eMAR

**"e-Maritime strategic framework and pilot implementation"**
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Kick-off Meeting, Brussels

Directorate-General for Mobility and Transport

EUROPEAN COMMISSION

# Project strategy

▸ To combine a top-down route (EMSF) with a bottom-up way through the pilot implementation involving interfacing and upgrading existing applications using the eMAR software platform

▸ Pilot implementation of the *e-Maritime Strategic Framework* aimed at:

◦ giving a broad cross-section of the maritime industry the opportunity to 'learn by doing' in order to assist the Commission in establishing substantiated directives and research plans.

◦ showing clearly the boundaries of emerging technologies and leading edge practices.

◦ providing better estimates of benefits and impacts.

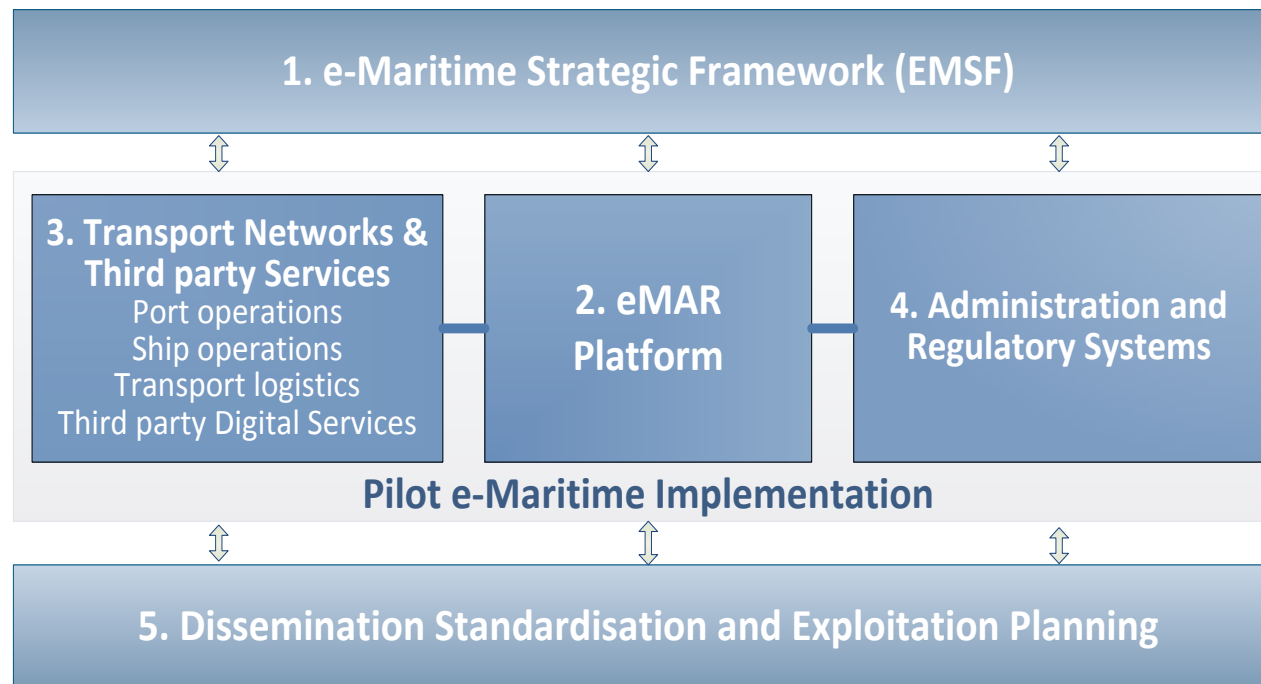◦ providing an open 'show case' for the EU e-Maritime initiative with facilities for wide participation.

# The eMAR objectives

- **An e-Maritime Strategic Framework (EMSF)** bringing together into a coherent whole concepts, processes, standards and technologies that will enable networking and computer supported co-operation among the principal maritime transport stakeholder groups.

- **A prototype e-Maritime Platform** based on existing technologies and outputs from ongoing projects, to establish upgraded solutions for acquiring, handling, exchanging and sharing essential data in the most efficient way, taking into consideration commercial confidentiality between stakeholders.

