



Vilicom

a bai communications company

Offshore & Industrial Private Networks

8th June 2023



Delivering Private Networks

Some Key Point

Private network solutions must fit the client's environment and constraints



SUNDERLAND
our smart city

**A SUPER-CONNECTED
CITY WHERE PEOPLE
AND BUSINESSES THRIVE**

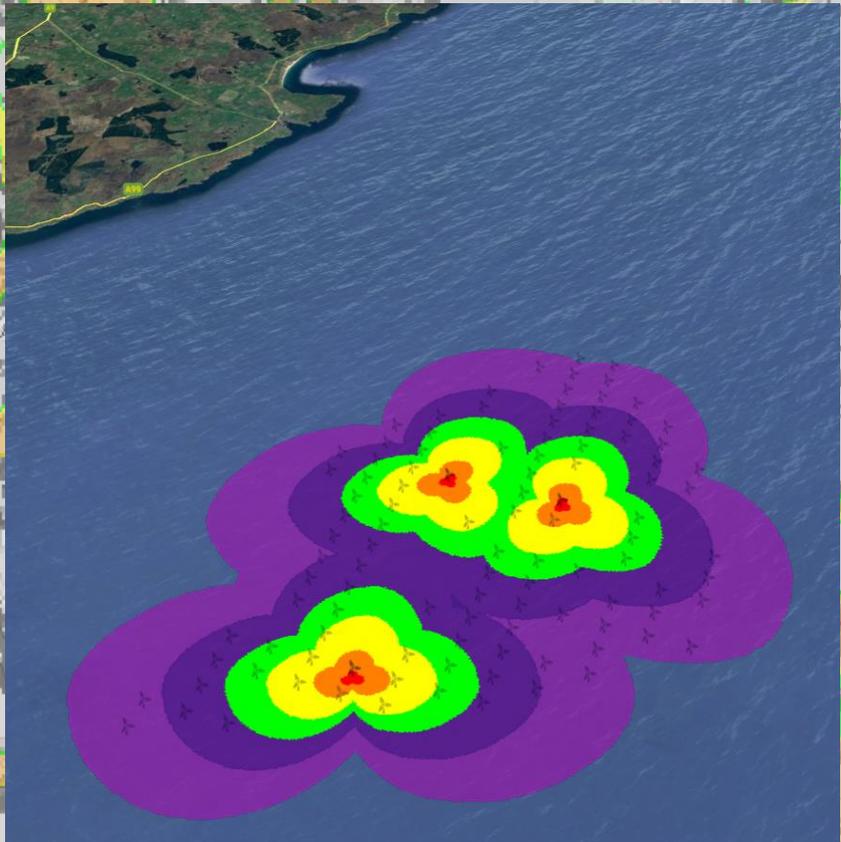
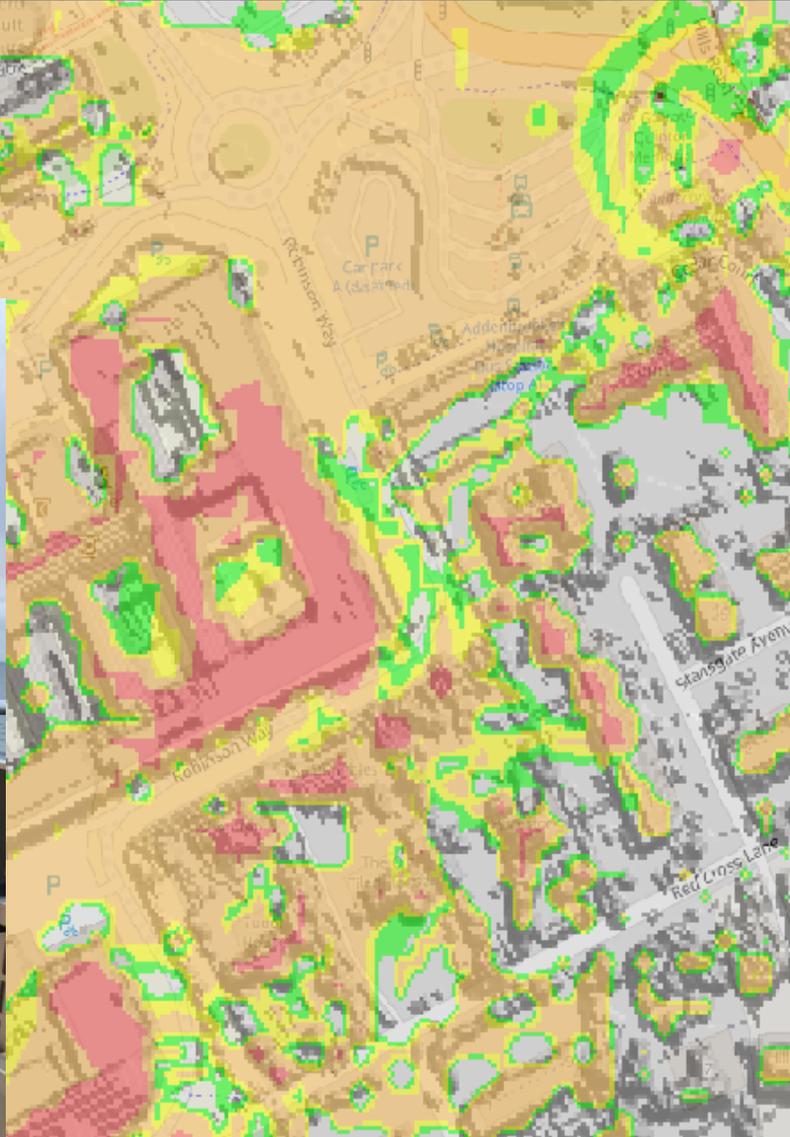
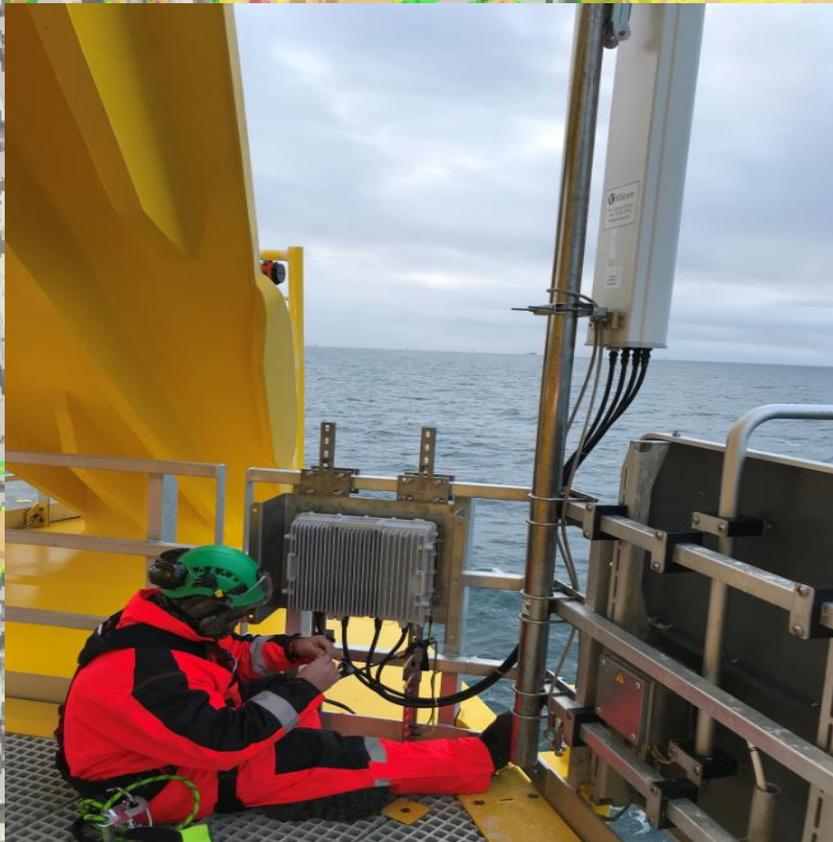
Sunderland
City Council

