

Outdoor Small Cells:

**Creating Connections
that Matter in our
Towns and Cities**

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A story of partnership



Creating Connections that Matter in our Towns and Cities

- Where are we now
- It only works if...
- More than assets and fibre
- A role for all stakeholders

But first....



An aerial photograph of a dense urban environment, likely London, showing a grid of streets and numerous buildings. The image is overlaid with a semi-transparent dark grey filter. In the center, the word "cellmex" is written in a large, white, lowercase, sans-serif font. To the right of the "x" is a white icon of three curved lines representing a signal or connectivity. Below the main text, the phrase "driving telecom connectivity" is written in a smaller, white, lowercase, cursive font.

cellmex

driving telecom connectivity

Outdoor Small Cells

Enhancing connectivity in crowded city centres across Europe

- **1,300 Small Cells deployment** in London
- **Neutral Host** for best end-to-end TCO
- **Economically attractive**, versus new macro deployment
- **As A Service model** from design to operation
- **Best TTM** for Street Works and Permissions
- **Minimising visual impact** in historic cities



London



Erice



Barcelona



Milan



Dublin



Ciampino



Switzerland

Incremental demand

UK leading the way

Demand building beyond London but

- Still very tactical
- Low levels
- Macro economic and market consolidation factors

The fight for assets

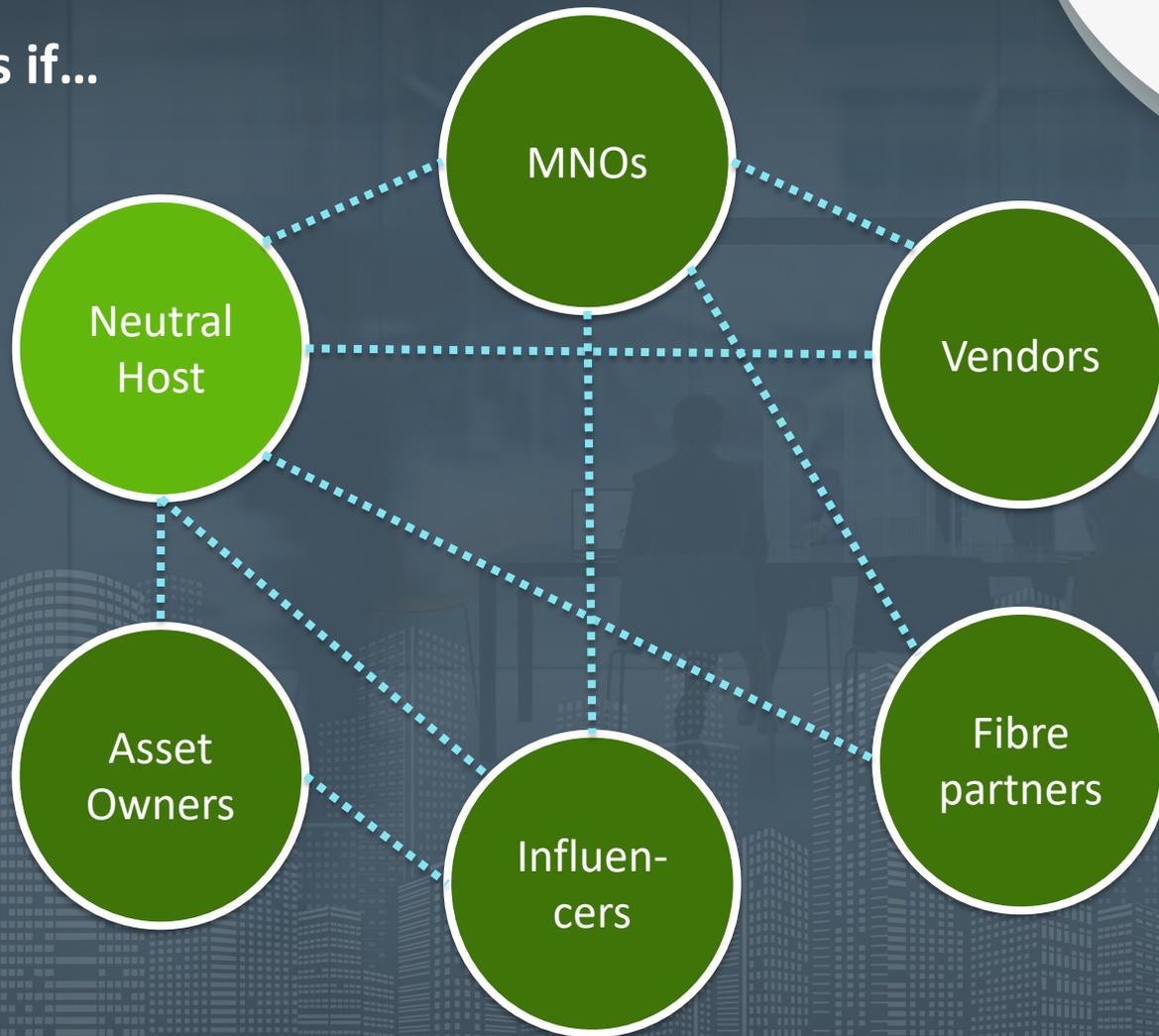
Open Access not quite the nirvana

- LA's approach re fee and terms
- NHs asked to sign overly onerous agreements
- This may backfire

Own solutions being deployed



It only works if...

