
Satellite and the 5G Journey

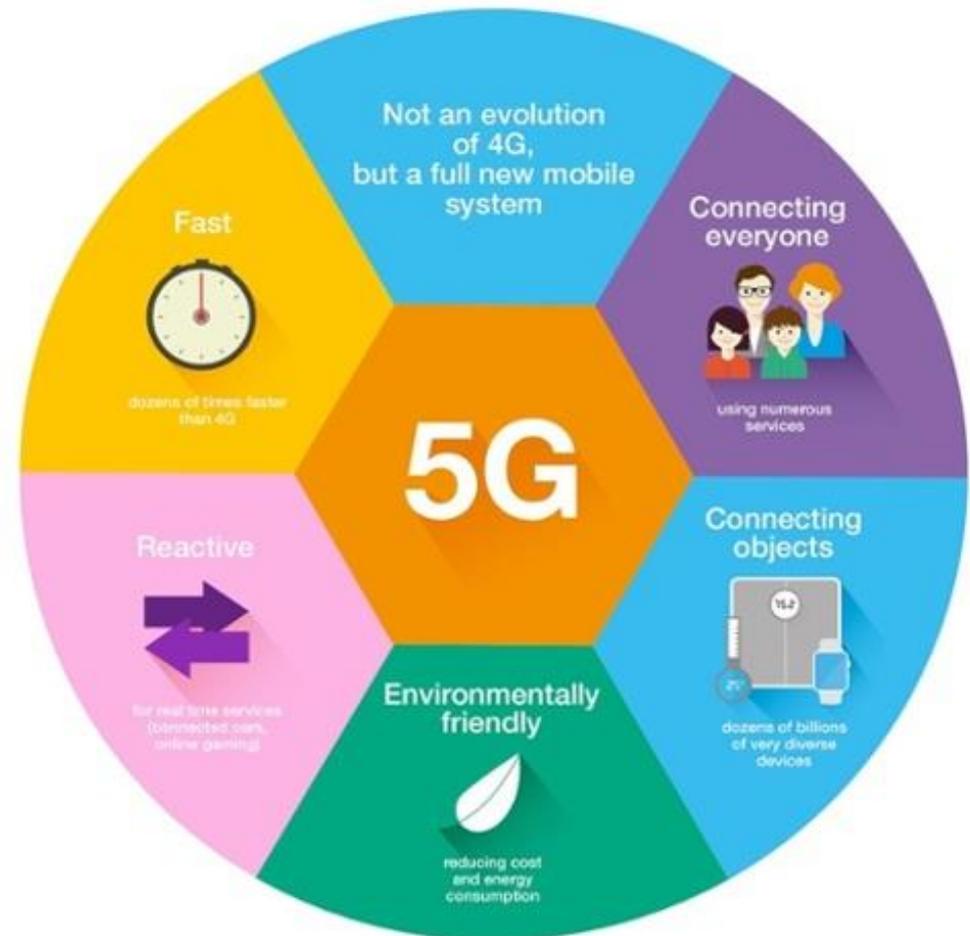
David Meltzer
Secretary General

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Satellite. Solutions. The World.

