

EUROPROJECT
Department [Project Management](#)



NAUTILOS Final Quality Plan

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V1.0	28.09.2022	Victoria Geraskova	First complete draft
V2.0	03.10.2022	Victoria Geraskova	First revised draft
V3.0	11.10.2022	Victoria Geraskova	Final version

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Nature of the deliverable		
R	Report	✓
DEC	Websites, patents, filing, etc.	
DEM	Demonstrator	
O	Other	

Dissemination level		
PU	Public	✓
CO	Confidential, only for members of the consortium (including the Commission Services)	

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NAUTILOS - New Approach to Underwater Technologies for Innovative, Low-cost Ocean observation is an H2020 project funded under the Future of Seas and Oceans Flagship Initiative, coordinated by the National Research Council of Italy (CNR, Consiglio Nazionale delle Ricerche). It brings together a group of 21 entities from 11 European countries with multidisciplinary expertise ranging from ocean instrumentation development and integration, ocean sensing and sampling instrumentation, data processing, modelling and control, operational oceanography and biology and ecosystems and biogeochemistry such, water and climate change science, technological marine applications and research infrastructures.

NAUTILOS will fill-in marine observation and modelling gaps for chemical, biological and deep ocean physics variables through the development of a new generation of cost-effective sensors and samplers, the integration of the aforementioned technologies within observing platforms and their deployment in large-scale demonstrations in European seas. The fundamental aim of the project will be to complement and expand current European observation tools and services, to obtain a collection of data at a much higher spatial resolution, temporal regularity and length than currently available at the European scale, and to further enable and democratise the monitoring of the marine environment to both traditional and non-traditional data users.

NAUTILOS is one of two projects included in the EU's efforts to support of the European Strategy for Plastics in a Circular Economy by supporting the demonstration of new and innovative technologies to measure Essential Ocean Variables (EOV).

More information on the project can be found at: <http://www.nautilus-h2020.eu/>.

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EXECUTIVE SUMMARY

The following document comprises the quality management and control procedures which have been proven to work within the first 24 months of the project lifetime and are to be followed in the execution of the NAUTILLOS project. It is an updated final version of the Quality Plan (D1.4, M3).

The following deliverable has eight main sections:

- Chapter I: Introduction
- Chapter II: Quality Objectives
- Chapter III: Project Structure
- Chapter IV: Project Budget – Lump Sum
- Chapter V: Roles and Responsibilities
- Chapter VI: Quality Assurance and Control Tools
- Chapter VII: Project Progress Measurement
- Chapter VIII: Risk and Issue Management
- Chapter IX: Configuration Management
- Chapter X: Appendix 1: References and Related Documents

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LIST OF ACRONYMS AND ABBREVIATIONS

Abbreviation	Definition
CA	Consortium Agreement
CDE	Communication, Dissemination and Exploitation
CP	Consortium Partners
EAB	External Advisory Board
EC	European Commission
EU	European Union
GA	General Assembly
KOM	Kick-off Meeting
KPI	Key Performance Indicator
TcL	Task Co-Leader
TIB	Technical and Innovation Board
TIM	Technical and Innovation Manager
OCM	Outreach, Communication & Dissemination
PC	Project Coordinator
PM	Project Manager
RAM	Responsibility Assignment Matrix
RASCI	Variant of the RAM (responsible, accountable, supporting, consulted, informed)
RWPL	Reviewing Work Package Leader
TL	Task Leader
WPL	Work Package Leader
WPcL	Work Package Co-Leader

I. INTRODUCTION

The NAUTILOS Final Quality Plan is a key deliverable for WP1 aiming to provide a single point of reference on the quality assurance tools and procedures that will be applied along the NAUTILOS project. This document is intended as a manual for all Consortium members to be used as a guide when a specific question needs to be answered for many day-to-day activities. As its guiding purposes, this deliverable provides a harmonized set of indication, procedures, and support documents to be used by all partners for an effective quality implementation of the project.

The present form represents the official document submitted to the European Commission in compliance with Grant Agreement commitments.

Being an integral part of management planning, providing a common standard to be applied throughout the entire project life, the Quality Plan defines a set of procedures to be followed to secure that:

- the Grant Agreement requirements and conditions have been fully applied and followed by all partners,
- EU/national regulations are considered in operational, administrative, and financial management,
- all rights and obligations defined in the Grant Agreement and the Consortium Agreement are fulfilled,
- all project activities are implemented in accordance with the Work Plan (as described in the Grant Agreement).

II. QUALITY OBJECTIVES

NAUTILOS Final Quality Plan is intended to ensure the achievement of high-quality project results and smooth project implementation regarding completion of the project's tasks on time, on budget, in scope and in line with the contractual obligations with EC, as well as with all relevant rules and provisions.

