



# Hymantovalley

A.G.I.R.E. SRL

## Project Handbook **HYMANTOVALLEY**

Date: 29/12/2023

Doc. Version: 1.1

Template version: 3.0.1



**Co-funded by  
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or EISMEA. Neither the European Union nor the granting authority can be held responsible for them.

**Document Control Information**

Settings	Value
<b>Document Title:</b>	Project Handbook
<b>Project Title:</b>	HYMANTOVALLEY
<b>Document Author:</b>	AGIRE – Nicola Galli, Massimiliano Musci
<b>Project Owner:</b>	HYMANTOVALLEY CONSORTIUM
<b>Doc. Version:</b>	1.1
<b>Sensitivity:</b>	Public
<b>Date:</b>	29/12/2023

**Document Approver(s) and Reviewer(s):**

NOTE: All Approvers are required. Records of each approver must be maintained. All Reviewers in the list are considered required unless explicitly listed as Optional.

Name	Role	Action	Date
Roberto Grassi – Provincia di Mantova	Project Manager	<i>Approve</i>	29/12/2023

**Document history:**

The Document Author is authorized to make the following types of changes to the document without requiring that the document be re-approved:

- Editorial, formatting, and spelling
- Clarification

To request a change to this document, contact the Document Author or Owner.

Changes to this document are summarized in the following table in reverse chronological order (latest version first).

Revision	Date	Created by	Short Description of Changes

**Configuration Management: Document Location**

The latest version of this controlled document is stored in the Hymantovalley repository on Teams – Agire account.

**TABLE OF CONTENTS**

<b>1. ABOUT THE PROJECT HANDBOOK.....</b>	<b>4</b>
<b>2. PROJECT OVERVIEW .....</b>	<b>5</b>
2.1. Project summary.....	5
2.2. Critical Success Factors and Project Management Objectives.....	5
<b>3. PROJECT APPROACH .....</b>	<b>10</b>
3.1. Project Lifecycle .....	10
3.2. Required Project Documentation .....	12
3.3. Specific Project Management Rules .....	12
3.4. Conflict Resolution and Escalations .....	13
<b>4. PROJECT PROCESSES.....</b>	<b>15</b>
4.1. Risk Management .....	15
4.2. Issue Management .....	15
4.3. Project Change Management .....	16
4.4. Quality Management .....	16
4.5. Configuration Management.....	17
4.6. Communications Management .....	18
4.7. Business Implementation Management .....	18
<b>5. PROJECT PROGRESS MEASUREMENT .....</b>	<b>19</b>
5.1. Project Progress Measuring Approach .....	19
5.2. Project Checklists .....	19
<b>6. PROJECT ROLES &amp; RESPONSIBILITIES .....</b>	<b>20</b>
6.1. Description of Project Roles and Responsibilities.....	20
6.1.1. Project Stakeholders.....	20
6.1.2. Project Steering Group (SG).....	20
6.1.3. Project Coordinator (PC).....	21
6.1.4. Lead Beneficiaries (LB).....	21
6.1.5. Project Management Board (PMB).....	21
6.1.6. Work Package Leader (WPL).....	22
6.1.7. Project Partners (PP).....	22
6.1.8. Affiliated Entities (AE) .....	23

## 1. ABOUT THE PROJECT HANDBOOK

The *Project Handbook* documents the selected approach for implementing the Hymantovalley project goals. It also highlights the key controlling processes to be used, the project policies and rules, and the overall management approach.

The *Project Handbook* is an important document since it defines the outputs of the planning (i.e. it defines the plans necessary for managing the project as well as to what extent they should be customize or/and tailored).

The *Project Handbook* becomes the basis for managing the project throughout its lifecycle and is an important point of reference for all project members and stakeholders. The *Project Handbook* is kept up to date throughout the life of the project.

During the Closing Phase, the *Project Handbook* becomes an important point of reference for the Project-End Review Meeting, and should be properly closed and archived.

## 2. PROJECT OVERVIEW

### 2.1. Project summary

HYMANTOVALLEY aims at demonstrating the de-carbonization of a quite air-polluted area in Europe laying in the Italian Po Valley by building a replicable green hydrogen ecosystem implemented as an integrated model of hydrogen production, storage, transportation and utilisation for heat, power and mobility, including the development and use of hydrogen-fed and zero-emissions ships, trains, buses and buildings.

The project plans to involve European and local communities and industries in the production of clean energy while creating synergies with other regional innovation ecosystems through knowledge exchange and utilising existing European hydrogen-based technologies.

HYMANTOVALLEY is going to develop an H2 value chain model in a unique tri-modal transport and logistics system (inland water, rail and road) laying in the heart of Italy and near two corridors of the Trans-European Transport Network (TEN-T), the Mediterranean and the Scandinavian-Mediterranean corridors, plus building an European Centre of Applied Research and Advanced Training on hydrogen focused on the optimisation and innovation of the hydrogen value chain and managed by relevant universities.

