

Publishable Final Activity Report (Jan. 2005 - Dec. 2008)

Co-ordination Action to implement an Advisory Council for Maritime Transport Research in Europe



Priority 6.2:

Integrating and Strengthening the European Research Area - Sustainable Surface Transport

Project coordinator name

Michael vom Baur

Project coordinator organisation name

CESA (Community of European Shipyards' Associations)

Project acronym: ACMARE

Project no. TCA4-CT-2005-516339

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Start date of project: 01/01/2005

Date of preparation: Jan 2009

Duration: 48 months

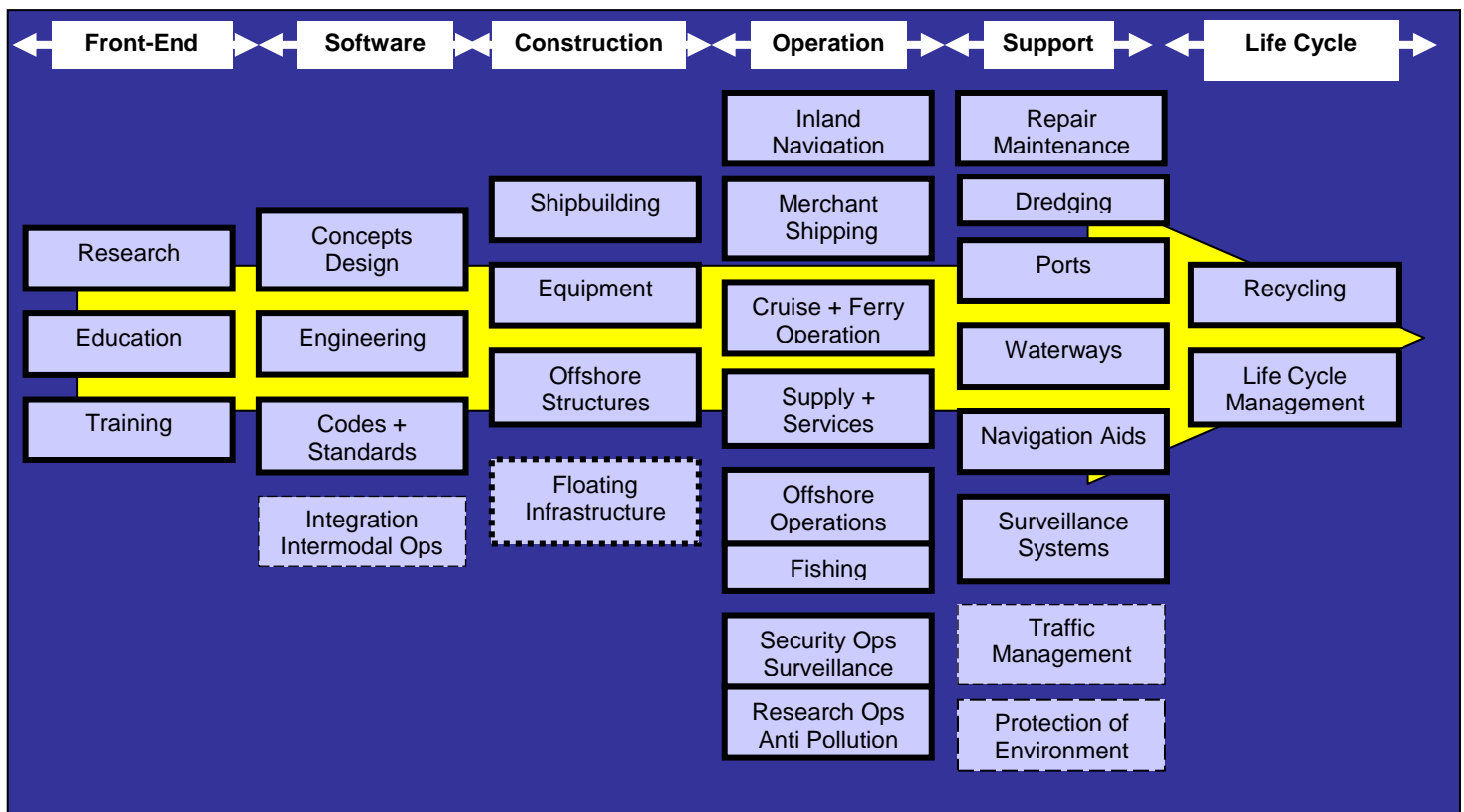
Publishable executive summary

Introduction

The history of civilisation and of commerce cannot be separated from that of waterborne transport. Trade of goods, passenger transport, exchange of knowledge, and the development of cities, regions and even civilisations, were in past centuries often only possible by means of waterborne transport.

Today's Europe would not be one of the world's most powerful regions, giving a stable and safe standard of living with a high social security for around 400 million citizens, without the performance of waterborne transport and operations, including the related European industry, know-how and professionals. Always with a high commercially motivated innovative pitch, almost all maritime technology developments have been made in Europe, even today, in the age of globalisation. European stakeholders along the waterborne value chain belong to the world leaders in their fields, benefiting from a tradition of development cooperation between e.g. operators and builders or clients and suppliers – a proven maritime cluster.

The main objective of the **Coordination Action ACMARE** (ACMARE) was achieved as it has established the European Technology Platform WATERBORNE (WATERBORNE^{TP}). WATERBORNE^{TP} is the initiative of all parties involved in the areas of shipping and shipbuilding, offshore industry and leisure vessels, ports and infrastructure development, and equipment manufacturers and systems suppliers to present their contribution to the development and prosperity of the EU and the member states.



