

Minutes of Meeting

4th GASVESSEL Consortium General Assembly

Meeting Date:	11 th of April 2019
Meeting Location:	Riviera&Maximilian Hotel – Trieste - ITALY
Meeting requested by:	Periodic Meeting planned according to the GASVESSEL Project Management Plan – Meeting organized by Partner 1–Navalprogetti
Purpose, Objectives and Elements of the Meeting with ref to WPs and relevant tasks (as per Meeting Agenda)	<p>See approved meeting agenda. In brief:</p> <ul style="list-style-type: none"> • Overview of the Coordinator. • Recap of the Review Meeting held with Project Officer. • Status of next deliverables and milestones up to June 2019. • WPs technical status and progress verification. <p>The Assembly is valid also as 8th Executive Board Meeting</p>
Minute prepared by:	NAVALPROGETTI
Attendees approval Date :	
Attendees:	<p>See signed Attendees list.</p> <p>Being present and represented all the Partners (more than the two-third of the Partners) the Assembly is valid in accordance with article 6.2.3 of the Consortium Agreement.</p>
Summary of Significant Results	<p>Meeting starts at 0900</p> <p>Welcome address to attendees from Mr. Loris Cok, Project Coordinator</p> <p>Turn of Table presentations</p> <p>WP1 - General overview of the Project by Spartaco Angelini, NP</p> <p>A brief recap of the review meeting held in Brussels on Feb. 5th regarding the first period assessment by EU has been presented.</p> <p>It is proposed to appoint Sandro Mosberger from DOW AKSA as replacement for Ute Spring within the Executive Board: he accepted (he needs to verify with his company if there are any objections on this) and the Assembly approves.</p> <p>Partners are requested to inform Coordinator about any changes in the internal organization that imply changes in the Grant Agreement (dismissal of employees mentioned in the GA imply an update of the same and Coordinator needs to be informed about the replacement of that person/role).</p> <p>During the second reporting period, GA needs to be revised. Partners will be kept informed accordingly in due time.</p> <p>Partners are requested to send their quarterly reports on time, with enough advance before Executive Board meetings.</p> <p>Partners are urged to put maximum attention on the reporting activity and to collect their internal data on monthly basis.</p> <p>Mr. Angelini informed that 8 scientific publication are to be produced as per GA. He suggested 8 topics and Partners gave some proposals.</p> <p>Topics proposed:</p>

4th Consortium General Assembly – Italy – 11th of April 2019

	<ol style="list-style-type: none"> 1. Study of the ship collision - NP 2. Comparative study of the ship with and without Air Cavity System - NP 3. Natural Gas Thermodynamics during loading/unloading phases - CENERGY 4. Technological tests on liners stainless steel AISI 304 - CNGV 5. Technological tests on carbon fiber -CNGV 6. Cylinders burst tests – comparative study between theoretical previsions and real data gathered on field with reference to safety issues – CNGV/BMPlus 7. Decision support model - ESTECO 8. Topics of great interest in the CBA – SINTEF/CHC <p>The progress of the deliverables to be issued between May and June 2019 has been reported by Mr. Angelini to all Partners involved. No issues have been reported.</p> <p>Milestone 4 supposed to be achieved by May 2019: BMP reported no issues for the achievement.</p> <p>Interested Lead Beneficiaries have been informed that Deliverables D2.1 and D9.1 are considered by EU as “live” documents that must be kept updated all along the duration of the Project</p> <p>WP3 & WP4 progress presentation by CNGV and BMP. Partners CNGV and BMP presented the status of the activities of WP3 and 4. Please refer to the relevant presentations for additional details.</p> <p>Third liner is under production and will be hydroformed and used to optimize the final configuration of the other liners. By September 2019 the first carbon fiber wrapped cylinder will be produced. The winding system features some innovations.</p> <p>WP5 Ship Design by NP NP at present, seen the work done so far, is trying to reduce the ship costs and therefore some modifications to the ship design will be necessary and are in progress.</p> <p>For the time being three sizes/types of new ships are foreseen and individuated using the Decision Support Model:</p> <ul style="list-style-type: none"> - 15 mmscm gross gas capacity with side loading/unloading - 10 mmscm gross gas capacity with side loading/unloading - 10 mmscm gross gas capacity with bow loading/unloading facilities and dynamic positioning. <p>Some discussion has been made between the Partners relevant to the upstream-midstream-downstream tariffs. It remains confirmed and agreed that three clearly separated tariffs (€/m³) are to be considered:</p> <ul style="list-style-type: none"> - Upstream tariff - Midstream (waterborne transportation of CNG) tariff - Downstream tariff
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4th Consortium General Assembly – Italy – 11th of April 2019

