

Impacts of Waterborne Research – Success stories

Mario Dogliani
Technical Director



WTP Research - when & what

WTP Research - which

WTP Research - how

WTP Research - who

WTP Research - what we learnt and what's next?

LAUNCHING OF THE WATERBORNE TECHNOLOGY PLATFORM

Ugo Salerno

CEO RINA SPA
Chairman EurACS
Chairman ETP WATERBORNE Support Group

MIF Plenary
Bremen 25 January 2005

THE MISSION OF WATERBORNE

A VISION FOR THE INDUSTRY

To identify the
STRATEGIC RESEARCH AGENDA

THE PILLARS OF WATERBORNE



WATERBORNETM

COMPETITIVE
MARITIME INDUSTRY

SAFE, SUSTAINABLE,
EFFICIENT

POPULATION &
TRANSPORT GROWTH

VISION 2020

WATERBORNE Strategic Research Agenda (WSRA) Key Priorities (1)

- Safe, sustainable and efficient waterborne transport
 - ✓ Synergy of safety + security through Goal/Risk Based Design
 - ✓ Towards the „zero ship accidents” target
 - ✓ The „crashworthy vessel”
 - ✓ „Low emission” vessels and waterborne activities
 - ✓ Enhanced waterborne security

Fincantieri's LNG ferry leaves for Canada

2014



After having completed the liquified natural gas sea trials, the F.-A.-Gauthier ferry built by Fincantieri in its shipyard in Castellammare di Stabia, left the yard on Wednesday sailing to Matane, in Québec, Canada.

The delivery to Société des traversiers du Québec will take place when the ferry arrives in Canada, Fincantieri said in a statement.

The new vessel is the first LNG-powered ferry ever built in Italy and the first of the kind to enter into service in North America.

....Carnival XL Project

2015



Shipyard: Meyer Werft- Papenburg
Shipowner: AIDA
Size: 2 × cruise ships (180,000 gt)

Shipyard: Meyer - Turku
Shipowner: Costa Crociere
Size: 2 × cruise ships (180,000 gt)