The HYMANTOVALLEY project involves 14 partners and 2 affiliated entities from Austria, Belgium, Italy and Netherlands.

The projects is co-financed (70%) by the Grant Authority European Innovation Council and SMEs Executive Agency (EISMEA) through the Interregional Innovation Investments (I3) Instrument of the EU Commission. This Programme is part of the European Regional and Development Fund (ERDF) and it aims at supporting interregional innovation projects in their commercialisation and scale-up phases giving them the tools to overcome regulatory and other barriers and bring their project to investment level.

### 2.2. Critical Success Factors and Project Management Objectives

#### Critical Success Factors

Managing a European project with many partners involves navigating a complex web of relationships, communication channels, and collaborative efforts as well as involves unique considerations due to the diversity of cultures, languages, legal frameworks, and institutional structures across different European countries. Success in such a scenario depends on several critical success factors. Here are some key elements to consider:

1. Clear Project Objectives and Scope:
  - Establish and communicate clear project objectives and scope to all partners.
  - Ensure a shared understanding of the project's goals, deliverables, and timelines.
2. Effective Communication:
  - Develop a robust communication plan to facilitate effective information exchange.
  - Foster open and transparent communication among all partners.
  - Utilize various communication channels, such as regular meetings, emails, and collaborative platforms.

3. Strong Governance Structure:
  - Establish a well-defined governance structure with clear roles and responsibilities.
  - Define decision-making processes to avoid conflicts and ensure accountability.
  - Implement mechanisms for conflict resolution.
4. Mutually Beneficial Partnerships:
  - Select partners with complementary skills and expertise.
  - Ensure that each partner brings value to the project and has a stake in its success.
  - Foster a collaborative and mutually beneficial relationship.
5. Robust Risk Management:
  - Identify and assess potential risks associated with the partnership and the project.
  - Develop a risk management plan to mitigate and manage risks effectively.
  - Monitor and adapt the risk management strategy as the project progresses.
6. Flexible Project Planning:
  - Create a flexible project plan that accommodates the dynamics of multiple partners.
  - Anticipate changes and build adaptability into the project schedule and resource allocation.
7. Technology and Collaboration Tools:
  - Implement appropriate technology and collaboration tools to facilitate communication and coordination.
  - Ensure that all partners have access to necessary tools and are trained in their use.
8. Resource Management:
  - Efficiently manage and allocate resources, considering the capabilities and constraints of each partner.
  - Monitor resource usage and make adjustments as needed to ensure equitable contributions.
9. Continuous Monitoring and Evaluation:
  - Implement a robust monitoring and evaluation system to track progress.
  - Regularly assess partner performance and address any issues promptly.
10. Legal Agreements and Contracts:
  - Develop clear and comprehensive legal agreements and contracts that outline expectations, responsibilities, and consequences.
  - Ensure all partners are aware of and adhere to the terms and conditions of the partnership.
11. Cultural Sensitivity and Diversity:
  - Recognize and respect cultural differences among partners.
  - Promote an inclusive and diverse working environment that values the unique contributions of each partner.
12. Adaptive Leadership:
  - Demonstrate adaptive leadership skills to navigate challenges and guide the project to success.
  - Foster a collaborative and positive team culture.
13. Legal and Regulatory Compliance:
  - Navigate the diverse legal and regulatory landscapes across European countries.

- Develop a comprehensive understanding of applicable laws and regulations in each participating country.
  - Ensure compliance with European Union (EU) regulations.
14. European Union Funding Guidelines:
- Adhere to the guidelines and requirements set by EU funding programs.
  - Stay informed about updates and changes in EU funding policies and regulations.
15. Stakeholder Engagement:
- Engage with a diverse range of stakeholders, including governmental bodies, non-governmental organizations, and local communities.
  - Foster partnerships with European institutions, industry stakeholders, and relevant organizations.
16. Collaboration with European Networks:
- Leverage existing European networks and collaborations to enhance project visibility and impact.
  - Participate in relevant European initiatives and forums to share knowledge and experiences.
17. Cross-Border Coordination:
- Develop effective mechanisms for cross-border coordination.
  - Address logistical challenges related to international travel, transportation, and the movement of goods and services.
18. Project Sustainability and Legacy:
- Consider the long-term sustainability of the project beyond its initial phase.
  - Identify opportunities for creating a lasting legacy or impact within the European context.
19. Project Reporting and Documentation:
- Ensure accurate and comprehensive reporting, taking into account the specific requirements of European funding agencies.
  - Maintain clear and well-documented project records for auditing purposes.
20. Social and Environmental Responsibility:
- Consider the social and environmental impact of the project, aligning with EU sustainability goals.
  - Integrate responsible and ethical practices into project activities.
21. Knowledge Sharing and Dissemination:
- Facilitate knowledge sharing and dissemination of project outcomes within the European community.
  - Contribute to the broader European knowledge base in the project's field.

