Zero emission waterborne transport
Proposal for co-Programmed Partnership
Agenda

• Partnership
  • Objectives
  • Relation with Horizon Europe
  • Relevance

• Current status

• Governance
  • Membership
  • Member states involvement
General objective

To provide and demonstrate zero-emission solutions for all main ship types and services by 2030 which will enable zero-emission waterborne transport by 2050.
Specific Economic Objective

By 2030:
Implementation of economically viable European new technologies and concepts regarding zero-emission waterborne transport,

**to strengthen the competitiveness** of European industries in growing green ship technology markets and

provide the **capability to enter new markets**, presently dominated by Europe’s competitors.
Specific Societal Objectives

Facilitate development of regulations and policies at national and international level including the development of standards to enable the implementation of technological solutions for zero-emission waterborne transport.

Facilitate the uptake of innovative zero-emission waterborne transport technologies and solutions within the European waterborne transport sector supporting economic growth and European employment.
Specific Scientific Objective

Broken down:
• GHG emissions
• Air pollution
• Water pollution
Vision & objectives

Elimination of GHG emissions

To develop and demonstrate solutions for the use of climate-neutral, sustainable alternative fuels applicable to ships with high energy demand (e.g. long distance shipping) before 2030;

To develop and demonstrate before 2030 solutions for the integration of high-capacity batteries solutions as single energy source for short-distance shipping (up to 150 to 200 nautical miles), as an additional energy source for all main ship types in environmentally sensitive areas, and to increase operational efficiency;

To develop and demonstrate solutions to be able to reduce the (alternative) fuel consumption of waterborne transport, including by the use of renewable energy, by at least 55 % before 2030, compared to 2008;

To develop and demonstrate solutions for port based supply infrastructure (i.e. infrastructure for bunkering of alternative fuels and electricity) needed to enable zero-emission waterborne transport, to be implemented by 2030 at the latest;

To develop solutions for clean and climate-neutral, climate-resilient inland waterway vessels before 2030.
Proposal for co-Programmed Partnership

Vision & objectives

Elimination of air pollution

To develop and demonstrate solutions to cut coastal and inland pollution to air from inland waterway transport and maritime shipping by at least 50% by 2030, compared to current levels.

Elimination of water pollution

To develop and demonstrate solutions to eliminate pollution to water (including harmful underwater noise) from ships, by 2030.
Relation with Horizon Europe

• Partnership solely focus on zero-emission
  - Safety, digitization and production only included when needed for or contributing to zero-emission and technology implementation

• Horizon Europe collaborative research
  - Safety of ships & shipping
  - Digitization & automated transport
  - Green and efficient production of ships and equipment
  - Ports operations not related to zero-emission vessels
  - Blue Growth, renewable energy production
Relevance

• Policies and regulations
  - European Green Deal
  - Initial IMO Strategy on the reduction of emissions
  - CCNR Mannheim declaration

• Large emitter
  - Most efficient mode of transport per ton kilometer
  - 940 million ton CO2, 3% of world total
  - Expected to double of triple until 2050
  - Large contributor to SOx, NOx and PM emissions in coastal areas and river cities
Important transport mode

• Waterborne transport importance
  - 90% of international trade
  - 75% of EU external trade
  - 40% of internal EU trade
  - 400 million ferry passengers in EU ports per year

• Europe is still leading
  - Almost 40% of world fleet controlled from EU
  - Almost 50% of world equipment from EU
  - World leader in specialized vessels
Why a Partnership

• Coordinated and joint approach needed
  - Many different stakeholders (owners, operators, ports, yards, suppliers, class)
  - Diversified sector (many different sub segments, different ship types, etc.)
  - International mode of transport by nature
  - High energy demands, coupled with lack of alternative fuels and missing infrastructure for these fuels

• Business as usual will not achieve the targets
Proposal for co-Programmed Partnership

Timeline

End of May 2020: Final proposal

June – draft SRIA

End of June 2020: Public Consultation of Strategic Research and Innovation Agenda (SRIA)

End of August 2020: Final SRIA

2021: launch of the Partnership (1st call)

2022: Launch of 2nd call

2022: Update of SRIA
03
GOVERNANCE
The Partnership

- **Partnership Board**
- **Partnership Secretariat**
- **States Representatives Group**
- **Research Advisory Group**

- Working group: Alternative fuels
- Working group: Electrification
- Working group: Energy Efficiency
- Working group: Design & Retrofitting
- Working group: Sectoral Integration
- Working group: Ports

- **Disclaimer:** exact internal set-up is still under debate and dependent on the MoU with the Commission.
Member states involvement

- Member states in States Representatives Group
  - Alignment with national policies
  - Discussion on prioritisation

- Some member states also represented in Waterborne TP
  - Often through national agencies

- Output of results will feed into policy development, used in IMO submissions
Openness & transparency

• **Association is membership based**
  - Open to any new member from the wider sector
  - Membership approved by default, unless...
  - Low membership fee (3000 Euro per year)

• **Budget association used for**
  - Running the association
  - Publication of documents
  - Organisation of TRA, events
  - Open public consultations

• **Non-members can participate to public events and conferences, and of course to projects**
Waterborne TP Association
Industrial Members
Waterborne TP Association
Research Members
Waterborne TP Association
Associations

Fondazione CS MARE
ASSONAVE
Italian Association of Shipbuilders and Related Industries
WEGEMT
EU MURMUS UNIVERSITY ASSOCIATION
EuDA
ECMAR
Deutsches Maritimes Zentrum
Lighthouse
magellan
European Affairs Consultancy
GICAN
Netherlands Maritime Technology
PFMT
SEA Europe
Shipyards & Maritime Equipment Association
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Royal Wagenborg
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Van Oord
Horsepower
Shell
Thank you!