

LNG Masterplan for Danube-Main-Rhine

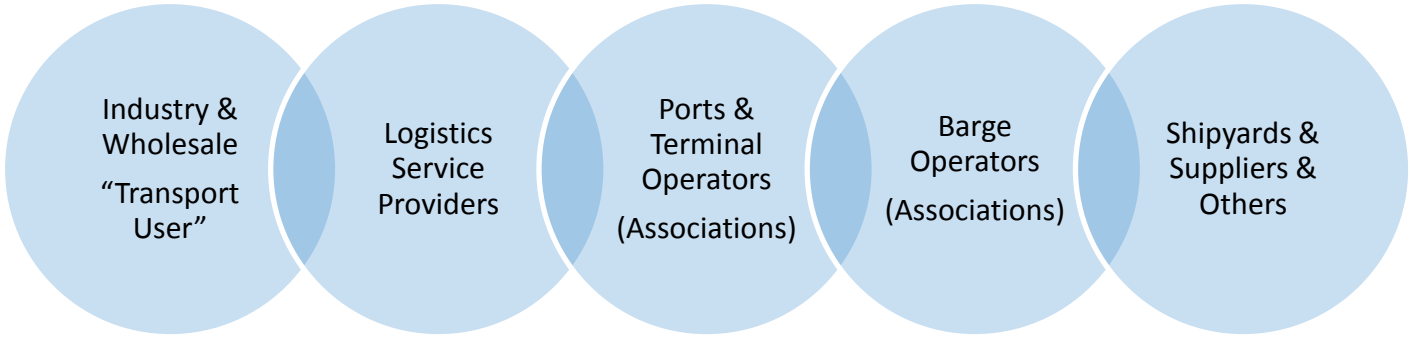
Proposal for the TEN-T Project

Manfred Seitz, General Secretary

LNG High-Level Seminar, Constanta, 25 January 2013

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 120 companies
- More than a lobbying organization as it initiates and executes projects which improve framework conditions resulting into a higher use of the Danube

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What is the rationale for the project?

- There is a strong need to modernize Danube fleet in order to improve environmental and economic performance
- LNG as fuel will significantly reduce vessel emissions (-20% CO2, -80 to 90% NOx, almost zero PM & SOx) and will increase the competitiveness of Danube transport (fuel cost savings relate into lower transport costs of est. up to 15%)
- Further CO2 reduction possible by blending with BIO-LNG
- LNG as cargo will increase transport volumes and will offer energy (cost) savings to many industries in the entire region
- **But, implementation of LNG requires co-ordination of public and private actions along a well defined strategy. This is why we need a transnational**

MASTERPLAN
FOR THE IMPLEMENTATION OF LNG ON THE DANUBE

In line with European Union Climate Action - Climate Energy Policy (2009), with Europe 2020 – New Economic Strategy; White Paper on transport; NAIADES and in particular with EUSDR

What is the aim of the Masterplan?