- **A pilot implementation of the e-Maritime Strategic Framework** to facilitate its practical evaluation and determination of specific policy, standardisation and future research requirements.  The pilot implementation will involve a target of 100 organisations, both from the private and public sector, interfacing their existing applications using the prototype e-Maritime Platform
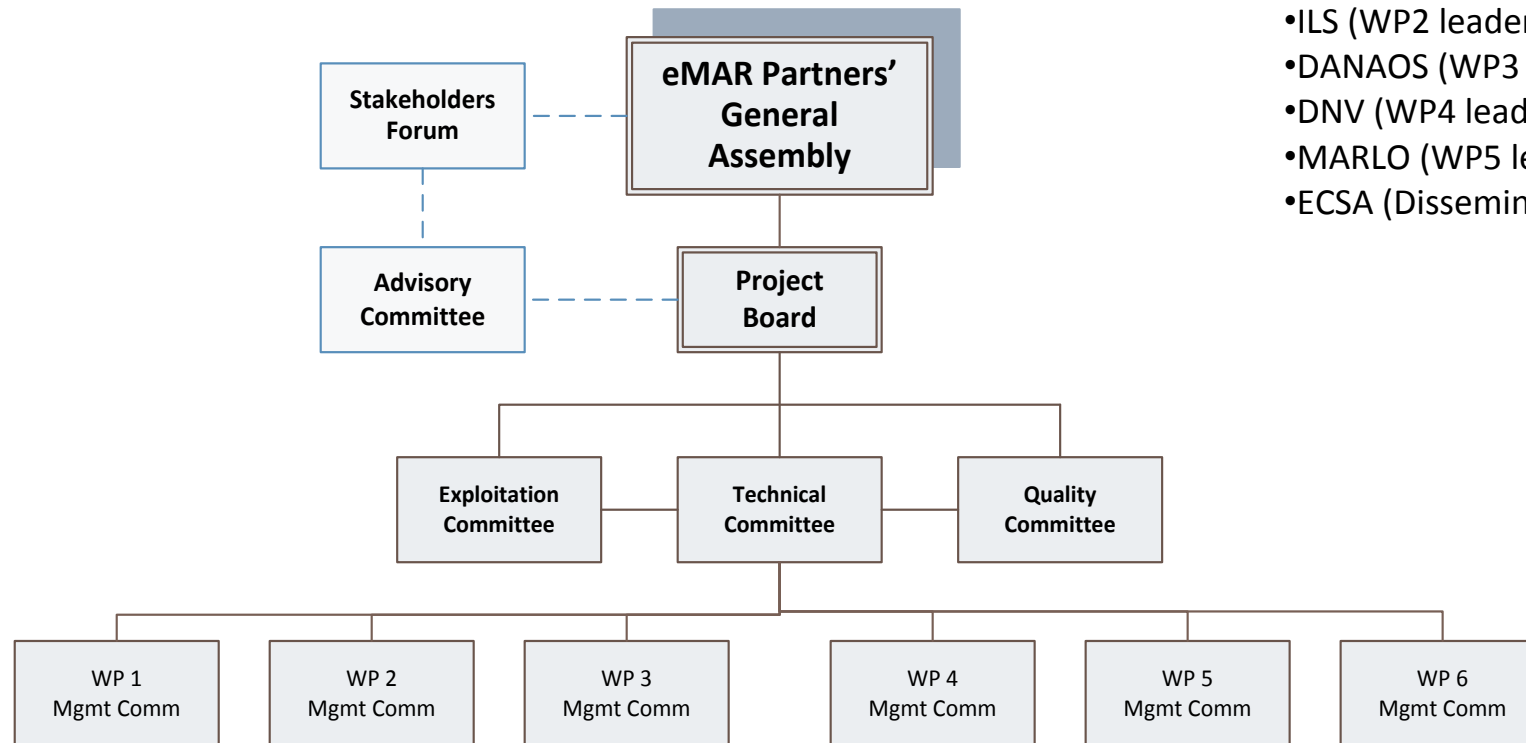
**Partners**

