of Public Administration
EPEM SA	Environmental Planning, Engineering and Management SA
EU	European Union
Eurostat	European Statistical Office
EVR	Expenditure Verification Report
FAO	Food and Agriculture Organization of the United Nations
FPEC	Future Pioneers for Empowering Communities' Members in the environmental and educational fields
GC	Grant Contract
GoA	Group of Auditors
JMC	Joint Monitoring Committee
JOP	Joint Operational Programme
JTS	Joint Technical Secretariat
IMF	International Monetary Fund
INNOMED-UP	Promoting UPcycling in Circular Economy through INNnovation and education for creative industries in MEDiterranean cities
ISO	International Organization for Standardization
LB	Lead Beneficiary
MA	Managing Authority
M&E	Indicative Monitoring and Evaluation Plan
MIS	Management Information System
MoP	Municipality of Prato
MT	Management Team
NA	National Authority
NCP	National Contact Point
NTUA	National Technical University of Athens
OECD	Organisation for Economic Co-operation and Development
PC	Project Coordinator
PIM	Project Implementation Manual
PM	Project Management
PP	Project Partner

PP1	Project Partner 1: EPEM SA, Greece
PP2	Project Partner 2: MoP, Italy
PP3	Project Partner 3: CRESM, Italy
PP4	Project Partner 4: Municipality of Tunis, Tunis
PP5	Project Partner 5: BZU, Palestine
PP6	Project Partner 6: FPEC, Jordan
PSC	Project Selection Committee
QA	Quality Assurance
QC	Quality Control
RBM	Result-based Management
ROM	Result -oriented Monitoring
SAG	Stakeholder Advisory Group
SMEs	Small and medium-sized enterprises
SC	Steering Committee
TESIM	Technical Support to the Implementation and Management
TO	Thematic Objective
UN	United Nations
UNDG	United Nations Development Group
UNSD	United Nations Statistics Division
UNECE	Economic Commission for Europe of the United Nations
WGPI	Working Group on Programming Issues
WHO	World Health Organization
WP	Work Package
WP1	Work Package 1: Management (Project Management)
WP2	Work Package 2: Communication (Project Communication)
WP3	Work Package 3: INNOMED-UP model (Project Implementation)
WP4	Work Package 4: SMEs Clustering Capacity Enhancement through Roadmaps and Smart Tools (Project Implementation)
WP5	Work Package 5: Pilot Integration Actions (Project Implementation)
WP6	Work Package 6: SMEs access to innovation and finance (Project Implementation)

EXECUTIVE SUMMARY

Scope of this Quality Assurance (QA) and Quality Control (QC) Protocol is to provide a reference point for the **management methodology** during the INNOMED-UP Project. It is an internal project handbook that describes the essential procedures the Project Partners (PPs) will have to implement for managing the quality of Project's operation and resulting outputs.

The present deliverable (A.1.4.1) of WP1 defines the Project organization, procedures, roles and responsibilities related to the quality management that will be carried out, and describes how the Project quality will be controlled. The document is based on the specified terms and conditions established in the Grant Contract (A_A.2.2_0172) with identification n° 39/1316 of 29-8-2019 and its Annexes. The use of QA/QC Protocol intends to ensure better collaboration among the PPs, individuals and groups; having in view that Project processes and resulting outputs are monitored and properly reported. This document shall be read in strict conjunction with the **Monitoring and Evaluation Plan** (JOP, Annex 2). It will be used to prevent possible deviations from the aforementioned plan and to grant deliverables of high quality. Actually, the QA/QC Protocol is one of the main tasks of the Project Management.

FOREWORD

An important goal of INNOMED-UP good practice guidance is to support the Project Implementation with higher standards and results that can be readily assessed in terms of **quality** and **completeness**. It is essential to implement QA/QC activities and procedures in Project's execution in order to directly contribute to accomplishing this goal; thus, conducting to successfully achieve its objectives and deliver on time a planned expected level of output.

The Lead Beneficiary (LB) (NTUA, Greece) as WP1 Coordinator is responsible for the overall management carried out by the PPs, communication within the Partnership, and for the liaison with the Managing Authority (MA) and the European Commission (EC), which includes organization of Project meetings, coordination of participation in clustering actions, reporting, and other tasks as required under the GC. Effective management structure and efficient technical procedures are key success factors for the INNOMED-UP Project. This document describes how the LB in collaboration with all PPs will assure a timely completion of the planned tasks with outcomes that meet quality levels expected by the MA. However, it does not explain what *quality* is, as it is assumed that quality concepts are well rooted among PPs. Furthermore, it is not scope of this document to interfere with internal quality management processes of each partner or to modify their procedures. PPs are free to apply their own controls and procedures for quality. In point of fact, this document intends to outline a common standard relevant to the quality of Project's outputs and management actions without adding useless bureaucratic weights to the normal works of partners. The QA/QC Protocol defines the acceptable level of quality and describes how the Project will ensure this level of quality in its deliverables and research processes. The WP1 focuses on an

entire process of Project Management consisting of several QA/QC activities, whereas each activity is considered to be a set of methods and procedures, which aim to ensure that:

- Deliverables are prepared to meet agreed-upon standards and requirements;
- Research processes are performed efficiently as required and regularly documented and reported;
- Non-conformities found are identified and appropriate corrective actions are taken.

The QA/QC Protocol is applied to Project deliverables and Project research processes.

This guidance establishes *good practice* in absolute compliance to the GC entering into force on September 1st 2019, in full accordance with the Decision of the Joint Monitoring Committee (JMC) of the ENI CBC Sea Basin 2014-2020 Programme of 29-1-2019 to award a grant to the Project, being consistent with the following **legal** and **regulatory framework**:

- Regulation (EU, EURATOM) n° 1046/2018 of the European Parliament and of the Council of 18th July 2018 on the financial rules applicable to the general budget of the Union;
- Council Regulation (EC, Euratom) n° 2988/95 of 18th December 1995 on the protection of the European Communities financial interests;
- ENI Regulation (EC) n° 232/2014 of the European Parliament and of the Council 11th March 2014 establishing a European Neighbourhood Instrument;
- ENI Common Implementing Rules (Regulation (EC) n° 236/2014) laying down common rules and procedures for the implementation of the Union's instruments for financing external Projects;
- ENI CBC Implementing Rules (Regulation (EC) n° 897/2014) of 18th August 2014 laying down specific provisions for the implementation of cross-border cooperation programmes financed under Regulation (EU) n° 232/2014 of the European Parliament and the Council establishing a European Neighbourhood Instrument;
- Regulation (EU) n° 1407/2013 of the European Commission of 18th December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid;
- ENI CBC Mediterranean Sea Basin Joint Operational Programme approved by the European Commission on 17th December 2015 (Decision n° C(2015) 9133), and its annexes;
- All manuals and guidelines issued by the Programme, in their latest version;
- Financing Agreements signed between the European Commission and the Mediterranean Partner Countries;
- National rules and guidelines applicable to the Lead Beneficiary (LB) and Partners.

The QA/QC good practice guidance outlined here reflects practicality, acceptability, cost-effectiveness, existing experience and the potential for application on a broader basis. The QA/QC Protocol aims to assess and improve **consistency**, **effectiveness**, **efficiency** and

impact. Moreover, the outcomes of QA/QC processes result in a re-assessment of estimates, e.g. if data quality is found to be lower than previously thought and this situation cannot be rectified in the current timeframe, the uncertainty estimates ought to be re-evaluated, etc.

The terms *quality control* and *quality assurance* both are often used incorrectly. The following definitions of QC and QA will be used for the purposes of good practice guidance¹:

Quality Control (QC) *of the data collection process assures that the underlying statistical assumptions of a survey are not violated, i.e. the meaning of the principal statistical measures and the assumptions which condition their use is maintained; or in data review process measures the impact of data adjustment on the data (UNECE, 2000).*

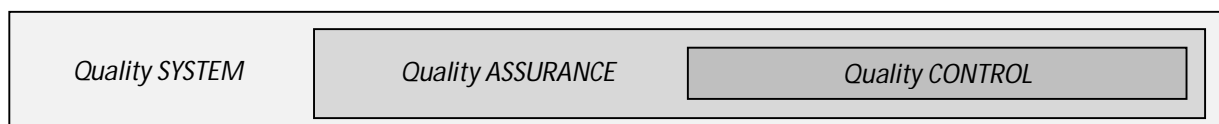
Quality Assurance (QA) *is an organization's guarantee that the product or service it offers meets the accepted quality standards. It is achieved by identifying what "quality" means in context; specifying methods by which its presence can be ensured; and specifying ways in which it can be measured to ensure conformance (Eurostat, 2004).*

The ISO 9000:2005 (which has been technically revised) defines quality as *the degree to which a set of inherent characteristics fulfills requirements*. QC and QA are two aspects of quality management. A system of quality management includes all activities of the overall management function that determine the quality policy, objectives, and responsibilities and their implementation. A management system *provides the means of establishing a policy and objectives and the means to achieve those objectives* (ISO 9000:2005, clause 3.2.2, management system, p.8) (Russell, 2013:299). Consequently:

- QC can be defined as that *part of quality management focused on fulfilling quality requirements* [need or expectation that is stated, generally implied or obligatory] (ISO 9000:2005, clause 3.2.10, quality control, p.9).
- QA consists of that *part of quality management focused on providing confidence that quality requirements* [need or expectation that is stated, generally implied or obligatory] *will be fulfilled* (ISO 9000:2005, clause 3.2.11, quality assurance, p.9).

QA/QC system can be interpreted as *a set of interrelated or interacting elements that organizations use to direct and control how quality policies are implemented and quality objectives are achieved, and so it includes all the activities that organizations use to direct, control, and coordinate quality* [Figure 1].

Figure 1: Quality Control/ Assurance/ System relationships



Source: Based on ASQ/ANSI/ISO 9000:2015

¹ https://ec.europa.eu/eurostat/ramon/coded_files/ESS_Quality_Glossary.pdf

Protocol is considered as *a set of conventions that determine the treatment, exchange and formatting of data in an electronic communications system. Similar to a data standard but applied to procedures* (UN, 2009). In a more precise way, QA/QC Protocol consists of:

- **QC activities** that *monitor and verify that Project deliverables meet defined quality standards, being defined as a system of routine technical activities implemented to measure and control the quality;*
- **QA activities** that *monitor and verify that the processes used to manage and create the deliverables are followed and are effective, being defined as a planned system of review procedures* (Russell, 2013).

There is a plethora of QA/QC Protocol definitions. Such a multifaceted concept can be understood in a variety of ways, depending on the context within which it is implemented (set of conventions), where, when or how it will be applied (specifications/standardisations). Therefore, before implementing any QA/QC activities, it is necessary to determine which *techniques* shall be used. There are various **considerations** in making these decisions:

- Technical that are related to the general techniques and the specific applications;
- Practical that involve assessing circumstances such as available resources, expertise and the particular characteristics of the Project in order to develop a QA/QC system.

Over the last several years, there have been many interpretations of what quality is. The concepts of quality have expanded from tangible products (in the 1920s), manufacturing and industrial processes (in the 1950s) to sectors such as service provided by organizations, including management functions of businesses as well (in the 1980s) (Russell, 2013:300). Occasionally, the imprecise use of terminology can lead to misunderstandings. Whether an activity is QA or QC depends on where it happens to be standing throughout the process. While QA relates to how a process is performed or how a product is made, QC is more the *inspection* aspect of quality management. The distinction between them needs to be clear: *QA is performed by teams or individual team members when they check their own work, while QC is performed by someone outside the team to check that QA has been performed;* QA and QC are different activities, meaning that *QA can't be skipped on the assumption that the QC reviewer will find all the mistakes.*

Quality is everyone's responsibility if involved. Without a distinct and well-performed QA/QC process, quality can never be achieved. Improved accuracy and reduced uncertainty need to be balanced against requirements for timeliness or cost effectiveness. QA/QC Protocol seeks to achieve that balance and to enable a continuous improvement of the effectiveness and efficiency of its performance; playing an active and constructive role in the success of efforts to foster both **transparency** and **quality**.

While diligent efforts have been made in order to ensure information contained in this document is consistent with the signed GC and its assigned budget, it should be noted that in case of any conflicts, the specified terms and conditions of the GC shall take precedence.

