Advancing Higher Education in Maldives Through
E-learning Development

AMED

4.1. AMED Quality Assurance Plan

AMED
Quality Assurance Plan

Executive summary

Title	AMED Quality Assurance Plan
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Contributor(s)	
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Abstract:	This document, as part of WP4, presents the AMED Quality Assurance Plan. It describes the goals (qualitative and quantitative measuring of indicators achievement), the evaluation criteria, the methodology and the outcomes of the evaluation, review process and reporting. It measures achievement and success of indicators to regularly review the project's performance. To make analysis even more comprehensive, QA plan goes through every work package and shows what has to be checked, measured and how. Minutes of the meeting template and Internal review template are constituent part of this document.
Key words	Quality management, monitoring, evaluation, impact, improvement, key performance indicators

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P3	CARNET	Croatian Academic and Research Network	HR
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Introduction

Process of quality assurance will, through WP4 and its activities and deliverables during the whole project, have the aims to:

- Create a framework for quality assurance with definition of quality assurance procedures (e.g. design of surveys and their technical implementation), tools and evaluation of the indicators, including procedures and templates for peer reviews, measuring of achievement, collection of data, all according to the defined timetables;

- Identify what works well and what does not work so well, in terms of both what is done (outputs), how it is done (processes) and identify how can it be and if it is improved;

- Assist the partnership and others to plan current and future projects (by improving the performance of the project and identifying new opportunities);

- Enable building upon successes and development of good practice, establishing a system to avoid the risks and mistakes, their repeating and mitigation;

- Assist to project management in monitoring the project; also, quality control and evaluation of the project coordination and cooperation will ensure smooth implementation of the project and identification of potential obstacles in a timely manner.

- Quality assurance process follows the European Foundation for Quality Management (EFQM) Excellence Model which is adapted to take into account the objective of creating a self-sustainable programme by the end of the project.

The AMED Quality Assurance plan is designed to:

1. Define, collect and analyse the data needed to monitor the quality of the project's outputs and processes;

2. Identify strengths and weaknesses, opportunities and threats to:

   a. take timely corrective action in responding to weaknesses and threats, when needed; and

   b. exploit strengths and opportunities when they arise;

3. Feed in Evaluation Reports.

WP4 is led by FOI in cooperation with all partners. Quality assurance will be the joint responsibility of all project partners at all levels.

Propositions for update of this document will be constantly collected, according to the suggestions of partners and project performance needs. After interim report new updated version with changes and updates will be issued. In this way QA strategy can be shaped according to the new findings and changes in the project. Also, additional quality assurance tools may be added when the need is recognized.