A promotional graphic for Sunderland City Council. It features an aerial view of the city and harbor, overlaid with a teal and yellow geometric design. The text "SUNDERLAND our smart city" is in the top left, "A SUPER-CONNECTED CITY WHERE PEOPLE AND BUSINESSES THRIVE" is in a pink banner across the middle, and the "Sunderland City Council" logo is in the bottom right.

Strong communication and collaboration is needed between the project teams, client, stakeholders and partners



Good RF and antenna designs to maximise benefits of networks



50 100m

End User Devices – Important part of design and testing



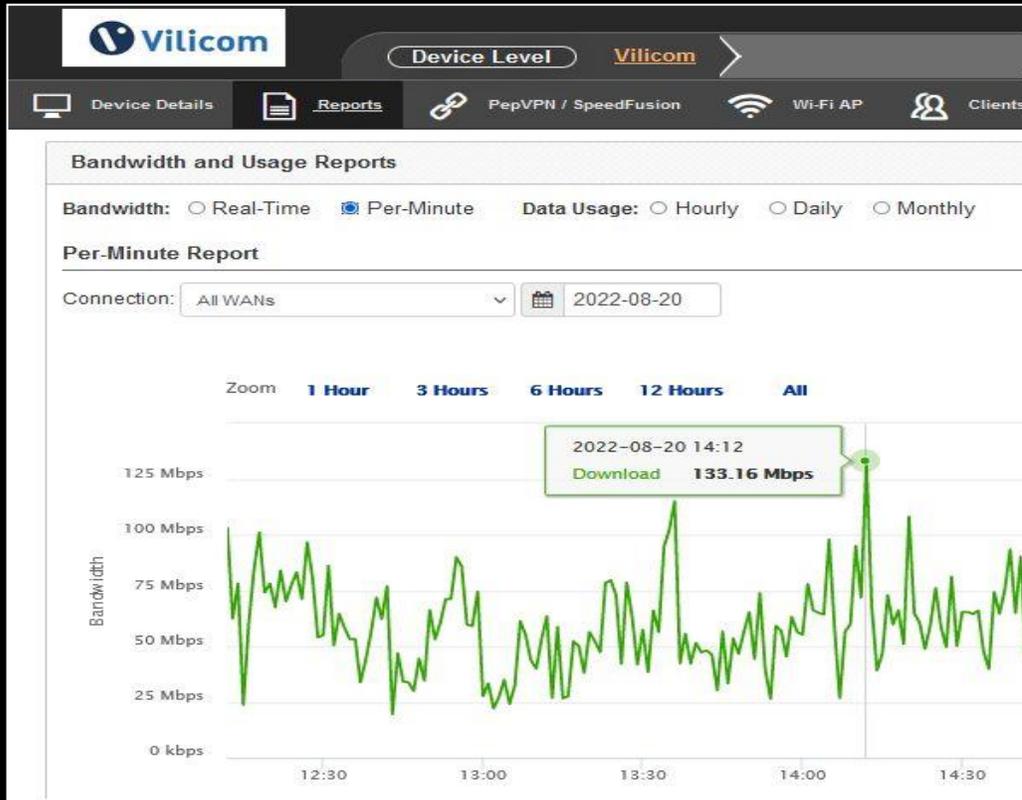
Pre-staging and factory acceptance testing is a critical step



Connectivity Enables Innovation and New Use Cases



They use a lot of data!



