



EMD 2010 Coordination and best practice for European Maritime
Technological Platforms (MTP)



Gijón 2010
European Maritime Day
Stakeholder Conference, 18-21 May



piattaforma tecnologica nazionale marittima

PTNM – The past and the future



RINA

Mario DOGLIANI
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Co-ordinator PTMB Support Group

PTNM – Italian National Maritime Technology Platform



The past:

- who are we
- objectives
- SRA
- projects

The future

- strategic lines
- PTMB

Specific topic

- marine renewable energy



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The past

The Italian Mare Technology Platform (PTNM) was created in 2005 to meet the need of a holistic interface among industry, research and administration on the topics of research, training and innovation.

Today the PTNM initiative perfectly suits the European Commission strategy to implement an Integrated Maritime Policy (Blue Book) and boost Member States to adopt holistic strategies for the sea.

The PTNM is seen by the European Commission both as a strength of our Country system and a mirror group of the European Platform WATERBORNE^{TP}, for its major compliance with the integrated approach to the maritime/marine sectors.



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Technology platforms follow a three-stage process of development:

Stakeholders, led by industry, come together to **agree a common vision** for the technology.

Stakeholders **define a Strategic Research Agenda** setting out the necessary medium- to long-term objectives for the technology.

Stakeholders **implement the Strategic Research Agenda** with the mobilisation of significant human and financial resources.



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MI INTERESSA..

- Operazione Trasparenza valutazione e merito
- Grandi opere
- Corridoi Europei
- Casa
- Edilizia Pubblica
- Interoperabilità ferroviaria
- Appalti Pubblici
- Patenti di guida e veicoli stradali
- Circolazione e sicurezza stradale
- Autotrasporto
- Servizi di Trasporto
- Lavoro e demanio marittimo
- Piattaforma Tecnologica Nazionale Marittima - PTNM**

SALA STAMPA

News

I risultati dei programmi Interreg in Italia

È scaricabile la pubblicazione "Cooperare in Europa. I risultati dei programmi Interreg in Italia". La pubblicazione è stata realizzata per divulgare i contenuti delle azioni promosse in Italia nell'ambito dei Programmi di Iniziativa Comunitaria Interreg IIIB e IIIC 2000-2006, programmi gestiti dal Ministero delle Infrastrutture e dei Trasporti - Direzione Generale per lo Sviluppo del Territorio, la Programmazione ed i Progetti Internazionali... [continua](#)

Infrastrutture: Matteoli, da UE via libera a 4 grandi opere per 8,3 miliardi
Archivate le procedure di infrazione per SAT, CISA e Brescia-Padova. Ok anche al Passante di Bologna.

La Commissione Europea ha archiviato le procedure di infrazione sulle modalità di realizzazione di tre tratte autostradali per complessivi 8,3 miliardi di euro. Lo comunica il Ministro delle Infrastrutture e dei Trasporti, Altero Matteoli, manifestando la sua piena soddisfazione per la felice conclusione della vicenda. ...[continua](#)

Infrastrutture: Inaugurati il raddoppio ferroviario BO-VR e il nuovo terminal per le merci.

motore ricerca

cerca

SERVIZI

calendario scioperi

albo richiami

normativa

rss

Tag cloud

appalti pubblici
auto bando carta
circolazione CASA ced
codice della strada
comunicati concorso
conferenze servizi Corridoi
cercasi usanze strutture

PTNM – Italian National Maritime Technology Platform

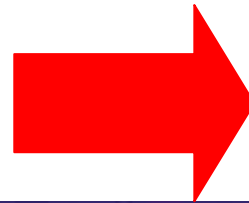
PTNM – Marine HQ CAPO GRANITOLA c/o CNR Institute for Marine Environment





Strategic Research Agenda

2005



2020





Ministry of University & Research (R)



RITMARE
Ricerca Italiana per il MARE
(Italian Research for the Sea)





The future





PTMB – Terms of Reference

Side event:

PTMB – Technology Platform of Mediterranean and Black Seas



Report

The workshop: "**PTMB – Technology Platform of Mediterranean and Black Seas**" was held on 18 May as a side event around the European Maritime Day celebrations. Its main objective was to officially launch and promote this new initiative aiming at establishing a common platform for dialogue between all relevant stakeholders from the Mediterranean and Black seas (including from non-EU countries) in the area of Maritime and Marine Research, Innovation and Training as well as contributing to the appropriate allocation of necessary financial resources mobilised from different sources (private/regional/national/EU and international).