| Stakeholder categories | | Consortium partners & subcontractors |
|---|---|---|
| Transport solutions organisations | Large research and consultancy | BMT |
| | Market research | MORI |
| | Global marine services provider | Inchcape Shipping Services |
| | Shipbroking solutions | ICAP |
| | Transport ICT solution providers | DANAOS, eBOS, INLECOM, MJC2, PTV, CLMS |
| | Shipping e-commerce solutions | SHIPSERVE |
| | Port Community Systems | PORTBASE, PortNet, SOGET, VALENCIA.COM |
| | Shipping Navigation and electronic systems | SAM Electronics |
| | Marine systems manufacturer | Wärtsilä |
| | SME Transport consultancies | MARLO, NECL, Econsult |
| Administration | | Norwegian Coastal Administration Maritime Administration of Latvia |
| Classification Societies | | DNV |
| Transport service providers | Ports / Freight Village | Valencia Port, Le-Havre, Rotterdam, Interporto Bologna |
| | Shipping | DANAOS Shipping |
| Transport Associations | | ECSA, EMEC, CLECAT |
| Universities | | •University of South Denmark -Department of Maritime Research and Innovation •University of Piraeus Research Centre •Vilnius Gediminas Technical University •Competence Centre of Intermodal Transport and Logistics |

# Project structure



**1. e-Maritime Strategic Framework (EMSF)**

**3. Transport Networks & Third party Services**
Port operations
Ship operations
Transport logistics
Third party Digital Services

**2. eMAR Platform**

**4. Administration and Regulatory Systems**

**Pilot e-Maritime Implementation**

**5. Dissemination Standardisation and Exploitation Planning**

# Management Structure

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                              │  eMAR Partners'  │
┌──────────────┐             │     General      │
│ Stakeholders │- - - - - - -│    Assembly      │
│    Forum     │             └──────────────────┘
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│   Advisory   │- - - - - - -│     Project      │
│  Committee   │             │      Board       │
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┌──────────────────┐        ┌──────────────────┐        ┌──────────────────┐
│   Exploitation   │────────│    Technical     │────────│     Quality      │
│    Committee     │        │    Committee     │        │    Committee     │
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│  WP 1  │ │  WP 2  │ │  WP 3  │ │  WP 4  │ │  WP 5  │ │  WP 6  │
│Mgmt Comm│ │Mgmt Comm│ │Mgmt Comm│ │Mgmt Comm│ │Mgmt Comm│ │Mgmt Comm│
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- BMT (WP1, 6 leader)
- ILS (WP2 leader)
- DANAOS (WP3 leader)
- DNV (WP4 leader)
- MARLO (WP5 leader)
- ECSA (Dissemination/PR)

