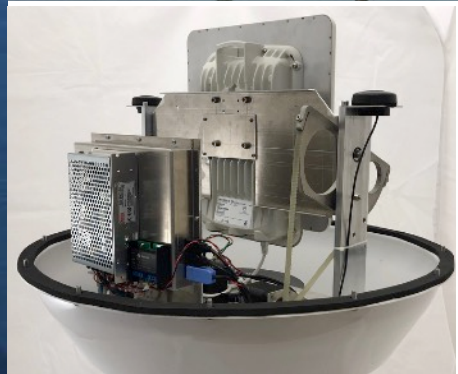
InAria! / Totalconn: The Fiber in the Harbour Project



Maritime Vertical Market Need

- Connect vessels and floating objects to a global Fiber-MPLS network in a cost efficient way.

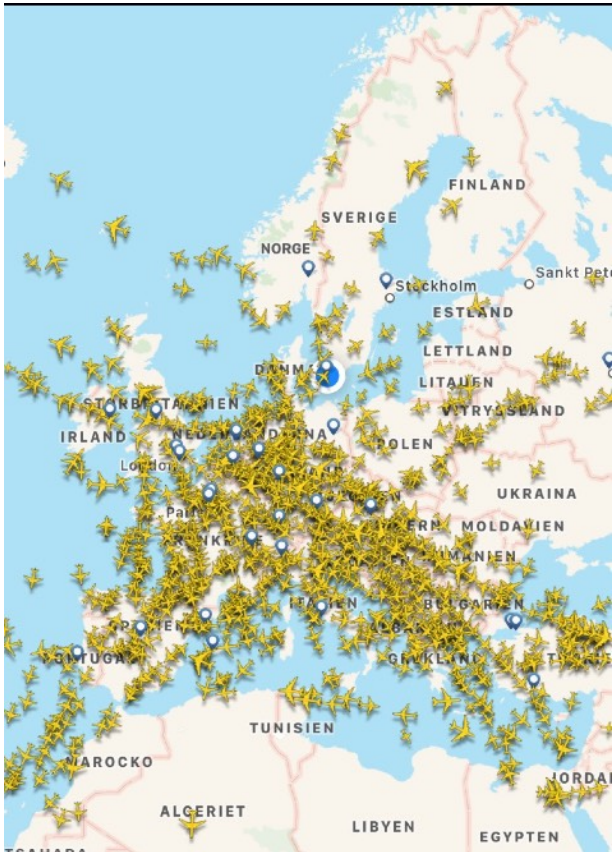
  - ✓ IT department – local network demand surge
  - ✓ Sales – High Speed internet to customers with no volume cap

Market Problem

- Satellite is expensive with low upload bandwidth
- 4G does not have the range or capacity

Satellite market future

- Within 5 year the majority of all airplanes will have internet on-board connected through satellite
- Majority of all large commercial ships will have satellite connection
- Customer demand will only increase, always on line!
- Will customer demand with high demand of speed and quality be met?
- Will satellite communication go down in cost?



Introducing Totalconn Wireless Antenna Tracking System

The new solution takes connectivity to beyond possible, the kit enables wire-like performance for moving wireless links on land or sea.

Expanding Connectivity

- Super performance: high speed, long range, low cost of ownership
- Full ecosystem
- Weatherproof – marine grade toughness
- Rapid & Simple installation – saving deployment time
- Save CAPEX

Wisp Control Powered Cloud Ecosystem

The Cloud ecosystem is a truly remarkable union of high performance wireless hardware with next generation management making networks simply to deploy, effortless to manage, and economical to maintain.

Network Statistics

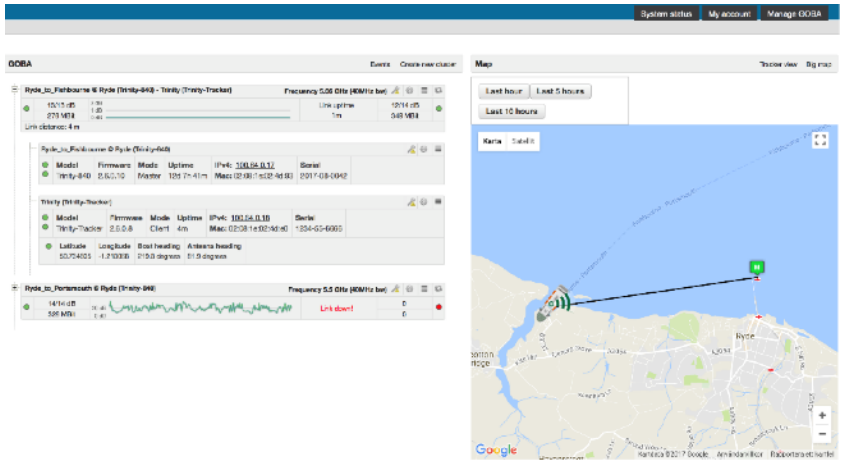
Get detailed stats on area, link and network performance

