







Towerco revenue streams: threats and opportunities

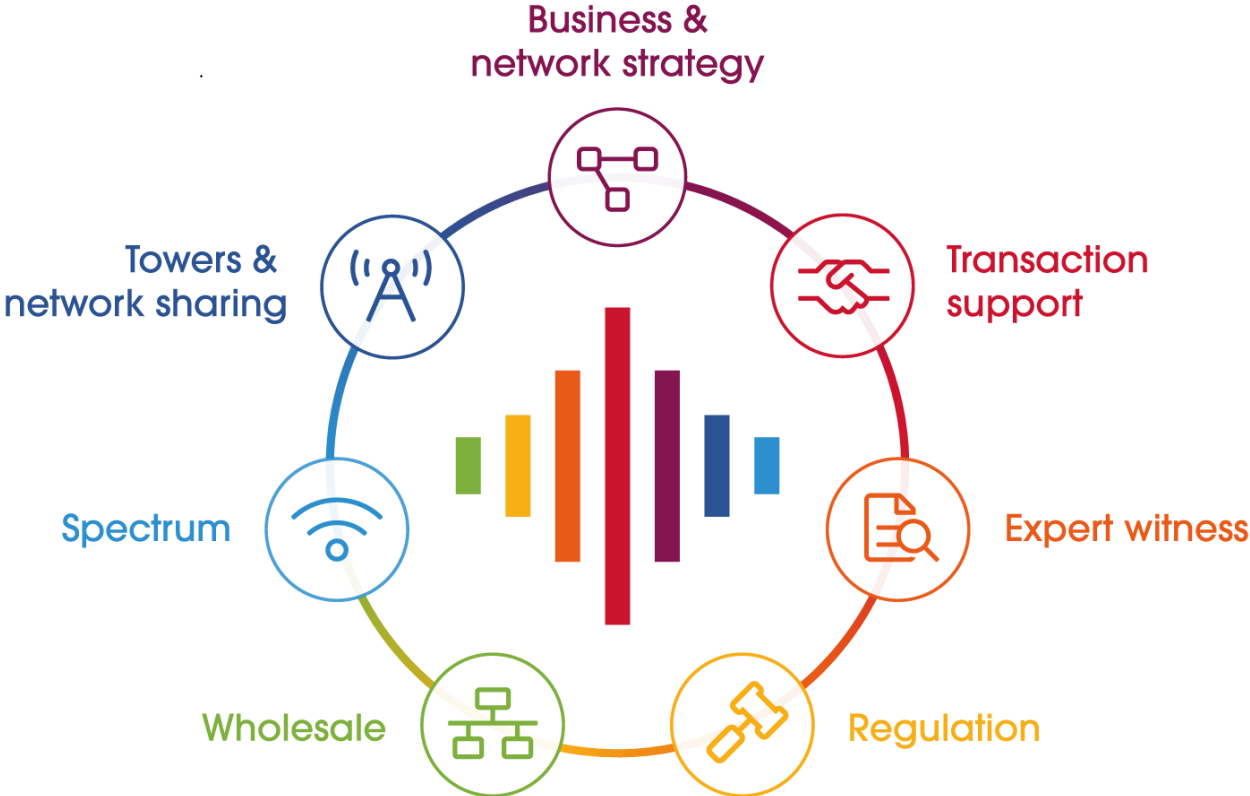
Tower & Fibre Forum, MWC

29 February 2024

Tailored consulting services to the TMT sector

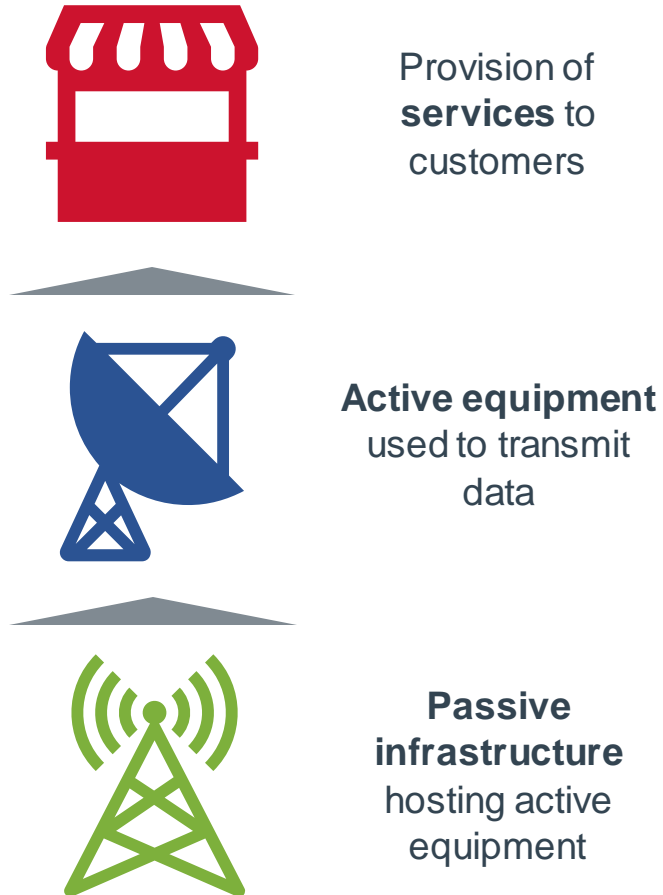


-  Due diligence
-  Tower consolidation
-  New business opportunities
-  RAN-as-a-Service



The towerco business model

Mobile value chain




