Project Quality Management Plan

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Project No.:	**723030**
Deliverable No.:	**D1.3**
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Responsibility:	**PARTNER No. 1 NAVALPROGETTI**

Type of Deliverable		
R	Document, Report, Drawings	X
DEM	Demonstrator, pilot, prototype	
DEC	Websites, patent fillings, videos, etc.	
OTHER		
ETHICS	Ethics requirements	
ORDP	Open Research Data Pilot	

Dissemination Level		
PU	Public	X
CO	Confidential, only for Members of the Consortium, including the EU Commission Services	

Version Management

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RV 2	2018-01-22	Amended date of MS2 from March2018 to May2018 (typing mistake)
RV 3		

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Project Acronym	GASVESSEL
Project Title	Compressed Natural Gas Transport System
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Start Date of Project	2017-06-01
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Organisation Name of Lead Contractor for this Deliverable	NAVALPROGETTI Srl – TRIESTE - Italy

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Contents

Glossary, abbreviations and acronyms

EU	The European Commission or in general Europe
INEA	Innovation and Networks Executive Agency of European Commission
PO	Project Officer assigned by INEA to GASVESSEL Project
Partner	Company member of the GASVESSEL Project Consortium
Project	The GASVESSEL no. 723030 Project
CNG	Compressed Natural Gas
GA	Grant Agreement
CA	Consortium Agreement
PMS	Project Management System
PM	Project Management
TM	Team Management
PA	Project Administration
P&C	Planning and Controls
PR	Project Reporting
DC	Document Control
HSEQ	Health, Safety, Environment and Quality controls and assurance
PRM	Procurement Management
MM	Materials Management
WP	Work Package
NP	Navalprogetti Srl – Trieste – Italy – The Coordinator – Partner -Lead Beneficiary of WP1 and WP5
DOW	Dow Deutschland Anlaghengesellschaft mbH - Partner
DOWA	DowAksa Deutschland GMBH - Partner
PNO	PNO INNOVATION – Belgium – Partner – Lead Beneficiary WP9
VTG	VNIPITTRANSGAZ – Kyiv – Ukraine – Partner – Lead Beneficiary WP6
SINTEF	SINTEF OCEAN AS – Trondheim – Norway – Partner – Lead Beneficiary WP7
BMP	BM Plus Srl – Buttrio – Italy – Partner – Lead Beneficiary WP4
CNGV	CNGV d.o.o. – Izola – Slovenia – Partner – Lead Beneficiary WP3
CEN	CENERGY Srl – Trieste – Italy - Partner
HLL	Hanseatic Lloyd Schiffahrt GMBH & Co – Bremen – Germany - Partner
CHC	Cyprus Hydrocarbon Company – Nicosia – Cyprus – Partner – Lead Beneficiary of WP2
EST	ESTECO S.p.A. – Trieste – Italy - Partner
ABS	American Bureau of Shipping (Hellenic) – Athens – Greece – Partner – Lead Beneficiary WP8
O&G	Oil and Gas
WP1	Project Management
WP2	Scenario analyses
WP3	Prototyping activities, design of pressure cylinders and prototyping pilot line

WP4	Prototyping of pressure cylinders. Procurement/construction/arrangement of prototyping pilot line
WP5	Ship Design
WP6	Offshore & Onshore gas loading/unloading systems
WP7	Costs and Benefits Analysis
WP8	Class Design Review – Safety Assessments
WP9	Dissemination and Exploitation
QA	Quality Assurance
QC	Quality Control
CBA	Costs Benefits Analysis
Work Plan	Planning of Activities in Attachment 1 of Project Management Plan D1.2
WBS	Work Breakdown Structure

1. Executive Summary

Scope of this Project Quality Management Plan is to provide a reference point for the quality assurance (QA) and quality control (QC) processes during the GASVESSEL Project development.

The present deliverable defines the Project organization, procedures, roles and responsibilities related to the quality management that will be carried out, and describes how the Project quality will be controlled.

The document is based on the terms and conditions established in the Grant Agreement no.723030 and its Annexes, as well as in the Consortium Agreement.

The use of the present plan can ensure better collaboration among the Consortium Partners, individuals and groups.

The Project Quality Management Plan is the deliverable no. D1.3 of WP1, intended to ensure that Project processes and outputs are monitored and properly reported. It will be used to prevent possible deviations from the Work Plan and to grant deliverables of high quality.