Quality Assurance Planning

Methodology

The AMED quality assurance is inspired by the European Foundation for Quality Management (EFQM) Excellence Model™ (figure 1). It is adapted to take into account the objective of creating a self-sustainable organisation by the end of the project.
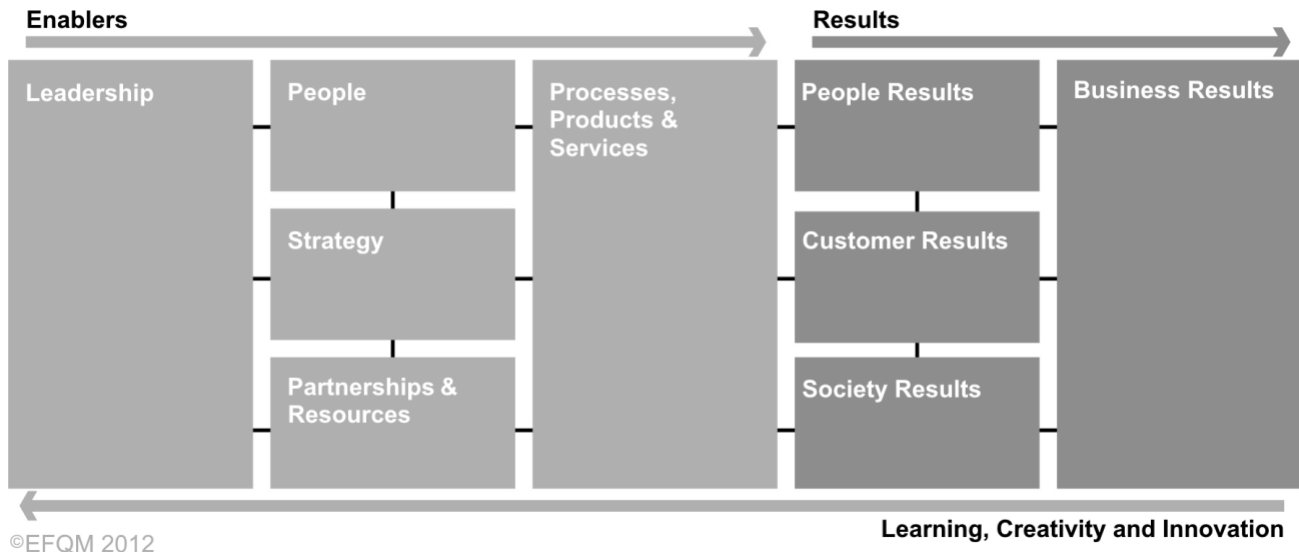
Figure 1 - EFQM Excellence Model (from European Foundation for Quality Management)

The scope of the QA framework is not, therefore, limited to the duration of the project's funding, but it is clearly situated in the perspective of the incorporation of a self-sustainable organisation. AMED is thus concerned with the following series of criteria defined in Table 1 below.

Table 1 - AMED QA Criteria Overview (according to EFQM)		
	Who / What	**Context**
Leadership	Project Steering Committee (PSC) Work package leaders	How AMED consortium set and communicate clear direction and strategic focus, uniting the project team to share and achieve projects outputs, define and use balanced set of results to review progress, provide a view of long and short term indicators, manage strategic, operational and financial risks of the project, are transparent and accountable to stakeholders of the project, create a culture of involvement and accountability among project members and stakeholders, promote and encourage equal opportunities and diversity and effectively manage change through structured project management and focused process improvement.
People	Project partners Project stakeholders External experts	How the project manages, develops and releases the full potential of its people, use people surveys and other forms of stakeholders' feedback to improve project outputs, ensure project members have the necessary competencies, resources and opportunity to maximise their contribution, communicate a clear direction and focus to ensure that people understand and can perform their contribution to the project outputs, enable and encourage sharing of information, knowledge and

		good practices, achieving a dialogue throughout the project and develop a culture that continually seeks to improve effectiveness of collaboration and teamwork, motivate project members for improvement and innovation and recognise their achievements, promote a culture of mutual support, and recognition among project members.
Strategy	Influencing education leaders and policy makers Including project stakeholders	How the project gathers stakeholders' needs as input to the development and review of strategy and supporting policies, anticipates long and short-term global and local impact of changes at individual (teachers, administrators and students), institutional (MNU and partners their partners), national (resolving problems of distance and transportation, teacher education) an international level (establishing good practices, international collaboration of education systems, promote Bologna principles) implements its supporting policies, plans, objectives, targets and processes, via clear focused strategy, analyse data and information regarding existing and potential partners, stakeholders and policy makers capabilities to understand how they can complement the projects capabilities, adopt effective mechanisms to manage the strategic risks identified, translates their strategy into processes and organisational structures, ensuring changes can be promptly implemented throughout the organisation, communicates strategy and supporting policies with project stakeholders.
Partnership & Resources	Project partners Associate partners Professional networks Project stakeholders	How the project manages project partners network to generate and exploit the support and resources required for creating a self-sustainable and influential network, managing of information, knowledge and technology to support the effective delivery of outputs and decision making, work together with partners to achieve mutual benefit and enhanced value for their respective stakeholders, supporting one another with expertise, resources and knowledge, establish approach to engage relevant stakeholders and use of their collective knowledge in generating ideas, provide and monitor access to relevant information and knowledge for stakeholders while ensuring security and intellectual property protection, establishing and managing learning and collaboration networks, evaluates and develops the technology portfolio to improve the agility of processes and the organisation, involves relevant stakeholders in the development and deployment of new technologies to maximise benefits.
Processes, Products & Services	Developing a professional network Designing (learning) resources Training Dissemination	How processes are systematically designed, managed, reviewed and improved to increase value for the project members and other stakeholders, with goal to develop meaningful mix of process performance indicators and related outcome measures and develop their curriculum in line with the changing needs of existing and potential student needs, anticipate different needs of project stakeholders and to ensure teachers have the