MSC Orders Four LNG Megaships from STX France

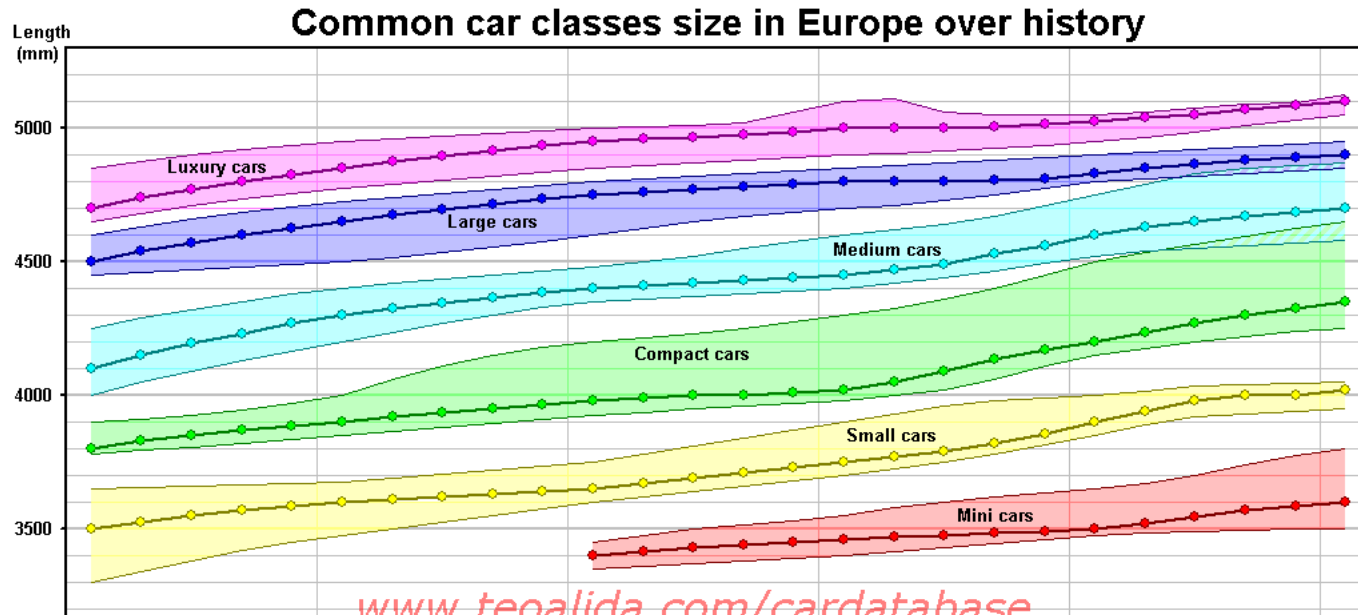
April 06, 2016

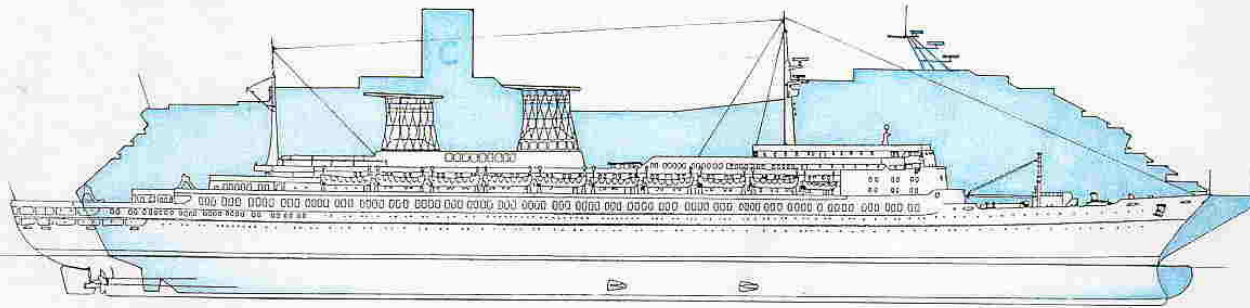
2016



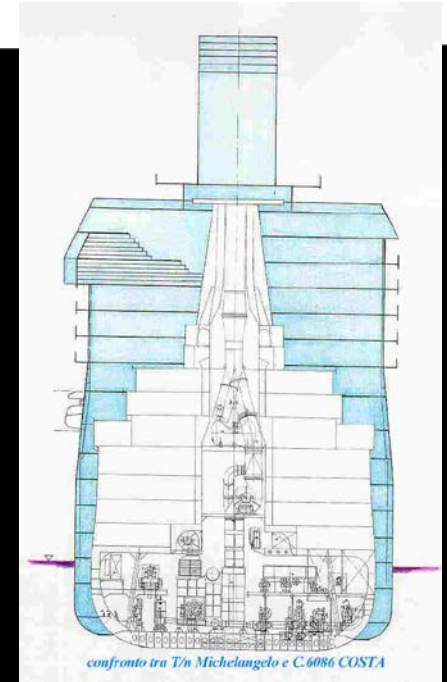
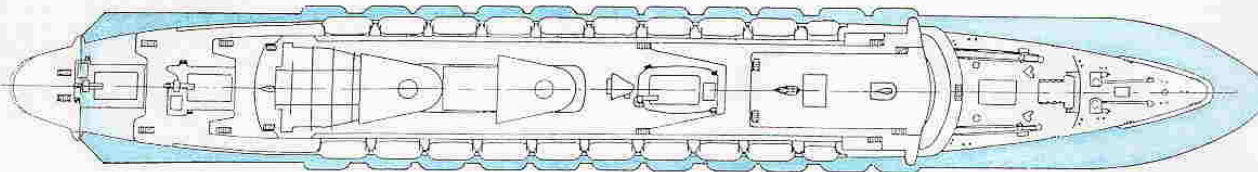


POLAND @ SEA
MARITIME MAGAZINE
2016
Green ships of the future
Renowned Canadian ferry operator switches its fleet to LNG with the help of Polish shipyard!





