



Driving spectrum supply through sharing native solutions

Martin Fenton

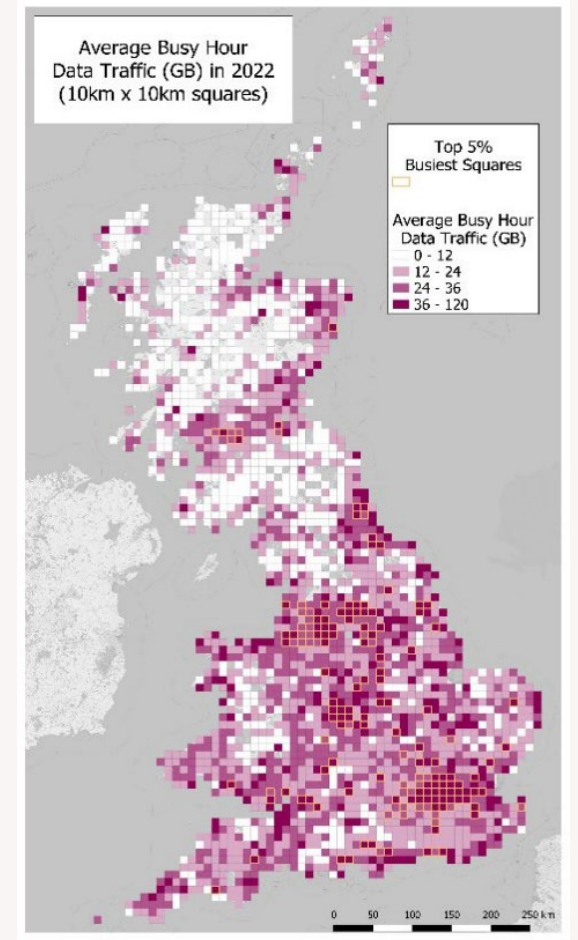
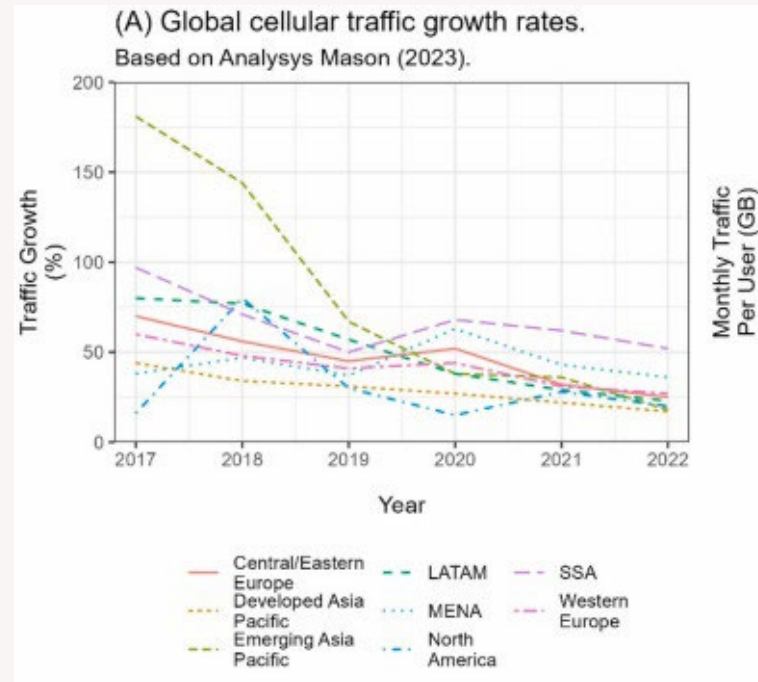
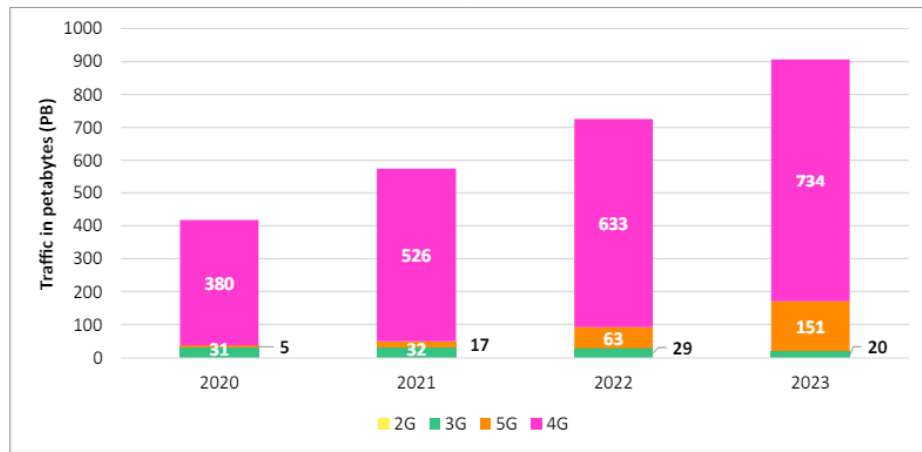
Director, Spectrum Technical Policy

27 June 2024



Mobile broadband continues to grow...