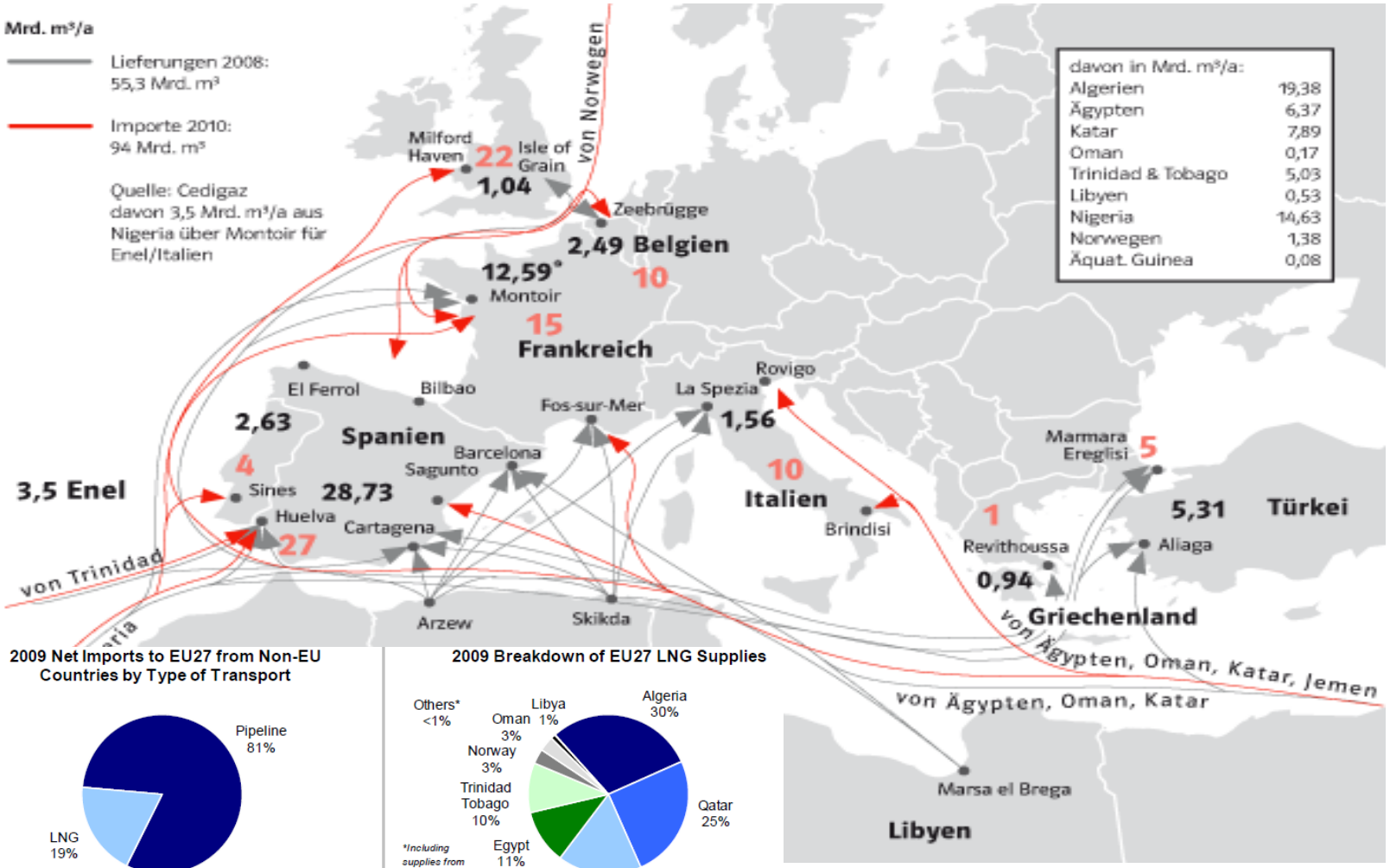
- To investigate into the costs and benefits of the implementation of LNG as fuel and as cargo for the Danube fleet
- To identify obstacles and to elaborate **solutions for cost-effective and stepwise deployment** in co-operation of public authorities and private industry
- To provide **assessment of potential LNG pioneer markets** in the hinterland of river ports and to explore this markets as part of a hub & spoke distribution concept
- To co-ordinate and to harmonize public legislation and public – private investment; to prepare full scale implementation of LNG as fuel and cargo & optimize EU funding
- To bring know how from Northern Europe & maritime sector to Central/ South Eastern Europe and to the Danube navigation sector
- It will develop a **comprehensive strategy together with a detailed roadmap** for the implementation steps in line with EU transport/energy/environmental policy goals and actions

Masterplan LNG – What is the concept?