The main objectives of this document are:

- The project's quality characteristics are defined, agreed, and achieved throughout the project,
- Quality assurance tools and procedures are performed as planned, including assuring compliance with EU's rules and regulations,
- Quality control activities are performed as planned,
- Any non-conformity (or opportunity for quality improvements) is identified and corrected (or implemented),
- Deliverables are accepted by the respective project partners based on the defined quality/acceptance criteria,
- Project documents (project final and interim reports) are accepted by the respective project partners based on the defined quality/acceptance criteria.

III. PROJECT STRUCTURE

1. PROJECT MANAGEMENT STRUCTURE

NAUTILOS has 21 partners from 11 European countries and is coordinated by CNR.

The project management structure of NAUTILOS is outlined in Figure 1. The management structure and applied procedures are established in the Grant Agreement (GrAgr) and Consortium Agreement (CA) and are described in detail in D1.1 Report on Management Procedures (M3).

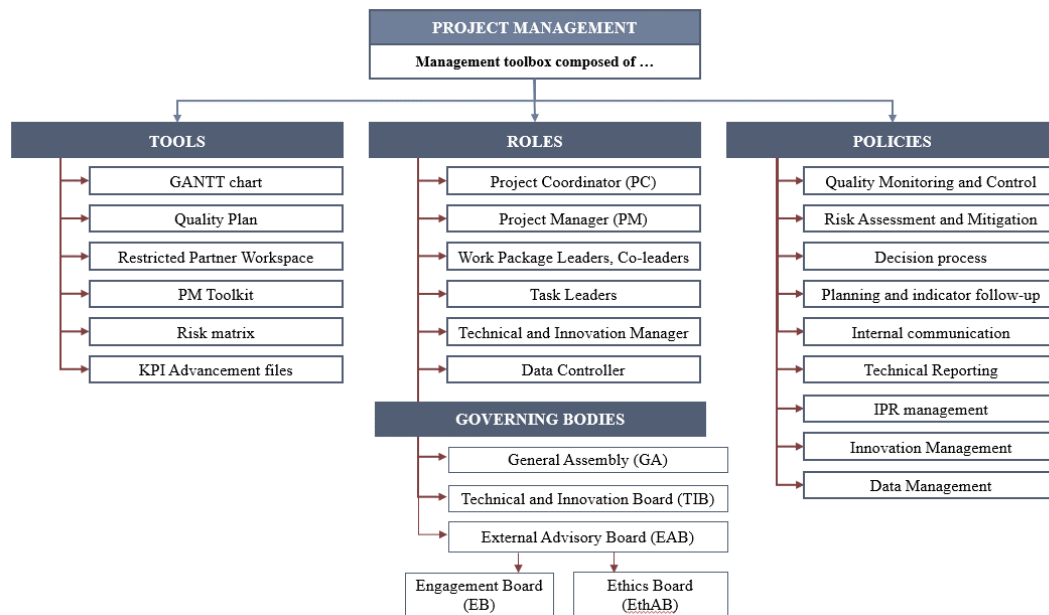


Figure 1. NAUTILOS Project Management Structure

2. ORGANISATIONAL STRUCTURE

Figure 2 outlines NAUTILOS organisational structure.

