

## **Useful links**

- 1. Europa page on the maritime transport**
- 2. SKEMA knowlegde platform for maritime transport and logistics**

# **Public consultation on EU e-Maritime initiative**

**(please note that the consultation was closed 27 June, 2010, and therefore participation is no longer possible)**

## **INTRODUCTION**

International maritime transport is the “life blood” of the world economy. EU waterborne transport is also a considerable contributor to the prosperity of the European regions and citizens. For this, it is at the forefront of the EU transport policy. At the same time maritime transport, as other sectors, is becoming part of the digital economy and the information society, which is shaping our lives. Internet has dramatically affected jobs and business practices in all professional sectors. It obliges organisations to search for new ways to realise the full benefits of information and communication technologies for competitive advantage and sustainability.

## **CHALLENGES**

The movements and cargoes of ships are monitored closely in European waters. This information, gathered for regulatory purposes, could be helpful also for the shipping industry, but at the moment it is not available. On the other, hand the Masters of the ships are burdened with administrative paperwork and reporting obligations.

Administrative procedures related to maritime transport are complex, time-consuming and, even today, are often paper transactions. Major European ports have advanced information systems, which deliver considerable quality and efficiency gains. However, the interoperability between port information systems is practically non-existent, limiting the potential for new services and economies of scale. Small ports may not be equipped with electronic data transmission systems at all. Most frequently, at each port call, the same data has to be entered by the shipmaster or agent, repeatedly and often manually, resulting in waste and errors.

European shipping is dependent on providing quality services rather than competing just on cost. This trend is expected to continue. Increase in efficiency must among other things be based on improved cooperation between shipping parties, including public and private entities. Improved cooperation is dependent on more efficient information management. The idea of paperless transactions and the paperless office is growing. Platforms are becoming dominant for one-to-one transactions and the benefits, such as avoiding double entry of data, are becoming clearer. The integration of logistics and transport services will boost short sea shipping and inland waterways as part of an enhanced European transport system.

An additional challenge for the operation of the EU fleet is the shortage of well-trained, motivated seafarers. It is anticipated that internet-based services and advanced telecom developments, such as broadband communication, amongst other benefits such as offering new training and career opportunities and keeping the mariners at sea in touch with their families, will raise the attractiveness of seafaring professions.

## PROSPECTS

To address these underlying problems and in anticipation of a new era of information technologies, the EU e-Maritime initiative is aimed at fostering the use of advanced information technologies for working and doing business in the maritime transport sector. The EU e-Maritime will focus on promoting interoperability between all stakeholders in the maritime transport sector including ports, shipping, inland waterways, logistics and administration authorities. It will be aimed to offer coherent, transparent, efficient and simplified solutions in support of cooperation, interoperability and consistency between Member States and transport stakeholders.

The EU e-Maritime will not only use but also support the implementation of the relevant EU directives, such as the Community Vessel Traffic Monitoring and Information System, and it will be developed in full alignment with EU initiatives inspired by advanced electronic means of managing and exchanging information such as e-Customs, e-Freight, etc.

The EU e-Maritime shall take into consideration the relevant regulations and initiatives developed by the international UN organisations, such as IMO and ILO, as well as technical standardisation bodies, such as ISO and CEN. The IMO e-Navigation is particularly relevant and close coordination has been established to ensure the synergistic development and the complementarity of the two initiatives. However, the EU e-Maritime initiative is addressing a number of particularly European problems specific to the nature of the EU transport systems.

Existing information systems will be considered as a basis for further developments. In particular, the European Maritime Safety Agency's developments and European expertise are assets that need to be fully utilised within the e-Maritime initiative.

In addition to the agreed set of standards to ensure interoperability between the systems and services, the EU e-Maritime will make easier the upgrading of existing systems and the development of new e-Maritime applications that will demonstrate the potential benefits in real life situations involving administrations and business across Europe. They will be structured around Application Domains in order to ensure both focus on the specific stakeholders' needs and conformance to a minimum set of guidelines for interoperability. The following five application domains proposed are:

- Administration Applications
- Ship Operation Applications
- Port/Terminal Applications
- Transport Logistics Applications
- Applications improving life at sea and promoting seafaring

## OBJECTIVES OF THE CONSULTATION

This consultation aims to collect your views on the e-Maritime initiative in order to assess the possible actions that could help meet the above-mentioned e Maritime objectives. We kindly ask you to evaluate these measures, propose modifications or even other measures. We also ask your opinion on the EU e-Maritime initiative in general. Please note that at this stage we are still assessing the broader objectives and the framework within which to work and not on the details of the technical issues. The selected measures will be later further evaluated in conjunction with maritime transport economic and social partners, after a general approach has been agreed.