		necessary resources, and competencies to maximise students' experience, continually monitor and review the experience and perceptions of project users and ensure processes are aligned to respond appropriately to any feedback.
People Results	Internal perception of project Performance Indicators	Align people with the project, the organisational structure, new technologies and key processes, adapt the organisational structure to support the achievement of the project goals, involve employees in developing and reviewing the people strategy, policies and plans, adopting creative and innovative approaches, manage recruitment, career development, mobility and succession planning, supported by appropriate policies, to ensure fairness and equal opportunities, use people surveys and other forms of employee feedback to improve project results for future organizational strategies, policies and plans. Measure perceptions of teacher satisfaction and involvement, motivation, competency, training, leadership, communication and working conditions. Measure performance indicators of teacher's activities, leadership performance, and internal communication, developed skills of teachers, administrators and decision makers.
Customer Results	External perception of project Performance Indicators	How are the people benefiting from the project activities and services perceive the project, using a set of perception measures and performance indicators to determine successful deployment of strategy, set clear targets for project users based on their needs and expectations in line with the project strategy. Measure perceptions of programme reputation, value, and support and student engagement. Measure performance indicators of programme delivery, support, complaints, and capacities for e-learning, opportunity to start joint study programmes.
Society Results	Authentic Learning / Assessment Employability / Social inclusion	What is the impact of the project on society, in particular in the world of education, employment and social inclusion, using the set of indicators to determine success in implementation, based on the needs and expectations of the stakeholders, segment results to understand experience, needs and expectations of the stakeholders, demonstrate sustainability in terms of good society results. Measure perceptions of programme reputation, societal impact, impact on workplaces and media coverage. Measure performance indicators of economic and societal activities, regulatory and governance compliance. At national level to solve distance and transportation problems and improve teacher education. At international level exchange of good practices, collaboration between EU and non-EU education

		systems and promotion of Bologna principles
Business Results	Key performance outcomes Key performance indicators	What is the level of performance the project is achieving in relation to its planned goals and targets? What is the efficiency and effectiveness of the products and services developed? Developing a set of financial and non-financial results to determine the success of the project, set clear targets for key project results based on the needs and expectations of their stakeholders, outlined in strategy, continuation of development beyond the project timeline, ability of MNU to create new programs after project end, upscaling to a full degree programme or a joint degree, segment results to understand performance of specific areas of the project and experience, needs and expectations of the stakeholders. Measure perceptions of stakeholders (administration), performance against budget, volume programme delivered and key project outcomes. Measure performance indicators of project costs, key project performance indicators (as stated in project), partner performance, technology, information and knowledge.

Delivery Team

The main objective of project planning and monitoring is to make sure that the right products are delivered at the right time and within the given budget, to correctly direct and carry out planned activities, and to properly direct and utilise resources.

Each Work package will form a Delivery Team. The Delivery Team will be headed up by Work Package Leaders. Each Delivery Team will be responsible for:
- The successful delivery of its element of the work stream to time, quality and budget
- Delivery team leaders to provide quarterly feedback to the Project Coordinator for inclusion in the mid-term report
- Identifying any escalating issues and risks to the Project Coordinator as part of the project risk management strategy
- Identifying any opportunities to be exploited by the project.

