

An aerial photograph of the Fugro Orca, a red and white inspection vessel, positioned on a large, black floating platform with yellow safety markings. The vessel is equipped with various antennas and a large white dome. A small orange inflatable boat is also visible on the platform. The background shows dark water and a wooden pier.

FUGRO

Fugro developments in remote offshore inspection

AIRTuB meeting Vlissingen

J.C. Sabel, 22 Sep 2022

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Remote operations, why?

Remote operations, how?

USV and ROV

Robodock



Who we are

9000 employees ...

...living in **61** countries

...**60** years of exploring the earth

FUGRO
60 YEARS

Celebrating our past, delivering the future

25
specialized
service
vessels



4
uncrewed
surface
vessels



82
remotely
operated
vehicles



6
autonomous
underwater
vehicles



26
jack up
platforms



194
geotechnical
drilling rigs



39
laboratories



7
remote
operations
centers



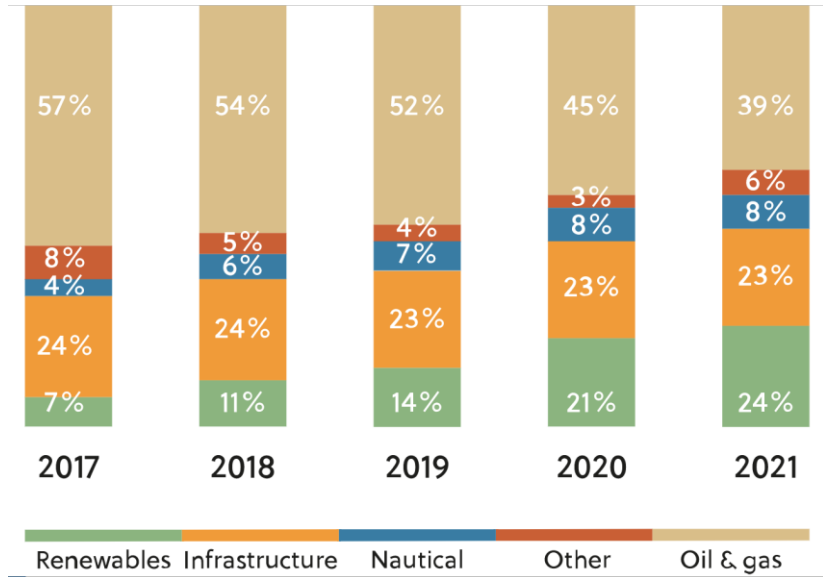
400+
R&D
Scientists



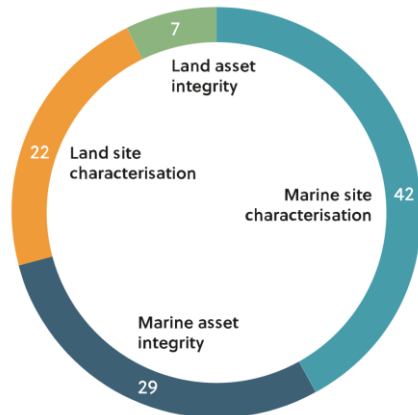
117
cone
penetration
testing
systems



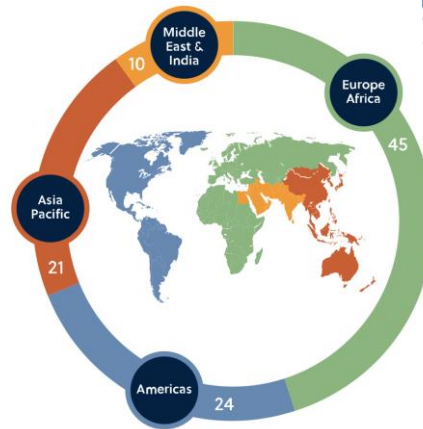
Fugro's key markets and services



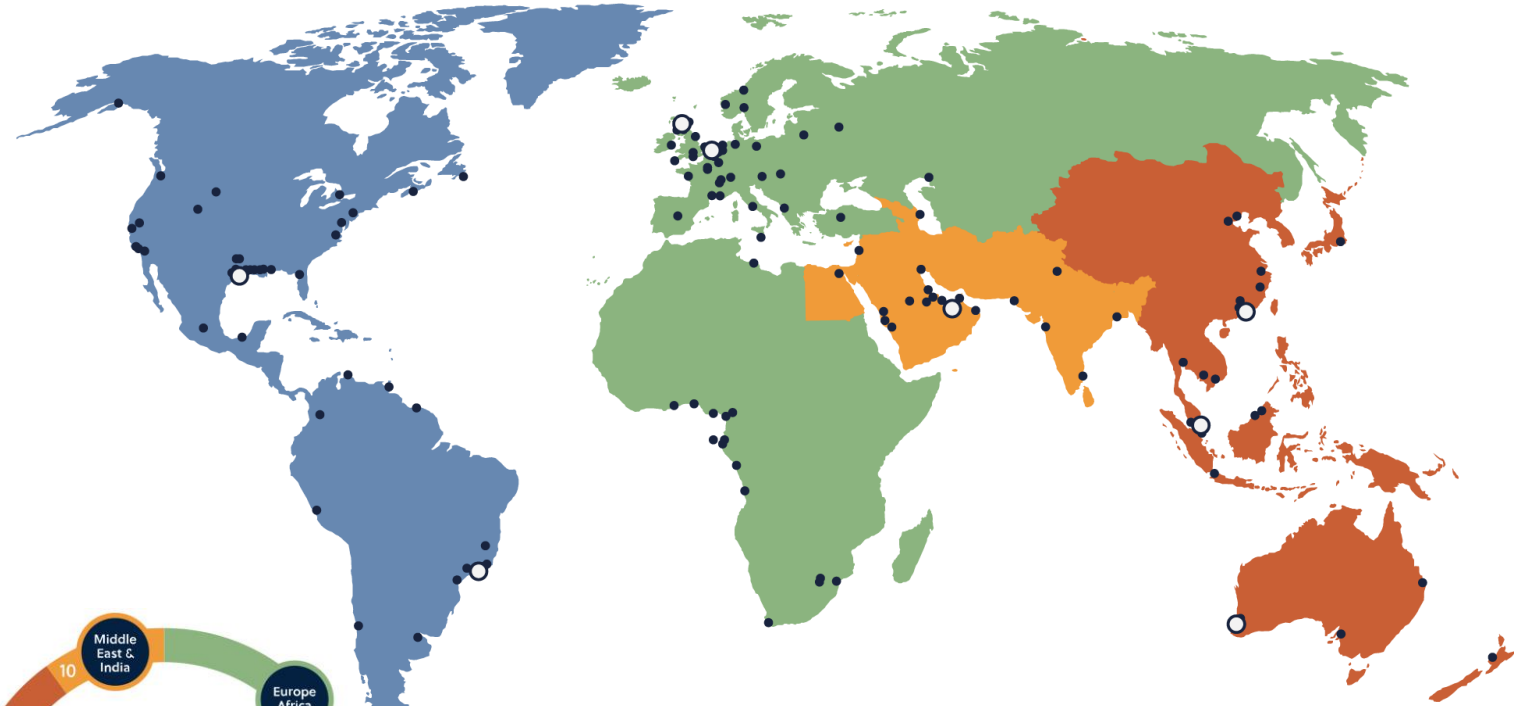
Revenue by market segment in %



Revenue by business line in %



Revenue by region in %



Why? "Safer, Faster and more Sustainable Services"



