



AQUACOMMS

Introducing The North Atlantic Loop

Delivering Secure, Resilient Trans-Atlantic Capacity

Andy Hudson
Chief Network Officer

What We Do

FOCUS – Fibre Optic Cables Under the Sea



AQUACOMMS

We FOCUS on:

- Subsea Networks
- The North ATLANTIC market only

We DELIVER:

- High-bandwidth Transport-layer services across the Atlantic
- From 1 year leases to 20 year IRUs

We OPERATE:

- As a Carriers' Carrier; we are independent, neutral and only sell in the Wholesale space
- Full 24/7 Network Management Centre monitoring wet plant, terrestrial and all facilities.
- Networks we built and own that allows us to deliver end - end services in as little as 72 hours

This is all we do

This FOCUS makes us Unique in the market and your ultimate Partner for your Atlantic network needs



Capacity Services



Managed Spectrum



Fibre Pair Solutions



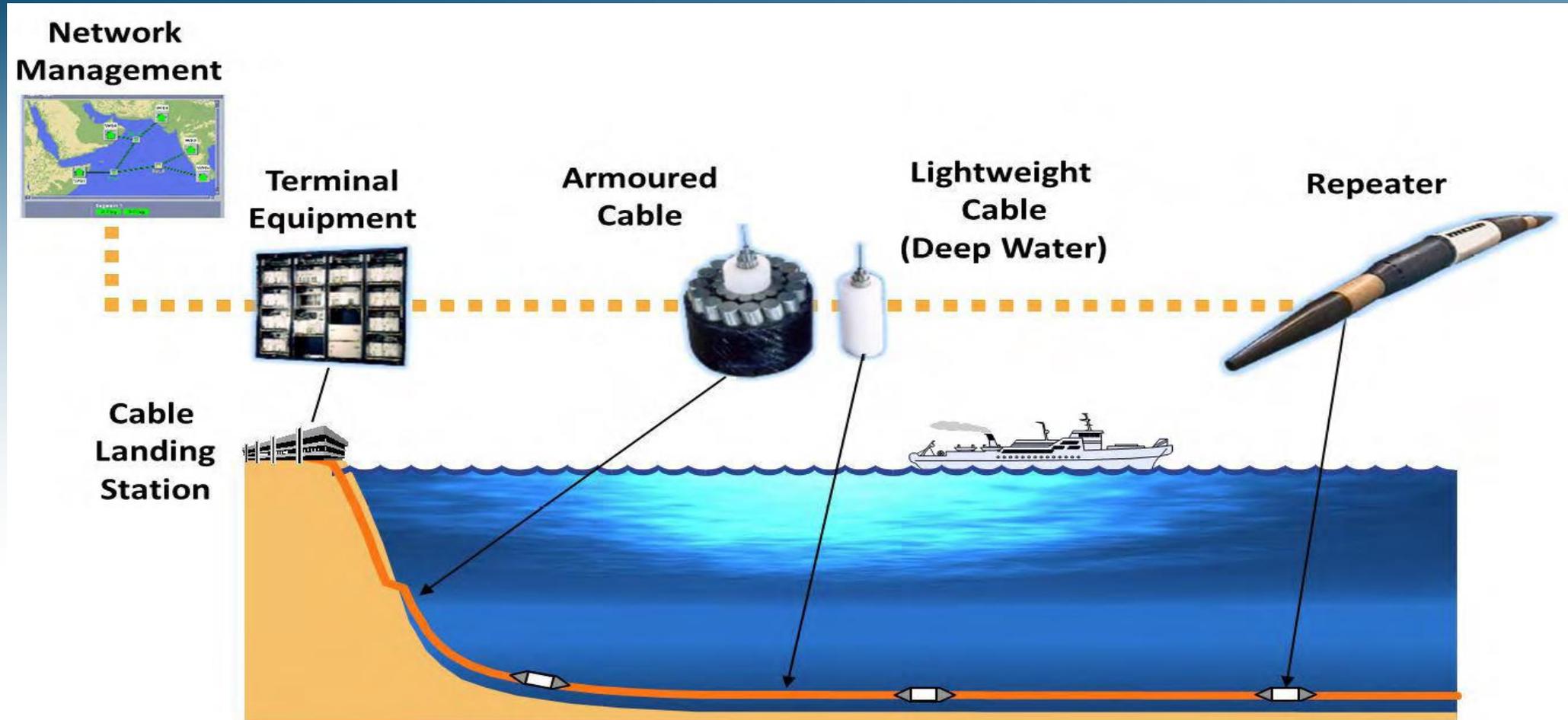
Professional Services

Subsea systems and the industry



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- End-end design and project