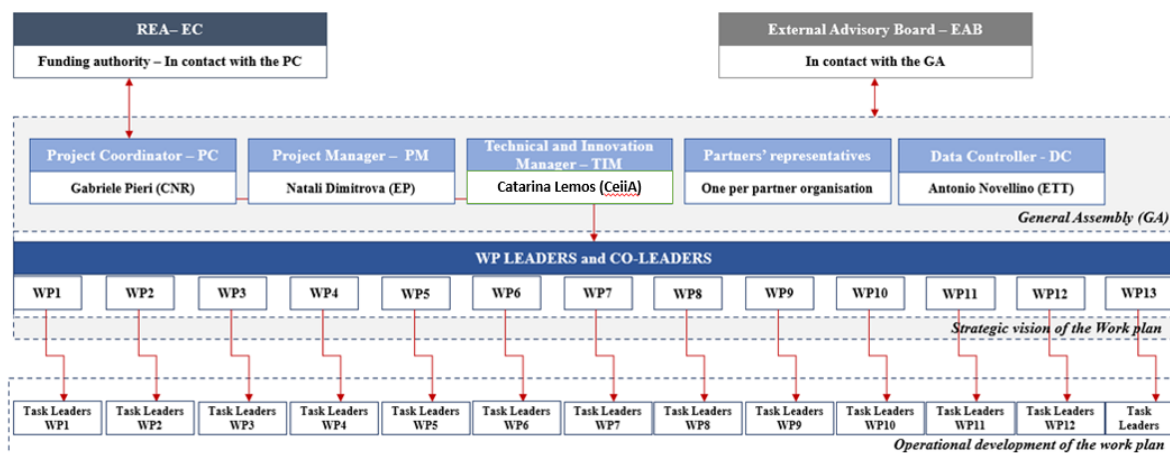


Figure 2. NAUTILOS Organisational Structure

3. PERT DIAGRAM: WORK BREAKDOWN STRUCTURE

NAUTILOS is composed of 13 work packages, as illustrated in the PERT Diagram below including 4 phases dedicated to the implementation of NAUTILOS (Development; Integration, validation and scenario testing; Demonstrations and Data Management and Modelling) and 5 transversal Work Packages dedicated to the management of the whole project (WP1), exploitation and impact (WP11), engagement with the European Strategy for Plastics in a Circular Economy (WP12), outreach, communication & dissemination activities (WP10) and ethics (WP13).

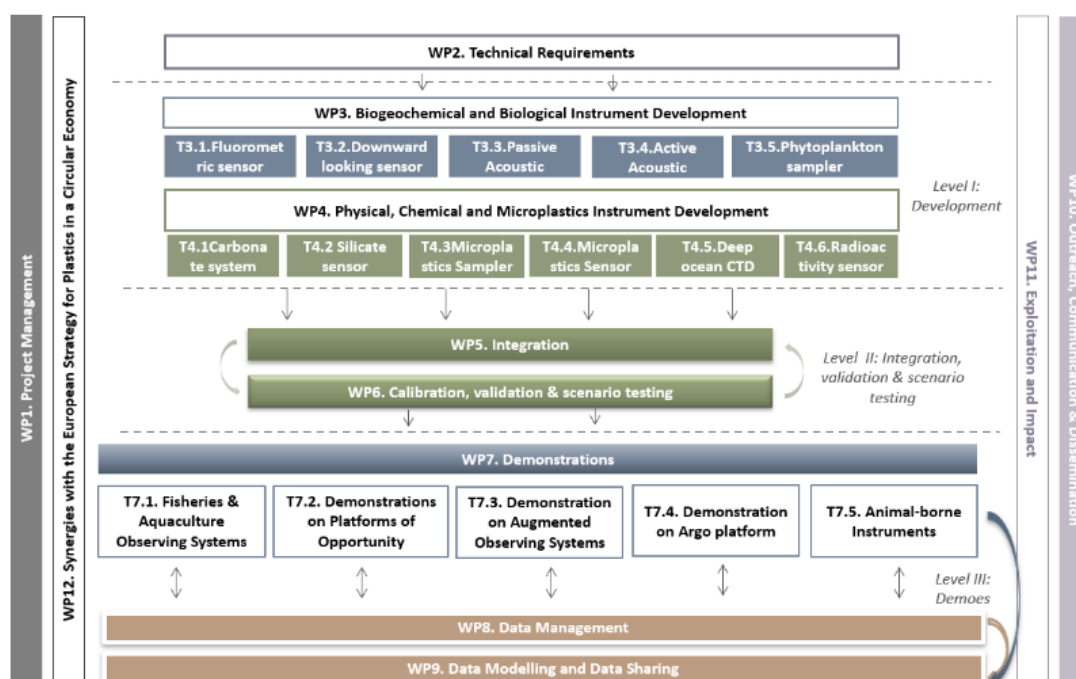


Figure 3. NAUTILOS PERT Diagram

4. GANTT CHART: PROJECT SCHEDULE

To manage the complexity of the NAUTILOS project, a detailed GANTT Chart providing a visual overview of the project schedule has been prepared and is available in TeamDrive shared space. To best fit the complex organisation of NAUTILOS activities, the GANNT has been constructed around a multi-level structure with specific timeframes per work package, per task and per sub-task. It also contains information about the involved partners in each task/WP, connected tasks/WPs, start and end date; percentage of progress of each task/WP and if there is a risk for its completion as planned; if the milestones have been achieved.

The GANNT chart is meant to serve as a management supporting tool, as well as a progress monitoring tool for following up the activities development at WP, task and sub-task level.

The GANNT chart is to be regularly (every 2 months) updated by the project partners.

An extract of NAUTILOS GANNT chart is provided below (fig.4).

