

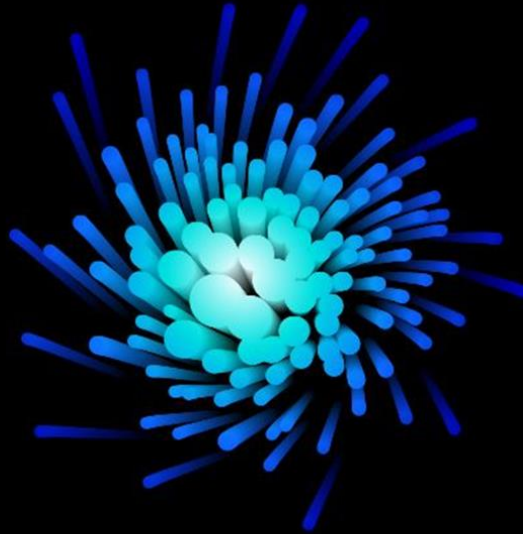
---

IOEMA

# The IOEM

A High-Capacity  
for Northe

UPD



IOEMA

# IOEMA: an open-access system that will deliver tangible value to the European network

## **Bridges core European markets with the Nordics**

Improved connectivity: core markets in Europe and data centres in the Nordics powered by low-cost, renewable energy

## **Enhances redundancy and diversity**

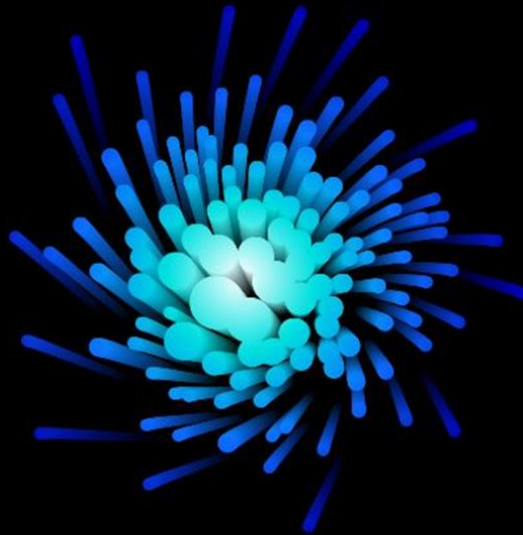
Strengthens network redundancy and diversity in northern Europe

## **Optimises data centre connectivity**

Boosts capacity across the data centre arc

## **Supports critical infrastructure security**

Full armouring and burial



IOEMA

## **Expands cable connectivity**

First direct connections:  
UK/Germany & UK/Eemshaven

## **Replaces ageing and decommissioned systems**

SEA-ME-WE 3, TAT-14, AC-1, CANTAT-3, etc.)

## **Connects with vital transatlantic crossings**

Havfrue (DK, NOR), Leif Erikson (NOR), Planned Trans-Atlantic cables (DK)

## **Improves latency**

Latency improved by up to 5.5 milliseconds

# Status – May 2024

**1400 km - 5 x Landing Points**

(UK, The Netherlands, Germany, Denmark and Norway)

**Multi- Core 48 fibre pairs**

**27 - 29 Terabit per fibre pair**

**Overall capacity 1.3 Pb/s**

**Latest BU fibre switching technology for the branches**

**PFE Equipment at every CLS to guarantee network availability**

**Buried and protected over its entire length**

**DAS monitoring solutions from every CLS**



# Status – September 2024

Expansion of the system from 5 to 7 Landing points

Landing point in Rotterdam, The Netherlands

Landing point in Leiston, UK

Total route length now 1620 km

Additional Branching Units for further expansion foreseen

BU6 - offshore Dumpton Gap, UK

BU7 - offshore Eemshaven, The Netherlands

BU8 - offshore Blaabjerg, Denmark

Preferred Supplier - NEC



# Status – February 2025

Manufacturing capacity constraints in the market influenced the progress of the project

Change from 48 fibre pairs to 24 fibre pairs (no longer Multi-Core)

Supply & Installation Contract out for tender (CIF June 2025)

Full fibre pair switching foreseen in all BU's (12 fp)

37 Terabit per fibre pair on longest span - Total capacity up to 1Pb/s

Desk Top, Fishing, System Design Study and Permitting starting soon

Re-naming of Landing Point from "Rotterdam, The Netherlands" to "The Hague, The Netherlands"

Agreement reached with RWS for Offshore Route in Dutch waters (incl. Branches to The Hague and Eemshaven)

MoU signed with EXA Infrastructure for Landing Partner Services at Leiston, UK

Extension to Saint-Vallery-en-Caux, France under consideration (+210km) - Connectivity to Paris, Marseille, Saint-Hilaire-de-Riez, France. Negotiations with Landing Partner ongoing.



# Status – February 2025

**Engagement with Scientific Community**  
(SURF, GEANT, EMSO, JTF SMART Cables)

**Engagement with Defence Ministries**

**Potential for incorporating Sensors in the system**

**DAS System from each CLS already included in basic design**

**Application for CEF Funding filed (Studies & Works)**

**Network collaborations discussions ongoing with other planned systems**



# LANDING PARTNERS



# PROJECT TIMELINE

2019-2024

## DEVELOPMENT PHASE

- Routing
- CAPEX & OPEX
- Feasibility Study
- Landing Partners
- ROM EPCI
- Sensor Study
- Extensions

2025

## CONSTRUCTION PHASE

- Detailed DTS
- Fishing Study
- System Design Study
- Permitting
- ITT
- Q2: CIF
- Q2: Financial Structure Ready
- Survey
- Manufacturing

2026

## CONSTRUCTION PHASE

- Survey
- Permitting
- Landing Site Prep
- CLS fit out
- Terminal Equipment Inst.
- Manufacturing
- Route Preparation Works
- Installation (PLSE)
- Main Installation
- PLIB & Protection work

2027

## CONSTRUCTION/ RFS PHASE

- Permitting
- Landing Site Prep
- CLS fit out
- Terminal Equipment Inst.
- Installation (PLSE)
- Main Installation
- PLIB & Protection work
- Testing & Commissioning
- Q4: RFS
- Pre Sales (Capacity)

2028

## OPERATIONAL PHASE

- Operations
- Capacity Management
- Capacity Sales

# PROJECT CATALOG

- Capacity Services (100G; 400G; 800G; etc.)
- Bandwidth Sales
- Onward connectivity to all major metro markets and gateways via IOEMA's partner networks
- Flexible and Scalable Solutions
- Customized Solutions
- Capacity Reservations possible
- Spectrum and Fibre Sales under consideration



**THANK YOU**



**Any Questions?**

For further discussion and engagement on the IOEMA project,  
please contact:

**Eckhard Bruckschen**

**CTO**

**[e.bruckschen@ioemafibre.eu](mailto:e.bruckschen@ioemafibre.eu)**

**Mob: +44 7775735339**