



From strategy to action - TEN-T and CEF green projects

Mihaela Marcu– Project Officer
Innovation and Networks Executive Agency - INEA
Unit C1-Baltic Sea, MoS & ERTMS

Maritime Shipping and Environment Protection
Hamburg, 26 May 2016



INEA

- **INEA** – European Commission executive agency, is the successor of the **TEN-T EA**
- Currently mandated to provide **technical and financial implementation of EU co-funded projects** under the following EU programmes:
 - ✓ **Connecting Europe Facility (CEF)**
 - ✓ **Horizon 2020** (Smart green and integrated transport; Secure, clean and efficient energy)
 - ✓ **Legacy programmes: TEN-T and Marco Polo 2007-2013**



INEA

Mission statement: *its mission is to support the Commission, project promoters and stakeholders by providing expertise and high quality of **programme management to infrastructure, research and innovation projects in the fields of transport, energy and telecommunications**, and to promote synergies between these activities, to benefit economic growth and EU citizens.*

Main objectives for the maritime sector:

Grants to EU public and private initiatives promoting:

- Sustainable and competitive maritime transport, including **deployment of alternative fuels and of reception facilities for oil and other waste**
- Deployment of innovation and new technologies actions, including ICT
- Safety of the maritime transport

Allocations

Funds for the period 2014-2020 for **CEF - €27.4 billion** out of which: **€22.4 billion for Transport**, €4.7 billion for Energy, and €0.3 billion for Telecom.

Co-funding rates between 20 to 30 % for works and 50% for studies.

For cohesion countries – rates are up to 85% for all types of activities, depending on national envelopes.

Maritime green projects under CEF

All EU LNG projects EU wide:

€296 mln total investments where €122 mln in EU grants, supporting the following objectives:

Promoting Motorways of the Sea:

- **€162 mln total investments; €69 mln in grants**

Innovation in maritime transport:

- **€76 mln total investments; €38 mln in grants**

Ports efficiency and greening:

- **€58 mln total investments; €15 mln in grants**

Other

Electric vessels: €26 mln total investments; €13 mln in grants

Scrubbers (12 Actions) 167.5 mln investments/55.7 mln grants

Waterborne green projects under TEN-T

LNG only:

€564 mln total investments; **€167 mln** in grants

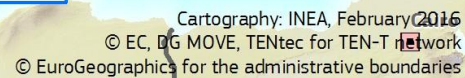
Methanol:

€22 mln total investments; **€11 mln** in grants

Scrubbers:

€ 164.4 mln total investments; **€ 46.6 mln in EU grants**

TEN PRIORITY AXES



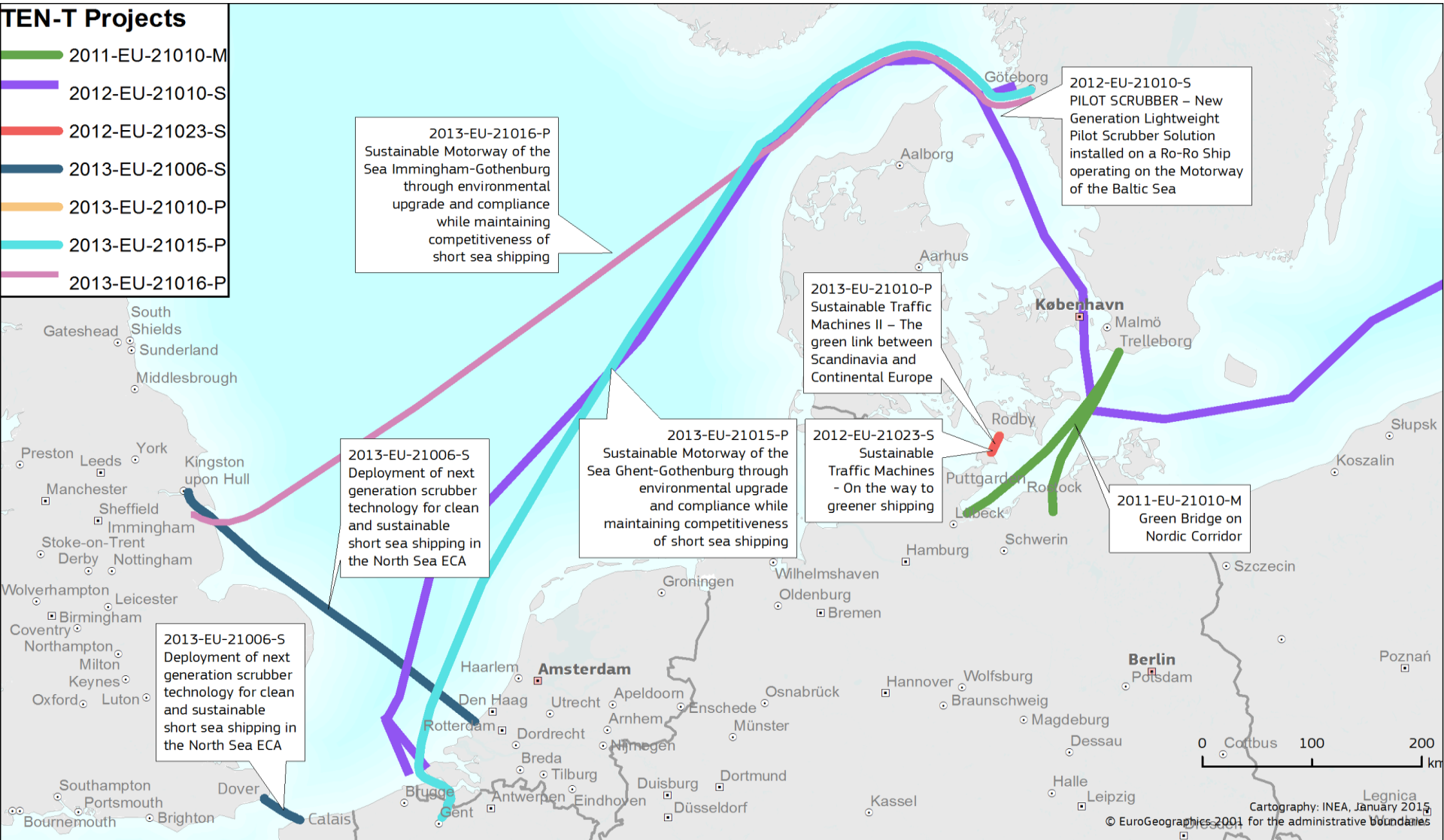


European
Commission

Scrubber projects

TEN-T Projects

- 2011-EU-21010-M
- 2012-EU-21010-S
- 2012-EU-21023-S
- 2013-EU-21006-S
- 2013-EU-21010-P
- 2013-EU-21015-P
- 2013-EU-21016-P



CEF Call 2015 – currently under evaluation

Motorways of the sea:

General envelope: 130 mln

Cohesion countries: 150 mln

Innovation (all modes of transport)

