

BMT Group: FP7 Maritime Transport: The Greening of Surface Transport

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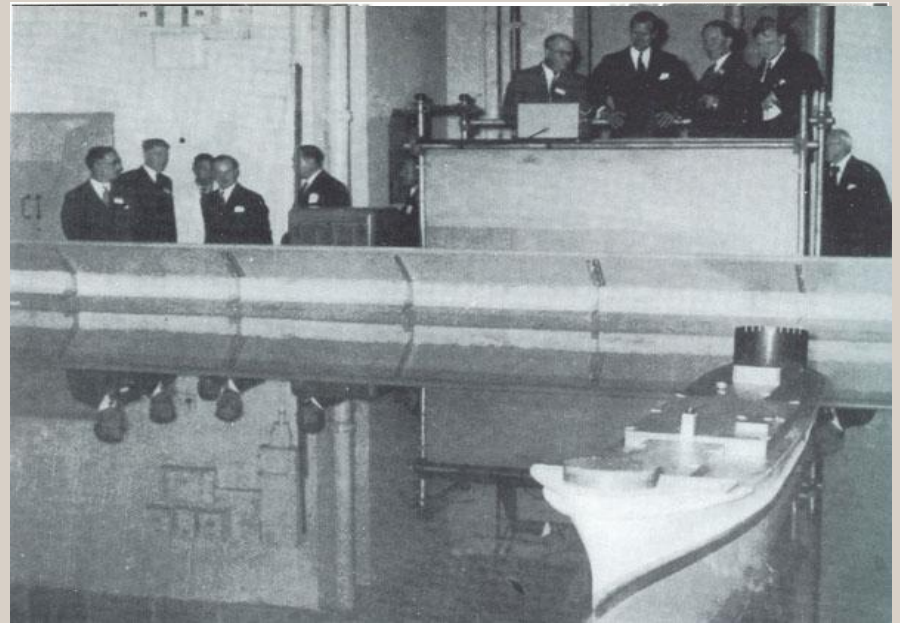
BMT: 25 years old with a longer heritage

British Ship
Research
Association

NMI Ltd



British Maritime Technology Ltd
established 1985 (now BMT Group Ltd)



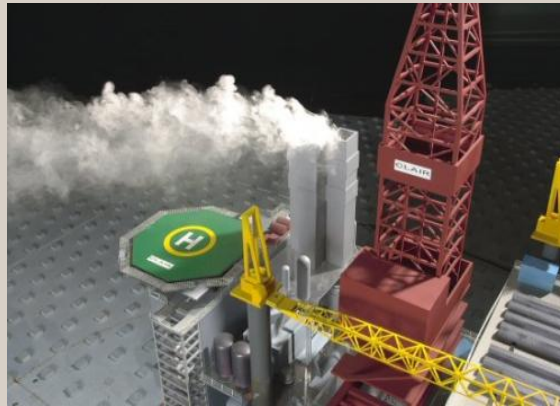
A Worldwide Business: European-based

1,200 staff

60 offices worldwide

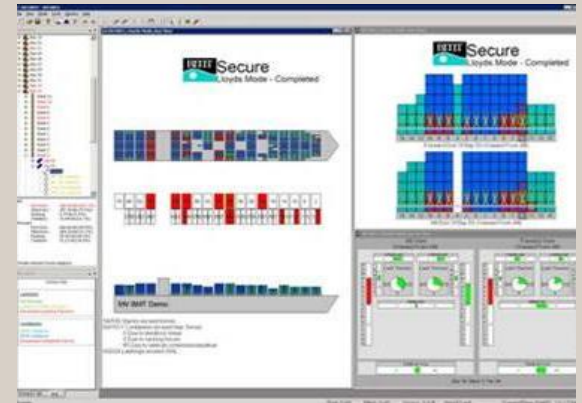
BMT in Energy and Environment

- Environmental management and planning
- Information systems and simulation models
- Engineering and safety studies
- Marine monitoring systems
- Wind engineering and aerodynamics
- Mining and materials handling