PTMB Preliminary SRA

PTNM - SRA - Maritime (coinciding with EU Waterborne TP SRA)		Common
2.1 Safe, Sustainable and Efficient Waterborne Operations		
<i>2.1.1 Implementing Goal Based / Risk Based Frameworks for Cost Efficient Safety</i>		
2.1.1.1 Implementing Risk Based Regulation and Approval		
2.1.1.2 Implementing Risk Based Design		R
<i>2.1.2 The "Zero Accidents" Target</i>		
2.1.2.1 Improving Vessel Usability and Maintainability		
2.1.2.2 New Systems and Procedures for Safe Waterborne Operations		R
2.1.2.3 Enhanced Vessel Operations under Severe Conditions		IR
<i>2.1.3 The "Crashworthy" Vessel</i>		
2.1.3.1 Collision and Grounding Scenario Research		
2.1.3.2 Failure Mechanisms Research and Modelling		
<i>2.1.4 "Low Emission" Vessels and Waterborne Activities</i>		
2.1.4.1 Minimising Airborne Emissions		
2.1.4.2 Cost Effective Waste Management and Ballast Water Treatment		
2.1.4.3 Minimising Wash, Noise and Vibration		R
2.1.4.4 "Life Cycle Minimum Emissions" and Environmental Protection		
<i>2.1.5 Enhanced Waterborne Security</i>		
2.1.5.1 Monitoring and Data Logging		IR
2.1.5.2 Simulation Support and Identification of Vulnerability Issues		R
2.1.5.3 Development of Efficient and Economically Viable Security Strategies Equipment and Specialised Vessels		

Notes: IR = Research topics (medium-long term results) - I = Innovation/Demonstration topics (short term applications)



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2.2 A Competitive Maritime Industry	
<i>2.2.1 Innovative Vessels and Floating Structures</i>	
2.2.1.1 Life Cycle Philosophy	
2.2.1.2 New Vessels for Changing and New Markets	
2.2.1.3 Design Innovation and Systems Optimisation	IR
<i>2.2.2 Innovative Marine Equipment and Systems</i>	
2.2.2.1 Power Generation	
2.2.2.2 Propulsion Efficiency	R
2.2.2.3 Electric Propulsion	
2.2.2.4 Automation, Control and Navigation	
2.2.2.5 Intelligent Data Management	IR
2.2.2.6 Cargo Handling Systems	
<i>2.2.3 Tools for Accelerated Innovation</i>	
2.2.3.1 Tools for Design and Analysis	IR
2.2.3.2 Simulation Software for Process Acceleration and Minimising Risk	IR
2.2.3.3 Product Model and Inter-System Data Communication	IR
<i>2.2.4 Next Generation Production Processes</i>	
2.2.4.1 Innovative Process Management Systems	
2.2.4.2 Integration of Design and Production Planning	
2.2.4.3 Modules, the Building Blocks of Future Vessels	
2.2.4.4 New Materials and Production Methods	
<i>2.2.5 Effective Waterborne Operations</i>	
2.2.5.1 Supporting Tools for Life Cycle Cost (LCC) Planning and Minimisation	IR
2.2.5.2 Minimisation of Energy Consumption	IR
2.2.5.3 Intelligent Maintenance Planning and Optimisation	
2.2.5.4 Automation and Platform Management	
<i>2.2.6 Technologies for New and Extended Marine Operations</i>	
2.2.6.1 Procedures and Support Tools	
2.2.6.2 Enhanced Sub-sea Capability	

Notes: R = Research topics (medium-long term results) - I = Innovation/Demonstration topics (short term applications)



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2.3 Manage & Facilitate Growth and Changing Trade Patterns	
<i>2.3.1 Accelerated Development of New Port and Infrastructure Facilities</i>	
2.3.1.1 Planning Tools for Optimal Logistic Chains and Hinterland Connections	IR
<i>2.3.2 Interoperability between Modes</i>	
2.3.2.1 Transfer Nodes	IR
2.3.2.2 IT Systems	
2.3.2.3 Systems of Transfer	
2.3.2.4 Intermodality of Transport	IR
2.3.2.5 High Quality and Efficient Intermodal Services	IR
<i>2.3.3 More Effective Ports and Infrastructure</i>	
2.3.3.1 Equipment and Systems for Faster Cargo Handling	
2.3.3.2 Automatic Operations	
<i>2.3.4 Intelligent Transportation Technologies and Integrated ICT solutions</i>	
2.3.4.1 Optimum Vessel Utilisation	
2.3.4.2 Container Imbalances and Management of Empty Containers	
2.3.4.3 Simulation of Logistic Chain	
2.3.4.4 Ports Network and Data Exchange	
<i>2.3.5 Understand Environmental Impact of Infrastructure Building and Dredging</i>	
2.3.5.1 Analysis of Regulatory Functions, Inconsistencies and Public Decision Making Processes	
2.3.5.2 Marina and Leisure Facility Development	
<i>2.3.6 Traffic Management Strategies</i>	
2.3.6.1 Decision Support Systems and ICT	

Notes: R = Research topics (medium-long term results) - I = Innovation/Demonstration topics (short term applications)