## PRACTICAL INFORMATION

The consultation is being launched only in an electronic form via the interactive policy-making tool. Interested parties are invited to send their comments, suggestions and replies to the questionnaire to the Commission by the 27th of June 2010 at the latest.

All stakeholders and organisations involved in Maritime transport and related logistic services are invited to respond to the public consultation. The summary of the consultation's results will be published on the Commission's website.

This is an anonymous survey, and therefore, you are not obliged to give any personal details. However, as the e-Maritime initiative has stakeholders on all maritime transport sectors we ask you to indicate the sector within which you work, so that we can better use the answers.

If you are replying on behalf of an organisation, we also ask you voluntarily to indicate the exact name of the organisation, the department and the contact email. This information will not be made public or used for any other purpose than to facilitate this survey.

Please note that this document has been drafted for information and consultation purposes only. It has not been adopted or in any way approved by the European Commission and should not be regarded as representing the view of the Commission. It does not prejudge, or constitute the announcement of any position on the part of the Commission on the issues covered. The European Commission does not guarantee the accuracy of the information provided, nor does it accept responsibility for any use made thereof.

## IMPORTANT ADVICES FOR FILLING-IN THE QUESTIONNAIRE

The online questionnaire is structured as follows:

- Respondent information
- General questions
- Applications
- Views on proposed measures
- Potential impact of measures
- Final considerations

The questionnaire contains 19 questions, most of which being open-ended questions. **Please be informed that if interrupted or left 90 minutes inactive, your contribution will not be saved.** Even though the consultation is open during 8 weeks, we would encourage stakeholders to respond as soon as possible in order to help the ongoing impact assessment. Proposed practical steps for filling-in the questionnaire:

- Questions are either compulsory or optional. If any of the compulsory fields have not been filled in, the system will not allow you to submit the questionnaire but will redirect you to the incomplete answer and give you an opportunity to correct it. An error message will appear in a purple/red colour under the question in which a problem occurred.
- **Please note that you should not use the ‘Back’ button** in the upper left-hand corner of the screen of your browser to navigate the online questionnaire, because this will lead to a loss of all the data that you have already inserted. For navigation, **you should use the buttons ‘Next’ and ‘Previous’ at the bottom of the questionnaire page instead.**
- When you successfully submit the questionnaire, a confirmation message will appear on your screen and you can print your answers.

### I. RESPONDENT INFORMATION

## 1. I speak on behalf of (compulsory)

- Myself
- Organisation

[Redacted]

[Redacted]

[Redacted]

## 2. Please, indicate all the sectors in which you are engaged: (compulsory)

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Port authority   | <input type="checkbox"/> Maritime authority             | <input type="checkbox"/> Harbourmaster            |
| <input type="checkbox"/> Entities responsible for health; veterinary and phytosanitary controls | <input type="checkbox"/> Customs operators              | <input type="checkbox"/> Port state control       |
| <input type="checkbox"/> Coast guard  | <input type="checkbox"/> Pilotage                       | <input type="checkbox"/> Terminal operator        |
| <input type="checkbox"/> Dockers  | <input type="checkbox"/> Cargo handlers                 | <input type="checkbox"/> Stevedores               |
| <input type="checkbox"/> Ship brokers and agents  | <input type="checkbox"/> Large producers / retailers    | <input type="checkbox"/> Shippers / receivers     |
| <input type="checkbox"/> Freight forwarders/logistic services                                   | <input type="checkbox"/> Multimodal transport operators | <input type="checkbox"/> - double entry deleted - |

- Rail/truck operators
  - Ship crews; seafarers' trade union/worker's organisation; etc
  - Educational / training / research organisation
  - IT provider
  - Other (please specify)
- Inland terminals
  - Ship owner
  - Marketing / PR
  - Maritime law / insurance
  - Exporting/importing agents
  - Ship operator
  - Shortsea Promotion Centre
  - Vessel inspection: Classification society