General envelope: 60 mln

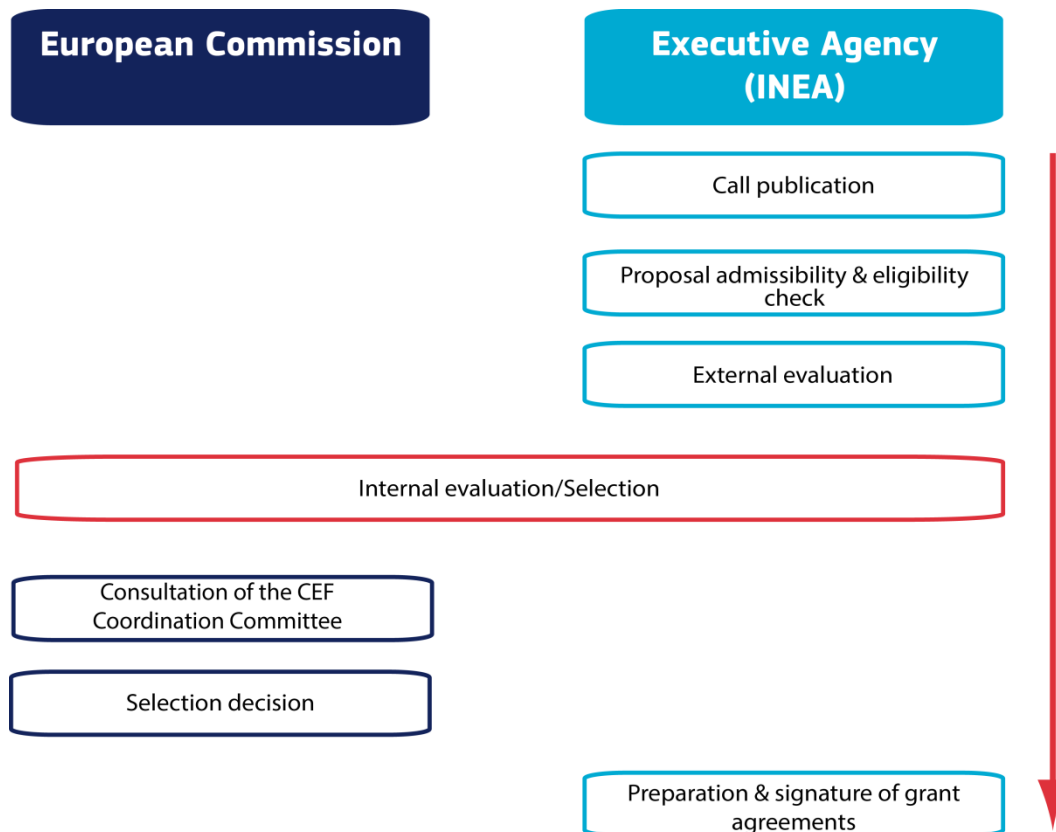
Cohesion countries: 180 mln

Ports (and other modes of transport)

Cohesion countries: 5,37 bln for the Core Network

New list of projects to be communicated in July.

The call process



NEXT call

Please check regularly our website at:

- **<http://ec.europa.eu/inea/en/connecting-europe-facility>**

Examples of actions supported

LNG infrastructure of filling stations and deployment in ships

2010-EU-21112-S

Budget:

Total costs: €26,789,000 - EU funding: €9,569,500

Timing: January 2010 – December 2013

Support for LNG as maritime fuel in the Baltic and North Seas and in the English Channel. Through this pilot Action the design for two new built ro/pax vessels were modified and the vessels were equipped with an LNG propulsion system.

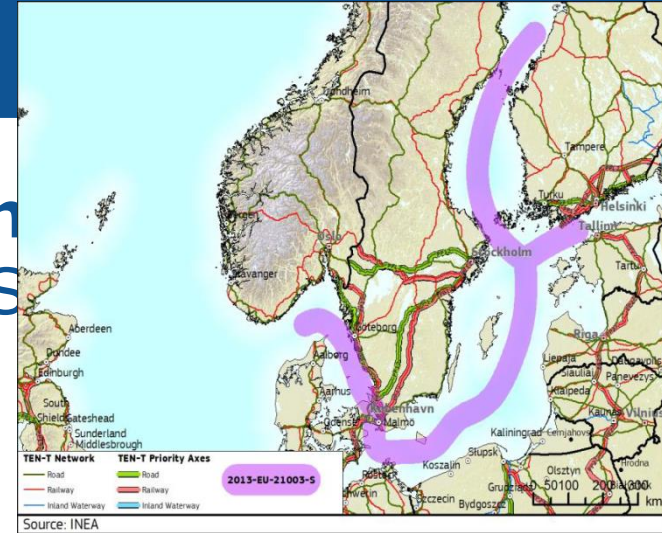


Into the future - Baltic So2lution

2013-EU-21003-S

Total Budget: **€7,259,080**

EU contribution: **€3,629,540**



The action will prepare a Feasibility Study of the Low Emission LNG Engine system and a Supply Chain Case Study. Final and main action is installation of a new low-speed, two-stroke, dual-fuel gas engine using LNG as fuel on a new vessel.

Duration: October 2013 – December 2015

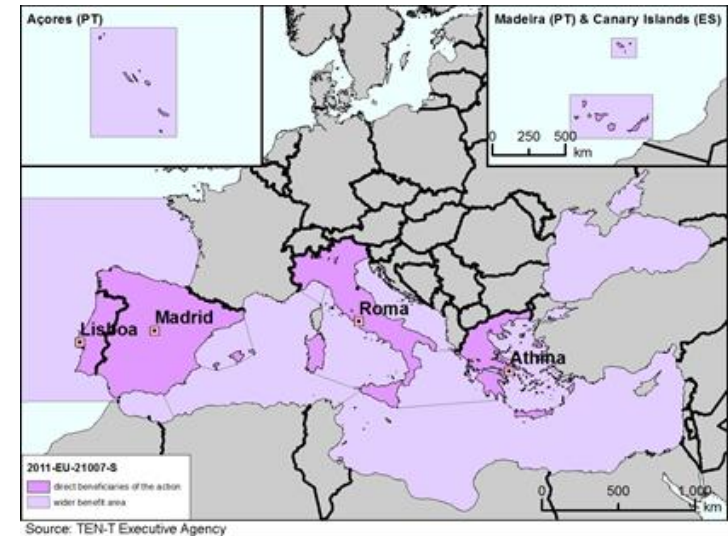
<http://www.zerovisiontool.com/pilot/baltic-so2lution>

COSTA project

2013-EU-21019-S

Total budget: €3,042,582
EU co-funding: €1,521,291

Duration: February 2012 – April 2014



The action will develop studies as based for an LNG masterplan for ports and ships in the Mediterranean, Atlantic Ocean and Black Sea.