T/n MICHELANGELO 1960 e C.6086 COSTA



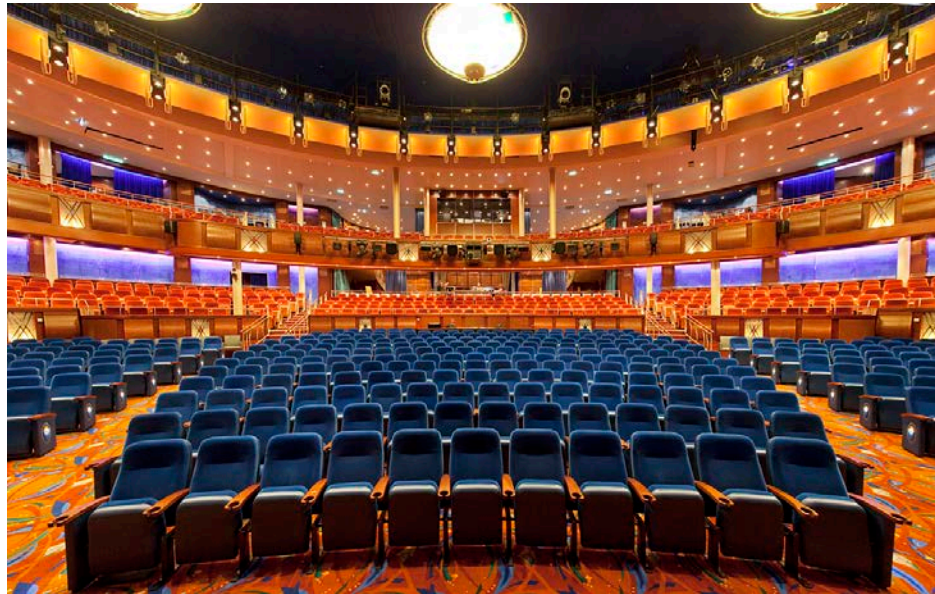
confronto tra T/n Michelangelo e C.6086 COSTA



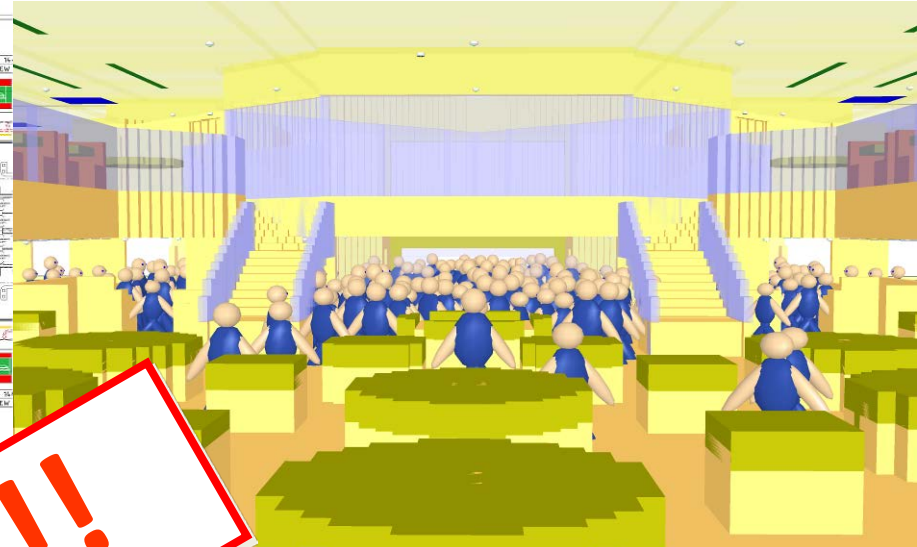
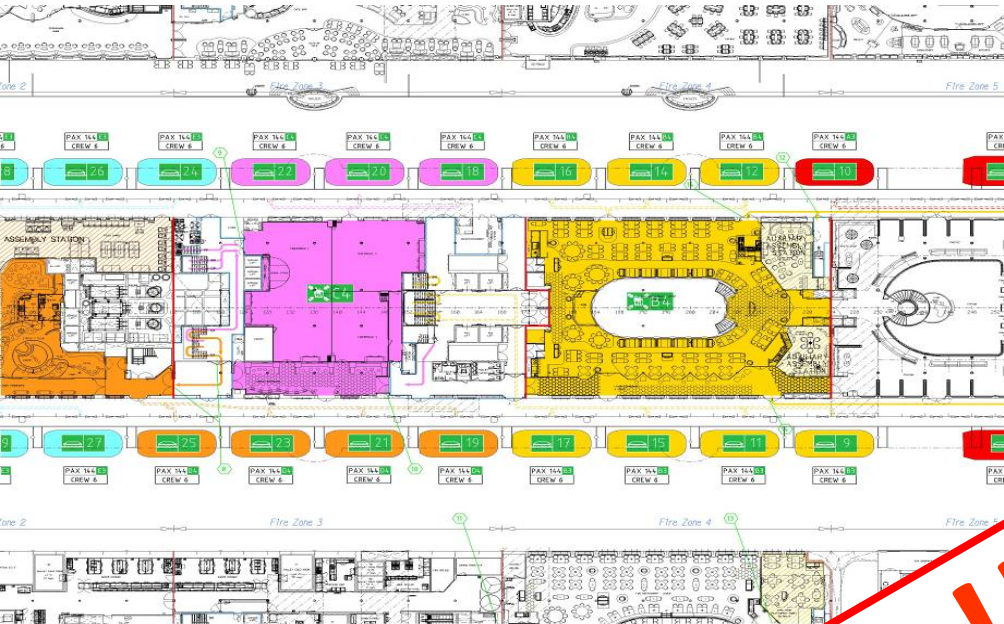


