



Minutes of Meeting

7th Consortium General Assembly MoM no.034

Meeting Date:	27 th May 2021		
Meeting Location:	Web conference in remote		
Meeting requested by:	Coordinator		
Purpose, Objectives and Elements of the Meeting with ref to WPs and relevant tasks (as per Meeting Agenda)	7 th Consortium General Assembly and 12 th Executive Board Meeting		
Minute prepared by:	S. Angelini – Project Manager		
Attendees approval Date:	2021.06.04		
Attendees:	 NAVALPROGETTI: Loris Cok, Alessia Ghersenti, Luciano Manzon, Omar De Palo, Spartaco Angelini DOW DOWAKSA PNO: Oscar Smulders, Proletina Sabotinova VTG Boris Shvets SINTEF OCEAN: Agathe Rialland BM Plus: Francesca Bozzi, Paolo Maschio, Giuseppe Monteverdi CNGV: Giovanni Fratti CENERGY: Michele Capobianco, Tancredi Chinese HLL: Marc Elsholz CHC: Nicolas Droushiotis ESTECO: Alberto Clarich, Luca Battaglia, Rosario Russo, Zhongli Wen ABS: Stavros Niotis, Maria Sokou TRIPLE A TECH (TAT): Oksana Pilatova MIB Italiana: Luca Chiodetto, Silvia Saggiori 		
Summary of Significant Results			
	This meeting is in remote due to Covid-19 travel restrictions. The General Assembly meeting is valid according to Consortium Agreement statements. Meeting starts at 0930 AM Scope of the Assembly is to have outlined the present status of the Project together with the main actions that are to be developed by the Partners in the last months of the Project itself.		





To allow the Assembly to be clearer and more agile, only the presentations of the main WPs having important "works in progress" were displayed as per approved Meeting Agenda:

WP1, WP5 – by NP (see attached)

WP4 – by BMP/CNGV (see attached)

WP8 – by ABS (see attached)

WP7 – by SINTEF OCEAN (see attached)

WP9 - by PNO (see attached)

Discussion:

- Informed Partners about the availability of the amended Grant Agreement and about the extended project duration up to end of Jan 2022
- Informed Partners that the HAZOP session has been done
- Ordered the last 4 (+1 option) liners for the final homologation tests of gas cylinders
- Evidenced again to Partners what CFS is, who shall present it and when and the importance to urgently appoint the external independent auditor as the audit must cover all the 56 months of the Project
- Partners invited to force the preparation of the final report in order to be able to send it to EU on the end of Feb 2022 at the latest
- For the time being 2 scientific publications and 2 lectures are missed. Partners invited to make proposals and/or provide directly
- Lead Beneficiary of WP4 to inform weekly the Coordinator about the progress of activities in the experimental prototyping pilot line
- At least 2 of the 3 Scenarios identified during the beginning of the project may have geo-political constrains. It is still unclear how such constrains will impact on the cost comparison calculations between CNG/LNG/Pipeline that is part of the CBA in WP7. To avoid cost comparison to be affected by the geo-political constrains or political decisions already taken by someone somewhere, NP suggest to apply the cost comparison to an ideal scenario agreed between the involved Partners and, only after the completion of this comparison, to parachute the results, obtained with this suggested parametric way, into the real scenarios accordingly. It remains confirmed that costs must be kept separated between upstream-midstream-downstream phases of the trade because there are potential future users that are already working keeping them separate. **CHC:** The





identified alternative scenarios will help the team to develop a technology map for comparing Gasvessel with alternative options. The more points we have the better for developing the specific graph. There is no reason to introduce geopolitics into technoeconomic equations at this point because by removing options will only provide us with less material to work with for developing the specific graph. Once we develop the technology map with the identified scenarios, we may evaluate additional options to improve clarity (if required) on the battery limits of Gasvessel technology. Also, regarding the use of ideal scenarios for Gasvessel. Having an ideal scenario for Gasvessel does not help comparison studies against alternative scenarios. An ideal scenario should be applicable for all different types of monetization concepts. Therefore, introducing ideal scenarios will not help WP7 to conclude on the sweet spot for applying the specific technology. If for example, the ideal case for applying the Gasvessel concept is finding the ideal distance to market, market volume, minimum number of vessels, no storage then this should be a result produced from this study and compared to other technologies. CHC remains very open to discuss any specific matters related to WP7 together with the WP Leader in future meetings.