- Project in the EU TEN T program: published 28.11.2012, deadline 26.03.2013
- Project start in Q3/2013 (with the Decision) with cost reimbursement as from January 2013
- Project duration 3 years: 1.1.2013 – 31.12.2015
- Feasibility phase (2013-Q2/2015) & Preparation & pilot deployment (Q3/2014-2015)
- Transnational consortium made up by:
  - national administrations, vessel classification societies
  - barge operators, terminal operators in river ports & related seaports,
  - vessel engine producers, technical equipment providers, terminal planers & suppliers,
  - education & training institutions, shipyards, gas industry, etc.
- Close interaction with related MoS projects and actions in maritime sector
- Industry reference groups & inferfaces for involvement of 3rd countries (SER, UA, MD) as well as overseas technology providers
- Project volume (depending on partner commitment & pilot deployment): 25–50 million € (50% EU funding)
- Project co-ordination by Pro Danube Management GmbH

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LNG Supply & Distribution in Europe



2009 Net Imports to EU27 from Non-EU Countries by Type of Transport

Source: 2010 Eurogas Statistical Report, The European Union of the Natural Gas Industry

2009 Breakdown of EU27 LNG Supplies

Source: 2010 Eurogas Statistical Report, The European Union of the Natural Gas Industry

Source: PREEF Research, 2011

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Danube Ports for LNG distribution to the hinterland