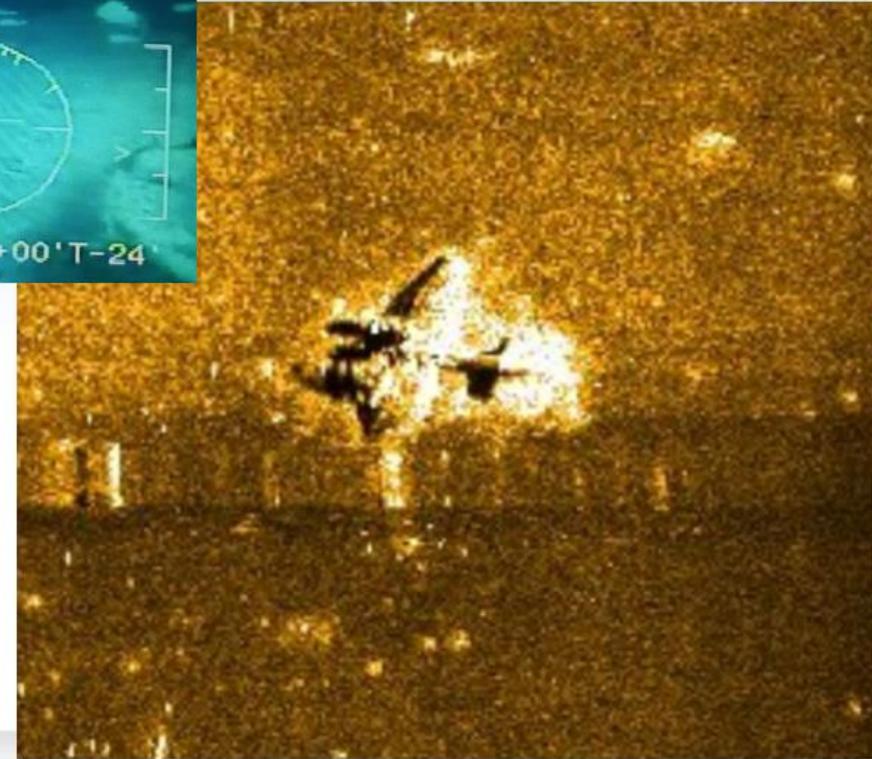
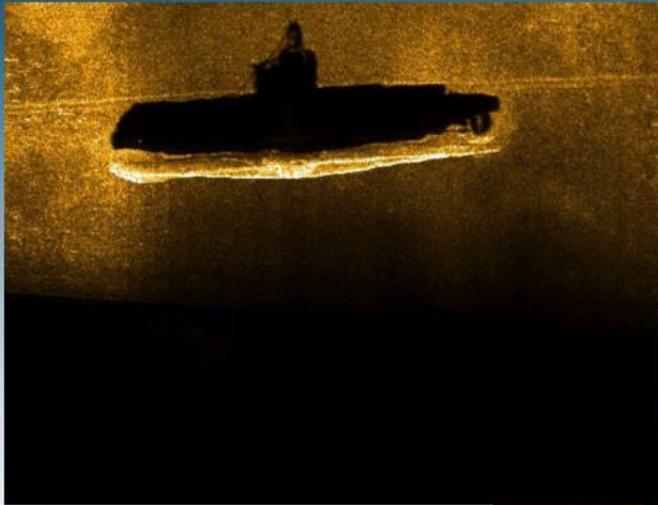


Subsea systems and the industry



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Survey and construction hazards