Continuing the successful efforts of the Maritime Industry Forum (MIF) in publishing two volumes of maritime R&D Master Plans since 1994, the industry stakeholders of the waterborne sector launched WATERBORNE^{TP} in January 2005, together with the EU member states, the European Commission services and stakeholders from science and society. A vision of the year 2020 (Vision

2020) was developed, published and promoted, followed by the WATERBORNE Strategic Research Agenda (WSRA) and the WATERBORNE Implementation Route Map (WIRM 2007).

Results achieved so far:

1. WATERBORNE^{TP} was **launched on 25 January 2005** at the MIF Plenary Session, establishing a continuous dialogue between all stakeholders in the maritime transport sector on R&D
2. The consensus building process was kicked off on 1st April 2005 with the first joint meeting of the Support Group (SG) and the Mirror Group (MG) of WATERBORNE^{TP}. The SG met 25 times in 4 years with always MG representatives present. SG and MG met jointly 9 times since 2005.
3. A common medium and long term R&D vision was developed, agreed, published and promoted: the **Vision 2020**;
4. To achieve the Vision 2020 targets, the necessary RDI steps were identified and a WATERBORNE Strategic Research Agenda developed, agreed, published and promoted: the **WSRA**;
5. To concretely implement those RDI steps, a WATERBORNE Implementation Route Map developed, agreed, published and promoted: the **WIRM**;
6. Over its existence, WATERBORNE has kept growing in representativity (more MG members and SG) and in influence (over EU and National Research programmes);
7. WATERBORNE has established itself as the prime advisor for the development and the implementation of a maritime research policy.



Coordinator:

The **Community of European Shipyards' Associations** (CESA) is the organisation coordinating the project.

The Project coordinator was **Mr Michael vom Baur** (michael.vombaur@wadanyards.com), Managing Director of LNG Technology GmbH, former chairman of COREDES (the R&D working group of CESA) and former Secretary of the Support Group of WATERBORNE^{TP}.

Project website:

<http://www.waterborne-tp.org/>

Press material:

Here after.

