

## Intellectual Outputs

QUALITY ASSURANCE AND MONITORING

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Innovative Training Approach in the Technology Assisted Environment for Water Management

## SUMMERIZE INFO PROJECT TITLE: Innovative Training Approach in the Technology Assisted Environment for Water Management-PARADOX IO REFERENCE: **Quality Assurance and Monitoring** TASK REFERENCE: Risk Analysis PARADOX CONTACTS: info@eyebb.co.uk **AUTHORS AND AFFILIATION:** Indra Bandara, EYEBB Systems DATE: December 2022 **DOCUMENT VERSION 1 STATUS:** V.1

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## TABLE OF CONTENTS

1	Risk Analvis	2
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PROJECT ACTIVITIES	PROBLEM/RISK	POTENTIAL IMPACT ON THE PROJECT	LEVEL OF IMPACT	PROBABILITY	ELIMINATION OF THE RISK
ACTIVITY 1 - PROJECT MANAGEMENT	R1.1 Risks stemming from multidisciplinary nature of partners	Failure to successfully transfer knowledge and experience from academia to the industry partners	Critical	Medium	Smart and continuing communication with all partners
	R1.2 Underestimation of time needed to produce deliverables	Tasks not completed / Deliverables not submitted on time	Critical	Medium	Ensure the successful completion of the activities and the validity of their results; Project management ensure timely submission of deliverables
	R1.3 Underestimation of effort needed to complete activities	Resource / Budget overrun / Timetable overrun	Critical	Low	Management structured so as to closely monitor resource/budget consumption – take corrective actions wherever necessary
	R1.4 Lack of experience and qualifications of staff involved	Results of low quality	Critical	Low	All partners commit sufficient knowledge and experience
	R1.5 Issues related to partners communication	Co-ordination problems / Disputes among partners	Critical / Marginal	Low	Communication plan as a part of Project implementation plan



## Intellectual Outputs A3

A3 QAM: PROJECT MANAGEMENT AND

IMPLEMENTATION ACTIVITY: QUALITY ASSURANCE AND

**RISK MANAGEMENT** 

PROMOTED BY:

IN PARTNERSHIP WITH:









Innovative Training Approach in the Technology Assisted Environment for Water Management

### **SUMMERIZE INFO**

PROJECT TITLE:

Innovative Training Approach in the Technology Assisted Environment for Water Management-**PARADOX** 

IO REFERENCE:

A3 QAM

TASK REFERENCE:

A3 QAM Quality Plan

PARADOX CONTACTS:

i.bandara@eyebb.co.uk

**AUTHORS AND AFFILIATION:** 

Madduma Bandara, EYEBB Systems

DATE:

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## TABLE OF CONTENTS

1.	INTF	RODUCTION	3
1	.1.	BACKGROUND	3
1	.2.	AIM AND SCOPE OF THE QUALITY PLAN	4
2.	SCO	PE / ACTIVITY DESCRIPTION	5
3.	AIM	S AND OBJECTIVES	7
3	.1	AIMS	7
3	.2	OBJECTIVES	7
4.	PRO	JECT ORGANISATION AND RESPONSIBILITIES	8
4	.1	ORGANISATION STRUCTURE	8
4	.2	ROLES	9
4	.3	DIVISION OF WORK	10
5.	QUA	LITY CONTROL	13
5	.1	RESPONSIBILITIES	13
5	.2	QUALITY SYSTEM REVIEW	14
5	.3	MONITORING AND PROGRESS REPORTING	15
5	.4	PREVENTIVE ACTIONS - RISK MANAGEMENT	15
5	.5	INTERNAL EVALUATION OF PROJECT DELIVERABLES	16
5	.6	COMMUNICATION	18
5	.7	DOCUMENT AND DATA CONTROL	19
1	ANN	IEXES	22
2	ANN	$\operatorname{IEX}\operatorname{I}-\operatorname{MEASURES}\operatorname{FOR}\operatorname{MONITORING}\operatorname{AND}\operatorname{EVALUATION}$	23
3	ANN	IEX II – OVERVIEW OF IMPACT INDICATORS	25
4	ANN	IEX III – RISK ANALYSIS TEMPLATE	26
5	ANN	IEX IV – TEMPLATES	28

# PROJECT MANAGEMENT AND IMPLEMENTATION ACTIVITY: QUALITY ASSURANCE AND RISK MANAGEMENT

Date:	9 <sup>th</sup> December, 2022
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Distribution:	PARADOX team internal use
File name	PARADOX Quality Plan
Version:	01
Description:	Quality management plan for project PARADOX

Version	Date	Status	Author	Changes
00	December 2020	Draft	BNU	
01	December 2021	Draft	BNU	

#### 1. INTRODUCTION

#### 1.1. BACKGROUND

PARADOX arises from a Strategic Partnership composed of higher education and business institutions that will actively cooperate among them and key stakeholders (enterprises, regional bodies and other HE/VET institutions) for the development provide a joint study modules program supported by Industry 4.0 and Blockchain certification application that will capitalise companies with prepared youth, providing enterprises innovation, expertise, and added value.

