



Unite!**Widening**

Quality and Risk Management Manual

Unite!'s responsible

Table of content

Introduction.....	3
1 Inputs data	6
2 Quality management (QM) in the Unite.WIDENING project	7
2.1 Introduction to project quality management	7
2.2 Quality management processes	8
2.2.1 Quality planning.....	8
2.2.2 Quality assurance	11
2.2.3 Quality control	15
3 Risk management (RM) in the Unite.WIDENING project	18
3.1 Basic definitions and goal of risk management	18
3.2 Risk management processes.....	20
3.2.1 Risk identification	22
3.2.2 Risk assessment.....	23
3.2.3 Risk treatment.....	25
3.2.4 Monitoring & reporting.....	26
3.2.5 Communication & consultation	27
3.2.6 Recording & reporting.....	27
3.2.7 Risk Mitigation & Monitoring Plan (Risk Register)	29
4 References	31
5 Appendixes	32



Introduction

The Unite.WIDENING brings together 9 Unite!¹ partner universities and 4 scientific associations, and technological hubs from both Widening and non-Widening countries. Project aims to close the gaps between universities by speeding up essential reforms and building the necessary skills to improve Research Careers, in line with European Research Area goals. Additionally, our partners are actively involved in European regions known for their economic opportunities, entrepreneurship, and innovation, contributing to their growth.

The Unite.WIDENING project has been designed to be a complementary project, supported by the European Universities Initiatives. This international coalition of higher education institutions from across the EU was born in 2019 and shares a long-term strategy of promoting European values and identity. It enhances science and knowledge valorisation in Unite! Alliance universities by facilitating cooperation with universities from Widening and non-Widening countries. The initiative aims to bolster the quality, inclusiveness, and competitiveness of higher education throughout Europe.

The idea behind the Unite.WIDENING project is drawn by the differences in conducting successful transnational research and innovation (R&I) projects within European Universities. Some are more disadvantaged than others due to a lack of scientific infrastructure, the ability to establish or access networks, maintain, and retain talents or overcome structural barriers at an institutional, regional, or national level.

The Unite.WIDENING project runs until 31/12/2028. Its quality management (QM) concept is prepared and performed based on the Quality Management Manual (QMM) for Unite! Alliance, at the same time supporting International Standards and Guidelines. Risk management (RM) concept is based on contemporary methodologies in management: Project Management Body of Knowledge (PMBOK), ISO 31000 Standard and experiences from previously implemented projects of the Alliance (especially project Unite.H2020).

QM of the Unite.WIDENING project addresses first and foremost QM practices and monitoring activities of the project itself ("project level"). The same assumption about practices and monitoring activities apply to project

¹ Unite! – *The University Network for Innovation, Technology, and Engineering*. is to forge connections between universities across Europe, allowing students to pursue degrees across EU countries, enhancing the global standing of European higher education institutions: <https://www.unite-university.eu/>

risk management (RM). At the same time, all practices support the Unite! Alliance’s values, goals and standards.

Project quality management and project risk management are knowledge areas in the project management process (Figure 1-1). This manual provides tips for managing the Unite.WIDENING project in the areas of quality and risk.

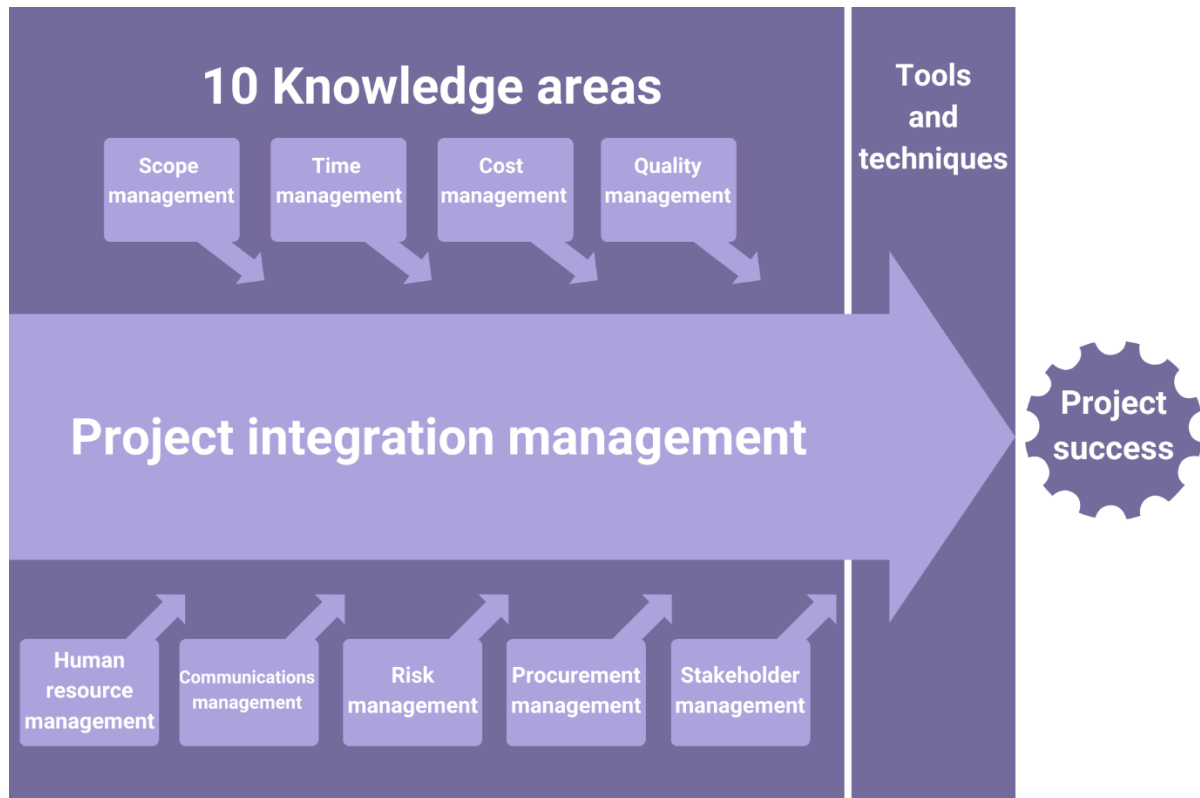


FIGURE 1-1 The knowledge areas of project management

In both quality and risk project management, there are written guidelines for planning and monitoring & controlling phases in the project lifecycle (Table 1-1).

TABLE 1-1 Phases of project lifecycle in the context of quality and risk project management

Knowledge areas of project management	Project initiation	Project planning	Project execution, monitoring and controlling	Project closing
Quality		Quality Management plan prepared	Quality testing executed and improvement actions done	Final quality management evaluation
Risk		Risk register prepared	Risks controlled	Final risk management evaluation



1 Inputs data

Inputs data and rules related to quality and risk management in the Unite.WIDENING project are connected with:

LIST OF 15 CRITICAL RISKS - Appendix no. 1

LIST OF 31 PROJECT MILESTONES - Appendix no. 2

LIST OF 37 PROJECT DELIVERABLES - Appendix no. 3

PROJECT GANTT CHART – Appendix no. 4



2 Quality management (QM) in the Unite.WIDENING project

2.1 Introduction to project quality management

This Section of the Manual relies primarily on the Unite! Quality Management Manual (QMM) and the Project Management Body of Knowledge (PMBOK), which is a set of standard terminologies and guidelines for project management. The PMBOK highlights the importance of quality planning, quality assurance and quality control as essential project quality management processes. These quality management processes are listed in Table 2.1-1 and described in Section 2.2 of the Manual.

TABLE 2.1-1 Project quality management processes

	Project quality management processes
1	Quality planning – the process of identifying quality standards for the project and its deliverables, and documenting how the project will demonstrate compliance with quality standards and meet stakeholder expectations.
2	Quality assurance – the process of translating the standards into executable quality activities that incorporate the Unite! quality policies into the project.
3	Quality control – the process of reviewing and recording the results of implementing the quality management activities to assess performance and ensure that the project deliverables are complete, accurate, and meet stakeholder expectations.

Section 2.2.1 describes the standards and responsibilities in the quality management of the Unite.WIDENING project. Section 2.2.2 indicates the criteria for assessing the quality of the deliverables and the quality of the process for achieving the deliverables, and presents the quality assessment for the Unite.WIDENING project. Section 2.2.3 explains the rules for monitoring and recording quality management in the project.

2.2 Quality management processes

Project quality management includes the processes for incorporating the Unite! quality policy into planning, assurance, and control of project quality requirements in order to meet stakeholder expectations. Project quality management also supports continuous process improvement activities. All quality criteria that are specific to the Unite.WIDENING project are listed in Section 2.2.2.

2.2.1 Quality planning

The Project quality management process begins with Quality planning. This process involves identifying the quality standards for the project and its deliverables and documenting how the project will demonstrate compliance with the specifications set out in the Unite.WIDENING project Grant Agreement and the expectations of the stakeholders.

The following Table 2.2.1-1 provides **a summary of the roles and responsibilities** involved in the quality management aspects of the Unite.WIDENING project, particularly with regard to the completion of tasks and the submission of deliverables.

TABLE 2.2.1-1 Roles and responsibilities in the quality management process

Roles and responsibilities in the quality management process		
1	Quality Management Officer (PLQMO)	<ul style="list-style-type: none"> arranges quality reviews of deliverables and the process of achieving deliverables prepares biannually quality reports prepares quality reports according to Grant Agreement content (DL1.3, DL2.2, DL3.2) arranges QAB cycle meetings (twice a year and as needed)
2	Quality Advisory Board (QAB) – QAB Unite.WIDENING members	<ul style="list-style-type: none"> advises the Work Package Leaders on the implementation of quality management reviews and accepts quality reports (according to Grant Agreement content and biannually quality reports)

3	Work Package Leaders (WPLs)	<p>verify that the deliverable are in conformity with quality standards and stakeholders expectations</p> <p>complete the Quality Register (described in section 2.2.3) and the quality final evaluation Template (TABLE 2.2.2-5)</p>
4	Persons responsible for deliverables (e.g. Tasks Leaders)	provide information to the Quality Register

The quality management Standards for the Unite.WIDENING project are established for **deliverables and the process for achieving the deliverables**. The types of deliverables are listed in the Grant Agreement (cf. Grant Agreement Appendix no. 3). For the purposes of the quality management of the Unite.WIDENING project, the deliverables have been divided into the following types:

DMP (Data Management Plan) – deliverables: No D1.1; D1.3; D2.1; D2.2; D3.1; D3.2; D11.1
R (Document/Report) – deliverables: No D1.2; D4.1; D4.2; D4.3; D4.4; D4.5; D5.1; D5.3, D5.4; D5.5; D5.6; D6.1; D8.1; D8.2, D10.1; D10.2; D10.4, D10.5; D10.6; D12.1; D13.1; D13.2; D13.3; D13.4
OTHER – deliverables: No D5.2, D7.1, D9.1, D9.2, D9.3, D10.3

If the quality of the deliverables need to be improved (see Section 2.2.2), we suggest using **the PDCA cycle** (see Figure 2.2.2-1). The PDCA cycle is used for continuous improvement. It promotes a structured and systematic approach, emphasising evidence-based decision-making and learning from experience. Its versatility allows it to be applied across various project domains, from individual tasks to overall project management strategies, enabling comprehensive enhancement in project performance.