THE WATERBORNE TECHNOLOGY PLATFORM – COORDINATION OF MARITIME RESEARCH AND DEVELOPMENT IN EUROPE

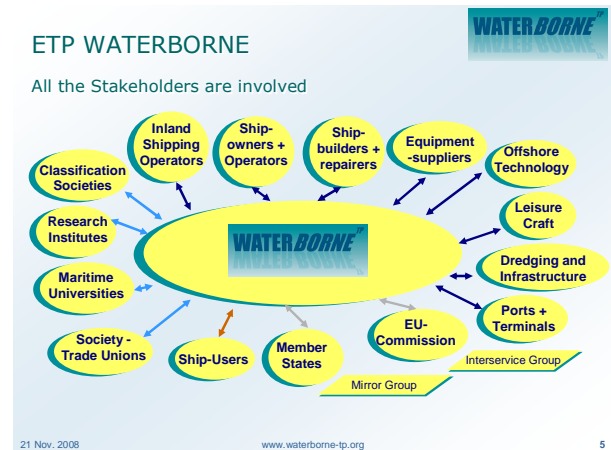
INTRODUCTION

Technology Platforms are promoted by the European Commission to encourage dialogue between industry, the research communities, Member States and the European Commission. The expectation is that through the Technology Platforms sectors can develop an industry-led strategic research agenda which will deliver a clear vision which will benefit Europe through effective innovation and technology development.

The maritime industries, in response to the initiative, established a Technology Platform based on the work already carried out by the Research and Development Strategy Panel of the Maritime Industries Forum (MIF). The WATERBORNE TP was formally launched during the MIF Plenary Meeting in Bremen on 25th January, 2005. The maritime transport sector had already been identified as a priority area for the forthcoming 7th Framework Programme and the expectation at the launch was that WATERBORNE TP would, in particular, inform the calls for the Sustainable Surface Transport elements of FP7.

WATERBORNE TP

The WATERBORNE TP has been established to be fully representative of a very broad cross-section of the maritime industries, as shown below.



The members of WATERBORNE TP are drawn from the stakeholder community through the sector trade associations representing the various interests across the European Community as follows:

- Ship operations (ECSA)
- Shipbuilding and ship repair (CESA)
- Equipment supply (EMEC)
- Classification (EurACS)
- Leisure craft supply (EURMIG)
- Ports and terminals (ESPO, FEPORT)
- Universities (WEGEMT)
- Professional societies (CEMT)
- Offshore oil and gas (EUROGIF)
- Dredging (EUDA)
- Inland transportation (EBU, INE)
- Research institutes (ECMAR)
- Labour (EMF)

This membership is supported by other organisations who participate in WATERBORNE TP activities as observers, including

- the marine science community through the Marine Board.
- other networks active in the maritime sector or related fields, such as the ERAnet Transport and MARTEC

The membership is also supported by the active involvement in *WATERBORNE* TP activities by representatives of the European Commission and the Member States, with the latter forming the very important Mirror Group.

Links are continually being developed with other technology platforms, in particular those associated with:

- other modes of transport which join with maritime transport in the overall logistics chain.
- technologies of direct interest to the maritime industries

Although the expectation is that the *WATERBORNE* TP will influence the European research agenda of FP7 and beyond through its Strategic Research Agenda, which is described more fully below, there is a realisation that research, development and innovation is funded in a number of ways. The output of *WATERBORNE* TP, therefore, also informs

- national research, development and innovation programmes of the Member States
- programmes funded directly by industry

by clearly setting out the needs identified by a broad cross-section of the maritime industries. The key to success is the broad range of the activities of the stakeholder community.

VISION 2020

The top level reference document is the Vision 2020 for the maritime industry which was presented to the European Commission by *WATERBORNE* TP in February 2006. This sets out the medium and long term ambitions of the maritime industry which need to be addressed by the research and development agenda. The Vision 2020 targets were characterised under the three selected *WATERBORNE* TP pillars which will ensure

- Sustainability,
- Competitiveness and

- Growth.

These three pillars were then expanded in the following terms:

- Achieving of a Safe, Sustainable and Efficient Waterborne Transport;
- Ensuring a competitive European Waterborne Industry;
- Managing and facilitating growth in transport volumes and the changes in trade patterns.

The Vision 2020 sets out the targets and innovation challenges which the maritime industry has developed collectively, through the *WATERBORNE* TP, and this reference document definition underpins the activities which have resulted in the following two documents.