Actions	Category	Assigned to	Participating partners	Progress	Initial Plan	Start	End date	Start (NAU) Month	End (NAU) Month	nexted task (WP2 table)
WP1. Project Management	On Track	CNR	All	40%	40%	10/1/2020	10/1/2024	M1	M48	ALL WPs
1.1 Scientific and Technical Project Management	On Track	CNR	All	40%	40%	10/1/2020	10/1/2024	M1	M48	
1.2 Communication and Administrative Project Management	On Track	EP	All	40%	40%	10/1/2020	10/1/2024	M1	M48	
ST1.2.1 'Internal' Project Management Tools	On Track	EP		40%	40%	10/1/2020	10/1/2024	M1	M48	
ST1.2.2 'Creation of Project Management Tools	On Track	EP		40%	40%	10/1/2020	10/1/2024	M1	M48	
ST1.2.3 'Administrative Support to consortium members and Project Governing Bodies	On Track	EP		40%	40%	10/1/2020	10/1/2024	M1	M48	
1.3 External Advisory Board	On Track	CNR	All	40%	40%	10/1/2020	10/1/2024	M1	M48	
1.4 Data Management Plan	On Track	CNR	All	40%	40%	10/1/2020	10/1/2024	M1	M48	WP8
1.5 Quality Assurance	On Track	EP	All	40%	40%	10/1/2020	10/1/2024	M1	M48	
1.6 Ethics in the context of marine observation	On Track	CNR	All	40%	40%	10/1/2020	10/1/2024	M1	M48	WP13
WP2. Technical Requirements	On Track	SCT	CNR, HCMR, NIVA, SYKE, IFREMER, ETT SPA, EDGELAB, NKE, AQUATEC, CERIA, HES-SO.	100%	100%	10/1/2020	7/1/2021	M1	M9	WP3, 4, 5, 7
2.1 Political and societal drivers and requirements	On Track	CNR	HCMR, NIVA, SYKE, IFREMER, ETT	100%	100%	10/1/2020	4/1/2021	M1	M6	
2.2 Technical requirements, standard sensor system and architecture	On Track	NIVA	IFREMER, Aquatec, NKE, HES-SO, ETT (HES-SO) (HES-SO) (HES-SO)	100%	100%	10/1/2020	7/1/2021	M1	M9	
2.3 Requirements for integration of sensors into selected platforms, incl. communication interfaces	On Track	SCT	, NIVA, CNR, SYKE, Aquatec, NKE, HES	100%	100%	10/1/2020	7/1/2021	M1	M9	
Specifications completed	Milestone	SCT		100%	100%	7/1/2021			M9	WP3, WP4
WP3. Biogeochemical and Biological Instrument Development	On Track	AQUATEC	MR, NIVA, SYKE, NKE, HES-SO, DI	100%	100%	10/1/2020	4/1/2022	M1	M18	
3.1 Fluorometric Sensors	On Track	HES-SO	NKE, SYKE	100%	100%	10/1/2020	4/1/2022	M1	M18	
ST3.1.1 Fluorometric Sensor	On Track	HES-SO		100%	100%	10/1/2020	4/1/2022	M1	M18	
ST3.1.2 Dissolved Oxygen and Fluorescence Sensors	On Track	NKE		100%	100%	10/1/2020	4/1/2022	M1	M18	
3.2 Downward-looking sensors for ocean platforms and aerial drones	On Track	NIVA	HCMR, DFKI	100%	100%	10/1/2020	4/1/2022	M1	M18	T 6.2, T9.4, T5.2
3.3 Passive Acoustic Sensors	On Track	AQUATEC	HES-SO	100%	100%	10/1/2020	4/1/2022	M1	M18	
ST3.3.1 Passive broadband acoustic recording sensor for noise monitoring	On Track	AQUATEC		100%	100%	10/1/2020	4/1/2022	M1	M18	T 5.4, T6.1.5, T7
ST3.3.2 Passive acoustic event recorder	On Track	AQUATEC		100%	100%	10/1/2020	4/1/2022	M1	M18	T 5.4, T6.1.5, T7.2
3.4 Active Acoustic Profiling Sensor	On Track	AQUATEC		100%	100%	10/1/2020	4/1/2022	M1	M18	
3.5 Sampler for phytoplankton and other suspended matter	On Track	NIVA	HCMR, SYKE, DFKI	100%	100%	10/1/2020	4/1/2022	M1	M18	

Figure 4. NAUTILOS GANTT Chart - extract

5. OPENPM²: OPEN PROJECT MANAGEMENT METHODOLOGY

NAUTILOS has adopted and utilises the OpenPM², a project management methodology designed by the European Commission. All NAUTILOS templates have been designed to fully answer the methodology's requirements.

IV. PROJECT BUDGET – LUMP SUM

NAUTILOS is a H2020 lump sum pilot project. The approved project's budget and a person-months summary table on a per task level (providing a clear overview of the effort different partners involved in a respective task) can be found in the project's OwnCloud shared space.