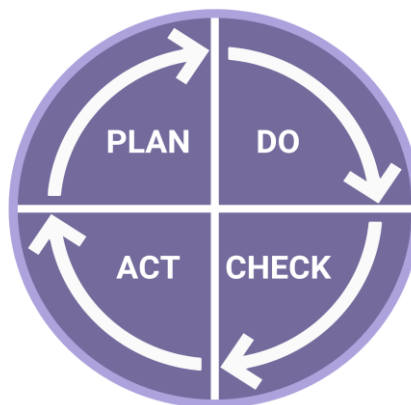


FIGURE 2.2.2-1 PDCA Cycle

Continuous improvement ensures that the project team learns from past experiences and adapts to changing circumstances to deliver better results. We recommend the use of the PDCA cycle at least for the final quality assessment of deliverables by the WP Leaders. However, we suggest using this cycle for each stage of deliverable work, according to the scope.

This includes analysing quality performance data, **identifying a problem or opportunity for improvement**, and implementing changes to enhance the quality of project deliverables and the process for achieving deliverables.

Once a quality problem or opportunity has been identified, it is highly recommended that an effective PDCA technique for improvement is used, according to the general quality management standards in Unite! (Written in Unite! QMM). This iterative four-step approach is designed to systematically improve project deliverables and the process of achieving deliverables. Here's how it operates:

Plan: This initial phase entails establishing clear objectives and targets for improvement. Key actions include:

- Setting SMART (Specific, Measurable, Achievable, Relevant, Time-bound) improvement objectives.
- Developing a detailed plan outlining the necessary resources, timelines, and responsibilities needed to achieve the goal.

Do: Once the plan is in place, implementation begins. Key actions include:

- Carrying out the planned activities.
- Collecting data during implementation to make the work visible, monitor progress and identify any deviations or challenges.

Check: This phase evaluates the implementation of the plan. Key actions include:

- Analysing the data collected to assess the performance against predetermined objectives.
- Identifying any variations between expected and actual results and investigating the root causes of any deviations to understand why they occurred.

Act: Drawing insights from the Check phase, corrective and preventive actions are taken to improve performance. Key actions include:

- Implement solutions.
- Adjusting processes, procedures, or resource allocation to optimise future performance.

Upon completion of the Act phase, the PDCA cycle begins anew, fostering a continuous loop of monitoring, evaluation, and improvement. This iterative approach facilitates ongoing refinement in deliverables or project processes, ultimately improving quality over time.

2.2.2 Quality assurance

We recommend a 5-stage scale for assessing the process of achieving deliverables (see Table 2.2.2-1). To ensure the high quality of deliverables, we recommend that the WP Leaders assess the process of achieving the deliverables, immediately after the deliverable content or scope is completed (80%).

TABLE 2.2.2-1 The 5-stage scale for assessing the process of achieving the deliverables

%	Description of stages
10 %	Concept is developed and work shared between people engaged in the task.
40 %	At least 50% of content or scope is completed.
80 % *	100% of content or scope is completed.
90 %	Deliverable evaluation is completed by WP Leaders.
100%	The final version (after correction) of the deliverable is done.

** It should be reached early enough before the deadline to be able to implement any necessary changes.*

As mentioned above, at the 3rd stage (80%), the WP Leaders assess the quality of the deliverables according to the criteria in Table 2.2.2-2. This table provides a list of quality criteria that are considered in the Unite.WIDENING project to ensure the overall quality of the project's deliverables.

The table with the listed criteria only applies to deliverables of the following types: **DMP – Data Management Plan** and **R – document/ report**.

TABLE 2.2.2-2 Quality criteria of deliverables (type DMP or R)

Quality criteria for the deliverables	Type of deliverable (see Section 2.2.1)	Assessment for quality criteria ²
Visibility (clear DMP or R structure, properly applied captions and references, correct formatting of DMP or R)	DMP or R	[VERY HIGH HIGH LOW VERY LOW]
Usability (simple language of communication, ease of understanding the content of DMP or R, ease of use of the content, user friendly)	DMP or R	[VERY HIGH HIGH LOW VERY LOW]
Availability of use by internal stakeholders (access on the Unite! communication platforms)	DMP or R	[VERY HIGH HIGH LOW VERY LOW]
Safety (widely understood, DMP or R ensures safety of application of its content)	DMP or R	[VERY HIGH HIGH LOW VERY LOW]
Flexibility (applicability across the structure of the Unite!, ability to meet stakeholder expectations)	DMP or R	[VERY HIGH HIGH LOW VERY LOW]
Sustainability (possibility to take into account its 3 dimensions: people, planet, prosperity)	DMP or R	[VERY HIGH HIGH LOW VERY LOW]
<i>... insert an additional criterion, unless you consider it reasonable in the context of your deliverable</i>	DMP or R	[VERY HIGH HIGH LOW VERY LOW]

TABLE 2.2.2-3 Quality criteria scale and its description

Scale	Description
VERY HIGH	This level indicates excellent fulfilment of the selected quality criterion by deliverable.

² See Table 2.2.2-3 The scale for quality criteria and its description

HIGH	This level indicates significant fulfilment of the selected quality criterion by deliverable.
LOW	This level indicates partial fulfilment of the selected quality criterion by deliverable.
VERY LOW	This level indicates minimal fulfilment of the selected quality criterion by deliverable.

For the deliverable type - OTHER, it is at the discretion of the WP Leader (in consultation with those responsible for the implementation of the tasks under the WPs, e.g. Tasks Leaders) how to assess the quality.

At this point we recommend the use of the document *Unite! Quality Management: Tips on Quality Indicators* (which is available in uShare for participants of the Unite.WIDENING project), which proposes the use of quantitative (e.g. number of users on the uShare platform) and qualitative indicators (e.g. acceptance and interest for a planned activity). Table 2.2.2-4 shows an example of the quality assessment of deliverables in type – OTHER.

TABLE 2.2.2-4 Example of the quality assessment of deliverables in type – OTHER

Type of indicator for assessment of the quality of deliverable	Type of deliverable (see Section 2.2.1)	Measurement
Quantitative e.g. number of users on the uShare platform	OTHER	Minimum 30 users per month
Qualitative e.g. acceptance and interest for a planned activity	OTHER	Questionnaires Surveys Interviews Focus groups

Some additional recommendations for the development of quality assessment indicators:

- limit indicators to few relevant numbers;
- use indicators for which data are readily available for measurement;

- use qualitative indicators that focus mainly on utility, usability, trust and acceptance of a planned or just carried out project task;
- don't use long questionnaires;
- if needed: find few crucial questions (referring to your indicators);
- if needed, use interviews/focus groups with few persons to „dive deeper” and ask for more details;
- think of an instrument that will give you a warning signal if something is fundamentally wrong.

The Manual assumes that each deliverable will be subject to the final evaluation process, and that the deliverables should take into account the strategic quality goals of Unite! as a long-term alliance and general goals of the Unite.WIDENING project, as well as the details and objectives of the WPs. Therefore, the quality of the final evaluation consists of following criteria:

- the deliverable meets the WP objective;
- the deliverable meets the Task objective;
- the deliverable contributes to the state of art of the Unite.WIDENING project;
- the deliverable contributes to the strategic quality goals of Unite! as a long-term alliance.

The final quality evaluation criteria **for all kind of deliverables** have 4 rates (definitely, satisfactorily, partially, not at all) and show the results of the evaluation carried out by the WP Leaders. The criteria and rates are presented in Table 2.2.2-5.

TABLE 2.2.2-5 Template of quality final evaluation

Evaluation criteria	Rating			
	definitely	satisfactorily	partially	not at all
The deliverable meets the WP objective				
The deliverable meets the Task objective				
The deliverable contributes to the state of art of the Unite.WIDENING project				
The deliverable contributes to the strategic quality goals of Unite! as a long-term alliance				

Recommendation of correction and/or improvement ³ :

As it is shown in the table, the final quality evaluation requires a recommendation for correction and/or improvement of the deliverable given by the WP Leader.

In this Manual, we recommend that **the final quality evaluation is completed** if the rating of the evaluation presents at least a satisfactory level of each of the embedded evaluation criteria.

2.2.3 Quality control

The goal of the quality control process is to assess the project performance and ensure that the project results are complete, accurate, and meet stakeholder expectations.

We recommend the following quality control process:

- | |
|---|
| 1. The first, initial quality control, will take place in May 2024. |
| 2. Periodic, every next 6 months, quality control will be taken until 31/12/2028. |

In this Manual it is recommended **to use the Quality Register** as a table, which is presented and described in the next part of this Section (Table 2.2.3-1). The table will be prepared as an Excel Spreadsheet file.

The monitoring and recording in the Quality Register of the Unite.WIDENING project will be carried out systematically and continuously until 31/12/2028.

The Quality Register consists of the most information on the status and quality of deliverables of the Unite.WIDENING project and is aim to:

- communicate the outcomes across the project,

³ Look at the PDCA cycle (see Section 2.2.1).

- provide the information for decision-making,
- improve the quality of deliverables and activities,
- provide the information for internal stakeholders.

The quality control process in the Unite.WIDENING project consists of the following steps:

1. The QAB (responsible for this Manual and the quality review of the deliverables) prepares a Quality Register in an Excel Spreadsheet file. The file, along with the Manual, is sent (in proper time) to Members of the WP Leaders Board.

2. Members of the WP Leaders Board distribute the file directly to the Person responsible for deliverables with a copy to the Unite! Key Liaison Officers. Person responsible for deliverables has 15 days to complete the file.

3. Within the following 5 days, Members of the WP Leaders Board collect the completed Quality Registers.

4. Members of the WP Leaders Board send the completed Quality Registers to the PLQMO⁴ within the next 5 days.

5. The QAB will compile the global Quality Register and prepare quality report within the next 20 days and submit it to the Unite! General Assembly. The report and results of the quality control process will be presented on each Dialogue.