Climate change has significant impacts on water availability and quality, which affect multiple sectors such as energy production, infrastructure, human health, agriculture, and ecosystems. In Europe, a key challenge is the shortage of qualified staff and the difficulty in attracting young talent to the water management sector. To address this issue, initiatives should be taken to make water management in related sectors more attractive and to transform academic knowledge and high-level competencies into practical and applicable skills. Such efforts can help boost the recruitment of highly-prepared staff in the water management sector.

One of the key priorities for HE is the reinforcement of the "Knowledge Triangle", through the support of innovation, entrepreneurship and university-business cooperation. This specifically applies to those traditional sectors, such as the environmental-related sectors, where changes in education and training are required to equip the future workforce with the new skills for the new demands generated by the changing patterns of economic growth as a result of climate change (e.g.: water sources, tourism impact).

The security of Europe's water sources is a critical driver of sustainable growth and has a significant contribution to the region's overall economic health, competitiveness, creativity, innovation, employment, and growth. However, a shortage of qualified staff and high levels of youth unemployment remain key challenges in Europe. To address this issue, initiatives should focus on making the water management sector more attractive and on transforming academic knowledge and high-level competencies into practical and applicable skills. Such efforts can help boost the recruitment of highly-prepared staff in the water management sector.

This Strategic Partnership proposes the creation of a flexible learning pathway that meets the needs of learners and companies in achieving environmental targets and securing sustainable conditions for EU citizens. The program will offer joint study modules supported by Industry 4.0 and Blockchain certification applications, which will help capitalize on companies with prepared youth and provide enterprises with innovation, expertise, and added value. By offering a flexible learning pathway, this program can help address the challenges faced by both learners and companies in meeting environmental goals and promoting sustainable practices.

PARADOX is a Strategic Partnership consisting of nine entities located in regions highly

affected by climate change and tourism. This partnership comprises five universities, three SMEs/technical research and training centers, and one chamber of commerce association. The aim of the partnership is to develop an international technology-assisted environment for water management training in Europe. The program will offer an adapted curriculum to equip the younger generation with specific, basic, and transversal competencies required in related industries. The international training modules will also provide students with opportunities to gain additional skills by studying and training abroad.

This initiative aligns with one of the principal aims of the Erasmus+ program: promoting synergies and cross-fertilization across various fields of education, training, and youth. It aims to remove artificial boundaries between different actions and project formats, fostering new ideas such as a sectoral multi-campus, promoting cross-border cooperation by attracting new actors from the world of work to collaborate with universities and VET institutions. Above all, the initiative targets the stimulation of new forms of cooperation that benefit both learners and industry partners.

The duration of the project is 30 months (2020-09-01– to - 2023-02-28) and is comprised of:

- Project Management and Implementation
- Transnational Project Meetings
- Multiplier Events
- Activities for the development of the defined "Intellectual Outputs"

The Quality Assurance and Risk Management - Activity - develops a quality plan aiming at providing a common quality baseline for every activity for every partner in the consortium, involving a close monitoring of each activity, book recording and registration of PARADOX's activities and responsibilities.

This Quality Plan is to be signed and adopted by each partner at the beginning of the project and starts with the adoption of the quality assurance mechanisms in line with both good EU practices and procedures. It will design the common criteria for educational contents between all consortium partners.

The activity objectives are:

- To monitor and evaluate the quality of project's activities and results.
- To handle project risks and appropriate mitigation/contingency.

#### 1.2. AIM AND SCOPE OF THE QUALITY PLAN

This document, for internal use by the PARADOX project team, will act as a guide for the internal quality management of the PARADOX Project and contains the general rules agreed upon in order to ensure its success. The plan shows how the project will be carried out, measured, and monitored.

This quality plan defines the organization structure and the relationships between the partners so that there is a clear distinction of roles for all participants, and a clear procedure for how the project will be managed and followed up. It also contains the project time plan, including a timeframe for milestones and major deliverables.

Quality standards, including criteria and indicators, are defined, and an evaluation framework, involving both formative and summative evaluation, is used to ensure quality and continuous improvement. An important aspect of the quality plan is the capacity for flexibility, allowing for modification or re-aligning of the project processes and objectives based on feedback and evaluation findings. All partners will be involved as part of the assessment process while delivering this project.

QP was developed and approved at the beginning of the project to confirm major deliverables/milestone acceptance criteria and manage approved project processes.

