Roadmaps aim to inform citizens and stakeholders about the Commission’s work in order to allow them to provide feedback and to participate effectively in future consultation activities. Citizens and stakeholders are in particular invited to provide views on the Commission’s understanding of the problem and possible solutions and to make available any relevant information that they may have.

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<tr>
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<tbody>
<tr>
<td>LEAD DG – RESPONSIBLE UNIT</td>
<td>DG MOVE-D3 (Ports and inland navigation)</td>
</tr>
<tr>
<td>LIKELY TYPE OF INITIATIVE</td>
<td>Non-legislative: Communication from the Commission to the European Parliament and the Council</td>
</tr>
<tr>
<td>INDICATIVE PLANNING</td>
<td>Q1/2021</td>
</tr>
<tr>
<td>ADDITIONAL INFORMATION</td>
<td><a href="https://ec.europa.eu/transport/modes/inland/promotion/naiaides2_en">https://ec.europa.eu/transport/modes/inland/promotion/naiaides2_en</a></td>
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This Roadmap is provided for information purposes only and its content might change. It does not prejudge the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described by the Roadmap, including its timing, are subject to change.

A. Context, Problem definition and Subsidiarity Check

Context

In 2019, the modal share of inland navigation was about 6%1 in the inland transport mix. About 15,000 cargo vessels are navigating on the Union's 37,000 km of inland waterways while 430 cruise vessels (>12 passengers) and about 3,000 day trip vessels are carrying passenger in Europe2. Approximately 49,000 people are working on inland vessels. The European Green Deal Communication3 calls for decisive action to shift more activity towards more sustainable transport modes including shifting a substantial part of the 75% of inland freight transport currently carried by road to inland navigation and rail and for measures to increase the capacity of inland waterways from 2021. The Sustainable and Smart Mobility Strategy4 adopted on 9 December 2020 indicated that inland waterways transport (IWT) and short sea shipping should increase by 25% by 2030 and by 50% by 2050. The need for a follow-up programme to the current Naiades II was also stressed by the Council in December 20185 and by the European Parliament6 in February 2019. The Council reiterated its request by endorsing the “Opatija” declaration on waterborne policy in March 20207. Over 75% of inland navigation in the EU consists of cross-border transport, so EU coordinated actions in environmental, energy and transport areas are needed to reinforce the EU Inland waterway transport Single Market. Rules have been developed in relation to various international basins (Rhone and Danube Commission) over a long period. Further EU actions would lead to the fundamental transformation of the IWT sector. They will reduce redundancies and barriers, ensure better cross-border traffic, and will contribute to the EU digital and environmental harmonisation for an increasing role of inland waterway transport in the transport system.

Problem the initiative aims to tackle

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1 This varies greatly among Member States; e.g. the Modal Split of Freight Transport on Land in NL represents 42.3%, in RO 28.7% and in BE 15.3% - Source: EU Transport in figures, Statistical Pocketbook 2018 (based on Eurostat figures)
2 EU and CH
3 https://eur-lex.europa.eu/resource.html?uri=cellar:b8828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC_1&format=PDF
4 https://ec.europa.eu/transport/themes/mobilitystrategy
While transport by inland waterways has traditionally been recognised as a cost-effective, safe, and to a large extent, environmentally friendly mode of transport, the sustainable development of the IWT sector needs to be reinforced, to meet the Green Deal objectives in terms of modal shift and lower pollutants and Greenhouse Gas emissions. One may distinguish two main problems:

1. **Firstly, with respect to volumes of freight transported, the Inland Waterways Transport potential is untapped compared to other modes of transport.** The modal share of freight inland navigation slightly decreased from 4.6% to 3.9% between 2008 and 2018 despite the significant spare capacity that continues to be available on Europe's inland waterways. The root causes of this problem are:

   A) **Insufficient integration of IWT into the logistic chain**

   A1) Insufficient quality of infrastructure and related services:
   While 85% of the inland waterways infrastructure meets theoretically⁸ the requirements of a minimum draught of 2.5 m and of a minimum height of 5.25 m under bridges of the Trans-European Transport Network (TEN-T) core network, IWT infrastructure problems represent a major bottleneck for the further development of the sector. The network of rivers is not always sufficiently connected to the main production and consumption sectors, in certain regions transhipment capacity is lacking or of insufficient quality, the predictability and reliability of the rivers is not always sufficient and in many areas infrastructure bottlenecks prevents taking the full benefit from inland navigation. In addition, recharging and refuelling infrastructure for zero-emission vessels and supply of renewable and low-carbon fuels is missing. The inland waterway sector however needs further guidance to tackle its infrastructure problems and to take the full benefit of the TEN-T and Connecting Europe Facility (CEF) framework, while complying with EU environmental legislations. The multi-dimensional functions of rivers, canals and lakes will need to be taken into account when developing waterways, through integrative approaches among all water users towards ecologic, societal, economic and safety-related functions.

   A2) Insufficient digital integration of IWT in smart, sustainable and resilient synchromodal supply chains:
   Currently IWT business processes are not digital per default and their digital integration into synchromodal supply chains is insufficient. Concerted effort is needed to facilitate the integration of digital inland waterway services into the data flow of other transport modes in order to facilitate seamless multimodal door-to-door services. The combination of the physical internet and syncho-modality enhances the bundling of volumes on corridors between seaports and hinterland leading to a more balanced use of land infrastructure capacity and a reduction in congestion levels and in other negative external effects.

   A3) Lack of incentives for modal shift to inland navigation:
   There is a lack of regulatory framework to incentive logistic operators to use more IWT. Consumers and businesses lack the right information that could help making their mobility and transport more sustainable. However, no specific and universally accepted framework for calculating and reporting CO₂ emissions from transport services exists.

   B) **Lack of attractiveness and well qualified work force**

   As the other modes of transport, IWT sector faces a lack of attractiveness, in particular for young people and women. The atypical working conditions and lack of information about what the sector does and what the career prospects are, are likely among the main causes. Crews also need to be trained to the rising new technology for greening and digitalising the fleet. Lack of harmonised and controlled crewing system and of harmonised approach on social security is also hampering the attractiveness of the profession.

   C) **Fragmentation of the governance structure of the IWT sector**

   The main governance structures relevant for the IWT sector are the European Commission, the various River Commissions and the United Nations Economic Commission for Europe (UNECE). International River Commissions, such as the Central Commission for the Navigation of the Rhine (CCNR) or the Danube Commission (DC) have enabled for more than a hundred years free navigation on their own respective basins. Without an inland waterway transport action plan for Europe, there is the risk of returning to fragmented and uncoordinated actions that hamper the EU Single Market and result in more redundancies and barriers, deteriorating cross-border traffic and jeopardising synergies. This would lead to a declining role of inland waterway transport in the transport system.

2. **Secondly, the progress towards innovation and alternative fuels, including zero emissions vessels is limited.**

   The inland vessels’ age structure is relatively old: the majority of vessels were built before 2000. Lack of innovation in a sector dominated by small owner-operators and economically weakened by the past and current crisis results in difficulties for the sector to organise itself to adopt sector-wide solutions to the challenges with which it is confronted and to invest in innovative technologies. The absence of an adequate regulatory

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⁸ This also depends of the water level of free flowing rivers
framework in the IWT sector has not provided for any incentive for the IWT to innovate and invest in fleet renewal and the application of low-emission technologies. The whole inland navigation sector including a variety of actors such as owner-operators, crews, freight forwarders, inland ports, terminal operators, shipbuilders and ship equipment manufacturers, shippers, public authorities responsible for inland waterway transport, national and regional agencies responsible for inland waterway operations and maintenance, financial institutions, investors and Members States & third countries are affected by this initiative.

### Basis for EU intervention (legal basis and subsidiarity check)

The key areas to be covered by the action plan, in particular transport, energy and environment are areas of shared competence. The EU exercises its competence in the domains to be covered by the action plan, including on reducing the emissions resulting from inland waterways transport activities. In order to reach the sustainability objectives of the European Green Deal, action at EU level is necessary to ensure efficient and strong initiatives that can deliver the needed climate and environmental impacts. Furthermore, climate change and certain negative environmental impacts are a trans-boundary problem, where coordinated EU action can effectively supplement and reinforce national and local action. For the following reasons, it is in line with the principle of subsidiarity: EU action on Inland Navigation is necessary to facilitate the functioning of internal market and to deliver on the objectives of the European Green Deal. 75% of freight transport by inland navigation is cross border so actions for further digitalisation and greening of the sector would need to be harmonised at EU level to avoid fragmented actions by Members States. The EU added-value of this initiative is therefore highly relevant.