Monitoring

The monitoring of quality is embedded in all project processes and deliverables, to facilitate the rapid detection of strengths and weaknesses (internal) and threats and opportunities (external) in order to use proposed solutions for solving weaknesses / threats and take advantage of identified strengths /

opportunities. Result of the quality control and monitoring will be very valuable input for the sustainability plan development and acceptance.

The monitoring of the project covers:

- Respect of deadlines and milestones
- Quality of the activities and deliverables
- Success indicators of the project, impact

In order to provide data to the monitoring, a number of **indicators** have been defined to review progress against objectives:

1. Deadlines: to identify potential delays to prevent possible impact on other deliverables;

2. Performance indicators:

    - Quantitative: number of successfully educated teachers, number of trained decision makers, equipped and functional Centre for open learning with interactive classroom and functional studio, achieved, number of equipped and functional e-learning classrooms and outreach centres achieved, number of equipment sets in outreach centres installed, number of participants in stakeholder consultation process involved, number of study programme developed, number of students enrolled in the newly designed modules

    - Qualitative: teachers' satisfaction with education provided within the project (survey), students' satisfaction with the quality of teaching by their teachers after being educated within the project (survey), satisfaction with enhanced skills (survey), visually observed well-functioning system of management, satisfaction with the ICT infrastructure (interviews and survey); ICT infrastructure based on local needs (procurement plan mapped with identified needs); satisfaction with the consultation process and proposed Roadmap (interviews and focus groups), satisfaction of teachers and students (interview, questionnaire or survey)

Quantitative and qualitative indicators are stated in detail in the table under Performance indicators.

Performance indicators

In order to measure the performance of the project, a number of key performance indicators have been defined in the project proposal (c.f. table 2 below). Two main areas are measuring **project implementation** and **study programme quality**. Study programme evaluation and recommendations for improvements during the piloting phase will ensure that the study programme is spot on the needs identified in the WP1 and WP2.

#	Key Performance Indicators (contractual)	Quantitative Indic.	Qualitative Indic.

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1	Successfully educated (competences and skills) university teachers;	50	certificates of completion issued to teachers		
2	Skill assessment results (assessment carried out before and after education)	50	Self-assessment questionnaires for teachers (before and after education)		
3	MNU staff (teachers/technical staff/support staff/decision makers) trained	40	Training plan, training program Trainings for different types of staff List of attendance and Certificates of completion issued Visually observed well-functioning system of management Satisfaction with enhanced skills(survey)		
4	Equipped and functional Center for Open Learning (COL)	1	Satisfaction with the ICT infrastructure (interviews and survey); 1 system administrator trained/newly employed	1 interactive classroom 1 functional studio 4 e-learning classrooms 12 functional video projector & canvas	
5	Participants in the stakeholders consultation process (university staff, external stakeholders)	20	Satisfaction with the consultation process and proposed Roadmap (interviews and focus groups)		
6	Study program developed and pilot tested	1	Decision of MNU on the approved study curriculum Teaching materials available Teachers' (students') and facilitators' evaluation survey 4 courses developed		
7	Enrolled students in the first year after the project	25	Attendance list / list of students enrolled in pilot courses (number of students) and their satisfaction with the course		
8	New online study programs in 2 years after the project	2	A roadmap for new study program (draft of courses, syllabuses, people, students…)		
9	Joint program or project in 2 years after the project	1	New proposal for joint program or European or National project submitted or approved		
10	Web page (with included flyer, newsletter, booklet, banner, press releases) Newsletters	1 6	Web page Project documents repository		
11	Policy dialog events held	4	Participant list, event reports		

Table 2 - Key Performance Indicators (KPI) (contractual)

Data Collection

The **collection of data** required for the monitoring is performed using:

- **Software**, e.g. Google Analytics,
- **Online Questionnaires**, e.g. Google Forms

  Teachers self-assessment before and after training, assessment of materials for training, evaluation of trainings, pilot evaluation, teachers' satisfaction with education provided, decision makers satisfaction with enhanced skills, satisfaction of MNU teachers and students with ICT infrastructure, satisfaction of university decision makers and teachers with consultation process and proposed Roadmap

- **Internal review of deliverables**; and
- **Interviews and testimonials**.

