### VANTAGE TOWERS

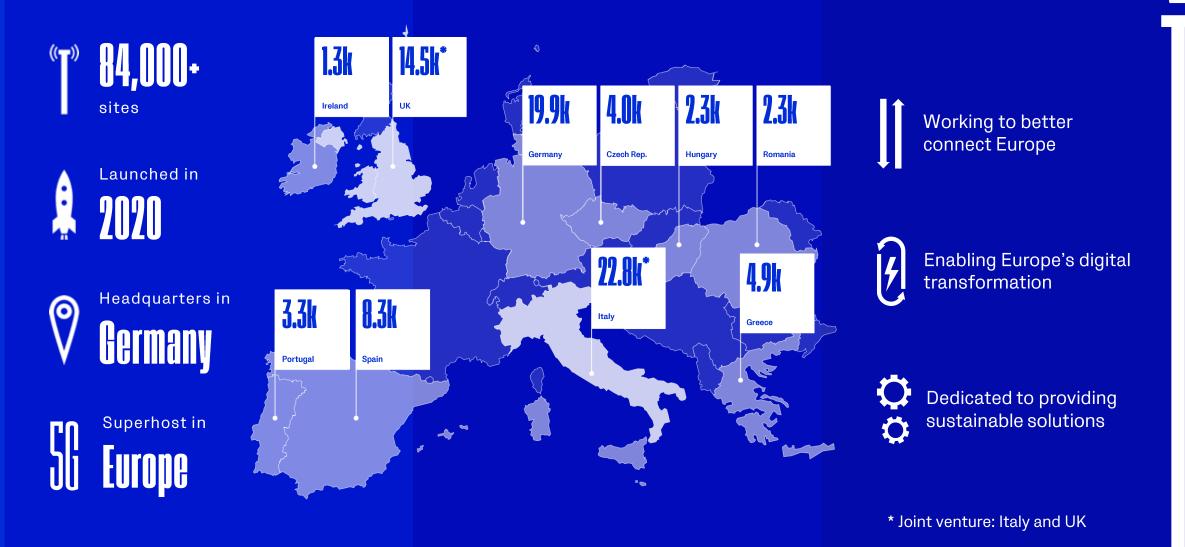




# OTTO HO HORAD HORA

MWC 2024, Barcelona, Spain GSMA Tower & Fibre Forum Seminar 29/02/2024 Jaime Abril, Head of Product and Business Development

## Vantage Towers: Powering Europe's digital transformation



## Why? Diversification driving forces

Increasing competition in the TowerCo market

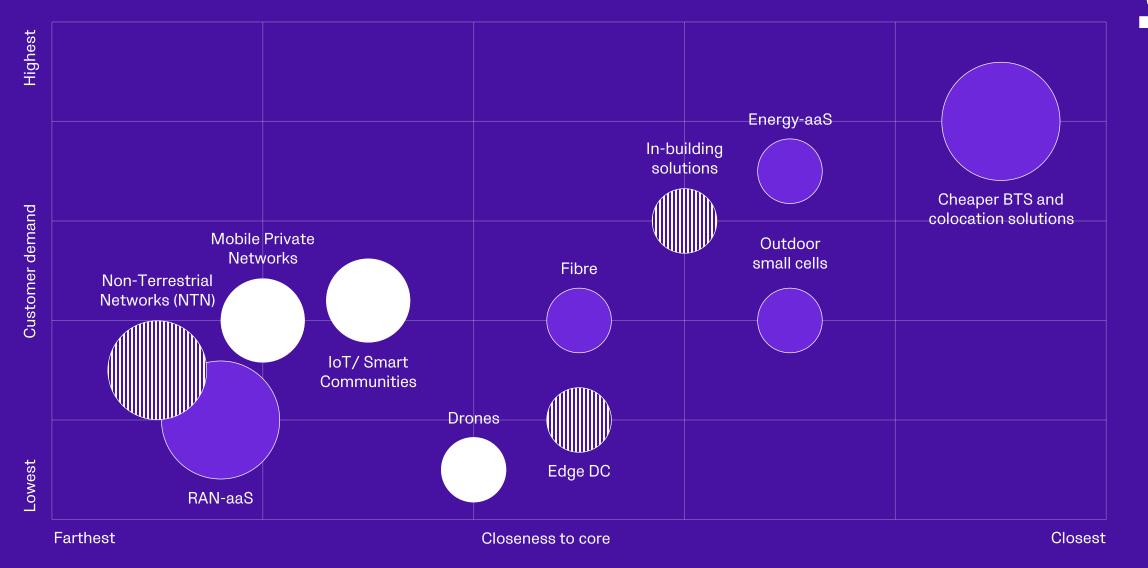
**RAN** sharing

Changing requirements from MNOs and non-MNOs

## Gore

(Highly dependent on MNOs)

## What? Beyond the core opportunity map



## How? External and internal product diversification success factors

#### Customers

- Features/ requirements
- Costs
- Time-to-market

## Government and regulation

- Rules
- Funding
- Control

#### Investors

- Returns
- Margins
- Long-term-value

#### Partners

(Suppliers, landlords)

- Quality
- Quantity
- Costs

## **Indoor Coverage Solutions**

For MNOs and property/business owners

Multi-carrier solution  $\rightarrow$  future-proof and cost-efficient

Coverage-as-a-Service, turnkey project

Repeaters and passive, active and evolved DAS solutions

Can be combined with IoT and private networks

#### **Examples:**

**More than 1.3k DAS sites across Europe** at airports, underground facilities, tunnels, hospitals, shopping malls, commercial buildings, stadia, etc.

