

# Subsea Cables Beyond Telecom



+ 850,000 km

of submarine optical cables  
deployed around the world

~ 21 times

the circumference  
of the earth

+ 410,000 km

of submarine cables  
under marine maintenance

7 vessels

owned & operated for  
installation & maintenance



+ 165 years

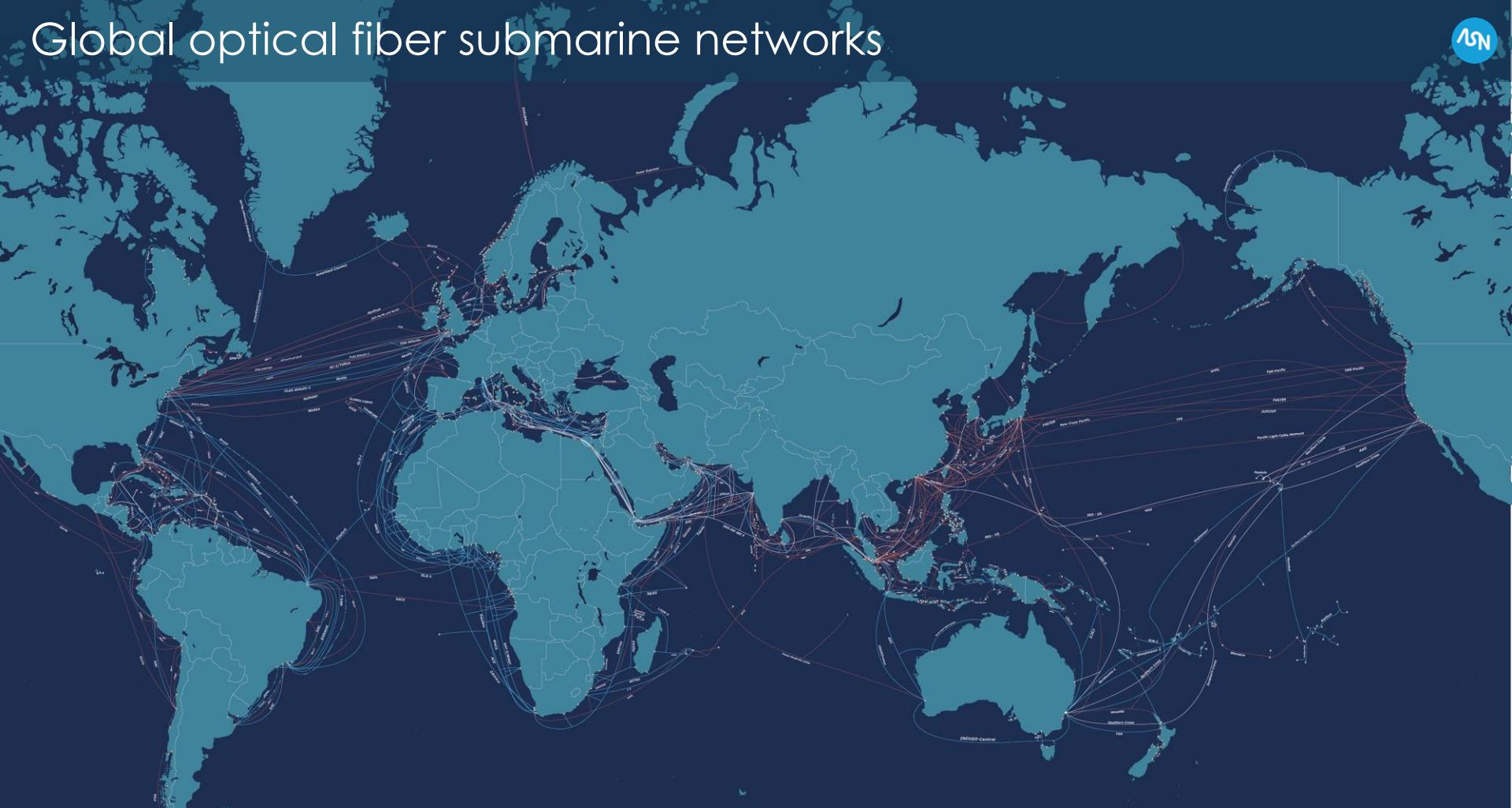
of experience with  
end-to-end expertise