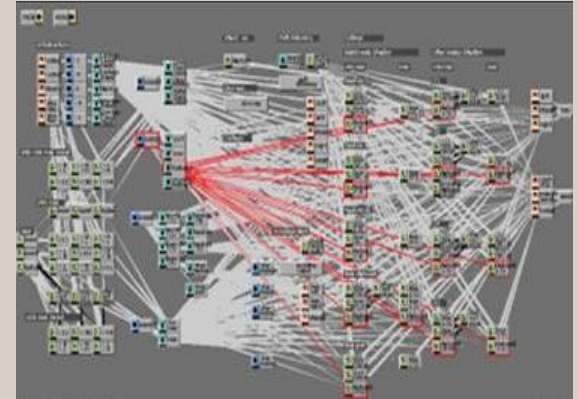
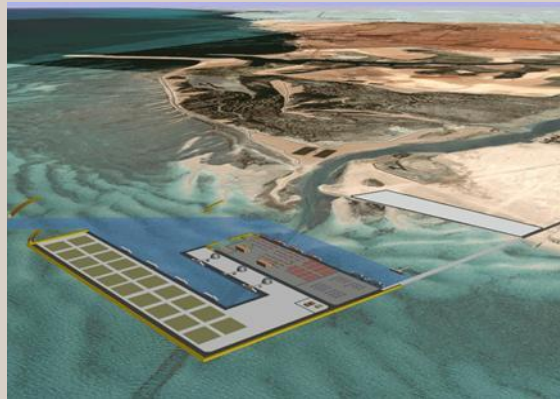
BMT in Maritime Transport

- Specialist vessels and yacht designs
- Vessel performance monitoring and analysis
- Shipyard support
- Modelling and laboratory analysis
- Manoeuvring and ship handling simulation
- Systems design



BMT in Ports and Logistics

- Port planning and operations
- Economic and financial analyses
- Trade forecasting
- Marine risk assessments
- Asset management and performance reviews
- Strategic investor support



BMT Relevant and Recent Studies

Recent studies in:

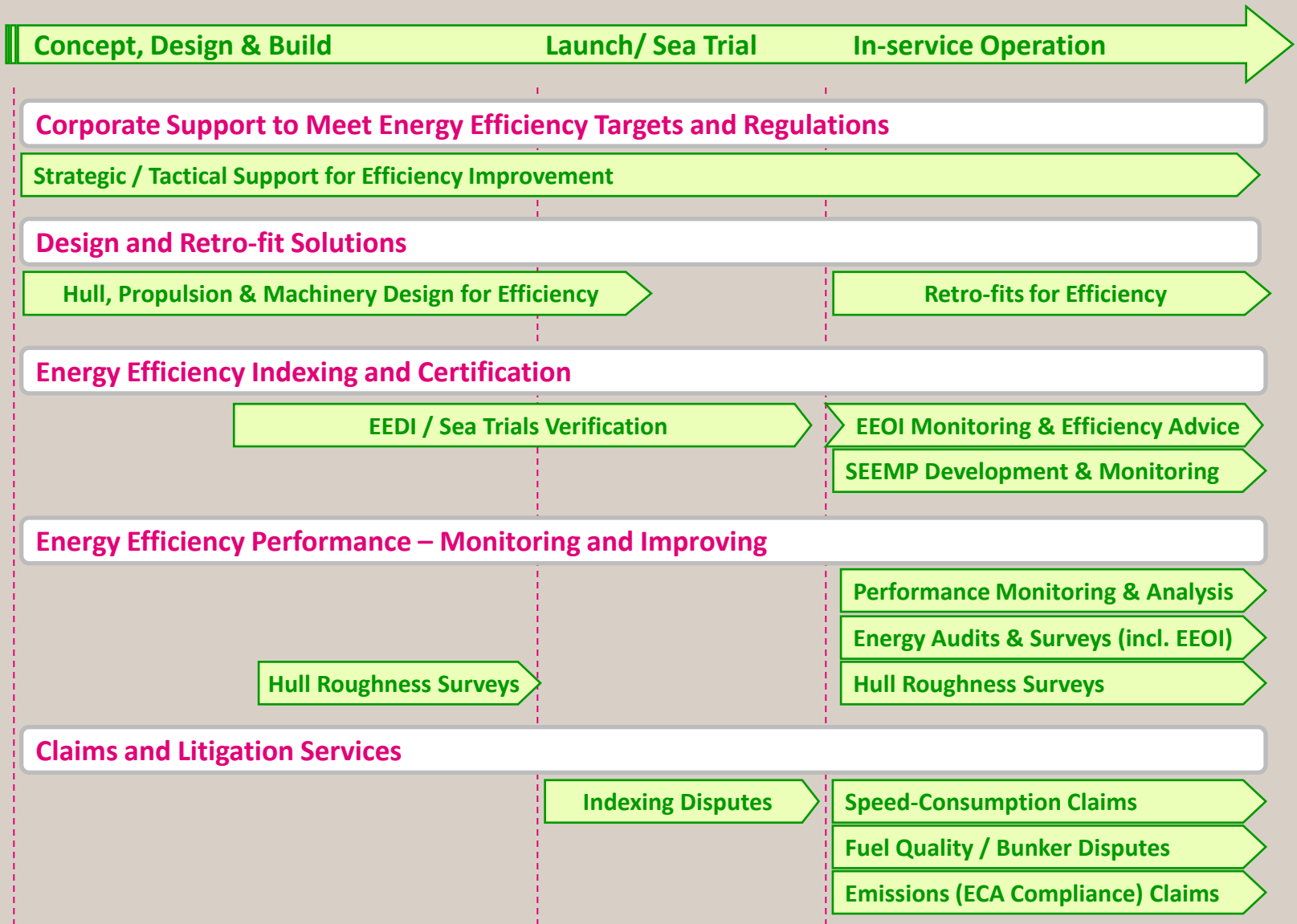
- Ship evacuation : SAFEGUARD
- Surfacing system for ship recovery: SUSY
- Power and propulsion systems: design for efficiency of liners, auxiliary ships (tankers)
- Design for emissions: methane slip issues
- Emissions trajectory models
- Course planning and prediction: weather routing
- Onboard energy recording, auditing and management (EEOI)
- Hull roughness surveys
- Self-funded R&D studies on EEDI development, margin allocations, heat management