GIGAWAVE customers typically using 10TB a month.

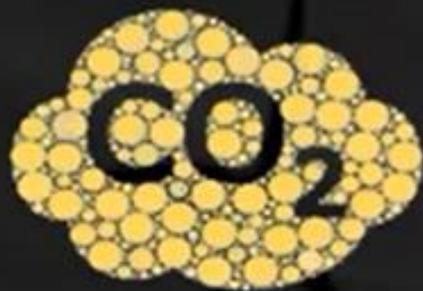
10 TB of data is equivalent of over **3,300 hours** of steaming HD video on Netflix in a month



MORAY EAST

OFFSHORE WINDFARM

Vestas



1.7 Million tonnes of
CO₂ saved per year



Powering 950,000
UK homes



100 x 9.5MW Vestas
turbines - 204m high



295km² square area
22km offshore



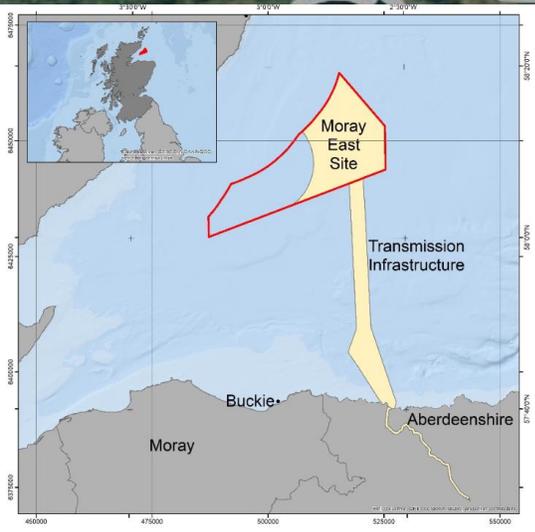
40% of Scotland's
Electricity

Moray East Private 4G Network

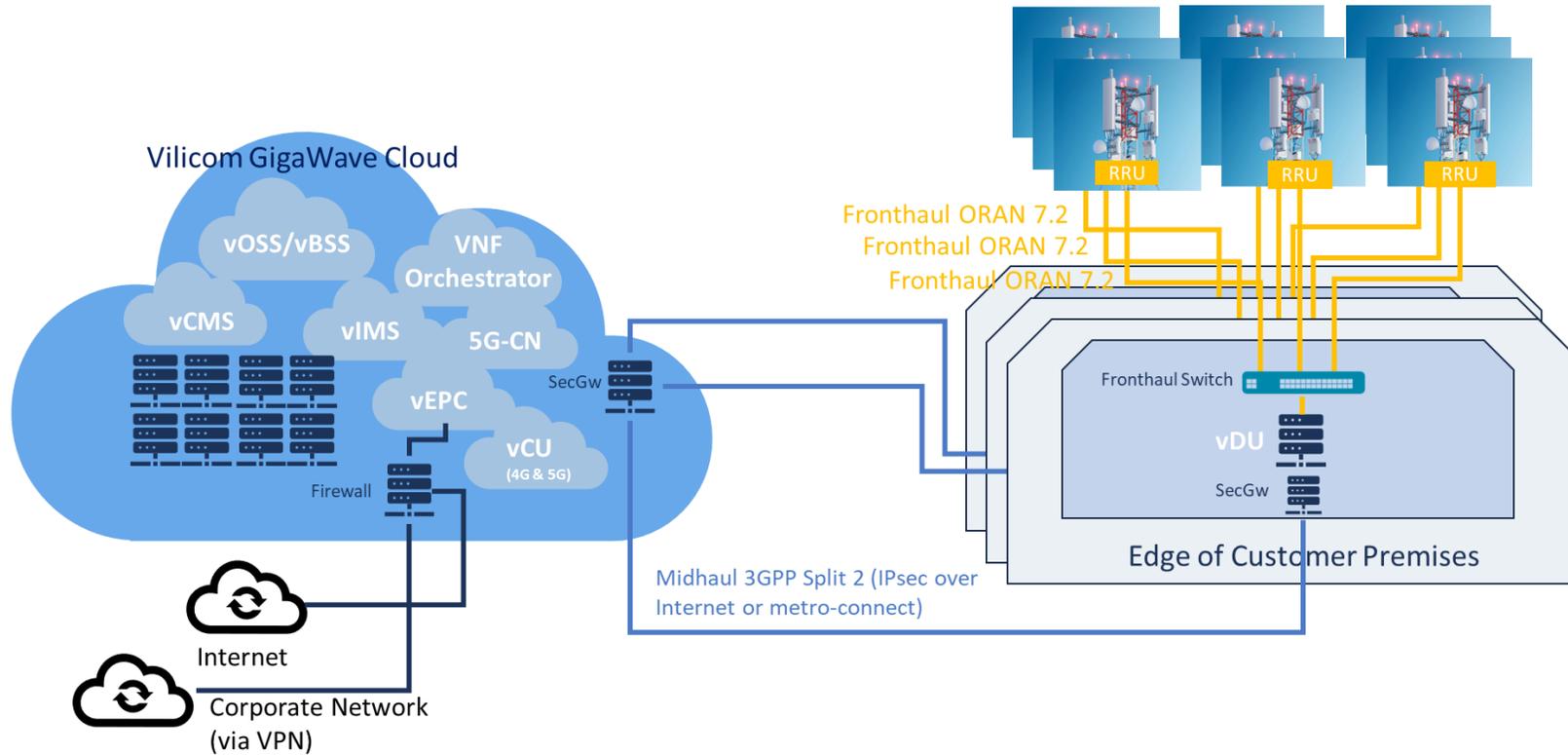
Offshore Network Nodes
vRAN Open RAN Technology
4x4 MIMO Macro RRUs
vRAN DU