+ 2,000

people working  
worldwide



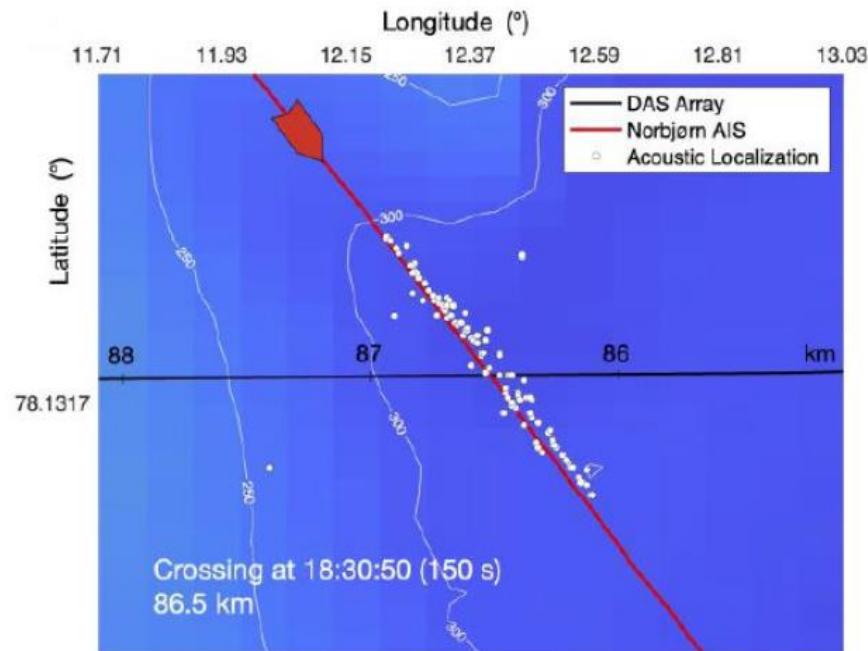
# Global optical fiber submarine networks



# Listening Optical Fiber : DAS



- ❖ Detects **water & seafloor movement** up to **2–3 km**
- ❖ **Continuous monitoring** to the first repeater and beyond
- ❖ Coastal coverage: **150–200 km**
- ❖ **Compatible** with telecom traffic
- ❖ Complements **AIS** to prevent cable cuts
- ❖ **Protects subsea assets**: cables, pipelines, offshore infrastructure



