ROLLS-ROYCE COMMERCIAL MARINE

India – A key market for generations



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Trusted to deliver excellence

Rolls-Royce Data – Strictly Private

About us

"A pre-eminent engineering company, focused on world-class power and propulsion systems."

- 25 000 ships with our design or equipment
- **1 out of 4** ships in the registered world fleet have our equipment on board
- 3 600 employees across 34 countries
- **£1,077m** in revenue, £(25)m profit (2017)
- Business areas:

Propulsion – Deck Machinery – Systems – Services – Ship Intelligence





Our services

Ship design

More than 900 UT and NVC vessels are in operation all over the world – under the toughest conditions known to man. Our UT design is the benchmark of the offshore oil & gas industry.





System integration

From the fingertip controls of our advanced bridge systems, to the engine room, propulsion systems and on-deck equipment, we have unparalleled systems integration capability.

The widest range of products in the marine industry

Our technology can be found in more than 25,000 vessels, delivering mission critical marine power and propulsion systems and deck machinery.

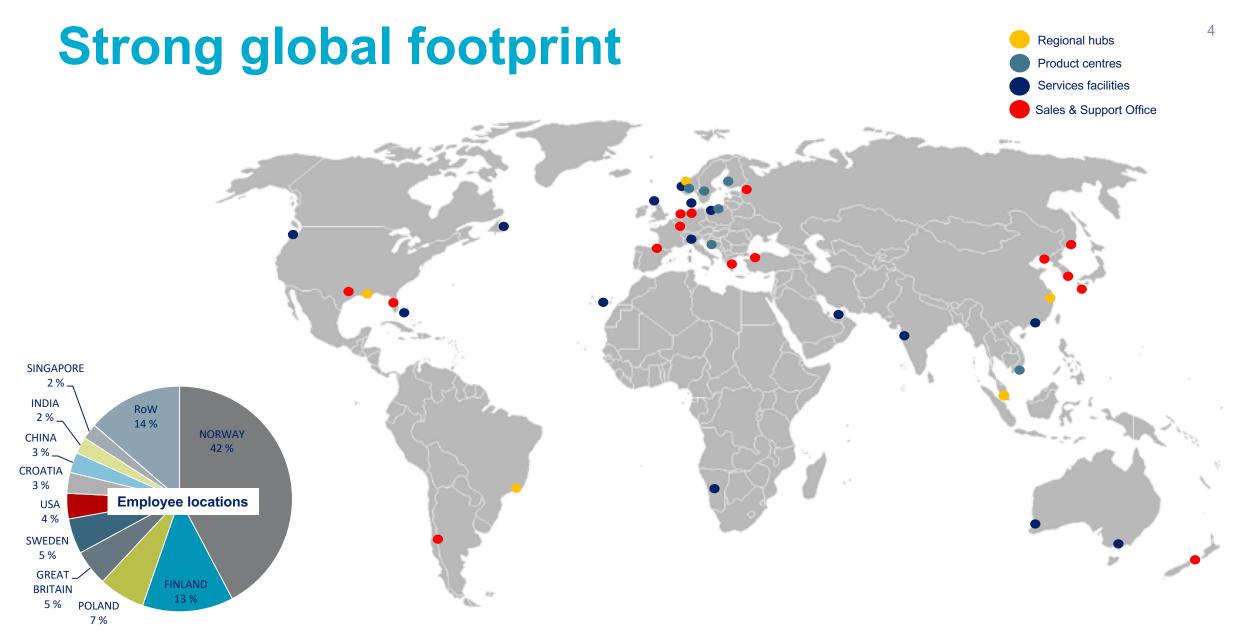


Through-life service and support

Global service network with more than 700 well-trained service engineers. Streamlined global spares distribution network and 24/7 technical support. Advanced customer training facilities in Norway, Singapore and Brazil.



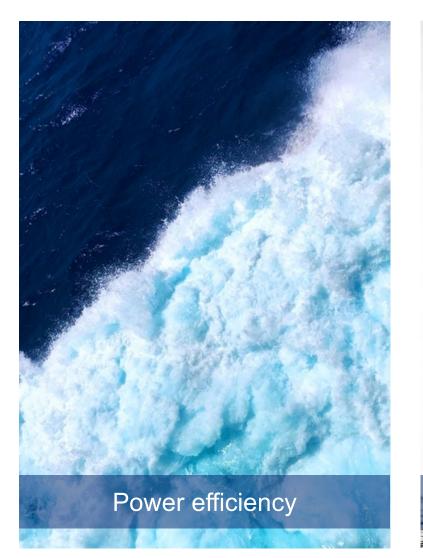








Three key drivers





Digitalisation



Our solution



"PIONEERING THE POWER THAT MATTERS."



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Pioneering the future

"Committed to innovation, powering better, cleaner growth."

- Strict **environmental demands** at sea is a driver for our industry. We believe in the positive transforming potential of clean technology.
- By building on our strong heritage we produce state-of-the-art electro-mechanical and hybrid power systems.
- In the future, completely **silent motor ships**, with **no smoke** from the pipes, will sail the seas.