Onshore Substation
Private Network Core (EPC)
vRAN CU



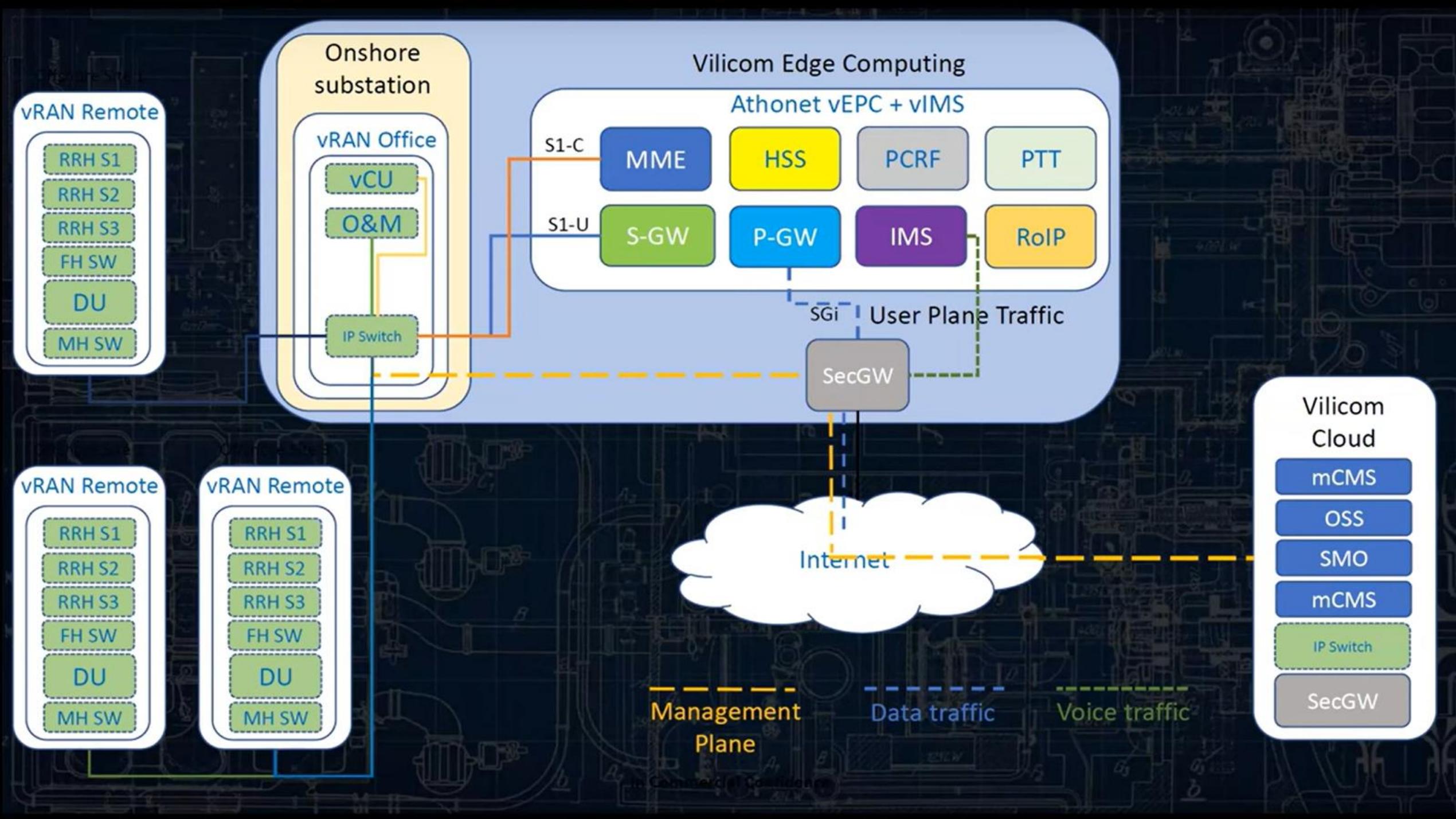
Delivered using Vilicom's GIGAWAVE Platform