# Small Cell and Smart City infrastructure solutions

MNOs for Small Cells, and Enterprise and Public Sector for Smart Communities

Multi-tenant solution for Small Cells/ outdoor DAS, IoT sensors and gateways, EV-charging stations, and drone stations

Hosting services with optional access to fibre and selected active hardware and services

Facade, illuminated signs, poles, ad hubs, recycling stations, etc. on private and public grounds

#### **Examples:**

Small Cells network for Telefonica in Spain and EV-charging stations with Elektromotive Hungaria Kft. in Hungary



## **Energy solutions**

Mainly for MNOs, but also for Enterprise and Public Sector

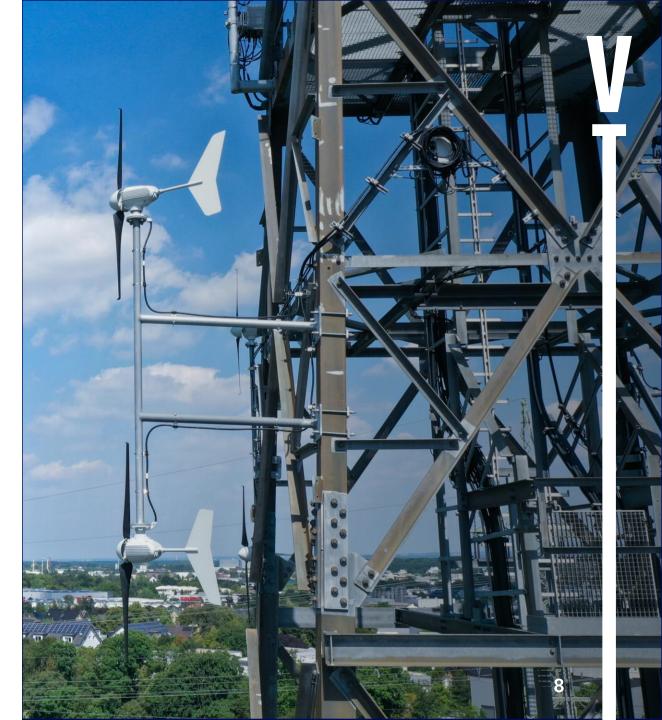
Multi-tenant infrastructure and energy equipment

Energy (HW)-as-a-Service, focusing on energy efficient and green solutions

Power connection, rectification, battery backup, renewable generation (solar panels, wind turbines, temporary and backup energy solutions)

#### **Examples:**

- + Grid electricity consumption from 100% renewable sources
- + ISO 50001-certified energy management
- + Hydrogen and photovoltaic generator



## **Sensing solutions**

Mainly for Enterprise and Public Sectors, but also for MNOs

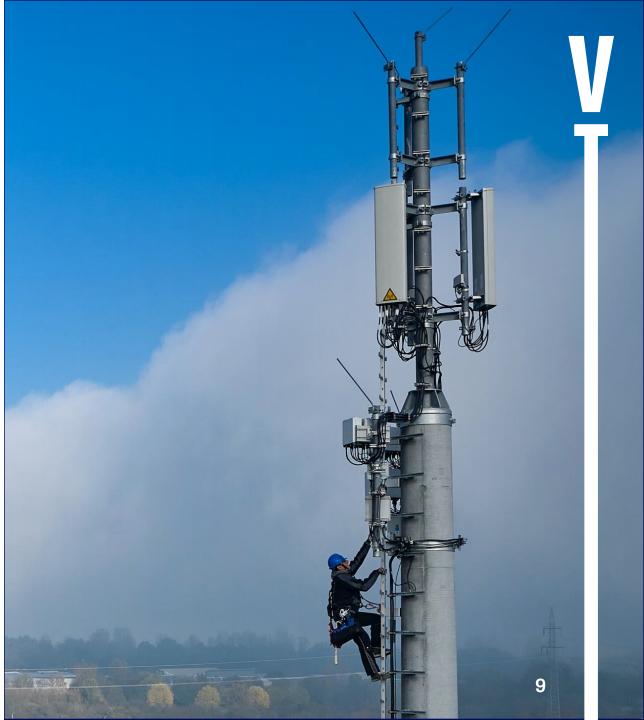
Hyperlocal real-time environmental data for multiple customers and applications

Sensor Data-as-a-Service and selected nowcasting/ forecasting/ alert services

Microwave-based rainfall, weather, air quality and noise sensing solutions

#### **Examples:**

Virtual microwaves for rainfall measurement and weather data for wildfire and flood prevention and management in Spain



#### VANTAGE TOWERS

# Thank you for your attention