By addressing these critical success factors (CSF), project managers (project coordinators, WP leaders, Hymantovalley project managers of each participant partner) can enhance the likelihood of successful outcomes when working with multiple partners. Regular communication, collaboration, and adaptability are key elements in managing the complexities associated with such projects.

## Project Management Objectives

The concept of a hydrogen valley refers to a regional initiative that aims to integrate hydrogen production, storage, distribution, and utilization in various sectors to create a sustainable and interconnected hydrogen ecosystem. The project management objectives in the implementation of a hydrogen valley are crucial for ensuring the successful development and operation of such a complex and integrated system.

Here are key project management objectives for implementing a hydrogen valley:

1. **Strategic Planning:**
  - Develop a comprehensive strategic plan that outlines the vision, goals, and objectives of the hydrogen valley.
  - Align the project with regional energy and sustainability policies and objectives.
2. **Feasibility Assessment:**
  - Conduct a thorough feasibility study to assess the technical, economic, and environmental viability of the hydrogen valley project.
  - Identify potential challenges and risks and develop mitigation strategies.
3. **Stakeholder Engagement:**
  - Identify and engage with key stakeholders, including government agencies, industry partners, local communities, and environmental organizations.
  - Foster collaboration and gather input from diverse perspectives to ensure broad support.
4. **Regulatory Compliance:**
  - Navigate regulatory frameworks related to hydrogen production, storage, and distribution.
  - Ensure compliance with safety, environmental, and industry standards.
5. **Technology Integration:**
  - Evaluate and select appropriate hydrogen production technologies (e.g., electrolysis, steam methane reforming) and storage solutions.
  - Integrate technologies for hydrogen distribution and utilization across various sectors, such as transportation, industry, and residential applications.
6. **Infrastructure Development:**
  - Plan and manage the development of hydrogen infrastructure, including production facilities, storage tanks, distribution networks, and refueling stations.
  - Coordinate construction and deployment activities to ensure timely completion.
7. **Financial Management:**
  - Develop a detailed budget that accounts for all phases of the hydrogen valley project, including initial investment and operational costs.
  - Explore funding opportunities, including public-private partnerships and government grants.
8. **Risk Management:**
  - Identify, assess, and mitigate potential risks associated with technology, infrastructure, financing, and market demand.
  - Implement risk management strategies to ensure project resilience.

9. Community Outreach and Education:
  - Implement communication and outreach programs to inform and educate local communities about the benefits and safety aspects of hydrogen technologies.
  - Address concerns and build public support for the hydrogen valley project.
10. Performance Monitoring and Reporting:
  - Establish key performance indicators (KPIs) to monitor the success of the hydrogen valley project.
  - Implement a robust monitoring and reporting system to track progress and address any deviations from the project plan.
11. Interconnectedness with Energy Systems:
  - Integrate the hydrogen valley into existing energy systems, considering synergies with renewable energy sources and the overall energy transition strategy.
12. Sustainability and Environmental Impact:
  - Ensure that the hydrogen valley project aligns with sustainability goals, minimizing environmental impact and contributing to a low-carbon economy.
13. Knowledge Sharing and Collaboration:
  - Foster collaboration with other hydrogen initiatives, research institutions, and industry partners to share knowledge and best practices.
  - Contribute to the global knowledge base on hydrogen technologies and their applications.

By effectively managing these objectives, project managers can contribute to the successful implementation of a hydrogen valley, creating a sustainable and integrated hydrogen ecosystem that supports regional energy goals and contributes to a cleaner and more resilient energy future.

### 3. PROJECT APPROACH

#### 3.1. Project Lifecycle

The project is organized into 8 work packages, which are divided into a certain number of tasks. Each work package has a leader, and each task has to be developed in a defined period.

Each task involves the preparation of deliverables, the partner responsible for which is clearly identified as well as the project’s milestones.

The project lasts three years from 1<sup>st</sup> September 2023 to 31<sup>st</sup> August 2026.

The timetable of the project is summarized below:

Timetable (projects of more than 2 years)												
<i>Fill in cells in beige to show the duration of activities. Repeat lines/columns as necessary.</i>												
<i>Note: Use actual, calendar years and quarters. In the timeline you should indicate the timing of each activity per WP. You may add additional columns if your project is longer than 6 years.</i>												
ACTIVITY	YEAR 1				YEAR 2				YEAR 3			
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Task 1.1 - Project coordination and reporting												
Task 1.2 - Quality Management												
Task 1.3 - Risks, IPR and Innovation Management												
Task 1.4 - Data Management												
Task 2.1 - Stabiliser and accumulators												
Task 2.2 - High-pressure loading line												
Task 3.1 – Pipeline to HRS												
Task 3.2 - Study and definition of optimal H2 transportation system												
Task 3.3 - Innovative transportable high-pressure storage solutions												
Task 3.4 - Vessel refitting												
Task 3.5 - Shunting locomotive architecture												
Task 3.6 - Tri-modal HRS at Valdarò Port study												
Task 3.7 - Tri-modal HRS at Valdarò Port engineering												
Task 3.8 – Mobility demo												
Task 3.9 - Detailed engineering of H2-to-power stationary application												
Task 3.10 - Storage prototypes												
Task 3.11 - H2-to-power DEMO												
Task 4.1 - Definition of optimal strategy for development of business case												
Task 4.2 - Techno-economic analysis of scenarios												
Task 4.3 – Value-chain definition and business model case development												
Task 5.1 - Masterplan of the Project Area												
Task 5.2 - Architectural Plan of the Research Campus												
Task 5.3 - Planning research activities												
Task 5.4 - Planning education and training activities												
Task 5.5 - Prepare MSCA proposal for funds												
Task 5.6 - R&D HUB for enabling technology of H2MANTOVALLEY												
Task 6.1 - Scientific literature survey												
Task 6.2 - Primary data collection												
Task 6.3 - Life Cycle Inventory (LCI)												
Task 6.4 - Life Cycle Impact Assessment (LCIA) and S-LCA												
Task 7.1 - Communication, Dissemination and Exploitation Plan												
Task 7.2 - Dedicated project website												
Task 7.3 - Draft, print communication materials												
Task 7.4 - Newsletter												
Task 7.5 - Participation in relevant and specialized events												



D7.5	Participation in relevant and specialized events	WP7	2 - AGIRE	R — Document, report	PU - Public	36
D7.6	Replication in Region Campania	WP7	2 - AGIRE	R — Document, report	PU - Public	36
D7.7	Final Exploitation Plan with Market Readiness Assessment	WP7	2 - AGIRE	R — Document, report	PU - Public	36
D8.1	Draft Term of Reference for calls	WP8	2 - AGIRE	R — Document, report	PU - Public	6
D8.2	Publish CALL1	WP8	2 - AGIRE	R — Document, report	PU - Public	12
D8.3	Publish CALL2	WP8	2 - AGIRE	R — Document, report	PU - Public	24

### 3.2. Required Project Documentation

Artefact	Location
Project Handbook (this document)	Teams repository, <a href="https://hymantovalley.agirenet.it">https://hymantovalley.agirenet.it</a> SyGMA
Stakeholder Matrix	Teams repository
Risk and Innovation Management plan	Teams repository, SyGMA
Data Management Plan	Teams repository, <a href="https://hymantovalley.agirenet.it">https://hymantovalley.agirenet.it</a> SyGMA
Minutes of consortium meetings	Teams repository, SyGMA
Progress report	Teams repository, SyGMA
Reports on cumulative expenditures	Teams repository, SyGMA

### 3.3. Specific Project Management Rules

The specific management rules are defined in the Grant Agreement and in the Consortium Agreement signed by each project's partner.

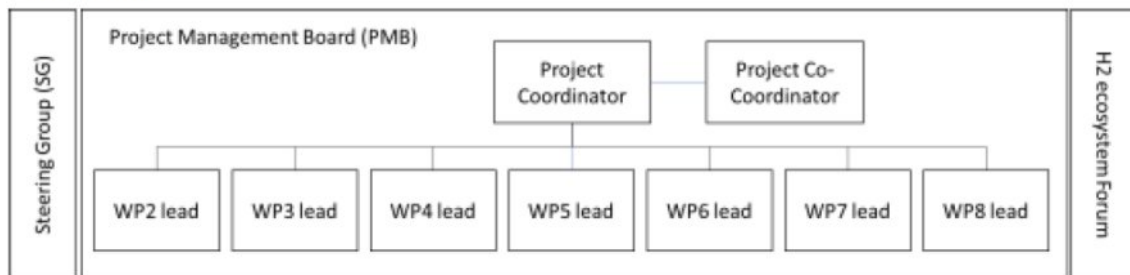
In particular:

- The Project Coordinator, acting within the PMB & with the SC, will continuously monitor progress of each of the work package and of the project, using the milestones as control points and a deliverable tracker.
- The WP partners will meet as often as required, and according to the planned milestones. The WL will be responsible for the day-to-day management of the WP work and will deliver periodic progress information Coordinator and the PMB.
- The WL will be responsible for leading the technical development of the specific area of work; communicating within the whole project consortium; ensuring that time schedules, resources, and costs are properly maintained on a WP level; ensuring review of WP deliverables.

- The Lead beneficiaries, indicated at 3.1 list of deliverables table, are responsible for delivery of outputs of the WP.
- Regular QA monitoring on other deliverables will be built into project plans within and between work packages to enable project partners and the Steering Group (SG) to give approvals when necessary. In this context also the H2 Ecosystem will be invoked to provide suggestions through focus groups.
- reports will be always reviewed by a person different from the writer(s).