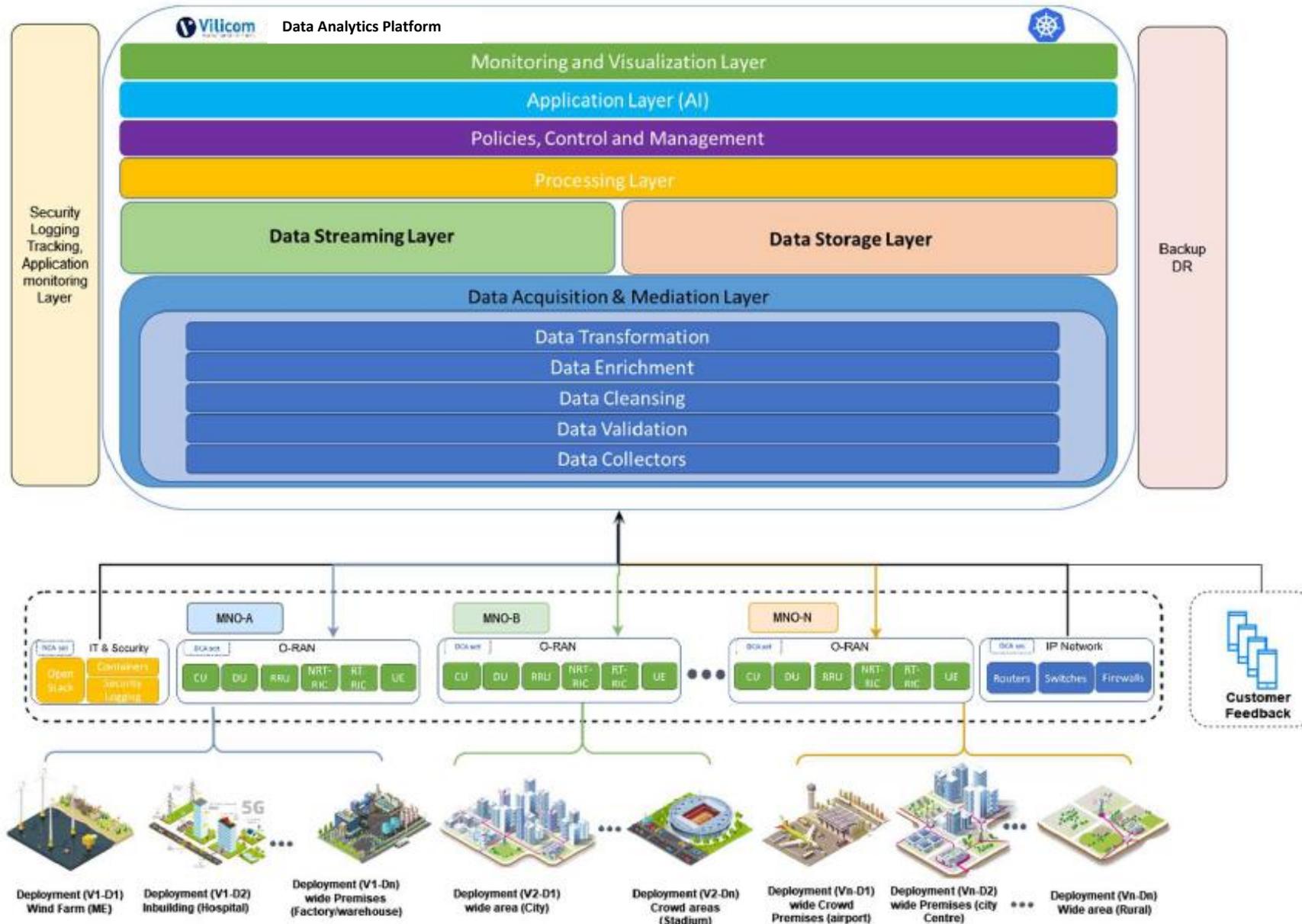
Open RAN Platform

Commercial Off The Shelf servers (COTS)

Multi-vendor



Data Analytics Platform



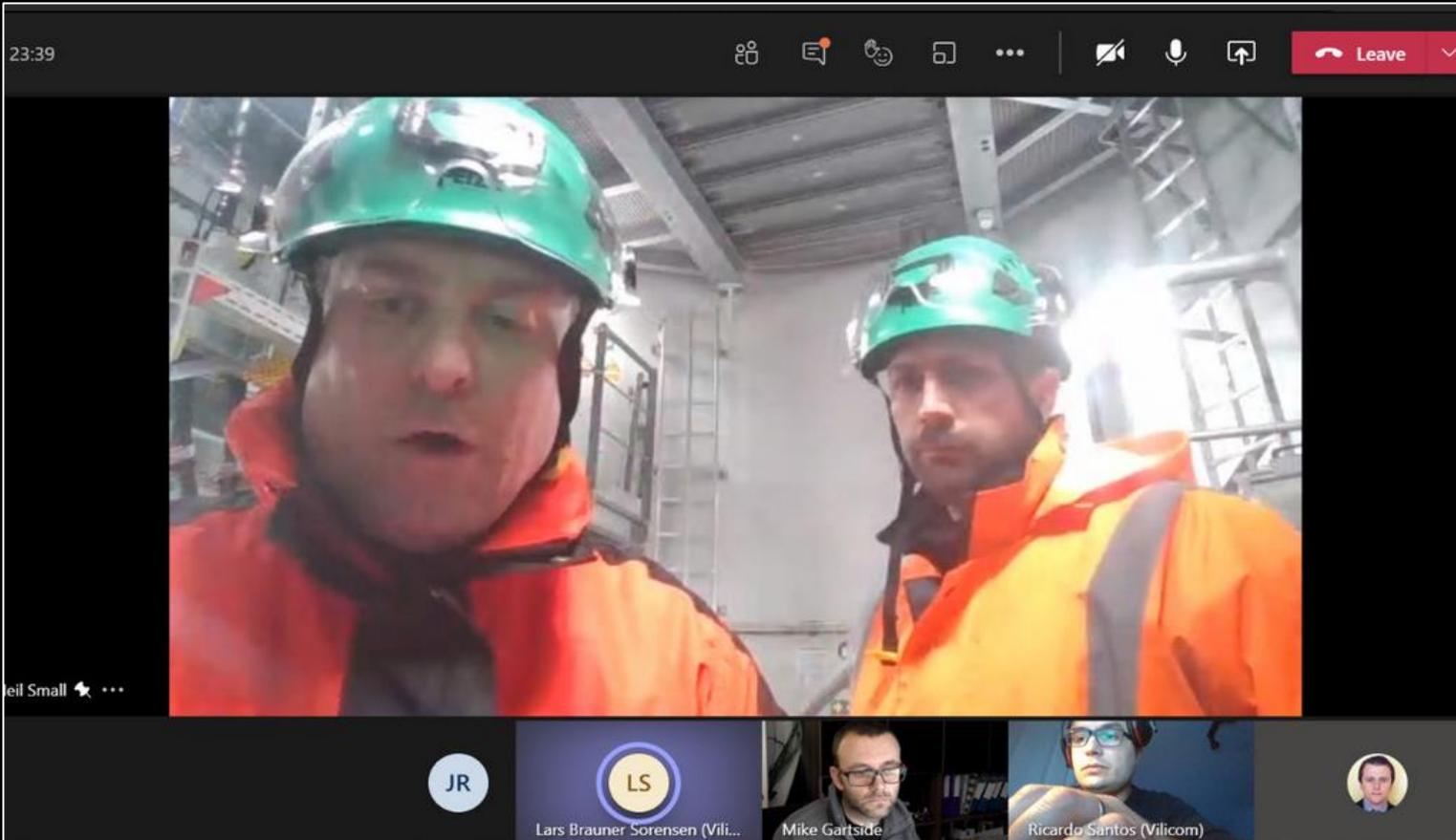
Private 4G Network Designed for Offshore