⁴ agata.klaus-rosinska@pwr.edu.pl

TABLE 2.2.3-1 Quality Register

NoD	WP	NoT	% of achieving deliverable	Responsible person	Degree of compliance with quality criteria for DMP or R deliverable type							Degree of compliance with quality criteria for OTHER deliverable type			Partner
					Visibility	Usability	Availability of use	Safety	Flexibility	Sustainability	Other suggested by WPL criterion	Suggested by WPL criterion	Suggested by WPL criterion		
[D1.1 D13.4]	[WP1 WP2 WP3 WP4 WP5]	[1.1. ... 5.5.]	[10% 40% 80% 90% 100%]	[name surname email]	[VERY HIGH HIGH LOW VERY LOW]	[VERY HIGH HIGH HIGH LOW VERY LOW]	[VERY HIGH HIGH HIGH LOW VERY LOW]	[VERY HIGH HIGH HIGH LOW VERY LOW]	[VERY HIGH HIGH HIGH LOW VERY LOW]	[VERY HIGH HIGH HIGH LOW VERY LOW]	[VERY HIGH HIGH HIGH LOW VERY LOW]				[ULISBOA LISPOLIS AAVANZ PWR WPT SA ARAW SA POLITO TU GRAZ TUDa Grenoble INP UGA UPC AALTO KTH]

Description of the columns:

NoD – Number of Deliverable, select from the list

WP – Work Package, select from the list

NoT– Number of Task, select from the list

% of achieving deliverable – The state stage of deliverable, select from the list

Responsible Person – The person who is responsible for the deliverable

Degree of compliance with quality criteria for DMP or R deliverable type – The quality criteria select from the list (or insert as an additional criterion) and their assess

Degree of compliance with quality criteria for OTHER type – The quality criteria insert and their assess

Partner – select from the list

3 Risk management (RM) in the Unite.WIDENING project

3.1 Basic definitions and goal of risk management

Risk is defined as any **uncertain event or condition that could affect a project**. A risk can be an event (such as a snowstorm) or a condition (such as the unavailability of a significant expert, lack of communication). In both cases, it is something that may or may not occur⁵.

Even the most carefully planned project can run into difficulties. No matter how well planned, a project can always run into unexpected problems. For example, team members may get sick or quit, the resources we were counting on may not be available, even the weather may put us in trouble. Does this mean that we are powerless in the face of unknown problems? The answer is no. We can always use risk planning to identify potential problems that could cause troubles for a project, analyse the likelihood of their occurrence, take steps to prevent the risks we can avoid and minimise those we cannot.

Contemporary project management methodologies are based on the premise that not all risks are negative. Certain events (such as finding an easier way to carry out an activity) or conditions (such as lower prices for certain materials) can help a project. When this happens, we call it an opportunity; but it is always treated as a risk.

However, for the Unite.WIDENING project, based on the project initiation documentation (Grant Agreement) and the Critical Risks defined therein, only risks with a negative nature will be considered in the Risk Management Plan. Thus, this document is prepared for identifying the negative potential risks, analysing them, quantifying them, and developing risk mitigation and monitoring. The goal of risk management is to make sure that the Unite.WIDENING project only takes the risks that will help it achieve its primary objectives while keeping all other risks under control.

⁵ Original definition of risk by PMBOK: An uncertain event and condition, that, if occurs, has positive or negative effect on one or more project objectives.

The Risk Management section of this Manual is based on contemporary project management methodology: the Project Management Body of Knowledge and ISO 31000 Standards.

The principles related to project risk management which were taken into account here are indicated in the Figure 3.1-1.



FIGURE 3.1-1 Principles related to project risk management

Their meaning is as follow:

- a) **Integrated:** risk management is an integral part of all project activities.
- b) **Structured and comprehensive:** a structured and comprehensive approach to risk management contributes to consistent and comparable results.
- c) **Customised:** the risk management framework and process are customised and proportionate to the project's external and internal context related to its objectives.
- d) **Inclusive:** appropriate and timely involvement of stakeholders enables their knowledge, views and perceptions to be considered. This results in improved awareness and informed risk management.
- e) **Dynamic:** risks can emerge, change or disappear as a project's external and internal context changes. Risk management anticipates, detects, acknowledges and responds to those changes and events in an appropriate and timely manner.

f) **Best available information:** the inputs to risk management are based on historical and current information, as well as on future expectations. Risk management explicitly takes into account any limitations and uncertainties associated with such information and expectations. Information should be timely, clear and available to relevant stakeholders.

g) **Human and cultural factors:** human behaviour and culture significantly influence all aspects of risk management at each level and stage.

h) **Continual improvement:** risk management is continually improved through learning and experience.

3.2 Risk management processes

The risk management process is consisted of the following steps:

Establishing the context: understanding the project's context is crucial for developing an effective risk management strategy. Firstly, the context of the Unite.WIDENING project is described in the Introduction and secondly, it is assumed that each Work Package (WP) and its Deliverables (D) and Milestones are taken into account to monitor and control risks (see the Appendix no. 4 – Project Gantt Chart).

Risk identification: a number of techniques can be used to systematically identify risks. Consideration should be given to both internal and external risks affecting the project. The basis for risk identification for the Unite.WIDENING project is a List of Critical Risks from the Grant Agreement (see the Appendix no. 1 – List of 15 Critical Risks) and a predefined more detailed list suggested for use (see the Appendix no. 5 - List of Predefined Potential Risks). New, additional risks, not mentioned in the indicated lists, can be identified in each reporting cycle.

Risk assessment: analysis of identified risks to assess their likelihood and impact. Determination of risk level and priority.

Risk treatment: selection and implementation of appropriate strategies (e.g., avoidance, mitigation, transfer, acceptance) to address prioritised risks. Developing clear treatment plans with defined actions, responsibilities, and timelines.

Monitoring and reporting: continuous monitoring implemented risk treatments to ensure project effectiveness. Regular review of the risk management process to assess performance, identify new risks, and improve project effectiveness over time.

Communication and consultation: maintenance of effective communication and consultation with stakeholders throughout the process. Keeping stakeholders informed of identified risks and treatment strategies to foster collaboration and engagement.

Recording and reporting: documenting all aspects of the risk management process, including assessments, treatment plans, and monitoring activities. Ensure clear documentation for transparency, accountability, and continuity.

What can be read from Figure 3.2-1 below, there are two parallel processes operating across the first four mentioned above: “Communication and consultation” and “Monitoring and review”. “Recording and reporting” sits as a process that cuts across all activities.

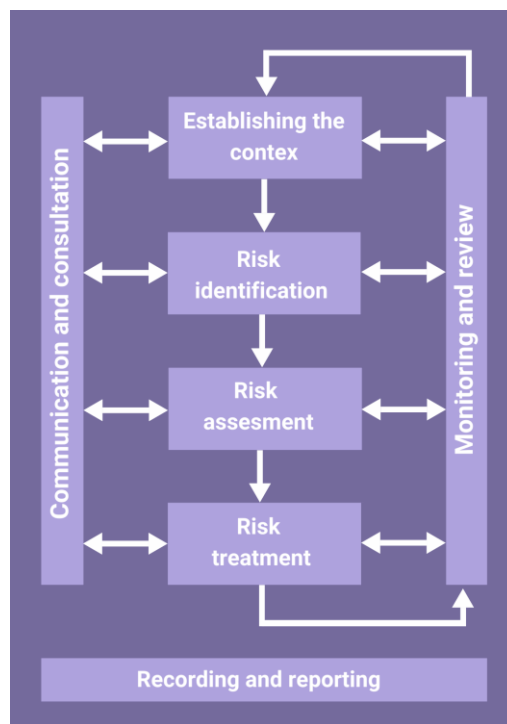


FIGURE 3.2-1 Project risk management process

By following the risk management process, each project team can systematically identify, analyse, evaluate, and respond to risks, thereby enhancing their ability to achieve project objectives and improve decision-making.

The process is iterative and, when performed properly, has multiple feedback loops between the different processes. Risk management should operate at any (and all) levels of the project and can be applied to all types of risk.

3.2.1 Risk identification

Our project can be affected by a range of events that are beyond our control. In order to remediate the consequences of these risks, it is essential to identify them to be able to develop mitigation strategies.

Risks can come from various sources including project scope, technology, resources, environment. It's also important to involve relevant stakeholders throughout the identification process to ensure a comprehensive and accurate risk assessment.

We recommend that you focus on every Deliverable and Milestone of the Work Package you are involved in and responsible for. We recommend a 2-step risk identification process:

1. Identify risks using the List of Predefined Potential Risks (see Appendix no. 5), which was created bearing in mind Critical Risks from the Grant Agreement of the Unite.WIDENING project.

2. Remember that a List of Predefined Potential Risks may not contain some risks important from your point of view. If this is the case, you can identify the risk yourself. You can identify risks for your Work Package using a combination of different techniques.

Below are specified risk identification techniques that are commonly used and recommended:

1. **Brainstorming:** this is a group technique where project team members, stakeholders, and subject matter experts gather to generate ideas about potential risks. The focus is on the quantity rather than the quality of ideas, encouraging participants to freely express any risks they foresee.

2. **Checklists:** using predefined lists of common risks based on industry standards, past projects, or specific project characteristics can help ensure that no obvious risks are overlooked. Checklists can be tailored to the project's unique context and can serve as a starting point for risk identification.

3. **SWOT Analysis:** a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis helps identify risks by examining both internal (strengths and weaknesses) and external (opportunities and threats) factors that could impact the project. Risks are identified by focusing on the 'Threats' aspect of the analysis.

4. **Interviews and Expert judgement:** Conducting interviews with project stakeholders, team members, and subject matter experts can provide valuable insights into potential risks. Experts in relevant domains can offer specialised knowledge about risks specific to their areas of expertise.

5. **Documentation Reviews:** Reviewing project documentation such as project plans, requirements documents, design documents, and lessons learned from past projects can help identify risks that have been encountered in similar projects or that are inherent in the project plan.

By employing a combination of above techniques, the project team can systematically identify a wide range of potential risks, helping to better understand the project environment and prepare for uncertainties.

Each potential risk will have its own unique number. Several potential risks are assigned to each WP, constituting Appendix no. 1 of this Manual. The person developing the Risk Mitigation & Monitoring Plan (described in section 3.2.7) assigns potential risk(s) to each Task and also selects the Category.

3.2.2 Risk assessment

Risk assessment is the process of assessing the likelihood and impact of risk events if they are realised. The results of this assessment are then used to prioritise risks to establish a most-to-least-critical importance ranking.

Using descriptive terms (Table 3.2.2-1) can help to communicate the likelihood of risks in a straightforward manner that is easily understood by the team, stakeholders and decision-makers.

We recommend using a linguistic method of likelihood assessment (Table 3.2.2-1).

TABLE 3.2.2-1. Risks likelihood definitions

Likelihood	Description
VERY LIKELY [VL]	This term indicates a high probability of the risk occurring. It indicates that the risk is expected to occur with a high degree of certainty or frequency.

LIKELY [L]	This term indicates a moderate to high probability of the risk occurring. It suggests that the risk is probable or reasonably expected to occur based on current circumstances.
UNLIKELY [UN]	This term indicates a low probability of the risk occurring. It indicates that the risk is not expected to occur frequently or is less probable compared to other risks.
VERY UNLIKELY [VU]	This term indicates an extremely low probability of the risk occurring. It suggests that the risk is highly improbable or almost certain not to occur under normal circumstances.