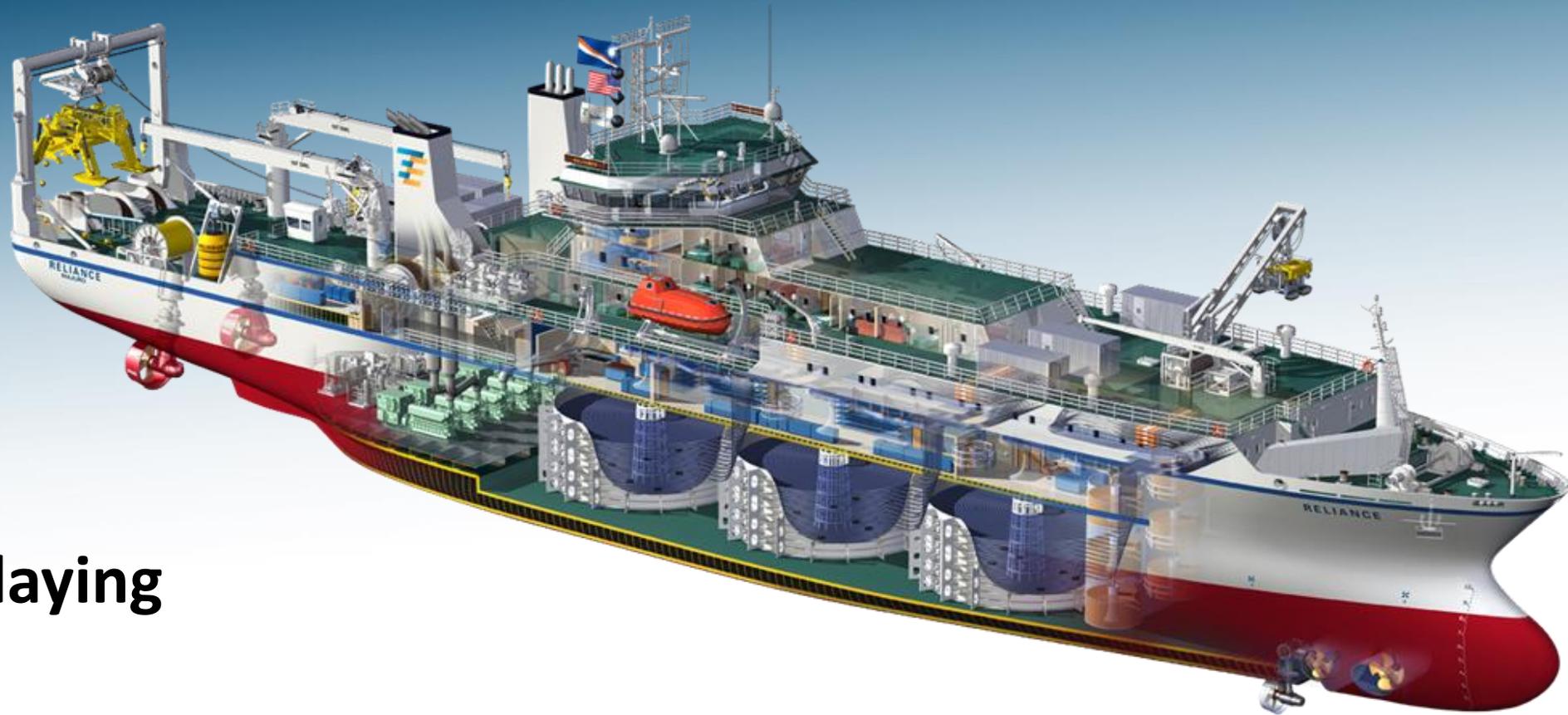


Subsea systems and the industry



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- End-end design and project



Cable laying

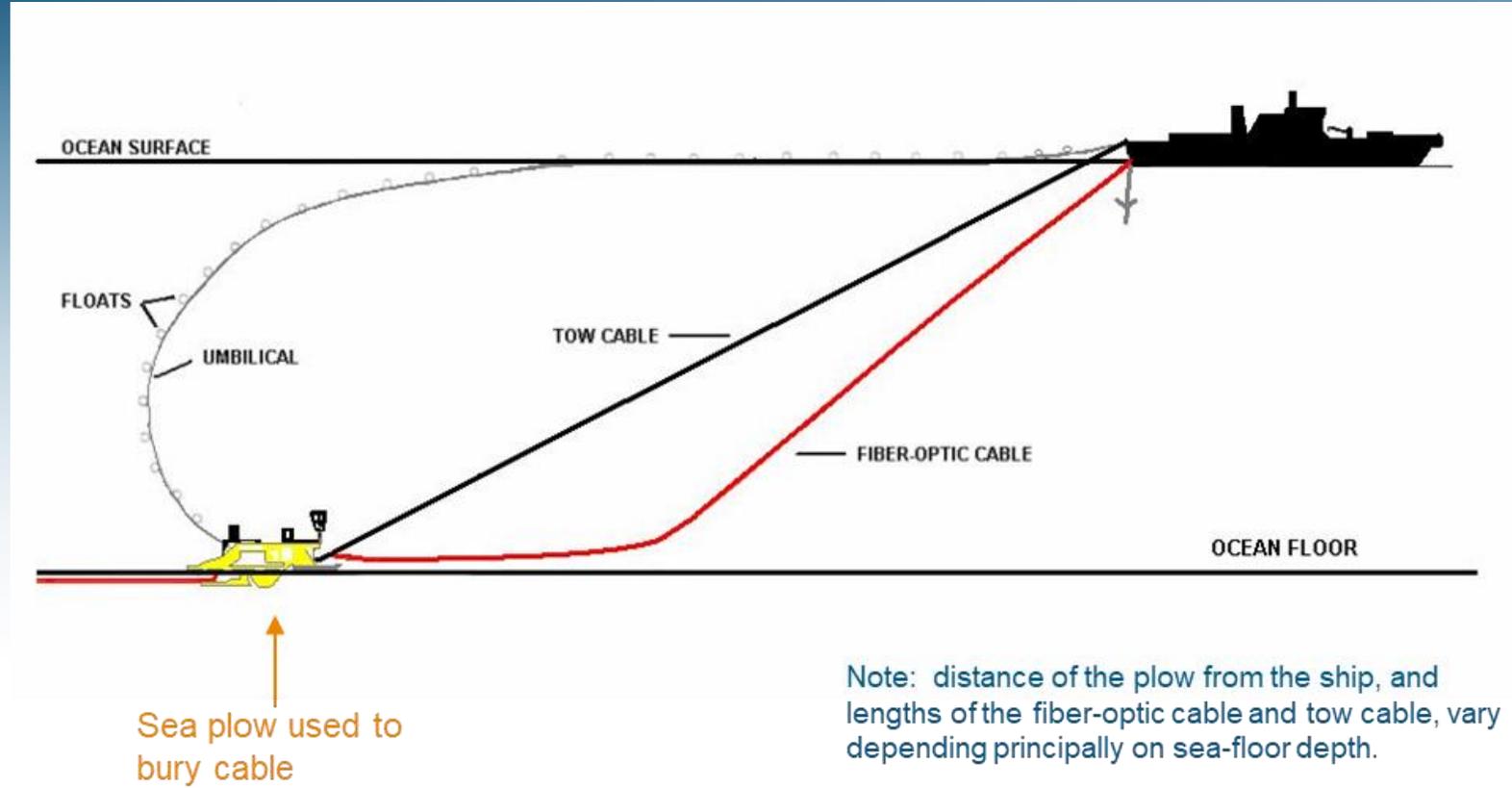


Subsea systems and the industry



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- End-end design and project