Methanol: The marine fuel of the Future

2012-EU-21017-S

January 2013 – December 2015

Total Project Cost:

22,502,000.00 euro

EU Contribution:

11,251,000.00 euro



To test the performance of methanol on the existing passenger ferry Stena Germanica by retrofitting the vessels to prove the feasibility of methanol as a future fuel for shipping and deliver the engine conversion kit.

LNG Bunkering Infrastructure Solution and Pilot actions for Ships operating on the Motorway of the Baltic Sea

2012-EU-21009-M

Total Budget: **€74,557,500**

EU contribution: **€23,103,000**

Duration: January 2012 – December 2015



The action includes:

- Build a Connection from the LNG Terminal to Jetty in the Port of Brofjorden
- **Bunker vessel** operating from Brofjorden LNG bunker terminal, to be delivered in January 2017
- Pilot **Feeder Vessel** with innovative cargo tank design, to be delivered in January 2017
- Construction of Pilot **Dry Cargo vessel** using LNG as fuel
- Conversion of Pilot **Tanker vessels** using LNG as fuel

ReaLNG: Turning LNG as marine fuel into reality in the North Sea-Baltic region

2014-EU-TM-0095-W

Total Budget: **€40,065,856**

EU contribution: **€13,082,775**



Duration: January 2014 – December 2017

The action will design, construct and operate a maritime LNG bunker vessel and as well as deploy necessary port investment for LNG bunkering in the Port of Rotterdam and the Port of Lübeck. The barge is expecting to provide LNG bunkering in the Amsterdam / Rotterdam / Anvers area. Training courses and pilot trainings in the field of LNG operations will also be organised.

<http://www.realng.eu/>

Sustainable LNG Operations for Ports and Shipping – Innovative Pilot Actions (GAINN4MOS)

2014-EU-TMC-0698-M

Total Budget: €41,314,934

EU contribution: €19,191,067

Duration: January 2015- September 2019



GAINN4MOS will carry out 14 engineering studies on ship retrofitting and/or newbuildings, port LNG infrastructures, bunkering stations and a large set of pilot projects.

Results include: 4 LNG retrofitted prototype vessels and 7 LNG bunkering stations in several European core ports: Koper, La Spezia, Venice, Fos-Marseille and Nantes - Saint Nazaire etc.

Complemented by GAIN4CORE which will establish pilot infrastructure in the ports: Genoa, La Spezia, Livorno, Ravenna and Venice (total budget of €43,981,857, out of which €12,441,928 EU contribution).

Zero Emission Ferries - a green link across the Oresund

2014-EU-TM-0489-S

Total Budget: **€26,300,000**

EU contribution: **€13,150,000**

Duration: January 2014 – December 2017



The action will replace the current marine gas oil fuelled propulsion system of **two RoPax ships** with pure **electricity power provision** from onshore, in the ports of **Helsingør and Helsingborg**.

Provide sufficient and adequate **on-shore power supply** and **connection to the power grid** in the two ports Helsingør and Helsingborg called by the ferries.



Horizon 2020 transport research

E-ferry: a green ferry for local communities

Duration 48 months; Total cost: 21,3 M€; EU funding: 16 M€
Started in June 2015;

*E-ferry involves the **design, building and demonstration** of a **fully electric powered 'green' ferry** which can sail without polluting and CO2 emissions.*

Island servicing ferry. **100% electric with autonomy**/route 13 nautical miles. 55m long, 150 passengers and 50 cars capacity. Recharged through renewable electricity from the island



Horizon 2020 transport research

LeanShips

EU funding: 17 M€

Started in May 2015;

Eight demonstrator show cases: 1. **CNG** (Compressed Natural Gas) powered RSD (Reverse Stern Drive) Tug 2. An **LNG tug**, 3. Marine Diesel Oil (MDO) or Methanol Dual Fuel for **Offshore Service Vessel**, 4. Efficient **LNG carrier**, 5. Retrofit of short sea **cargo ship** (SECA) with LNG, 6. **Inland cargo ship** with large oscillating propulsor, 7. Large propeller for **general cargo vessel**, 8. **Energy efficient PAX** /cruise ships



Thank you for your attention!

**For more information,
please visit our website at:**

<http://ec.europa.eu/inea/connecting-europe-facility/cef-transport>