"Zero Emission Ship" project

• By combining existing technologies in new ways, Rolls-Royce with partners plan to build ferries that represent a quantum leap for the environment.













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Pioneering efficiency

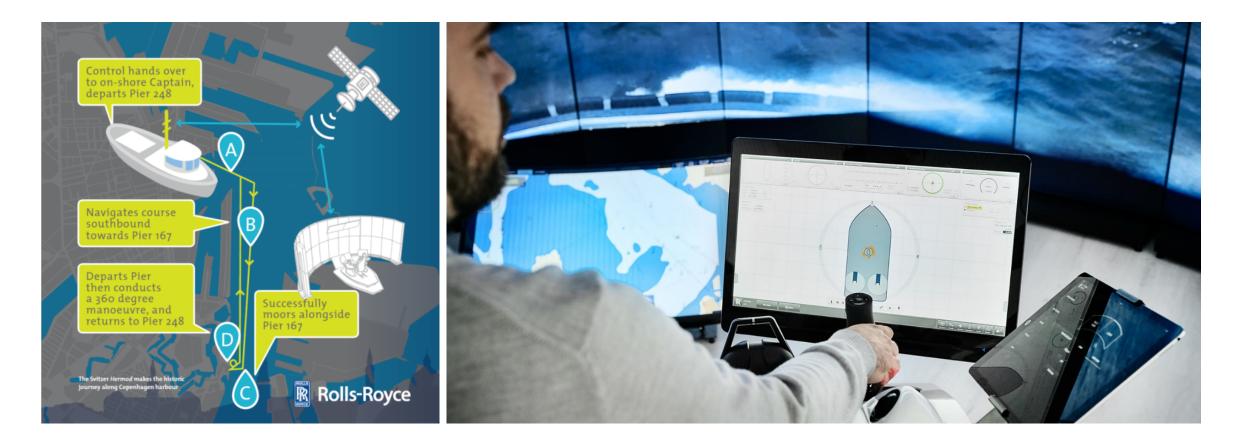
"Helping our customers do more, using less."

- Marine 4.0 where products, systems and digital data meet
 - Smart manufacturing
 - Ship intelligence (remote and autonomous operations)
 - Data analytics servicing ships with digital tools and konowledge





World's first remotely controlled commercial tug





Pioneering business

"Investing in technology, people and ideas to improve all aspects of our performance."

- We have **increased our investments** in new technology with 50%
- Creating an **working environment** where each of us is able to be at our best is the top priority.
- We value **collaboration**, **simplicity** in processes, **agility** and **boldness** in our work.







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Norwegian Maritime Competence Center

• Technology and Training Centre, Fleet Management Centre & Data Analytics Centre





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Naval

40 Indian Navy vessels with Rolls-Royce equipment 21 Coast Guard vessels operating Rolls-Royce products Broad product portfolio represented 10 Class of Vessels



Rolls-Royce Commercial Marine History and relations in India

- ONGC discovered oil at Bombay High in 70's and since then Government of India has given oil exploration and production top priority and is active with multinational companies in further developing prospective fields
- ONGC in 80's embarked on project of acquisition of Offshore Vessels and also agreed with Indian Shipowners for charter of Offshore Vessels on long term basis. ONGC selected UT 714 / UT 724 design and vessels built in early 80's. Rolls-Royce had agreements with yards for transfer of technology, training of shipyard engineers, provision of experts on site during construction of vessels, and competitive financial packages. First contract was with Mazagon Dock, 4+4 x UT 714 for ONGC



Rolls-Royce Marine History and relations in India

UT Design Offshore vessels built/acquired in the 80's:

•	Mazagon Dock Ltd	UT 706 x 1
•	ONGC	UT 707 x 2
•	Mazagon Dock Ltd	UT 714 x 1
•	ONGC	UT 714 x 16
•	Shipping Corporation of India	UT 714 x 10
•	Essar Shipping	UT 714 x 4
•	ONGC	UT 724 x 17







Rolls-Royce Marine History and relations in India

- Rolls-Royce has supplied major equipment on more than 180 vessels with 60 Indian Ship Owners/Oil companies. Around 65 of these vessels are Rolls-Royce UT Design Vessels, each equipped with a range of Rolls-Royce equipment. Presently we have 160 vessels under construction at Indian Shipyards which are with Rolls-Royce UT Designs and/or Equipment.
- Offshore Vessels built/ordered for Indian owners at Indian yards: Year 2000-2011 - <u>19 vessels</u>
- Offshore Vessels built/ordered for Indian owners at yards outside India: Year 2000-2011 - <u>26 vessels</u>
- Offshore Vessels built/ordered in India for owners outside India: Year 2001-2011 - <u>111 vessels</u>



Rolls-Royce Marine Key projects in India







Rolls-Royce Marine

Project for Ministry of Shipping







Rolls-Royce Marine

New Projects



UT517L for Indian Coast Guard



UT 851 for NCAOR



Rolls-Royce

Thank you for your attention