This document shall be read in strict conjunction with D1.2 Project Management Plan. Actually, Quality Management is one of the main tasks of the Project Management

Partners

2. Foreword

This document does not explain what "quality" is, as it is assumed that quality concepts are well rooted among GASVESSEL Project Partners.

Furthermore it is not scope of this document to interfere with the INTERNAL quality management processes of each Partner or to modify Partners' procedures (for instance NP is certified ISO 9001 – 2008 for its quality system, has its own Quality Manual that will apply to all deliverables of competence in GASVESSEL Project. Process to certify Navalprogetti ISO 9001 – 2015 is ongoing), Partners are free to apply their own procedures for quality.

Actually, this document intend to outline a common standard, relevant to the quality of outputs and Project management actions without adding useless bureaucratic weights to the normal works of Partners. The Quality Management Plan defines the acceptable level of quality and describes how the Project will ensure this level of quality in its deliverables and research processes.

Quality management activities ensure that:

- Deliverables are prepared to meet agreed-upon standards and requirements
- Research processes are performed efficiently as required and regularly documented and reported
- Non-conformities found are identified and appropriate corrective actions are taken

Quality Management Plan apply to Project deliverables and Project research processes.

Quality control (QC) activities monitor and verify that Project deliverables meet defined quality standards.

Quality assurance (QA) activities monitor and verify that the processes used to manage and create the deliverables are followed and are effective.

Quality Plan Components
The Quality Management Plan describes the following quality management components:

- Quality objectives
- Key Project deliverables and processes to be reviewed for satisfactory quality level
- Quality standard
- Quality control and assurance activities
- Quality roles and responsibilities
- Quality tools
- Plan for reporting quality control and assurance problems

Purpose
As integral part of GASVESSEL Project Management Plan, the Project Quality Management Plan is intended to provide a solid ground for successful, timely and quality implementation of the Project activities.

It forms a common standard to be applied and followed throughout the entire Project life.

For the purpose, it defines the set of procedures to be followed in order to secure that:

- The GA requirements and conditions have been fully applied and followed by all Partners

- The EU/national rules and procedures are taken into account in operational, administrative and financial management

- All rights and obligations defined in the Consortium Agreement are fulfilled

- All Project activities are realized in accordance with the Work Plan and assigned budget

The purpose of developing a quality plan is to match EU expectations in terms of quality and prepare a proactive quality management plan to meet those expectations.

The Quality Management Plan helps the Executive Board, Coordinator and PM Team to determine if deliverables are produced to an acceptable quality level and if the Project processes, used to manage and create the deliverables, are effective and properly applied.

The followings are involved:

Executive Board
Coordinator
PM Team (resources in WP1)
Lead Beneficiaries and Partners

2.1 Regulatory Framework and References

Execution of GASVESSEL Project shall comply with and governed by:

- Grant Agreement signed by the Coordinator with the European Commission-INEA and by all the Partners in the Accession Forms. Grant Agreement number 723030 entering into force on May 22nd, 2017
- Consortium Agreement signed between all Partners dated May 15th, 2017.
- National legislation frameworks, governing business administration, in the homeland of each Partner

- National legislation frameworks, governing HSE and social issues, in the homeland of each Partner
- Deliverable D1.2 Project Management Plan
- Work Plan, already in hands of Partners since kickoff meeting on 2017.06.07, and formally published as Attachment 1 of Project Management Plan.

In case of conflict between the contents of Grant and Consortium Agreements, the Grant Agreement statements shall prevail.

Project Management starts on month 1 (**First of June 2017**) and ends on month 48 (**End of May 2021**).

The 48 months assigned to the Project are considered sufficient for the performance of the foreseen tasks.

Language and units

All along the Project, the following will be used:

- English language
- SI and metric units
- Nautical miles and knots for sea routes length and ships' speeds

2.2 Project Expenditure and Applicable Rules

This section deals with the expenditures made during the GASVESSEL Project implementation and rules that are applied.
This section is closely related to the relevant articles of the Grant Agreement.

General eligibility principles

Eligible costs are those necessary to carry out the Project tasks and **incurred during the eligible period** of Project implementation.
They may be:

- exclusively devoted to the project objectives and activities, ***or***
- be allocated proportionally to the Project, applying a justifiable fair and equitable method of calculation.