New revenue sources (focus of this session)

- Energy
- In-building solutions
- Fibre
- Neutral host
- NTN networks
- RAN-as-a-service
- Private networks
- Edge data centres
- Smart towers
- Etc.


“Traditional revenue” – driven by MNO site demand

Tenancy ratio



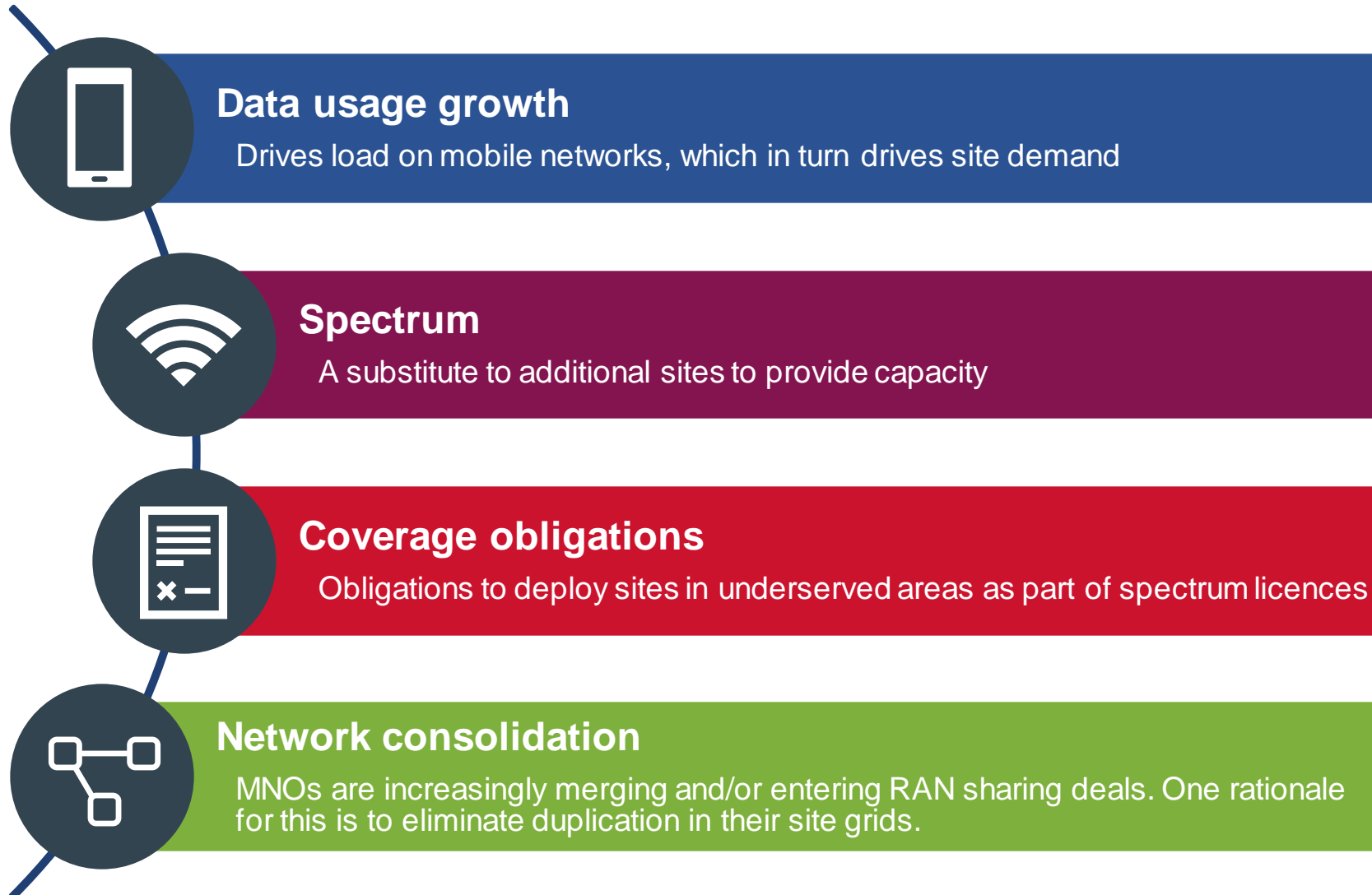
Incremental EBITDA with minimal incremental costs