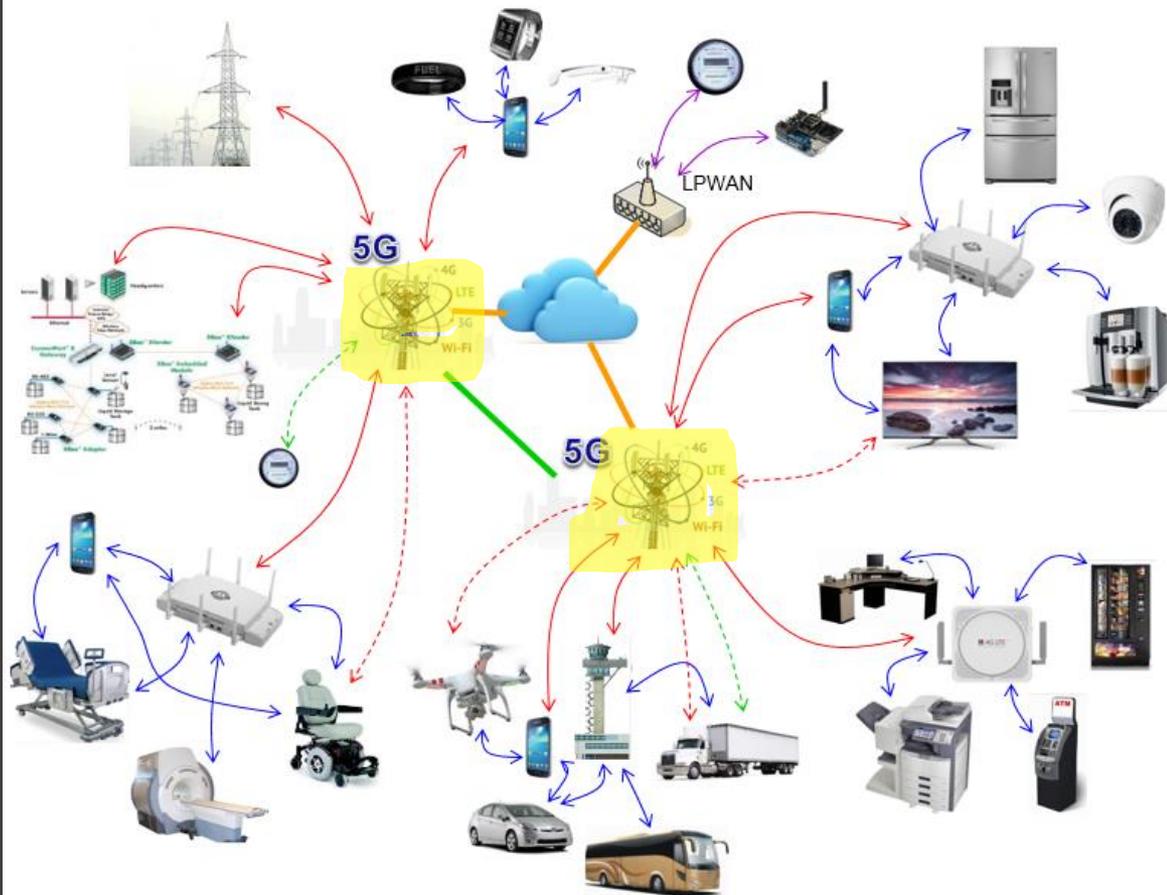
5G: The Enabler of IoT and Much More

“5G will fuel innovation across every industry, unleash new opportunities for economic growth and bring sustainable development and inclusive community engagement. It will create thousands of jobs, billions of dollars in savings and give people more choices and more opportunity. This is the most transformative technology of our lifetime”. John Legere, CEO T-Mobile US



UK & US MNO View of 5G:

- **EE:** 5G “will improve your mobile experience and help you enjoy faster internet speeds, a more reliable data connection in busy places, and a near-instant connection when opening apps and websites, playing games or connecting to your smart home devices.”
- **Verizon** 5G will give people the ability to do more and make things better”
- **Vodafone:** 5G “is helping us live better through 5G enabled healthcare, smart buildings and smart cities.”
- **AT&T:** “Transforming the future with 5G”





**If the Network Enabling
5G is a Pipe . . .**

***. . . Then the ground based 5G
network envisioned by the MNOs
has a few holes.***

The Holes in the MNO Pipe

- **Outside** urban areas, 5G cell deployment using mmWave spectrum will be hindered due to high cost of terrestrial network buildout
- **Inside** urban areas, 5G cell deployment using mmWave spectrum will be subject to blockage by obstacles and high cost of buildout
- **Outside and inside urban areas**, 5G cell deployment using sub-6 5G spectrum will not deliver promised 10x performance improvement over LTE