Each identified risk may have a different impact on the project. The assessment considers how the event could impact the deliverables, the processes, costs, schedule, etc. However, the impact is not limited to these criteria, however; political, social, scientific or economic consequences may also need to be consider.

Five levels of impact can be specified (Table 3.2.2.-2).

TABLE 3.2.2-2 Risks impact definitions

Impact	Description
NOT SIGNIFICANT [NS]	A risk even that, if it occurs, will have little or no impact on achieving outcomes, objectives.
MINOR [MI]	A risk even that, if it occurs, will have a minor impact on achieving desired results, to the extent that one or more stated outcomes, objectives will fall below goals but well above minimum acceptable levels.
MEDIUM [ME]	A risk even that, if it occurs, will have a moderate impact on achieving desired results, to the extent that one or more stated outcomes, objectives will fall well below goals but above minimum acceptable levels.
MAJOR [MA]	A risk even that, if it occurs, will have a major impact on achieving desired results, to the extent that one or more stated outcomes, objectives will fall below acceptable levels.

DISASTER [DI]	A risk even that, if it occurs, will have a severe impact on achieving desired results, to the extent that one or more of its critical outcomes, objectives will not be achieved.
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A risk analysis may identify a number of risks that appear to be of similar rank or severity. When too many risks are clustered at or about the same level, a method is needed to prioritise risk responses and where to apply limited resources.

In this step, the overall set of identified risk events, their impact assessments, and their probabilities of occurrence are "processed" to derive a most-to-least-critical rank-order of identified risks. A major purpose of prioritising risks is to provide a basis for allocating resources.

For this reason we can use **Risk Matrix**, as is in Table 3.2.2-3:

TABLE 3.2.2-3 Risks Matrix

Likelihood	Not Significant	Minor	Medium	Major	Disaster
Very likely	VLNS	VLMI	VLME	VLMA	VLDI
Likely	LINS	LMIN	LMED	LMAJ	LDIS
Unlikely	UNNS	UNMI	UNME	UNMA	UNDI
Very Unlikely	VUNS	VUNS	VUME	VUMA	VUDI

3.2.3 Risk treatment

It is not possible to predict with certainty when a potential event will occur. However, it is possible to identify them, prepare for their consequences, and even mitigate them using risk mitigation strategies:

Acceptance of risk: this strategy is a common option when the cost of other risk management options, such as avoidance or mitigation, may outweigh the cost of the risk itself. This option is preferred when the probability of occurrence is unlikely or very unlikely and the impact is potentially not significant or minor.

Avoiding risks: risk avoidance is the opposite of risk acceptance. It is the action that avoids any exposure to risk, whatever it may be. It is important to note that risk avoidance is generally the costliest of all risk mitigation options. This option is preferred when the probability of occurrence is likely or very likely and when the impact is potentially medium to disaster.

Risk mitigation: reduce the exposure of specific risks by diminishing the impact of an risk or its likelihood. This option is preferred when the probability of occurrence is likely and when the impact is potentially minor to not significant.

Risk transfer: is the implication of the transfer of risk to a willing third party. This option is preferred when the probability of occurrence is very likely and when the impact is potentially minor to not significant.

3.2.4 Monitoring & reporting

The monitoring and reporting processes of the Unite.WIDENING project are coherent to the PDCA cycle⁶.

Therefore, regular risk reviews are carried out **every 6 months to assess performance**, identify new risks, and improve effectiveness over time.

The first, **initial risk review will take place in May 2024**. However, we highly recommend to monitor the risks that you have prioritised as:

	Risk Matrix
very likely and medium, major or disaster impact	
likely and major or disaster impact	
unlikely or very unlikely and disaster impact	

much frequently than 6 months, e.g. every quarter or even once a month. Continuously monitor implemented risk treatments to ensure effectiveness.

⁶ P-Plan, D-Do, C-Check, A-Act. Concept of the PDCA was described in Section 2.

3.2.5 Communication & consultation

Communication and consultation are interconnected elements. Communication entails sharing information and comprehension of risks, whether through written, visual, or verbal means. Consultation involves gathering feedback from stakeholders to aid decision-making on risks. Both communication and consultation are vital, as one cannot be fully effective without the other. To ensure their synergy, factual, timely, relevant, accurate, and understandable information exchange is essential, facilitated by a mix of stakeholders with varied experiences and perspectives.

Therefore, it is crucial to prepare the Risk Mitigation & Monitoring Plan (described in the section 3.2.7 of this Manual) with the involvement of as many stakeholders as possible.

Before you start working on this Plan, read the Manual carefully. If you need any clarification, do not hesitate to contact the Quality Advisory Board (QAB) (by email⁷).

3.2.6 Recording & reporting

The process of recording and reporting in risk management in the Unite.WIDENING project will be carried out systematically and continuously until 31/12/2028.

We recommend the following recording and reporting process:

1. The first, initial recording and reporting, activity will take place in May 2024.
2. Periodic, every next 6 months, risk recording and reporting activities will be carried out until 31/12/2028.

The recording and reporting mechanism aims to:

- communicate risk management activities and outcomes throughout the project,
- provide information for decision-making,
- improve risk management activities,
- provide risk information and interact with stakeholders.

⁷ agata.klaus-rosinska@pwr.edu.pl

Recording is about collecting information in a Risk Register, so that this information can then be reported to decision-makers.

In fact, the **Risk Register determines the Risk Mitigation & Monitoring Plan** and contains all the information needed to effectively manage the risks in the project. We therefore recommend using the Risk Register as a tool to record the identification, assessment and monitoring and review of risks. We recommend implementing and developing the Risk Register as a table presented and described in the next section. The table is prepared as a Spreadsheet file.

The risk management process, directly dedicated of common work on the Unite.WIDENING project, consists of the following steps:

1. The QAB (in charge of regular risk reporting) creates a Risk Register for each Work Package (WP) in an Excel Spreadsheet file. These files will include a Risk Register and helpful examples. The files, along with the Manual, are sent (in proper time) to Members of the WP Leaders Board.
2. Members of the WP Leaders Board distribute the files directly to Persons responsible for deliverables with a copy to Unite! Key Liaison Officers. Persons responsible for deliverables are given 15 days to fill the files.
3. Within the following 5 days, Members of the WP Leaders Board collect the Risk Registers from Persons responsible for deliverables.
4. Members of the WP Leaders Boards send the Risk Registers to the PLQMO⁸ within the next 5 days.
5. The QAB compiles the global project Risk Register within the next 20 days and submits it to the Unite! General Assembly.

⁸ agata.klaus-rosinska@pwr.edu.pl

3.2.7 Risk Mitigation & Monitoring Plan (Risk Register)

TABLE 3.2.7-1 Risks Mitigation and Monitoring Plan (Risk Register)

No	Identification				Analysis and assessment			Risk mitigation and monitoring plan			
	Risk	Task	Category	WP	Likelihood	Impact	Assess	Mitigation strategy	Mitigation plan	Risk owner	Partner
1	[LIST OF PREDEFINED POTENTIAL RISKS] OR NEW RISK	[1.1. 5.5.]	[DELIVERABLE/ MILESTONE]	[WP1 WP2 WP3 WP4 WP5]	[VERY LIKELY LIKELY UNLIKELY VERY UNLIKELY]	[NON-SIGNIFICANT MINOR MEDIUM MAJOR DISASTEROUS]	[VLNS VLMI VLME VLMA VLDI LINS LMIN LMED LMAJ LDIS UNNS UNMI UNME UNMA UNDI VUNS VUNS VUME VUMA VUDI]	[ACCEPT AVOID] MITIGATION TRANSFER]	[DESCRIPTION]	[NAME SURNAME MAIL]	[ULISBOA LISPOLIS AAVANZ PWR WPT SA ARAW SA POLITO TU GRAZ TUDa Grenoble INP UGA UPC AALTO KTH]
NO	...	...	...	...	...	...	...	...	...	...	...

Description of the columns:

NO - Ordinal number

RISK – select from the “List of Predefined Potential Risks” or/and identify a new risk

TASK – select from the list

CATEGORY – select from the list

WP – select from the list

LIKELIHOOD – select from the list

IMPACT – select from the list

ASSESS – select from the list

MITIGATION STRATEGY – select from the list

MITIGATION PLAN – describe how the mitigation strategy will be implemented

RISK OWNER – Task Leader or a person who is personally responsible for implementation mitigation strategy and monitoring risk

PARTNER – select from the list



4 References

- Grant Agreement, Project 101136765 – Unite.WIDENING, European Research Executive Agency (REA), 05/12/2023.
- Unite! Quality Management Manual (QMM), 11/2021.
- Unite! Quality Management: Tips on Quality Indicators, 16/02/2023.
- Project Management Body of Knowledge, 7th edition (PMBOK® Guide), Project Management Institute (PMI), 2021.
- ISO 31000:2018 (en) Risk management – Guidelines, International Organization for Standardization, Geneva 2018.



5 Appendixes

Appendix no. 1 - LIST OF 15 CRITICAL RISKS⁹

Critical risks & risk management strategy			
<i>Grant Preparation (Critical Risks screen) – Enter the info.</i>			
Risk No	Description	Work package No	Proposed mitigation measures
Management Risks			
1	Project coordination management issues	WP1, WP3, WP2	The project coordinator will produce a detailed project management plan and will provide each member of the consortium with a clear list of deliverables and timelines. The interaction with the consortium members will be fluid and regular and it will use a structured intranet platform for the internal communication process. Local PM Offices will have operational responsibility in PL/PT and report back to the steering committee.
2	Failure in respecting planning, or unexpected delays in achieving milestones/ deliverables	WP1, WP3, WP2	Expertise of the partners (technical skills and management experience) will allow them to anticipate problems. Close monitoring of activities at the WP and Task level, with strict control on deliveries (including interim ones). The management team with the support of the PC will establish a feasible calendar that will be followed and controlled by each WP and Task leaders. Whenever necessary, support by the Coordinator and WP & Task Leaders in getting additional partners involved to provide resources to complete activity in time.
3	Lack of commitment from partners to the project	WP1, WP3, WP2	Efforts will be taken in the beginning of the project to form a common language and a commitment to the project goals. The kick-off meeting, in M1, will be a crucial event for establishing a sense of community. Continuous communication, strong motivational leadership with clear responsibilities, supportive Quality

⁹ Main Work Packages are divided into periods in Grant Agreement according to the key: **WP1**: WP1, WP2, WP3; **WP2**: WP4, WP5; **WP3**: WP6, WP7, WP8; **WP4**: WP9, WP10; **WP5**: WP11, WP12, WP13.

