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Cruise & Passenger ship new builds

A complex process

Shipbuilding, especially of modern passenger and cruise ships, has evolved into a highly complex process. It involves numerous suppliers, sub-suppliers, engineering companies, classification societies, equipment providers, and of course, the ship owners themselves.

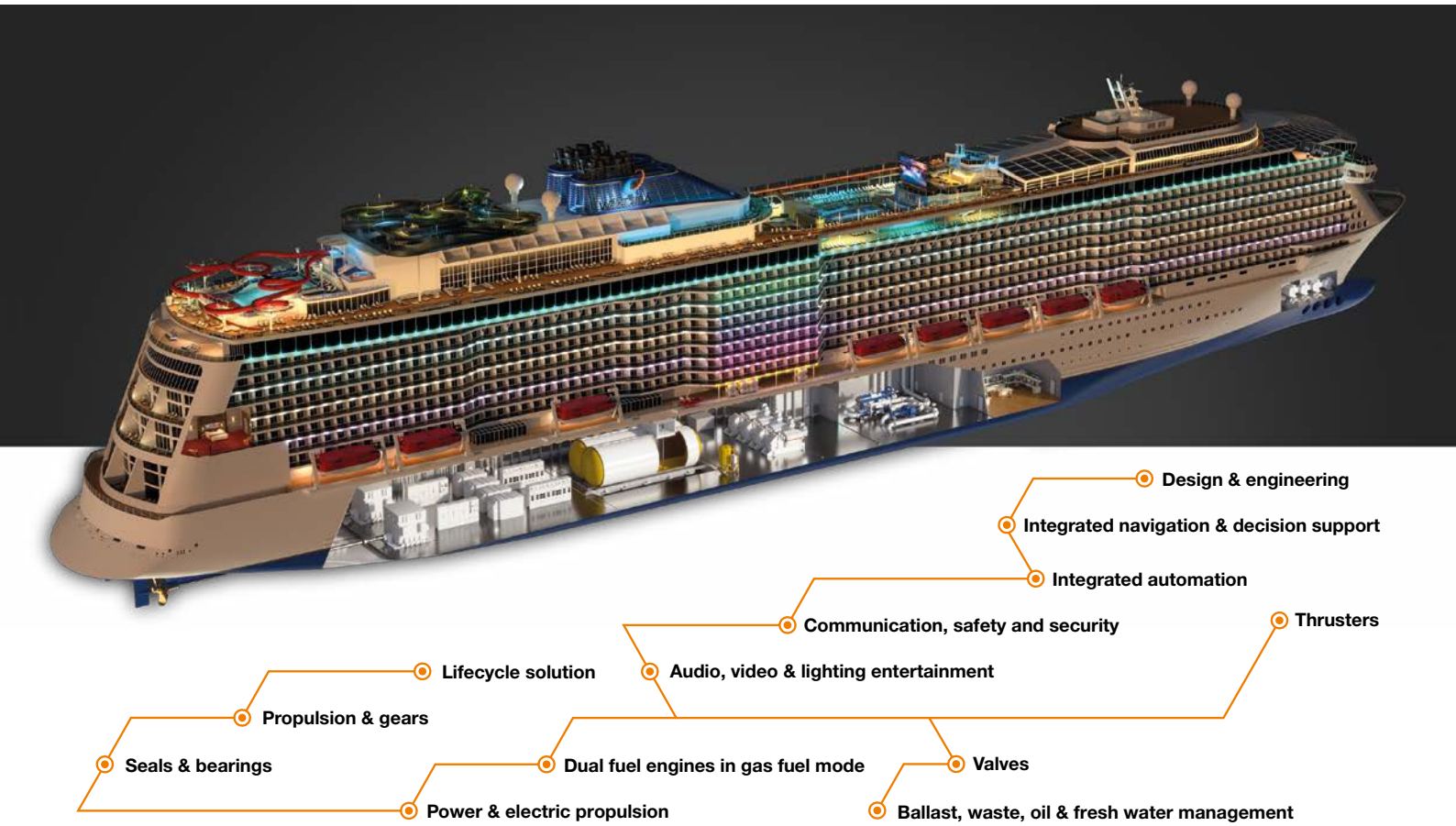
Additionally, thanks to established shipyards being busy with full order books, more ships are being built in new shipyards located around the world, that don't have the same capabilities or experience but are interested in stepping into the Cruise market and are able to offer attractive financing options.

This combination of numerous project partners and stakeholders, and multi-continental ecosystems raises the risk level in new build projects.

In a typical new build scenario, the shipowners might be based in one country e.g. America, the technology providers in Europe, while the shipyards are based in Asia.

The risks of using multiple suppliers

- With shipbuilding personnel often located in different countries, failures in communication can take place which can cause delays and increase costs.
- Sourcing of systems and sub-systems from different suppliers can lead to inadequate system integration, delays in build schedules and lead to reduced lifetime performance.
- With equipment and systems being sourced from many different suppliers, getting original spare parts and the right maintenance expertise can be a challenge.



How much can problems with integration add to the cost of a new build?

Improper systems integration thanks to sourcing non-standard equipment from multiple suppliers can mean additional time, resources and cost spent to correct it.

- Costs of redesign and reengineering = EUR 640,000*
- Corrections during installation plus commissioning costs = EUR 1,140,000**
- Corrections and modifications for overcoming interfacing issues = EUR 750,000
- Total additional costs = EUR 2,530,000 or 2.5% of the price of EUR 100 million cruise ship

*20 engineers working at EUR 100 per hour for 40 days
**EUR 1500 per day plus the cost of 20 yard engineers working at EUR 500 per day for 60 days

- OPEX cost of non-optimised equipment is EUR 150,000* = EUR 4,500,000 over 30 years
- Cost of equipment maintenance and down time is EUR 200,000** per year = EUR 6,000,000 over 30 years
- Total OPEX costs (EUR 6 Mn + EUR 4.5 Mn) = EUR 10,500,000 over 30 years

*Based on annual fuel costs of EUR 5 million
**Cost of 1 shore side technical assistant and 1 administration clerk

How can Wärtsilä help?

The risk is alleviated when a reliable and fully integrated supply of the equipment and systems required can be sourced from a single supplier with the experience and worldwide presence to support and deliver in line with the project requirements.

Companies, such as Wärtsilä, that have in-house capabilities in ship design, engineering, project management, and a broad portfolio that can be integrated into solutions, can offer 'end-to-end' responsibility with services to support each element required, delivering benefits throughout the lifecycle of a vessel. By being involved in the project from a very early stage, Wärtsilä can alleviate most of the risks detailed above.

Wärtsilä Lifecycle solutions can predict maintenance needs, ensuring that assets operate in the most efficient way and in accordance with relevant regulations.

Customers can access Wärtsilä service network around the world for support where and when its needed

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