Cable laying

Subsea systems and the industry



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- End-end design and project

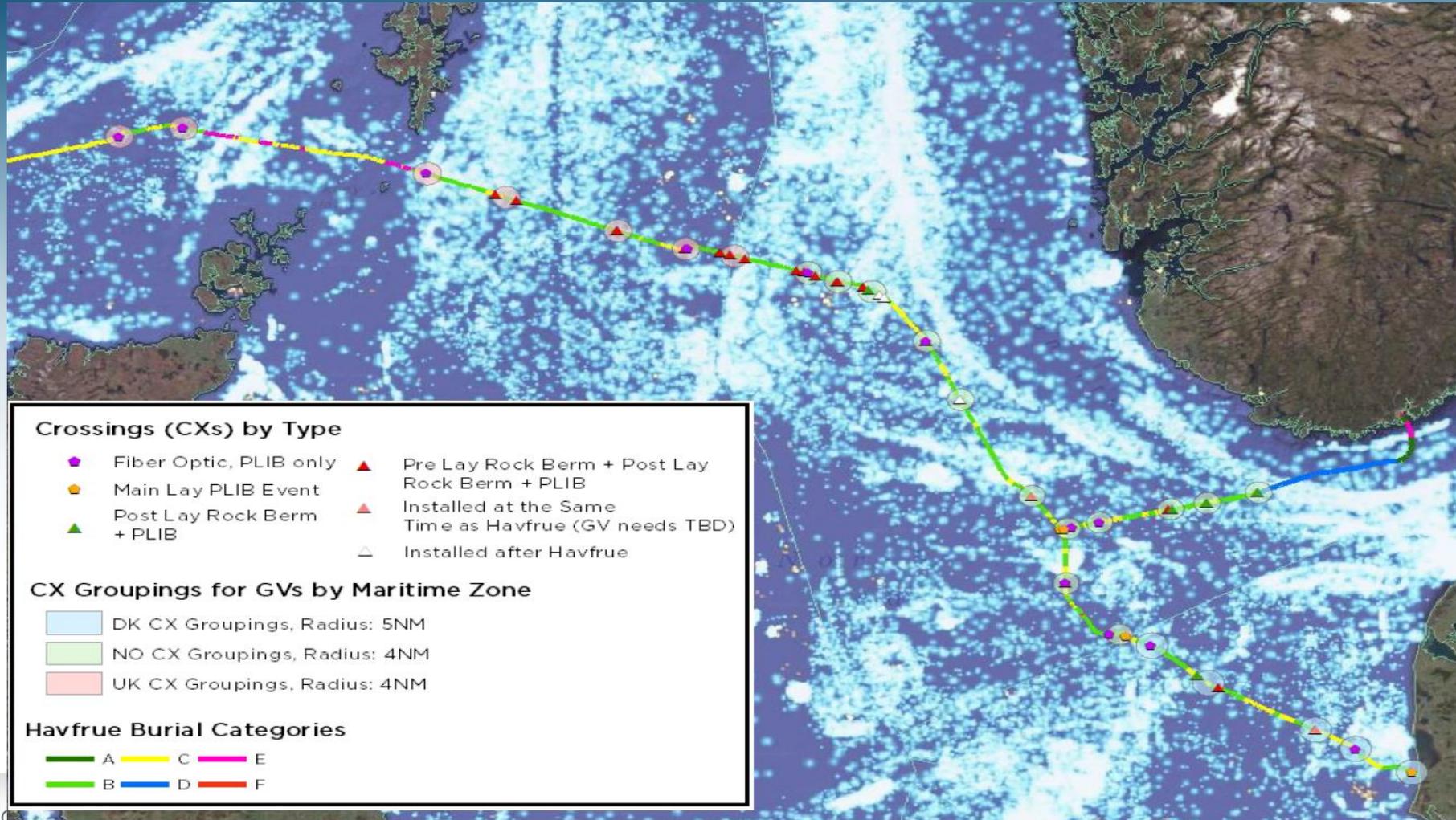


Cable landing



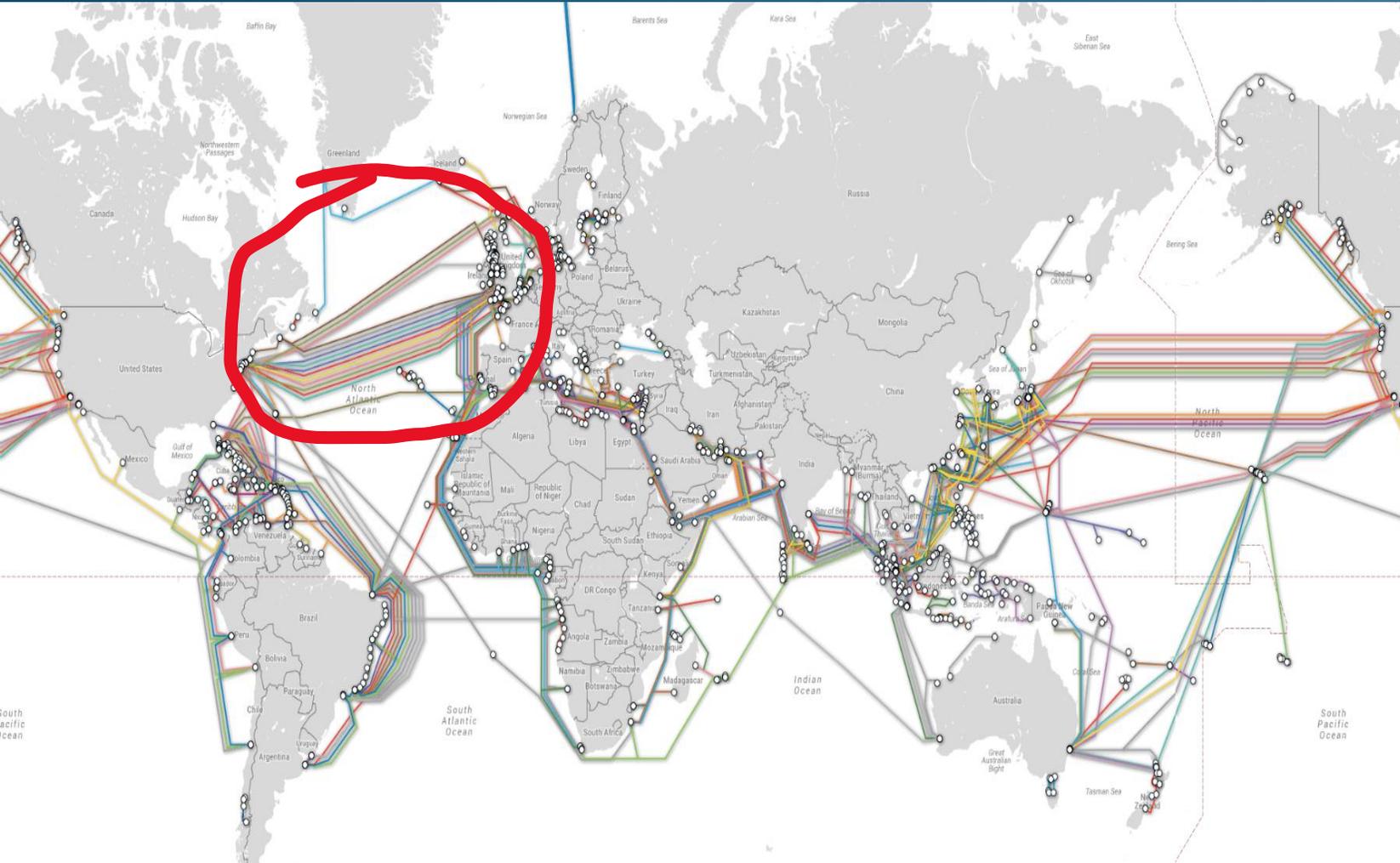
Subsea systems and the industry

- Global fishing watch data input to cable type and routing