The project organization structure is described by the following scheme:

#### Organization



All Partners will participate in the decision-making process through their participation in the Steering Group (SG). The Meetings of the Steering Group, headed by the coordinator, will be held every six months, and will be aimed at maintaining the right coherence of the project goals, reaching the strategic objectives, and providing solution of possible problems. The coordinator will organize the Meetings, prepare all the necessary documents to be discussed, furnish explanations and suggestions for the discussion, and lead the sessions.

At the SG, each Party of the Consortium will be represented by one person (Member) at the SG, participating in a cooperative manner. The SG will have a chairperson appointed by the SG itself on its first meeting. The SG will deliberate with a majority of 51% of its present Members represented (quorum 2/3 of the members), as defined in the Consortium Agreement. Meeting will be valid also through electronic means. The SG will take decisions on changes to the Grant Agreement and its Annexes and on the appointments on the PMB, and on strategic guidelines, solving conflicts that may emerge during the project. The SG will control the development of the project, follow the activities, check, and guarantees the quality of deliverables and results, reports and cost statements, and grant payment arrangements.

The PMB shall consist of the Coordinator, co-coordinator and the work package leaders (WPL) as appointed by the SG. They shall be responsible for the proper execution and implementation of the decisions of the General Assembly (or Steering Group SG) and the Project Programme. The PMB will have voting rules like the SG that will be drafted to ensure operational level flexibility.

### 3.4. Conflict Resolution and Escalations

Conflicts are situations in which one or both parties perceive a threat. They are considered to be critical issues and can be raised by any of the project stakeholders. The Project Management Board should proactively identify, log and raise such issues for resolution. When required, conflicts are discussed on the periodic project meetings or, if needed, escalated to the Project Steering Group (SG).

Conflict resolution activities are registered in the *Issue Log*, while conflict resolution decisions can be logged in the *Decision Log*.

The escalation procedure for this project is as following:

- Only issues/changes/risks with Very Low and Low impact can be approved by the WP Leader. In this case, the Project Coordinator (PC) must always be informed and decisions may be registered in the *Decision Log*;
- Issues/changes/risks with Medium impact are approved by the Managing Level (Project Coordinator), appropriately notified. Decisions are registered in the *Decision Log*;
- Issues/changes/risks with High and very High impact are approved by the Project Steering Group (SG). Decisions are registered in the *Decision Log*;
- When relevant, the Project Steering Group (SG) has extraordinary meetings for approving remediation actions related to urgent or very urgent issues with considerable impact or size.

## 4. PROJECT PROCESSES

### 4.1. Risk Management

The project risk management process defines the activities to identify, assess, prioritise, manage and control risks that may affect the execution of the project and the achievement of its outputs. This is a four step process:

- **Risk Identification:** risks are continuously identified throughout the project lifecycle by any project stakeholder and documented in the *Risk Log* (by any project team member).
- **Risk Assessment:** risks are assessed based on their likelihood of occurrence and the impact in project scope and constraints. The product of their likelihood and impact (in 5 point scales) defines the Risk Level which is then used as a reference for their prioritisation and risk response development.
- **Risk Response Development:** there are four strategies to be considered as risk responses to threats: Avoid, Transfer, Reduce or Accept a risk. After the strategy for each risk has been selected, specific actions to implement the strategy will be defined, described, scheduled and assigned, while a Risk Owner assumes the responsibility for its implementation. These actions will be incorporated into the *Project Work Plan*.
- **Risk Control:** the Project Status Meetings are used to revise the status of risks, probabilities and impacts, and related actions, and to identify new risks. Risks will be revised weekly, but also after the occurrence of any significant event. If any of the identified risks occur, then the Project Manager (PM) will implement the contingency plans and communicate the issue to the Project Steering Committee (PSC).

The deliverable D1.2 Risk and Innovation Management Plan will be the main tool to control the project risks. This document will be defined in the first part of the project and will list all the specific risks identified by the project's partnership, it will describe the strategy to reduce the likelihood of the risk occurring and the actions to be applied to limit damage if the risk occurs.

### 4.2. Issue Management

The project issue management process defines the activities related to identifying, documenting, assessing, prioritizing, assigning, resolving and controlling issues.

It is a four step process that the Work Package Leader (WPL) executes whenever required throughout the project lifecycle:

- **Issue Identification:** Issues can be identified by any project stakeholder throughout the project lifecycle, using different communication channels such as meetings, emails, and reports. The issues are registered in the *Issue Log*.
- **Issue Assessment and Action Recommendation:** a first informal assessment considers the category, impact, urgency and size of the issue, followed by a more detailed analysis to identify the root cause and recommend a solution. This information is documented in the *Issue Log* and used as input to the appropriate decision makers (based on the escalation process). The decision is documented in the *Decision Log*.
- **Actions Implementation:** After issues are evaluated and the remediation actions approved, the the Work Package Leader (WPL) will incorporate these actions into the *Project Work Plan* and update project related documentation such as project plans and logs

- **Issue Control:** Project Status meetings will be performed monthly by the Work Package Leader and used to revise the status of issues and related actions, and to identify new issues. Additionally, the Project Management Board (PMB) will report every six months the status of the major issues to the Project Steering Group (SG) and, when adequate, to other project stakeholders.