New locations



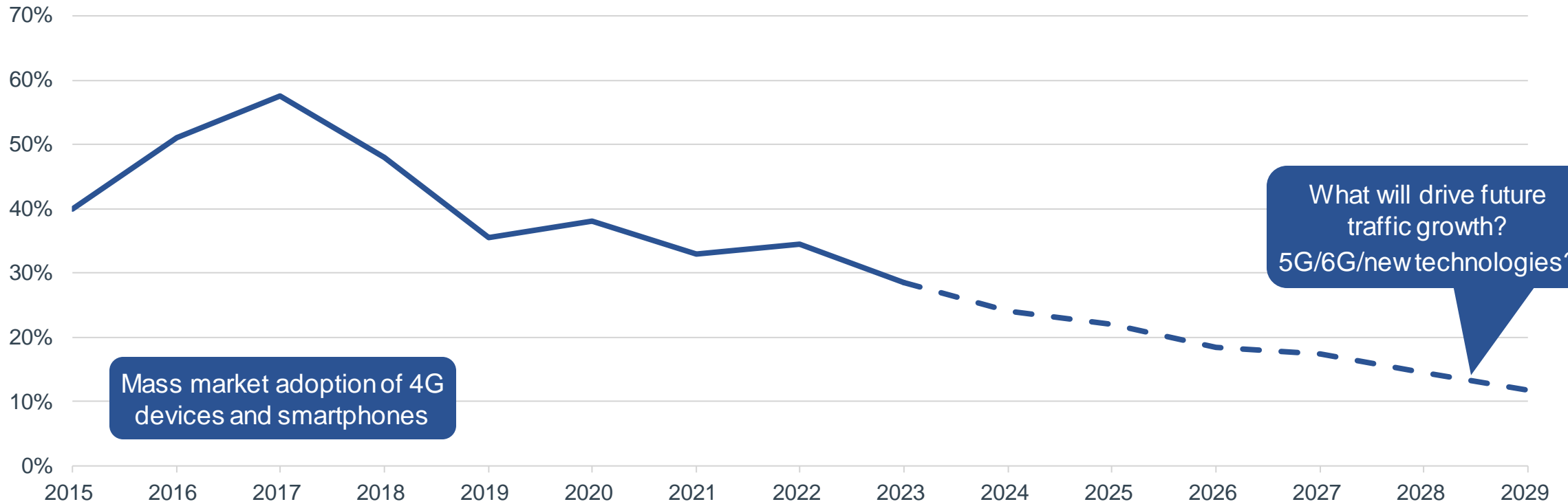
New locations required by MNOs

Many factors affect MNO demand for space on sites




Mobile data usage growth rates are slowing

Global average mobile monthly data usage growth rates*
(GB/SIM/month)



Mass market adoption of 4G devices and smartphones

What will drive future traffic growth?
5G/6G/new technologies?