Safer Operations and reduced HSSE exposure by moving people to shore

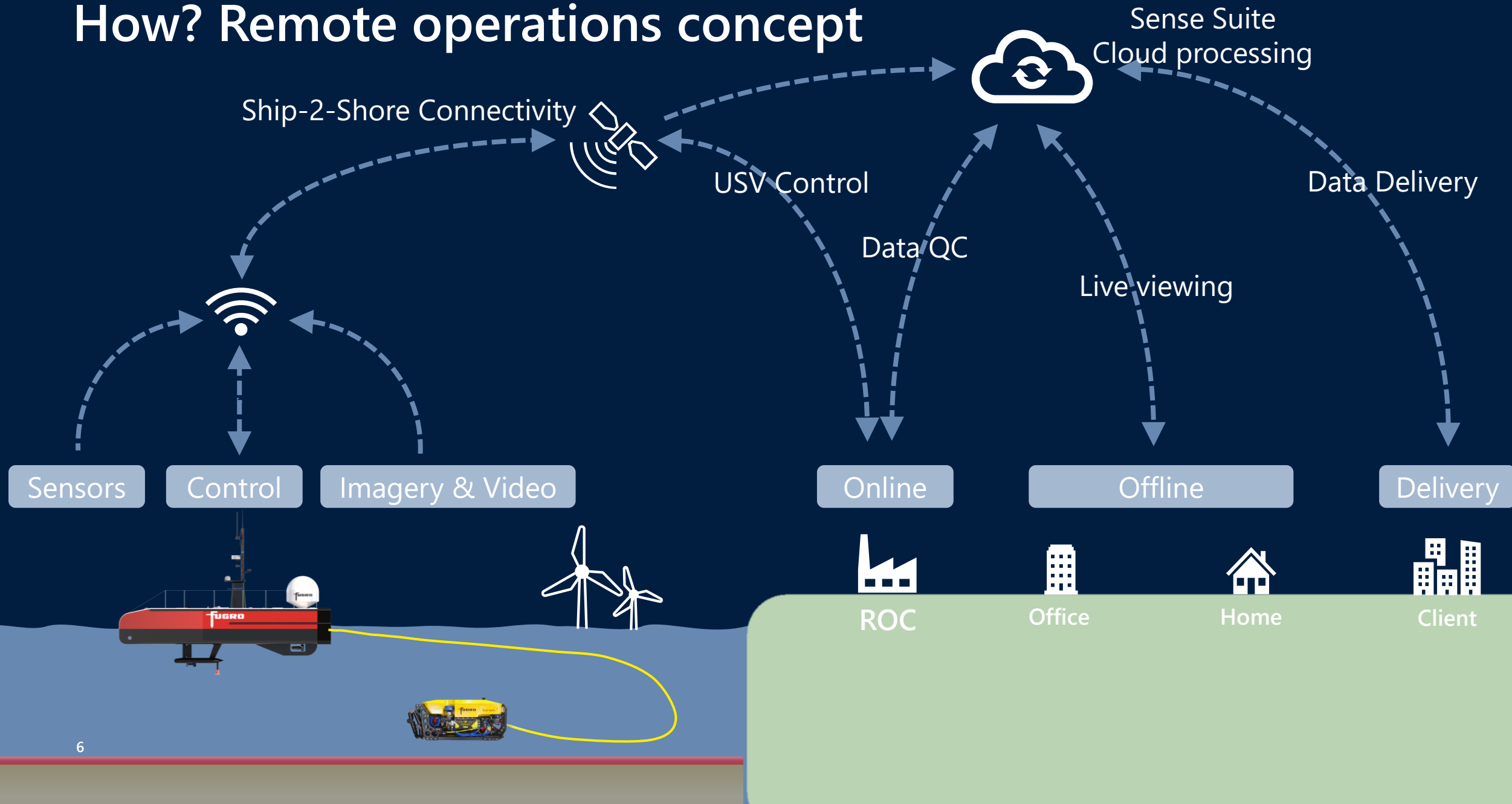


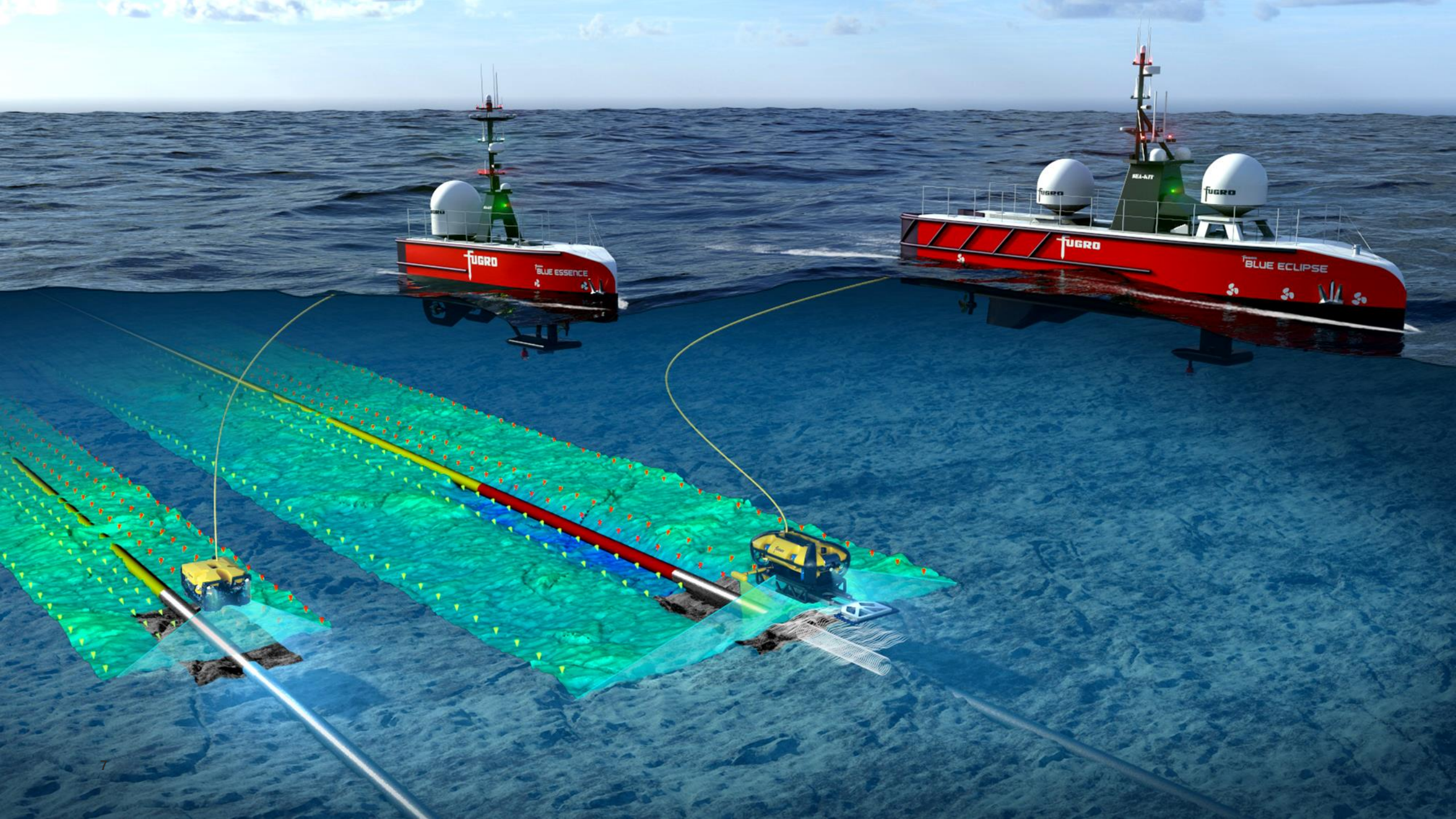
Faster delivery through cloud-based processing and data access



Reduced carbon footprint by decreasing fuel consumption & mobilization logistics

How? Remote operations concept









Robodock, what is it?

- A floating, mobile **automated docking-refueling- and data download** station for Fugro's USV fleet.
- To be stationed on **strategic locations** close to OWF assets **independent of quayside** facilities and logistics.
- Contributing to safer, faster and more sustainable O&M by providing a **short notice call out, uncrewed flexible platform**, facilitating both scheduled and unscheduled operations.



Robodock test

- Successfully tested in August 2022 in IJmuiden Marina
- Fugro Orca docking and undocking
- Automatic mooring effective