### 4.3. Project Change Management

The project change management process defines the activities related to identifying, documenting, assessing, approving, prioritising, planning and controlling changes, and communicating them to all relevant stakeholders. It is a five step process that the Project Coordinator (PC) executes whenever required throughout the project lifecycle, after the approval of the Steering Group (SG):

- **Change Identification:** a request for a change can be submitted formally via a Change Request Form, or can be identified and raised during meetings as a result of decisions, issues or risks. The *Change Log* contains information to identify the change, such as the requestor, a short description, identification date, etc.
- **Change Assessment and Action Recommendation:** the size and impact of the change on the project scope, schedule, cost, quality, risk, and other project boundaries is assessed, where after a recommended action will be documented by the Partner in the *Change Log*. This information is then used as an input to the formal change approval by the appropriate decision makers.
- **Change Approval:** the approval of a project change will follow the defined escalation process for this project. For changes which do not have significant impact on delivery time and budget, the changes can be approved by the Project Management Board (PMB). Other changes (having a size L or XL) are approved by the Steering Group (SG). The decision details are documented in the *Change Log*.
- **Change Implementation:** the activities related to the implementation of approved changes will be documented in the *Project Work Plan*.
- **Change Control:** new or open changes will be identified/reassessed every six months during the Project Management Board (PMB). The Project Coordinator (PC) will then update the *Change Log* with the results of the analysis/review. For the Medium, High and Very High size changes, the Project Coordinator (PC) will report on a semi-annual basis their status to the Steering Group (SG) and, when adequate, to other project stakeholders.

### 4.4. Quality Management

The project quality management process comprises all activities (related both to processes and deliverables) that will increase the ability to meet the project expected results identified in the *Project Charter*. The process is comprised of five steps:

- **Define Quality Characteristics:** identify the objectives, approach, requirements, activities and responsibilities of the project's quality management process and how it will be implemented throughout the project. Quality management activities will be added to the *Project Work Plan*. The *Quality Review Checklist* and *Deliverables Acceptance Checklist* are created during the Planning phase.
- **Perform Quality Assurance:** the quality assurance activities will be performed by evaluating the design of project controls, by confirming that they are implemented, and by assessing their operational effectiveness.

These activities will consider the project quality objectives along with the project risks. In addition, quality assurance validates compliance with the organisation's rules and regulations,

as well as with relevant governmental and industry rules, regulations and legislation. Quality assurance activities will be performed by the project Coordinator (Provincia di mantova supported by Agire) as defined in the Task 1.2, and by the Steering Group (SG).

- **Perform Quality Control:** the *Quality Review Checklist* will be used by the Project Coordinator (PCO) for evaluating the quality control activities and to validate compliance with the plans in terms of scope, time, cost, quality, project organization, communication, risks, contracts, and client satisfaction.
- **Perform Deliverables Acceptance:** the Deliverables Acceptance Checklist supports the monitoring of the status of all activities that are pre-condition to the delivery of project outputs and their formal acceptance. Project deliverables are accepted if the acceptance activities are successfully performed and within the pre-specified tolerances. The project deliverables may be conditionally accepted even with a set of known issues, provided that these are documented and that there is a plan for addressing them.
- **Perform Final Acceptance:** the final acceptance is obtained from the Project Officer by EISMEA, through the Project Approval. Deliverables classified as Public — fully open are then published on the specific deliverable download page of the project website <https://hymantovalley.agirenet.it>.

#### 4.5. Configuration Management

The project configuration management procedure comprises the identification of project configuration items (CIs), their attributes and status codes, the establishment of baselines, the definition of roles and responsibilities for authorised changes to CIs, and the maintenance and control of a project repository.

##### Storage of project management artefacts

The Project Coordinator (PC) will structure the project management artefacts per project management phase, following the below folder convention:

- 01 Initiating
- 02 Planning
- 03 Executing
- 04 Monitor & Control
- 05 Closing

##### Naming convention of project management artefacts

The following artefact naming convention will be used:

*(XX).(DocumentName).(ProjectName).(yyyy-mm-dd).v(x.x)*, where:

- (XX) (two numerical characters) unique artefact number within the folder indicating the artefact sequence.
- v(x.x) indicates the artefact version. Version numbers like "0.x" mean that the document hasn't been approved yet; minor changes will be reflected in the decimal (revisions number) and major changes (formal reviews) in the version number.

##### Versioning of project management artefacts

All project management artefacts are under version control, except for the project logs and checklists.