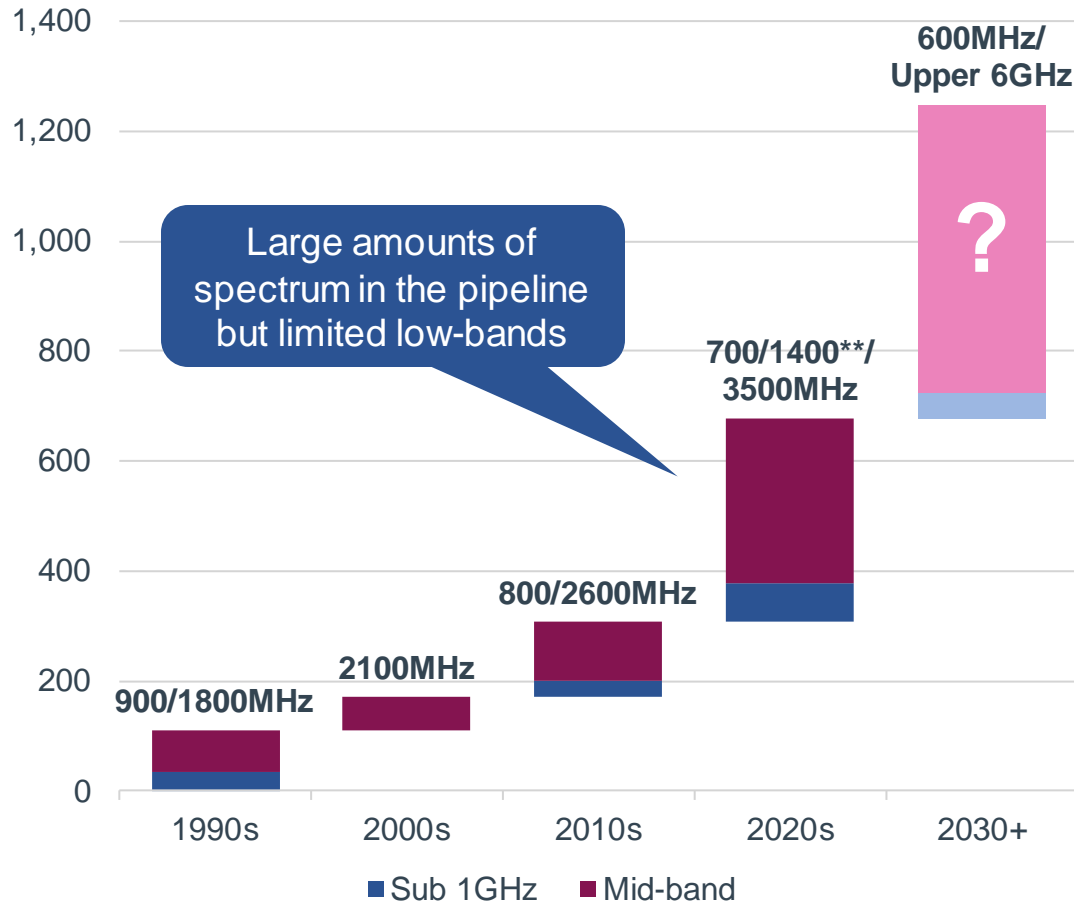
 Slowing demand growth, coupled with available additional capacity, will dampen demand for new sites

* Source: Ericsson mobility reports

Spectrum available to MNOs has increased considerably



Spectrum awarded in a typical European market
(DL* MHz) – excluding mmWave



WRC-23 key outcomes

- Upper 6GHz identified for IMT in Region 1, with footnotes elsewhere

WRC-27 agenda items

- ✗ • 4.5GHz – difficult in Europe
- ✓ • 7-8GHz – most promising
- ✗ • 15GHz – too high frequency?