			Assurance/Quality Control procedures, detailed schedules, and quick decision-making capabilities.
4	Key people in the consortium leave creating knowledge gap in the project	WP1, WP3, WP2	Plans and knowledge will be documented. Partners will be responsible, as outlined in the Consortium Agreement, for replacing members of staff with someone of the same experience and skill (defining deputies for key roles).
5	Lack of appropriate communication flows among the partners	WP1, WP3, WP2	The internal communication strategy will focus on maximizing interaction and knowledge transfer between partners to ensure the success of the project. Partners will interact and will organize face-to-face meetings and regular teleconferences (e.g. a teleconference will take place every month) and other multi- and bi-lateral contacts with other partners.
Technical / Operational Risks			
6	Difficulties or unwillingness to identify shareable infrastructures or resources	WP5, WP4	Identification of incentives for sharing e.g. access to other resources; sharing of success stories; reverse request: sharing of needs of resources or infrastructures to stimulate cooperation.
7	Differences in local practices to involve citizens or businesses in research make transfer to other regions impracticable; clashes between research/ business cultures.	WP5, WP4	Provide success cases of Open Local Innovation Communities. Use the digital campus framework as a tool to include new entities. Study of engagement best practices in outreach of involvement of citizens in R&I in non-Widening countries performed with consideration of research/business cultures before transfer to PL/PT.
8	Design or implementation of the training programmes is inappropriate for the target audiences	WP6, WP8, WP7	Design and implementation performed considering the experience and knowhow of the consortium in the 2 previous projects Unite!E+ and Unite!H2020. Selection of contents for the training performed considering key goals e.g. valorisation of research careers and industry cooperation.

9	Negative training impact evaluation	WP6, WP8, WP7	Indicators for success, and their requirements, will be clearly defined in Quality Plan or WP3 DLs; assessment of needs and existing knowledge and diagnostics will be inputs for the creation and implementation of the training programme; execution of training will be repeated with lessons learned from past ones.
10	Inappropriateness of the joint interdisciplinary & Trans European R&I agendas to mitigate the gap between countries	WP9, WP10	Identification of gaps in PL/PT to be considered in the execution of the WP, to improve identified issues. Use the experience in Unite!H2020 to effect changes in PL/PT ecosystems, and highlight existing best practices that have positive results. Highlight the expected benefits to participants in the ecosystems.
11	Low participation in match making events, or few industry/business-driven innovation links are created.	WP9, WP10	Use of tools and experience for the Unite!E+, Unite!H2020, aUPaEU and other projects to identify potential participants and disseminate the events; drive interest with identification of potential areas for cooperation; stimulate interest and engagement with success stories; promote the creation of green and digital villages in PL and PT and disseminate the sharing of R&I capacities and infrastructures.
12	Low interest in Industry-Embedded Doctoral Schools	WP9, WP10	Attract researchers with the motivation to improve their research careers, and attract industry with the potential to improve competitiveness, and performance in R&D of new products and services. Promote visits and exchanges as a way to improve mutual knowledge and stimulate the identification of cooperation areas between industry and academia
13	Inability to engage or transfer knowledge sufficiently among stakeholders and policy makers, or low acceptance of the initiatives	WP13, WP11, WP12	Earlier informative contacts will help mitigating risk of low interest from stakeholders. Proactive awareness raising with concrete numbers and benefits for them and policymakers. Continuous communication and involvement of stakeholders during the project lifetime, including through use-cases, workshops, surveys, wide dissemination of results, etc.
14	Difficulty to disseminate and communicate to the end	WP13, WP11, WP12	Capitalise on best expertise and networks of all partners to design and plan the dissemination and communication strategy. Develop and promote the project through relevant media.

34 - 60



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	audiences / stakeholders		
15	Low participation from ecosystem players in PL/PT and from other Twinning countries	WP13, WP11, WP12	Proactive raising awareness of the benefits of participating in the project for ecosystem players, organizing seminars, workshops etc.



Appendix no. 2 - LIST OF 31 PROJECT MILESTONES¹⁰

Milestones					
<i>Grant Preparation (Milestone's screen) – Enter the info.</i>					
Milestone No	Milestone Name	Work Package No	Lead Beneficiary	Means of Verification	Due Date (month)
1	Appointment of the 2 Advisory Boards	WP1	1-ULISBOA	Minutes and website – composition of Boards	3
2	Completion of 1st PR	WP1	1-ULISBOA	Periodic reporting 1 documentation	15
3	Completion of 2nd PR	WP2	1-ULISBOA	Periodic reporting 2 documentation	36
4	Final PR Completion	WP3	1-ULISBOA	Final reporting documentation	60
5	Workshop/Conference “The 5 EU Missions H2030” in PL and PT	WP4	7-POLITO	Report of the conference/ minutes; Website	3
6	Definition of PL/PT Strategic Areas	WP4	7-POLITO	Report	9
7	Research Expert Communities in PL/PT Strategic Areas	WP5	7-POLITO	Creation of 4 Research Expert Communities in PL/PT Strategic Areas defined by the scientific advisors and the steering committee	18
8	Presentation of Digital Campus Framework	WP5	7-POLITO	Public presentation of the Digital Campus Framework in PL and PT	24
9	Open innovation Community for Green and Digital Transition in Widening countries	WP5	7-POLITO	Agreement Role Model Signature for a green Trans-European country	28

¹⁰ Main Work Packages are divided into periods in Grant Agreement according to the key: **WP1:** WP1, WP2, WP3; **WP2:** WP4, WP5; **WP3:** WP6, WP7, WP8; **WP4:** WP9, WP10; **WP5:** WP11, WP12, WP13.

10	Young researcher's innovative internships	WP5	7-POLITO	Developing the young researchers internships in company for the innovative process/products development in the PL/PT Strategic	32
11	Training Toolkits adapted to Widening countries	WP8	10-Grenoble INP	Website and Manuals	42
12	Network of Research Experts - perform 4 Strategic areas Workshops in PL/PT	WP8	10-Grenoble INP	Network outputs – definition of strategic areas by the scientific advisors and steering committee; regulations; workshops shortcomings	28
13	4 Workshop Series to mentor researchers in Widening countries	WP7	10-Grenoble INP	4 workshops outputs (list of attendees, contents, etc) – mentoring researchers in connection with the industry	32
14	4 Motivational Tracks – from Master Level to PhD	WP7	10-Grenoble INP	Leverage the tracks to the industry in PL and PT – 4 motivational tracks created and given by companies/R&I incubators	34
15	3 TED Talks in PL and PT – partnerships with EIT programmes	WP8	10-Grenoble INP	TED Talks organised with the companies/R&I incubators – annual (3rd, 4th and 5th Year)	42
16	Workshop on life cycle assessment (LCA) for researchers in the field of sustainability	WP8	10-Grenoble INP	List of attendees - (at least 20 researchers)	44
17	Workshop on writing successful European Research Council (ERC) proposals for	WP8	10-Grenoble INP	List of attendees - (at least 10 staff members)	44

37 - 60



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	researchers interested in applying for ERC funding				
18	Creation of a thematic Unite! community of researchers, extension of the Unite! community on living labs	WP9	1-ULISBOA	Minutes of the meetings	30
19	Handbook on good practices and data sharing for living labs	WP9	1-ULISBOA	Submission of the handbook, publication on the Digital Campus	36
20	Implementation/Creation of 8 offices in PL and PT (TT, OS, MSCA Grant Writing and an HRResearchers office to support R&I Agendas implementation)	WP10	4-PWR	Formalities proofs, Website info	40
21	1 Open Science Forum – PL and PT version	WP10	4-PWR	Contents of the event, website, list of attendees	46
22	Creation of 3 Centres of Excellence in Strategic Areas in PL and PT	WP10	4-PWR	Report and website	46
23	Perform 4 Matchmaking Events	WP10	4-PWR	Minutes of events with other alliances and networks outside Europe considering Widening countries approach	58
24	Official launch of Project website	WP11	4-PWR	Website	4
25	Conference: How to sustain the local ecosystems with external actors	WP12	4-PWR	Website and contents; list of attendees	30
26	Intermediate Brussels Conference: From Widening to EU	WP12	4-PWR	Website and contents; list of attendees	30

	(European Universities Initiatives)				
27	2 S&R&I Hackathons to external actors of academia	WP12	4-PWR	Contents, Videos and Website	36
28	Designation of society ambassadors of R&I in the 2 cities	WP13	4-PWR	Ceremony	60
29	Organization of Science & Innovation Days (Night Science Events; R&I Museums Story Tellers Context; R&D Escape Rooms).	WP13	4-PWR	Dissemination of events; List of attendees	60
30	1 Yearly Award about the best R&I practice in Lisbon and Wroclaw	WP13	4-PWR	The award winner's speech + the jury minutes	60
31	Final Conference: Sharing RI to forward discoveries, breakthroughs in S&T and generate value in Widening countries	WP13	4-PWR	Website and contents; list of attendees	60

39 - 60



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WPT WROCLAWSKI PARK
TECHNOLOGICZNY

AVANZ
INNOVATION

TECHNISCHE
UNIVERSITÄT
DARMSTADT

A''
Aalto University

TU
Graz
Graz University of Technology

INP
UGO



AR
AW
Agencja Rozwoju
Aglomeracji Wroclawskiej

LisPO:is

Politecnico
di Torino

U LISBOA
UNIVERSIDADE
DE LISBOA

UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

Wrocław University
of Science and Technology

Appendix no. 3 - LIST OF 37 PROJECT DELIVERABLES¹¹

Deliverables						
<i>Grant Preparation (Deliverables screen) – Enter the info.</i>						
<i>The labels used mean:</i>						
<i>Public – fully open (automatically posted online)</i>						
<i>Sensitive – limited under the conditions of the Grant Agreement</i>						
<i>EU classified –RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision 2015/444</i>						
Deliverable No	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month)
D1.1	Data Management Plan	WP1	1 - ULISBOA	DMP – Data Management Plan	PU - Public	6
D1.2	QM and Risk Management Manual	WP1	4 - PWR	R – Document, report	PU - Public	4
D1.3	Quality and Risk Management – Initial Report	WP1	4 - PWR	DMP – Data Management Plan	PU - Public	15
D2.1	Data Management Plan – Midterm Report	WP2	1 - ULISBOA	DMP – Data Management Plan	PU - Public	36
D2.2	Quality and Risk Management - Mid Term Report	WP2	4 - PWR	DMP – Data Management Plan	PU - Public	36
D3.1	Data Management Plan - Final Report	WP3	1 - ULISBOA	DMP – Data Management Plan	PU - Public	60

¹¹ Main Work Packages are divided into periods in Grant Agreement according to the key: **WP1:** WP1, WP2, WP3; **WP2:** WP4, WP5; **WP3:** WP6, WP7, WP8; **WP4:** WP9, WP10; **WP5:** WP11, WP12, WP13.