V. ROLES AND RESPONSIBILITIES

1. PROJECT GOVERNING BODIES

a. General Assembly

The General Assembly (GA) is the ultimate decision-making body of the Consortium, which consist of one representative per partner and is chaired by the PC.

The role, responsibilities, process and schedule of the GA have been detailed in D1.1 Report on Management Procedures (M3) and D1.4 Quality Plan (M6).

b. Technical and Innovation Board

Technical and Innovation Board (TIB) is the supervisory Consortium Body for the technical implementation of NAUTILOS which reports to and is accountable to the General Assembly.

The role, responsibilities, process and members of the TIB has been detailed in D1.1 Report on Management Procedures (M3) and D1.4 Quality Plan (M6).

c. External Advisory Board

The External Advisory Board acts as an independent external body, chaired by the Coordinator and composed of external experts.

The role, responsibilities, process and members of the EAB has been detailed in D1.1 Report on Management Procedures (M3), D1.4 Quality Plan (M6) and D1.2 External Advisory Board Report 1 (M12).

2. PROJECT MANAGEMENT ROLES

An in-depth description of each of the project management roles established within NAUTILOS is to be found in D1.1 Report on Management Procedures (M3) and D1.4 Quality Plan (M6).

a. Project Coordinator

The Project Coordinator (PC), Gabriele Pieri from CNR, is responsible for the coordination and management of the overall project.

b. Data Controller

The Data Controller (DC), Antonio Novellino from ETT, is responsible for the data management and the data management plan within NAUTILOS.

c. Technical and Innovation Manager

The Technical and Innovation Manager (TIM), Catarina Lemos from CEiiA (a successor of the former TIM, Armindo Torres from CEiiA) supervises and directs the technical and innovation aspects of the project.

d. Project manager

The administrative and project manager, Victoria Geraskova from EP (acting as a substitute is Natali Dimitrova, the former project manager), is responsible for the administrative follow up of the project.

e. Work Package Leaders

At the operational level, the work of the project is divided into 13 work packages. Each Work Package will be led by a Work Package Leader (WPL), supported by WP co-leaders, task and sub-task leaders.

3. PARTNER CONTACT DETAILS

Contact details of the representatives of all partner organisation in NAUTILOS can be found under the project's ownCloud and TeamDrive shared spaces. These are subject of periodic review and update (every 6 months).

VI. QUALITY ASSURANCE AND CONTROL TOOLS

The following tools and techniques will be used for project planning, management, and control, including the quality criteria to be collected and reported during the project:

Criterion Name	Frequency	Tolerance
WP Status reports distributed	Monthly	One month (i.e. every two months).
WP Progress Reports distributed	Bi-annually	One month
WP Project Review (following completion of WP Progress Report)	Bi-annually	One month
Project Management Review Meetings performed	Weekly	One week. Holiday period, each three weeks.
Project Technical Innovation Board (TIB) meetings performed	Quarterly	One month (i.e. every three months).
Milestone reviews executed	Per milestone	No tolerance.
Reporting period reviews executed	Per reporting period	No tolerance.
Stakeholders' satisfaction questionnaires sent, received and analysed	Once during the project	No tolerance.

VII. DELIVERABLES REVIEW AND APPROVAL

A total of 98 deliverables are to be submitted to the European Commission over the project implementation, 71 of which will be available to the public and will thus be accessible long after the project's completion. Therefore, a review process is a key step in the preparation of the deliverable to guarantee that the result is up to the appropriate standard and to the quality expectations.

1. DELIVERABLE REQUIREMENTS

NAUTILOS creates deliverables that are either reports or demonstrators. For deliverables that do not take the form of a written report, a written record will nevertheless be prepared to include supporting material for the output/outcome. For demonstrators, a technical report will be created, capturing the outcomes of the demonstration.

All report deliverables must be prepared in the Microsoft Word format – docx. For collaboration, partners may use other tools. To ensure consistency, a template is constantly available on the ownCloud platform. All deliverables must use the template provided, be written in English and proofread using spell checker. When submitting the final deliverable, it must be converted to the PDF format, before uploading it.

The content of each deliverable depends on the type of deliverable itself. It should cover all the information relevant to the activity that it results, and all the information needed by other Partners for performing their activities. The responsibility is of its author(s). Nevertheless, the **deliverable should meet a set of requirements**, based on the following aspects:

- (1) **Relevance.** Presented information should be true to the original objectives set out in Annex A of the GA and is relevant for the achievement of the Project goals and focused on the key issues.