RMS Olympic ~ Interiors

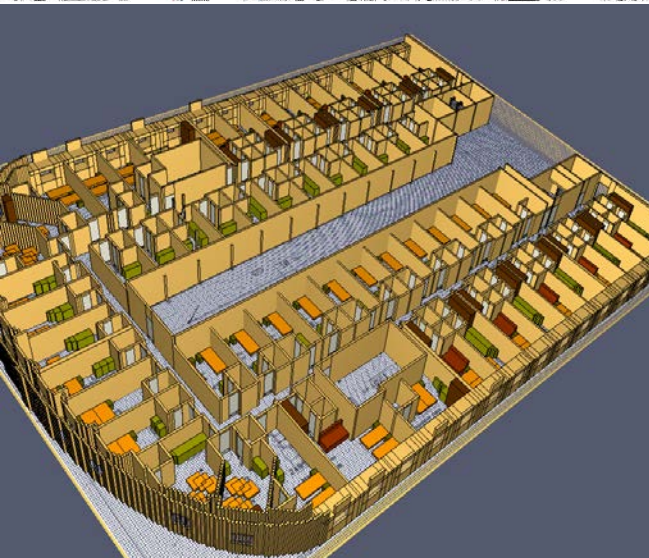








OK !!!



Draft SOLAS amendments on subdivision and damage stability agreed

Draft amendments to revise and update SOLAS chapter II-1 subdivision and damage stability regulations were agreed. The draft amendments will be forwarded to the Maritime Safety Committee (MSC 96) for approval with a view to subsequent adoption.

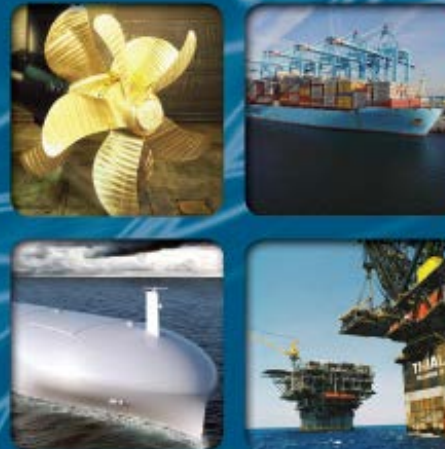
The draft amendments form part of a substantive review of the regulations in SOLAS chapter II-1, in particular those related to passenger ships, covering stability information to the master; watertight integrity; periodic operation and inspection of watertight doors in passenger ships; survivability of passenger ships; and prevention and control of water ingress. Further work on explanatory notes to those regulations in the chapter will continue in a correspondence period.