Other notable outcomes

- Sub-700MHz will not be on the agenda until WRC-31

* Assuming 75% DL for TDD bands

** Includes 40MHz of SDL 1400MHz which is not yet widely used in Europe

Coverage obligations are driving tower demand

Spectrum awards / renewals increasingly include coverage obligations in rural areas



Arcep's "New Deal" 2018 licence renewal has resulted in an additional 2600 sites in rural regions



700MHz obligations to cover all municipalities with more than 20 000 inhabitants

Not only does this drive site demand, a neutral host model may be more appropriate given the economics of rural deployments

MNOs are increasingly consolidating their RANs

Mergers



Following the Sprint & T-Mobile merger, American Tower and Crown Castle are **forecast to lose USD375m and USD250m** respectively in 5-year revenues from Sprint cancellations*

There are multiple potential mergers ongoing worldwide, including:



Vodafone + Three



Orange + Masmovil



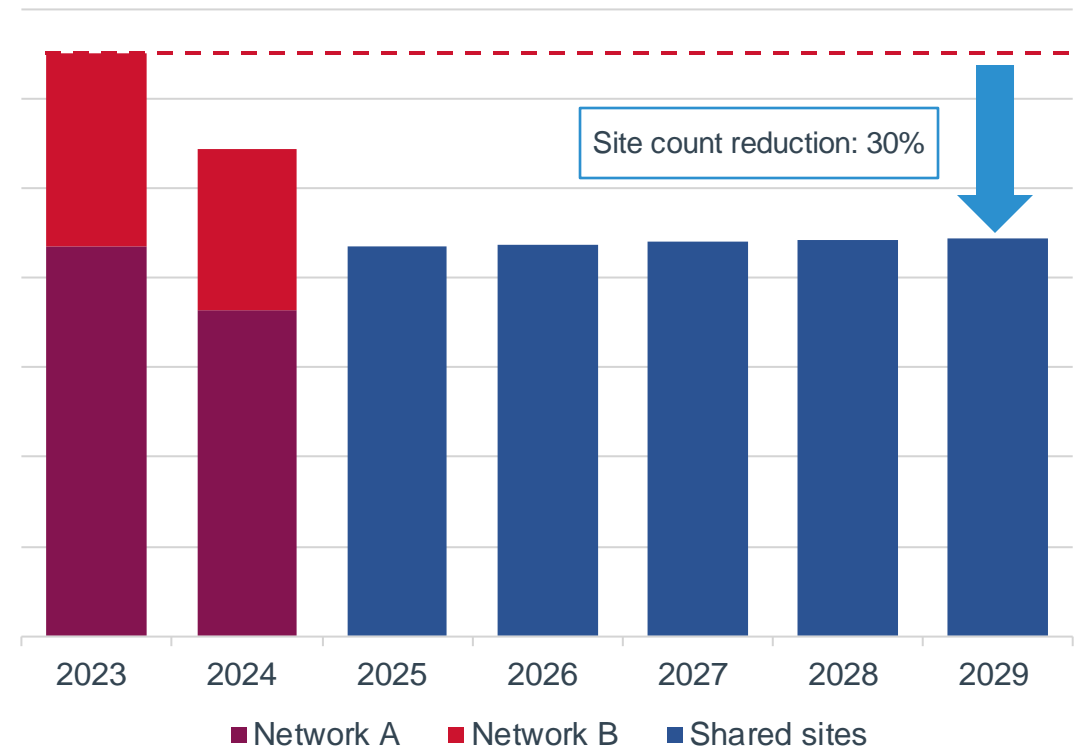
Vodafone + Nowo



Smartfren + XL Axiata

Network sharing

Example site forecast resulting from RAN share**



* Source: HSBC Global research, December 2023

** Source: Aetha analysis

Traditional towerco revenue – threats and opportunities



Threats to current revenues

Slowing mobile data growth rates

Improved spectrum supply may dampen demand for new sites

RAN consolidations from mergers / network sharing



Opportunities for additional revenues

Deployment of new spectrum may drive PoPs on existing sites

Coverage obligations / policies to improve rural coverage

Neutral host opportunities in rural areas and for small cells

Whilst leasing access to towers will remain the bulk of towerco's revenue, the successful towercos of tomorrow will seek opportunities to diversify

Today's discussion – towerco diversification

- **Matthew Edwards** – Product Director, Telecom Infrastructure, TowerXchange
- **Daniel Champion** – CEO, Sitenna
- **Mirko Masi** – Director of Technology, Cellnex
- **Jaime Abril** – Head of Business and Product Development, Vantage Towers
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