QA/QC PROTOCOL - PURPOSE, APPROACH, STRUCTURE

The International Organization for Standardization (ISO) series programme provides standards for documentation and audits as part of a Quality Management System (QMS)². Though the ISO series is not designed explicitly for management, many of the principles may be applied to ensure high quality outputs. The Partnership may find these documents useful source material for developing QA/QC planning³. The following standards and guidelines published under the ISO series may supplement specific QA/QC procedures for practical guidance; ensuring data quality and a transparent reporting system. A quality plan includes *procedures and associated resources to be applied when/by whom* (ISO 9000:2015; ISO 10005:2018). It is effective throughout the lifetime of a project, but is open to revision if necessary. Responsibilities for quality planning, assurance and control are shared between partners, which allow various views on quality issues in order to reach the optimal outcome.

The **QA/QC Protocol** provides guidelines so as to meet easily the quality requirements without more work. The use of guidelines provides a better and easier collaboration among PPs through actions and measures that facilitate the PM and coordinating tasks. The purpose of this document is to establish the prerequisites of quality, to help with monitoring and controlling the quality of all processes and deliverables and finally to ensure that all the activities are in conformance with the signed GC's specifications. All the PPs are responsible for and engaged in the work (e.g. activities, deliverables, prototype conception) produced within the INNOMED-UP Project. Therefore, on the basis of the aforementioned principles:

QA involves the establishment of **periodic reporting** (progress/interim/final reports), clear responsibilities per partner and regular, clearly guided communication flows. A well-defined external review (audit/evaluation reports) further supports the QA of deliverables.

QC focuses on feedback through **internal processes** (periodic reporting, Management Team or Bodies, i.e. SC) and **external advices** (review process, Management Bodies, i.e. SAG). It further monitors how feedback is implemented and assures the optimal outputs.

The QA/QC Protocol covers major processes that concern organizational, technical or practical aspects; following the **Result-based Management** (RBM) approach and the **Result-oriented Monitoring** (ROM) approach, i.e. methods/practices best suited for PM (PIM, Ch.6). In the framework of ENI CBC MED Programme, applying the RBM has a positive impact on Planning; Consensus, coordination, ownership; Management; Communication and reporting; Positive and negative lessons learnt. Officially, the *MA and the JTS will apply the [RBM] to*

² ISO 10005:2018 *Quality management - Guidelines for quality plans*.
<https://www.iso.org/obp/ui/#iso:std:iso:10005:ed-3:v1:en>

³ Where quality plans are required for project applications, the guidance provided in this document is intended to be complementary to the signed GC and its Annexes. In this document, the following verbal forms are used: 'should' indicates a recommendation; 'may' indicates a permission; 'can' indicates a possibility or a capability.

the ENI CBC MED funded projects⁴. The Planning phase is followed by an Implementation phase where monitoring progresses toward results and resources consumed with the use of appropriate indicators become an essential task to ensure results are being achieved, in compliance with Article 24.1 of the ENI CBC Implementing Rules⁵. Finally, the Evaluation phases (mid-term and final) provide valuable information for decision-making and lessons learnt for the future (JOP, Annex 2:5-6). The ROM helps to review the Project performance, to assess the likelihood that objectives will be achieved, and to evaluate the need for action.

QC PROCEDURES

The **main focus** of **QC general techniques** is on the processing, handling, documenting, archiving and reporting procedures that are common to all activities and should be applied routinely throughout the preparation of deliverables. It is less possible to conduct checks on every aspect of input data, parameters and calculations frequently. Cross-checks should be performed on selected sets of data and processes over an appropriate period of time, or a sample of data from each output should be included in the QC process on an **ongoing basis**. Due to the large quantity of data that needs to be checked for some activities/deliverables, automated checks are encouraged where possible [Table 1], e.g. a QC activity may involve checking that data keyed into a computer database is correct. A combination of manual and automated checks constitutes control procedures in checking large quantities of input data. In parallel with QC general techniques, **QC specific procedures** are directed at certain types of data depending on the method used and require knowledge of the types of data available or the associated parameters, e.g. applications where significant revisions have taken place.

Table 1: General level QC procedures

QC Activity	Procedures
Check that assumptions and criteria for the selection of data/factors are documented	<ul style="list-style-type: none"> • Cross-check descriptions of data/factors with information and ensure that these are properly recorded and archived;
Check for transcription errors in data input and bibliographical references	<ul style="list-style-type: none"> • Confirm that data and bibliographical references are properly cited in the internal documentation;
Check that appropriate parameters and units are correctly recorded and factors are used	<ul style="list-style-type: none"> • Identify parameters that are common to multiple uses • Check that temporal and spatial factors are used correctly;

⁴ UN (2014, March) *Results-Based Management Handbook. Strengthening RBM harmonization for improved development results*. Clean Draft Version. RBM/Accountability Team, undg WGPI (FAO, WFP, UNAIDS, UNSSC, UNDP, UNIFEM, UNICEF, UNFPA).

⁵ Article 24.1 of the ENI CBC Implementing Rules states that 'The Joint Monitoring Committee (JMC) shall follow the Programme implementation and progress towards its priorities using the objectively verifiable indicators and related target values defined in the Programme. The JMC shall examine all issues affecting the Programme performance'. See COMMISSION IMPLEMENTING REGULATION (EU) n° 897/2014 of 18th August 2014 laying down specific provisions for the implementation of cross-border cooperation programmes financed under Regulation (EU) n° 232/2014 of the European Parliament and the Council establishing a ENI.

Check the integrity of data	<ul style="list-style-type: none"> • Confirm that data relationships are correctly represented • Ensure that data fields are properly labelled and have the correct design specifications; • Ensure that adequate documentation of database and model structure and operation are archived;
Check the consistency of processing steps	<ul style="list-style-type: none"> • Confirm that the appropriate processing steps are correctly followed;
Undertake review of internal documentation	<ul style="list-style-type: none"> • Check that there is detailed internal documentation to support the expected results; • Check that supporting data, and records are archived and stored to facilitate detailed review; • Check integrity of any data archiving arrangements of outside organisations involved in preparation;
Check methodological and data changes resulting in re-evaluation of resulting outputs	<ul style="list-style-type: none"> • Check for methodological and temporal consistency in data;
Undertake completeness checks	<ul style="list-style-type: none"> • Confirm that estimates are reported; • Check that known data gaps, which result in incomplete estimates are documented;
Compare resulting outcomes to previous estimates	<ul style="list-style-type: none"> • For each activity, current resulting outcomes should be compared to previous estimates. If there are significant changes, re-check estimates and explain any difference.

Source: Own processing.

As part of QC procedures, it is good practice to document and archive all information required for the implementation of the INNOMED-UP Project's deliverables. This includes:

- Assumptions and criteria for selection of data;
- References or documentation used, data or information associated with Activities;
- Rationale for choice of methods used;
- Changes in data inputs or methods from previous years;
- Identification of individuals providing their expertise and qualifications to do so;
- Details of electronic databases or software used in deliverable turnover, including versions, operating manuals, requirements, etc, required to enable their later use;
- Worksheets and interim calculations for aggregated data or previous estimates;
- QA/QC plans and outcomes of QA/QC procedures.

QA PROCEDURES

Good practice for **QA procedures** requires an objective review to assess the quality of: the granted equipment and products or services produced by the Innovation Vouchers; the granted Mentorship cross-border schemes (considered necessary as Project Indicators); new business models and spin-offs; established cross-border partnerships. They may be reviewed as a whole or in parts, so as to identify areas where improvements could be made. The QA

procedures are utilised in addition to the QC general techniques and QC specific procedures. It is good practice for the WP Coordinators to conduct a basic expert peer review prior to submitting reports and deliverables in order to identify potential problems and make corrections where possible. Furthermore, it is advised to apply this review to all types of data. However, this will not always be practical due to timing and resource constraints. The objective in QA implementation is to involve reviewers that can conduct an **unbiased review** of the Project Indicators. It is good practice to select QA reviewers that have not been involved in preparing this Project's proposal previously. Preferably these reviewers would be independent experts selected *through an appropriate procurement procedure, following the national legislation and GC requirements* to fulfil QA roles and also assist the MA adequately by providing a sufficient audit trail (DMCS, Annex 1).

The measures proposed in this QA/QC Protocol have been defined taking into account the Project's logical framework, the different involvement of PPs and other participants, the signed GC and its Annexes, complementary rules and recommendations laid down in the ten (10) chapters of the Project Implementation Manual (PIN), which are mandatory, i.e. Key documents; Actors involved; 'Project start' in five steps; Reporting: the business card of the Project; Amendments to the Grant Contract: flexibility versus rigidity; Project monitoring; Financial management; Risk Management; Project Closure; Communication and visibility. More specifically, this document consists of the following sections and annexes:

- **Section 1: Project Management** describes the Project's organizational structure;
- **Section 2: Decision-making Mechanisms** describes general and specific procedures which will be followed during the Project, e.g. to settle a dispute case;
- **Section 3: Deliverables and Review procedures** describes a set of rules (structure) for the technical deliverables and procedures for the review process which will be followed during the Project;
- **Section 4: Assessment of Project Results** describes the systematic approach of an objective Project evaluation framework that focuses on Impact, ENI CBC Indicators achievement and Project Indicators achievement;
- **Section 5: Internal Communication and Information Flow** lays out how the PPs will collaborate in preparing the deliverables;
- **Section 6: Communication and Visibility of the Project** lays out in detail the way the deliverables should be presented for public dissemination;
- **Annex** provides additional information for the Project.

The LB as Project's Leader and WP1 Coordinator is put in charge of ensuring that the procedures on QA/QC Protocol are updated regularly, carried out and completed accurately by the INNOMED-UP Partnership. The **goal** of QA/QC Protocol is to define tools and means, which through key processes check that the expected results obtained in the Project comply with quality objectives and priorities set for management, deliverables, targets and outputs.

1. PROJECT MANAGEMENT

This chapter gives an introduction to the Project characteristics in order to allow PPs to get easier on board and find most important information at a glance. Therefore, this section will introduce shortly the main elements of the INNOMED-UP Project in terms of partners and WPs, e.g. involvement, participation, roles, responsibilities of the management bodies; the methodology to follow, answers to **what**, **how** and **when** is developed for each activity.

The WP1 activities will ensure that INNOMED-UP Project is properly coordinated and that work is completed within the terms of the GC with the MA of ENI CBC MED Programme. The Partnership consists of a number of partners across Europe and the Mediterranean; representing organizations with various organisational styles and interests. This contextual heterogeneity necessitates flexibility in establishing operational procedures (for the Project) in order to encourage and to support the desired collaborative approach for research and development tasks within the Project. This section describes the **management structure** and the **techniques for decision-making** that will be implemented in the INNOMED-UP Project.

The WP1 structure is concerned with the following challenges:

- The accomplishment of the Project general and specific objectives;
- The accomplishment of technical targets, such as the punctual delivery of outputs with the required quality and within the budget limits;
- The overall management and synchronisation of activities within/between the WPs;
- The management and administration of all contractual requirements under the GC.

In order to implement effective management actions, it is foreseen that the Project Coordinator together with the Management Team will use **a set of tools, means and criteria** (e.g. reporting, meetings) to collect Project information in a clear manner for all partners to understand, and to evaluate Project progress and organise accordingly any needed actions.

1.1 ORGANIZATIONAL STRUCTURE

The organizational structure has to be enough so as to provide effective coordination performance, capable to elaborate the financial, legal and administrative part of the Project [Figure 2]. Applying best practices is a critical success factor that assures efficient operation. The QA/QC Protocol is performed during both technical and financial checks, while:

- **Progress reports** completion checking (GC, Art.6.3), once every six months;
- **Interim reports** completion checking (GC, Art.6.3), once every twelve months;
- **Final report** completion checking (GC, Art.6.2), which covers any period not covered by the previous reports;
- **Required attendance level** (plenum) for meetings is met to be legally transacted;
- **Dispute settlement**, when matters/serious concerns are raised but issues resolution is being achieved promptly through a fair and shared understanding (GC, Art.23).