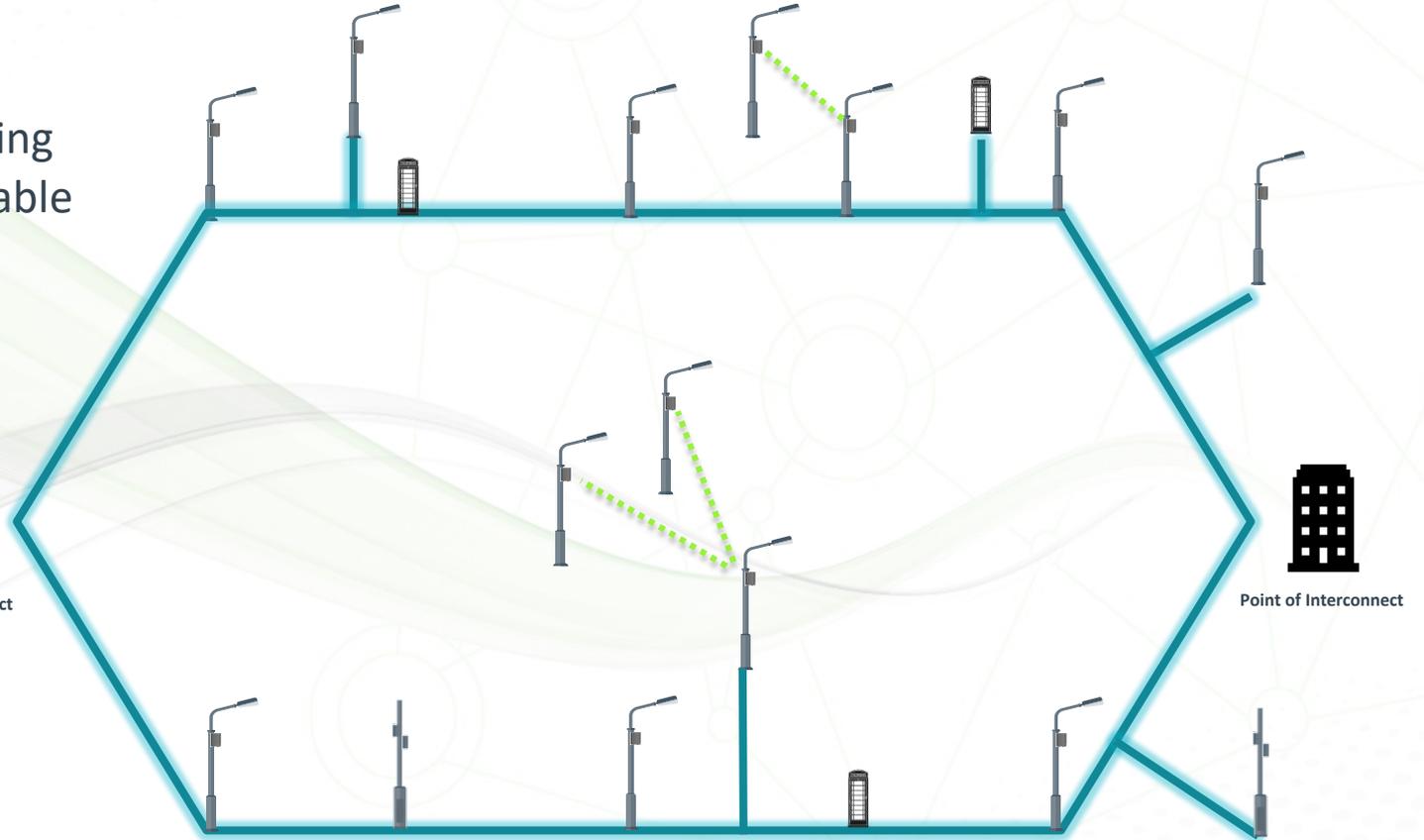


Fibre route connecting
street assets to suitable
point of presence

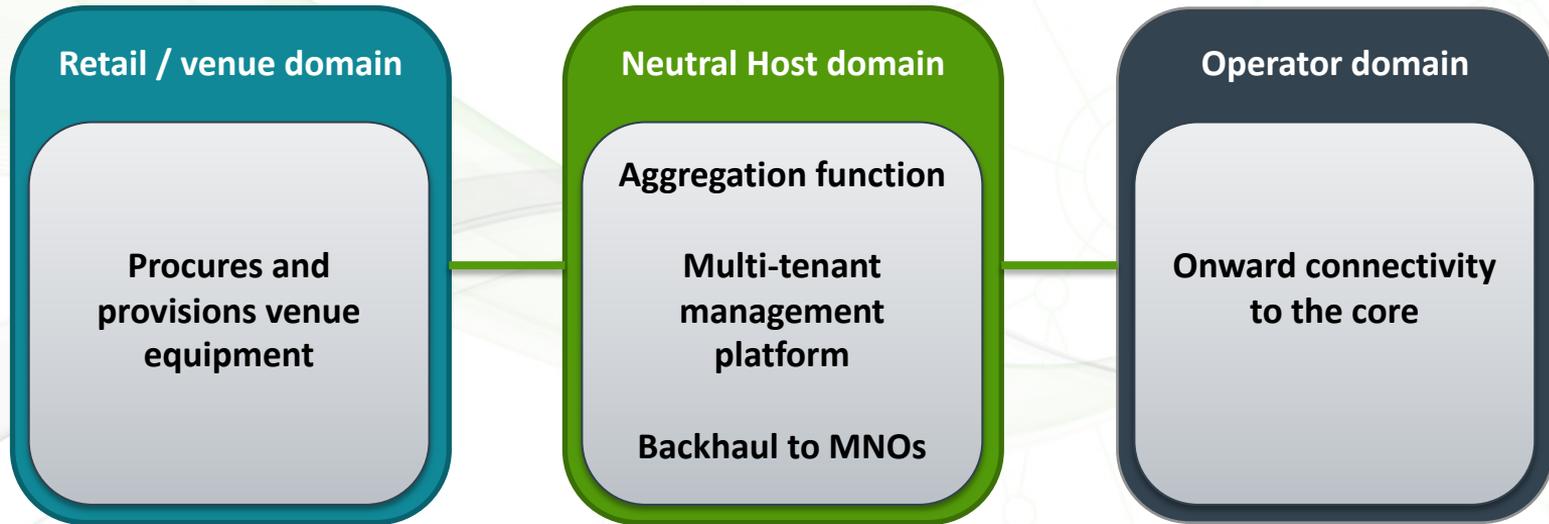


Point of Interconnect

Assets
& Fibre



JOTS: NHIB / NHOD high level architecture



It's done elsewhere....

Technology evolution is simplifying RAN management, outsourcing and sharing

- NH RAN management
- RAN Sharing already common between MNOs but within symmetric frameworks
- Higher flexibility and autonomy can be achieved



Cellnex as enabler thanks to :