Subsea systems and the industry

Transatlantic systems and the future



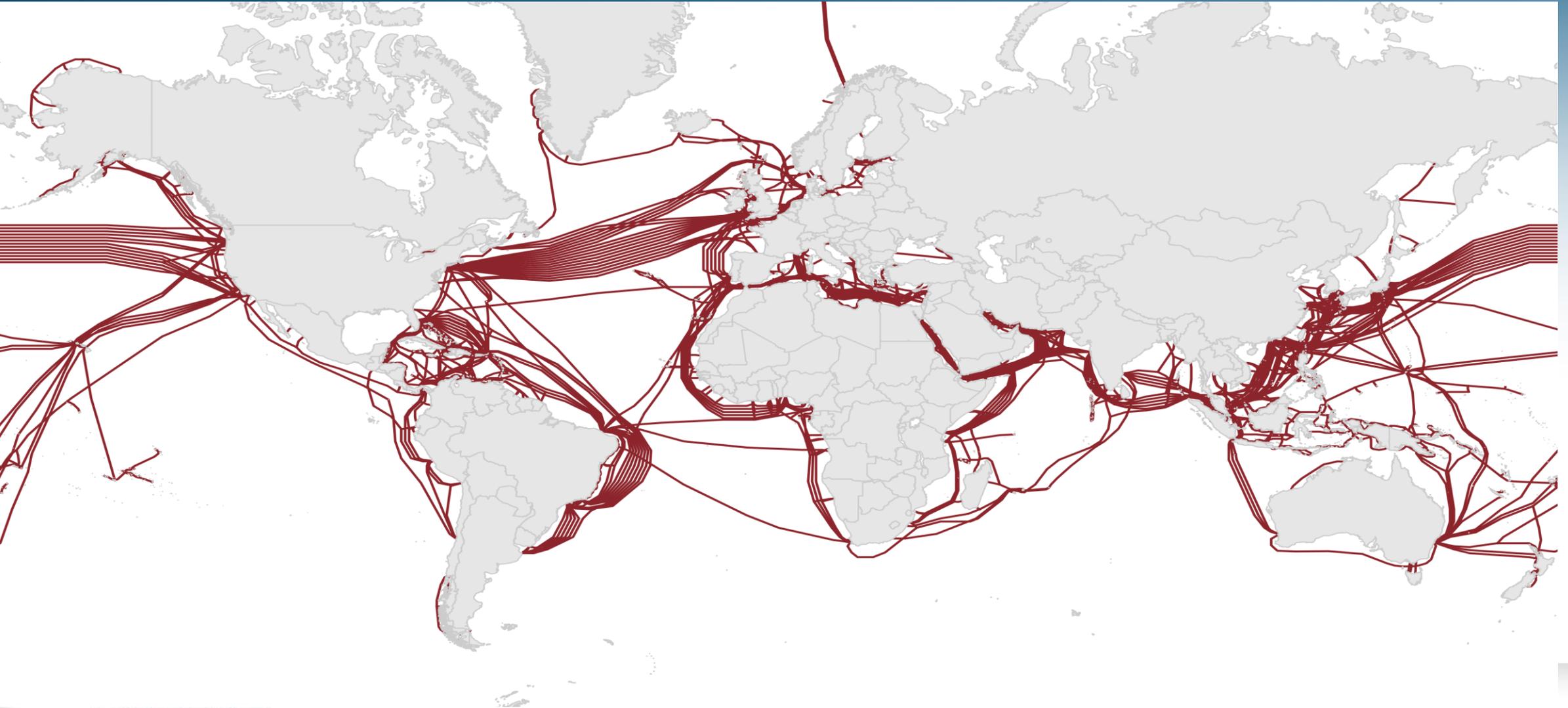
- As of early 2018, there are 448 submarine cables in service globally
- 1.2m Km of cables
- 99.7% of international data is transmitted under water
- Growth of data generation, data consumption, data