#### 4.6. Communications Management

The communications management process determines how to communicate most efficiently and effectively to the various stakeholders. It defines and documents the communication items content, format, frequency, the audience and expected results. It also defines how to communicate project status and the assignment of activities to the various stakeholders, and the communication strategy for each stakeholder, based on their interests, expectations and influence in the project.

The following project meetings will be organised:

Meeting	Chair	Frequency
Kick-off Meeting	Project Coordinator (PC)	Once
Consortium's Meeting	Project Coordinator (PC)	Every 6 months
Project Management Board meeting	Project Coordinator (PC)	Every 6 months
Project Steering Committee Meeting	Project Coordinator (PC)	Every 6 months
Closure meeting	Project Coordinator (PC)	Once

The following project reports will be delivered:

Report	Responsible	Frequency
Consortium's meeting minutes	Project Coordinator (PC)	With partner meetings
Mid-term Progress Report	Project Coordinator (PC)	Once
Project-End Report	Project Coordinator (PC)	With Project-End Review

#### 4.7. Business Implementation Management

The business implementation management process comprises the activities related to prepare and manage the changes to the organisation that will occur as a result of the project. This process consists of the following steps:

- **Identify Impact on Processes:** assess how the project will affect already existing business processes in the performing organization. Define the new business processes. Strive to disrupt normal business operations as little as possible during project implementation.
- **Identify Impact on People:** assess how the project will impact the people using the project's outputs. Consider resistance-to-change, communication, functional support, training, etc.
- **Identify Cultural Impact:** assess how the project will have an impact on the organizational culture. Consider individual or group behavior, organizational practices or shared values.
- **Define Implementation Strategy:** define the communication strategy, promotional and other change activities that fall within the project's responsibilities and that will promote a smooth implementation of the project's outputs into the organization.
- **Define Change Activities:** define necessary change activities that support the implementation strategy. Consider project activities, change activities for the organisation and post-project change activities.
- **Benefits Tracking:** Identify, describe and recommend activities and metrics for measuring the benefits realisation of the project in the future.

## **5. PROJECT PROGRESS MEASUREMENT**

### **5.1. Project Progress Measuring Approach**

The most adequate project progress measuring method for the Hymantovalley project is the periodic tracking of:

- Milestones (every month)
- Deliverables (every month)
- Money spent (every 12 months)

### **5.2. Project Checklists**

Following checklists will be used in order to monitor and control the project:

- Quality Review Checklist
- Deliverables Acceptance Checklist
- Stakeholder Checklist

## 6. PROJECT ROLES & RESPONSIBILITIES

### 6.1. Description of Project Roles and Responsibilities

In the following section, the roles of major players in a project are described alongside with the responsibilities, expectations, rights and duties of each participant in the project.

#### 6.1.1. Project Stakeholders

Description
Project stakeholders are people (or groups) who can affect or can be affected by both the activities performed during the life of a project, or/and by the project's output(s) and outcome(s). Stakeholders can be directly involved in a project's work, or can be members of other internal organisations, or even be external to the performing organisation (e.g. suppliers, users, EU citizens, contractors, NGO's, industry partners, member states, etc.).

#### 6.1.2. Project Steering Group (SG)

Description
<p>The permanent members of the committee are:</p> <ul style="list-style-type: none"> <li>• Project Coordinator (PC) who chairs the committee, is the key-decision maker and accountable for the success of the project.</li> <li>• All project partners (one person per partner)</li> </ul>
Responsibilities
<ul style="list-style-type: none"> <li>• Champions the project and raises awareness at senior level.</li> <li>• Guides and promotes the successful execution of the project at a strategic level, keeping the project focused towards its scope.</li> <li>• Ensures adherence to organisation policies and directions.</li> <li>• Provides high level monitoring and control of the project.</li> <li>• At the end of the Initiating phase, authorises the project to continue, based on the project's <i>Business Case</i> and <i>Project Charter</i>, unless this is performed by the Appropriate Governance Body (AGB).</li> <li>• At the end of the Planning Phase, authorises the project to continue to the Executing phase, based on the <i>Project Handbook</i> and <i>Project Work Plan</i>.</li> <li>• Authorises plan deviations, scope changes with high project impact and decides on recommendations.</li> <li>• Arbitrates on conflicts and negotiates solutions to escalated issues.</li> <li>• Drives and manages change in the organisation caused by the project.</li> <li>• Approves and signs-off the management artefacts regarding quality, delivery and closing (<i>Business Case</i>, <i>Project Charter</i>, <i>Project Work Plan</i>, etc.).</li> </ul>