According to the Grant Agreement and the Annotated Model Grant Agreement dated 21 April 2017, in order to be eligible the costs have to be:

- Actually paid by the relevant Final Beneficiary
- Incurred within the period of eligibility of the Project
- Reasonable, justified, and in compliance with the requirements of a sound financial management, in particular with **economy, efficiency and effectiveness principles**
- Included in the estimated total budget and closely linked to any action or output of the approved work plan and necessary for its implementation;
- Identifiable and verifiable. Cost must be recorded in the accounting records of the Beneficiary and determined according to the applicable accounting standards of the Country

where the Beneficiary is established and according to the usual cost-accounting practice of the Beneficiary
- In compliance with all the relevant EU, national and H2020 Programme rules
- In compliance with the requirements of applicable tax and social legislation
- Accompanied by the necessary documents proving that the expenditure is real and that the action has been implemented and/or the output has been delivered
- Not shared with any other project partner.

Any expenditures out of these rules will be considered ineligible and will not be paid by H2020 Programme.
The additional set of rules to respect so that costs are accepted as eligible is:

- They belong to one of the H2020 Programme categories of expenditure (budget lines: personnel costs, travel, subcontract, linked third parties, etc.), work packages and have been incurred according to the rules established by the H2020 Programme
- They incurred in compliance with the H2020 Programme eligible area and location of activities
- They are qualified in Euro currency and are not granted by any other EU funding

2.3 Project Governing Structure

For Project Governing Structures see D1.2 Project Management Plan item 2.4

2.4 Planning and Management of the Project

See Work Plan in Attachment 1 to D1.2 Project Management Plan.

For the correct development of the project, the following management processes are identified:

PROCESS	REFERENCE	OUTPUT
Costs progress monitoring	Project	MoM of Executive Board
Technical progress monitoring	Project	MoM of Executive Board
Changes and non-conformities management	This document D1.3 Project Quality Management Plan	Upgrade of the Work Plan and of the Project
Risk management	Deliverable D1.2 Project Management Plan	Mitigation actions
Exploitation and dissemination of results	Tasks of WP9	Actions foreseen in WP9
Technical and economic reporting	Grant Agreement	Reporting documentation

2.5 Project documents preparation

The following principles shall apply to documents preparation:

- All documents shall be written using the standard format herewith supplied.
- All Partner shall ensure the maximum level of quality while preparing the documents.
- All the documents used for dissemination shall have the approval of Coordinator in agreement with PNO.
- The Project management team is in charge to check that documents comply with the proposed formats.
- All documents produced for the dissemination shall have the logo of EU, GASVESSEL and of all Partners.

2.6 List of contacts for communications

Partners shall supply Coordinator with a list reporting names, phone and e-mail address, and keep it updated, of the various persons, inside their organization, in charge for Project administration, as follows:

- Project management matters
- Quality matters
- Administrative matters
- Technical matters
- Dissemination matters

3. Project Quality Management Objectives

Project Quality Management objectives are referred to the following two items:

a. Deliverables
   i. Deliverables support proficiency for improved Project Management actions
   ii. Deliverables meet the requirements of Project Lead Beneficiaries, Partners representatives, Executive Board, Coordinator and finally of EU
   iii. Deliverables are aligned to industry best practices for Project Management
   iv. Deliverables are suitable for Web delivery and for dissemination activities (confidential deliverables excluded)
   v. Deliverables are easy to understand and use. More precisely, shall contain all the information needed by other Partners, to allow them to fairly progress in relevant tasks, avoiding, as far as possible necessity of requests for integration, clarification, input of missed data, etc.
   vi. Project practices conform to the Project Management Plan (Deliverable D1.2)

b. Processes

In GASVESSEL Project, this item is mainly referred to the Quality Management for CNG Cylinders prototyping phases. To allow the prototyping phases to be effective for a CNG Cylinder prototypes construction and for the relevant cost analysis, the following approach is considered:

i. During prototyping, the industrial best practice shall apply, cumulated by:
   a. CNGV in the construction of composite Cylinders of smaller size
   b. BMP in its high level of mechanical and gears constructions
ii. All input and output technical data, while prototyping and test Cylinders of larger size, including preliminary technological tests on base materials, shall be recorded and reported in written for further use. ABS, duly informed in time accordingly, will attend to the tests upon its decisions.
iii. Time and materials consumed to build and test prototypes to be recorded, analyzed and reported to allow SINTEF's CBA and ships' CAPEX calculations
iv. In terms of Quality, the final output of prototyping will be used to prepare the "Quality Manual", to be used in the possible subsequent phase of industrial production of CNG Cylinders

All documents and reports produced within the GASVESSEL Project are expected to satisfy the following quality criteria:

- To respond qualitatively to objectives set in the Project Management Plan
- To be started and delivered within the time frame set in the Work Plan
- To be approved by the relevant management structure as defined in this Project Quality Management Plan
- To satisfy the visual identity requirements, i.e. to be presented in corresponding templates provided in this Project Quality Management Plan

4. Key Project Deliverables and Processes to be reviewed for satisfactory quality level

The following key Deliverables and Processes will be reviewed for satisfactory quality level:

a. Deliverables and processes related to Milestones in GA

Milestone number	Milestone title	WP number	Lead Beneficiary	Due Date	Means of verification
MS1	Scenario description and characterization; Decision Support Model defined	**WP2**	11 - CHC	**JAN 2018**	Scenario description and characterization; Decision Support Model defined
MS2	Scenario analyses performed with the Decision support model	**WP2**	11 - CHC	**MAY 2018**	Scenario analyses performed with the Decision support model
MS3	MFD Platform	**WP3**	12 - EST	**NOV 2018**	Winding Design Optimization Platform
MS4	Pressure Vessels – Pilot Line ready event	**WP4**	7 - BMP	**MAY 2019**	Pressure Vessels - Pilot Line ready event
MS5	Results of CNG Cylinders pilot productions and Tailored Ship design and on/off loading systems available	**WP4**	1 - NP	**JAN 2020**	Results of CNG Cylinders pilot productions and Tailored Ship design and on/offloading systems available
MS6	Functional Ship Design Ready	**WP5**	1 - NP	**MAY 2020**	Functional Ship Design Ready
MS7	Proof of Concept	**WP7**	6 - SINTEF	**MAR 2021**	Proof-of-concept (Tool for CNG cost simulation validated by means of verification Results of CBA. Environmental assessment and safety assessment).
MS8	Dissemination, Communication, Exploitation Plan	**WP9**	4 - PNO	**MAY 2018**	Dissemination, Communication, Exploitation Plan
MS9	Workshops and conference (including presentation and report) for policy, ethics and further adoption	**WP9**	4 - PNO	**MAY 2021**	Workshops and conference (including presentation and report) for policy, ethics and further adoption

b. Deliverables and Processes related to the Deliverable list in GA

Deliv. No.	Deliv. Title	WP No.	Lead Beneficiary	Type	Dissemination level	Due Date
D1.1	Executive Board minutes of meeting. Consortium Agreement Document	**WP1**	1 - NP	Other	Public	**JUN 2017**
D1.2	Project Management plan	**WP1**	1 - NP	Report	Public	**AUG 2017**
D1.3	Quality management plan	**WP1**	1 - NP	Report	Public	**AUG 2017**
D1.4	Project final report	**WP1**	1 - NP	Report	Public	**MAY 2021**
D1.5	"Web-based Knowledge Management" manual	**WP1**	1 - NP	Report	Public	**MAY 2019**
D2.1	Scenario description and characterization	**WP2**	11 - CHC	Report	Public	**MAY 2018**
D2.2	Decision Support Model	**WP2**	12 - EST	Demonstrator	Public	**MAY 2018**
D3.1	Platform for Pressure Cylinders Optimization. Validation of the design Process. Optimization Software and design basis document.	**WP3**	12 - EST	Report	Confidential	**JUN 2019**
D3.2	Scenario analyses performed with the Decision Support model	**WP3**	11 - CHC	Report	Public	**MAY 2019**
D3.3	Technical specifications and executive plans of the installations and equipment necessary for the design of Pressure Cylinders, Pilot line and prototyping Equipment	**WP3**	8 - CNGV	Report	Confidential	**JUN 2019**
D4.1	Test procedures on prototypes and experimental support tests with strain gauges. Validation of the software simulations models (FEM analysis). Safety factor validation tests	**WP4**	7 - BMP	Report	Confidential,	**NOV 2019**
D4.2	Production procedures	**WP4**	7 - BMP	Report	Confidential	**NOV 2019**