### B. What does the initiative aim to achieve and how

This initiative aims to set an “Inland Navigation Action Plan 2021-2027”, aligned to the new multi-annual financial framework, focused on (A) moving more transport by inland waterways by making inland waterway infrastructure and shipping fit-for-future, and by integrating inland navigation into multimodal mobility of people and freight with the support of digitalisation. This shall ultimately lead to an increase in the modal share of inland waterway transport, a reduction of road congestion, safer, more reliable transport, quality jobs and a more sustainable transport system as a whole that fully respects the environmental acquis. It will also focus on (B) a gradual shift towards zero emission inland vessels, through a coordinated transport, environmental and energy policy to pool resources among energy and transport actors towards a sustainable energy transition. These two challenges should be reinforced by incentives to increase the use of inland waterways transport. These incentives are mainly financial and could concern the internalisation of external costs (by implementing the ‘polluter pays’ and ‘user pays’ principles), in particular through carbon pricing, energy taxation and infrastructure charging mechanisms, which should be complemented by improved information to users. To meet the two core challenges mentioned above it is proposed to have an integrated action plan with relevant incentives for users and identified relevant action areas, including such as:

1. **Fleet**: significantly reduce the current dependence on fossil fuels enabling the transition towards zero-emission vessels and decarbonisation of the fleet by 2050 while safeguarding competitiveness and safety. This should be done by mobilising research & deployment financing support and foster innovations through the review of the directive 2016/1629. A clear EU methodology for assessing C02 emission levels inland waterways vessels needs to be developed.

2. **Infrastructure**: achieve the continuous and reliable navigability of the trans-European inland waterway network and in those inner cities where inland waterways can green the last mile of city logistics through dedicated terminals. It should ensure swift links to other modes while assuring sustainability and resilience of the infrastructure, protecting the environment and adapting to climate change. This can be achieved through (i) clearer and flexible technical requirements for TENT-T infrastructure, (ii) a reinforced role of the European Coordinators for better coordination of national/corridor plans and (iii) enhanced multimodality and interoperability between different modes through a new regulatory framework on combined transport, (iv) continuous financial support aimed at improving the quality and the climate resilience of inland waterways infrastructure, including of the inland ports infrastructure to become new clean energy hubs for integrated electricity systems, hydrogen and other low-carbon fuels and testbeds for waste reuse and the circular economy as well as their multimodal connections with rural, urban and suburban areas.

3. **Digitalisation**: develop and use digitalisation as an instrument to support the developments towards smart and sustainable jobs, fleet and infrastructure connected to other transport modes. The possible revision of the River Information Services (RIS) directive and a proposal for electronic documents for crew and vessels will contribute to reinforce the digitalisation of the sector to foster multimodality.

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4. **Crew**: create an attractive work place with high qualification while ensuring EU harmonisation through crewing requirements. Safety and security qualifications standards for crews need to be developed to cope with emerging technologies.

### C. Better regulation

#### Consultation of citizens and stakeholders

The European Commission will not launch a dedicated public consultation on this initiative since the Inland Navigation sector was included in the Public Consultation undertaken in view of the preparation of the Sustainable and Smart Mobility Strategy. A targeted consultation was done end of 2019 when the Inland Navigation sector, including SMEs, River basins and Member States were consulted through the Commission’s Naiades Expert Group. In this framework, the above-mentioned stakeholders adopted recommendations\(^\text{10}\) for an agenda 2021-2027 for Inland Navigation. A dedicated workshop was organised with the Naiades expert group stakeholders in June 2020 to clarify the detailed measures of their recommendations.

#### Evidence base and data collection


The European Commission will not carry out an Impact Assessment for the Naiades III action plan. The Commission will carry out Impact Assessments for the specific initiatives to be announced in the action plan, as appropriate.

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\(^{10}\) https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupMeetingDoc&docid=38147


\(^{12}\) https://inland-navigation-market.org/

\(^{13}\) https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupMeetingDoc&docid=38147