#### 2. SCOPE / ACTIVITY DESCRIPTION

The general project methodology for PARADOX is based on PRINCE2 (Projects IN Controlled Environments), a widely recognized process-based method for effective project management. This methodology follows a modular structure, with each phase or module producing specific results that serve as the basis for the next phase. The methodology establishes a systematic and structured system for verifying the progress of project activities against milestones and measurable indicators. By following this methodology, the PARADOX initiative can ensure effective project management and successful implementation of its goals.

The PRINCE2 method is in the public domain, and offers best practice guidance on project management with the following key features:

- Defined organisation structure for the project management team
- Product-based planning approach
- Emphasis on dividing the project into manageable and controllable stages
- Flexibility that can be applied at a level appropriate to the project.....

The project activities are grouped the following way:

#### **Project Management**

**Information**, promotions and dissemination

**Quality Assurance and monitoring** 

#### M1 Kick off Meeting

O1/A1 Survey

O1/A2 Development of Paradox Methodological framework

O1/A3 Delivery

#### **M2 2nd Consortium Meeting**

O2/A1 Training paths definition

O2/A2 Definition of learning content modules

O2/A3 Harmonisation and validation of learning modules and training path/s

O2/A4 Development of the guidelines for trainers

#### **M3 3rd Consortium meeting**

O3/A1 Elaboration of functional and non-functional specifications

**O3/A2** Training Content Integration

O3/A3 Test release and platform improvement

O3/A4 guidelines on how to use the e-learning platform

#### M4 4th Consortium meeting

**O4/A1 Training for Trainers: Content Editors** 

O4/A2 Development of Classroom Training Modules (O3/A2)

O4/A3 Development of online for the international training Modules

O4/A4 Industry 4.0 Learning Platform evaluation

#### **M5** Final Meeting

E1 PARADOX Multiplier Events in the UK

**E2 PARADOX Multiplier Events in Country IT** 

E3 PARADOX Multiplier Events in Country GR

**E4 PARADOX Multiplier Events in Country ES** 

**E5 PARADOX Multiplier Events in Country RO** 

**E6 PARADOX Multiplier Events in Country PT** 

E7 PARADOX Final Conference (UK/ES)

#### 3. AIMS AND OBJECTIVES

#### **3.1 AIMS**

- The development of specific, basic and transversal competences and skills such as management, entrepreneurship, leadership, digital skills and language competence in the field of education and training, through pedagogical approaches developed in the different intellectual outputs.
- The intellectual outputs of the PARADOX initiative will strengthen the education and training paths of youth workers, equipping them with the necessary competencies and skills required to attain high-quality jobs in water management-related sectors. By focusing on developing these competencies, PARADOX aims to bridge the skills gap in the industry and promote sustainable practices. The program aims to contribute to the development of a highly skilled workforce that can meet the challenges posed by climate change and water management, ensuring that the industry remains competitive and sustainable in the long term..
- The online learning content developed by PARADOX will support teachers, educational staff, and youth workers in acquiring or improving their use of ICT for learning and related digital competencies. By providing access to high-quality digital content, PARADOX aims to promote the use of technology in education and training, and to support the development of a digitally competent workforce. The program recognizes the importance of digital skills in the modern workplace, and aims to equip learners with the skills required to succeed in the water management industry, as well as in other sectors that require digital competencies.
- PARADOX will trigger modernisation and reinforce education aligned to the needs and opportunities offered by traditional industries. It will provide, assess, and look for the recognition of basic skills needed in planning., energy, etc sectors.
- PARADOX will also address transversal skills, such as entrepreneurship, foreign languages and digital competences.

#### 3.2 OBJECTIVES

The goal of PARADOX is to improve water education by promoting and assisting the development of interdisciplinary and multidisciplinary curricula related to water programs. Additionally, they aim to create materials that connect climate change education to water security and align with the International Hydrology Programme for 2020-2027. The PARADOX consortium consists of 5 universities, 4 SMES, and a social partner. All members are involved in supporting educational programs related to the

sector in various ways.

This initiative aims to cater to the requirements of every participant, including their staff, students, and community. To achieve this goal, we have defined various specific objectives.

- SO1. Capacity Building in the sector: Promoting ACTIVE COOPERATION and partnership between actors from the knowledge triangle: HE institutions (BUCKS, IHU, UPM, UTB,UNIPA), industry (EVM, EYEBB, UMOU), Chamber of Commerce (ACIF) and local/Regional Bodies to obtain an impact on environmental responsibility, modernisation and internationalisation of HE..
- SO2. We aim to create flexible learning pathways for higher education students that recognize and provide them with important competencies and skills such as internationalization and digital learning. This pathway will validate prior learning and improve sector-specific, high-level basic, and transversal competencies and skills, particularly relevant to the water security-related sector. These skills include management, entrepreneurship, languages, leadership, and their contribution to a cohesive society. The pathway will also increase opportunities for learning and labor mobility for students and strengthen cooperation between higher education institutions and relevant stakeholders.
- SO3. Our goal is to enhance collaboration and encourage mobility activities, so that students can acquire the necessary specific and transferable skills. We aim to engage both students and partners' staff and stakeholders in shaping the outcomes and ensuring their relevance. Ultimately, this will provide students with more opportunities to succeed..