- (2) **Accuracy.** Information presented must be reliable - all claims need to be proven and/or supported by relevant references.
- (3) **Completeness.** The deliverable should include all the necessary information to achieve its purpose.
- (4) **Concision.** The deliverable should include only necessary and relevant information and eliminate redundancies.

The deliverables are to have a uniform appearance, structure and referencing scheme. It is therefore necessary to use document referencing and template provided in this Project Quality Management Plan and align to the following guiding principles in terms of appearance, structure and overall presentation:

- (1) **Clarity**
 - Sentences are short, engaging and grammatically correct.
 - The layout and formatting of the document helps readers follow along and make sense of the content.
 - Abbreviations are used only when necessary and clearly outlined at the beginning of the document.
- (2) **Consistency**
 - Ensure there is consistency between different sections, internal document references, related requirement, documents and other deliverables.
 - Ensure that all tables, figures and charts have been properly referenced.
- (3) **Use of language**
 - Use specific, definite and concrete language.
 - Check your spelling, grammar and punctuation.
 - Have the deliverable proofread before sending to reviewers.

2. REVIEWING PROCEDURE

a. Roles and responsibilities

The NAUTILOS project defines the following responsibilities:

- Progress on deliverables is monitored on a monthly basis by the Coordinator and the Project Manager. The status of upcoming and eventually pending deliverables should be monitored by the WP leaders within WP quarterly meetings and reported to the Coordinator. Any problems or expected delays should be flagged immediately providing an explanation, any planned mitigation action and the anticipated completion date.
- Each **task leader** is responsible for the deliverables of their task. They are supported in its elaboration by all partners involved in the respective related task/s. They need to use the template Deliverable Report Template in NAUTILOS' ownCloud.
- The **Work Package Leader and co-leader** are responsible for checking that the deliverable will be done on time by the task leader and report to the **Project Coordinator and Project Manager** if any delay is foreseen.
- The deliverable passes an internal review by **Review Team 1** consisting of the Project Coordinator, Technical and Innovation Manager, WP leader and co-leader who approve the structure of the deliverable. In case any of the roles overlap a relevant substitute should be sought.

- As a second reviewing step the first complete draft of the deliverable must pass cross-work package review by a peer work package - **Review Team 2**. In case any of the roles overlap a relevant substitute should be sought.
- The finalised deliverable is then sent back to **Review Team 1** for final acceptance. If not accepted, it is returned for alterations to the deliverable's lead.
- Deliverables have to be delivered by the Coordinator to the EC Portal at the end of the official delivery month given in Annex 1, Part A. To allow sufficient delivery time, the first complete version of the deliverable is to be ready 30 days before the deadline when it is distributed to **the review team 2 (WP)** for final comments and amendments.
- Finally accepted deliverables are transmitted to the EC by the **project coordinator**.
- In case of the delay of a deliverable the WP leader is responsible for updating the list of deliverables with the new expected delivery date and a comment on the reasons for delay.

Note: The deliverable lead can add an additional reviewer at their own discretion based on the specifics of their respective deliverable.

b. Peer review of Work Packages

NAUTILOS deliverables are reviewed twice before submission to the EC. The first review is by the technical manager, project coordinator, WP leader and co-leader. The second review is by a peer work package. Peer Review of work packages is assigned in Table . Work package leaders are responsible to assign the reviewing task to personnel within their work package.

Reviewers are expected to provide constructive suggestions for improvement. Written comments may be provided directly in the document, always using "Track Changes", and reviewing comments. Therefore, if changes are made to the document, they should be clearly visible to the deliverable leading partner. After receiving review comments, the authoring team shall address them and if necessary, communicate with the reviewing team.

Table 1. Reviewing Work Packages in NAUTILOS

WP being reviewed	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	WP9	WP10	WP11	WP12	WP13
Reviewing WP	WP10	WP5	WP4	WP3	WP2	WP7	WP6	WP9	WP8	WP11	WP1	WP13	WP12

c. Reviewing Timeline

The NAUTILOS project will follow the following timeline to assure timely quality delivery and approval of the deliverables:

Table 2. Timeline for deliverables execution

WHEN	WHAT
75 days before the deadline	An official reminder will be sent by the project manager to Lead Author(s) and WP Leader and co-leader responsible of the Deliverable.

60 days before the deadline	High level skeleton, incl. design of prototypes and expected length must be submitted to review team 1: coordinator, TIB (or a TIB representative) and the respective WP Lead and co-lead .
50 days before the deadline	The review team responds, approving and/or giving explicit and tangible guidance for improvements/changes.
30 days before the deadline	Once the first complete version of the deliverable is ready the deliverable is distributed to the review team 2 (WP) for final comments and amendments.
20 days before the deadline	The review team and partners involved respond with potential additional requests for revisions.
7 days before the deadline	The final deliverable is submitted to review team 1 for approval. If no further comments the project coordinator gives final approval and submits.
Following the submission	The submitted deliverable may receive comments or request for improvement from the EC. The corrective actions will be implemented as soon as possible, not following the schedule above. The responsibility for improvements is with the author/task lead, but can be delegated to specific partner, covering the topic in question.