- Neutrality
- Flexibility
- Service centric
- Financial capacity



Nationwide RANaaS

- 8k sites and BTSs
- 17k m/wave links
- 11k km fibre

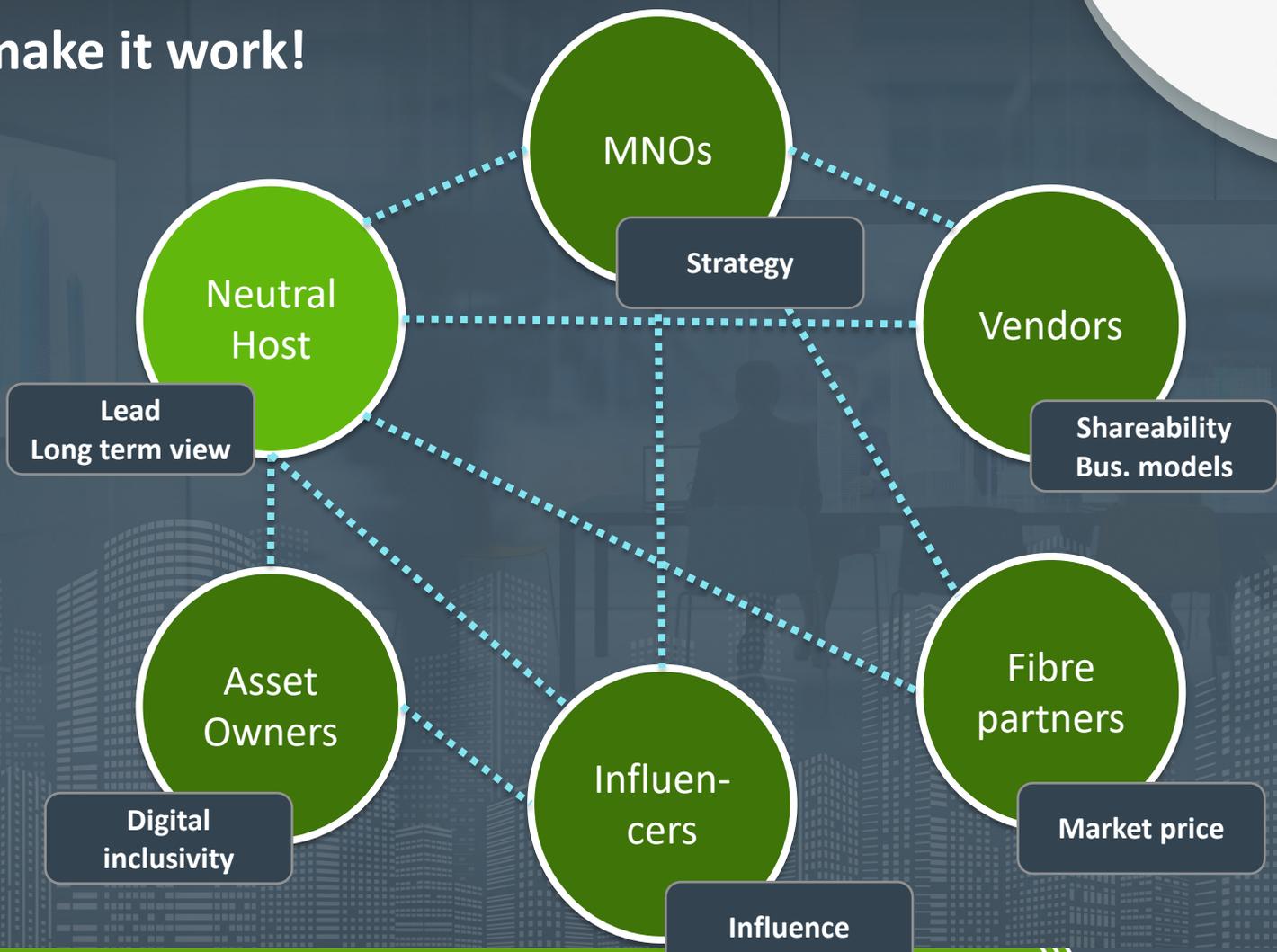
- Incremented value by Active sharing
- MNO retains full control of Network evolution strategy

mmWave trial

- Paris La Défense, France



Let's make it work!



We'll continue to spread the word...

Flexible deployment options Ultra-fast fibre connectivity Trusted service delivery

Flexible deployment options

Extended portfolio of local authority owned street furniture, digital kiosks and dedicated Small Cell Street Points.

Small Cells for smarter cities

Growing urban populations are demanding ultra-fast, ultra-reliable mobile connectivity. Small Cells deliver, enhancing social inclusion, economic growth and smart city innovations.

WATCH THE VIDEO

The need for change at street level

Demand for high bandwidth mobile services is surging rapidly in heavily lit town and city centres the world over, the impact on communities and the case for small cell connectivity at street level.

READ THE CASE (PDF) HERE

Making it happen in urban communities

Cellnex is helping MNC customers, partners and communities across the UK connect to new opportunities at street level. As the UK's Small Cell leader, and having deployed more Small Cells than anyone else, we're opening the coverage gaps, enhancing experiences and supporting local economies.

PREVIEW CASE

Small Cell Fronthaul

AR/VR remote collaboration

Internet of everything everywhere

Creating connections that matter

Small Cells for smarter cities
Growing urban populations are demanding ultra-fast, ultra-reliable mobile connectivity. Small Cells deliver, supporting social inclusion, economic growth and smart city innovations. [Scan the QR code to watch the video.](#)

The need for change at street level
Demand for high bandwidth mobile services is surging rapidly in heavily lit town and city centres the world over, the impact on communities and the case for Small Cell connectivity at street level. [Scan the QR code to read the executive summary.](#)

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Use QR codes or visit:
www.cellnex.com/gb-en/small-cells-1p

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Executive briefing: Small Cells

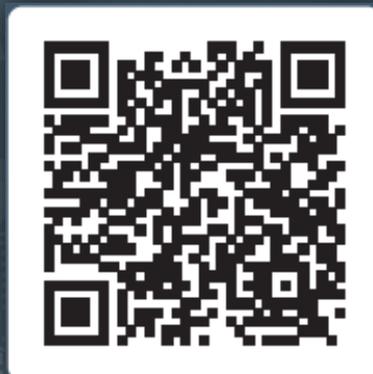
Creating connections that matter

Exploring the opportunities of deploying Small Cell infrastructure in dense urban areas

Thank you

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Scan the code to access the resource centre