



# Opening the floodgates to densification

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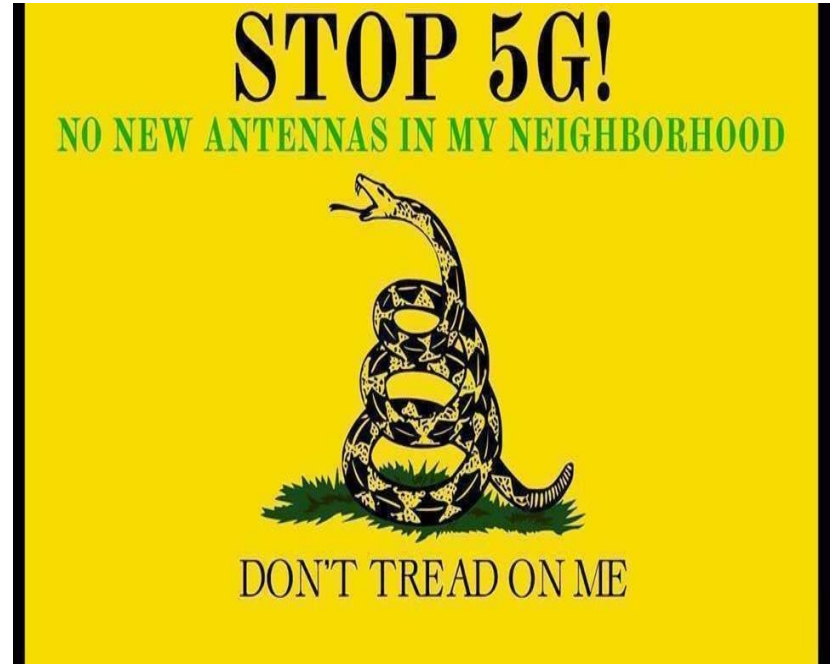
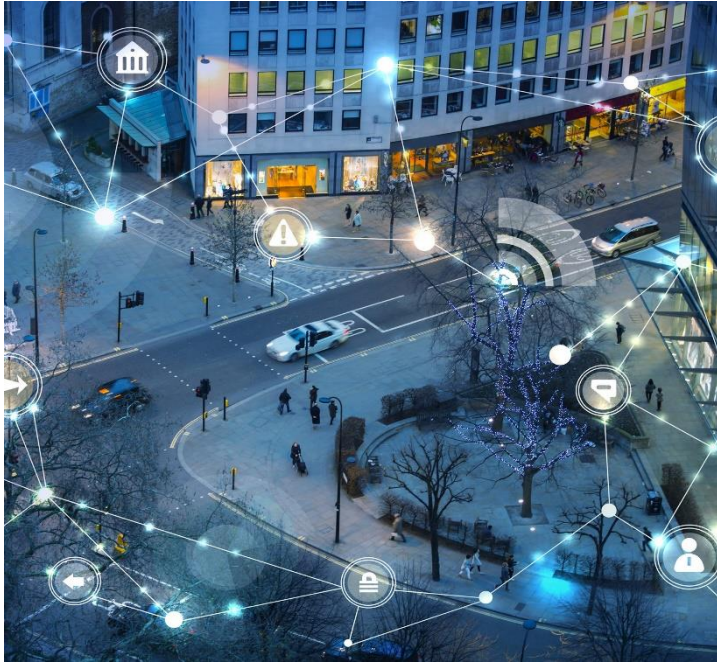
**Small Cell Forum**