WATERBORNE STRATEGIC RESEARCH AGENDA

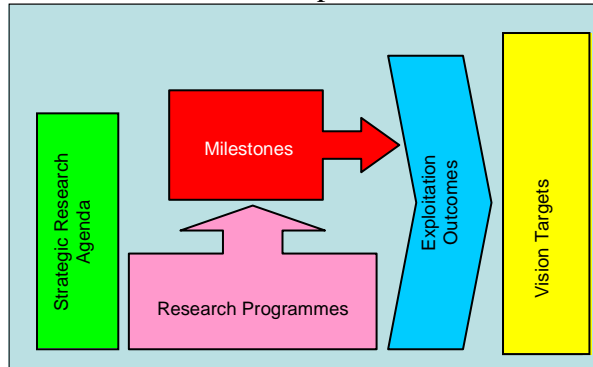
The *WATERBORNE* TP Strategic Research Agenda was presented to the European Commission in May 2006 and represents the translation of the Vision 2020 targets into an agenda of directed actions, which collectively will deliver the Vision by providing the key enabling technologies.

For each of the three pillars, the *WATERBORNE* TP Strategic Research Agenda expands the targets and innovation challenges of the Vision 2020 by outlining the background scenario and describing the key research, development and innovation outcomes which are necessary to deliver the targets.

WATERBORNE IMPLEMENTATION ROUTE MAP

The *WATERBORNE* TP Strategic Research Agenda was developed further to a practical level by defining a number of exploitation outcomes and creating a route maps. This document was presented, in executive summary form, to the European Commission in November 2007. The route maps provide a clear linkage between the agenda and the

Vision 2020 targets through individual research topics, through development milestones and exploitation outcomes as illustrated in the diagram below. Each exploitation outcome is identified against the three pillars which were defined in the Vision 2020, so that it is easy for the reader to understand the linkages and the interrelationships between the various elements at a research topic level.



The WATERBORNE TP Strategic Research Agenda Implementation document sets out for each Research Topic a detailed description which informs the reader about

- the objectives of the research topic, in relation to the achievement of the Vision 2020 targets,
- the related research activities that have been completed or are in progress
- the required timescales for achieving the research outcomes
- the technology, tools and processes that are within the scope
- the expected outcomes

Where possible some estimate of the budget requirements is provided.

The standardised format makes this document a key reference for the maritime industries in addressing the research, development and innovation needs for the future.

RELATIONSHIPS

WATERBORNE TP has built relationships with a number of organisations and will continue to develop these, formally and informally. Apart from the associations described above, the most active task is to develop and manage the relationships with national maritime research platforms in individual Member States. WATERBORNE TP provides support to these organisations by communicating the documented outputs in the form of the WATERBORNE TP Strategic Research Agenda, the Implementation Route Maps and the Vision 2020 and by consulting on the future review and revision of the key documents.

DELIVERING THE VISION

The essential task of WATERBORNE TP is to deliver value to the maritime community by ensuring that the output of the first phase is disseminated and the exploitation outcomes are delivered. The next phase is to begin the process of continual review, challenge and updating of the Strategic Research Agenda to reflect the changing challenges faced by all sectors of the maritime industry.

Project Consortium:

No.	Participant name	Participant short name	Country
1	COORDINATOR Community of European Shipyards' Associations	CESA	BELGIUM
2	FORCE TECHNOLOGY (on behalf of ECMAR European co-operation in Maritime Research)	ECMAR/ FORCE	DENMARK
3	European Community Shipowners' Associations	ECSA	BELGIUM
4	European Marine equipment Council	EMEC	BELGIUM
5	<i>Due to unfortunate circumstances, no port association accessed the contract.</i>		
6	European Dredging Association	EUDA	BELGIUM
7	European Oil and Gas Innovation Forum	EUROGIF	BELGIUM
8	RINA (on behalf of EURACS European Association for Classification Societies)	EURACS/ RINA	ITALY
9	European Association of Universities in Marine Technology	WEGEMT	UNITED KINGDOM
10	Bureau Veritas (on behalf of EURACS European Association for Classification Societies)	EURACS/ BV	FRANCE