D3.2	Quality and Risk Management - Final Report	WP3	4 - PWR	DMP – Data Management Plan	PU - Public	60
D4.1	New Policy Recommendations for R&I Widening Countries Agendas – E-Book	WP4	7 - POLITO	R – Document, report	PU - Public	10
D4.2	Report “Research management needs in PL and PT - identification of gaps and future actions”	WP4	7 - POLITO	R – Document, report	PU - Public	12
D4.3	Handbook of HRS4R for Widening countries	WP4	1 - ULISBOA	R – Document, report	PU - Public	12
D4.4	Enhanced, extended and updated online catalogue of RIs + directory of TTOs	WP4	10 - Grenoble INP	R – Document, report	PU - Public	12
D4.5	White Paper UNITE “A new university Open Science & Innovation Strategic Roadmap” - adapted version to Widening countries	WP4	12 - AALTO	R – Document, report	PU - Public	12
D5.1	Development of Gender, Inclusion and Equity Plans in research careers – Survival Guide to Widening countries	WP5	1 - ULISBOA	R – Document, report	PU - Public	18
D5.2	Design and implementation of a long-term scheme for joint MRO of the above	WP5	10 - Grenoble INP	OTHER	PU - Public	18
D5.3	Risks-benefits analysis on allowing	WP5	10 - Grenoble INP	R – Document, report	PU - Public	24

41 - 60



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	external users access to an RI					
D5.4	Report - Establishment of the Research Assessment Framework in Widening Countries	WP5	11 - UPC	R – Document, report	PU - Public	28
D5.5	Legal framework and agreement template for UDS segment in PL and PT – UIDS (Unite Industrial Doctoral School)	WP5	11 - UPC	R – Document, report	PU - Public	32
D5.6	Best Practices Report in Outreach and involvement of citizens in R&I	WP5	11 - UPC	R – Document, report	PU - Public	18
D6.1	Guidelines to the creation of a Science & Innovation Skills Academy	WP6	1 - ULISBOA	R – Document, report	PU - Public	15
D7.1	Training Programmes Contents and Guides – Manual	WP7	10 - Grenoble INP	OTHER	PU - Public	24
D8.1	Training Implementation Report	WP8	4 - PWR	R – Document, report	PU - Public	44
D8.2	Training Impact and Assessment Report	WP8	1 - ULISBOA	R – Document report	PU - Public	46
D9.1	Crowd/Lending Funding initiative – Widening Capacities Funding in PL and PT	WP9	8 - TU GRAZ	OTHER	PU - Public	32
D9.2	Interconnecting Unite! living labs and pooling the data they produce	WP9	10 - Grenoble INP	OTHER	PU - Public	36

D9.3	Mobility schemes to Joint Supervision programmes (1 Widening and 1 non-Widening supervisor) for PL and PT students – Digital framework	WP9	7 - POLITO	OTHER	PU - Public	30
D10.1	Guidelines and recommendations for the further development of Joint Interdisciplinary & trans-European R&I Structures - Widening countries	WP10	9 - TUDa	R – Document, report	PU - Public	54
D10.2	Stakeholders Analysis Pilot Tests (The Business/Academia Cooperation based on SGDs in PL and PT)	WP10	8 - TU GRAZ	R – Document, report	PU - Public	48
D10.3	Toolkit to Research Assessment Framework – contents and materials (including the Development of UNITE Code of Ethics and Diversity in Research Environments in PL and PT); Development of the Research Transparency Dashboard – PL and PT – website; The update	WP10	13 - KTH	OTHER	PU - Public	50
D10.4	Implementation of 2 pilot tests in the context of Research Assessment – contents/reports for Visiting Chairs and Sabbatical Periods	WP10	13 - KTH	R – Document, report	PU - Public	54

	(mixed across the industry and academia)					
D10.5	Development of Expert Programmes to improve the success rate in ERA Chairs and Talent Attractiveness & Expert Tutoring for ERC Plus Programme Accelerator	WP10	13 - KTH	R – Document, report	PU - Public	50
D10.6	Evaluation of the industry-embedded Doctoral Schools in Widening countries	WP10	7 - POLITO	R – Document, report	PU - Public	45
D11.1	Plan for dissemination, communication and exploitation	WP11	4 - PWR	DMP – Data Management Plan	PU - Public	6
D12.1	Plan for dissemination, communication and Exploitation - Updating	WP12	4 - PWR	R – Document, report	PU - Public	36
D13.1	Outreach Plan for Widening countries in R&I – report outlook along the success cases in PL and PT	WP13	11 - UPC	R – Document, report	PU - Public	48
D13.2	The Global Science Impact Outlook Report – the vision from the side of Widening countries - report	WP13	11 - UPC	R – Document, report	PU - Public	60
D13.3	The Complete White Book 2.0 - European Policies & Strategies concerning the [Reform and renew the] Science & Innovation	WP13	9 - TUDa	R – Document, report	PU - Public	58

44 - 60



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	institutional approaches					
D13.4	Plan for dissemination, communication and exploitation - Final Report	WP13	4 - PWR	R – Document, report	PU - Public	60



Appendix no. 4 – PROJECT GANTT CHART

WP/Tasks | Duration in Months / Reporting Period (RP)	M1-M12				RP1 M15 M13-M24				M25-M36 RP2 M36				M37-M48				M49-M60 RP3 M60			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
WP1 Project Management & Quality Assurance	WP1.1 (N1)				WP1.2 (N2)				M1 – M60				WP1.3 (N3)							
Task 1.1 Project Management									M1 – M60											
Task 1.2 Quality Assurance, Tasks Monitoring & Risk Management									M1 – M60											
WP2 Assessment & Reform of S&R&I institutional approaches	WP2.1 (N4)				WP2.2 (N5)															
Task 2.1 Diagnosis and SOA towards a multi-dimensional roadmap	M1 – M12																			
Task 2.2 Strengthen Human Capital and respect the European Values	M6 – M18																			
Task 2.3 Sharing Research Infrastructures and resources					M8 – M24															
Task 2.4 Reinforcing cooperation between Academia and Business					M8 – M32															
Task 2.5 Enabling a European Open Science and Innovation Area	M6 – M18																			
WP3 Training and Capacity Building considering Multi-Dimension Roadmap	WP3.1 (N6)				WP3.2 (N7)				WP3.3 (N8)											
Task 3.1 Creation of Science, Research & Innovation Skills Academy	M6 – M24																			
Task 3.2 Design of “Train the Tutors” and “Train the Support Staff” programmes					M12 – M24															
Task 3.3 Implementation of “Train the Tutors” and “Train the Support Staff” programmes					M18 – M44															
Task 3.4 Evaluation of Training impact									M22 – M54											
WP4 Building Inclusive Collaboration for Excellence					WP4.1 (N9)				WP4.2 (N10)											
Task 4.1 Joint interdisciplinary & Trans European R&I agendas to mitigate the gap between countries					M24 – M42															
Task 4.2 Contribution to the creation of industry/business-driven innovation links					M24 – M48															
Task 4.3 Principles of sharing virtual and physical R&I capacities including infrastructures					M24 – M44															
Task 4.4 Promotion of attractive, fair and cooperative research careers					M24 – M54															
Task 4.5 Industry-Embedded Doctoral Schools					M24 – M54															
WPS Outreach without Borders	WP5.1 (N11)				WP5.2 (N12)				WP5.3 (N13)											
Task 5.1 Outreach to and inspiring local/regional innovation ecosystems									M32 – M48											
Task 5.2 Engaging with citizens, cities, regions and other non-academic actors									M20 – M60											
Task 5.3 Global outreach and internationalization													M48 – M60							
Task 5.4 Contribution to European policies and strategies													M32 – M58							
Task 5.5 Dissemination and Communication									M1 – M60											



Appendix no. 5 - LIST OF PREDEFINED POTENTIAL RISKS

No	Critical risks from Grant Agreement	Work Package No	Predefined Potential Risks
1	Project coordination management issues	WP1	<p>Dependency on Project Coordinator: If the project coordinator is unable to fulfill their responsibilities, such as producing a detailed project management plan or providing clear deliverables and timelines, the project could face delays or confusion.</p> <p>Communication Breakdown: While the use of a structured intranet platform for communication is mentioned, there is a risk of communication breakdown if the platform is not utilized effectively or if there are technical issues. This could lead to misunderstandings or delays in the project.</p> <p>Dependency on Consortium Members: The success of the project relies on the cooperation and contribution of consortium members. If there are disagreements, lack of commitment, or inability to meet expectations, it could hinder progress.</p> <p>Operational Responsibility: The allocation of operational responsibility to local PM Offices in PL/PT (presumably Poland and Portugal) carries the risk of inconsistency or differences in approach between different locations. Lack of coordination or alignment with the overall project goals could lead to inefficiencies or conflicts.</p> <p>Reporting Structure: If the reporting back to the steering committee is not timely or accurate, it could result in poor decision-making or lack of oversight, leading to project deviations or failures.</p> <p>Dependency on Intrastate Infrastructure: The effectiveness of the intranet platform relies on stable and reliable infrastructure. Technical issues, such as server failures or internet outages, could disrupt communication and project progress.</p> <p>Resource Allocation: There is a risk that resources (financial, human, or technological) may not be allocated appropriately or efficiently, leading to budget overruns, delays, or compromised quality of deliverables.</p> <p>Scope Creep: Without clear boundaries and regular monitoring, there is a risk of scope creep, where additional requirements are</p>

47 - 60



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			<p>added to the project without proper evaluation of their impact on timeline and resources.</p> <p>Cultural and Language Differences: Working with a consortium may involve teams from different regions with diverse cultures and languages. Misunderstandings due to cultural differences or language barriers could impact collaboration and project outcomes.</p>
2	Failure in respecting planning, or unexpected delays in achieving milestones/ deliverables	WP1	<p>Dependency on Partner Expertise: Relying solely on the expertise of partners to anticipate problems may pose a risk if partners lack the necessary skills or experience, leading to oversight of potential issues.</p> <p>Lack of Contingency Planning: While close monitoring and strict control on deliveries are mentioned, there may be a risk if there's a lack of contingency planning in case of unforeseen delays or obstacles.</p> <p>Overreliance on Management Team: Depending heavily on the management team and project coordinator to establish and maintain a feasible calendar could lead to bottlenecks or delays if these individuals become overloaded or unavailable.</p> <p>Resource Constraints: While the text mentions the possibility of involving additional partners to provide resources when necessary, there's a risk that finding and integrating new partners could be time-consuming and may not always be feasible within project timelines.</p> <p>Dependency on Task Leaders: The effectiveness of the calendar and control mechanisms relies on the diligence and competence of task leaders. If they fail to fulfill their roles adequately, it could lead to schedule slippage or quality issues.</p> <p>External Dependencies: The success of the project may depend on factors beyond the control of the management team, such as regulatory changes, market fluctuations, or availability of external resources. Failure to address these dependencies could pose a risk to the project timeline and outcomes.</p> <p>Communication Challenges: There may be risks associated with ineffective communication between partners, the management team, and task leaders, leading to misunderstandings, delays in decision-making, or misalignment of priorities.</p> <p>Scope Creep: Without clear boundaries and scope definition, there's a risk that the project may expand beyond its original parameters, leading to increased costs, resource strain, and potential delays.</p>