centres, terrestrial fibres and subsea are all **interrelated**
- Subsea cables are responsible for **\$10 trillion** in transactions every day

Evolution of Subsea Cables

Active Submarine Cables, September 2018 + Planned Cables



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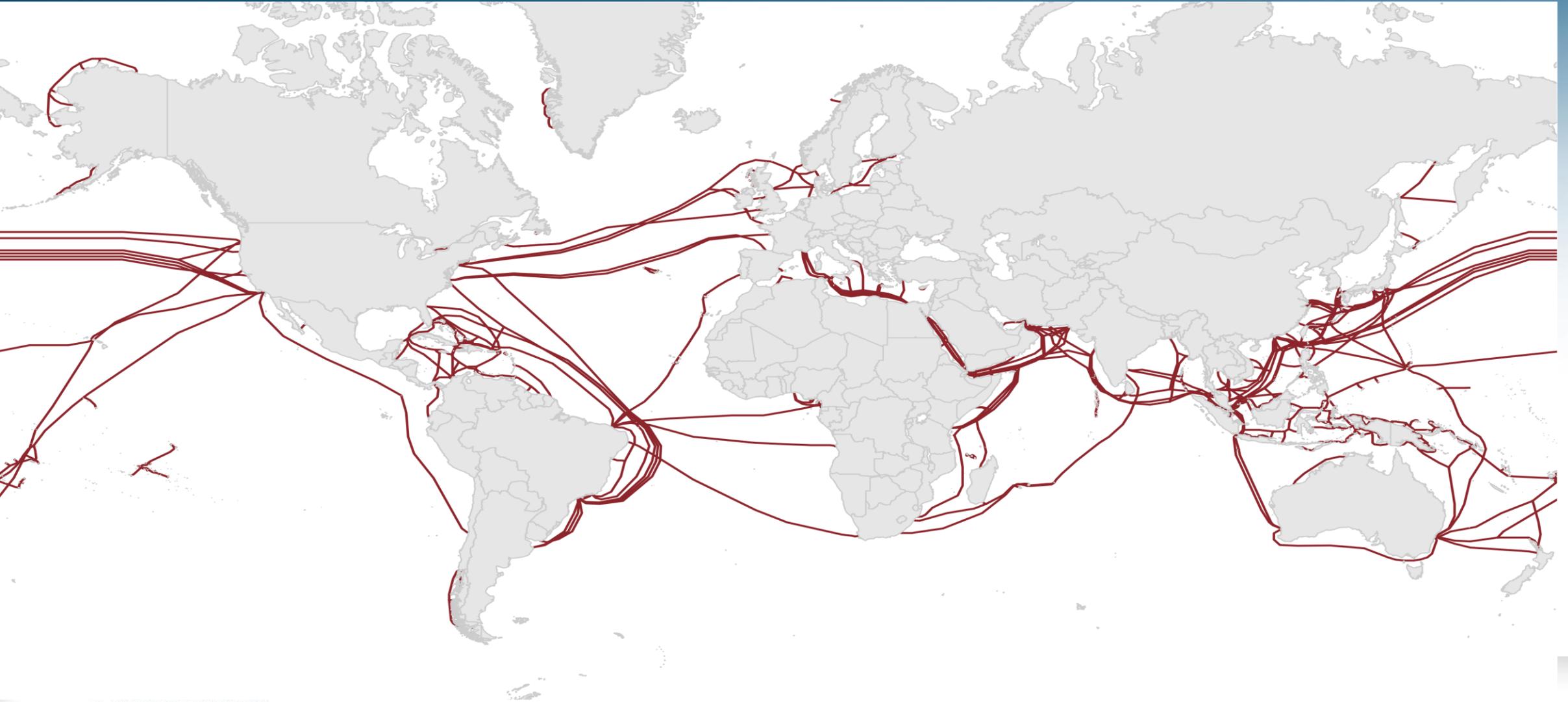