# Workplan

| | Tasks in Work Packages | Lead | person-months | % | Months (1-36) | Start-End (month) | |
|---|---|---|---|---|---|---|---|
| WP1 | **e-Maritime Strategic Framework (EMSF)** | 1 | **55.1** | 15% | M2 ............ M8 | 1 | 34 |
| T1.1 | Stakeholder needs analysis & market surveys | 16 | 18.5 | | | 1 | 6 |
| T1.2 | Policy, legal and standardization requirements analysis | 17 | 5.5 | | | 2 | 9 |
| T1.3 | e-Maritime Strategic Framework (EMSF) Specification | 1 | 31.1 | | i ... V1 ... V2 ... V3 | 4 | 34 |
| WP2 | **eMar Platform** | 10 | **58.0** | 15% | M4 ... M7 | 6 | 32 |
| T2.1 | eMAR Architecture and Base Platform | 10 | 21.3 | | V1 ... V2 | 6 | 32 |
| T2.2 | Connectivity and Information Management Services | 4 | 14.0 | | V1 ... V2 | 11 | 32 |
| T2.3 | e-Maritime Semantic Services | 1 | 4.9 | | V1 ... V2 | 11 | 32 |
| T2.4 | Optimisation Services | 15 | 4.9 | | V1 ... V2 | 11 | 32 |
| WP3 | **eMAR Business Applications** | 2 | **141.1** | 38% | M5 | 11 | 33 |
| T3.1 | Port e-Maritime Solutions | 25 | 31.6 | | V1 ... V2 | 11 | 33 |
| T3.2 | Shipping e-Maritime Solutions | 2 | 16.5 | | V1 ... V2 | 11 | 33 |
| T3.3 | Transport Logistics e-Maritime Solutions | 11 | 40.7 | | V1 ... V2 | 11 | 33 |
| T3.4 | Interfacing Third party Digital Services | 9 | 52.3 | | V1 ... V2 | 11 | 33 |
| WP4 | **eMAR Administration Applications** | 3 | **47.8** | 13% | M6 | 11 | 33 |
| T4.1 | Interfacing with SSN and related developments | 24 | 12.4 | | V1 ... V2 | 11 | 33 |
| T4.2 | eMAR NSW | 13 | 21.9 | | V1 ... V2 | 11 | 33 |
| T4.3 | Interfacing with Class, Safety, Security & Environmental Systems | 3 | 13.5 | | V1 ... V2 | 11 | 33 |
| WP5 | **Dissemination, Evaluation and Standardisation** | 14 | **59.1** | 16% | M3 | 1 | 36 |
| T5.1 | Website, intranet and observatory | 4 | 2.1 | | V1 ... V2 ... V3 | 1 | 36 |
| T5.2 | E- Maritime Forum and Dissemination Programme | 6 | 15.4 | | V1 ... V2 ... V3 | 2 | 36 |
| T5.3 | Evaluation, Policy and Research Recommendations | 14 | 14.2 | | V1 ... V2 ... V3 | 7 | 36 |
| T5.4 | Standardisation | 14 | 4.0 | | V1 ... V2 ... V3 | 7 | 36 |
| T5.5 | Exploitation planning | 1 | 4.8 | | i ... V1 ... V2 ... V3 | 7 | 36 |
| T5.6 | EU e-Maritime Programme Support | 1 | 18.6 | | IA V1 ... CR V1 ... CR V2 ... IA, CR | 1 | 36 |
| WP6 | **Project Management** | 1 | **14.5** | 4% | M1 | 1 | 36 |
| T6.1 | Legal and administrative project management | 1 | 4.5 | | V1 ... V2 ... V3 ... V4 | 1 | 36 |
| T6.2 | Project planning and technical co-ordination | 10 | 7.0 | | | 1 | 36 |
| T6.3 | Quality assurance | 14 | 3.0 | | V1 ... V2 ... V3 ... V4 | 1 | 36 |
| | **Total (Person-months)** | | **375.6** | **100%** | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 | | |

# Outputs phased development



| | | | | | Interaction services with Class, Safety, Security & Envn. |
| | | | | | eMAR NSW application |
| | | | | | Interfacing with SSN vs2 |
| | | | | | Interfacing with Third Party Digital Services vs2 |
| eMAR Platform vs1 | | | | | Transport Logistic Solutions |
| eMAR Architecture vs1 | | Interfacing with Third Party Digital Services vs1 | | eMAR Platform vs2 | Shipping Solutions |
| EMSF Specification vs1 | Semantic Services | Port Solutions vs1 | Interfacing with SSN vs1 | eMAR Architecture vs2 | Port Solutions vs2 |
| Stakeholder, Policy and Legal Analysis | Connectivity Services | Optimisation Services | Specification of National Single Windows | EMSF Specification vs2 | EMSF Specification vs3 |
| E-Maritime Strategic Framework (EMSF) **WP1 (M12)** | 1st vs. of eMAR Platform Services **WP2 (M14)** | 1st vs. of eMAR Business Applications **WP3 (M21)** | 1st vs. of eMAR Admin Applications **WP4 (M24)** | 2nd vs. of eMAR Platform and Services **WP2 (M26)** | 2nd vs. of eMAR Business and Admin Applications **WP3&WP4 (M34)** |

**WP5** Communication Plan

e-Maritime Forum

Policy and Research Recommendations

Website, intranet, observatory

Evaluation

Standardization