GENERAL HIERARCHY AND COORDINATION

INNOMED-UP is a European research project having six (6) Work Packages (WPs) and seven (7) partners, coordinated by the Lead Beneficiary. The National Technical University of Athens (NTUA, Greece) is the LB and acts as the Leader responsible for the management and scientific coordination of the Project. This Project will be implemented over three (3) years period in Partnership between seven (7) organizations in seven (7) cities in five (5) different countries: Athens (Greece), Prato (Italy), Palermo (Italy), Tunis (Tunis), Hebron/Nablus (Palestine) and Amman (Jordan). The **INNOMED-UP Partnership** consists of:

- Lead Beneficiary (**LB**): National Technical University of Athens (NTUA, Greece);
- Project Partner 1 (**PP1**): Environmental Planning Engineering and Management (EPEM SA, Greece);
- Project Partner 2 (**PP2**): Municipality of Prato (MoP, Italy);
- Project Partner 3 (**PP3**): Centre for Economic and Social Research for the South of Italy (CRESM, Italy);
- Project Partner 4 (**PP4**): Municipality of Tunis (Municipality of Tunis, Tunis);
- Project Partner 5 (**PP5**): Birzeit University (BZU, Palestine);
- Project Partner 6 (**PP6**): Future Pioneers for Empowering Communities' Members in the environmental and educational fields (FPEC, Jordan).

The **governing culture** of INNOMED-UP Project is based on democracy, participation, co-determination and clear leadership. The defined Project management bodies, decision-making process and the responsibilities are bindingly described in the GC and its Annexes. The Project is designed in a way that all partners are responsible for the activities located in their respective city under the corresponding Work Package (WP) Coordinator. Each WP is coordinated by one (1) Project Partner (PP) according to its specific experience and capacity.

The management structure and techniques of the Project are tailored to the complex structure of the Project. The interactions, the responsibilities and decision-making power are clearly split among the following two (2) established **management bodies** of this Project:

- The **Steering Committee (SC)** -highest decision-making body by delegates of all PPs, responsible to put in place all technical, financial, scientific, time scheduling issues as well as the contingency measures to mitigate potential risks during the Project's lifetime. It is led by the LB, responsible for monitoring the proper implementation of the Project. It meets in person, once per semester, to review the overall Project progress, any kind of unexpected events or risks, and to propose short-term actions in order to reach the planned deliverables with quality and in time;
- The **Stakeholder Advisory Group (SAG)** -an advisory body of important stakeholders related with the Project objectives, representing civil society, academia, technical community, Government, and the private sector. It meets upon request of the LB.

The following delegates are defined on behalf of each PP to present within the SC meetings:

- **LB (NTUA, Greece):**
Sofia AVGERINO-KOLONIAS, Emeritus Professor, who is the Project Coordinator of the INNOMED-UP Project, appointed Head of the SC,
Eirini KLAMPATSEA, Associate Professor, and
Mattheos PAPAVALIOU, Associate Professor, Communication Manager of NTUA, as alternates;
- **PP1 (EPEM SA, Greece):**
Haris KAMARIOTAKIS, Member of Board,
Maria PLOTA, Researcher, as alternate;
- **PP2 (MoP, Italy):**
Besnik MEHMETI, Project Officer of European Projects Office,
Lorena VIDAS, Project Officer, and
Paolo QUARNIERI, Project Officer, as alternates;
- **PP3 (CRESM, Italy):**
Alessandro LA GRASSA, President of CRESM,
Luca CUMBO, Coordinator in Palermo, as alternate;
- **PP4 (Municipality of Tunis, Tunis):**
Mahdi HENTATI, General Manager Environment Department,
Leila BEN GACEM, Consultant, as alternate;
- **PP5 (BZU, Palestine):**
Shadi GHADBAN, Associate Professor, Dean Faculty Of Art, Music And Design, Project Manager of BZU,
Mohammad JAWABREH, Assistant Professor, Communication Officer, as alternate;
- **PP6 (FPEC, Jordan):**
Obyda HUMMASH, Executive Director of FPEC,
Ehab EID, Deputy director, Communication Specialist, as alternate.

In addition to the management bodies a **Management Team** is needed for monitoring and harmonizing the WPs. It includes the LB as Leader and also WP1 Coordinator together with two (2) key staff members:

- Sofia AVGERINO-KOLONIAS, Emeritus Professor, as Project Coordinator appointed Head of the Management Team on behalf of the LB (NTUA, Greece), who steers activities towards the maximization of the expected results, and undertakes day-to-day management. This is important for the smooth running of the Project because it encompasses a wide variety of topics and challenges, regarding the technical and financial reporting, communication activities, efficient implementation of activities, outputs production, achievement of result indicators, and outputs indicators;

- Panagiotis STRATAKIS, NTUA staff member, as Financial Manager who undertakes the financial monitoring and control system that is set up to monitor the execution of the agreed budget allocation, drafts the financial reports, and takes care of all documents, which may be requested for the financial control and the monitoring;
- Mattheos PAPAVASILIOU, Associate Professor, Communication Manager of NTUA, in close collaboration with Ehab Eid, Deputy director, Communication Specialist, as Communication Manager responsible for the WP2, who undertakes the drafting of the Communication and Visibility Plan (under the supervision of the LB).

A **Communication Team** is needed for keeping adequate communication flows among the LB, WP Coordinators and within the Partnership. Therefore, Mattheos PAPAVASILIOU, Associate Professor, Communication Manager of NTUA, in close collaboration with Ehab EID, Deputy director, Communication Specialist, Communication Manager who is responsible for the WP2, manage this team, which includes the following members:

- **LB (NTUA, Greece):** Ioannis SPYROPOULOS, Researcher, NTUA staff member;
- **PP1 (EPEM SA, Greece):** Haris KAMARIOTAKIS, Member of Board;
- **PP2 (MoP, Italy):** Letizia BENIGNI, Communication Officer;
- **PP3 (CRESM, Italy):** Alessandro LA GRASSA, President of CRESM;
- **PP4 (Municipality of Tunis, Tunis):** Hanan TARHOUNI, Communication Manager, and Leila BEN GACEM, Consultant;
- **PP5 (BZU, Palestine):** Mohammad JAWABREH, Assistant Professor, Communication Officer, and Mothana HEJJA, Financial and Administrative assistant.

Each WP Coordinator is responsible for monitoring and harmonizing activities per WP; assuring quality of the related deliverables; establishing intermediate milestones and PP mandates for associated subtasks within the WP; deciding upon exchange of work or parts of a specific task among the involved PPs.

The following PPs are identified as **Coordinator per WP** of the Project, who is in charge of the progress of each activity, responsible to report periodically to the SC, more specifically focusing on Project Management:

- **WP1: Management** - Coordinator: LB (NTUA, Greece);

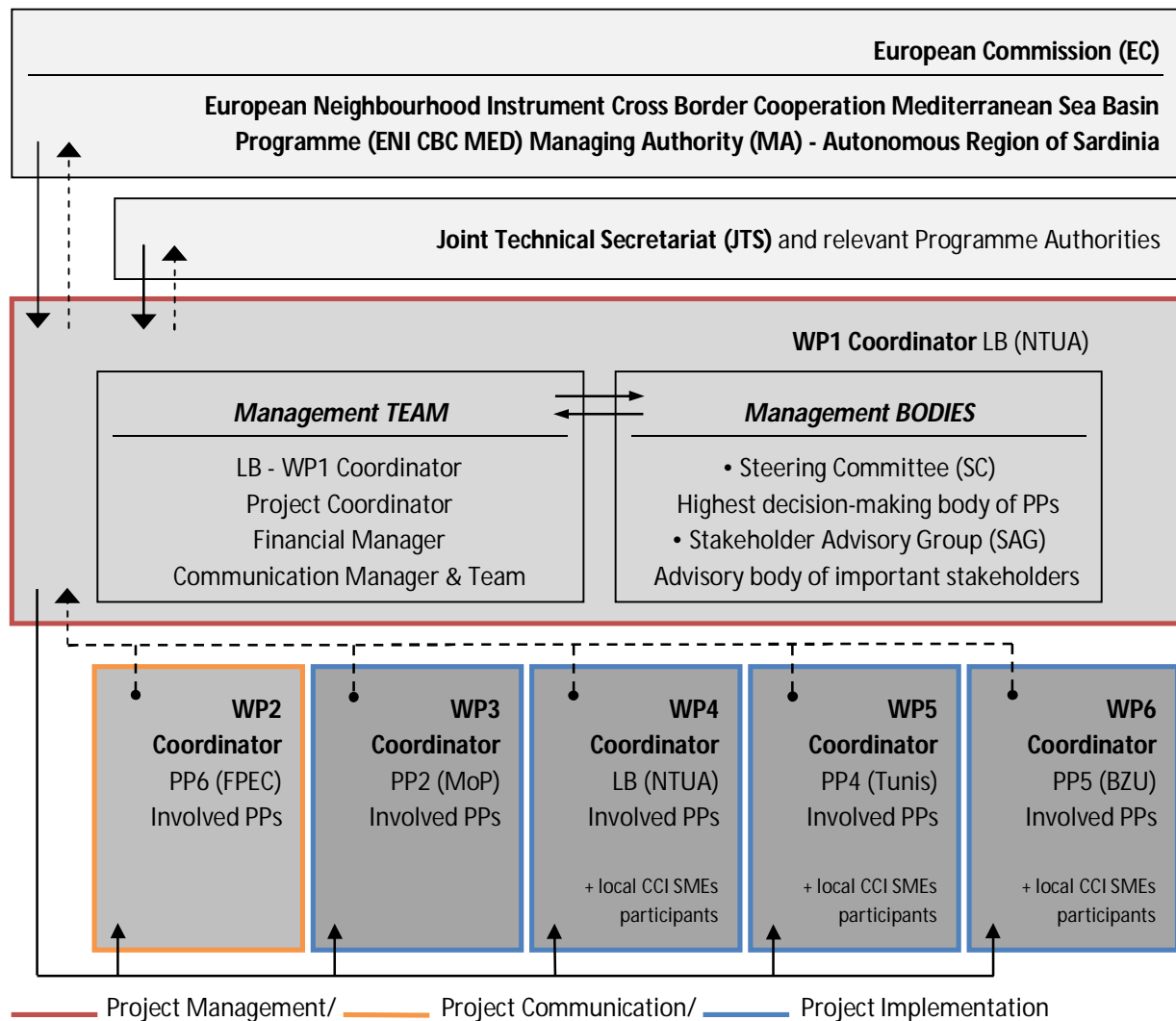
focusing on Project Communication:

- **WP2: Communication** - Coordinator: PP6 (FPEC, Jordan);

focusing on Project Implementation:

- **WP3: INNOMED-UP model** - Coordinator: PP2 (MoP, Italy);
- **WP4: SMEs Clustering Capacity Enhancement through Roadmaps and Smart Tools** - Coordinator: LB (NTUA, Greece);
- **WP5: Pilot Integration Actions** - Coordinator: PP4 (Municipality of Tunis, Tunis);
- **WP6: SMEs access to innovation and finance** - Coordinator: PP5 (BZU, Palestine).

Figure 2: Organizational structure



Source: Based on GC, Annex I: Description of the INNOMED-UP Project

Beside the LB and PPs, the *actors* involved in or relevant to (GC, Art.16.4.b; PIM, Ch.2):

- **Project Implementation** are the MA, the JTS, two (2) Branch Offices (BOs), National Contact Points (NCPs), Auditors of the LB and PPs;
- **Programme Implementation** are National authorities (NAs), JMC, Group of Auditors (GoA), Control Contact Points (CCPs) and Project Selection Committee (PSC).

The general **hierarchy** defined in the PM structure results in responsibilities for proper implementation of this Project. Each WP Coordinator is responsible for the achievement of WP specific goals, being in close contact with the LB through e-mails and teleconferences, besides periodic reporting, which is the designed process to summarize the overall Project progress, status and risks in order to be evaluated during the meetings of the SC. Constant interactions arise among the PM and all Outputs through the whole period of 36 months [Table 2]. This offers useful information indicating correlations (dependences/associations) among **complex managerial variables** that have to be thoroughly understood by PPs in order to maintain high standards and to avoid the time limit exceeded, by clarifying the activities'

duration and how to meet tight deadlines of deliverables or milestones set for the successful implementation of the INNOMED-UP Project, e.g. submission of reports on time, etc.