Evolution of Subsea Cables

Only Active Cables with RFS Post-2011 + Planned Cables



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The Atlantic Market



Background

- Currently, there are 14 separate Trans-Atlantic routes connecting North America to Europe
- 11 systems were RFS between 1999 – 2003
- 3 systems have launched since 2015 (Hibernia Express, AEC-1 and Marea)
- Estimated useable life is 20-25 years; maybe 15 years for economic reasons
- Current profitability driven largely by O&M revenue derived from early indefeasible right of use (IRU) contracts
 - These are extremely profitable by current comparison
 - Once the IRU ends and there is no more O&M revenue, this will be a deciding factor on the future of the cable
- The market is now being designed around a smaller number of next generation cables built since 2015
 - New technology
 - Geographical diversity on both sides of the Atlantic, driven by OTT requirements

The Atlantic Market



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Current Atlantic Cables



The New Atlantic Cables

AEConnect Trans-Atlantic Cable Network

- AEConnect-1
Trans-Atlantic Cable
- AEConnect-2 (HavFrue)
Trans-Atlantic Cable
- AEConnect Diverse Backhauls
- Hibernia Express
- MAREA
- Dunant



The Aqua Comms' North Atlantic Loop



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The North Atlantic Loop offers **two diverse** routes from the US to Europe, combining to offer:

- New York and / or New Jersey to Ireland, to the UK and onwards to Mainland Europe
- New York and / or New Jersey to Denmark, to the UK and onwards to Mainland Europe

**AEConnect
Trans-Atlantic
Cable Network**

- AEC-1 Trans-Atlantic Cable
- AEC-2 Trans-Atlantic Cable
- AEConnect Diverse Backhails
- CC2 & NSC
- POPs: US, Ireland, UK and Denmark

CC-2 and NSC

Aqua Comms is building CeltixConnect-2 (CC-2) & North Sea Connect (NSC) to provide uniquely diverse, high capacity routes to the UK and mainland Europe



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- Existing Cable
- Planned Network

United States of America

North Sea Connect

Denmark

CC-2

AEC
Network

EirGrid

CC-1

CC-2 complements the existing CC-1 to form a fully diverse ring between Dublin and Manchester

Incorporating Branching Units to facilitate connectivity to the Isle of Man

Dark Fibre available for pre-RFS sales

North Sea Connect (NSC) is the first modern system providing diversity from the UK into Northern Europe and avoiding London

