Observing the Ocean and Earth with

SMART CABLES

SMART Cables in Future Ocean Observing

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Identifying gaps and prioritizing solutions to address global deep ocean challenges

iDOOS Annual Meeting
21-23 May 2024

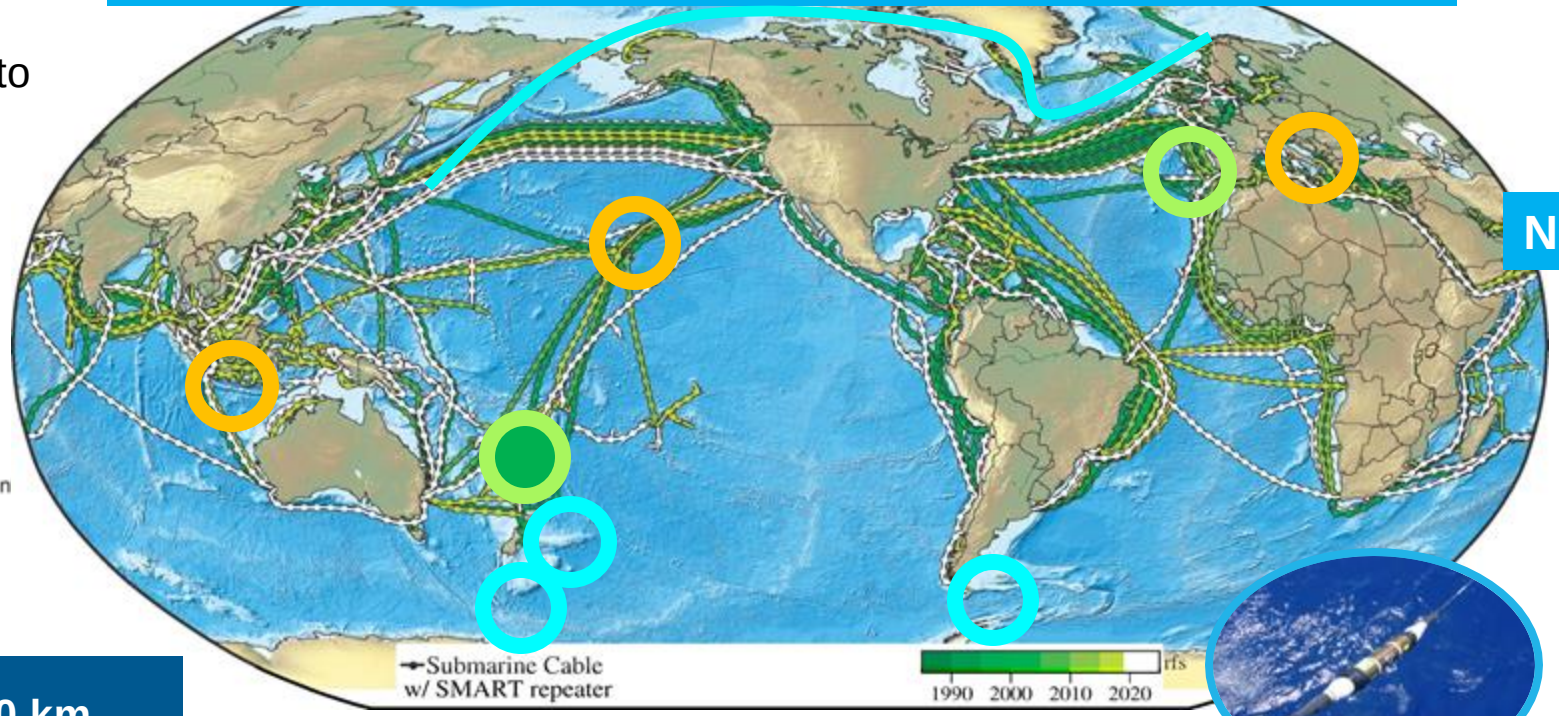
Climate Change and DRR

Global Array for Climate, Oceans, Sea Level, Earthquakes, Tsunamis

Create a Planetary sensor, power, Internet network

1st order addition to Ocean-Earth observing system

2021 2030 United Nations Decade of Ocean Science for Sustainable Development



Share submarine cable infrastructure

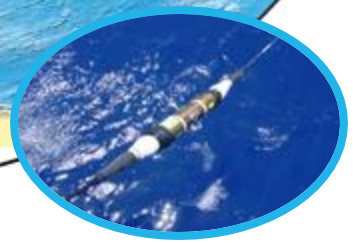
Telecom + science

↓€$

NO Interference

1.2+ GM
~20,000 repeaters
20 year refresh

repeaters ~70 km



SMART CAM: 3700 km, install 2026, Gov't €154M
Continent/Portugal-Azores-Madeira ring