Table 2: Outputs overview

WPs		Semester					
WP1	Management	I	II	III	IV	V	VI
O 1.1	Project Management						
O 1.2	Progress Reports						
O 1.3	Project meetings						
O 1.4	Monitoring and Evaluation Plan						
O 1.5	Overall Evaluation Report						
WP2	Communication	I	II	III	IV	V	VI
O 2.1	Communication and Visibility Plan						
O 2.2	Awareness Campaigns						
O 2.3	Online Communication and Dissemination material						
O 2.4	Printed Communication and Dissemination material						
O 2.5	INNOMED-UP Digital platform for CCI SMEs' training and networking						
O 2.6	Info points for consultation of SMEs						
O 2.7	Capitalization Plan						
WP3	INNOMED-UP model	I	II	III	IV	V	VI
O 3.1	INNOMED-UP Strategic Context Report						
O 3.2	Methodological Framework Reports						
O 3.3	INNOMED-UP Model for the Mediterranean						
WP4	SMEs Clustering Capacity Enhancement through Roadmaps and Smart Tools	I	II	III	IV	V	VI
O 4.1	Strategy design for Specialization of INNOMED-UP's Holistic Approach - local level						
O 4.2	CCI SMEs' clustering roadmaps for each city						
O 4.3	Clustering smart tools						
WP5	Pilot Integration Actions	I	II	III	IV	V	VI
O 5.1	Pilot clusters						
O 5.2	Pilot innovative products						
O 5.3	Pilot Reuse Open Market						
O 5.4	Socio-Urban Circularity Workshops						
WP6	SMEs access to innovation and finance	I	II	III	IV	V	VI
O 6.1	Training Activities for SMEs in each participating city						
O 6.2	Innovation Vouchers						
O 6.3	Access to cross-border mentorship schemes and new financial tools						

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

The **focus** of **QA** is on the creation and monitoring of processes. **QA procedures** create and monitor Project's processes, which need to be performed effectively so as to reach the targeted outcome. This involves apart from **progress reporting** (progress/interim/final), the establishment of **responsibilities** that are comprehended well within the Partnership, and regular **communication flows**, e.g. clearly guided face-to-face/teleconference meetings, etc.

1.2 MEASUREMENT OF PROJECT PROGRESS

During Project's life, the LB (NTUA, Greece) has to inform the MA on Project progress periodically (GC, Art.6) by means of **regular reporting**. *Reporting aims to update on relevant progress in project implementation and demonstrate whether or not the indicative plan for outputs and activities completion is on track with respect to the approved project annexed to the GC* (PIM, Ch.4). Firstly, a **Communication on project starting** report is expected to be submitted by the LB after three months from the signature of the GC. Subsequently, the GC foresees three (3) types of reports: **Progress**, **Interim**, and **Final** report. Each report has a specific goal, and consists of two (2) separate sections: a **narrative** part that assists checking technical aspects, and a **financial** part that helps checking economic issues.

WP Coordinators are responsible for preparing and delivering to the LB any necessary supporting documentation provided by the involved PPs per WP. Content-based information and available data contribution aim to cover WP progress as regards deliverables, milestones and resources spent in compliance with the Monitoring and Evaluation Plan. On that basis, the LB will have the final responsibility for drafting an **integrated report**, summarize the Project status looking for inconsistencies, further elaborating and taking care of the final distribution. The INNOMED-UP Project is divided into seven (7) distinct reporting periods, i.e. from month 0 to 3, 0 to 6, 0 to 12, 13 to 18, 13 to 24, 25 to 30, 0 to 36 and 25 to 36 [Table 3].

Table 3: Synthetic overview of periodic reporting

TYPE of report	Reporting period (Months covered by report)	Deadline for submission	INNOMED-UP important dates
Communication on project starting	0-3	<i>Within 3 months</i> after the signature of the GC	30-11-2019
1 st Progress report	0-6	<i>10 working days</i> after the end of the reporting period	29-02-2020 (end of period) 13-03-2020 (submission deadline)
1 st Interim report	0-12	<i>Within 2 months</i> after the end of the reporting period	30-08-2020 (end of period) 30-10-2020 (submission deadline)
2 nd Progress report	13-18	<i>10 working days</i> after the end of the reporting period	28-02-2021 (end of period) 12-03-2021 (submission deadline)
2 nd Interim report	13-24	<i>Within 2 months</i> after the end of the reporting period	30-08-2021 (end of period) 30-10-2021 (submission deadline)
3 rd Progress report	25-30	<i>10 working days</i> after the end of the reporting period	28-02-2022 (end of period) 14-03-2022 (submission deadline)
Final report	0-36 (narrative) 25-36 (financial)	<i>Within 3 months</i> after the end of the reporting period	30-08-2022 (end of period) 30-11-2022 (submission deadline)

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

Progress reporting is an essential component allowing an **on-going monitoring** for the implementation of INNOMED-UP Project. Please note that the LB is in charge, responsible for reporting on behalf of the whole Partnership, i.e.: (a) collects information and documents in relation to results, Outputs, their indicators, and Activities, provided by the involved PPs (technical/financial content); (b) checks their quality and consistency; (c) drafts and submits an integrated report, based on the contributions of all PPs.

The LB will submit these reports to the MA according to the guidelines defined by the PIM (GC, Art.6; PIM, Ch.4) to facilitate checking of both the technical and financial progress. For continuous reporting, the LB has the obligation to report progress through the provided Reporting and Management Information System (MIS). **Reporting is considered critical** to measure progress and manage the deliverables' preparation or potential risk in the Project.

The **basic idea of the integrated report** is to implement a tool, which urges each PP to provide information regarding their ongoing and planned work as well as information on the resources spent. It is planned as a short report on a six-month basis. It is an **efficient tool** to provide the WP Coordinators a good understanding of the status and progress of the work or to detect any possible delays or deviations well in advance. Furthermore, the final report serves as a helpful basis for evaluation. Based on the structure and targets of each Output, the following types of periodic reporting give a short introduction to PPs analyzing the work carried out by the LB. This tool presupposes **collaboration** as regards the work performed within the respective period and helps the LB to monitor activities and progress made within the last six months. It further asks each WP Coordinator explicitly for the achievements and Outputs per WP, in order to have a clear view on their results and how they will impact the ongoing work. It is also of high importance the section in MIS, which offers the opportunity for partners to describe deviations and corrections per Activity. This section gives ideas of problems partners have to cope with and that may be related to other deeper problems. The MIS is the IT software designed to support three (3) functions: results-based approach, PM, and Communication. Five major (5) **key issues** regarding the reporting standards need to be thoroughly explained and explicitly clear to all PPs, prior to taking any action (PIM, Ch.4:3):

- **Who is in charge of reporting?** The LB is responsible for reporting on behalf of PPs;
- **Reporting forms** (progress/interim/final report) are available in MIS (GC, Annex I). When uploading in the MIS (outputs/deliverables/supporting documents) all PPs have to use files' names related to the contents of the file, e.g. a file containing the minutes of a SC meeting should be numbered and titled according to the timeframe of the Project activities implementation "1_SC_minutes_Beirut_02-03.05.2019";
- Project is expected to contribute to two **cross-border transversal result indicators** at Programme level, which are: *New jobs created* as a result of Project initiatives, and *Increased participation and visibility of cross-border cooperation*;
- Reporting has to be completed in the **language** of the Project, which is English;
- **Clarifications on reporting** have to be provided within fifteen (15) calendar days.

PROGRESS REPORTS

Progress reports allow **on-going monitoring** by the MA/JTS. Their goal is to provide an overview of Project progress in terms of achieved results, outputs delivered, lessons learnt.

The **Progress Narrative Report** is submitted after month 6, 18 and 30, within ten (10) working days after the end of the reporting period (covers the previous six-month period). A courtesy form template is provided to facilitate information, data collection and input.

The **Progress Financial Report** is based on the template set up in the MIS as *Summary report on expenses* to effectively monitor the expenses incurred by cost categories, WPs and outputs for the concerned implementation period. Information on the expenditures trends will be compared to the approved budget.

The LB and PPs will fill in the aforementioned templates through the MIS. The LB will need to *validate* the report on expenses. Since this operation may take time, *it is highly recommended that the LB monitors on a regular basis (at least on a monthly basis), the input of the financial information provided by each partner. This will also allow the LB to promptly detect potential delays and take corrective measures.* The Progress report will be processed and either rejected or approved by the JTS (PIM, Ch.4:4).

INTERIM REPORTS

Interim reports are submitted after month 12, 24 and 36 of Project Implementation, within 3 months after the end of the reporting period (cover the previous 6-month period).

The **Interim Narrative Report** has the same structure as the Progress Narrative Report.

The **Interim Financial Report** is composed of three (3) templates (PIM, Ch.4:4-5), i.e. Summary report on expenses (see Progress Financial Report); Expenditure verification report (EVR): this is the document issued by the auditors -appointed by the LB and PPs - for the verification of expenses (GC, Art.6.6). In addition to the EVR of the LB and PPs, the Auditor of the LB will draft a consolidated report, including the results of the verification carried out by all auditors (Annex 4.2.1-4.2.7 TESIM model forms); Request of payment: the MIS will generate the format by the end of the reporting circuit (Annex 4.3).

FINAL REPORTS

In addition to the Interim Narrative Report for the last six-month of Project, we shall submit a **Final Narrative Report** covering the entire Project Implementation period (Annex 4.4). This provides a global overview of the achieved results and impact of the Project, the added value in terms of cross-border cooperation, Project sustainability and contribution to the objectives of the Programme, including cross-cutting issues (non-discrimination principle in all activities; environmental sustainability; gender equality, etc.) (JOP, Per.2.6).

The **Final Financial Report** is composed of the same templates of the Interim Financial Report, i.e. Summary report on expenses, EVR and Request of payment (PIM, Ch.4:5).

2. DECISION-MAKING MECHANISMS

2.1 PROJECT MEETINGS

Communication is for sure one of the most essential foundations of successful project collaborations. Therefore, the INNOMED-UP Partnership establishes **regular communication** via teleconferencing with audio and audio-visual calls, and any other available systems, such as e-mails, Cloud, Digital Platform, periodic Reports, minutes of meetings, WP-internal/cross-WP meetings on request. The virtual meetings are planned in parallel to physical meetings. Currently, the face-to-face meetings are needed due to the complexity and large number of interfaces to be developed within this Project. To ensure the Project's success it is crucial to implement an efficient meeting structure. Different expectations and schedules need to be discussed so as to make a definitive plan about the further work plan and required actions.

During the whole Project, seven (7) Project meetings will be organized. At the outset of the Project, the kick-off meeting will be convened by the LB (NTUA) in Athens, Greece. It is scheduled to organize five Steering Committee (SC) meetings, one per semester, which will be held in participating cities. At the end of this Project, there will be a finalisation meeting. All PPs will participate in Project meetings to present and discuss Project implementation. In addition, there will be WP-internal/cross-WP meetings on request. Due to experience, there will be more teleconferences, rather than having physical meetings. Further it is planned to organize several workshops and participate in conferences related to the Project [Table 4].

Table 4: Project meetings

TYPE of meeting	Date	Place	WP	OUTPUT	ACTIVITY
Kick-off meeting	Nov 2019	Athens	WP1	O 1.3	A 1.3.1
1 st Steering Committee	Feb- Mar 2020	Amman	WP1	O 1.3	A 1.3.2
2 nd Steering Committee	Sept-Oct 2020	Prato	WP1	O 1.3	A 1.3.2
3 rd Steering Committee	Feb- Mar 2021	Palermo	WP1	O 1.3	A 1.3.2
4 th Steering Committee	Sept-Oct 2021	Tunis	WP1	O 1.3	A 1.3.2
5 th Steering Committee	Feb-Mar 2022	Prato	WP1	O 1.3	A 1.3.2
Final meeting	Jul 2022	Athens	WP1	O 1.3	A 1.3.3

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

All PPs and participants involved in activities have to be in **continuous communication**, led by the WP Coordinators, who are in charge of the progress of these activities. The LB has the great responsibility of answering about progress, developments and problems to each WP Coordinator, being responsible for the smooth execution and overall coordination of the activities assigned to them within the frame of Project's management, communication and implementation. Thus, the PPs will have a **frequent dialogue** with the WP Coordinator(s) and need to report periodically to them, at least once every month. Each WP Coordinator is

responsible for the overall management and coordination at WP level, and the achievement of the defined results, and will report periodically once in every six months to the SC.