Remote Config

Change configuration remotely

Alert Engine

Get real-time alerts when connections are interrupted



Google Maps

Pinpoint link locations using the Google Maps integration

One-Click Updates

Update to the newest firmware remotely with one-click

Troubleshooting

Troubleshoot connection issues from he cloud

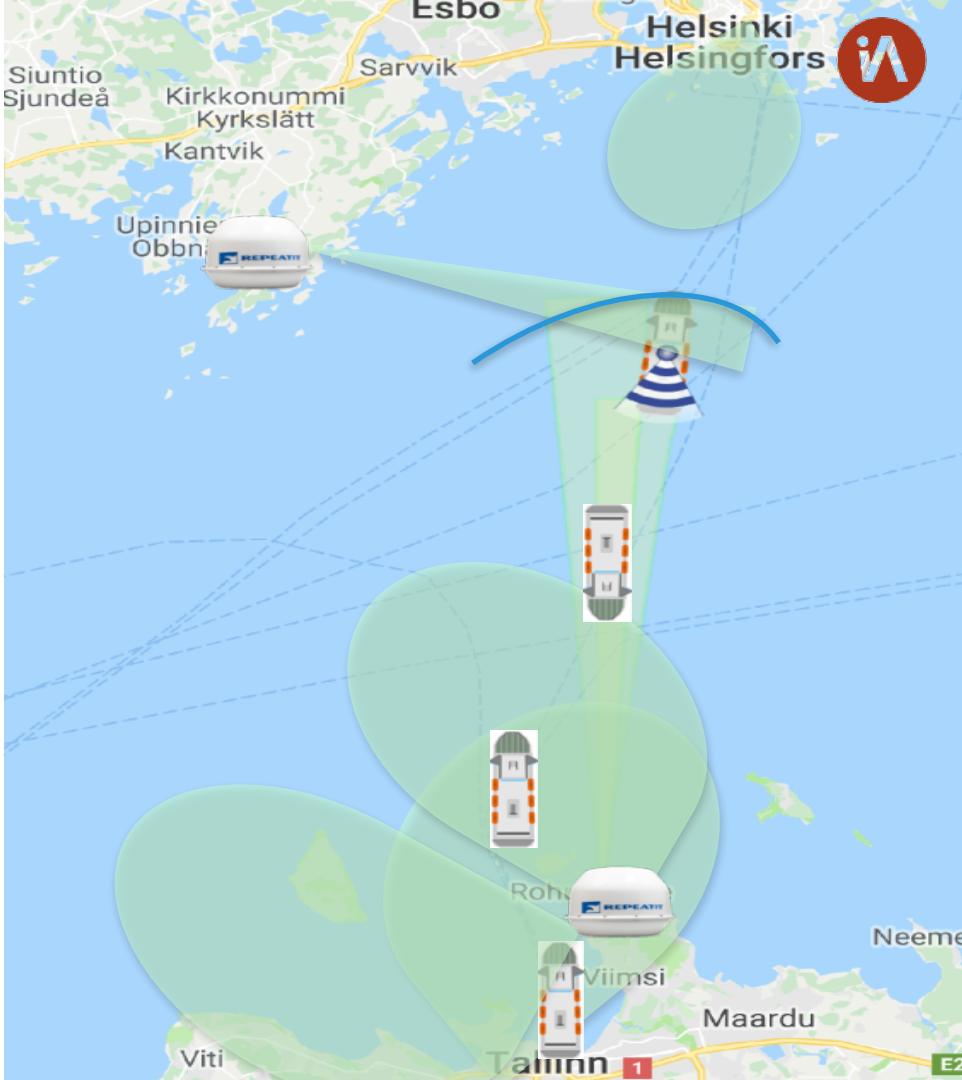
Ferries & Cruise

Two kit on top of deckhouse

Quicker installation by one man

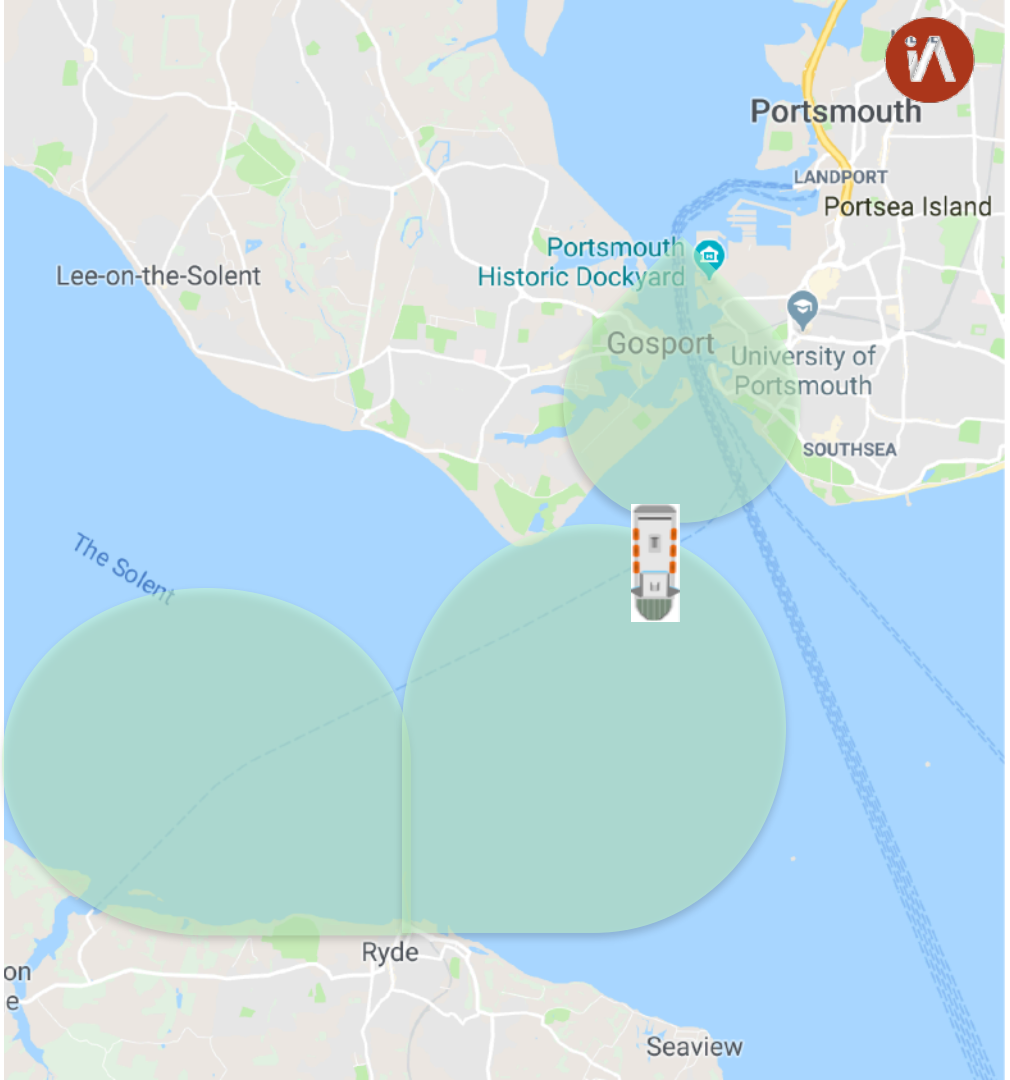
Tallinn to Helsinki

- 80 km distance
- 3 ships
- 100Mbit/s minimum
- 2 kits
- on each ship to provide 360 degree coverage but also improved capacity
- 2 trackers on shore to track ship furthest out.
- 4 fix 90 degree antennas to cover up to 20km from shore
- Advanced network logic through cloud to determine what ship to track



Portsmouth to Ryde

- 10 km distance
- 13 ships
- 100 Mbit/s to each ship minimum