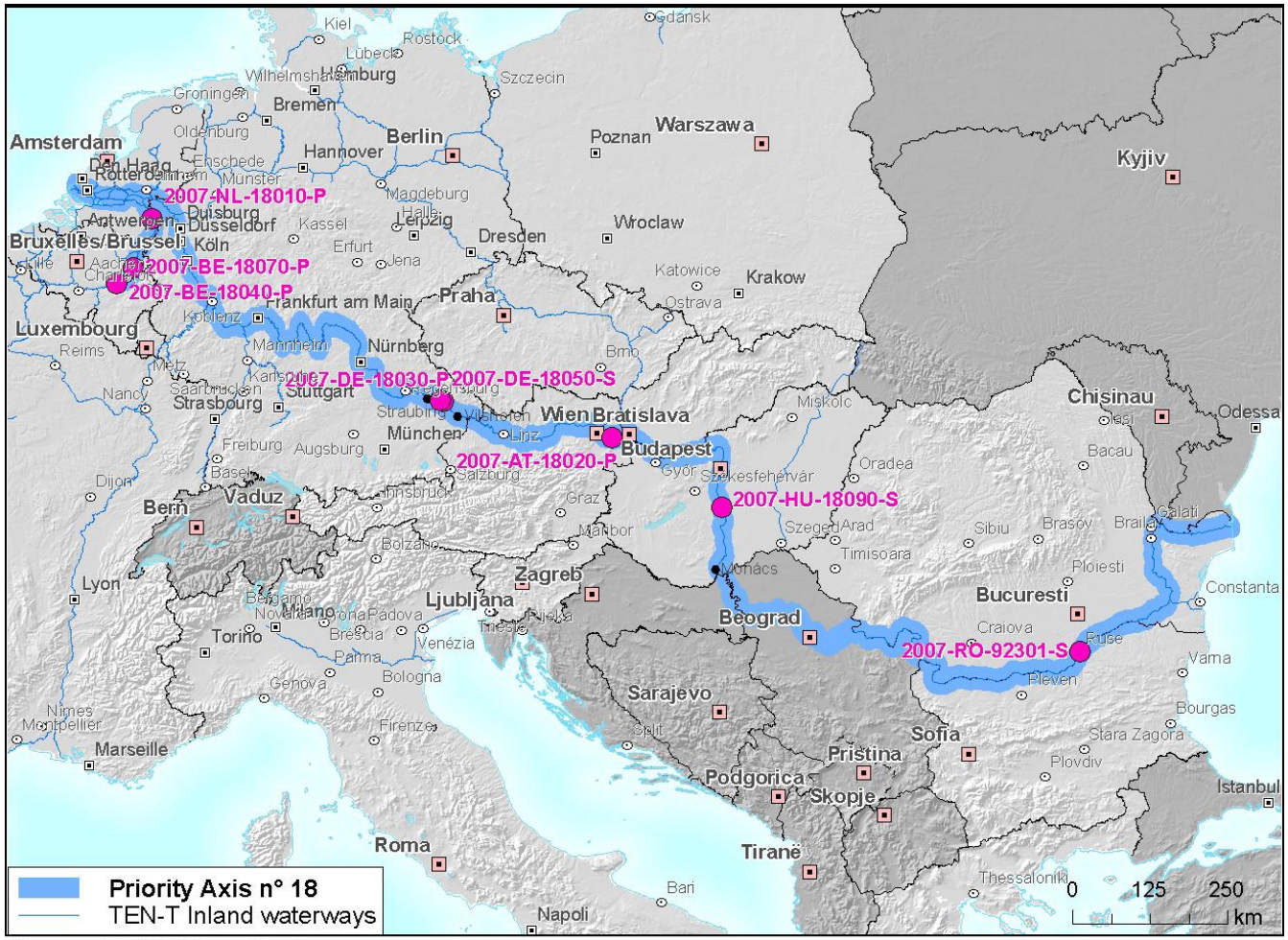
Danube = GREEN „BLUE GAS CORRIDOR“

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Proposed Work Breakdown Structure



TEN-T Call 2012



Source: TEN-T Executive Agency

Specific objectives: ***Priority project 18 „Rhine – Main - Danube“***

- Eligible are (1) Member States themselves as well as (2) international organisations, joint undertakings or public or private undertakings from EU Member States
- Applications submitted by (2) **shall be presented with the agreement of the “Member State(s) concerned” *[Ministries of Transport]*** (= Member States on the territory of which the Action will be implemented; in this case the Member States along PP18)

Where does the Masterplan refer to? –TEN-T Call 2012

TEN-T aid may be granted to:

> *„Studies that lead to implementation of **innovation and new technologies** for transport, infrastructure and facilities contributing to decarbonisation or the reduction of external costs in general“*

SCOPE

> *Development of the necessary TEN-T **infrastructure and facilities that will support the use of alternative fuels** and propulsion replacing fossil fuels, including … CNG, **LNG**, including **LNG bunkering vessels** and biofuels as well as any combination thereof. Facilities may include also **emission reduction technologies** and **energy storage equipment** installed in the vehicles.*

Partnership structure (status 18.1.2013)

- **Barge & terminal operators**
  - Ports / terminals: Rotterdam, Strasbourg, [Basel], Komarno, Constanta
  - Ports / terminals under negotiation: Antwerp, Duisburg, Baja, Ruse, Linz
  - Fleet operators: Chemgas, TTS Group,
  - Fleet operators under negotiation: Fluvius, Mahart, Mercurius, Rhenus
- **Technology / Equipment providers & Shipyards**
  - Shipyard Komarno, Stroje a Mechanismy, a.s., HAM Group
  - Under negotiation: Linde, Cryonorm Systems BV, Holland Innovation team, Damen Shipyards, GTT, Westport, Wärtsilä
- **Classification societies / Technical offices / Financial Institutions / Universities & Research Institutions**
  - Germanischer Lloyd, DST, Uni Duisburg, STC Group, Ceronav, FH Steyr, TU Wien, Ister Trans, TNO, Ballast Nedam
  - Under negotiation: Bureau Veritas, Lloyd Register, Seatech Engineering, Univeristy of Craiova
- **Gas / oil industry / Energy**
  - EVN, Salzburg AG
  - Industry reference group: OMW, Gazprom Germania, MOL
  - Under negotiation: Overgas, SNG
- **LNG End users (truck business / energy industry sector) & Logistics**
  - NGVA (CZ)
  - Under negotiation:, Rolls Royce, Iveco

Political support (Member States concerned)