KICK-OFF MEETING

The **Kick-off meeting** is the official opening of the Project. It was held by the LB (NTUA, Greece) in Athens Greece on November 22nd 2019. It included comprehensive presentations concerning key issues as regards the reporting and other obligations towards the JTS/MA. The **goal** was to have an open discussion and planning of the necessary steps to overtake the upcoming months. Project objectives were analytically presented and specific roles assigned to PPs. The timetable and QA/QC procedures were introduced and accepted, as well as the way that synergies will be built, when/how stakeholders and target groups will be involved.

STEERING COMMITTEE (SC) MEETINGS

The **SC** is the **highest decision-making body**, comprised of each PP's senior scientific or technical representatives, and chaired by the LB. It is considered as a **good instrument** to support implementation, appropriate coordination and communication. The SC will meet regularly, once every six months. It will decide on all matters related to technical, financial, scientific, time scheduling issues and also contingency measures to mitigate any unexpected events or risks during the Project's lifetime. All delegates have to be present (plenum) at the SC meetings in person, or through other means in cases where force majeure is proven. The decisions are expected to be taken by **consensus**. If such a consensus cannot be reached, decisions will be taken by a majority vote, with each present member having one vote. In the event of a tie, the vote of the LB will decide.

The 1st SC will be organized at Amman in March 2020, 2nd at Prato in October 2020, 3rd at Palermo in March 2021, 4th at Tunis in October 2021, and 5th SC at Prato in March 2022.

The **final meeting** will be held at Athens Greece in July 2022. During this meeting, the Project results will be presented and evaluated by the INNOMED-UP Partnership. Other consolidation and mainstreaming of sustainability actions will be also included.

STAKEHOLDER ADVISORY GROUP (SAG) MEETINGS

The **SAG meetings** have an advisory role and will be organized upon request of the LB. These can involve external experts, regional authorities, and other key stakeholders or target groups representatives in part of its work to ensure information flows between the Project and the outside world and get relevant input for successful implementation. It is expected that they will develop as a means for constructive and effective communication and dialogue between Research and **important stakeholders** that are related with the Project objectives representing civil society, academia, technical community, Government, the private sector. The **goal** is to facilitate the effective involvement in decision-making and participation of authorities, local communities, CBOs and SMEs that express a diverse range of interests.

INTERNAL PROJECT MEETINGS

WP-internal/cross-WP meetings will be organized to guarantee the Project's operation.

The LB together with WP Coordinator(s) shall convene WP-internal/cross-WP meetings on request dealing with management and technical topics, before or after the SC meetings. Although there is not a fixed rule on the frequency, it is expected that these meetings will be convened at least every three (3) months, and shall also convene extraordinary meetings at any time upon written request of any partner with duly justified reasons. Responsibility for hosting meetings will be rotated amongst each of the PPs during the Project's operation. These meetings include face-to-face and virtual meetings, e.g. telecommunicationing, etc.

WP Coordinators should consider the convenience of having ordinary meetings with the PPs involved to discuss the technical issues of their WP. Meetings of each WP team will be called by WP Coordinators as often as needed for ensuring effective work progress and to address task matters and other related issues. It is highly recommended to convene these meetings by electronic conferencing facilities to limit travel expenses.

Other meetings can be organized at task level by PPs involved in specific activities.

OPERATIONAL PROCEDURES FOR PROJECT MEETINGS

Notice of a meeting

Next meetings will be preliminary scheduled during each meeting. The LB, or WP Coordinators shall give notice in writing of a meeting to each partner as soon as possible; meaning early enough preceding an ordinary or extraordinary meeting.

Participants to the meetings

Concerning the SC meetings and SAG meetings, each PP's delegate:

- Should attend or be represented at the meeting;
- May nominate a proxy to attend and vote at the meeting⁶;
- Shall participate in a cooperative manner in the meetings.

Concerning the WP-internal/cross-WP meetings, each PP's representative:

- The LB, WP Coordinator(s) and PPs involved should attend meetings;
- The LB, together with WP Coordinator(s) shall decide who else should attend the meeting (PPs intervening in the involved WP(s), any other specific party or partner);
- Participants should attend or nominate a proxy following the same procedure as outlined above for the SC/SAG meetings;

⁶ Proxy nomination must be done in advance by official notification by the person to be represented, to be delivered to the LB, via e-mail and copied to the nominated proxy. The decisions taken by the proxy are binding for the partner who has delegated.

- Output from these meetings will be in the form of decisions for scientific/technical issues related to this specific part of the work;
- Proposals on relevant changes to the work plan are subject to approval by the LB.

Agenda and Venue

Concerning internal Project meetings:

- The LB shall compose and send each PP a draft agenda preceding the meeting;
- The host partner shall send each PP an official invitation and the overall program preceding the meeting;
- During a meeting the delegates will approve the agenda. If a new item is proposed to the original agenda, it has to be agreed by the delegates;
- Meetings will be chaired by the LB;
- The host partner will be responsible for in situ organization convening the meeting;
- The host partner will prepare the arrangements for the meeting: appropriate room, available material, logistic information, recommendations for hotels, directions, etc.

Minutes

Concerning the SC meetings and SAG meetings:

- Minutes of each meeting shall be the formal record of all decisions taken;
- The LB shall produce a working draft of the minutes based on the notes recorded during the meeting, presentations and other material;
- The LB with the support from partners who presented in the meeting shall make the minutes and related materials available to all PPs the next days of the meeting;
- The minutes shall be considered accepted within fourteen (14) calendar days from sending if no PP has objected in writing to the LB with respect to their accuracy;
- The accepted minutes shall be made available to all the PPs within the Partnership;
- The LB shall manage the storage of minutes and related materials. If requested the LB shall provide duplicates to parties;
- The PP6 (FPEC, Jordan) as WP2 Coordinator, and in collaboration with the LB, has to distribute any information concerning the above meetings to social media;
- Decisions may only be executed once the relevant part of the minutes is accepted.

Voting rules and quorum

Concerning the SC meetings and SAG meetings:

- The meeting shall not deliberate and decide reliably unless a plenum of its members are present or represented;
- Each partner represented on the meeting shall have one vote;
- Decisions shall be taken by majority vote.

2.2 DISPUTE SETTLEMENT

Decision-making mechanisms that govern the INNOMED-UP Project perform a crucial role especially as regards **dispute settlement**, helping to resolve discrepancies among PPs by means of dialogue and mutual concession, to avoid the impact of risk events on the Project. The LB will be free to act on its own initiative to formulate proposals and take any decisions, in accordance with the procedures described in the signed GC and its Annexes.

According to the GC, this Contract shall be governed by the law of the country of the MA i.e. the Italian law. The parties to this Contract shall do everything possible to settle amicably any dispute arising between them during the implementation of this Contract. To that end, they shall communicate their positions and any solution that they consider possible in writing, and meet each other at either's request. The LB and the MA shall reply to a request sent for an amicable settlement within 30 days. Once this period has expired, or if the attempt to reach amicable settlement has not produced an agreement within 120 days of the first request, the LB or the MA may notify the other part that it considers the procedure to have failed. In the event of failure to reach an amicable agreement, the dispute may by common agreement of the LB and the MA be submitted for conciliation by the European Commission if it is not the MA. If no settlement is reached within 120 days of the opening of the conciliation procedure, each party may notify the other that it considers the procedure to have failed. In the event of failure of the above procedures, each party to this Contract may submit the dispute to the courts of the country of the MA i.e. Cagliari (GC, Art.23:24-25).

According to the Partnership Agreement, in case of dispute arising in the execution of the Partnership Agreement between the Lead Beneficiary and the Partners or among the Partners themselves, all parties shall do everything possible to settle amicably this dispute. To this end, they shall communicate their positions in writing and any solution that they consider possible. The Lead Beneficiary shall immediately notify the MA of any disputes arising during the Project implementation. In case of failure to reach an amicable agreement, the dispute shall be submitted to the courts of the country of the Lead Beneficiary and the applicable law is that one of the country where the Lead Beneficiary is established (GC, Annex III, Art.21:11).

2.3 RISK MANAGEMENT

A result-based combined with a **risk management** approach is applied in parallel to the ENI CBC MED Programme and INNOMED-UP Project. This brings substantial benefits during the lifetime of any project and it can save a time and money by enabling partnerships to deal **proactively** with unexpected events. This helps: Minimize the impact of threats to successful delivery; Implement the Project on time and on-budget; Ensure the quality of outputs and results envisaged. A risk event is an occurrence that may affect the Project positively or negatively. The **type of risk event** can be part into the following areas: Strategic; Technology or innovation; Action plan; Investment plan; Procurement; Communication; Finance.

To guarantee the achievement of Project objectives, it is essential to have **structured** decision-making mechanisms that identify and understand the significant Project risks. A **continuous** risk management process is based on seven (7) rules (PIM, Ch.8): Make risk management part of Project management practice; Identify risks early; Consider threats and opportunities; Clarify ownership issues; Communicate about risks; Plan and implement risk responses; Monitor risks and track associated tasks. Meetings, either on an ordinary or extraordinary basis, shall serve as an interactive **forum for risk identification**. This will be effective depending on the early identification of/fast reaction to events that can affect the Project's outcomes, and as long as these events are identified risks being analyzed and graded, based on their impact and probability of occurrence.

3. DELIVERABLES AND REVIEW PROCEDURES

The INNOMED-UP Project produces several data types that can be classified depending on the **origin** of the retrieved information, such as Modelling data (information for computer models developed during the Project and the input data for the validation of the models); Simulation results (information that is obtained after computer models are run); Software (code developed in the framework of computer modelling or different communication and control systems); Documentation (information and data included in presentations, reports, manuals, and other communication documents) Images, including photos of equipment, snapshots of operation and tests and infographic material; Animation, for communication activities, including short videos, infographic animations, etc. Especially, regarding preferred data formats to be used during Project's operation, **predefined** templates and information have been prepared by the JTS/MA and developed by the LB, and distributed online to all PPs to maintain a **harmonized** data and information management within the Partnership.

TYPES OF DELIVERABLES

The Project is designed in a way that all PPs are responsible for the activities located in their respective city, together with the WP Coordinator [Table 5] [Table 6] [Table 7] [Table 8] [Table 9] [Table 10]. On that basis, two (2) types of deliverables are foreseen in the Project:

- **Document deliverable**, mainly in the format of reports, manuals, minutes, etc, which refers to any type of original textual report that is produced in the context of the Project, according to the deliverables defined in the Project description;
- **Technical and technological output**, in the form of plans, drawings, platforms, pilot products, etc, which refers to technical services developed and provided to target Beneficiaries in the context of the Project.

QC is performed through deliverable preparation/creation process and also internal (peer) review procedures -whilst each deliverable undergoes a **content quality evaluation**-oriented to ensure better quality of results, checking completeness and correctness criteria.