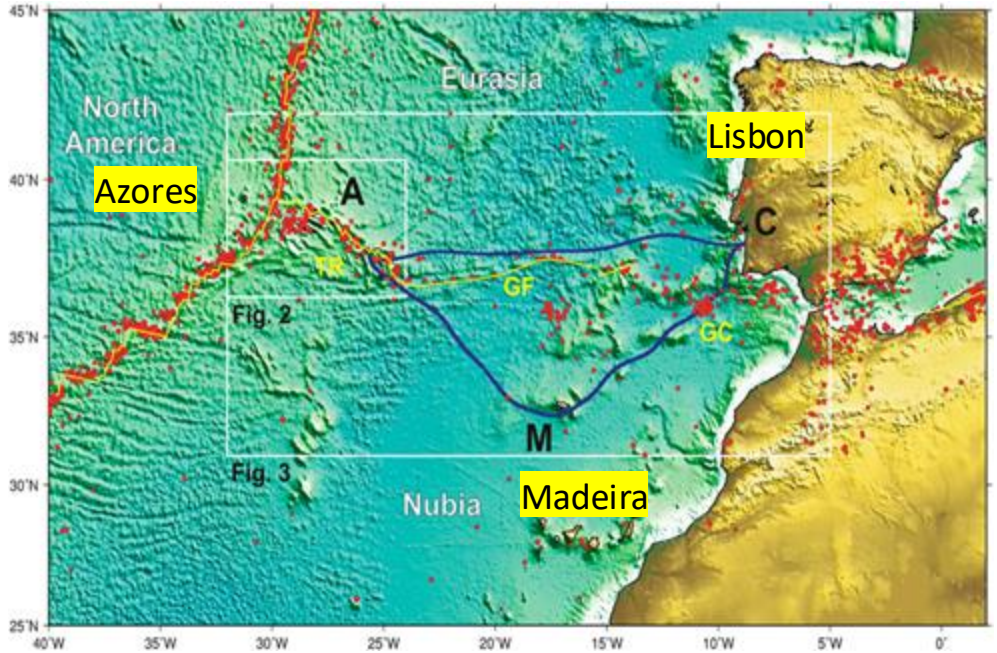
Know the environment – protect the network

Bottom temperature, pressure, seismic acceleration

ITU unesco WMO

Funded SMART Cable Systems

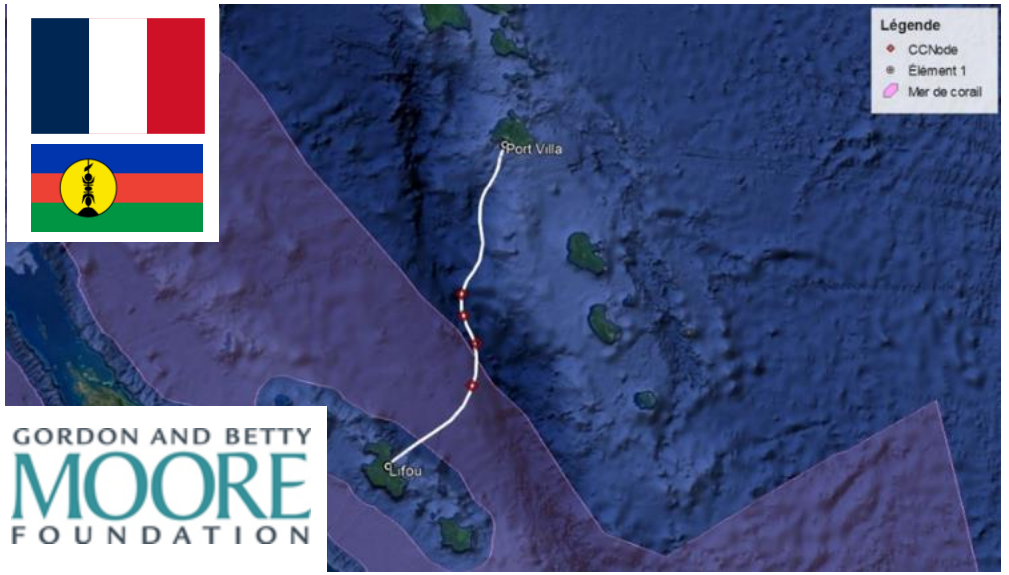
Portugal SMART Atlantic CAM



- 3700 km, ~50 SMART repeaters
- Gov't funding €154M. With EU support
- €154M ~ 1 ship+sensors, 25 years (€6M/y)
- SMART 10% €15M ~ €1.5/citizen/25 y

Both Ready for Service 2026

TAMTAM SMART Cable System



GORDON AND BETTY MOORE FOUNDATION

- 450 km long, 4 SMART repeaters,
- France funding SMART

- 25+ year life, reliable, low lifetime cost
- Leverage $5B/y industry, 170 y

SMART CABLES

ITU unesco WMO

GORDON AND BETTY MOORE FOUNDATION

Schmidt Marine TECHNOLOGY PARTNERS

SMARTCables.org

ITU/WMO/UNESCO IOC Joint Task Force

Scan to Join!