The objectives aim to meet the needs of all individuals, organizations, and important stakeholders. Innovation activities, especially those related to education and training, tend to be concentrated in certain areas where knowledge is shared among various industries, educational institutions, and training sectors. Geographic culture plays a significant role in this. Innovation in education and training is seldom achieved alone, as skills and experiences are shared across different higher education institutions, beyond academia and national borders. PARADOX is in a unique position with its actors spanning various sectors and countries, which leads to successful outcomes.

## 4. PROJECT ORGANISATION AND RESPONSIBILITIES

#### 4.1 ORGANISATION STRUCTURE

The project activities will be carried out by the following committees and working groups:

#### **COMMITTEES**

The Committees will take the major decisions regarding the project.

Our management structure is designed to facilitate project implementation, with a focus on efficient decision-making and management procedures. There are two main bodies within our management structure.

- As the PARADOX applicant, the Project Manager (PM) appointed by BNU is responsible for ensuring the successful execution of the project. This involves managing all aspects, including technical work, administration, control, planning, progress, revision, reporting and reviews. The PM is in charge of monitoring, assessing and maintaining project progress at high quality standards. They also act as the main interface between the PARADOX consortium and the EC..
- The Steering Committee (SC) will consist of a representative from each partner. Its main role is to assist the Project Manager (PM) in implementing the work-plan and making decisions that concern all partners for the benefit of the PARADOX proposal. The SC has the authority to make decisions on issues such as amending the Grant Agreement, allocating the budget among project partners, making necessary decisions during the project implementation, and taking corrective measures. Its purpose is to provide consistent and strategic guidance for the project.

#### WORKING GROUPS

All the partners' activities will be monitored during the implementation. A Quality and Evaluation Working Group (QEWG), composed by BNU, EYEBB, EVM, and UPM, has been set up, responsible for performing the periodical assessment of the activities and evaluation of the outcomes. The key staff involved in the QEWG has wide experience in management, monitoring and quality assurance of European projects.

Key staff for QEWG is:

- Dr. Florin Ioras
- Dr. Indra Bandara

Monitoring tools have been created to collect the information necessary for the final technical implementation report and financial statement.

#### 4.2 ROLES

#### **Project Manager**

The Project Manager is accountable for Quality Management in the project and approves the Quality Plan.

#### **Quality Manager**

The role of Quality Manager reports to the Project Manager and aims to ensure that the deliverables of the project are fit for purpose, are consistent and meet both external and internal requirements. This includes regulatory compliance and customer expectations. The Quality Manager conducts quality assurance activities like audits and reviews to ensure that processes and procedures in the project are sufficient for their purpose and are applied and followed.

The role includes responsibility for:

- Devise and establish the project's quality procedures, standards and specifications.
- Review project requirements and makes sure they are met.
- Compile, assess and set standards for quality.
- Establish and maintain control and documentation procedures.
- Monitor performance by gathering relevant data and produce quality reports.
- Make suggestions for changes and improvements and how to implement them.
- Manage reported deviations from the Quality Plan, either by ensuring that the Quality Plan is followed, or through a Change Request adapting the Quality Plan to better reflect the reality of the project.

#### **Intellectual Output Lead**

The Activity Lead participates in the work to together with the Quality Manager compile and customize Quality Objectives and Standards for the Activity, ensure compliance with those standards, and to report deviations and needs for changes to the Quality Manager.

#### **Project Member**

Although the Quality Manager is responsible for Quality Management in the project, all project members are responsible to follow the Quality Plan and report directly to Activity Lead or the Quality Manager when one considers that the quality plan deviates from reality, or that it is not followed.

#### DIVISION OF WORK 4.3

To achieve the objectives of PARADOX, work is divided into 3 Project Management Activities, 5 Meetings, 4 Intellectual Outputs, and 7 multiplier events and Conference, each one with a Leader:

PROJECT ACTIVITY*	LEADER
A1 Project Management	BNU/ALL
A2 Information, promotion and dissemination	EVM
A3 Quality Assurance and Monitoring	EYEBB
M1 Kick off Meeting	UK
O1/A1 Survey	EVM
O1/A2 Development of Paradox Methodological framework	BUCKS(BNU)
O1/A3 Delivery	UNIPA
M2 2 <sup>nd</sup> Consortium Meeting	EVM
O2/A1 Training paths definition	UPM
O2/A2 Definition of learning content modules	UNITBV
O2/A3 Harmonisation of validation of learning modules and training path/s	DPE
O2/A4 Development of the guidelines for trainers	BNU
02/11 Development of the guidennes for trainers	DINO