	with the winding pattern, the winding parameters, validation of the tension control systems, system of impregnation, viscosity and processing temperatures, issue of quality assurance and quality control documents					
D4.3	Final report by the entity independently with the issuance of the results of all the validation tests and the issuance of the final document of homologation of the Pressure Cylinders and the production process (Production Quality Manual)	**WP4**	7 - BMP	Report	Confidential	**NOV 2019**
D5.1	Basic design and Naval Architecture Package	**WP5**	1 - NP	Reports, Drawings	Public	**JAN 2020**
D5.2	Reports on towing tank experimental tests results	**WP5**	1 - NP	Report	Public	**JAN 2020**
D5.3	Functional Design and Engineering Package and safety report	**WP5**	1 - NP	Reports, Drawings	Public	**MAY 2020**
D6.1	Technical proposals for the construction and equipment of Loading / unloading modules	**WP6**	9 - CEN	Report	Public	**NOV 2019**
D6.2	Software tool for the design and operation of the loading / unloading facilities	**WP6**	9 - CEN	Report	Public	**NOV 2019**
D6.3	Report on the offshore loading/unloading operation analyses	**WP6**	6 - SINTEF	Report	Public	**MAR 2020**
D7.1	CBA database	**WP7**	6 - SINTEF	Report	Public	**OCT 2019**
D7.2	Report on Comparative / sensitivity analysis (for each scenario) of CNG GASVESSEL versus LNG, FLNG, Pipeline	**WP7**	6 - SINTEF	Report	Public	**FEB 2021**
D7.3	Profitability assessment	**WP7**	6 - SINTEF	Report	Public	**FEB 2021**

	of the GASVESSEL concept (socio- economic and Financial analysis)					
D8.1	Documentation providing safeguard solutions for the system as identified in the HAZID analysis	**WP8**	13 - ABS	Report	Public	**JUN 2019**
D8.2	Documentation providing a master hazard register and a framework for quantitative risk assessment (ABS)	**WP8**	13 - ABS	Report	Public	**JUN 2019**
D8.3	General Design Approval Letter for the whole CNG carrier design and its associated systems (if meeting requirements)	**WP8**	13 - ABS	Report	Public	**MAR 2021**
D9.1	Dissemination and Exploitation plan	**WP9**	4 - PNO	Report	Public	**JAN 2018**
D9.2	Promotion material. Including brochures, articles, and presentations.	**WP9**	4 - PNO	Report	Public	**MAY 2021**
D9.3	Public and internal website (First, Full version)	**WP9**	4 - PNO	Websites, patents filling, etc.	Public	**MAY 2018**
D9.4	Reports of the 3 workshops	**WP9**	4 - PNO	Report	Public	**MAY 2020**
D9.5	Business plan for the project results and 6 Business cases	**WP9**	4 - PNO	Report	Public	**MAY 2021**
D10.1	NEC - Requirement No. 1	**WP10**	1 - NP	Ethics	Confidential	**SEP 2017**
D10.2	EPQ - Requirement No. 2	**WP10**	1 - NP	Ethics	Confidential	**SEP 2017**
D10.3	NEC - Requirement No. 3	**WP10**	1 - NP	Ethics	Confidential	**SEP 2017**

5. Quality standard

Quality standard defines the policy that Project Partners shall follow to ensure the quality of achieved outputs and results, as well as standards to apply to deliverables and processes.

Whatsoever is the internally used Quality standard of each Partner, the aim of Quality Assurance Policy is to ensure GASVESSEL Project commitments to maintain a high standard of quality in Consortium relationships, in the supplied services and provide continuous improvement.

GASVESSEL Partners to maintain an effective and efficient quality assurance process, planned and developed in conjunction with Project Management, that is designed to eliminate deficiencies and inaccuracies.

6. Quality Assurance and Quality Control

"Quality Assurance" is what GASVESSEL Project benefits if quality control has been effectively applied to the Consortium works.

Benefits for GASVESSEL come out from the basic concept of quality that plays: **do the right thing once only.** This means no waste of time, resources, etc.

The Quality Assurance is fundamental for all works in GASVESSEL Project and should be implemented by all Partners while developing their tasks.

For the scope, GASVESSEL Partners shall:

- Maintain conformity in work method throughout, in accordance with set policies, procedures, regulations and codes of practice and without significant deviation.
- Ensure that all policies, procedures, relevant regulations and codes of practice are effective and analyzed to match GASVESSEL needs.
- Regularly monitor and measure the quality of expected outputs and methods in view to ensure high quality standards, best value and continuous improvement.

"Quality control" is the operational techniques, procedures and objectives that are used to fulfil the requirements of quality.

6.1 Deliverables/documents numbering procedure

Each deliverable/document/correspondence exchanged , as far as practicable, shall have in due evidence the following references:

- GASVESSEL logo
- EU and H2020 logo and EU flag
- Reference to GA number and Project name. For GASVESSEL is **723030 GASVESSEL**
- Reference to Work Package and Deliverable numbers

See template in Appendix 1 for deliverables in form of report.