Connectivity for Construction and Service Vessels



Connectivity for the Crews





Our Projects

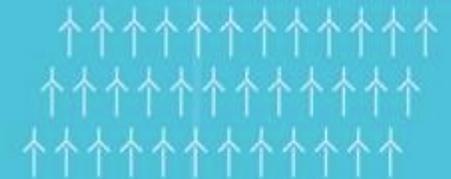


>>> ADVANCED COMMS/5G



>>> DATA & DIGITAL SERVICES

Humber 5G Living Lab



>>> CLEAN MARITIME



>>> ROBOTICS & AUTONOMOUS SYSTEMS



GRIMSBY

>>> NET ZERO PORT



Link to wider transport network

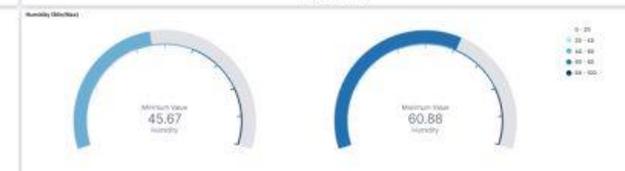
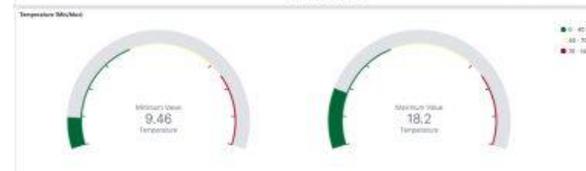
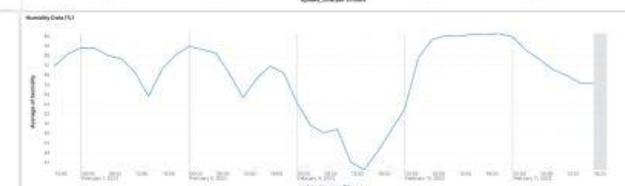
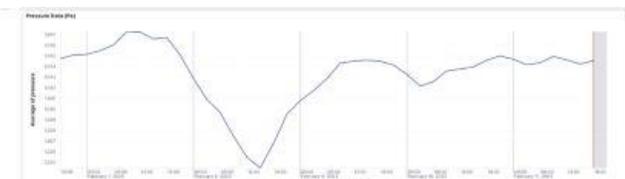
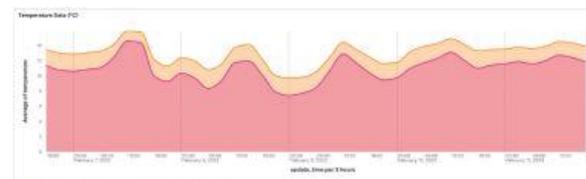
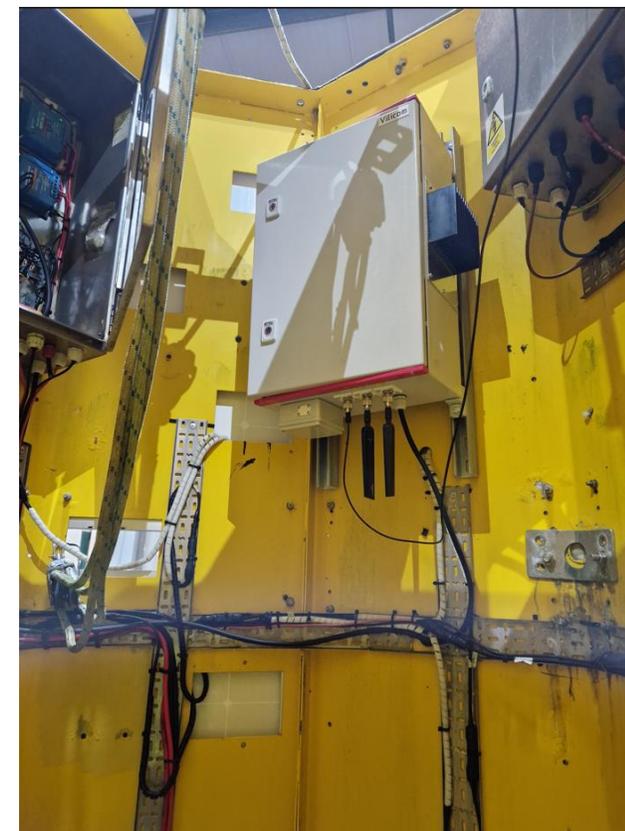