2.4 Technologies for sustainable shipping	
2.4.1 <i>Monitoring, collection and analysis of environmental data</i>	I
2.4.2 <i>Tools to forecast and manage fish reservoirs</i>	
2.4.2.4 Identification technologies	R
2.4.3 <i>Enabling technologies for sustainable fishing and for safety of fishermen</i>	
2.4.3.1 Selective fishing	
2.4.3.2 Mariculture	
2.4.3.4 Minimising polluting emissions	IR
2.4.3.5 Tuna farming	R
2.4.3.6 Integrated management systems	IR
2.5 Technologies for sustainable coastal management	
2.5.1.1 <i>ICT</i>	
2.5.1.2 <i>Models</i>	
2.5.1.3 <i>Climate</i>	R
2.5.1.4 <i>Monitoring</i>	IR
2.5.1.5 <i>Coasts</i>	IR
2.5.1.6 <i>Bio sensors</i>	R
2.5.1.7 <i>Biotechnologies</i>	R
2.5.1.8 <i>Intervention</i>	
2.5.1.9 <i>Data quality</i>	IR
2.5.1.10 <i>Surveys</i>	IR



Strategic Lines for implementation

STRATEGIC LINES (DRAFT)

A) OCEAN 2015: MARITIME TECHNOLOGY DEMONSTRATORS (HIGH TECH OCEANOGRAPHIC SHIPS)	2
B) REQUALIFICATION OF THE WATERBORNE TRANSPORT AND OF THE PLEASURE BOAT SYSTEMS FROM THE ENVIRONMENTAL AND ENERGY CONSERVATION POINTS OF VIEW	2
C) <i>THE 3RD MILLENNIUM SUSTAINABLE FISHING SYSTEM</i>	2
D) <i>STRATEGIES AND TOOLS FOR DISMANTLING AND RE-CYCLING OF PLEASURE BOATS AT THE END OF THEIR COMMERCIAL LIFE.</i>	3
E) ICT FOR THE SEAS	3
F) 4MARE – RE-DESIGN JOBS AT SEA	4
G) INTEGRATED LOGISTICS	4
H) MATERIALS AND COMPONENTS FOR SHIPS AND YACHTS	4



EMD 2010 Coordination and best practice for European Maritime Technological Platforms (MTP)



Strategic Lines for implementation

PTMB STRATEGIC LINES	LINE A	LINE B	LINE C	LINE D	LINE E	LINE G	LINE H
2.1 Safe, Sustainable and Efficient Waterborne Operations							
<i>2.1.1 Implementing Goal Based / Risk Based Frameworks for Cost Efficient Safety</i>							
2.1.1.1 Implementing Risk Based Regulation and Approval							
2.1.1.2 Implementing Risk Based Design							
<i>2.1.2 The "Zero Accidents" Target</i>							
2.1.2.1 Improving Vessel Usability and Maintainability	✓		✓	✓			✓
2.1.2.2 New Systems and Procedures for Safe Waterborne Operations			✓		✓		
2.1.2.3 Enhanced Vessel Operations under Severe Conditions	✓						
<i>2.1.3 The "Crashworthy" Vessel</i>							
2.1.3.1 Collision and Grounding Scenario Research							
2.1.3.2 Failure Mechanisms Research and Modelling							
<i>2.1.4 "Low Emission" Vessels and Waterborne Activities</i>							
2.1.4.1 Minimising Airborne Emissions	✓	✓	✓				
2.1.4.2 Cost Effective Waste Management and Ballast Water Treatment	✓	✓	✓	✓			
2.1.4.3 Minimising Wash, Noise and Vibration	✓	✓	✓				✓
2.1.4.4 "Life Cycle Minimum Emissions" and Environmental Protection	✓	✓	✓	✓			
<i>2.1.5 Enhanced Waterborne Security</i>							
2.1.5.1 Monitoring and Data Logging					✓	✓	
2.1.5.2 Simulation Support and Identification of Vulnerability Issues					✓	✓	
2.1.5.3 Development of Efficient and Economically Viable Security Strategies Equipment and Specialised							
2.2 A Competitive European Maritime Industry							
<i>2.2.1 Innovative Vessels and Floating Structures</i>							
2.2.1.1 Life Cycle Philosophy	✓		✓	✓			
2.2.1.2 New Vessels for Changing and New Markets	✓						✓
2.2.1.3 Design Innovation and Systems Optimisation	✓	✓	✓		✓		✓
<i>2.2.2 Innovative Marine Equipment and Systems</i>							
2.2.2.1 Power Generation	✓	✓	✓				
2.2.2.2 Propulsion Efficiency	✓	✓	✓				
2.2.2.3 Electric Propulsion	✓	✓	✓				
2.2.2.4 Automation, Control and Navigation	✓	✓	✓				



Marine renewable energy

The FLOWER PROJECT