Other documents part of a Deliverable, for Partners' internal filing purposes, shall be numbered as per the following example:

Ship's Midship Section drawing, prepared by NP, belonging to WP5 and D5.1 deliverable package:

- H2020
- 723030 GASVESSEL
- WP5
- D5.1

- Deliverable Revision number, usually:
  - RV0 First issue for Partners check and comments
  - RV1 Document implemented with Partners comments and ready to be uploaded on EU portal and Project website
- Internal project number of the Partner
- WBS group identity number
- Sequential document numbering in that WBS
- Internal revision number

H2020 723030 GASVESSEL

XXX mscm CNG Ship

MIDSHIP SECTION

WP5 - D5.1 - RV1 – 803 – 01 – 005 – Rev. A003

6.2 H2020 Rules for Dissemination

All Partners should acknowledge at all times EU funding to GASVESSEL Project in all deliverables classified "public" and used for dissemination.

The following sentences may be used:

Publicity and promotional materials:

"The GASVESSEL Project has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement no. 723030"

Patents (if any):

"The work leading to this invention has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement no. 723030"

Results:

"The research leading to these results/this publication has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement no. 723030"

Disclaimer excluding EU Agency responsibility:

"This paper/presentation/article/publication reflects only the author's view and the Innovation and Networks Executive Agency (INEA) is not responsible for any use that may be made of the information it contains"

6.3 Procedures for communication, publication and dissemination of project results

Communication Activities:

Each Partner wishing to undertake any formal communication activity/initiative related to the Project should inform both Coordinator and WP9 Lead Beneficiary (PNO). The content and the overall message of the communication activities should be agreed with the Coordinator while WP9 Lead Beneficiary should be consulted on the visual identity of the Project (logo, communication style..) All communication activities shall be reported at latest quarterly, at the time of the periodic Status Report to the Executive Board.

Dissemination and publication of project results:

Before the dissemination and publication of Project results, the Partner shall give the Coordinator and all the other Project Partners at least 30-calendar-day-notice. Other Partners then have two calendar weeks to comment the dissemination/publication and request necessary modifications, if any. If there are no Partners comments within the period above, the dissemination/publication of results is allowed.

6.4 Use of social media

The Project uses social media.

Any content to be shared using social media shall be sent in advance to the WP9 Lead Beneficiary.

6.5 Communication

Day by day communication of Project related issues will be done via email/ phone.

Important communications should be traced via mail with copy to Coordinator.

6.6 Types of meetings and relevant procedures

All meetings of the Project governing Bodies shall follow the procedures stated in the Consortium Agreement and reflected in the Project Management Plan D1.2.

All other project meetings will follow a more flexible and ad hoc procedures agreed within the participant Partners involved.

However, an official agenda (where relevant) and meeting minutes shall be produced for all meetings and circulated to all Partners.

6.7 Web meetings

The Partner requesting the Web meeting is free to propose/ use a provider to set up a web meeting/ conference.

The Coordinator shall be invited to all web meetings.

In case a Task Leader requests a web meeting, the WP Lead Beneficiary shall be invited as well.

The organizer of the web meeting is responsible for preparing the agenda and taking meeting minutes and sharing them with all Partners.

6.8 Regular meetings

For regular meetings of Consortium governance Bodies see Project Management Plan D1.2

7. Quality roles and responsibilities

In GASVESSEL project, two types of deliverables foreseen:

- Documents, mainly in the format of reports
- Technical and technological output, in the form of drawings, calculation booklets, etc.

Document deliverable

Refers to any type of original textual report that is produced in the context of the GASVESSEL Project and referring to the deliverables defined in the Project description.

Technical and technological output

Refers to technical services developed and provided to target Beneficiaries in the context of the GASVESSEL project.

Since above types of deliverable are different, a different validation procedure will be implemented

Document deliverable will be validated, in terms of quality, by the **Lead Beneficiary** of the WP to which said deliverable is belonging.

More in detail, the author of the deliverable will perform the first document check.
He will review his own work before delivery to its Lead Beneficiary that provides to the second check before circulating it among the Project Partners.

The deliverable to be forwarded **to all Project Partners** for comments at least one month before the due date of the deliverable, so the document goes through three phases of validation.

After receiving the deliverable, Partners have two weeks to give their comments to the author.

Deliverables not commented by Partners within the two weeks will be considered “checked and approved”.