Stability requirements for vessels engaged in towing are being amended

MARITIME INNOVATIONS FOR THE 21ST CENTURY

Success stories from EU Research



WATERBORNETM

Maritime Europe Strategy Action

Newbuildings

Parts

Maintenance



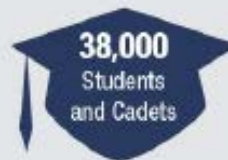
The economic value of the EU shipping industry **jobs & wealth**

The EU controlled shipping fleet in numbers

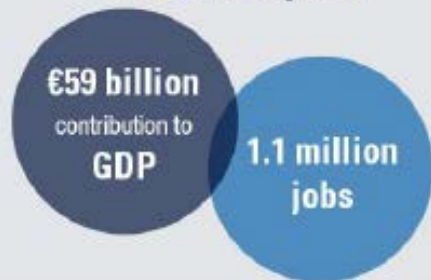
70% growth
in tonnage



Direct economic impact



Indirect impacts



Induced impacts



Total economic impact



For every **€1 million** of GDP the shipping industry creates, another **€1.6 million** is created elsewhere in the EU economy

= 2,6

50% Amount by which the total economic contribution of the EU shipping industry could have been reduced in the absence of EU-approved state aid measures.¹

1 Based on illustrative counter-factual scenarios for nine EU countries