- Main Areas

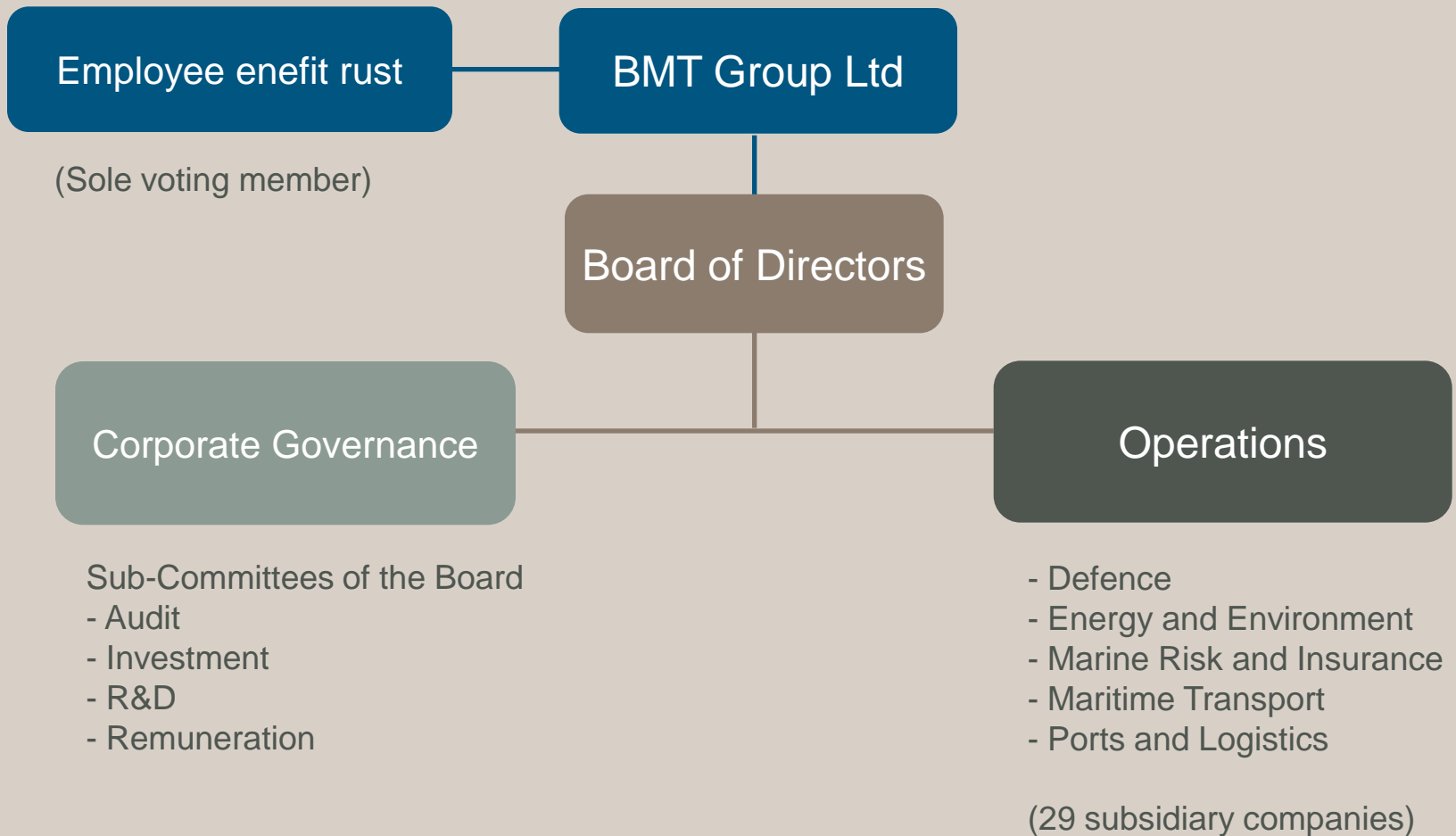
- Future platforms
- Future ship systems
- Through life support
- Safety and environment
- Information systems