The Lead Beneficiary reviews the deliverable once more before handling it over to the Coordinator Finally Coordinator gives his final comments and corrections, if any, and provide uploading of the deliverable on EU portal.

Summarizing, the quality review of deliverables in GASVESSEL Project will be performed at three levels:

FIRST LEVEL by Deliverable author. The first level of quality control for the deliverable is responsibility of its author. The author, belonging to the Lead Beneficiary organization responsible for that deliverable, will ensure that the produced deliverable is in accordance with the set goals and defined visual identity requirements.

SECOND LEVEL by Partners. The deliverable draft is distributed for review to all other Partners, whether or not involved in the same activity. Partners review time is ruled here above in this chapter. The final rating of the Deliverable draft could be marked as:

- **ACCEPTED** - In case the deliverable is fully accepted by Partners and by all involved Partners
- **REVISION REQUIRED** - The deliverable author has one week to include or disregard those comments and finalize the deliverable.
- **REJECTED** – Non-conformance plan needs to be applied in case the quality of the deliverable is not satisfactory and / or fails to conform to the quality criteria. Partners rejecting the deliverable have to prepare the «Non Conformity Report».

In case heavy disagreements between reviewing Partners and author, the deliverable will have to go through the next level of control:

THIRD LEVEL by Executive Board. Is the final level of deliverables quality control.
Executive Board is responsible to resolve any disagreement that may appear at the previous lower control levels. At this level, the same review principles of SECOND LEVEL remain valid,

The approval of all deliverables must respect the timeframes for deliverables due date scheduled in the Project Work Plan.

Maximum allowed size of each single deliverable, for uploading on EU portal, is 52 megabyte.

Technical and Technological deliverable will be validated based on the document prepared to describe the features of the output.

Based on that document, acceptance criteria are defined and will serve as a point of reference for evaluating the output.

The validation of technical and technological deliverables will happen in different stages.

Technology developer, as for example for WP3 and WP5, will be the first to assess whether the deliverable meets the acceptance criteria.

Furthermore other Project Partners, as for example HLL and ABS for WP5 and ABS for WP3 and WP4 will get an access to the technology, checking it again against the acceptance criteria.

After the testing phase and/or remediation of all issues, Lead Beneficiary will notify the Coordinator that the technology is ready to be delivered.

The completed acceptance criteria checklists will go with the technical and technological delivery as a proof that the quality assurance process have been performed.

In GASVESSEL Project, quality management is heavily dependent on internal communication, allowing feedbacks among geographically dispersed Project Partners, for quality validation of project deliverables. Consequently, minimal corrective measures will be adopted if necessary, to hit Project general and specific objectives and targets.

If it will be the case, technical and technological output, with CONFIDENTIAL classification, will be in any case circulated among all Partners, to keep them informed about the Project progress.

8. Quality tools

Each deliverable will be evaluated according to the following criteria:

1. **CONTENT**

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 reports should meet a set of requirements, based on the following aspects:

a) Completeness. Information provided in the deliverable must be reliable, complete and supported by relevant references.
b) Accuracy. Information presented to be focused on the key issues.
c) Relevance. Presented information should be relevant for the achievement of the Project goals.
d) Language features. Before elaboration of the final version, the report to be submitted for proof reading.

2. **APPEARANCE AND STRUCTURE**

The deliverables 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.

At each Executive Board meeting, the status of Project QA/QC will be reviewed to ensure that the

procedures were followed, to define opportunities for improvement (if any) and to find the solution to eliminate gaps between current and desired levels of performance.

Results of such Executive Board review will be an integral part of the Executive Board minutes of meeting.

9. Plan for reporting quality control and quality assurance problems

Based on Partners' Status Reports, the further step to be undertaken is to identify the areas of non-conformity with the defined procedures.

If non-conformities are identified, they should be documented in the appropriate form (Attachment 4), and corrective actions to be applied.

Any Partner identifying the necessity for corrective actions shall report to the Coordinator and inform the Executive Board accordingly using the Status Report. Partner to advice proposed solutions.

Executive Board shall discuss the matter, either at regular Executive Board meeting or through e-mails, web-conferences, etc. Proposals on corrective action should be suggested and put for voting by Executive Board members. Decisions shall be documented in the Executive Board Minutes of Meeting.
Coordinator will forward decisions to all Partners involved.

Executive Board, as higher ranked management structure of the Project, is responsible for the implementation of corrective actions.

