



the great 6G spectrum debate

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CITYMESH

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A true techco, born as an integrator and growing into an operator

Turning connectivity into
operational value by leveraging:

- Operator solutions
- Drone solutions
- Integrator solutions
- IoT solutions
- Temporary solutions
- Mission critical solutions



2015

First spectrum acquisition

BIPT auctioned band 42 “WiMax” spectrum per postal code.

Citymesh was the only applicant and was awarded 40MHz of band 42 spectrum in 15 communities.

n78 20 MHz TDD

2020

Expansion and Diversification

Citymesh acquired the last piece of national band 27 spectrum (15MHz FDD duplex). Incumbents could not enter the auction due to spectrum cap limitation.

n28 15 MHz duplex
n78 20 MHz TDD

2022

4th operator package

Together with joint venture partner DIGI, Citymesh acquires a national package of spectrum to deploy a full network as new MNO in the Belgian market.

n1 5 MHz duplex
n3 15 MHz duplex
n7 15 MHz duplex
n8 5 MHz duplex
n28 5 MHz duplex
n38 45 MHz TDD
n78 50 + 20 MHz TDD



Total private 4G/5G market in numbers – potential size, forecast value, current progress

INDUSTRY	SITES
Industrial / manufacturing	10.71m
Warehouses (logistics)	3.3m
Hospitals / labs	263k
Utilities (water)	140k
Mining	54k
Transport venues / ports	50k
Power generation	47.6k
Military bases	10k
Oil and gas	8k
TOTAL	14.58m

Potential size (left) – Nokia’s seminal market-sizing from five years ago, as spectrum was liberalised for enterprises and Nokia launched its DAC product; the count focuses squarely on Industry 4.0. (Source: Nokia / Harvard University)

Current deployments (right) – numbers vary wildly, mostly depending on whether P4G/5G deployments include proofs and trials; note all calculations exclude China. (Sources: listed right)

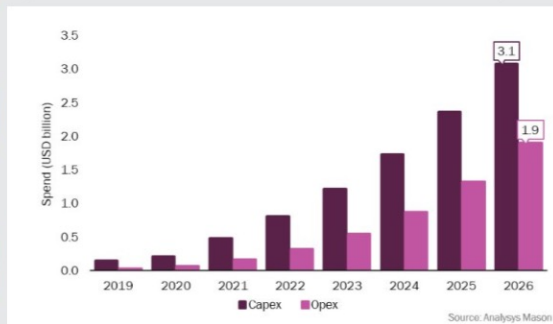
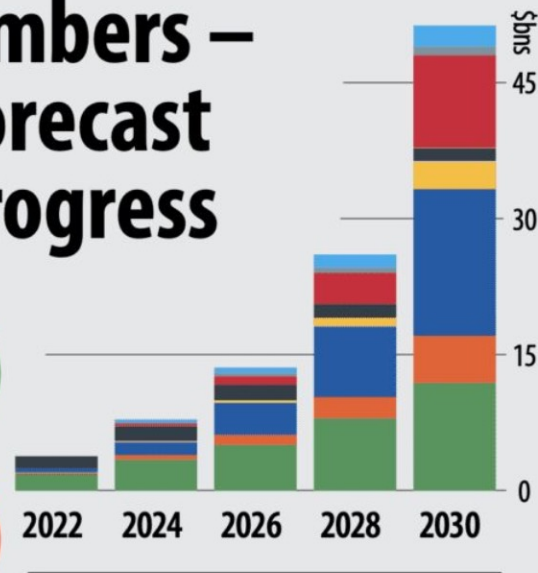
Projected value (far right) – the top-end forecast for revenue predicts \$50 billion per year by 2030, which is five-times what others say. (Source: ABI Research)

4,000
- Analysys Mason

2,900
- Berg Insight

1,384
- GSA

1,200
- Spirent



key takeaways

From Citymesh' perspective



Do not underestimate private networks



**Do not overestimate the practical use of sub-THz,
or even bands above 5GHz**



**Allow more flexibility at the technology level, i.e.
subframe structures**