- 2 trackers on large ships to provide 360 degree coverage but also improved capacity
- Three fix 90 degree antennas
- One Omni antenna in the harbour



TOTALCONN
WIRELESS SOLUTIONS

Genova Cruise Port

- Radwin latest 5G Beam Forming Technology

- Top Coverage over Genova Cruise Port
- Up 100/100 Mbps dedicated directly connected to Speedcast Global MPLS
- Radio Planning and IP Network management by InAria!/Totalconn Network Control Center in Italy
- Backhauling to towers with 18 Ghz Licensed SAF Links

TOTALCONN
WIRELESS SOLUTIONS

The Future in Italy

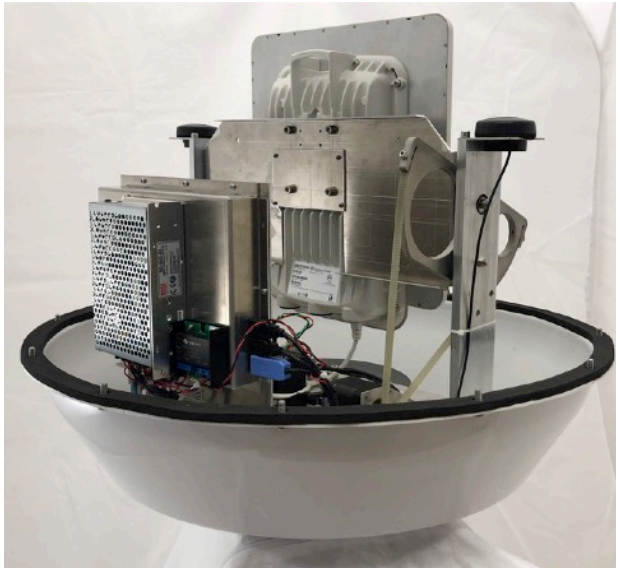
- Top 5 Cruise Ports
- Top Ten Super Yacht Marinas
- Most of the 25 Merchant Ports
- Roaming support with top global EU Cruise Ports and Super Yacht Marinas
- Combined Satcom / 5G Microwave / Managed Wifi offering

speedcast

TOTALCONN WIRELESS SOLUTIONS

Radwin 5G Beam Forming support

RADWIN



SAF

Sector backhauling by SAF