3	Lack of commitment from partners to the project	WP 1	<p>Lack of Alignment: Despite efforts to form a common language and commitment to project goals, there is a risk that stakeholders may not fully align with the project objectives or understand the established language, leading to miscommunication and misunderstandings.</p> <p>Ineffective Kick-off Meeting: While the kick-off meeting is identified as crucial for establishing a sense of community, there is a risk that it may not effectively achieve this goal. Factors such as poor facilitation, disengaged participants, or conflicting agendas could hinder the establishment of a cohesive team dynamic.</p> <p>Communication Breakdown: Although continuous communication is emphasized, there is a risk of breakdowns in communication channels. This could occur due to technological issues, language barriers, or lack of clarity in communication protocols, leading to delays, errors, or misunderstandings.</p> <p>Leadership Challenges: While strong motivational leadership is mentioned, there is a risk that leadership may not effectively motivate or inspire team members. Additionally, if responsibilities are not clearly defined or if leadership lacks authority, decision-making processes may be hindered, leading to delays or confusion.</p> <p>Quality Assurance/Quality Control Issues: While supportive Quality Assurance/Quality Control procedures are highlighted, there is a risk that these procedures may not adequately address project requirements or that implementation may be ineffective. This could result in quality issues, rework, or project failures.</p> <p>Schedule Delays: Despite detailed schedules being mentioned, there is a risk of schedule delays due to unforeseen circumstances, resource constraints, or unrealistic timelines. Lack of flexibility in the schedule or failure to account for potential disruptions could impede project progress.</p> <p>Decision-Making Bottlenecks: While quick decision-making capabilities are identified as important, there is a risk that decision-making processes may be hindered by bureaucracy, conflicting priorities, or indecision among stakeholders. This could lead to project bottlenecks and hinder progress.</p>
4	Key people in the consortium leave creating knowledge gap in the project	WP1	<p>Lack of Documentation: If plans and knowledge are not adequately documented, there's a risk of critical information being lost or misunderstood, which could lead to project delays or errors.</p>

			<p>Dependency on Consortium Agreement: Relying solely on the Consortium Agreement to outline responsibilities may lead to misunderstandings or disputes if there are ambiguities or if the agreement is not clear or comprehensive enough.</p> <p>Succession Planning: While it's positive to have a plan for replacing staff members, there could be risks if suitable deputies for key roles are not identified or if the process of replacing staff is not well-defined. This could lead to disruptions in operations or a loss of institutional knowledge.</p> <p>Skill and Experience Matching: Ensuring that replacements have the same level of experience and skill as the outgoing staff members may be challenging. If replacements are not adequately qualified, it could impact the quality of work or lead to increased training needs.</p> <p>Dependency on Partners: The reliance on partners to fulfill their responsibilities may introduce risks if partners fail to meet their obligations or if there are disagreements about the interpretation of roles outlined in the Consortium Agreement.</p> <p>Communication Breakdown: If plans, responsibilities, or replacements are not effectively communicated among team members and partners, there's a risk of confusion, duplication of effort, or tasks falling through the cracks.</p> <p>Staff Turnover: If there's high turnover among staff members, constantly replacing individuals could impact team morale, productivity, and project continuity.</p> <p>Legal and Compliance Risks: If the process of replacing staff does not comply with legal regulations or contractual obligations, it could result in legal liabilities or penalties.</p>
5	Lack of appropriate communication flows among the partners	WP1	<p>Dependency on Technology: Reliance on teleconferences and other digital communication tools may expose the project to risks such as technical failures, connectivity issues, or cyber threats, potentially disrupting communication and knowledge transfer.</p> <p>Geographical Barriers: Face-to-face meetings and teleconferences might be challenging to coordinate due to geographical distances between partners, leading to scheduling conflicts, travel costs, or difficulties in ensuring equal participation from all parties.</p> <p>Language and Cultural Differences: Partners from diverse backgrounds may face language barriers or cultural differences that hinder effective communication and understanding,</p>

		<p>potentially leading to misunderstandings or misinterpretations of project goals and objectives.</p> <p>Inadequate Participation or Engagement: Despite scheduling regular interactions, there's a risk that some partners may not actively engage or contribute to discussions, impacting the overall effectiveness of knowledge transfer and collaboration.</p> <p>Lack of Documentation: Depending solely on verbal communication during meetings and teleconferences may result in important information not being documented properly, leading to knowledge gaps or inconsistencies in understanding project requirements and deliverables.</p> <p>Resistance to Change: Partners may resist adopting new communication strategies or tools, preferring traditional methods or lacking the necessary skills to effectively utilize digital platforms, which could impede the smooth implementation of the communication strategy.</p> <p>Limited Accessibility: Not all partners may have equal access to necessary communication technology or resources, potentially excluding certain stakeholders from important discussions and decision-making processes.</p> <p>Over-Reliance on Scheduled Meetings: Relying solely on monthly teleconferences and face-to-face meetings may hinder spontaneous communication and collaboration, limiting the ability to address urgent issues or adapt to changing project requirements in a timely manner.</p> <p>Dependency on Key Individuals: If key individuals responsible for organizing or facilitating communication activities become unavailable due to unforeseen circumstances such as illness or resignation, it could disrupt the continuity and effectiveness of the communication strategy.</p> <p>Confidentiality Risks: In multi- and bi-lateral contacts with other partners, there may be risks of unintentional disclosure of sensitive information or breaches of confidentiality, particularly if communication channels are not properly secured or protocols are not followed.</p> <p>Lack of Feedback Mechanisms: Without robust feedback mechanisms in place, partners may not have opportunities to provide input or express concerns about the effectiveness of the communication strategy, making it difficult to identify and address potential issues in a timely manner.</p>
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6	Difficulties or unwillingness to identify shareable infrastructures or resources	WP2	<p><u>Access to other resources:</u></p> <p>Risk of unequal access: There's a risk that certain participants may have access to more resources than others, leading to unequal power dynamics or unfair advantages within the sharing arrangement.</p> <p>Risk of resource depletion: If resources are shared without proper management or oversight, there's a risk of overuse or depletion, which could hinder future cooperation or sustainability.</p> <p>Risk of dependency: Participants might become overly reliant on shared resources, leading to difficulties if those resources become unavailable or are withdrawn.</p> <p><u>Sharing of success stories:</u></p> <p>Risk of misrepresentation: There's a risk that success stories may be exaggerated or misrepresented, leading to unrealistic expectations or disappointment among participants.</p> <p>Risk of competition: Sharing success stories could inadvertently fuel competition among participants, detracting from collaborative efforts and fostering a sense of rivalry.</p> <p>Risk of complacency: Participants might become complacent or less motivated to innovate if they perceive past successes as sufficient, potentially hindering future progress.</p> <p><u>Reverse request: sharing of needs of resources or infrastructures:</u></p> <p>Risk of resource scarcity: If numerous requests for resources or infrastructures are made, there's a risk of resource scarcity, making it challenging to fulfill all requests adequately.</p> <p>Risk of dependency: Similar to access to resources, there's a risk that participants may become overly dependent on others to fulfill their needs, potentially leading to unequal partnerships or strained relationships.</p>
7	Differences in local practices to involve citizens or businesses in research make transfer to other regions impracticable;	WP2	<p>Lack of Engagement: One of the significant risks is the failure to engage effectively with citizens and stakeholders in the innovation process. If the outreach efforts are not well-executed or if there is a lack of interest from the target audience, the OLICs may struggle to attract participation and generate meaningful contributions.</p> <p>Resistance to Change: Implementing new frameworks and approaches, such as the digital campus framework, may face resistance from existing stakeholders who are comfortable with</p>

52 - 60



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	clashes between research/business cultures.		<p>traditional methods. Resistance to change can hinder the adoption and success of OLICs, especially if key players within the innovation ecosystem are not supportive.</p> <p>Digital Divide: Not all stakeholders may have equal access to digital tools and platforms, leading to a digital divide that could exclude certain individuals or groups from participating fully in the OLICs. This could limit the diversity of perspectives and ideas within the community.</p> <p>Intellectual Property Concerns: Collaboration in innovation communities may raise concerns about intellectual property rights and ownership of ideas and inventions. Without clear guidelines and agreements in place, participants may be hesitant to share their knowledge and innovations openly.</p> <p>Sustainability: Ensuring the long-term sustainability of OLICs can be challenging, especially if they rely heavily on external funding or lack clear governance structures. Without sustainable funding and support, these communities may struggle to maintain momentum and relevance over time.</p>
8	Design or implementation of the training programmes is inappropriate for the target audiences	WP3	<p>Reliance on Past Projects: Relying solely on the experience and know-how gained from previous projects (Unite!E+ and Unite!H2020) may lead to complacency or overlooking new challenges and opportunities specific to the current project. There's a risk that the project team may not adequately adapt to changing circumstances or emerging trends.</p> <p>Limited Innovation: If the design and implementation process heavily lean on past projects, there's a risk of limited innovation. Innovation is crucial for staying competitive and addressing evolving needs, and overly relying on past experiences may hinder the introduction of novel approaches or solutions.</p> <p>Assumption of Transferability: Assuming that experiences and strategies from previous projects will seamlessly transfer to the current project without considering contextual differences poses a risk. Each project has its unique set of challenges, stakeholders, and objectives, and what worked in the past may not necessarily work in the current scenario.</p> <p>Potential Stakeholder Mismatch: While selecting contents for training based on key goals such as valorization of research careers and industry cooperation is essential, there's a risk of overlooking the needs and expectations of other stakeholders involved in the project. Neglecting the interests of certain stakeholders could lead to dissatisfaction, resistance, or lack of engagement, potentially impacting the project's success.</p>

			<p>Limited Flexibility: Focusing solely on predefined key goals for training content selection may limit the flexibility to adapt to evolving requirements or unforeseen challenges during the project lifecycle. This lack of adaptability could result in missed opportunities or ineffective responses to changing circumstances.</p> <p>Inadequate Risk Assessment: The text does not explicitly mention a comprehensive risk assessment process. Without a thorough risk assessment, the project team may overlook potential threats or vulnerabilities, increasing the likelihood of encountering unforeseen issues that could disrupt project progress or outcomes.</p>
9	Negative training impact evaluation	WP3	<p>Undefined Success Indicators: If the indicators for success are not clearly defined in the Quality Plan or Work Package 3 Deliverables (WP3 DLs), it could lead to ambiguity in assessing progress and achievement. This lack of clarity may result in misalignment of goals and objectives, leading to ineffective implementation of the project.</p> <p>Inadequate Needs Assessment: If the assessment of needs and existing knowledge is not thorough or accurate, it may lead to the development of a training program that does not adequately address the actual requirements of the project. This could result in wasted resources and ineffective training outcomes.</p> <p>Poor Diagnostics: If the diagnostics used for assessing needs and existing knowledge are flawed or incomplete, it may lead to incorrect assumptions about the training needs of the project. This can result in the development of training programs that fail to address critical gaps or challenges within the team or organization.</p> <p>Ineffective Training Execution: While the intention to repeat training with lessons learned from past sessions is positive, there is a risk that these lessons may not be effectively identified, captured, or implemented. Without proper reflection and adjustment based on past experiences, the training program may fail to improve over time, leading to stagnation or inefficiency in skill development.</p> <p>Lack of Continuous Improvement: Failing to incorporate feedback and lessons learned into subsequent training sessions may result in a lack of continuous improvement in the training program. This could lead to missed opportunities for optimizing the effectiveness and relevance of the training content and delivery methods.</p>