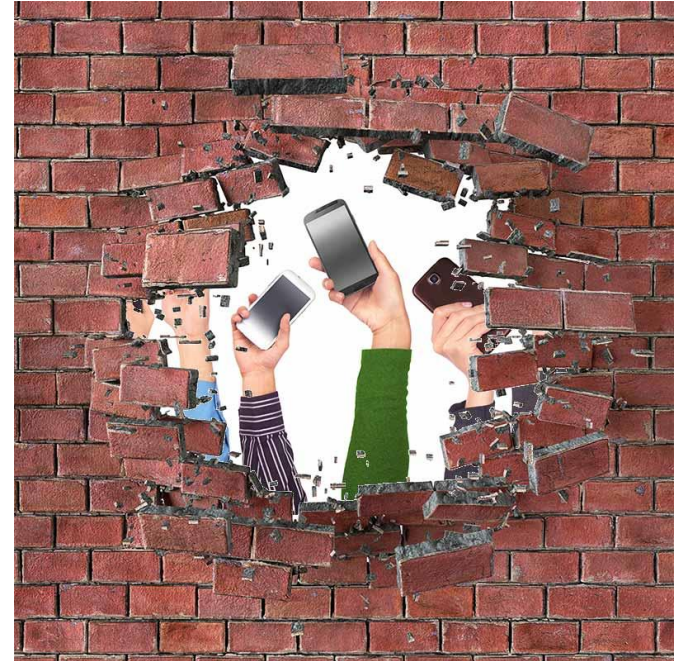
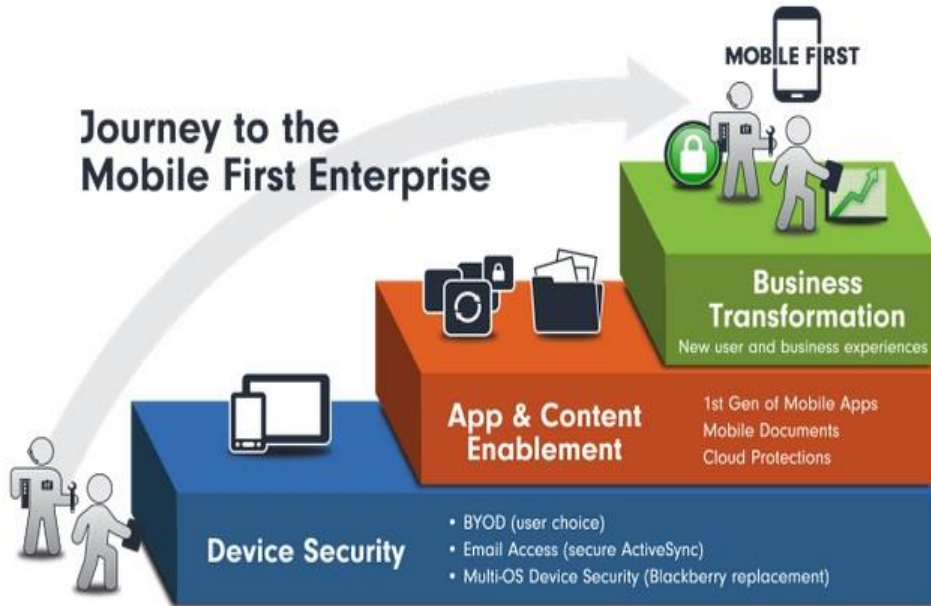
This year's critical challenges: MNOs



# This year's critical challenges: cities



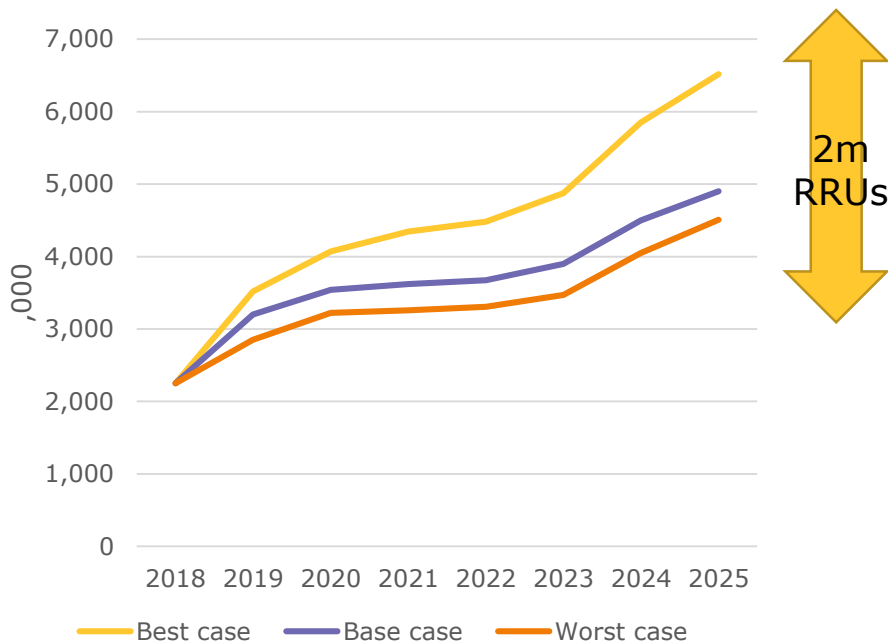
# This year's critical challenges: enterprises



