SEA Europe
Shipyards' & Maritime Equipment Association

M. Dogliani – Technical Director

Danish Maritime Authority

EUSBSR
EU STRATEGY
FOR THE BALTIC
SEA REGION

Trafi
Finnish Transport Safety Agency

Who are we?

Who are we?

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MARITIME INDUSTRIES : HIGHLY COMPLEX VESSELS
© SEA EUROPE
Aircraft Carrier
11 000 000 Hrs
2 000 000 Parts
60 000 Tons
12 000 000 Code Lines
Harmony of the Seas
10 000 000 Hrs
900 000 Parts
54 000 Tons
500 000 Code Lines
Complex Research Vessel
1 000 000 Hrs
550 000 Parts
3 000 Tons
1 500 000 Code Lines
A380
80 000 Hrs
100 000 Parts
537 Tons
1 000 000 Code Lines
Fighter Jet
60 000 Hrs
40 000 Parts
24 Tons
2 000 000 Code Lines
Automobile
23 Hrs
3 000 Parts
1.9 Tons
INCREASING COMPLEXITY
0
5
10
15
20
25
30
35
40
45
Manufacturing Time

Chances → further innovation

Clean technology retrofitting

Danish Maritime Authority

EUSBSR EU Strategy for the Baltic Sea Region

Trafi Finnish Transport Safety Agency

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Home

The Dutch maritime technology sector is innovative and has hundreds of ideas to ensure sustainability in shipping. From emission reduction at sea to smart ship design. Find out here!

Strong at innovation on sustainability

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new skills

Commercial Shipping Transformed

It is envisaged that these eight technologies will be implemented differently from ship type to ship type. These ships will be called TechnoMax Ships, as technology implementation will be at its most appropriate and fullest level in 2030. They will be operated differently from in the past, and will be smarter, data-driven, and greener, with flexible powering options, full on-board wireless connections, and digital connections through global satellites.

Crew

Due to the concurrent application of different kinds of technologies at different levels, a highly qualified and multi-skilled crew will be needed. The benefits of the balanced combination between a TechnoMax Ship managed by a highly skilled crew will be recognised by ship owners and ship operators. Effective action on the human element will require effort at the conception, design and construction stages of a ship's life, as well as throughout its operation.

New Skills

New skills will be required to maximise the benefits of a fully integrated logistics supply chain. These skills will include:

- Big data management
- Big data analytics
- Automated operation and maintenance (O&M)
- Management of complex service constructs
- Management of data belts to keep them safe from cyber attacks and maintain its integrity

Ship operations will be conducted partially or entirely onshore and remotely manned by personnel with doctorate degrees

Cooperation

Playing the same song makes the difference between cacophony and simphony