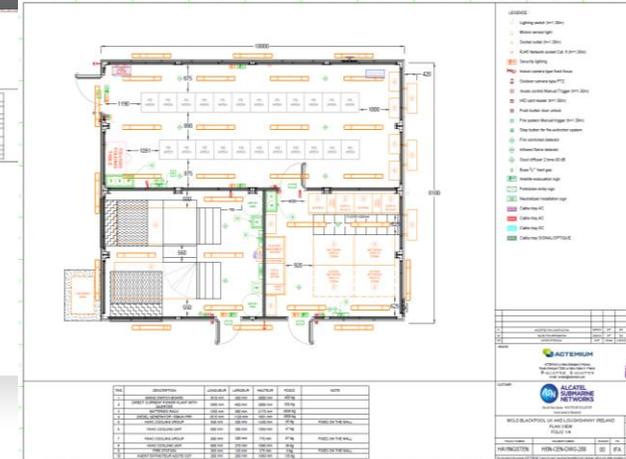
Blackpool landing and fronthaul/MCLS



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Landing 4th October

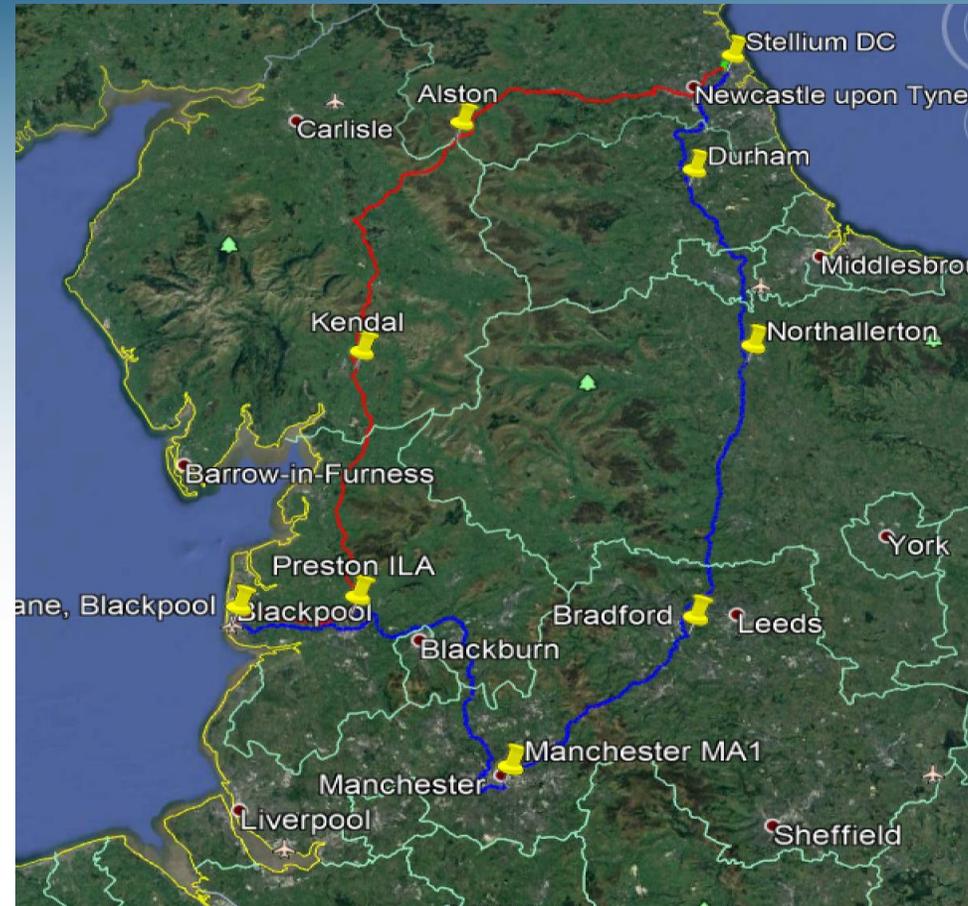


UK Backhaul under construction



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Diverse infrastructure to ensure service availability



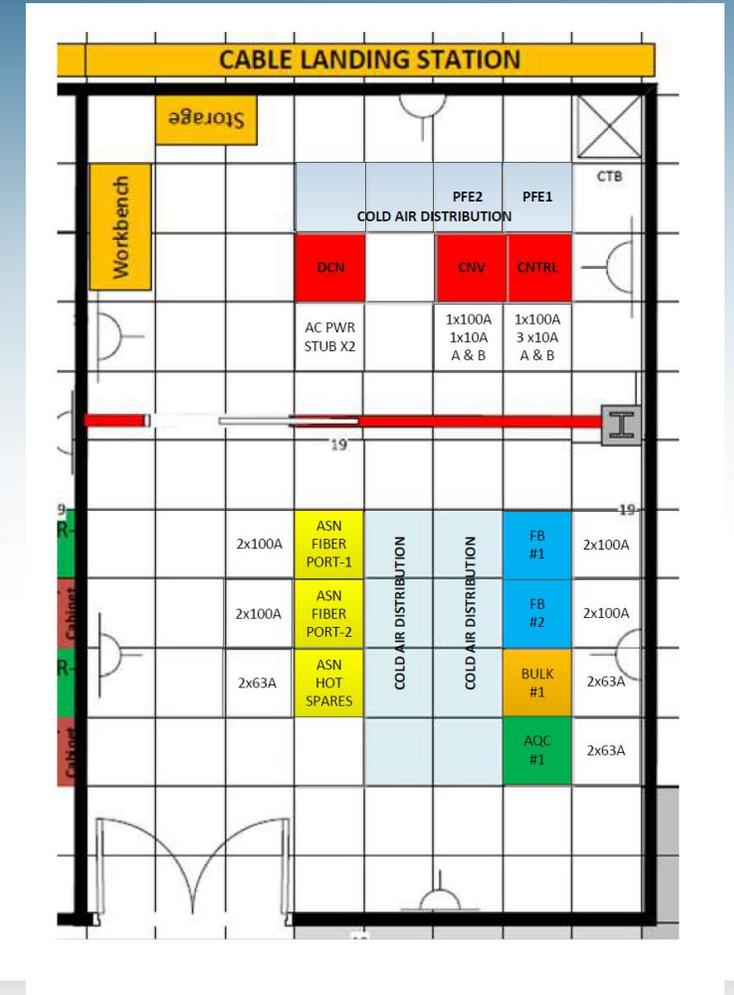
Newcastle, Stellium DC



Fronthaul Network



Landing Station



The North Atlantic Loop

Delivering Secure, Resilient Trans-Atlantic Capacity



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Global carrier class connectivity

Blackpool & Newcastle >10ms **closer** to NY than London!

AEConnect Trans-Atlantic Cable Network

- AEC-1 Trans-Atlantic Cable
- AEC-2 Trans-Atlantic Cable
- AEConnect Diverse Backhauls
- CC2 & NSC
- POPs: US, Ireland, UK and Denmark



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Thank you

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