# All these require concerted effort by the small cell community

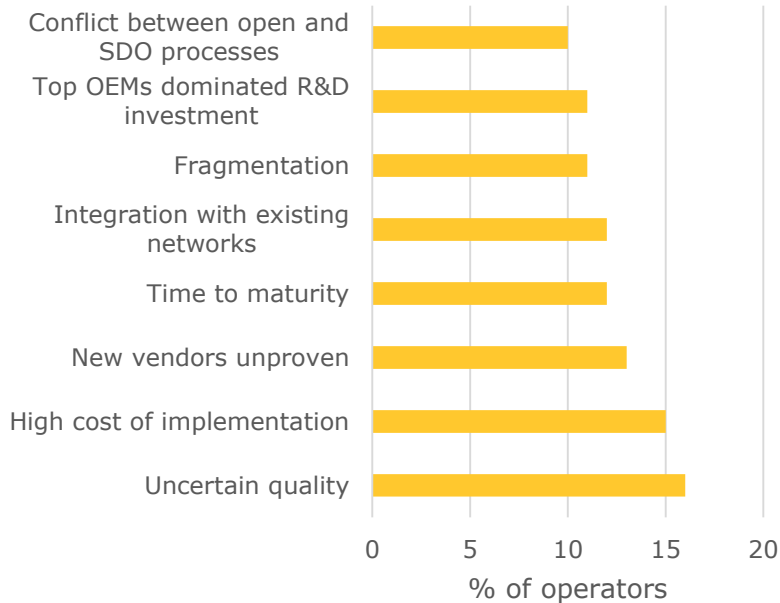


- But many conditions need to be met to address all these challenges and drive the best case forecast
- Some important ones from SCWS:
  - Variety of deployers
  - Open networks and agreed splits
  - Edge computing integration
  - Automation
  - Influencing policy