### 3. Can you identify your role and interest in the e-Maritime initiative? (optional)

### 4. How familiar are you with the e-Maritime topic? (compulsory)

- Very familiar
- Fairly familiar
- Not very familiar
- Never heard before

## II. GENERAL QUESTIONS

Despite the progress achieved in recent years in maritime transport information systems, there are a number of underlying problems affecting efficiency, performance and quality of services related to maritime transport. Previous consultations and projects have concluded the following:

1. Administrative procedures are complex and time-consuming and are even today often paper transactions. When carried out electronically, systems and processes are not harmonised and differing interpretations create additional inefficiencies.
2. The manual processing of information needed to carry out daily tasks, both on-board and on land, is a waste of resources and a source of errors affecting negatively safety, security and performance.
3. Inefficient use of resources and increased costs in logistics and in the chain of operations are due to fragmentation of information systems, lack of standards and uncoordinated planning.
4. Lack of interoperable information systems for ship, cargo and compliance management creates barriers to establishing networks that are able to acquire data, manage it, use it and share it in the most efficient way among the users. This entails increased costs because several systems co-exist without real economies of scale, which particularly affects SMEs.
5. Efficient port and ship security and safety increasingly require integrated surveillance, monitoring and control systems, incorporating adequate ‘intelligence’ for proactive, remedial and cross-border operations.
6. Shortage of qualified people in EU seafaring and maritime professions is a critical issue for safety and quality shipping.

Considering the above and recognising the important role of innovation, the European Commission intends to propose the EU e-Maritime initiative in order to achieve some of the strategic goals of the EU maritime transport policy. This proposal is also in anticipation of a new era of e-business from the application of more advanced web solutions and to avoid the socioeconomic disadvantages that would follow ineffective, uncoordinated investments in modern information systems.

The ultimate goal of the EU e-Maritime initiative is to make maritime transport more efficient, safer and environmentally friendlier by improved information use, knowledge creation, facilitation of business collaborations and supports to cope with externalities. The above aims are, together with differentiation and reduced cost, common drivers for value and competitive advantage.

**5. In your view, which are the most important operational problems the EU e Maritime initiative should address?**  
**(optional)**

**6. Please comment on the level of investment in information systems for the maritime industry in the public and private sector.** **(optional)**

### **III. APPLICATIONS**

The e-Maritime Applications will demonstrate the potential benefits of e-Maritime in real life situations involving administrations and business across Europe. They will be structured around application domains in order to ensure both focus on the specific stakeholders needs and conformance to the minimum global principles for interoperability across domains. Five application domains are proposed for consideration. They are listed below along with some examples of specific applications that EU e-Maritime may address.

#### **Administration Applications**

- Support for National Single Windows, one-stop-shop developments or a European Single Window including common reporting interface and dynamic integration with existing ones
- Support for compliance to and enforcement of regulations
- Improved maritime shore-based installations and coastal maritime infrastructures for the collection and dissemination of data
- Improved interoperable maritime surveillance/monitoring systems for traffic, ship and cargo facilitating EU and national administrations to collaborate in safety, security and environmental risk management in support of proactive or remedial operations
- Integrated systems for monitoring, evaluating and managing situations including improved risk assessment and decision support systems
- Solutions for more effective and coordinated controls and inspections
- Delivering an EU system for statistical data on maritime transport

## **Ship Operation Applications**

- Improved automation in ship reporting
- Better and proactive planning of operations
- Resource management optimisation
- Inspection support and compliance monitoring
- Remote technical support, interaction with classification societies
- Proactive maintenance; monitoring of the seaworthiness of a ship
- Improved ship environmental monitoring and control
- Fleet and ship routing and scheduling

## **Port/Terminal Operations Applications**

- Port Community Systems
- Integration of Port Single Windows with national and international web portals
- Automated collection, management and reporting of quality statistics
- Coordination of inspections
- Resource management; optimised movements of equipment, containers, cargo and passengers
- Integrated port security management
- Integrated systems for monitoring and management of traffic in and around ports

## Transport Logistics Applications

- Establishing co-operative transport networks and integration of short-sea-shipping into logistics
- Discovering and comparing transport services and negotiation mechanisms
- Monitoring and control of service quality
- Managing the environmental footprint of waterborne transportation on key inter-modal corridors