O2/A4 Development of the guidelines for trainers	BNU
M3 3 <sup>rd</sup> Consortium Meeting	UNITBV
M4 4 <sup>th</sup> Consortium Meeting	DPE
O3/A1 Elaboration of functional and non-functional specifications	EVM
O3/A2 Training Content Integration	UPM
O3/A3 Test release and platform improvement	UNITBV
O3/A4 Guidelines on how to use the e-learning platform	UPM
O4/A1 Training for Trainers: Content Editors	BNU
O4/A2 Development of Classroom Training for the training Modules	UNIPA/UPM

O4/A3 Development of online for the International training Modules	UPM
O4/A4 Industry 4.0 Learning Platform evaluation	DPE
M5 5 <sup>th</sup> Consortium Meeting	ACIF
M6 6 <sup>th</sup> Consortium Meeting	UNIPA
E1 PARADOX Multiplier Events in the UK	EYEBB
E2 PARADOX Multiplier Events in Country IT	UNIPA
E3 PARADOX Multiplier Events in Country GR	DPE
E4 PARADOX Multiplier Events in Country ES	UPM
E5 PARADOX Multiplier Events in Country RO	UNITBV
E6 PARADOX Multiplier Events in Country PT	ACIF
E7 PARADOX Final Conference (UK lead/ES)	EVM (BNU Lead)
M7 Final Meeting and Conference	EVM(with BNU lead)

To ensure project "ownership," it's essential to maintain strong and constant communication among all partners. This includes effectively involving all partners in all Intellectual Outputs and benefits.

#### Quality assurance.

In addition to evaluating the concrete results of a project, it is important to ensure comprehensive quality assurance. This involves implementing an internal review process to ensure the quality of the outcomes, particularly the educational content.

Ensuring constant quality checks, assessments, and approvals based on the four-eyeprinciple will guarantee high-quality results from the outset. This approach helps to prevent errors and makes the quality assurance process, as well as the entire workflow, more efficient.

It is the responsibility of each activity leader to ensure the quality of the results produced by their respective activity. This includes the deliverables, which will undergo a peer review conducted by the Quality and Evaluation Working Group (QEWG).

### 5. QUALITY CONTROL

The Quality Control in the project focuses on the deliverables of the project and monitors them in order to verify they are complete, correct, and of acceptable quality.

The approach to quality management aims to ensure that all personnel involved in the project perform their tasks correctly from the start, preventing misunderstandings about what needs to be produced and how. This helps avoid productivity and quality losses, as well as delays in the project schedule.

This is going to be achieved by

- Early identification and reviews of all quality-impacting documents.
- Reviews of all quality-impacting documents.
- Using the well-defined and anchored quality standards and procedures already in use for each activity.
- Using Customer Satisfaction as a Quality Control tool in case quality standards and procedures are missing and/or there are no documented processes/processes procedures do not exist in any form.

This section outlines the necessary steps to ensure that the project and its deliverables meet the project requirements. The individuals responsible for carrying out these activities will be identified in the following chapters of this document.

A list of such activities is given below:

- Responsibilities
- Quality system review:
  - Internal quality audits, reporting and monitoring
  - Non Conformities: Corrective and preventive actions
  - Control of quality records,
  - Document and data control
  - Deliverables
  - Customer Satisfaction

#### 5.1 RESPONSIBILITIES

The current Quality Plan is applicable to all the activities, which are related to the project. Hence, compliance of its execution with the Quality Plan is mandatory for all involved.

The project quality policy is as follows:

- To implement and maintain a quality system based on ISO 9001,
- To identify for all involved their responsibilities regarding quality,

The Quality and Evaluation Working Group is responsible for ensuring that all deliverables meet the requirements of the grant agreement. They administer the Quality Plan and have the authority to identify issues during internal audits. If problems are found, the Project Coordinator and Management Team are responsible for taking action to solve them. All issues are discussed during meetings and documented in the minutes, including the agreed-upon solution and deadline for resolution. Evidence of problem resolution must be provided..

The Quality Manager is the person who has the authority to manage and perform all quality work. This is documented in the present document and is meant to encompass the following aspects:

- Initiate action to prevent the occurrence of any non-conformity,
- Identify and record any relevant problem,
- Initiate, recommend and/or provide solutions through the reporting system,
- Verify the implementation of solutions,
- Monitor and control further processing, delivery or installation of any preferred solution to ensure that any reported non-conformance has been corrected

#### 5.2 OUALITY SYSTEM REVIEW

The Quality system is to be reviewed within the Steering Committee meetings.

In subsequent reviews the following will be taken into account:

- Results from project audits,
- Results from internal audits,
- Official project Outputs,
- Corrective action requests from all the above,
- Preventive actions on all the above,
- Project participants staff training and adequacy for the tasks undertaken,
- Level of used resources per category and adequacy of spent resources for the particular task.