BMT Group: Energy Efficiency Services



BMT Group Structure

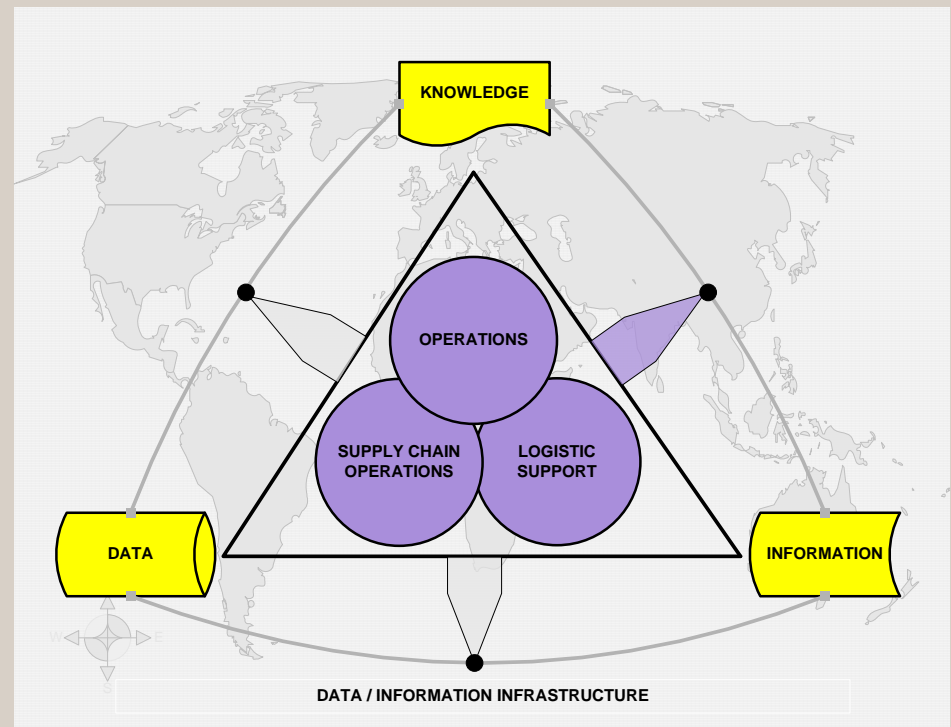


Review of Group Activities

Swedish FMV 'Expeditionary' Logistics Planning:

BMT Reliability Consultants is assisting the Swedish Ministry of Defence (FMV) and Swedish Forces in transforming the processes and practices of logistics planning to support the country's involvement in 'Expeditionary' military operations.

The contract recognises BMT's specialist expertise in logistics planning and management and will draw on the UK's experience gained in the deployment and support of UK troops overseas.