Table 5: WP1 timetable (Gantt chart)

WP1	Management	SEMESTER I						SEMESTER II						SEMESTER III						SEMESTER IV						SEMESTER V						SEMESTER VI					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
		S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
O 1.1	Project Management																																				
A 1.1.1	Create contact database (PPs & stakeholders)																																				
A 1.1.2	Establish management & advisory bodies																																				
A 1.1.3	Undertake Financial Control & Monitoring-Financial manager																																				
A 1.1.4	Undertake day-to-day management-Project coordinator																																				
A 1.1.5	Undertake Coordination & communication PPs-with the MA																																				
O 1.2	Progress Reports																																				
A 1.2.1	Drafting of Technical Manual on reporting & financial procedures																																				
A 1.2.2	Drafting of Financial reports every six months																																				
A 1.2.3	Drafting of Evaluation reports (2 interim & 1 final)																																				
A 1.2.4	Drafting of Management reports (2 interim & 1 final)																																				
O 1.3	Project meetings																																				
A 1.3.1	Organize Kick-off meeting																																				
A 1.3.2	Organize 5 SC Meetings																																				
A 1.3.3	Organize Final Meeting																																				
O 1.4	Monitoring & Evaluation Plan																																				
A 1.4.1	Drafting of QA/QC Protocol																																				
A 1.4.2	Assessment of overall quality of Project progress																																				
A 1.4.3	Assessment of Project management																																				
A 1.4.4	Assessment of final results																																				
O 1.5	Overall Evaluation Report																																				
A 1.5.1	External Reviewing																																				
A 1.5.2	Drafting of Final Evaluation Report																																				

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

Table 6: WP2 timetable (Gantt chart)

WP2	Communication	SEMESTER I						SEMESTER II						SEMESTER III						SEMESTER IV						SEMESTER V						SEMESTER VI					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
		S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
O 2.1	Communication & Visibility Plan																																				
A 2.1.1	Drafting of communication & visibility plan																																				
A 2.1.2	Yearly evaluation of communication activities																																				
O 2.2	Awareness Campaigns																																				
A 2.2.1	Campaign for concept of Circular Economy in the Mediterranean																																				
A 2.2.2	Campaign for role of CCI across Mediterranean & CE principles																																				
A 2.2.3	Campaign for CCI clustering, cross-border innovation & technology																																				
O 2.3	Online Communication & Dissemination material																																				
A 2.3.1	Newsletters & press releases																																				
A 2.3.2	Videos																																				
A 2.3.3	Printed Communication & Dissemination material																																				
O 2.4	Printed Communication & Dissemination material																																				
A 2.4.1	Packages of Material for events/ Conference material																																				
A 2.4.2	Project Leaflet in all program's languages																																				
A 2.4.3	Project Banners & Posters																																				
A 2.4.4	Publication of Guide for access to financing tools																																				
A 2.4.5	Publication of Guide for Circularity Strategy																																				
O 2.5	INNOMED-UP Digital platform for CCI SMEs' training & networking																																				
A 2.5.1	Development of Digital Platform																																				
A 2.5.2	Asynchronous e-learning platform																																				

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

Table 7: WP3 timetable (Gantt chart)

WP3	INNOMED-UP model	SEMESTER I						SEMESTER II						SEMESTER III						SEMESTER IV						SEMESTER V						SEMESTER VI					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
		S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
O 3.1	INNOMED-UP Strategic Context Report																																				
A 3.1.1	Conduct state of the art review on CCI SMEs																																				
A 3.1.2	Review of existing policies & synergies in the Mediterranean on CCI & CE																																				
A 3.1.3	Conduct state of the art review in Circular Economy: Existing Practices & Trends Models																																				
A 3.1.4	Data Assessment & Compilation of INNOMED-UP Strategic Context Report																																				
O 3.2	Methodological Framework Reports																																				
A 3.2.1	Drafting of detailed methodology & Guidelines to be followed by all partners																																				
A 3.2.2	Compilation of the Database of CCI SMEs for each city																																				
A 3.2.3	Data collection from the participating cities on CE Models																																				
A 3.2.4	Compilation of Methodological Framework reports																																				
O 3.3	INNOMED-UP Model for the Mediterranean																																				
A 3.3.1	Consolidation Workshop between partners & stakeholders																																				
A 3.3.2	Drafting of Guide for Circularity Strategy for CCI SMEs in the Mediterranean (INNOMED-UP Model)																																				

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

Table 8: WP4 timetable (Gantt chart)

WP4	SMEs Clustering Capacity Enhancement through Roadmaps & Smart Tools	SEMESTER I						SEMESTER II						SEMESTER III						SEMESTER IV						SEMESTER V						SEMESTER VI					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
		S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
O 4.1	Strategy design for Specialization of INNOMED-UP's Holistic Approach - local level																																				
A 4.1.1	SWOT and PEST Workshops in each city (6 WS)																																				
A 4.1.2	SWOT and PEST Analysis reports for each city (6 reports)																																				
A 4.1.3	Strategy design for Specialization of the INNOMED-UP's Holistic Approach at local level (1 report)																																				
O 4.2	CCI SMEs' clustering roadmaps for each city																																				
A 4.2.1	Mapping of CCI value chains and existing interactions with CE models (6 surveys)																																				
A 4.2.2	Mapping of existing connections and networks in the CCI Sector of each city (6 surveys)																																				
A 4.2.3	Drafting of 6 clustering roadmaps (one per each participating city)																																				
O 4.3	Clustering smart tools																																				
A 4.3.1	Design a Smart Bicycle and construct a Prototype (12 pcs)																																				
A 4.3.2	Develop a Central Information System (1)																																				
A 4.3.3	Design a Smart Garbage Bin and construct a Prototype (60 pcs)																																				
A 4.3.4	Develop an Open source repository for circular designs and eco-design toolkits (1)																																				

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

Table 9: WP5 timetable (Gantt chart)

WP5	Pilot Integration Actions	SEMESTER I						SEMESTER II						SEMESTER III						SEMESTER IV						SEMESTER V						SEMESTER VI					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
		S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
O 5.1	Pilot clusters																																				
A 5.1.1	Re-Production of clustering smart tools in each case study & testing																																				
A 5.1.2	Methodology guidelines for the pilot clustering intervention																																				
A 5.1.3	Engagement and involvement of local communities in the pilot clusters																																				
A 5.1.4	Memorandum of Understanding with Stakeholders & selected local CCI SMEs																																				
A 5.1.5	Pilot clustering																																				
O 5.2	Pilot innovative products																																				
A 5.2.1	Evaluation of proposals from CCI SMEs that participate in the clusters																																				
A 5.2.2	Selection of proposals to be funded and supervision																																				
A 5.2.3	Evaluation report on produced products																																				
O 5.3	Pilot Reuse Open Market																																				
A 5.3.1	Pilot Open Market in MPC > Tunis																																				
A 5.3.2	Pilot Open Market in EUMC > Prato																																				
O 5.4	Socio-Urban Circularity Workshops																																				
A 5.4.1	Workshop for the role of CCIs in revitalization of Med Urban Centers and promotion of CE																																				
A 5.4.2	Open Workshop for Civil society engagement in the INNOMED-UP Model in MPC > Amman																																				
A 5.4.3	Open Workshop for role of CCIs in revitalization of Med Urban Centers & promotion of CE																																				

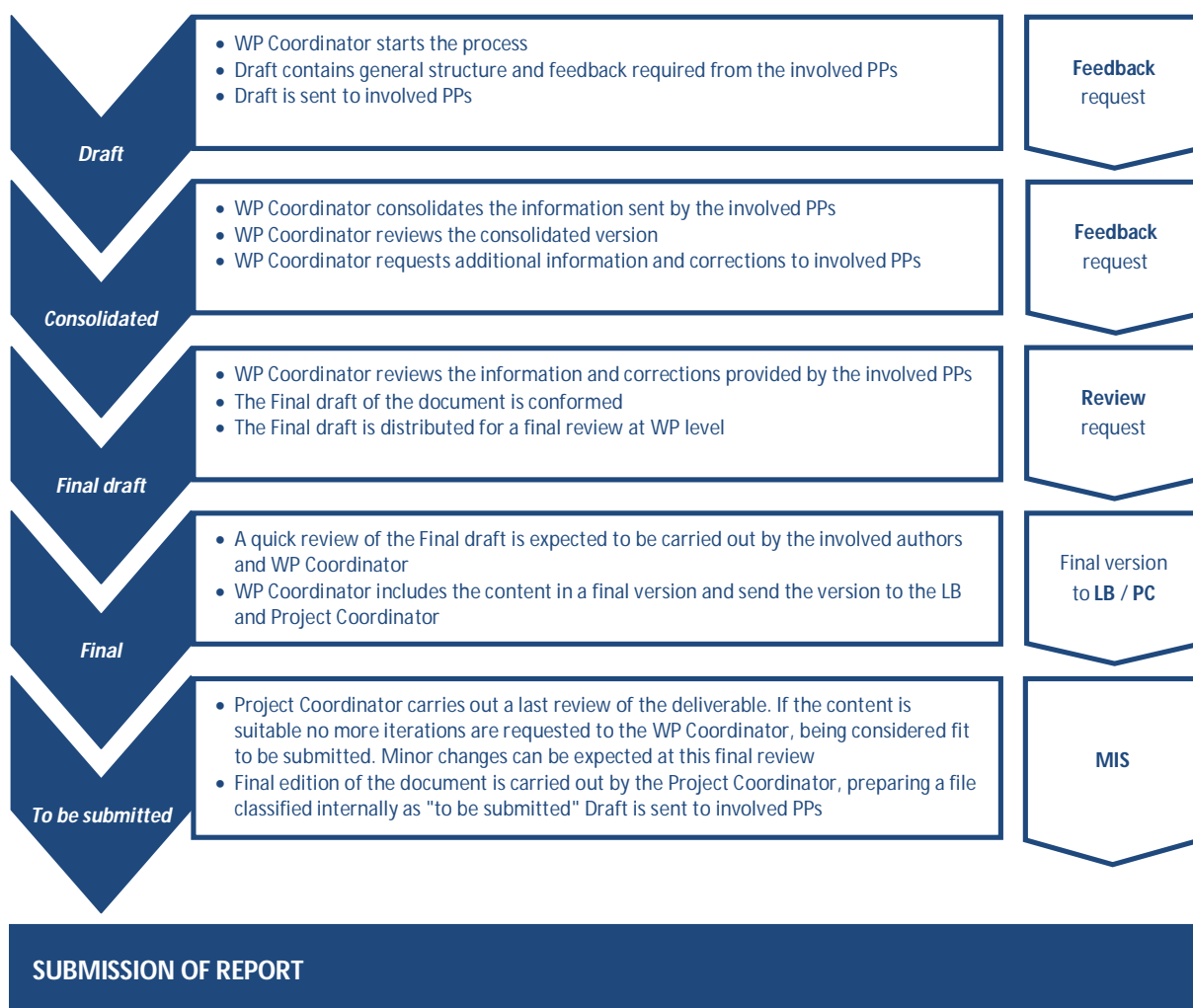
Table 10: WP6 timetable (Gantt chart)

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

INTERNAL REVIEWING PROCESS

During Project's operation, WP Coordinators have to report to the LB about each WP progress, results and observed bottlenecks. In general, WP Coordinators are responsible of the expected and required **process for deliverables** per WP. The deliverable preparation is organized internally at Partnership level by the WP Coordinator. Each WP Coordinator has the responsibility of starting the process providing a general structure and guidelines of the content to be reported in each deliverable (Draft), inviting the involved PPs and participants to contribute to each section of an Activity, forming a consolidated version of the document. The WP Coordinator reviews the document once is consolidated and requests additional feedback, if needed, to prepare the Final Draft. The **goal** is to configure a final version of the deliverable which is sent to the LB for a last review process. Once the content is approved, a final edition is needed (checking authoring, exporting to certain format) before submission. The exact timeline for deliverable preparation is provided by the signed GC and its Annexes. Depending of the complexity and iterations needed, WP Coordinators are in the position of starting the process sooner in order to avoid if possible additional delays [Figure 3].

Figure 3: Review process of deliverable preparation and submission



Source: Own processing. Based on GC, Annex I: Description of the INNOMED-UP Project, and PIM, Ch.4:8

Since the above types of deliverable are different, a different **validation procedure** will be implemented but all will be validated throughout in terms of quality by WP Coordinator and the LB. Summarizing, the quality review of deliverables in the Project will be performed at three (3) levels: 1st level by deliverable author, who will ensure that the **draft version** of the produced deliverable is in accordance with the set goals and defined visual identity requirements; 2nd level by involved PPs in the same activity of a particular WP, to whom the draft version will be distributed and who will contribute to a **consolidated version** of the produced deliverable; 3rd level by the LB and Project Coordinator, who will accept, or require revision, or reject the **final version** of the produced deliverable. The **approval of deliverables must respect the timeframe for deliverables** due date scheduled in the Project Work Plan. Each deliverable will be evaluated according to the following criteria:

- **Content**, depending on the specific type of deliverable itself. It should cover all the information relevant to the activity that it results and all the information needed by other PPs for performing their activities. The responsibility is of its author(s) but should meet a **set of requirements**, based on the following aspects: Completeness (Information provided in the deliverable must be reliable, complete and supported by relevant references); Accuracy (Information presented to be focused on the key issues); Relevance (Presented information should be relevant for the achievement of the Project goals); Language features (Before elaboration of the final version, the report to be submitted for proof reading);
- **Appearance and Structure**, having a uniform appearance, structure and referencing scheme. It is therefore necessary to use document referencing and predefined templates provided in the JTS/MA and developed by the LB.