## Applications improving life at sea and promoting seafaring

- Communication, infotainment and e-Health services for the well-being of persons at sea
- e-Learning and e-training for career development both at sea and in land

**7. Please comment on the structure of the EU eMaritime application domains. In particular, please identify possible limitations such as current operations and tasks that may not be mapped easily in the proposed structure? (optional)**

**8. Please comment on specific applications listed above. Which of them do you consider as most/least important? Please add any specific applications or functions, relevant to EU e-Maritime, which are omitted from the above list. (optional)**

**It is expected that eMaritime applications will facilitate information exchange between administrations and maritime operators. At the same time, information could be made available for use by operators to facilitate commercial transactions and for use by administrations for compliance controls, policy implementations, statistics, etc.**

**9. From your own perspective, which are the additional benefits that e-Maritime could bring to your job and to your organisation'?**

(optional)

## **IV. YOUR VIEWS ON THE PROPOSED MEASURES**

The Commission is evaluating a set of measures that could facilitate reaching the objectives of the EU e-Maritime initiative. We ask your views on these measures. You can propose modifications or even other measures. Please note that at this stage we are looking at the measures as

elements that provide the building base for e-Maritime applications. The selected measures will be further evaluated at the later stage, together with maritime transport economic and social partners, after the general approach has been agreed. Envisaged measures include:

**M1 Guidance, information and support on interoperable eMaritime systems** – Promote the advantages of interoperable eMaritime systems by sharing general and specific information, for example, best practice cases and studies; encourage public-private partnerships and further dialogue between the maritime transport stakeholders; and, with pilot applications demonstrate options and evaluate impacts on deploying e Maritime solutions.

**M2 Actions to define e-Maritime standards** – The first step towards interoperability will be the definition of a common minimum level of functionality required to ensure seamless and effortless exchange of information between the maritime transport stakeholders. This will have to include specifications for a common data exchange environment for applications – independent of technologies and their evolutions. Interoperability with existing systems, in particular those mandated by EU legislation, have to be ensured. This action needs to consider the:

- User requirements of all stakeholders;
- Current issues around interoperability;
- Current practices where interoperability is successful;
- The implications of Directives and requirements not only in the maritime sector, but across the supply chain;
- The challenges of trust, acceptance, security and the issue of confidentiality in data provision and sharing;
- International development of standards;
- Future technologies;

Appropriate consultation arrangements for the development of EU standards and rules will be implemented.

**M3 Measures to require the implementation of National Single Windows** – The measure will require Member States to provide National Single Window (NSW). This will lead to sharing of commonly agreed data sets through a standardisation process. The measure may or may not be supported by a centralised system. Interoperability with the existing and new NSWs is a requirement and therefore this measure is linked to

M2. Furthermore, the Commission is interested in your views as to whether a European single window is desirable and feasible (see Question 13)

**M4 Measures to support stakeholders in implementing the necessary e-Maritime ICT infrastructure** – Support to ports, and other stakeholders in obtaining the necessary ICT hardware, software and skills for exchanging maritime transport data as well as support for interoperability implementation for those already having Port Community Systems or National Single Windows in place. This measure is linked to M2 and M3.

**M5 Actions to support the intelligent use of data** – The action will encourage research and development of applications, studies, pilot projects, take-up and support actions, demonstrating and promoting the intelligent use of existing data: for example applications for probability calculations, risk assessments and Decision Support Systems (DSS). Users of the possible applications would be the data owners, e.g. ports or shipping agents who have entered the data into the system or those who have been given the authorisation to use the data by the data owner. This measure is linked with measure M3.

**M6 Actions to optimise traffic inside and around ports** – The measure will encourage research and development, studies, take up and support actions for real time monitoring, management and optimisation of traffic in and around ports. This entails specifying signalling and traffic control systems commonly managed by port, rail and road operators.

**M7 Actions to support e-services for seafarers** - The measure promotes initiatives such as: e learning, e health, remotely delivered recreation and entertainment at sea (e.g. video-chat, social networks, etc.). The actions could include the provision of guidance, the promotion of international dialogue and dissemination of best practices, the creation of incentives for the industry, and the inclusion of these initiatives in EU projects and programmes. This measure is related to M8.