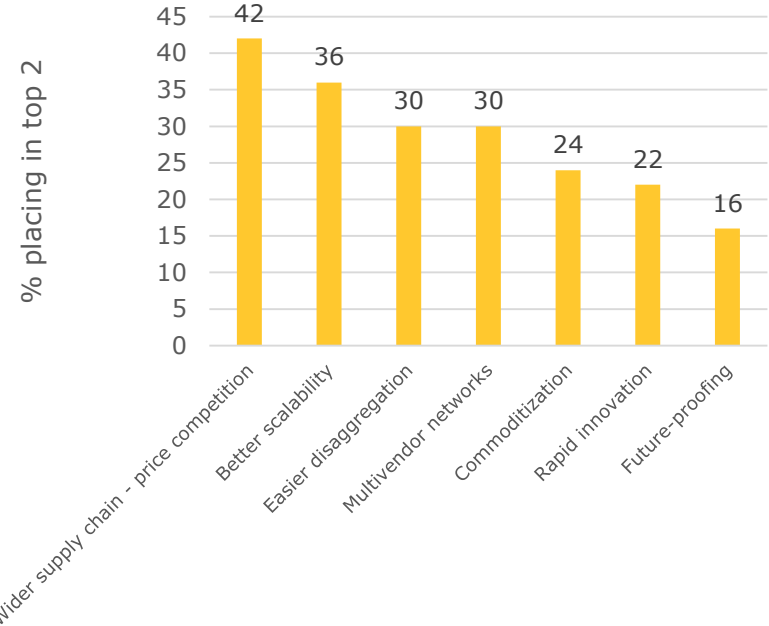


Overall deployments best and worst case

# Open networks and agreed splits are vital for industry scale: (n)FAPI

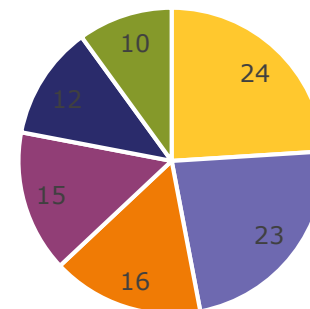
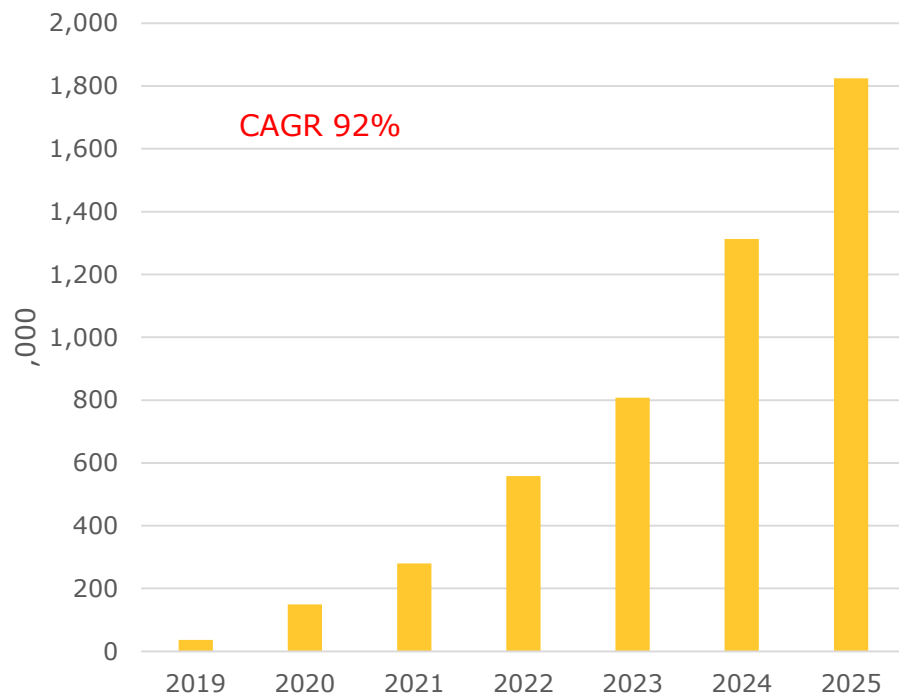


Main barriers to deploying open RANs



Expected impact on small cell economics of open RANs

# Open specs and monetization models will drive the edge+cellular advantage



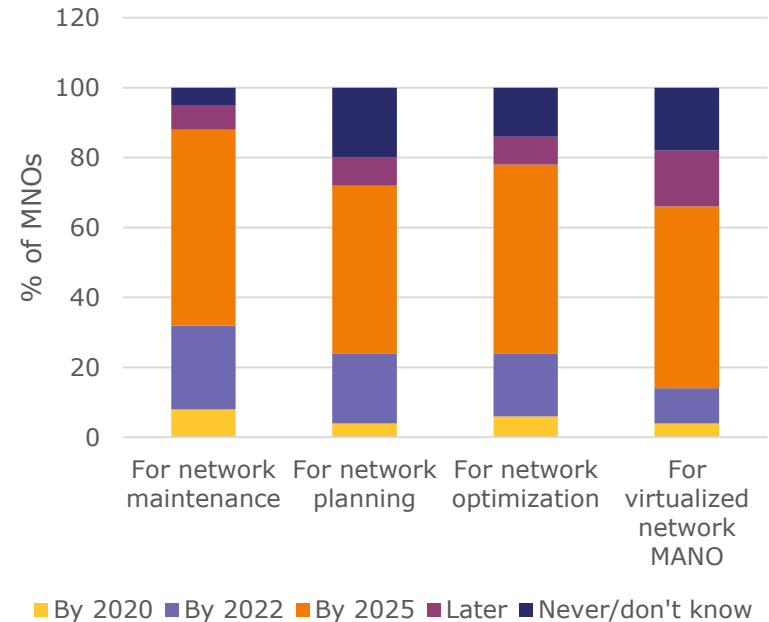
- Immature standards and lack of interoperability
- Unproven business case
- Risk of making wrong architecture choice
- Uncertainty about MNO's ability to monetize edge compute
- Uncertain cost and risk sharing with enterprise
- Uncertainty about key use cases esp ultra-low latency

L: Forecast deployment of edge nodes with cellular; R: Top deployer barriers to edge

# Intelligent automation will improve the economics of planning and management



- Rising use of ML in small cell planning and management
- Greater precision - SCF/5GAM paper
- First drivers relate to management opex
- Then the case evolves to full orchestration, enabling new services
- Build on existing SON work – roadmap to automation across the network