The outcomes from the above shall be discussed at Steering Committee meetings, and their results shall include:

- Satisfaction with the audits, corrective actions and the results of complaints,
- Dissatisfaction and requirements for further auditing or more corrective actions,
- Satisfaction with the corrective actions taken by the relevant partner(s).

An agenda of such a meeting may include some of the following topics:

- 1. Results of internal audits.
- 2. Corrective actions requests received.

- 3. Results of external audits.
- 4. Preventive actions.
- 5. Review of quality objectives.
- 6. Introduction of new quality targets.
- 7. Date of next meeting.

It is important to keep records of the meetings, including attendance and a summary of the points raised and resolved. The Project Manager is responsible for creating and storing these records. The Quality and Evaluation Working Group compiles and documents the Quality Plan, which is authorized by the Steering Committee. Once authorized, the Project Coordinator will distribute the final plan to relevant parties. Any changes or revisions must be approved by the Project Steering Committee..

#### 5.3 MONITORING AND PROGRESS REPORTING

On a six-monthly basis, each partner and activity leader will provide progress updates to the Project Coordinator. These updates will cover technical progress, results, deliverables, compliance with the WP, and any identified risks. Progress will be reported in terms of completion percentage, estimated time to completion, and any deviations from agreed timescales. Additionally, partners will submit an internal financial control report detailing person-months expended. By requesting partners to report their plans for the following period in advance, the project's management boards and activity leaders can make proactive corrections to the work plan and ensure efficient resource utilization.

#### 5.4 PREVENTIVE ACTIONS - RISK MANAGEMENT

These are techniques to be used early in life-cycle of the project to minimize risks.

A risk assessment matrix (See Annex III) is under development for the various project activities related to work involved in the project activities. For each of the activities, the following are identified:

- Risks
- Their potential impact on the project
- Effect (level of impact)
- Probability of occurrence

The level of impact is assessed with a value of "negligible, marginal, critical or uncontrollable." Probability is assessed with a value of "low, medium, or high risk."

Following the calculation of risk exposure, the proposed solution or mitigation strategies are presented.

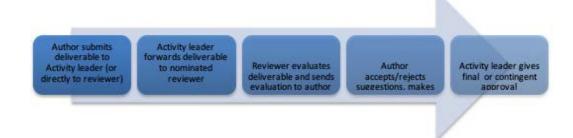
The activity leaders have the duty to regularly observe and evaluate the potential dangers associated with their activities. They must pay extra attention to the risks with a higher level of severity. An interactive version of the matrix is available on Dropbox for all project team members to track the status and progress of the mitigation strategies. The assessment of risks, strategies, and updates will be included in the WP status reports and discussed individually with each team at partner meetings..

## 5.5 INTERNAL EVALUATION OF PROJECT DELIVERABLES

Deliverables are measured and approved using instruments that include meeting evaluation forms, event evaluation forms, a peer review process, and expert review process audits.

Meeting and event evaluations — All participants are required to complete questionnaires, which collect both quantitative and qualitative data using a digital survey tool that allows for anonymity. A 5-point Likert scale is utilized whenever possible. After each meeting or event, a summary of the collected data, along with recommendations for any necessary changes or improvements, will be compiled. Partner meetings will use a standard questionnaire form, while specific questionnaires will be developed for each event.

**Peer review of deliverables** – To evaluate deliverables using this tool, a partner nominated by the Activity leader (who is not involved in the deliverable's production) reviews each one. The deliverable is sent to the Activity leader at least 15 days before the expected delivery date, who then forwards it to the reviewer for evaluation. The reviewer checks the deliverable against the requirements, description, or objective, identifies any deviations or problems, and suggests improvements to the author. The author then decides whether to accept or reject the suggestions and takes appropriate action. The deliverable, along with the reviewer's evaluation, is submitted to the Activity leader for final approval, which may involve further modification if necessary. In some cases, multiple reviewers may be involved in the peer review process to ensure the deliverable's quality.



Peer review evaluations should include the following information:

- General comments:
  - o Thoroughness of contents
  - o Correspondence to project objectives
- Specific comments:
  - o Relevance
  - o Format (layout, spelling, etc.)
- Suggested actions:
  - o The following changes should be implemented
  - o Missing information
  - o Further improvements

To assist reviewers in writing peer review evaluations, a template can be accessed in the A3 Quality Assurance and Monitoring folder located in Dropbox.

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	Templates		Florin Ioras
	MODULES		me
	PARADOX Budget		Florin Ioras
	Impact		Florin Ioras
	Justification		Miguel Ángel Ayala
	Application		Florin Ioras
	MEETINGS		Florin Ioras
	TIMESHEETS		Florin Ioras
	ME Reports		me
	Quality and Monitoring		Florin Ioras
	Dissemination	<b>,</b>	Miguel Ángel Ayala
	INTELLECTUAL OUTPUTS		Florin Ioras

#### 5.6 COMMUNICATION

#### **E-MAILS:**



A contact list with all the project participant's members mails is available in Dropbox in this path: PARADOX/Intellectual outputs/COMMUNICATION PROTOCOL

Should a member of the team change the responsible partner must change the contact details.