3. DELIVERABLES REVIEWING CHECKLIST

The deliverables reviews are performed in three stages based on the ***Deliverables Reviewing Checklist***, available at ownCloud shared space.

VIII. PROJECT PROGRESS MEASUREMENT

1. WORK PACKAGE STATUS REPORTS

The project quality will be monitored and managed also through periodic reporting on the work package status, use of resources, risk and issues encountered and activities planning.

Every 2 months each Work Package leader will fill in a 1-page Work Package Status Report. The Project Manager will remind each Work Package Leaders to do so 10 days before the end of the month. The template for the report is available on ownCloud.

2. WORK PACKAGE PROGRESS REPORT

Additionally, all Work Package Leaders will be asked to report **every 6 months** all activities they have performed, risks or issues encountered within the respective work package (including technical activities, communication and dissemination activities etc.), using the Work Package Progress Report template. A reminder will be sent to each work package leader by the Project Manager 15 days before the deadline. WPLs are responsible to gather all the information on the technical progress in

their WP from the task leaders (sub-task leaders) in their respective work package and compile a WP report before sending it to the coordinator and Project Manager. The template is available on ownCloud.

All work package Progress Reports will be integrated as part of the Project Quality Reviews.

3. PROJECT QUALITY REVIEWS

All work performance quality reviews will be analysed and recommendation and remediation/improvement actions will be defined in the Quality Review Report.

Project quality reviews will be performed every six months to verify that all project plans and processes are executed as planned and at the expected quality. The objective of the internal report is to monitor the project's technical progress. It will be a summary of the technical work completed, progress on the work which is ongoing as well as an explanation for any deviations from Annex 1.

4. QUALITY CONTROL RECORDS

The quality records (evidence that quality management activities have been performed) are archived in the project repository (ownCloud), under the "Monitor & Control" folder. The different versions of the project artefacts (created at each artefact update) will provide evidence of the performance of these activities.

IX. RISK AND ISSUE MANAGEMENT

1. RISK IDENTIFICATION, ASSESSMENT AND RESPONSE

a. Risk identification and description

In the preparation phase, the Consortium has created an initial risk list, which can be updated whenever new risks have been identified. The preliminary list of potential project risks and mitigating actions is included in the Grant Agreement, Section 1.3.5. WT5 Critical Implementation risks and mitigation actions.

For each risk from the initial risk list, the consortium made a first analysis identifying:

- The associated WP;
- The level of risk both before risk mitigation;
- The appropriate contingency plan.

Risks will continue to emerge during the lifetime of the project so project risk management processes will be conducted iteratively (continuously identified throughout the project lifecycle).

b. Risk assessment and response

The purpose is to assess the impact of the identified risks in terms of their influence to the project objectives (risk level). This assessment is necessary before any risk response planning/actions can be done and is being done based on likelihood of occurrence and the impact in project objectives.

The list will be regularly and upon need reviewed and modified until the project's end. If at any point a risk of medium to high likelihood, high severity and respectively high impact is identified, the Project

Coordinator will be immediately informed, he will consult with appropriate consortium partners, TIM, DM, PM about how to best manage the risk and consequently design the best risk mitigation plan. If a high impact risk remains unresolved it will be discussed during management meetings.

The selection of risk response strategy will be based on the results of the risk assessment (risk level), the type of risk, on the effects on the overall project objectives etc. The strategy/ies selected for each risk are documented by the PM.

2. ISSUE IDENTIFICATION, ASSESSMENT AND RESPONSE

a. Issue Identification

The purpose is to facilitate the identification and documentation of issues. Examples of issues that can arise in the project are:

- There are disagreements on the interpretation of requirements;
- WP team has difficulties achieving the set goals (e.g. in terms of time, resources or quality);
- Non-conformities are identified by various stakeholders;
- Identified risks changing from potential to actually existing problems;
- External effects that influence the project in a negative way;
- Other reasons.

Issues can be identified/raised by any Project Stakeholder throughout the project lifecycle, using different communication channels as meetings, emails, reports etc.

b. Issue assessment and response

The purpose is to assess the urgency and impact of the issue and decide on a priority for its resolution.