STRATEGIC RESEARCH AGENDA

OVERVIEW

Waterborne Transport & Operations
Key for Europe's Development and Future



WATERBORNE™

2000-2012: 50 Projects co-financed

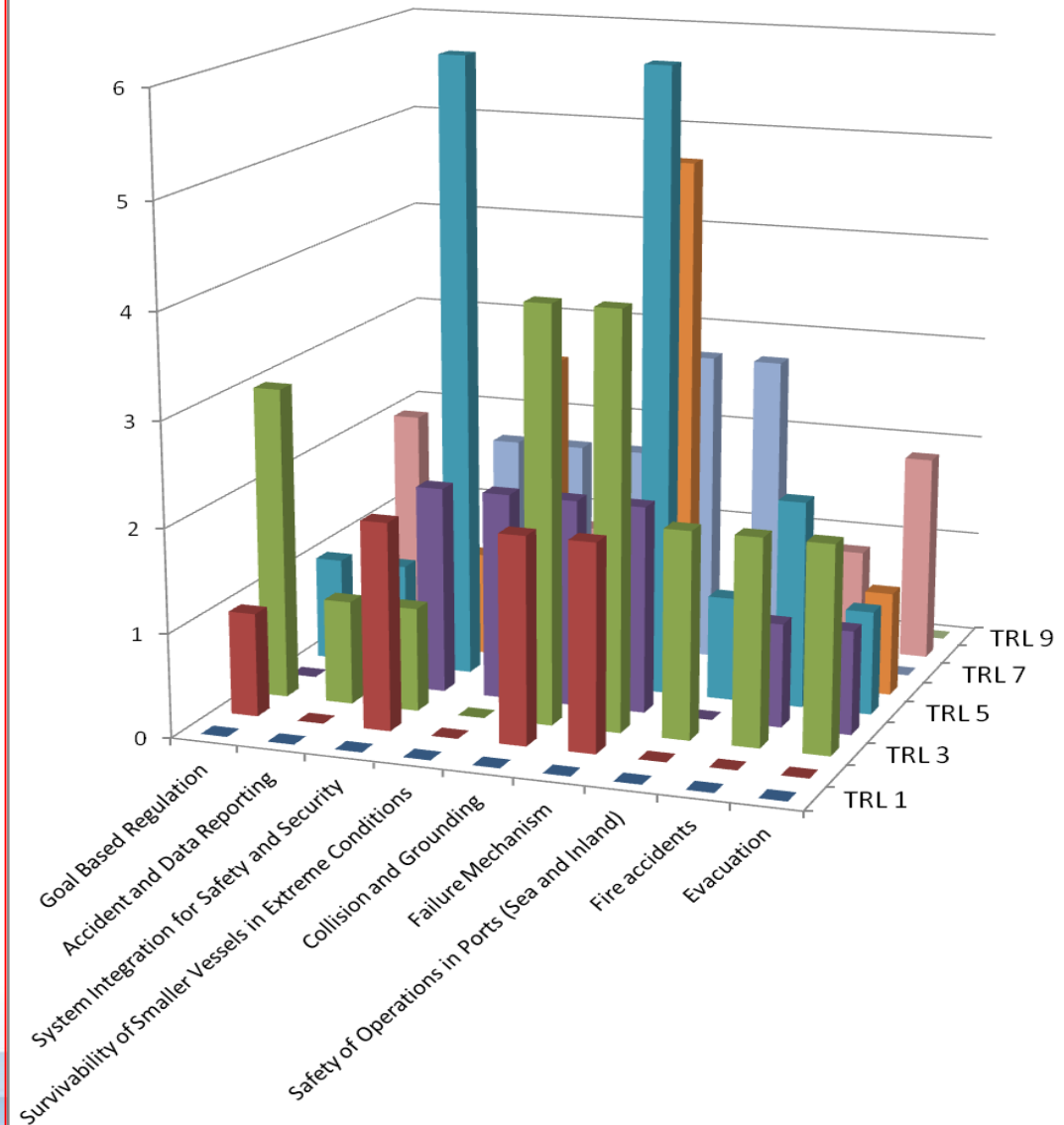


Maritime Europe Strategy Action

Deliverable 2.1

TTG SAFETY: CLUSTERED RESEARCH PROJECTS

State-of-the-art, achievements,
opportunities for implementation



LNG WORLD NEWS

The industry's LNG news terminal

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Wartsila, MAN D&T start Hercules-2 project



The Hercules R&D programme to develop large engine technologies, which was initiated in 2004 as a joint vision by the two major European engine manufacturing groups, Wärtsilä and MAN Diesel & Turbo, is to continue with a new Hercules-2 project, pending approval under the Horizon 2020 EU Framework Programme for



HERCULES

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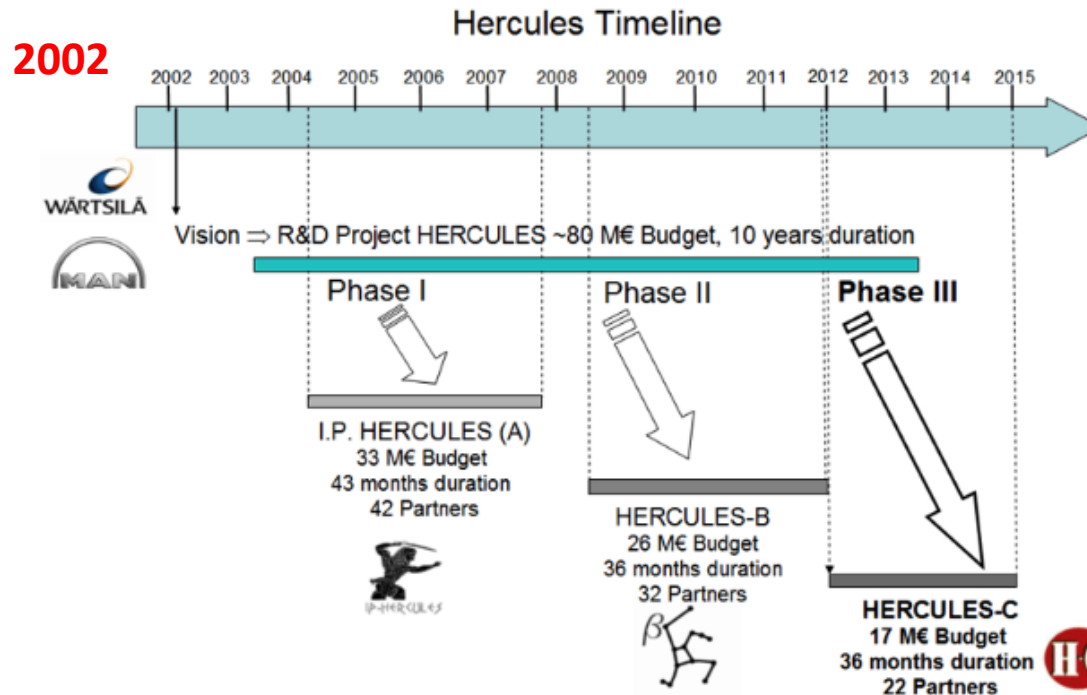