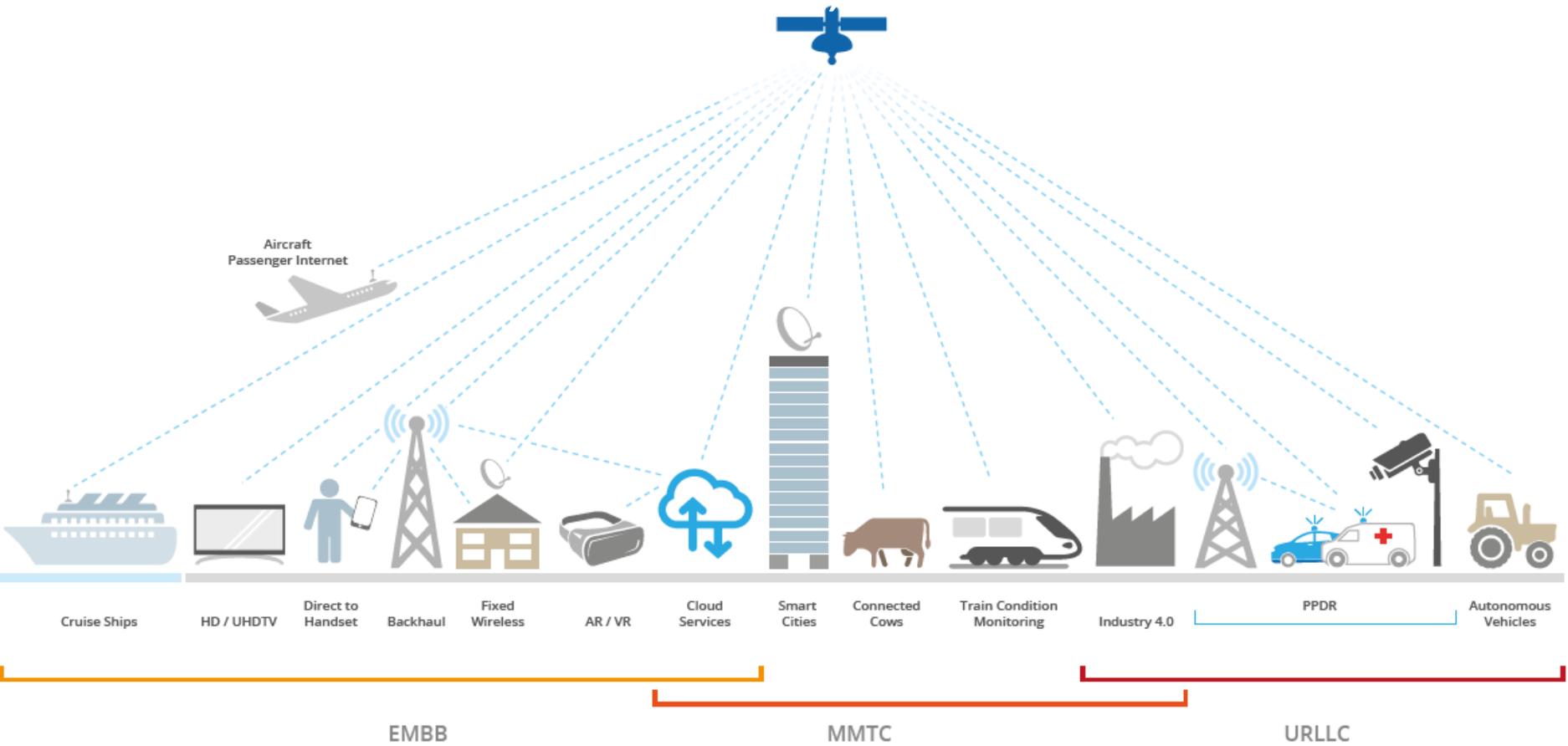
Fortunately, there is a fix . . .

Communication Satellites

Advantages:

- Ubiquitous coverage enabling global connectivity and extension of cellular coverage and/or serve as backhaul for carrying 5G IoT traffic
- 99.9+% reliability as not subject to natural and man-made events on earth that disrupt service
- Ability to deliver broadband services with speeds greater than 100 Mbps
- Improved latency for non-GEO satellites
- Cost effective for a wide range of services and end-users
- Ability to be targeted and dimensioned via spot beams to deliver a specified capacity to serve a given collection of devices
- Proprietary, closed system, enhancing reliability and offering greater security

Always There, Always On



Extending the reach of terrestrial 5G networks to places terrestrial networks cannot cover

This is the
Enabler of
5G



A Complimentary Set of Networks

Thank You

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