  The WP4 leader and the project team will meet regularly online within the course of the project to:

    - Reflect on the project process: what worked well in the last few months? What could be improved? Was the consortium able to meet all deadlines? If not, what should be changed?
    - Discuss the status-quo and work on relevant topics, e.g. review-procedure of the reports and deliverables, reflection on the agenda of partner-meetings;
    - Discuss needs for action and further steps to be made by the project co-ordinator and the partners;

  The WP7 leader is responsible for preparing online meetings as well as the follow up (minutes, actions).

- **Interviews with the main project stakeholders**

  Interviews with selected project stakeholders (teachers/decision makers/students) will be conducted in order to evaluate the development of AMED. The interviews aim to reflect the work done, identify strengths and weaknesses of their approach and define their further aims. The results of the interviews will be summarised and reported to partners via email and at project meetings.

Review Process

There will be two types of reviews, formative and summative:

Formative review: it is the informal monitoring of activities developed during and in between partner meetings that provide a basis for continuous improvement. It is mainly achieved through ongoing interaction with project partners, stakeholders and users —either online, synchronously or asynchronously, and face-to-face. A short formative report will be provided to all project partners during online and face-to-face meetings.

Summative review: it is the formal review conducted for the interim and final reports that provide a basis for assessing the value created by the project.

Internal Processes Review
The review of internal processes is based on:

- Regular review of performance indicators and deadlines against collected data
- Review of meeting minutes
- One to one interview with a sample of partners during/after project meetings

Based on the data collected, WP4 leader will inform the project co-ordinator and the other partners of any need to revise the processes where a discrepancy has been identified.

Other types of the peer reviews will be:

Deliverables internal review
Each deliverable is assigned to a partner who is primarily responsible for the review of the deliverable (c.f. the section *Quality Assurance per Work Package*), on a defined template.

The internal review of the deliverables is based on:

- Analysis of performance indicators —if there is a discrepancy, what is the responsibility of the deliverable and how should it be corrected, or exploited if a strength has been identified.
- The review workflow internal to Google Drive (all deliverables are uploaded/referenced to Google Drive) and in the proposed form (template)
- The informal feedback collected during interaction with partners and members transmitted to the relevant WP leaders.

For every deliverable, two (2) partners are nominated as internal reviewers during kick off meeting. The table with peer-reviewers and deliverables is uploaded to the projects' repository and is part of this document.

Internal review process will be performed in the following way:

Result status	Deadline	Responsible

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First version of deliverable *Deliverable leader prepares the deliverable according to template and sends it to assigned peer-reviewers (WP leader in Cc)*	3 weeks prior the deadline	Deliverable leader
External evaluation (if foreseen) and internal review *Internal reviewers need to review the deliverable within 7 days upon they receive the deliverable using -review evaluation form* *Internal reviewers send the form to the deliverable leader who modify the deliverable if requested or justify if needed.* *In case that the deliverable is not accepted by the reviewer in the first iteration (major modifications were required), deliverable leader sends the modified version to that internal reviewer again.*	Within 1 week	external experts, internal peer reviewers
Final version *When results of all internal - reviews are positive (deliverable accepted), deliverable leader prepares the final version* *WP leader uploads the final version and informs the Project Coordinator and QA partner*	Within 1 week prior the deadline	WP Leader

Reporting

There will be summative reports and several short formative reports.

The **short formative reports** will be based on the analysis of the relevant performance indicators and current progress of the project activities.

The **summative reports** are the interim and final reports submitted to the European Commission. The Evaluation Reports will be authored by the Quality Assurance Work Package leader with the support of the project coordinator, together with input from all project partners.