Next steps – Project timeline

- **Elaboration of project proposal: Danube & Rhine development scenarios (on-going)**
- **Identification and assignment of stakeholders (on-going)**
  - Non Disclosure Agreement, LOI, Proposal Fee Agreement
  - “Tour de Capital” (National authorities, industry stakeholders in Danube region)
- **Phasing-in of project partners & assignment of responsibilities (on-going)**
- **Integration of stakeholders from North & Western Europe & maritime sector (on-going)**
- **Project presentations at DG Move, DG Regio and TEN EA (ongoing)**
  - Clarifications on open questions related to call, informative meetings with representatives to provide up-to-date status of the project preparation
  - Integration of project into European Union Strategy for the Danube Region (EUSDR)
- **Clarifications the open issues in the regulatory framework with CCNR and authorities (incl. integration of the Classification societies)**
- **Building-up project management structures, incl. Steering committee, Advisory bodies, etc. (on-going)**

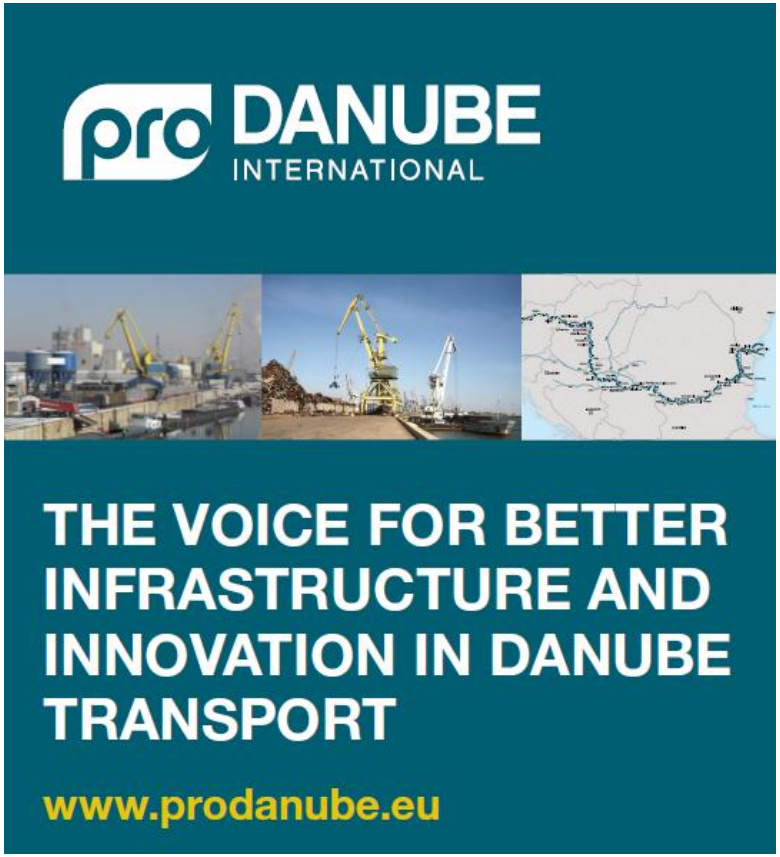
Conclusions

- **EU- wide Masterplan will overcome “Chicken and Egg” – situation**
- Provides an appropriate project plattform and fosters a co-ordinated & structured development & pilot deployment for LNG terminals and vessels
- Provides basis of an European wide legal & organisational framework for development & deployment of LNG (vessel technical regulations, terminal regulations, etc.)
- Inland navigation will be more competitive and the most environmentally friendly transport mode; LNG as cargo will increase the political awareness for the Danube as import transport resource
- Inland barging sector is a pioneer market for LNG as fuel and a cost-effective transport solution to reach European hinterland
- Inland terminals will functions as satelites to the hinterland enabling to reach other pioneer markets like public (transport) sector and heavy duty transport industry (buses, garbage collection trucks, city logistics)
- **The LNG masterplan will pave the way for a full scale-deployment and provides guideance for public and private investment as well as for EU funding**

Further information

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