At each SC meeting, the **status of QA/QC** for deliverables will be reviewed to ensure that the procedures were followed, to define opportunities for improvement (if any) and to find the solution to eliminate gaps between current and desired levels of performance.

Transparency of roles and responsibilities has an extended impact on Project's success. Uncertainty can dramatically affect individual, organizational or Partnership's performance. Thus, the LB and responsible persons for each partner per WP are defined in advance to participate and collaborate, having to share clear responsibilities for Deliverables [Table 11].

Table 11: WPs - Roles and active involvement of PPs

WP1	Management							
O 1.1	Project Management	LB	PP1	PP2	PP3	PP4	PP5	PP6
A 1.1.1	Create contact database (Project partners and stakeholders)	X	X	X	X	X	X	X
A 1.1.2	Establish management and advisory bodies	X	X	X	X	X	X	X
A 1.1.3	Undertake Financial Control and Monitoring (financial manager)	X						
A 1.1.4	Undertake day-to-day management (Project coordinator)	X						
A 1.1.5	Undertake Coordination and Communication PPs with the MA	X						

O 1.2	Progress Reports	LB	PP1	PP2	PP3	PP4	PP5	PP6
A 1.2.1	Drafting of Technical Manual on reporting & financial procedures	X						
A 1.2.2	Drafting of Financial Reports (FR) every 6 months	X *	* Supporting documentation by each PP					
A 1.2.3	Drafting of Evaluation Reports (ER) (2 interim and 1 final)	X *						
A 1.2.4	Drafting of Management Reports (MR) (2 interim and 1 final)	X *						
O 1.3	Project meetings	LB	PP1	PP2	PP3	PP4	PP5	PP6
A 1.3.1	Organize Kick-off meeting	X						
A 1.3.2	Organize 5 Steering Committee (SC) meetings			X	X	X	X	X
A 1.3.3	Organize Final Meeting	X						
O 1.4	Monitoring and Evaluation Plan	LB	PP1	PP2	PP3	PP4	PP5	PP6
A 1.4.1	Drafting of QA/QC Protocol	X						
A 1.4.2	Assessment of overall quality of Project Progress	X						
A 1.4.3	Assessment of Project Management	X						
A 1.4.4	Assessment of Final Results	X						
O 1.5	Overall Evaluation Report	LB	PP1	PP2	PP3	PP4	PP5	PP6
A 1.5.1	External Reviewing	Drafted by external reviewer						
A 1.5.2	Drafting the Final Evaluation Report							
WP4	SMEs Clustering Capacity Enhancement through Roadmaps and Smart Tools							
O 4.1	Strategy design for Specialization of the INNOMED-UP's Holistic Approach at local level	LB	PP1	PP2	PP3	PP4	PP5	PP6
A 4.1.1	SWOT and PEST Workshops in each city (6 WS)	X		X	X	X	X	X
A 4.1.2	SWOT and PEST Analysis reports for each city (6 reports)	X		X	X	X	X	X
A 4.1.3	Strategy design for Specialization of the INNOMED-UP's Holistic Approach at local level (1 report)	X *	* Based on each cities strategy design for the integration of circularity models in specific value chains					
O 4.2	CCI SMEs' clustering roadmaps for each city	LB	PP1	PP2	PP3	PP4	PP5	PP6
A 4.2.1	Mapping of CCI value chains and existing interactions with CE models (6 surveys)	X		X	X	X	X	X
A 4.2.2	Mapping of existing connections and networks in the CCI Sector of each city (6 surveys)	X		X	X	X	X	X
A 4.2.3	Drafting of 6 clustering roadmaps (one per each participating city)	X		X	X	X	X	X
O 4.3	Clustering smart tools	LB	PP1	PP2	PP3	PP4	PP5	PP6
A 4.3.1	Design a Smart Bicycle and construct a Prototype (12 pcs)	Design & Prototypes		2 copies	2 copies	2 copies	2 copies	2 copies
A 4.3.2	Develop a Central Information System (1)	X						
A 4.3.3	Design a Smart Garbage Bin and construct a Prototype (60 pcs)	Design & Prototypes		10 copies	10 copies	10 copies	10 copies	10 copies
A 4.3.4	Develop an Open source repository for circular designs and eco-design toolkits (1)	X						

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

4. ASSESSMENT OF PROJECT RESULTS

Monitoring is a crucial activity for the PM as it allows continuous learning at all levels. It is also a duty of the LB (GC, Art.5.f) and a responsibility of the MA (GC, Art.16.5) as well. The ENI CBC MED follows the **Result-oriented Monitoring** (ROM) approach that is based on two (2) principles: **Action-oriented** (monitoring must produce concrete recommendations for the upcoming activities); **Partnership-oriented** (recommendations are expected to be agreed and adopted by the LB and PPs).

The ROM *implies a focus on timely delivery of high-quality outputs and a continuous analysis of lessons learned throughout a **periodic quality assessment** by the JTS/MA of the INNOMED-UP Project contribution to the Programme expected results, complemented by a quantitative measurement of relevant results and outputs indicators.* It uses four (4) criteria: Relevance and quality of Project design; Efficiency; Effectiveness; Sustainability. Thus, this helps: Review the Project performance; Assess the likelihood that the Project objectives will be achieved; Evaluate the need for action (PIM, Ch.6).

Internal monitoring is a tool to support effective management and decision-making. *It should not be seen as an administrative burden, nor confused with the reporting obligations* (TESIM, 2019:4-6). It tracks: **operational** progress (how the Project is progressing in terms of implementation, delivery of results and management of risks); **financial** progress (use of resources). To set a successful internal monitoring system, each partner will have to: appoint responsible persons for monitoring and allocate clear responsibilities among Project staff; establish sources of data for monitoring; define joint templates for data collection and set up a shared, internet-based, information tool including the control of deadlines, resource use, activities, deliverables and indicators using available project management software so as get an overview of Project progress.

Project Evaluation *is the periodic assessment of the efficiency, effectiveness, impact, sustainability and relevance of a project in the context of stated objectives. It is frequently undertaken at/after completion and usually involves independent evaluators with a primarily purpose of learning lessons to guide future decision-making, design and implementation of other projects, future programming and policy making* (JOP, Annex 2:115).

External monitoring (including ROM), as defined by the EC *is distinguished from "internal monitoring" because it involves external agents (e.g. donor officials or contracted consultants), and the use of donor designed/approved monitoring methods and reporting formats, which are designed primarily to meet the donor's own upward reporting and accountability requirements.* ROM system is a key example of an external monitoring and reporting requirement (JOP, Annex 2:113).

The **Indicative Monitoring and Evaluation Plan** (M&E) is used to systematically plan the collection of data concerning cross-border activities to assess and demonstrate progress made in achieving expected results. It highlights mechanisms or modalities for monitoring

the achievement of selected outputs indicators and their contribution towards the expected results. In addition, this elaborates on the frequency and responsibility and it complements the identified risks and mitigation measures available in the JOP (JOP, Annex 2:3).

In the context of the INNOMED-UP Project, the emphasis will be on accessing new and externally-generated knowledge and innovation for SMEs that do not have internal skills and financial resources to innovate: they can get knowledge and adapt technology solutions that fit with their context and needs. Whether this is realizable in practice, it will be evaluated by assessing the Project's **impact** through: Expected results/Output Indicators, Target Values. **For the Project**, this *allows the LB and all PPs to understand if Project activities are effectively and efficiently leading to the completion of all planned outputs and, therefore, how they are contributing to Programme results, outputs and their indicators.* **For the JTS/MA**, it *provides information for the Annual Implementation Reports (AIR) to be approved by the JMC and EC. The AIRs include all indicators of the JOP, which are part of Project e-forms (PIM, Ch.6:3).*

4.1 IMPACT

Expected results and indicators or *intended outcome* are **instruments** adopted by the MA to develop a sound Monitoring and Evaluation plan of the new JOP. They are defined as the **specific dimension of well-being and progress for people** in their capacity of consumers, workers, entrepreneurs, savers, family or community members, that motivates policy action, i.e. what is intended to be changed with the contribution of public interventions designed. The notion of change includes changes in behaviour, social practices, institutions, etc. These are also defined as tangible products or services delivered (JOP, Annex 2:111-112).

In general, result indicators usually measure the broader societal impact of a particular objective or priority. They go beyond the direct beneficiaries of the support and cover a wider group of society. Appropriately designed result indicators should to a certain extent be affected by the outputs of the Programme, but in general they are also affected by other, external factors that lay beyond the activities of the Programme. They are **quantitative (or qualitative) expressions of the achievement** of the defined priorities.

The specific activity of Programme leads to outputs. **Outputs** are defined as the direct products of Programmes; they are intended to **contribute to results**. They are also the goods and services produced, i.e. (physical) outputs that are the direct result of a certain operation. Measurable policy actions, whose intended task is to produce results, e.g. support services, competition-enhancing measures, territorial cooperation initiatives, etc (JOP, Annex 2:114).

Outputs Indicators measure immediate and concrete consequences of the measures taken and resources used. They are describing the *physical* product of spending resources through **policy interventions**. Examples of output indicators are: number of cross-border networks created, number of people learning neighboring language, number of schools built, number of teachers trained, number of enterprises supported, km of road, the number of hours of extra-teaching hours provided by the intervention, etc (JOP, Annex 2:114).

Targets for result indicators usually reflect effect of programme and other factors. A result indicator is associated with a target. Setting targets for result indicators can be difficult. They can be of quantitative or qualitative nature. A qualitative target is a range of expected values, the expected direction of change and the expected pace of change. Other definitions include: the estimate of a future value of the result indicator influenced by programme and other factors or an estimate of the contribution of the programme to the change of the result indicator (the effect or impact of the Programme) (JOP, Annex 2:116).

4.2 ENI CBC MED INDICATORS ACHIEVEMENT

In the context of the INNOMED-UP Project, result (or outcome) indicators will measure the results in terms of **target group benefits**. Examples of these are: improved qualifications, increased business activity across the border, improved skills, newly created institutional structures, etc. They are variables that will provide information on some specific aspects of results that lend themselves to be measured. Therefore, three (3) result indicators (ENI CBC MED 2.2.1.A/2.2.1.B/2.2.1.C) aim to reflect the **added value of the cross-border cooperation** and so provide information on the change the ENI CBC MED Programme intends to bring to the Mediterranean area [Table 12]. It is also expected to contribute to two (2) cross-border transversal result indicators as a result of Project initiatives (JOP, Annex 2:12; PIM, Ch.4:3):

- ENI CBC MED 0.2 *New jobs created as a result of the projects initiatives carried out within each Priority* (short/long-term employment contracts by 2019 and 2022);
- ENI CBC MED 0.3 *Increased participation and visibility of cross-border cooperation* (number of participants to Project events/website single visits by 2019 and 2022).

Table 12: Priority, expected results and indicators of Programme

Thematic Objective	A.2 - Support to education, research, technological development and innovation	
Priority	A.2.2 - Support SMEs in accessing research and innovation also through clustering	
Result indicators	under TO2 Support to education, research, technological development and innovation	
Expected Result	A.2.2.1 - Upgraded innovation capacity of SMEs participating in CBC Med projects in processes, products and management systems for uptake of research outcomes	
ENI CBC MED cross-border transversal result indicator	ENI CBC MED 0.2 (JOP, Annex 2:12)	New jobs created as a result of the projects initiatives carried out within each Priority
	ENI CBC MED 0.3 (JOP, Annex 2:13)	Increased participation and visibility of cross-border cooperation
ENI CBC MED Indicator	ENI CBC MED 2.2.1.A (JOP, Annex 2:50)	Number of innovative products/services created by clustered SMEs across or within borders
	ENI CBC MED 2.2.1.B (JOP, Annex 2:51)	Investments (in euro) in targeted SMEs for new knowledge and equipment (hardware and software) and joint R&D and innovation activities

	ENI CBC MED 2.2.1.C (JOP, Annex 2:52)	New (foreign) investments (in euro) in targeted SMEs
OUTPUT Indicator	ENI CBC MED 2.2.1.1.a (JOP, Annex 2:53)	<i>Number of SMEs substantially and actively involved in projects as final beneficiaries (ENI CBC 2)</i>
	ENI CBC MED 2.2.1.2.c (JOP, Annex 2:54)	<i>Number of SMEs receiving grants for operational instruments (equipment) to favor their innovation</i>
	ENI CBC MED 2.2.1.3.d (JOP, Annex 2:53)	<i>Number of SMEs using programme support for cooperation in education, R&D and innovation (ENI CBC 4)</i>

Source: JOP, Annex 2.