# Embedded Instruments: CC-Nodes

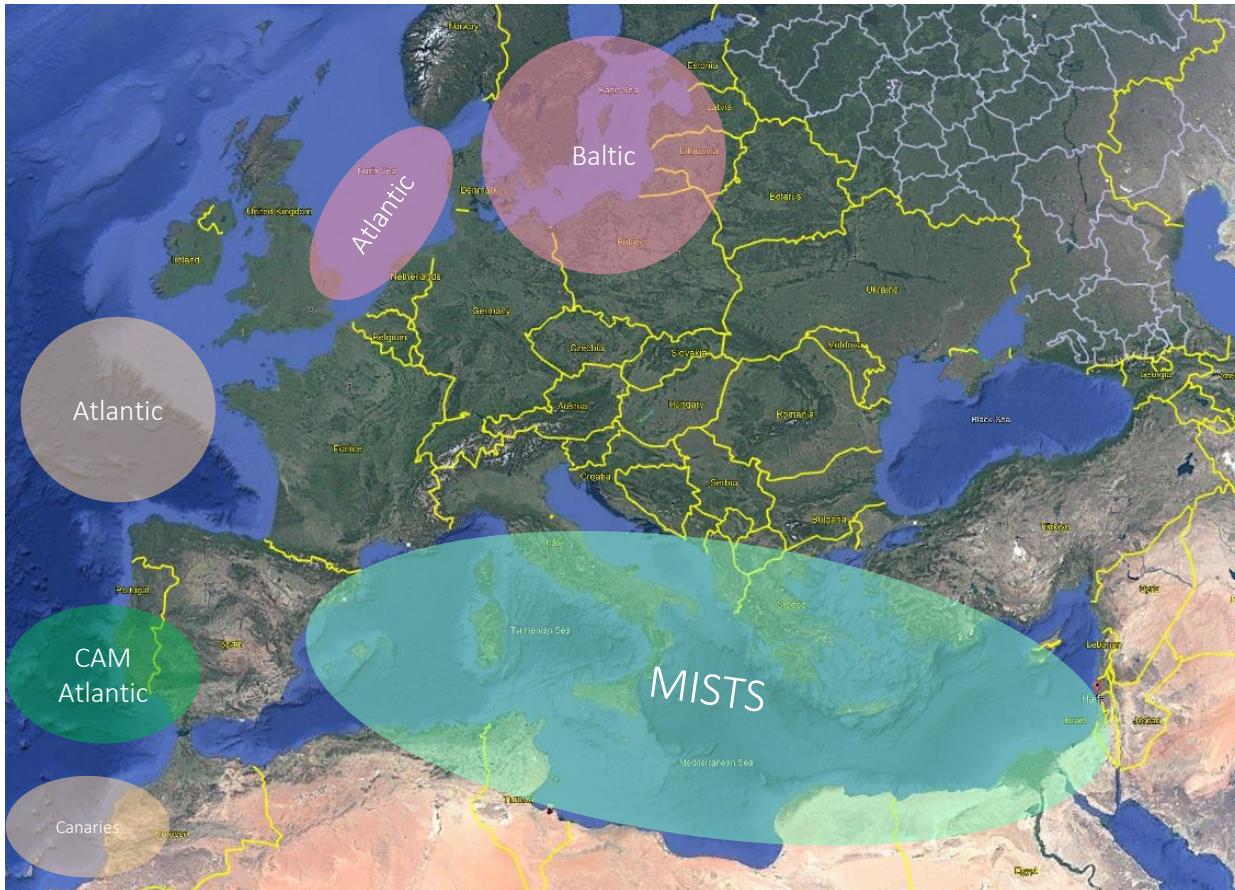


- ❖ **Dedicated seacase** with high-precision sensors
- ❖ Baseline: **3-axis seismic, pressure, temperature**
- ❖ Next sensors: acoustic, conductivity, oxygen, etc.
- ❖ **Point-based** nodes on new cables at critical locations, Real time!
- ❖ Key for **tsunami detection**; supports science & civil protection



- ❖ **Primary challenge:** sustainable funding models
- ❖ **Europe:**
  - DAS already deployed (e.g., **GEANT**)
  - DAS seabed demonstrator (**VIGIMARE**)
  - **CC-Nodes targeted for 2027** on CAM Atlantic + France-Oceania (Tamtam Cable)
  - **MISTS (CEF)** advancing Mediterranean & Canaries coverage
- ❖ **Missed opportunities** (e.g., **Pencan-10**) highlight **structural barriers**

# European Strategic Areas



- ❖ **Multipurpose subsea cables:** connectivity + environmental & hazard monitoring
- ❖ **Three priority basins:** Atlantic, Baltic, Mediterranean
- ❖ **A future-proof, next-generation European architecture**

# Key conditions for deployment



- ❖ **Fiber listening:** regulatory & authorization barriers
- ❖ **CC-Nodes:** ~10% extra cost, must be built in **from project start**
- ❖ **Data governance:** defined **from day one**
- ❖ **Europe:** multiple projects advancing thanks to the CEF
- ❖ **Success =**
  - seize upcoming projects or**
  - design Smart Cables from inception**  
**(Portugal with CAM Atlantic & MISTS)**



We connect the **world**  
We connect **people**



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