The Quality Assurance Report outline is:

Executive Summary

Introduction

Scope and Methodology of the Review

Evaluation Activities (if questionnaires, will contain results)

Formative evaluation (measuring indicator in number and type, on time delivery, content, templates) and implemented improvements

Summative evaluation (interim/final report)

Work Packages Review

WP1 Needs analysis & preparation

WP2 Study programme co-creation

WP3 Institutional framework for e-learning

WP4 Quality assurance

WP5 Pilot implementation and sustainability of the study programme

WP6 Dissemination

WP7 Project Management

Outcomes of the internal review Process

Strengths and Weaknesses Identified *(internal)*

Threats and Opportunities Identified *(external)*

Corrective Actions Engaged *(based on weaknesses and threats)*

Exploitation Actions Engaged *(based on strengths and opportunities)*

Conclusions and Recommendations

Annexe(s)

Quality Assurance Plan per Work Package

In this section, a description of each work package is presented:

- Deliverable reference

- Indicator
- Deadlines
- Partner primarily responsible for the deliverable
- Partner primarily responsible for the review of the deliverable

NB: the reference to "Key Performance indicators" (KPI) in the "QA Tool" column refers to the measure of the gap between the planned and actual value indicators. The main KPI for each WP are listed at the beginning of each individual WP Plan.

WP 1: Needs analysis and preparation

	Result	Indicator	Date	Resp.	Rev.	QA Tool
D1.1	Desk analysis on MNU current practices, key stakeholders, organizational and legal framework	report published	March 2019	FOI	CRN/UOC	Document exists in project documents repository / Peer review & approval of report
D1.2	Identification of the best practices and success stories - Maldives, EU, World	report published	March 2019	FOI	UOC/MNU	Document exists in project documents repository / Peer review & approval of report
D1.3	Needs analysis and input from key stakeholders	report published	April 2019	FOI	CRN/UOC	Document exists in project documents repository / Peer review & approval of report

WP 2: Study program co-creation

	Result	Indicator	Date	Resp.	Rev.	QA Tool
D2.1	A draft version of the study programme structure	draft document approved	February 2020	UOC	FOI/MNU	Document exists in project documents repository / Peer review & approval of document
D2.2	Study materials prepared	Study curriculum and learning outcomes of all courses reported study programme accredited 4 study handbooks published	September 2020	UOC	CRN/FOI	Document exists in project documents repository, Peer review & approval of materials, also: MNU decisions archive, Ministry of education archive MNU library, MNU e-learning system

WP 3: Institutional framework for e-learning at MNU

	Result	Indicator	Date	Resp.	Rev.	QA Tool
D3.1	3.1.1.Draft MNU e-Learning Roadmap 3.1.2. Final MNU e-Learning Roadmap	e-Learning roadmap approved (draft/final)	May 2020 (1st release) May 2021 (Final release)	CARNET	FOI/UOC	Documents exist in project documents repository / Peer review & approval of document
D3.2	Equipment	Items purchased	November 2019	CARNET	FOI/UOC	MNU inventory register, review of the document and budget
D3.3	Staff trained	1 training plan 1 training program trainings for different types of staff 40 people trained	October 2020	CARNET	UOC/MNU	Document exists in project documents repository / Peer review & approval of report

		Result	Indicator	Date	Resp.	Rev.	QA Tool
		(teachers/technical staff/support staff/decision makers) awarded certificates of completion					

WP 4: Quality Assurance

	Result	Indicator	Date	Resp.	Rev.	QA Tool
D4.1	Quality Plan Developed (V1), updated version after interim report (V2)	quality plan published	April 2019	FOI	MNU/UOC	Document exists in project documents repository / Peer review & approval of plan
D4.2	Quality control and evaluation of the project coordination and cooperation evaluation	periodical evaluation reports published	June 2020 January 2022	FOI	MNU/CRN	Questionnaire for project partners Document exists in project documents repository
D4.3	Quality control and evaluation of the study pilot implementation	report on study evaluation and recommendations for improvement/better adaptation to the regional conditions/needs published	November 2021	FOI	MNU/UOC	Questionnaire for teachers and students Document exists in project documents repository

