PROMOTING LNG AS A LOW CARBON FUEL IN MARITIME AND INLAND NAVIGATION REGIONS (BLUGAS4EU)

Interreg Europe Programme 2014-2020, 2nd Call

Manfred Seitz, General Secretary
June 2016
What is Pro Danube International?

Platform of private companies with strategic economic interest in better framework conditions and higher public investment in the Danube transport & logistics system.

- Established autumn 2011 by companies & associations
- Non profit association based in Vienna
- Network of currently more than 140 companies
- More than a lobbying organization as we initiate and execute projects through the service company Pro Danube Management GmbH
- More info on: [www.prodanube.eu](http://www.prodanube.eu)
PDI Priorities & LNG Activities

1. Establish and ensure effective waterway infrastructure management
2. Execute pre-defined TEN-T bottleneck infrastructure projects
3. Develop the Danube Ports into effective centers of intermodal logistics and industrial growth
4. Facilitate the modernisation of the Danube fleet
5. Abolish all unnecessary administrative barriers for waterway transportation
6. Optimize financial support schemes of the European Union to stimulate investment in the sector

<table>
<thead>
<tr>
<th>Year</th>
<th>Activities</th>
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<tbody>
<tr>
<td>2013</td>
<td>• Project support for Bomin Linde GmbH for grant application TEN T</td>
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<td>2013-2015</td>
<td>• Coordinator LNG Masterplan for Rhine/Meuse-Main-Danube</td>
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<td>2015</td>
<td>• Project support: Shell Downstream LNG BV for grant application REALNG</td>
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<td>2016</td>
<td>• Project support: ENGIE LNG Solutions BV for grant application INtoLNG</td>
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<td>2016</td>
<td>• Project support: Klaipedos Nafta for grant application BLUEBaltics</td>
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<td>2016</td>
<td>• Project proposal for grant application BLUGAS4EU</td>
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<td>Under preparation 2016</td>
<td>• Implementation projects for LNG terminals in Galati &amp; Constanta (RO)</td>
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<td>• Implementation project for LNG in Upper Austria</td>
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<td>• Support to LNG projects in Slovakia</td>
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• Implementation project for LNG terminals in Galati & Constanta (RO)
• Implementation project for LNG in Upper Austria
• Support to LNG projects in Slovakia
LNG Masterplan Project in a Nutshell

ELABORATION OF TECHNICAL DESIGN AND OBTAINING PERMITS

LNG BUNKER STATION IN THE PORT OF ANTWERP
Capacity: 400 m³ of LNG
Facilities: storage of LNG and CNG, bunkering inland ships with LNG, fueling road transport with LNG & CNG
Investment & operation: by concessionaire
Start of operations: by January 2019

FEASIBILITY STUDIES INVESTIGATING BUNKER OPTIONS

LNG INFRASTRUCTURE IN THE PORT OF MANHEIM
Capacity: 800 m³ of LNG
Facilities: LNG storage, truck fuelling, vessel bunkering
Estimated investment: 6-7 MEUR
Operational costs/year: 250,000 EUR
Interested investors are welcome

LNG INFRASTRUCTURE IN THE PORT OF SWITZERLAND
Capacity: 1,000 m³ of LNG
Facilities: LNG storage, truck fuelling, vessel bunkering

Rhine/Meuse-Main-Danube: LNG ARTERY FOR EUROPE
Inland navigation functions as pioneer consumer and facilitator

DEPLOYMENT

LNG TERMINAL – RUSE (BG)
Location: in the port area in Ruse (river Danube) - former heavy machinery building factory grounds
Capacity: 4 vertical tanks of 226 m³ of LNG (total 1,000 m³)
Facilities: storage, vessel (un-)loading facility, truck & vessel fuelling station

(PRE-)FEASIBILITY STUDIES & TECHNICAL CONCEPTS

LNG FLOATING TERMINAL IN BRATISLAVA & KOMARNO (SK)
Size: 126 x 24 m (L x W), Deadweight: 2 m
Capacity: 12 x 350 m³ of LNG
Facilities: LNG storage, vessel bunkering, facilities for other services, e.g. ship waste reception facilities, potable water, etc.

LNG TERMINAL – GALATI (RO)
Capacity: 4,000 m³ in semi-presured tanks (option to increase up to 8,000 m³)
Facilities: LNG storage, truck fuelling, vessel bunkering
Estimated Investment: 17 MEUR

SMALL SCALE LNG TERMINAL – CONSTANTA (RO)
Capacity: 5,000 m³
Facilities: LNG storage, (un-)loading of (smaller) seagoing vessels, fuelling of inland vessels and trucks
Facilitate sufficient LNG fuelling infrastructure (enforcement of DAFI, provision of adequate locations, efficient & fast permitting procedure, incl. environmental), provide infrastructure for intermodal LNG logistics.

Increase awareness on socio-economic benefits of LNG, inform on safety requirements and standards for LNG infrastructure & operations, ensure implementation of Action Plan.

Minimise methane slip of engine & along LNG supply chain, facilitate production & use of advanced gas engines, manage boil-off on inland vessels, reduce bunkering time to comparable values with traditional fuels, facilitate retrofitting of vessels, reduce unit costs of LNG equipment, initiate continuous research on required safety levels for LNG equipment & operations.