Review of Group Activities

Ship-board Monitoring, Analysis and Recording Technologies (SMART):

BMT SeaTech Ltd is continuing its development of the SMART product suite to assist customers who wish to optimise vessel performance and safe operation.

By providing a system that continuously records ship speed and fuel consumption with navigational and environmental parameters, performance trends are delivered that enable ship owners to quantify negative and often costly effects.



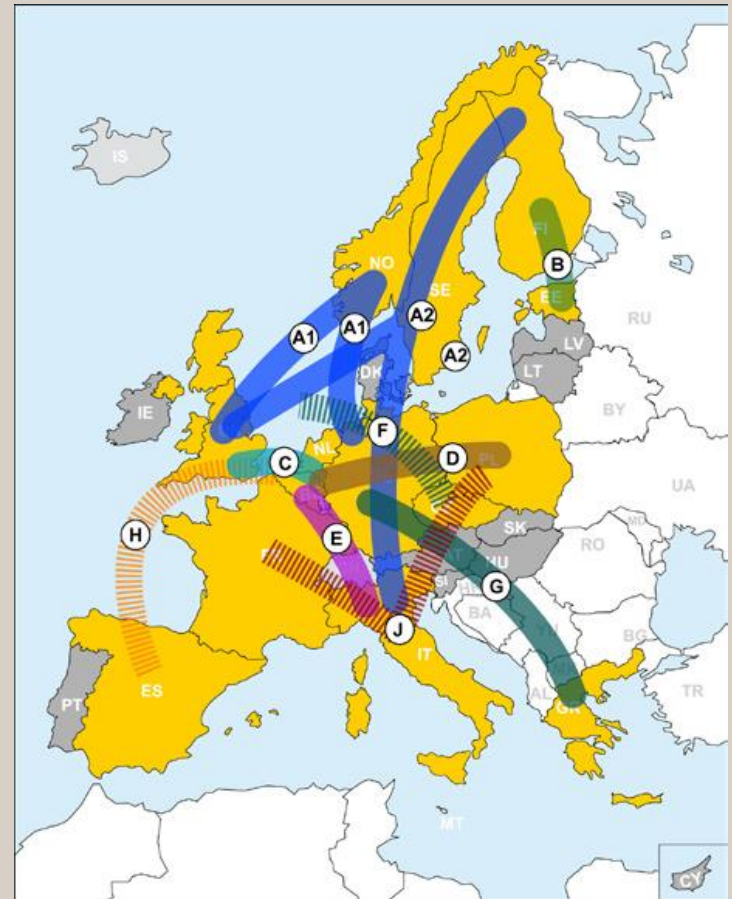
Commitment to Research

FREIGHTWISE

BMT is project managing, the FREIGHTWISE initiative.

The FREIGHTWISE consortium consists of 55 participants in 14 countries with involvement in 9 business cases. The overall objective is to support the modal shift of cargo flows from road to intermodal transport using road in combination with short sea shipping, inland waterways and rail.

It will achieve this objective by means of improved management and facilitation of information access and exchange between large and small, public and private stakeholders across all business sectors and transport modes.



Commitment to Research

FLAGSHIP

The rapid development of satellite communication and the internet has provided the means by which ship operators can gather data instantaneously and in large amounts.

BMT is project managing and researching FLAGSHIP which is one of the EU's major R&D projects. The aims of the project are to ensure that information is collected, analysed and delivered to the right people, in the right format and incorporating the highest level of knowledge. By doing so, FLAGSHIP has the potential to assist ship operators worldwide to manage the situations they face: from regular day-to-day operations to one-off emergencies.