The **source of verification** for ENI CBC MED Indicators achievement is (JOP, Annex 2):

- ENI CBC MED 0.2: Progress reports calculating progressive staff engagement of the firms and/or local stakeholders participating in the projects; During the mid-term and final evaluations additional analysis will be provided per Priorities/sectors;
- ENI CBC MED 0.3: Information will be collected by project using progress reports;
- ENI CBC 2.2.1.A: Information on the baseline will be collected using surveys and/or the available documented sources (official statistics). These surveys will be mainly based on questionnaires to be sent, collected and analyzed by the first six months of project implementation to all relevant stakeholders. The above will be used to monitor and assess the broader CBC impact of the results expected to be achieved by the projects within the targeted eligible regions; Information will be provided through progress reports including reference to official documentation and external sources available on innovative products/services created by clustered SMEs across or within borders;
- ENI CBC 2.2.1.B: Information on the baseline will be collected using surveys and/or the available documented sources (official statistics). These surveys will be mainly based on questionnaires to be sent, collected and analyzed by the first six months of project implementation to all relevant stakeholders. The above will be used to monitor and assess the broader CBC impact of the results expected to be achieved by the projects within the targeted eligible regions; Information will be provided through project progress reports including reference to official documentation and external sources available on Investments (in euro) in targeted SMEs for new knowledge and equipment (hardware and software) and joint R&D and innovation activities;
- ENI CBC 2.2.1.C: Information on the baseline will be collected using surveys and/or the available documented sources (official statistics). These surveys will be mainly based on questionnaires to be sent, collected and analyzed by the first six months of project implementation to all relevant stakeholders. The above will be used to monitor and assess the broader CBC impact of the results expected to be achieved by the projects within the targeted eligible regions; Information will be provided

through project progress reports including reference to official documentation and external sources available on (foreign) investments (in euro) in targeted SMEs.

4.3 PROJECT INDICATORS ACHIEVEMENT

In the context of the INNOMED-UP Project, output indicators are quantitative and will measure the direct products of the chosen activities. They concern the direct beneficiaries of the projects and are only affected by what the actions lead to being (in principle) insensitive to any external impact. It is expected that they will provide information on the achievements of the Programme. Three (3) output indicators (ENI CBC MED 2.2.1.1.a/2.2.1.2.c/2.2.1.3.d) attempt to reflect the **direct action** of this Project and so contribute to the change the ENI CBC MED Programme intends to bring to the Mediterranean area [Table 12] [Table 14].

Table 13: Programme Expected results

Priority	Expected Result	ENI CBC MED Indicator	ENI CBC MED Programme target	INNOMED-UP Project target
A.2.2 - Support SMEs in accessing research and innovation also through clustering	A.2.2.1	2.2.1.A	75.0	15.0
		2.2.1.B	1250000.0	250000.0
		2.2.1.C	1250000.0	250000.0

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

Table 14: Project Outputs

Expected Result	Project outputs	WP	OUTPUT Indicator	ENI CBC MED Programme target values	INNOMED-UP Project target value Once indicated the Programme outputs indicator(s), quantify the project target values
A.2.2.1 - Upgraded innovation capacity of SMEs participating in CBC Med projects in processes, products and management systems for uptake of research outcomes	Training Activities for SMEs in each participating city	WP6	2.2.1.1.a	50.0	30.0
	Innovation vouchers	WP6	2.2.1.2.c	50.0	21.0
	Training Activities for SMEs in each participating city	WP6	2.2.1.3.d	50.0	30.0

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

The **source of verification** for Project Indicators achievement is (JOP, Annex 2) [Table 15]:

- ENI CBC MED 2.2.1.1.a: Information on the baseline will be collected using surveys and/or the available documented sources (official statistics). These surveys will be mainly based on questionnaires to be sent, collected and analyzed by the first six months of project implementation to all relevant stakeholders. The above will be used to monitor and assess the broader CBC impact of the results expected to be achieved by the projects within the targeted eligible regions; Information will be provided through project progress reports including reference to official documentation and external sources available on (foreign) investments (in euro) in targeted SMEs;
- ENI CBC MED 2.2.1.2.c: Information will be provided through progress reports including reference to official documentation and external sources available on purpose, use and impact of instruments that were made available;
- ENI CBC MED 2.2.1.3.d: Information will be provided through progress reports including reference to official documentation and external sources available detailing Programme support provided to SMEs with specific focus on training, coaching, and consultancy services.

Table 15: Project Outputs

Code	Title	WP	Semester of delivery	Number of Units	Measurement unit
O 3.1	INNOMED-UP Strategic Context Report	WP3	I	1	Report
O 3.2	Methodological Framework Reports	WP3	II	6	Reports
O 3.3	INNOMED-UP Model for the Mediterranean	WP3	V, VI	1	Model
O 4.1	Strategy design for Specialization of INNOMED-UP's Holistic Approach - local level	WP4	II, III	1	Report
O 4.2	CCI SMEs' clustering roadmaps for each city	WP4	III, IV	6	Roadmaps
O 4.3	Clustering smart tools	WP4	III, IV	4	Tools
O 5.1	Pilot clusters	WP5	IV, V	6	Cluster
O 5.2	Pilot innovative products	WP5	V	18	Products
O 5.3	Pilot Reuse Open Market	WP5	VI	2	Pilot Reuse Open Markets
O 5.4	Socio-Urban Circularity Workshops	WP5	IV	4	Workshops
O 6.1	Training Activities for SMEs in each participating city	WP6	II, III, IV	60	SMEs
O 6.2	Innovation Vouchers	WP6	V, VI	180000	Euros in the form of innovation vouchers
O 6.3	Access to cross-border mentorship schemes and new financial tools	WP6	V, VI	105000	Euros in the form of cross-border vouchers

Source: Based on GC, Annex I: Description of the INNOMED-UP Project

5. INTERNAL COMMUNICATION AND INFORMATION FLOW

From the beginning of the Project, communication between the partners is considered of key importance to aim at the Project results. For this reason, the Kick-off meeting will be devoted to put in common the overall structure of the Project, reviewing short-term and mid-term milestones and deliverables and approving the tools which will be used during the INNOMED-UP Project to monitor and to help analyzing its progress. In order to establish an accurate communication and timely information flow within the Partnership, the LB and WP Coordinators will coordinate their work and encourage sharing good practices on how to organize internal communication: **who informs whom, how, on what and when.**

Effective internal communication helps with the management and monitoring (TESIM, 2019:2). Cost-free digital tools may facilitate the internal communication among PPs, e.g. cost-free conversations, storing/sharing documents, files transfer, schedule meetings, online workspaces, mailing lists, etc. assist cooperation, which is the backbone for Project's success.

In order to link internal communication with the management structure and reporting, several groups and mailing lists have been created, including the LB, PPs and other members involved in the organizational structure: Management Team, bodies (SC/SAG), and each WP. The information and contact base are that way easily and constantly updated, keeping an adequate flow of communication among all members of the Partnership.

Besides the day-to-day communication management, a tool to ensure communication inside, the Project is having semi-programmed and regularly scheduled meetings as well. The latter will be planned ahead including the defined agenda for the meeting (distributed by the WP coordinator). Both of these allow the generation of results that will be distributed later at Partnership level. Therefore, such meetings are considered of key importance to solve communication problems, to ensure PPs' communication, team work, progress review and to discuss issues or challenges of common interest affecting the Project progress. Therefore, a **Communication Team** is established strategically to keep the meetings rhythm. **Important communications** should be traced via mail with copy to the LB and relevant WP Coordinator.

6. COMMUNICATION AND VISIBILITY OF THE PROJECT

Communication is an essential component of any project not only for amplifying the visibility of the achievements with media, institutions, key stakeholders and the general public, but also for demonstrating the value for money of EU funding, i.e. how public money is spent and for which purposes (PIM, Ch.10). There are many tools available for **effective** communication. In line with the financial/resources dedicated to communication, projects are expected to develop a mix of actions that can ensure an appropriate level of visibility and reach out the identified target groups.

External communication should be understood as a **strategic tool** assisting to achieve project objectives, embedded in every phase of project implementation: in the initial phase communication is essential for informing stakeholders about the Project start; throughout the project implementation you have to inform your target audiences about the project progress and status, engage them, or change their attitudes/behaviour; in the final phase communication should focus on promotion and dissemination of the achievements of your project (TESIM, 2019:3). The **communication plan** is a tool for effective communication, which represents a balanced mix of communication activities and means, and contributes to the achievement of Project objectives. Even if the main elements of this plan are defined at the Project's development stage, in the early phase of Project implementation it needs to be further detailed and updated in accordance with the Project's Work Plan. Communication objectives must be defined according to **SMART criteria** in order to be: Specific (targeting a specific area for additional improvement); Measurable (having quantifiable indicators of progress); Achievable (within budget and resources available); Relevant (result-based or result-oriented objectives); Time-bound (associated with target dates).

In the context of the INNOMED-UP Project, the **Communication and Visibility Plan** will be implemented with the leadership of PP6 (FPEC), under the supervision of the LB. This will include several components, such as Project: background; objectives; target groups and key messages; communication tools/channels identified; timeframe; budget. As further steps to be undertaken, this plan foresees: Online communication (newsletters, press releases, social media); Printed communication (printed material and release of two Guides); Awareness campaigns on critical issues; Conferences open to the public (during and at the end of the project); Horizontal and vertical (across WPs) Project dissemination activities. The content and the overall message of the communication activities should be agreed with the LB and WP Coordinator, while the LB should be consulted on the **visual identity** of the Project.

CONCLUSIONS

In this document, processes involved in the QA/QC have been analytically described. Identifying potential risks and the areas of non-conformity with the defined procedures is decisive in interpreting appropriate actions for corrective measures to be taken further. Any PP identifying the necessity for these actions or advice proposed solutions shall report to the LB and the Management Team, so as to inform the SC accordingly. The SC shall discuss the matter, either at a regular SC meeting or through e-mails, teleconferences, etc. Proposals on corrective action should be suggested and put for voting by SC members. Decisions shall be documented in the minutes of SC meeting. The LB will forward decisions to all PPs involved. The **goal** is to ensure that the management, reports and results of the INNOMED-UP Project are developed to meet all high standards and requirements of the ENI CBC MED Programme.

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ANNEX - MAIN STAKEHOLDERS

LB (NTUA, Greece):

- Municipality of Athens
- Athens Trade Association
- Solid Waste Management Agency of Attica

PP1 (EPEM SA, Greece):

- Hellenic Recycling Agency
- Hellenic Recovery Recycling Corporation

PP2 (MoP, Italy):

- As.T.R.I. (Italian Textile and Recycling Association)
- Prato Chamber of Commerce

PP3 (CRESM, Italy):

- Municipality of Palermo
- RAP (Public Company of the Municipality of Palermo for the waste collection and management)
- Legambiente (Environmental Association)
- ConfCooperative Sicilia (Regional Association of Cooperatives)

PP4 (Municipality of Tunis, Tunis):

- Ministry of Higher Education and Scientific Research
- CITET
- CONNECT
- Association for the protection of the Medina of Tunis (ASM)
- Blue Fish

PP5 (BZU, Palestine):

- The Municipality of Hebron
- The Municipality of Nablus
- The Ministry of Industry and Commerce in Palestine
- The Ministry of Tourism and Antiquities in Palestine
- Nablus Chamber of Commerce and Industry
- The Chamber of Commerce and Industry of Hebron

PP6 (FPEC, Jordan):

- Ministry of Municipal Affairs
- Municipality of Madaba
- Ministry of Local Development in Jordan