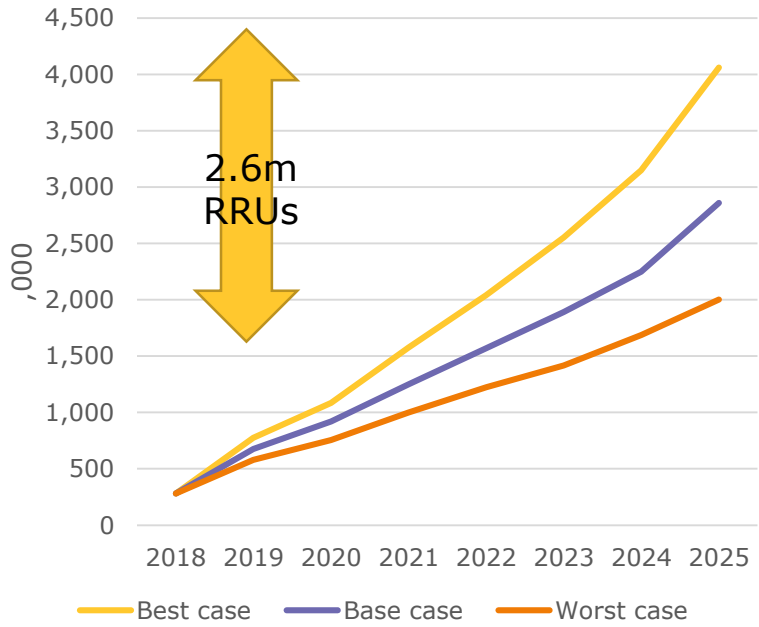
Expected adoption of AI/ML for small cell processes



# Communication with municipalities and evidence-based lobbying is now critical

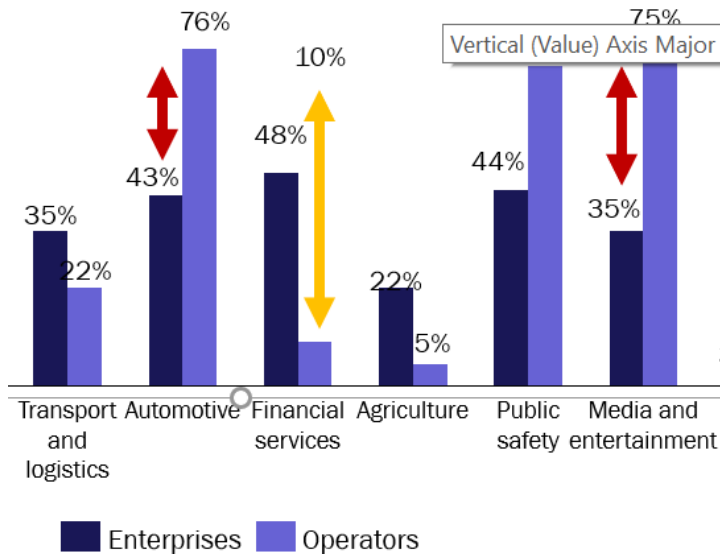


	Minimal bureaucracy	Cheap backhaul	Low (or zero) attachment fees
China	✓	✓	✓
Japan	✓	✓	✓
S Korea	✓	✓	✓
Sprint/ Altice (USA)	✓	✓	✓
India	~✓~	✗	✓
Most US and EU situations	✗	✗	✗

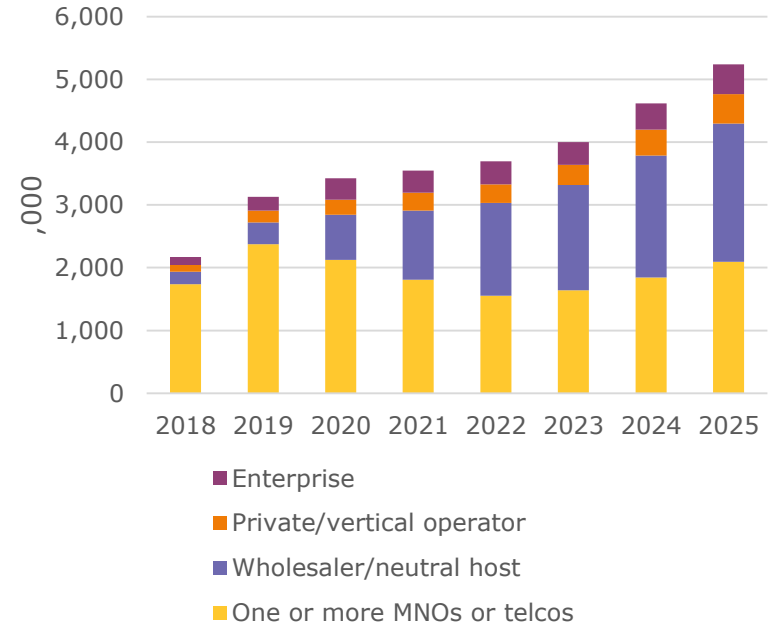


Outdoor deployments best and worst case

# New deployers and neutral hosts will address the wide variety of requirements in 2020s



Source: Analysys Mason



Small cell deployments by ownership