Provide regulatory framework together with competencies required in handling of LNG for various personnel, facilitate EU-wide acceptance of E&T related to LNG, improve availability of and access to E&T, improve quality of LNG-related education through dedicated learning tools, ensure recognition & certification of E&T institutes, endure capacity of emergency responses.
Implementation of LNG Masterplan - four major Instruments Proposed

**IMPLEMENTATION OF LNG MASTERPLAN ACTION PLAN**

*Governance & Technical Measures*

**Program Support Action (PSA) 2016-2018**
LNG Masterplan Action plan being implemented under coordination of EC DG MOVE and in cooperation with other relevant organisations

**AWARENESS & PROMOTION CAMPAIGN OF LNG PLATFORMS**

*Market-side Measures*

Interreg Europe / PSA 2016-2018
Strong cooperation of LNG Platforms along multi-annual work programme as EU project

**IWT LEAD PROJECTS FOR LNG INNOVATIONS**

**Horizon 2020 (Call 2017 & 2018)**
With dedicated LNG research agenda – technology platform project to advance LNG technologies & searching for synergies with road & maritime sector

**DEPLOYMENT PROJECTS**

*IWT infrastructure & vessels and synergies with road & maritime sector*

CEF Pilot Projects
National Programmes
Interreg Programme
EFSI Blending
BLUGAS4EU Project at a glance

- Funding program:
  - Interreg Europe 2014-2020

- Investment priority
  - 3.1. Improving low-carbon economy policies

- Member States involved:
  - Austria, Germany, Greece, Netherlands, Poland, Portugal, Romania, Spain

- Coordinator: Valencian Institute of Business Competitiveness (ES)

- Implementation period:
  - 01.03.2017 – 28.02.2021

- Total Budget: 1,414,000 EUR

- Overall funding rate: 80.55 %
Objectives of the project

- BLUGAS4EU is a regional cooperative action of:
  - 8 European countries: Austria, Germany, Greece, Netherlands, Poland, Portugal, Romania, Spain AND
  - 5 regions: Baltics, NorthSea-Rhine, Danube, Mediterranean, Atlantic

  to exchange their knowledge and best practices regarding low carbon solutions for maritime shipping, inland navigation and ports in order to foster decarbonisation of freight transport

- BLUGAS4EU aims to:
  - facilitate regional cooperation
  - improve the effectiveness of regional and national policies oriented to favour the adoption of LNG as main fuel for maritime and inland waterways transport
  - promote the exchange of experiences among partners who are responsible for facilitating the appropriate regulatory framework for natural gas adoption as a maritime and inland navigation fuel
  - Facilitate the transition to low carbon economies, improving energy efficiency and increasing decarbonisation of maritime and inland navigation transport sectors

- The project will contribute to:
  - the definition of Action Plans at regional and national level that prepare the necessary funding programs to increase the use of low-carbon transport options and be funded from regional Territorial Cooperation Programs (ETC) or Growth & Jobs programs in order to accelerate the adoption of LNG as alternative fuel in European maritime and inland waterway transport
Work Breakdown Structure & Timeline

PHASE 1

2 years
1.03.2017 – 28.02.2019

WP 1 Management & Coordination
- SWP 1.1 Project Administration
- SWP 1.2 Financial Management & Controlling
- SWP 1.3 Management of Stakeholders Group

WP 2 Communication & Dissemination
- SWP 2.1 Project Promotion & SWP 2.2 Project Dissemination

WP 3 Regional / national framework analysis
- SWP 3.1 Status Quo Analysis
- SWP 3.2 Identification of existing barriers to the uptake of alternative fuels & development of necessary infrastructure
- SWP 3.3 Involvement of national & regional authorities / international organisations & stakeholders

WP 4 Identification & Transfer of Good Practices
- SWP 4.1 Collection and facilitation of transfer of good practices
- SWP 4.2 Execution of meetings with responsible authorities for the management of the policy instruments identified
- SWP 4.3 Elaboration of case studies on practical implementation examples

WP 5 Implementation and Capitalization
- SWP 5.1 Awareness campaign and Education & Training for relevant stakeholders groups
- SWP 5.2 Elaboration of regional action plans

PHASE 2

2 years
1.03.2019 – 28.02.2021

WP 1 Management & Coordination
- SWP 1.1 Project Administration
- SWP 1.2 Financial Management & Controlling
- SWP 1.3 Management of Stakeholders Group

WP 2 Communication & Dissemination
- SWP 2.1 Project Promotion
- SWP 2.2 Project Dissemination

WP 5 Implementation and Capitalization
- SWP 5.3 Monitoring of the action plans implementation
Project Consortium & Next Steps

**Partners**

1. Valencian Institute of Business Competitiveness / ES – LEAD PARTNER
2. Valenciaport Foundation for Research, Promotion and Commercial Studies of the Valencian region / ES
3. University of Valencia / ES
4. Pro Danube International / AT
5. University of Applied Sciences Upper Austria / AT
6. National Technical University of Athens (NTUA) / GR
7. Motus Foundation / PL
8. Energy Valley Foundation / NL
9. Pro Danube Romania – Association for the promotion of transport on the Danube / RO
10. MARIKO Maritime Competence Centre / DE
11. Directorate for Transports, Azorean Government / PT
12. Port of Rotterdam / NL – ADVISORY PARTNER

**Next Steps**

- Project proposal under evaluation (end of 2nd Call: 13 May 2016)
- Evaluation results available - by October 2016
- Signing of Consortium Agreement - December 2016
- Project start: March 2017
Further information

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