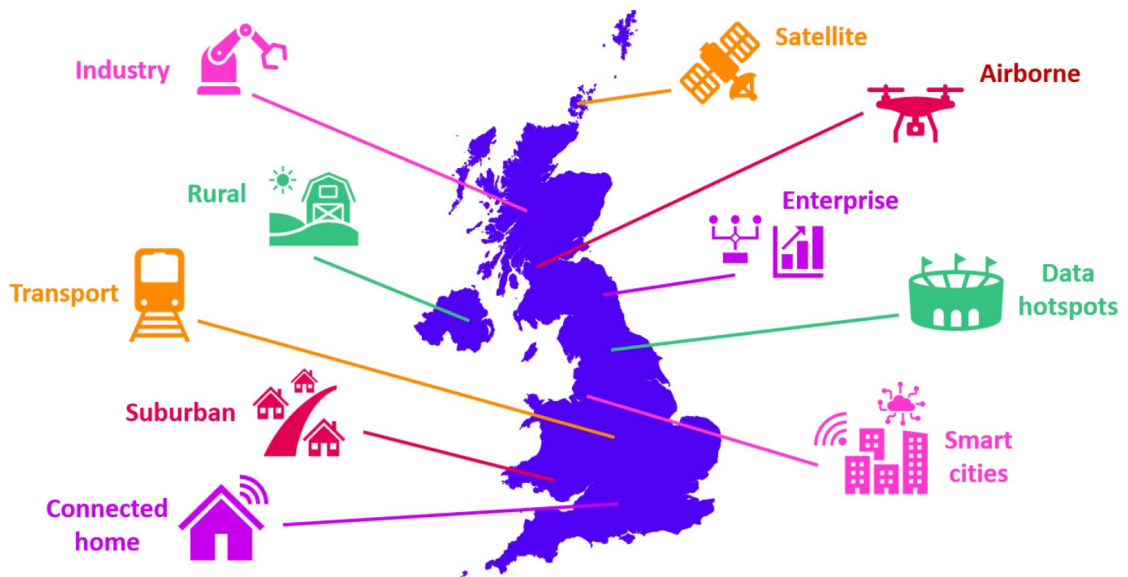
Figure 3:10: Total monthly traffic by technology (2020-2023)



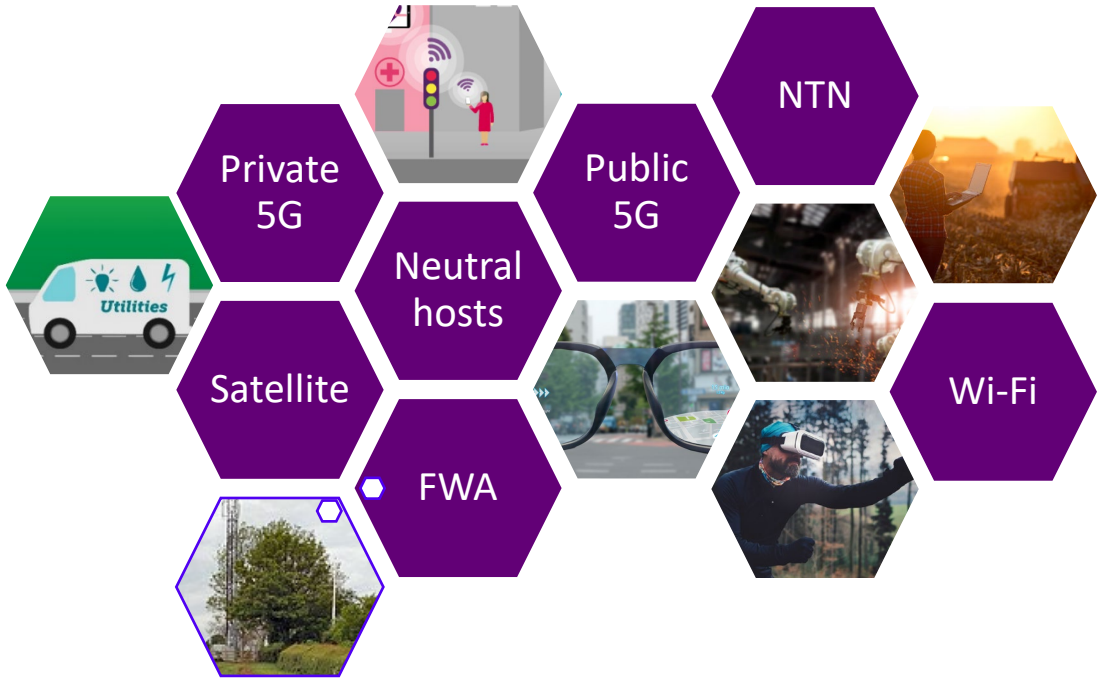
...but uncertainty on rate and location

...rate of growth slowing considerably

Increased demand diversity...



..Increased supply diversity



- Specific problems to solve that vary by county driving more niche solutions
 - Existing layers cover significant portions of demand.
- > Dense urban spaces, indoor coverage, deep rural, capacity in market towns, various industrial spaces (ports, airports, warehouses), resilient networks, corridor networks

Sharing native solutions will help to maximise spectrum supply



- Flexible power solutions to accommodate variations in demand & deployments
- Ability to reuse spectrum indoors and outdoors leveraging building isolation
- Real world coexistence solutions driving tighter packing of users
- “Sharing by design” built into future equipment standards
- Standardised and harmonised solutions to drive ecosystem economies of scale

Improved spectrum sharing is key to enabling wireless broadband growth

Shared Access for Local Networks*

- Increased signal strength
- Denser deployments
- Encouraging collaboration

mmWave for National and Local Mobile

- Rural & Urban
- Nationwide urban assignments via auction
- Local assignments via annual fees

6 GHz for Mobile and Wi-Fi*

- Indoor/Outdoor sharing
- Rural /Urban sharing
- Adaptive to emergent demand

Sharing between Mobile and Wi-Fi

- Combining mobile and Wi-Fi use has significant potential for consumer benefits from this band.
- A first step towards “sharing by design” – necessary as spectrum becomes more crowded
- Technical and policy challenges require innovative thinking.
- Working with large tech companies and European regulators to study sharing options and identify practical effective mechanisms
- Indoor/outdoor split with constrained mobile power and/or high-power mobile with some variable band split could work.