Mail writing: The email "subject text" should always be: PARADOX - ACTIVITY X (x is the number of the Activity) + your subject matter

#### **MEETINGS**

Meetings are important to ensure the progress of PARADOX and to maintain the technical and social relationships among the partners in the project.

The Official Language of the project and therefore of ALL the meetings is English: every document related with the meetings (minutes, attendance records...) must be in English.

PARADOX meeting types and topics to be covered:

#### • Partner meetings –

All project meetings must be documented with minutes in English: See Annexes for Minutes Template. All relevant Partner Meetings on agenda (as agreed on Kick off meeting May 2019) are the following:

Location	Date
Kick off meeting: BNU, Buckinghamshire, UK	10/2020 Online & 12/03/2021 Online
EVM, Santa Cruz de Tenerife, Spain	08/03/2022
UTB, Romania	13/05/2022
DPEm Greece	13/07/2022
ACIF, Protugal	22/09/22
UNIPA, Italy	21/11/22
BNU/EVM Final meeting	08/02/2023

National meetings - conducted by partners members to discuss and advise on content related issues.

During international partner meetings, decisions will be made by a simple majority vote if there is no consensus. In the event of a tie, the project manager will have the deciding vote. If consensus cannot be reached at the national level, the matter will be brought to international meetings (via Skype or management meetings) for resolution.

- **Skype meetings** held at three levels:
- 1) PARADOX management issues, with only management team participating
- 2) PARADOX content issues where e.g. activities are discussed, and all the relevant members are attending
- 3) PARADOX Activities issues one-on-one meetings between Activity leaders and the project coordinator



#### 5.7 DOCUMENT AND DATA CONTROL

## STORAGE AND ACCESSIBILITY: GOOGLE DRIVE FOR THE EXCHANGE OF DOCUMENTS

All documents and computer data files must be exchanged via the Dropbox workspace. Colleagues should post in the Telegram / Mail forum when a file has been added or changed.

All documents are to be stored in the Dropbox workspace for visibility and use for all partners when needed.

Documents are to be stored in the following folders (folders may be added or updated as needed):

#### Folder/Content

- Common Resources: Includes:
  - o Introduction to PARADOX, project description, budget and Contacts, partnership agreements, timesheets templates...
  - Full proposal and support documents the project application and official documents related to the application
  - o Partner agreements and subcontracts the official project award, evaluation feedback related to the application
  - o Communication protocol: contact list and main agreements
  - o Dissemination: Online and Offline Meetings information
  - o Graphic design: Logos, presentations, templates...
  - Partner meetings 2020-2023 Agendas, minutes, presentations, working papers for all partner meetings and Skype meetings
- Intellectual Outputs 1-4 Details of the working documents and deliverables related to each activity
- Videos, Photos, etc.

#### **DELIVERABLES**

Project deliverables will be stored separately in the relevant folder in the Dropbox workspace as they are developed.

#### DOCUMENT FORMAT

All documents will be saved in MS Word or MS Excel. A template (including font, builtin header, footer, page numbers, etc.) to be used for the creation of Word documents can be found as a separate document in Annex V.

Final versions of documents should be marked as final and uploaded to Dropbox in readonly format.

#### NOMENCLATURE OF DOCUMENTS

All documents must be listed giving for each the issue date, its name, version number (if necessary), status, the author's institution, and a sequential number to use as reference (R1,R2. Rn) in communication and correspondence.

Documents should be named as follows:

Date: yy.mm.dd

Document name: Chosen by author (the name should clearly identify the document by stating the purpose or information it contains)

Version number: (v01, v02...)

Status – (draft, final)

Author's institution: Authors should use the proper acronym for their institution (BNU, EVM...)

Reference number: R1, R2... Rn (any change to the document must be followed up with a new reference number)

Example: 2019-06-01-QualityPlan-v01-Draft-EVM-R1

Example: 2019-08-10-PressRelease-BNU-R6

In communication, the document can simply be referred to as Quality Plan R1 or Press Release R6.