Hornsea 2 Windfarm

Public 4G Network



Solar Powered 5G Private Network for R&D





Extreme E - Private 5G Network



Port of Stockholm

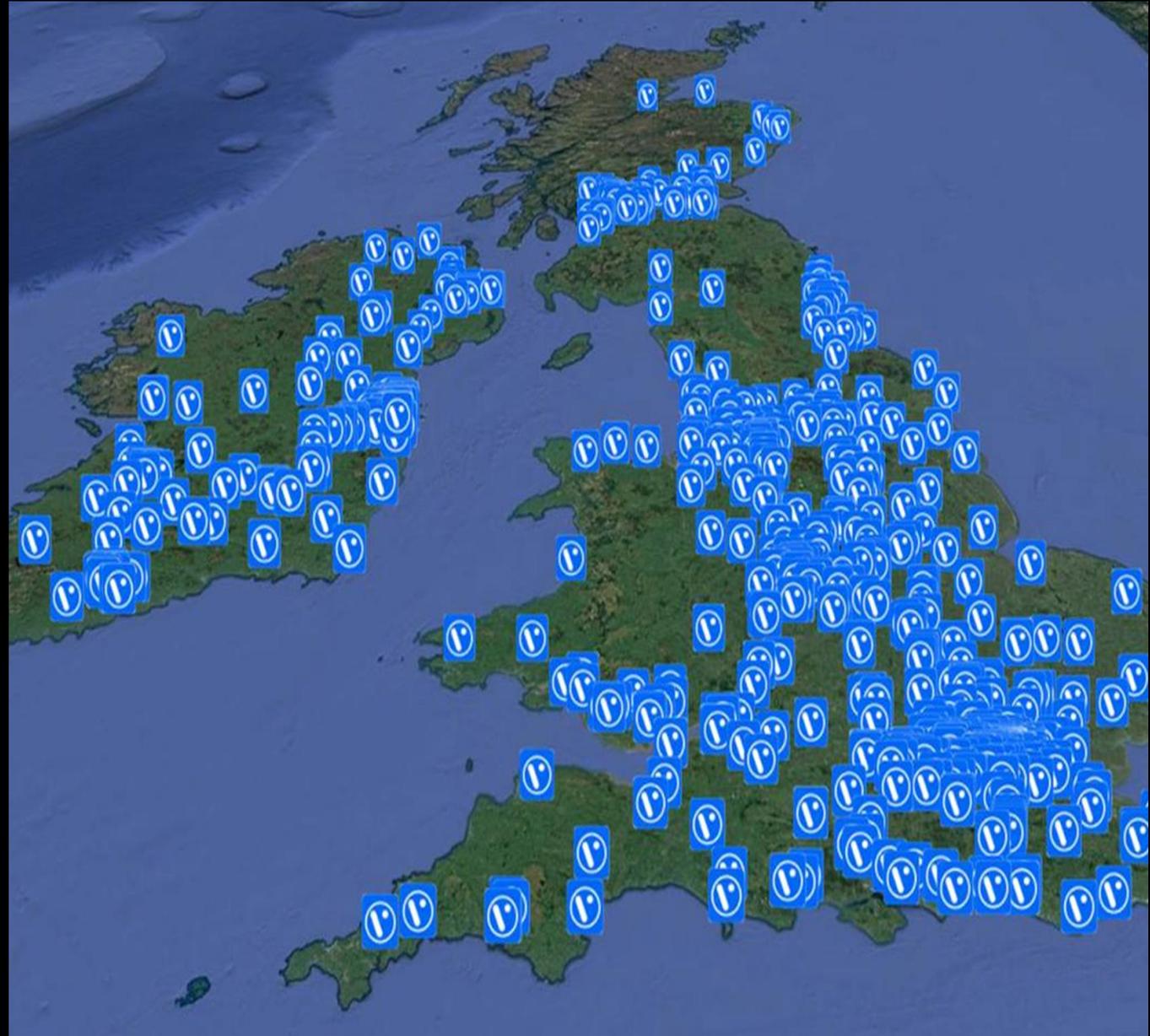
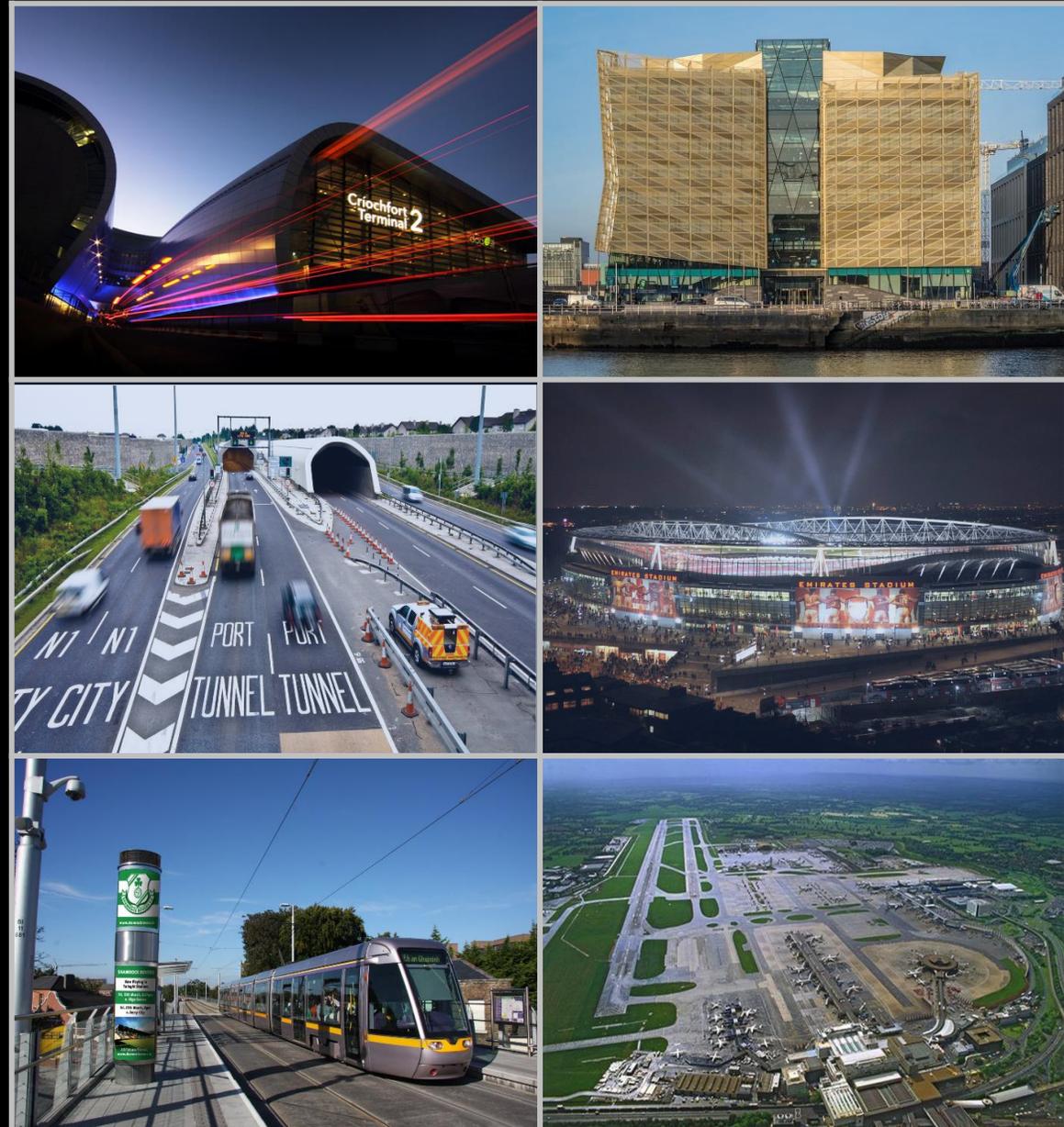
Private Network Operation &
Maintenance Managed Service