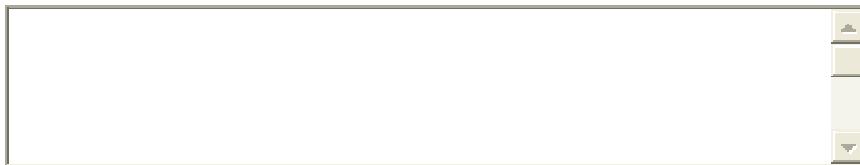
**M8 Measures to support ship-shore broadband communication** – The measure will encourage research and development, studies and other support and take-up actions and deployment of terrestrial broadband communication systems and high-speed communication links enabling e Maritime services between the ship and shore. M7 is a prerequisite for this measure.

**10. Please provide your views on each of the proposed measures, indicating whether you think they are Very Important, Important or Not Important and any comments or suggestions that you have in relation to that measure.**

	Very important	Important	Not important	No opinion
<b>M1 Guidance, information and support on interoperable eMaritime systems (compulsory)</b>				
<b>M2 Actions to define e-Maritime standards (compulsory)</b>				
<b>M3 Measures to require the implementation of National Single Windows (compulsory)</b>				
<b>M4 Measures to support stakeholders in implementing the necessary e-Maritime ICT infrastructure (compulsory)</b>				
<b>M5 Actions to support the intelligent use of data (compulsory)</b>				
<b>M6 Actions to optimise traffic inside and around port (compulsory)</b>				

<b>M7 Actions to support e-services for seafarers</b> (compulsory)				
<b>M8 Measures to support ship-shore broadband communication</b> (compulsory)				

**11. In your view, are there more measures that should be included? If yes, please describe and explain why they should be included.** (optional)




**12. In your view, what is the most important measure for you or your organisation? Please explain.** (optional)




**13. Please comment on the need and benefits in establishing a European Single Window for reporting to administrations** (optional)



## V. POTENTIAL IMPACT OF THE MEASURES

The impact assessment will assist the European Commission in understanding what kind of impacts the e-Maritime Initiative might have. We would like your views on the likely impacts associated with the EU e-Maritime initiative.

In summary, the following impacts are expected:

- Modal share: impacts on the number of travellers or tonnes of freight which will be diverted from other transport modes to the maritime mode;
- Efficiency of maritime operations: impacts on the rationalisation of the port and ship operations through the provision to transport users with real time information on available infrastructures, etc.
- Reduction of administrative burdens: impacts in terms of number and complexity of transactions for a single port call, lead time of the custom operations and number of electronic transactions.
- Safety: impacts in terms of reduction of accidents;
- Job quality in terms of improved access for the workforce to professional development e-training services, improved communication facilities and improved information, education and entertainment services.

**14. We would like your views on the type and scale of impacts that might occur as a result of the e-Maritime Initiative? Please describe the scale and extent of impacts, whether negative or positive**

	Very positive	Positive	No impact	Negative	Very negative
<b>Impact on Modal share (compulsory)</b>					
<b>Impact on Efficiency of maritime transport sector (compulsory)</b>					
<b>Impact on Reduction of Administrative burden (compulsory)</b>					
<b>Impact on Safety, security and environmental protection (compulsory)</b>					
<b>Impact on Job quality in your sector (compulsory)</b>					

**15. Are there other important impacts that would need special consideration? (optional)**

**16. We would appreciate receiving your views on the type and scale of impacts that might occur as a result of the EU e-Maritime initiative. Please describe them, whether negative or positive. (optional)**

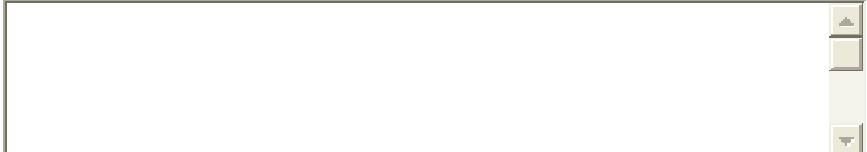


## VI. FINAL CONSIDERATIONS

**17. In your view, what kind of data is important for the assessment of the impacts of the proposed measures? If known, please state relevant data sources.** (optional)



**18. In your view, what problems could arise in the way to implementation of the EU e Maritime components and how could they be addressed?** (optional)



**19. Please add any other comments you consider relevant. (optional)**

A large, empty rectangular text input field with a thin black border. A vertical scroll bar is positioned on the right side of the field, featuring three small square icons at its top and bottom ends.