- Partner ABS requires to include in Deliverable D7.3 a comparison relevant to the potential environmental benefits of CNG vs LNG.
- Partner ABS need a report from BMP/CNGV relevant to all tests done up to now as shown in the CNGV presentation
- Partner ABS informs that will need to receive the useful data to perform the FMECA analysis of CNG Cylinders (potential failure modes)
- ABS will inform BMP/CNGV about the dates of his field attendance to the tests on the last cylinders (end of June/early July)
- TAT ask CHC for possible info about East Med Pipeline project: CHC informs that requested info are confidential and belonging to the pipeline Design Company and consequently cannot be disseminated. CHC: Please note that there is enough information in the public domain regarding the specific project that TAT may utilize if TAT wishes to execute any specific studies. CHC is always available for consultation, within the scope of this project
- MIB, from its privileged position of market leader in Onshore & Offshore Oil & Gas transfer systems, informs





the Assembly that the CNG loading and unloading in			
offshore conditions is technically feasible and there are			
Projects already doing so with equipment in operations.			

	Assembly closed at 0130 PM		
Action Decided			
Action Item	Partner Responsible	Due Date	
1. WP8- Additional Special Studies may be needed by ABS based on HAZOP and FMECA	ABS, NP, CEN, EST, CNGV	Within end of summer 2021	
2. ABS Basic Design Approval Review	ABS, NP, CEN, EST, CNGV	Within end of summer 2021	
3. Provide ABS with a report relevant to the tests performed up to now on CNG Cylinders and relevant production methods applied	BMP, CNGV	Within end of June 2021	
4. D7.1 – Update midstream costs calculations and validation	SINTEF, NP, CEN, EST, CNGV, HLL, TAT	Preliminary meeting TBD, completion within 31st October 2021	
5. D7.2 – Comparative analysis	SINTEF, CHC, TAT	Completion of data collection during July-August 2021, completion within 31st October 2021	
6. D7.3 Cost-Benefits Analysis	SINTEF, CHC, NP, CNGV, CEN, EST, HLL, ABS, TAT, other TBD	Workshop within end of June 2021, completion within 31 st October 2021	
7. WP7 – Publication "Managerial methods for selecting best vessel fleet for transportation of stranded natural gas" with potential for CO2 and hydrogen transportation	SINTEF, EST, CHC and NTNU University	Works in progress. Date TBD	
8. WP7 – Exploitation potential for Gasvessel in Norway-region	SINTEF, TAT	Meetings with Norwegian actors from June to October 2021	





9. According to Articles 5.2	All Partners receiving EU	CFS takes time to prepare
and 6.2 of the Grant	contribution equal or above €	and must be submitted
Agreement, a Certificate on	325.000	along with the final
the Financial Statement (CFS)		periodic report. Ensure that
is required to be provided for		the CFS covers the whole
each beneficiary or linked		project duration. The CFS
third party whenever their		must be issued by a
total requested EU		qualified auditor and must
contribution for actual costs		follow the template in
and unit costs is €325,000 or		Annex 5
above.		to the Grant Agreement.
		Failure to provide an
		adequate CFS will delay and
		potentially also reduce the
		final payment.
10. The lead beneficiary ABS	Coordinator	ASAP
Hellenic ask info about how		
to manage the presence of its		
third-party ABS Consulting		
(UK) in the CFS		
11. Deliverables D2.1 and	CHC, PNO	Within end of the Project
D9.1 are live documents.		
Need to be updated at least		
once before the end of the		
project		
List of Attachments:	Partner presentations	

The General Assembly is also valid as Executive Board meeting.

Next and last General Assembly end of November 2021, Location TBD