When an issue arises, an initial assessment (informal) will be performed by the person who raised the issue. This informal assessment will consider dimensions like relation to a specific area, possible consequences, level of urgency and size/scope. After this first assessment, the Project Manager (PM) will have the responsibility to assign the detailed analysis of the issue to a project stakeholder and to document the proposed solution and decisions made. After issues are evaluated and the remediation actions approved, the PM/Coordinator will incorporate these actions into the project documents.

3. RISK AND ISSUE CONTROL – RISK AND ISSUE REGISTER

All risks and issues will be recorded in a risk and issue register. It will capture details of the identified individual project risks and issues aiming with the purpose to monitor and control the implementation of the risk and issue response activities while continuously monitoring the project environment for new risks, issues or changes (e.g., probability and/or impact).

Project work package meetings, weekly PM meetings and consortium meetings will be used to revise the status of risks and issues and the related actions, and to identify new risks or issues that can impact project milestones, deliverables or objectives.

The Risk Owner is to report periodically the status of the risk and any response activities to the Project Manager (PM) and the Project Coordinator (PC). PM will be responsible for documenting any risk

updates, including new risks or actions, updating the status of response activities, changing risk levels based on mitigation actions, changing the assignment of actions, etc.

Issues status monitoring is the PM's responsibility, including adding new issues, updating issue status, updating remediation action details, modifying urgency, impact, and/or size levels based on changes in project environment, etc.

Additionally, PM will report periodically the status of the major issues identified for the project to the Project Coordinator and the General Assembly.

The Project Risk and Issue Register Template is available on OwnCloud.

X. CONFIGURATION MANAGEMENT

1. PM² PROJECT MANAGEMENT FILES NAMING CONVENTION

Managing files rules: editing and naming

The NAUTILOS project follows PM² methodology and uses the following naming convention:

Files: (XX).(DocumentName).(ProjectName).(dd-mm-yyyy).v(x.x)

<Example: *D1.4 Quality Plan_NAUTILOS_08.01.2021.V0.2.docx*>

Explanations:

- XX (two numerical characters) is the numerical sequence of documents or the deliverable number when referring to a deliverable.
- x.x is referring to the version of the document. If it begins with a "0.x" it means that the document hasn't yet been approved; minor changes can be reflected in the decimal (revisions number) and major changes (formal reviews) in the number.

When creating a project document, the Project Manager (PM) will include:

- The title of the document;
- The document type (e.g. plan, check list, log, guide, template, study, report);
- The version number;
- The issue date;
- The document control information, document approver(s) and reviewers and document history and location;
- The confidentiality classification of the document.

2. STORAGE AND ARCHIVING OF PROJECT MANAGEMENT ARTEFACTS AND DELIVERABLES

The project will utilise two repositories:

1. *ownCloud*

OwnCloud is an open-source file sync and share software which provides a safe, secure, and compliant file synchronization and sharing solution on servers and is to be utilised by NAUTILOS partners throughout the four years of the project. All partners' representatives have an account which is password protected and has thus access to all information available within. Sign in is enabled via the NAUTILOS website. All finalised project documents are stored within the ownCloud account.

- Versioning

With the Versions Application enabled, ownCloud automatically saves old file versions thus preventing accidental deletions or unintended amendments.

2. Team Drive

Whilst ownCloud will be utilised to store finalised versions of the deliverables Google Team Drive will be used to collaborate on working versions of documents. Once those have been finalised they will be transferred to the project's OwnCloud.

XI. APPENDIX 1: REFERENCES AND RELATED DOCUMENTS

NAUTILOS Final Quality Plan has been developed in accordance with the provision outlined within the following related documents:

- NAUTILOS Grant Agreement Nr. 101000825,
- NAUTILOS Consortium Agreement.

Alongside to these key documents, this plan has been developed on the basis of various project deliverables such as D1.1 Report on Management procedures (M2), D10.1 Outreach, Communication & Dissemination Strategy (M2), D1.3 Data Management Plan (M6), D1.4. Quality Plan (M3) and D11.1 NAUTILOS Exploitation Strategy (M3), D10.8 Outreach, Communication & Dissemination strategy 2 (M18).

ID	Reference or Related Document	Source or Link/Location
1	NAUTILOS Grant Agreement Nr. 101000825	NAUTILOS ownCloud
2	NAUTILOS Consortium Agreement	NAUTILOS ownCloud
3	D1.1. Report on Management Procedures	10.5281/zenodo.7162213
4	D10.1. Outreach, Communication and Dissemination Strategy	10.5281/zenodo.7163695
5	D1.4 Quality Plan	10.5281/zenodo.7163673
6	D10.8 Outreach, Communication & Dissemination strategy 2 (M18)	NAUTILOS ownCloud