	<p><i>This will help the interested representatives of the value chain to better define their investment policy and the different requirements of each scenario will be reflected in the relevant specific tariffs.</i></p> <p><i>NP and HLL have agreed to meet on the end of May next, to deepen the ships' OPEX calculations (consumptions, maintenance costs, harbor taxes, crew costs, insurance coverage, etc.). In addition, based on the updated General Arrangement plan, Technical Specification and Light Ship weight estimate, NP will ask HLL to try to obtain quotations from Chinese or Korean shipyards for the ships' construction, to be compared with the European yards' costs.</i></p> <p>WP6 progress presentation by Borys Shvets VTG <i>VTG informed Partners that instead of issuing 8 interim reports as previously scheduled, they will integrate all the reports in the final one, in order to avoid duplications and to provide clear information. The study of the loading/unloading areas will include both the scenario in which a gas storage is present, and the scenario in which no storage is necessary.</i></p> <p>WP5/6 SHIP COMPRESSORS AND LOADING/UNLOADING STUDY by Cenergy <i>CENERGY presented the study on the compressors and gas thermodynamics for the ship loading/unloading facilities. Please refer to the relevant presentations for additional details.</i></p> <p><i>The study will be presented at MOSES2019 in Glasgow on May next and is ready to be published on scientific journals.</i></p> <p>WP7 progress presentation by Spartaco Angelini on behalf of Agathe Riiland SINTEF <i>During the meeting held in Norway on March 2019, there was a fruitful discussion between NP, CHC, CNGV, SINTEF and several crucial points were clarified (ref. discussion on the scenarios and the discussion on the offshore loading/unloading and mooring concepts). The objective of WP7 were agreed and the main deliverables discussed.</i> <i>SINTEF will prepare a detailed plan and information to WP7 participants.</i> <i>The strategy is to work together as core group, not dividing tasks unnecessarily, to have as few interim reports as possible, and work on common sharing platform.</i> <i>A workshop is scheduled with CHC, SINTEF, ABS on May 2019.</i></p> <p>WP7 Decision Support model in WP3/5/8 by EST <i>Esteco presented their Decision support model and the use within WP3, 5, 7 and 8.</i></p>
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4th Consortium General Assembly – Italy – 11th of April 2019

	<p>Within WP7, following some partners' interventions, it has been suggested to include the possibility of change the number of operative days p/year in order to evaluate a more appropriate capacity of a gas storage.</p> <p>Within WP3, the characteristics of the materials have been discussed together with CNGV and presented to Partners.</p> <p>WP8 Class Design Review by ABS ABS presented their activity and informed the Partners that they already issued a Risk Matrix and a full report relevant to the Ship Design is almost ready. They issued 27 recommendations after the meeting held in Trieste in February 2019.</p> <p>WP9 Communication, Exploitation and Dissemination activities by PNO Alessia Di Loreto PNO presented the activities performed within WP9 and informed the partners that the already issued Plan for Exploitation and Dissemination (PEDR) will be continuously updated up to the end of the project.</p> <p>During this meeting, the Consortium realised the need for more detailed studies not included in the Gasvessel scope of work, and will concentrate in the next future to focus on parallel interested topics, possibly to be included in the next EU H2020 or Horizon Europe research programs.</p> <p>The works of the Meeting are concluded at 1700.</p> <p>Almost all Partners remained in Trieste to attend, the day after, the Workshop arranged by PNO on the IPR</p>	
Action Decided		
	Action Item	Partner Responsible
		Due Date
List of Attachments:	<ol style="list-style-type: none"> 1. Status of project activities, presentation by CNGV 2. Status of project activities, presentation by BMPlus 3. Status of project activities, presentation by VTG 4. Status of project activities, presentation by CENERGY 5. Status of project activities, presentation by ABS 6. Status of project activities, presentation by PNO 7. Status of project activities, presentation by ESTECO 8. Signed attendees list 	
Comments on Meeting effectiveness, if any	<p>Meeting confirmed the good relationship between the Partners and the strong spirit of cooperation, oriented to a fair execution of tasks, to smooth sharp edges over and to achieve GASVESSEL Project goals.</p> <p>Next Consortium General Assembly on October 2019 in Buttrio, Italy</p>	