Corrective actions should ensure:

- Effective handling of all complaints
- Reports of non-conformities
- Investigation of the cause of non-conformities with reference to quality system,
- Recording the results of the investigation
- Determining the corrective / preventing actions intended to eliminate the causes of the non-conformity
- Application of controls to ensure that corrective actions are taken and effective
- That information on actions taken are submitted to the Partners

10.Procedures of the Executive Board

1 – Definition
The Executive Board is the Project body which shall ensure the quality and the effectiveness of the implementation of the Project, together with the Coordinator in accordance with the provisions of the General Assembly.

2 – Composition
The composition of the Executive Board is defined in the Consortium Agreement, signed by all GASVESSEL Partners

3 – Tasks
The Executive Board shall satisfy itself about the effectiveness and quality of the implementation of the Project, in accordance with the following:

1. it shall consider any problem incurred during the implementation of the Project and take decisions on how to solve these problems;
2. it shall consider and approve the activities/project changes proposed by the Partners during the Project implementation period;
3. it shall periodically review progress made by the Project, based on documents submitted by Lead Beneficiaries Partner;
4. it shall examine the results of implementation, particularly achievement of the targets set for each Project WP and the overall Project indicators;
5. it shall consider and approve Project Status Reports on Project implementation;
6. it shall be informed of any relevant comments made by the H2020 Programme Management Authority (EU Project Officer);
7. it shall be responsible for programming the common Project events in coordination wit the Partner PNO, responsible for dissemination;
8. it may propose any revision or examination of the Project to make possible to hit the targets or to improve Project management, including financial aspects;
9. it shall approve, on proposal of Coordinator, the breakdown of the expenditures incurred by each Project Partner, submitted in the Status Reports, in compliance with the maximum amount of contribution granted to each Project Partner by the H2020 Programme Management Authority;
10. it approves the information and communication plan presented by the Project Partner/s responsible/s of WP9;
11. it adopts the documents prepared by the Project Partners in compliance with the foreseen Project activities;
12. it approves major changes requested for the implementation of the Project by each Project Partner;
13. it approves and implement the Risks assessment developed by each Partner in the periodical Status Reports;

14. it approves and implement the QA/QC actions possibly submitted by each Partner in the periodical Status Reports;

4– Chairpersonship and meetings
The Project Executive Board will be chaired by a representative of the Coordinator, and co-chaired by the representative of the Project Partner hosting the meeting.

7 – Minutes
At the end of the meeting a minute of the decisions taken is prepared by the Hosting Project Partner, circulated and signed by the Executive Board members.
Minutes of meeting shall be circulated among all GASVESSEL Consortium Partners.

8 – Written consultation
The Coordinator can initiate a written decision-making process. In this case the Coordinator shall send the draft decision to the members of the Executive Board and shall fix a deadline for comments and approval.

9 – Communication within the Executive Board
Communication among the members of the Executive Board shall generally done by e-mail, or by the Intranet section in the website of the Project. Any document sent to the members of the Executive Board or the Coordinator, must be transmitted by e-mail or uploaded in the Intranet.
All members of the Executive Board shall update the Coordinator about their e-mail and address and their eventual changes.

10 – Working groups
Executive Board and/or Coordinator can ask Partners to set up working groups, in order to develop in details specific issues of the Project.

11 – Communication and transparency
Executive Board guarantees adequate information on its work. For this scope, and to give adequate publicity to the work of the Executive Board, the minutes of the meetings, after their final approval, will be uploaded on the website of the Project.
Information on discussion within the Executive Board to remain confidential.

12 - Impartiality
Any assessment and/or decision of the Executive Board shall be free from bias and must not be influenced by personal interest of any of the individual members.

13 - Working language
Working language of the PSC shall be English. This rule also applies for the official documents of the PSC.

14 - Expenditures
Expenses to attend to the Executive Board meetings are held by each Project Partner that have participated to the meeting with its representatives.

The Project Partner that have activated a specific resource incurs the expenditure for technical assistance of experts and for the associated member participation.
All expenditure incurred by organizing the Executive Board meetings will be covered by the Project budget resources.

11.List of Attachments

The following templates are attached herewith and form integral part of this Project Quality Management Plan:

- Attachment 1 – Standard form for Meeting Agenda
- Attachment 2 – Standard form for Minutes of Meeting
- Attachment 3 – Standard form for non-conformity report
- Attachment 4 – Quality assurance check list for deliverables
- Attachment 5 – Standard front page and format for Deliverables
- Attachment 6 – Standard form for quarterly reporting to Executive Board (Status Reports)
- Attachment 7 – Standard form for time sheets