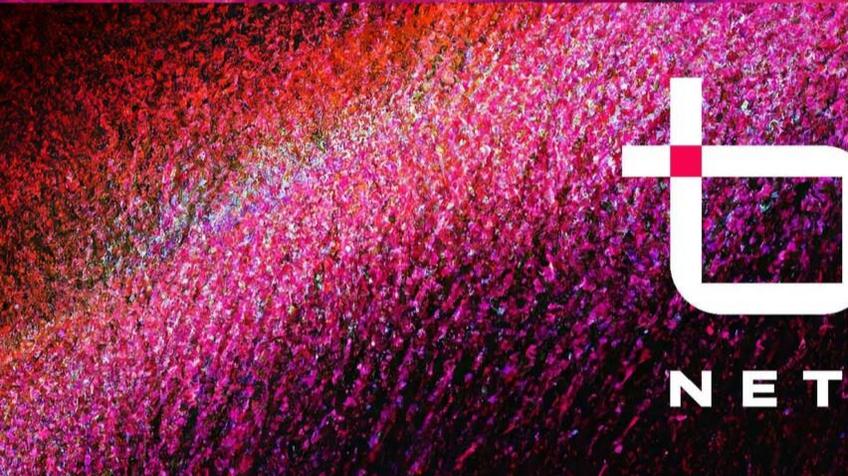
About Vilicom

Over 1500 Special Coverage Solutions Delivered



Projects Delivered in over 20 Countries

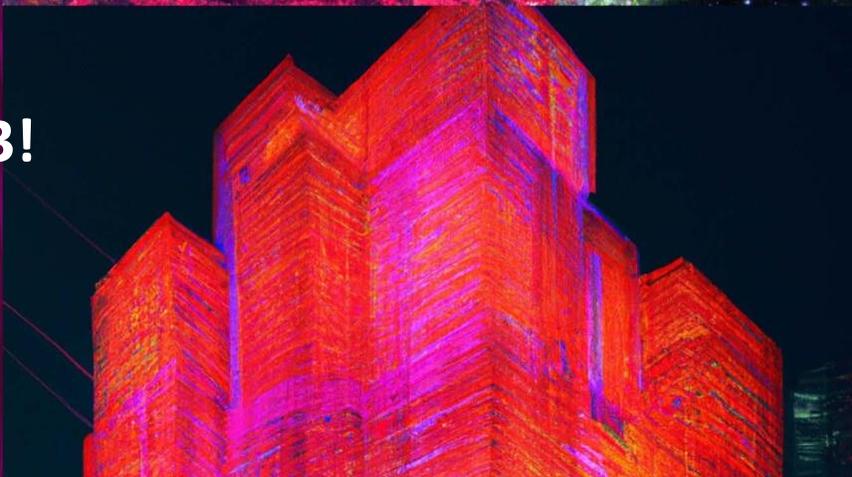




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NETWORKS



REBRANDING end of June 2023!



Thank you

- **Private Cellular Networks offer great connectivity solutions for challenging environments**
- **Open RAN brings flexibility to meet wide range of client requirement**
- **Good reliable connectivity enables innovation and new ways of working**