## ANNEXES

### 1 ANNEX I – MEASURES FOR MONITORING AND EVALUATION

The measures of monitoring and evaluation, adopted in order to ensure the quality of the project activities and results, will involve all the management partners staff and include:

#### **Monitoring:**

- Internal assessments of project progress performed via qualitative and quantitative indicators, to be defined in detail by each partner institution on a task-by-task basis, with monthly checks in order to monitor the degree of progress of each task. At the current stage, the partners have already identified a list of milestones that will be used to further define the qualitative and quantitative indicators:
- delivery of the assessment instruments
- report on jewellery techniques state of art
- report on the training needs analysis
- definition of the didactic units' contents and Learning Outcomes
- definition of the qualification
- LO validation methods defined
- accumulation and transfer instruments released
- accumulation and transfer instruments validated
- interviews and showcases' format and collection procedures defined
- 25%, 50%, 75% and 100% of interviews and showcases' available on the project website
- didactic units' production completed
- open courses digitalized and available online
- beginning of the pilot phase
- end of the pilot phase
- project website first deployment (end of M2)
- dissemination and exploitation strategy delivered
- leaflets and brochures prepared
- Internal reports every three months by the activity leaders and Mid-term reports referring to progress on the tasks and activities conducted by each partner, to be reported to the members of the partnership and EU funding agency. The following tools will be used: Financial Reporting Templates, Dissemination Table, Minutes Meetings, Final Conference Results Report. Each partner will contribute to the final report and will communicate any potential divergences from the project plan.

- Partners meetings, where all the issues related to the completion/accomplishments of the project will be discussed at "real" (in presence) and remote (via web-conference) meetings during the whole project duration. The 4 in presence meetings (approx. 1 every 10 months, see attached Gantt) will be interspersed with virtual meetings held via web-conferences tools (approx. 12, every 2 months), in order to increase the frequency of the quality controls.

Monitoring plan and tools will be implemented to provide monthly reports aimed at:

- verifying the results of the project management both for the applicant and for each partners;
- checking WP progress according to the scheduled results and outputs;
- managing unexpected difficulties and to ensure the planned results in time and according to the assigned budget.

#### **Evaluation:**

Basis for the evaluation plan will be the project work plan, the already defined milestones, impact indicators and the list of deliverables. In general the evaluation plan aims at verifying the correspondence between the project objectives and the results achieved by means of Applicant analysis and final reporting.

In detail the evaluation plan is conceived to check (list is not exhaustive):

- the level of the output achievement according to the methodology adopted;
- the quality level of the results achieved by the dissemination activities during all the project duration by using partners final reports and Applicant final analysis report;
- the cooperation and communication between partners by means of online questionnaires;
- the impact of the expected results on the participants, target groups and stakeholders by means of online survey, submitted by using mailing list previously created;
- the added value of the European dimension ensured by the consortium partnership by means of Applicant analysis and final reporting.

## 2 ANNEX II – OVERVIEW OF IMPACT INDICATORS

The list of the performance indicators will be refined and improved during the preparation of Project Management Handbook. For each quantitative performance indicator it is currently listed a numeric threshold, for which the activity is considered successfully completed.

#### **Project management**

- number of reports accepted by the NA (100%)
- number of documents passing the QA (> 90%)

#### **Performance indicators:**

- Number of interviews and surveys successfully completed (>30).
- Number of MA certificates designed (4 at least)
- Number of certifications produced (4 at least)
- Number of formats defined and agreed among the partnership (= 1 for interviews and 1 for showcases)
- Number of collected interviews (40 at least),
- Number of collected showcases (16 at least)

#### **Educational Contents:**

- Number of produced didactic units (6 at least)
- Number of available additional didactic materials (> 20 per course).
- Number of interested entities (> 150)
- Number of prospective students (> 40)
- Number of positive feedbacks (> 50 %)

#### **Dissemination indicators:**

- Number of contacts on the project website (> 3000)
- Number of distributed leaflets (> 1600) and brochures (> 240),
- Number of articles on media (> 5)

### 3 ANNEX III – RISK ANALYSIS TEMPLATE

PROJE CT ACTIVI TIES	PROBLEM /RISK	POTENTI AL IMPACT ON THE PROJECT	LEVEL OF IMPAC T	PROBA BILITY	ELIMINATION OF THE RISK
ACTIVI TY 1 - PROJEC T MANAG EMENT	R1.1 Risks stemming from multidiscipli nary nature of partners	Failure to successfully transfer knowledge and experience from academia to the industry partners	Critical	Medium	Smart and continuing communication with all partners
	R1.2 Underestima tion of time needed to produce deliverables	Tasks not completed / Deliverable s not submitted on time	Critical	Medium	Ensure the successful completion of the activities and the validity of their results; Project management ensure timely submission of deliverables
	R1.3 Underestima tion of effort needed to complete activities	Resource / Budget overrun / Timetable overrun	Critical	Low	Management structured so as to closely monitor resource/budget consumption – take corrective actions wherever necessary
	R1.4 Lack of experience and qualification s of staff involved	Results of low quality	Critical	Low	All partners commit sufficient knowledge and experience

R1.5 Iss related partners communication	sues to n problems / Disputes among partners		Low	Communication plan as a part of Project implementation plan
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### 4 ANNEX IV – TEMPLATES

FOR FURTHER INFORMATION www.paradoxproject.eu