### 6.1.3. Project Coordinator (PC)

Description
<p>Is the key project decision maker and accountable for project success.</p> <p>The Project Coordinator is Provincia di Mantova.</p> <p>As defined in the Grant Agreement (GA) and in the Consortium Agreement (CA) the coordinator is supported by a Project Co-coordinator or Coordinator <i>De Facto</i> that is AGIRE, in house company of Provincia di Mantova.</p> <p>Considering this document and the project management, for the active role of Project coordinator (PC) has to be considered AGIRE and, only in case of problems, Provincia di Mantova.</p>
Responsibilities
<ul style="list-style-type: none"> <li>• Acts as the project champion promoting the success of the project.</li> <li>• Chairs the Project Steering Group (SG).</li> <li>• Provides leadership and strategic direction to the Business Management and Project Management Board (PBM).</li> <li>• Owns the project risks and assures proper project outcomes are in-line with business objectives and priorities.</li> <li>• Mobilises the necessary resources for the project in accordance to the budget.</li> <li>• Monitors project progress regularly.</li> <li>• Coordinates resolution of issues and conflicts.</li> <li>• Ensures that the project outcome meets the business expectations.</li> <li>• Drives organisation change and monitors proper evolution and change implementation.</li> <li>• Approves and signs-off all key management milestone artefacts (<i>Project Handbook, Project Management Plans, Business Implementation Plan, etc.</i>).</li> </ul>

### 6.1.4. Lead Beneficiaries (LB)

Description
<p>Assumes overall accountability for the project deliverables.</p>
Responsibilities
<ul style="list-style-type: none"> <li>• Represents the interests of those designing, delivering, procuring, and implementing the project's deliverables.</li> <li>• May help the Project Coordinator (PC) to define the <i>Business Case</i> and scope, deliverables, milestones and budget required for the project.</li> <li>• Agrees on objectives for the supplier activities and approves the contractor's deliverables for the project (if applicable).</li> <li>• Assumes the overall accountability for project deliverables and services requested by the Project Steering Group (SG).</li> <li>• Mobilises the required resources from supplier side and appoints the Project Management Board (PMB)</li> </ul>

### 6.1.5. Project Management Board (PMB)

Description
<p>Represent the interests of the end-users in the project.</p>

The PMB consists of the Coordinator, co-coordinator and the work package leaders (WPL). The PMB is responsible for the proper execution and implementation of the decisions of the Steering Group (SG).

#### **Responsibilities**

- Helps to define business needs and requirements.
- Ensures that the project specifications and deliverables meet the needs of all users.
- Approves on behalf of the users the project specification and acceptance criteria.
- Communicates and prioritises user opinions in Project Steering Committee (SG) decisions on whether to implement recommendations on proposed changes.
- Participates in demonstrations and pilot phases as needed.
- Performs the deliverable acceptance tests.
- Signs off documents related to the users (documentation, requirements, etc.).
- Guarantees the stability of the business during the transition towards the new operational state.

#### 6.1.6. Work Package Leader (WPL)

##### **Description**

Consists of the specialist roles responsible for the development of each work package as defined in the Grant Agreement (GA) and for the creation of the related deliverables.

##### **Responsibilities**

The WL:

- Contributes in the elaboration of the project scope and the planning of the project activities.
- Performs the project activities according to the *project work plan* and schedule.
- Produces project deliverables.
- Provides information to the Project Management Board (PMB) regarding the progress of activities.
- Participates in project meetings as needed and contributes to the resolution of issues.
- Participates in the Project-End Meeting to derive and document useful lessons learned for the organisation.

#### 6.1.7. Project Partners (PP)

##### **Description**

Leads the contractor's staff working on the project.

##### **Responsibilities**

- Collaborates closely with the Work Package Leader (WPL) and through it with the Project Management Board (PMB).
- Plan, controls and reports on the production of deliverables.
- Ensures that all work is performed on time and to the agreed standards and quality.
- Guarantees the successful completion and delivery of the subcontracted activities.

### 6.1.8. Affiliated Entities (AE)

Description
Entities affiliated to a beneficiary within the meaning of Article 187 of EU Financial Regulation 2018/10464 which participate in the action with similar rights and obligations as the beneficiaries (obligation to implement action tasks and right to charge costs and claim contributions).
Responsibilities
<ul style="list-style-type: none"> <li>• Reports to and takes directions from the Project Management Board (PBM).</li> <li>• Assists in the development and execution of project and team plans (or parts of it).</li> <li>• Communicates plans, decisions, and instructions to the Project Partner or external contractors.</li> <li>• Participates in project meetings as needed and contributes to the resolution of issues.</li> <li>• Provides guidance to project participants in support of work execution.</li> <li>• Assists with the organisation of project meetings and creating the minutes.</li> <li>• Gathers status information, actuals and forecasts of all work packages and advises the Project Management Board (PMB) of any discrepancies.</li> <li>• Proactively detects quality or scheduling issues and proposes preventive actions.</li> <li>• Prepares or contributes to project status reports in timely manner.</li> <li>• Supports the risk and change management process, updates the <i>Risk</i> and <i>Change Logs</i>.</li> <li>• Coordinates deliverable acceptance with internal and external users and stakeholders.</li> <li>• Establishes the routine project communications to inform project stakeholders.</li> </ul>