WP 5: Pilot implementation and sustainability of the study program

	Result	Indicator	Date	Resp.	Rev.	QA Tool

	Result	Indicator	Date	Resp.	Rev.	QA Tool
D5.1	Study programme piloted	4 trainings modules delivered	November 2021	MNU	FOI/ CRN	Attendance lists, surveys, interviews (teachers, students , MNU decision makers)
D5.2	Sustainability plan developed and approved by MNU	sustainability plan approved	November 2021	MNU	UOC/ CRN	Document exists in project documents repository / Peer review & approval of plan MNU decision archive

WP 6: Dissemination and Exploitation

	Result	Indicator	Date	Resp.	Rev.	QA Tool
D6.1	Dissemination Plan Developed	dissemination plan published	April 2019	MNU	FOI/C RN	Document exists in project documents repository / Approval of plan
D6.2	Project web page developed	web page online	April 2019	MNU	FOI/C RN	Web address
D6.3	Policy dialog and recommendations (focus groups, round tables, conferences, recommendations for policy makers)	4 consultation events held	November 2021	MNU	CRN/U OC	Participants lists, questionnaire for participants on consultations events

D6.4	Project results disseminated	project flyer published project newsletter published project booklet published project banner printed press releases	January 2022	MNU	UOC/CRN	project documents repository web page Inventory list newspapers

WP 7: Project management

	Result	Indicator	Date	Resp.	Rev.	QA Tool
D7.1	Projects meetings held (kick-off - M3 Maldives; 2nd - M12 Spain ; 3rd - M24 Croatia ; Final - M35 Maldives)	minutes on held meetings participants list	January 2022	FOI	MNU/ UOC	Project document repository Project document repository
D7.2	Project collaboration online platform established	collaboration platform established	April 2019	FOI	CRN/ MNU	Web address
D7.3	Project progress controlled and reported	reports on performed activities and achieved results	January 2022	FOI	MNU/ UOC	Project document repository
D7.4	Risk mitigation plan developed and updated	risk mitigation plan	April 2019	FOI	UOC/ MNU	Document exists in project documents repository / Approval of plan

Annexes

Meeting Minutes Template

Purpose of Meeting:		Date:		Chair:		
Topic	**Discussion Summary**	**Action**	**Who**	**When**	**Remarks**	
1.						
2.						
3.						

Internal Review Template

AMED INTERNAL REVIEW CHECKLIST

D [DEL NO] – [NAME OF THE DELIVERABLE]

INTERNAL REVIEWED BY: [PP SHORT NAME] / [EXTERNAL EXPERT NAME & ORG.]

Criteria	Verified (Y/N)
1) Delivery of the output	
On time delivery	
Use of AMED document template	
Cover page information completed (Number, title, authors, organizations, dates, version number, abstract)	
Table of contents updated	
Executive summary completed	

Output file title properly structured - for an output: OP.X.X_(shortened) title_PPX	
Template fonts and styles followed	
Page Number Completed	
Comments	
2) Language review (typing mistakes, grammar, etc.)	
Are there language corrections that should be checked and revised?	
Comments	
3) Coherence with document / task objectives as declared in the Project form	
Indicators (numbers and description) are achieved	
Comments	
4) Reliability of data	
Information and sources well identified	
Bibliography section properly structured (if applicable)	
Comments	

5) Validity of content

In your opinion,

is content of quality?	Y/N
are there any sections missing?	Y/N
does the document cover the topic successfully?	Y/N
is information presented in a structured and clear way?	Y/N
are conclusions presented sufficiently?	Y/N

Comments / Suggestions for revision	

6) Deliverable Accepted? (provided that suggested changes are implemented)	
If no, please state reasons:	

- Please send the filled checklist to the WP Leader, Project manager (WP7) and Quality Assurance Manager (WP4).