10	Inappropriateness of the joint interdisciplinary & Trans European R&I agendas to mitigate the gap between countries	WP4	<p>Lack of Specificity: This lack of specificity can lead to ineffective problem-solving and implementation.</p> <p>Ambiguity in Execution: Without a clear understanding of the Work Package or its objectives, it can be challenging to execute effectively.</p> <p>Assumption of Transferability: Mentioning the use of experience from Unite!H2020 to effect changes in PL/PT ecosystems assumes that the challenges and solutions identified in one context will seamlessly apply to another. However, this assumption may not hold true due to differences in contexts, stakeholders, and other factors.</p> <p>Dependency on Best Practices: Relying solely on existing best practices without considering the specific needs and challenges of the PL/PT ecosystems may not lead to effective improvements. It's essential to tailor solutions to the unique circumstances of the ecosystems in question.</p> <p>Overemphasis on Positive Results: While highlighting existing best practices with positive results is beneficial, it's crucial not to overlook potential pitfalls or negative outcomes associated with implementing these practices. Failure to consider potential drawbacks could lead to unforeseen issues during implementation.</p> <p>Unrealistic Expectations: Mentioning "expected benefits to participants in the ecosystems" raises expectations without providing concrete details or evidence supporting these expectations. Unrealistic expectations can lead to disappointment and lack of trust if the anticipated benefits are not realized.</p> <p>Lack of Stakeholder Involvement: Lack of stakeholder involvement can result in solutions that do not adequately address the actual needs and concerns of those affected.</p>
11	Low participation in match making events, or few industry/business-driven innovation links are created.	WP4	<p>Misidentification of Potential Participants: There is a risk that the tools and experiences used may not accurately identify suitable participants for the projects. This could result in either missing out on valuable contributors or including individuals or entities that do not align well with the project goals, leading to inefficiencies or conflicts.</p> <p>Limited Engagement: Although the aim is to stimulate interest and engagement, there's a risk that the chosen strategies may not effectively captivate the target audience. Without sufficient</p>

			<p>engagement, the projects may struggle to attract meaningful participation or collaboration.</p> <p>Failure to Drive Cooperation: Identifying potential areas for cooperation is crucial, but there's a risk that these efforts may not lead to successful collaborations. Without proper facilitation or alignment of interests, potential cooperative opportunities may not materialize, leading to missed chances for innovation and progress.</p> <p>Overemphasis on Success Stories: While sharing success stories can be motivational, there's a risk of overselling or misrepresenting achievements. This could create unrealistic expectations or overshadow the challenges and complexities involved in the projects, potentially leading to disillusionment among stakeholders.</p> <p>Green and Digital Villages Implementation Challenges: Promoting the creation of green and digital villages involves significant logistical, technical, and regulatory challenges. There's a risk that these challenges may be underestimated, leading to delays, cost overruns, or even project failure.</p> <p>Limited Dissemination of R&I Capacities: While disseminating R&I capacities and infrastructures is essential for fostering collaboration, there's a risk that the dissemination efforts may not reach a wide enough audience. This could result in missed opportunities for leveraging available resources and expertise.</p> <p>Inadequate Monitoring and Evaluation: Without robust monitoring and evaluation mechanisms in place, it may be challenging to assess the effectiveness of the dissemination efforts and identify areas for improvement. This lack of feedback could hinder the overall success and impact of the projects.</p>
12	Low interest in Industry-Embedded Doctoral Schools	WP4	<p>Conflicting Objectives: There may be a risk of conflicting interests between researchers aiming to advance their careers and industries seeking to enhance competitiveness. This misalignment could lead to tension or disagreement in collaborations.</p> <p>Intellectual Property Concerns: Collaboration between academia and industry may raise issues related to intellectual property rights. There's a risk that proprietary information or research findings could be misused or leaked, leading to disputes or loss of competitive advantage.</p> <p>Dependency on External Partners: Relying too heavily on external partners, such as industry, for funding or resources may result in a loss of autonomy for academic researchers. This dependency</p>

			<p>could influence research agendas or compromise academic integrity.</p> <p>Unequal Power Dynamics: Industry partners may hold greater financial resources and influence compared to academic institutions or individual researchers. This power asymmetry could lead to unequal bargaining power, potentially disadvantaging academia in negotiations or collaborations.</p> <p>Limited Academic Freedom: Pressure to align research with industry interests could restrict academic freedom and creativity. Researchers may feel compelled to prioritize industry-driven projects over exploratory or unconventional research, potentially stifling innovation.</p> <p>Ethical Concerns: Collaborations between academia and industry may raise ethical considerations, particularly regarding research integrity, conflicts of interest, or potential biases in data interpretation. There's a risk of compromising ethical standards in pursuit of mutual benefits.</p> <p>Loss of Independence: Overreliance on industry funding or partnerships could compromise the independence and objectivity of academic research. There's a risk that research outcomes may be influenced or skewed to meet the interests of industry partners, undermining scientific credibility.</p> <p>Knowledge Drain: Excessive emphasis on exchanges and visits between academia and industry without proper safeguards could lead to a drain of intellectual capital from academic institutions to industry. This brain drain may weaken academic research capacity and hinder long-term innovation.</p> <p>Competitive Disadvantage: Collaboration with industry may inadvertently provide competitors with insights or access to research findings, resulting in a loss of competitive advantage for either academia or industry partners.</p> <p>Cultural Clash: Differences in organizational culture, priorities, or timelines between academia and industry could lead to misunderstandings or communication barriers, hindering effective collaboration and knowledge exchange.</p>
13	Inability to engage or transfer knowledge sufficiently among stakeholders	WP5	<p>Assumption of Interest: There is an assumption that stakeholders will have low interest initially. This could pose a risk if stakeholders do not respond positively or engage actively despite the efforts made.</p> <p>Effectiveness of Informative Contacts: Although earlier informative contacts are mentioned as a mitigation strategy,</p>

57 - 60



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	and policy makers, or low acceptance of the initiatives		<p>there is a risk that these contacts may not effectively convey the importance or benefits of the project to stakeholders.</p> <p>Lack of Engagement from Policymakers: There is a risk that they may not be receptive or actively engage with the provided information, which could hinder the progress of the project.</p> <p>Ambiguity in Concrete Numbers and Benefits: If numbers and benefits are not clearly defined or if they are perceived as ambiguous or unrealistic, it could undermine the credibility of the project and its objectives.</p> <p>Timing of Awareness Raising: Timing is crucial in awareness-raising efforts. There's a risk that if awareness is raised too early or too late, it might not have the desired impact on stakeholders or policymakers.</p> <p>Failure to Address Stakeholder Needs: If the information provided does not address the specific needs or concerns of stakeholders, there's a risk that they may remain disinterested or resistant to the project.</p> <p>Dependency on Stakeholder Engagement: The success of the project seems dependent on stakeholder and policymaker engagement. If this engagement does not materialize as expected, it could pose a significant risk to the project's outcomes and objectives.</p> <p>Limited Contingency Planning: There may be limited contingency planning in place to address unforeseen challenges or resistance from stakeholders and policymakers.</p> <p>Lack of Tailored Communication: While the text mentions proactive awareness raising with concrete numbers and benefits, there's a risk that these may not be effectively communicated if they are not tailored to the specific interests and priorities of each stakeholder group. One-size-fits-all communication may not resonate with all stakeholders.</p> <p>Limited Feedback Mechanisms: Although the text mentions involvement of stakeholders through various means such as workshops, surveys, etc., there's a risk that these mechanisms may not effectively capture the feedback and concerns of all stakeholders. Without robust feedback mechanisms, it may be challenging to address evolving stakeholder needs and expectations.</p>
14	Difficulty to disseminate and	WP5	<p>Dependency on Partners' Expertise and Networks: Relying solely on the expertise and networks of partners may lead to limited</p>

	<p>communicate to the end audiences / stakeholders</p>		<p>perspectives or biases in the dissemination and communication strategy.</p> <p>Lack of Diversity in Strategy Development: Depending on the backgrounds and interests of the partners, there might be a tendency to overlook certain communication channels or target audiences, leading to a less comprehensive strategy.</p> <p>Limited Reach of Relevant Media: Without clearly defining what constitutes "relevant media," there's a risk of overlooking key platforms or channels where the project's target audience might be found. This could result in ineffective promotion and reduced visibility.</p> <p>Failure to Adapt to Changing Media Landscapes: Media landscapes evolve rapidly, with new platforms emerging and existing ones gaining or losing popularity. Failing to adapt the strategy to these changes could lead to missed opportunities or ineffective communication.</p> <p>Inadequate Promotion: Simply developing and promoting the project through media channels may not be sufficient to capture the attention of the target audience. Without a detailed plan for how promotion will be executed, there's a risk of the project being overlooked or misunderstood.</p> <p>Lack of Monitoring and Evaluation: Without mechanisms in place to monitor the effectiveness of the dissemination and communication strategy, it's difficult to identify areas for improvement or measure the impact of the project's promotion efforts. This could result in wasted resources and missed opportunities for optimization.</p>
15	<p>Low participation from ecosystem players in PL/PT and from other Twinning countries</p>	WP5	<p>Resource Allocation: Organizing seminars, workshops, and other awareness-raising activities requires significant resources in terms of time, manpower, and possibly financial investment. There's a risk of overcommitting resources without adequate planning or prioritization, leading to strain on the project's budget or team.</p> <p>Audience Engagement: There's a risk that the target audience may not be sufficiently engaged or interested in participating in the events despite efforts to raise awareness. This could result in low attendance rates, diminishing the effectiveness of the awareness-raising activities.</p> <p>Miscommunication: There's a risk of miscommunication or misunderstanding regarding the benefits of participating in the project. If the messaging is unclear or fails to resonate with the</p>

		<p>target audience, it may lead to confusion or skepticism about the project's objectives or potential benefits.</p> <p>Negative Perception: If the awareness-raising activities are perceived as overly promotional or insincere, there's a risk of generating a negative perception among ecosystem players. This could undermine trust in the project and deter participation.</p> <p>Lack of Follow-up: Organizing awareness-raising events is only one part of the process. There's a risk that without effective follow-up mechanisms in place, the initial awareness generated may not translate into sustained engagement or participation from ecosystem players.</p> <p>Inadequate Evaluation: Without proper mechanisms for evaluating the impact of the awareness-raising activities, it may be difficult to assess their effectiveness or identify areas for improvement. This could result in missed opportunities to refine the project's approach and maximize its impact.</p>
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