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The I.P. HERCULES Integrated Project (High Efficiency R&D on Combustion with Ultra Low Emissions for Ships) is a large scale cooperative project on marine engine R&D supported by the European Commission and the Swiss Federal Government. This Project has been completed.

[\(more details\)](#)

The HERCULES Project developed new technologies to drastically reduce gaseous and particulate emissions from marine engines and concurrently increase engine efficiency and reliability, hence reduce specific fuel consumption, CO₂ emissions and engine lifecycle costs. These objectives were attained through interrelated developments in thermodynamics and mechanics of ?€?extreme?€? parameter engines, advanced combustion concepts, multistage intelligent turbocharging, ?€?hot?€? engines with energy recovery and compounding, internal emission reduction methods and advanced aftertreatment techniques, new sensors for emissions and performance monitoring, adaptive control for intelligent engines. Advanced process models and engineering software tools have been developed, to assist in component design. Prototype components have been manufactured and sea tested. Engines





SAFETY FIRST

Project reference: G3RD-CT-1999-00031

Funded under: [FP5-GROWTH](#)

Design for safety : ship fire engineering analysis toolkit

From 2000-03-01 to 2003-03-31

Project details

Total cost:

EUR 3 376 118

Topic(s):

[1.1.3.-3. - Key Action Land Transport and Marine Technologies](#)

2000

Homepage

Air

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Water

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Multimodal

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EU-funded safety at sea project has worldwide impact

1999

The results of the 'HARDER' project have been incorporated into the revised IMO SOLAS regulations on safety and stability of passenger vessels, applied to shipping around the globe.

Tags: [Water](#), [Greening of transport](#), [Safety and security](#), [Competitiveness](#)



When water is running into a ship following an accident at sea, a number of different scenarios can be played out. The ship may sink due to flooding of so many compartments that there is not enough buoyancy to keep the vessel afloat. This was the case for RMS Titanic which sank in 1912, two years

... a lucky coincidence?

We prefer to call it...

.... building our





Diversity is an asset



Provided we sing the same song Success requires time





General approach to STRIA

- **7 technical areas** have been identified on the basis of their potential impact on the transformation of the EU transport system:

1. Electromobility
2. Alternative fuels
3. Vehicle design & manufacturing
4. Connected and automated transport
5. Transport infrastructure
6. Network and traffic management systems
7. Smart transport and mobility services (incl. urban)



EMPLOYMENT, SOCIAL AFFAIRS & INCLUSION

European Commission > Employment, Social Affairs & Inclusion > ... > Agenda for new skills and jobs



POLICIES AND ACTIVITIES

NEWS AND MULTIMEDIA

PUBLICATIONS AND DOCUMENTS

Europe 2020 initiatives

Agenda for new skills and jobs

Agenda for new skills and jobs

This initiative is how the Commission will help the EU reach its employment target for 2020: **75% of the working-age population (20-64 years) in work.**

Launched in 2010, it is part of the EU's overall strategy – **Europe 2020** – promoting smart, sustainable and inclusive growth in the next 10 years and beyond.

The Agenda also contributes to achieve the EU's targets to get the early school-leaving rate below 10% and more young people in higher education or equivalent vocational education (at least 40%), as well as to have at least 20 million fewer people in poverty.



We are ready for a new mission



When the going gets tough, the tough get going.
(Joseph P. Kennedy)

izquotes.com