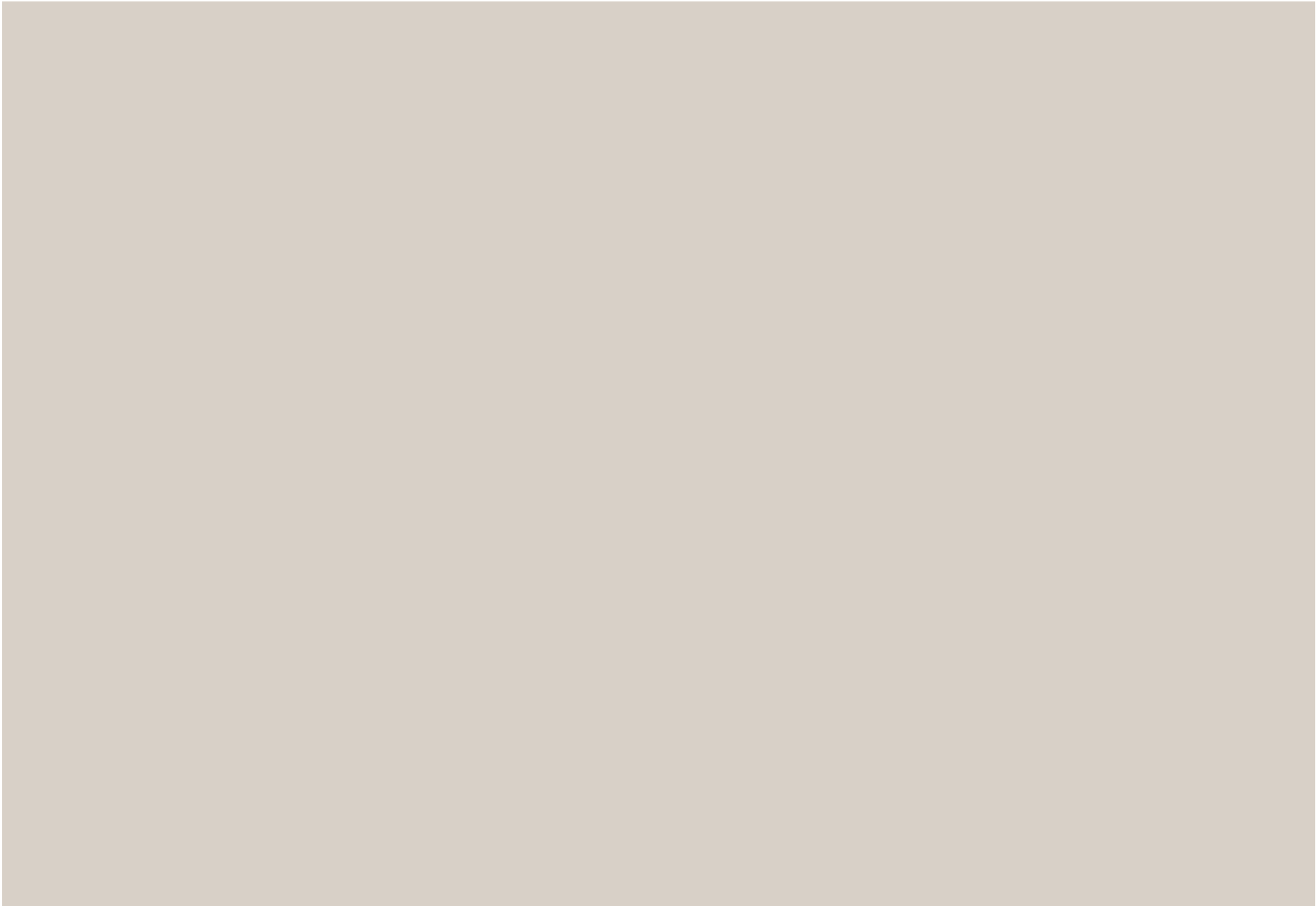
Collaborative Research

- **BMT has a well established track record of international collaborative research**
- **Current lead project is Poseidon**

Poseidon Project Aims

- **The objective of this work package is to develop electric ship technologies for wider application to deliver**
 - Reduced environmental impact including safety and environmental issues
 - Improved performance of electric ship
 - Reduced electric ship acquisition and life cycle costs
 - Enhanced design methods and tools for systems integration within an electric ship
 - **30 European companies involved**
 - **20 million Euro budget**





Poseidon Work Packages

- **WP-1 New Generation High Power Integrated Power & Propulsion System (CVT)**
- **WP-2 New Electrical Auxiliaries (SIREHNA)**
- **WP-3 Enhanced Electrical Power Systems, Green Harbour and Wireless (SAM)**
- **A-1 Integration in Ships (MARIN)**
- **A-2 Land Scaled Test Demonstrator (CVT)**
- **A-3 Risk-base design - Safety and Environment (Det Norsk Veritas)**
- **A-4 Project Management (BMT)**
- **A-5 Dissemination (GICAN)**

**Thank you for
your kind
attention**

