

Commission comments on the proposal for a European Partnerships on zero-emission waterborne transport partnership

“Why focus on zero emissions?”

A focus on zero emission shipping reflects the EU’s commitment to meet globally agreed International Maritime Organisation targets, to cut global total GHG emissions from shipping by at least 50% by 2050, as well as demands to reduce the environmental impact from both inland and maritime shipping. This focus is in line with the EU’s long-term decarbonisation strategy “A Clean Planet for All”, the Paris Agreement objectives and the vision of Commission President-elect for a European Green Deal, with a carbon neutral Europe by 2050 and the need to tackle difficult sectors, such as waterborne transport.

Achieving these ambitious goals requires a change from business as usual. EU R&I would need to target new solutions, including technologies, but also fuels, infrastructures, retrofitting existing maritime and inland ships, as well as other non-technological innovations, new operational concepts and services, within a wider multimodal mobility system, thereby leading to substantial efficiency improvements for door-to-door freight and passenger transport. Considering that ships now entering service could be operational until 2050, the development of deployable solutions is urgent, and needs to be developed within approximately 10 years.

In this respect, it will also be necessary to exploit the full potential of smart technologies – including digitalisation, artificial intelligence, connectivity, and big data – to increase energy efficiency and reduce energy consumption, as well as to improve ship operations in both maritime and inland waters. This is reflected within the draft fiche.

Zero-Emission Shipping and the scope of other partnerships

A zero-emission waterborne transport co-programmed partnership will not overlap with the scope of the other partnerships proposed. There will however be synergies, in particular concerning interfaces with other transport modes, batteries and fuel cells, where coordination will maximise the benefits from all activities.

Synergies with other partnerships can include:

- The proposed partnership **“Towards a competitive European industrial battery value chain for stationary and mobile applications”** addresses battery development, with automotive as the largest target and biggest market. The Batteries partnership will also address development for other markets, including for waterborne transport. In this respect, it focusses on specialist battery technology, material and manufacturing, whilst a zero-emission shipping partnership would address integration of a battery within the ship systems and enable pre-deployment in maritime and inland applications (addressing e.g. charging infrastructure, certification process, etc.). This is reflected in the fiche for Batteries and cooperation between the two partnerships will be maintained to ensure relevance and generate synergies.
- The proposed **“Clean Hydrogen”** partnership focusses on hydrogen fuel production and demand side technologies, including fuel cells for heavy-duty waterborne applications. Similarly, as for aviation and rail, this partnership would focus on the development of hydrogen and its associated technologies, whereas the Zero-emission shipping partnership would address the implementation and validation, for both maritime and inland shipping.
- The proposed Partnership **“MOSART”** addresses mobility and safety for automated road transport. MOSART also mentions potential interfaces with other transport modes. In this context within a zero emission shipping partnership, any efficiency improvements achieved through automated shipping and maritime/river traffic management, these may be leveraged

through synergies with MOSART to the efficiency of the wider multimodal mobility system as a whole.

- The proposed partnership for “**A climate neutral, sustainable and productive Blue Economy**” is focused upon resilient marine ecosystems and marine resources, contributing to the realisation of a sustainable economy for maritime and inland waters. Waterborne transport is one of several potential influencers on the marine environment and in this respect, cooperation between the partnerships will be ensured. It is noted however, that the ‘Blue Economy’ partnership is not expected as such, to develop itself the solutions enabling zero-emission waterborne transport (e.g. new technologies, fuels, or any relevant bunkering infrastructure).

Cross-cutting issues and synergies between mobility partnerships

Cross-technology and cross-sectoral (cross-modal) approaches within partnerships are important to ensure an improved impact and added-value at EU level. Transport sectors could therefore maximise the exploitations of the research results within the proposed mobility partnerships and learn from each other’s best practises.

This would be undertaken by each partnership during its preparation, ensuring involvement of other relevant stakeholders (e.g. sustainable fuel producers, battery makers, etc..) which are not traditionally linked to the existing value-chains for that sector for an effective preparation of its research and innovation roadmap.