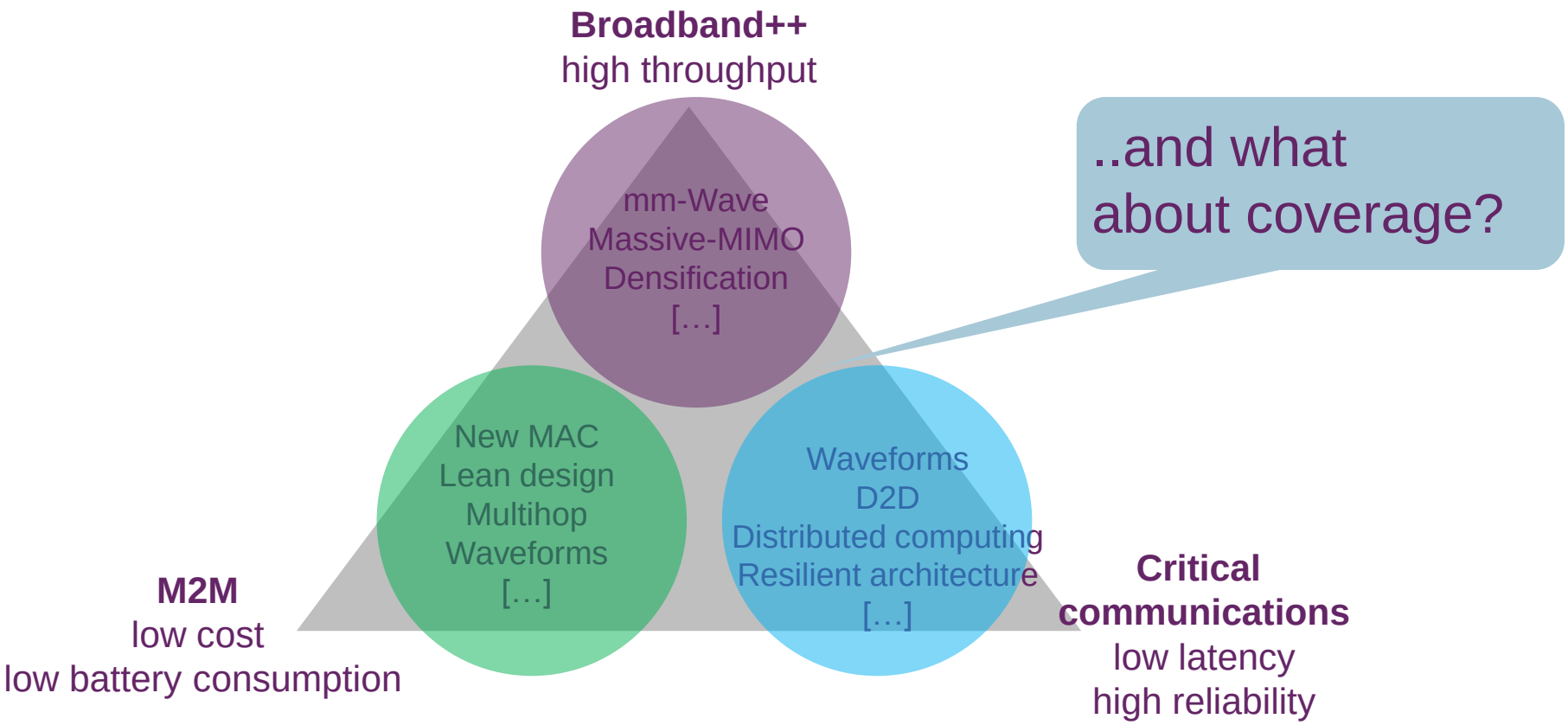
5G services for everyone

Philip Marnick, Chair, RSPG, and Group Director, Spectrum, Ofcom

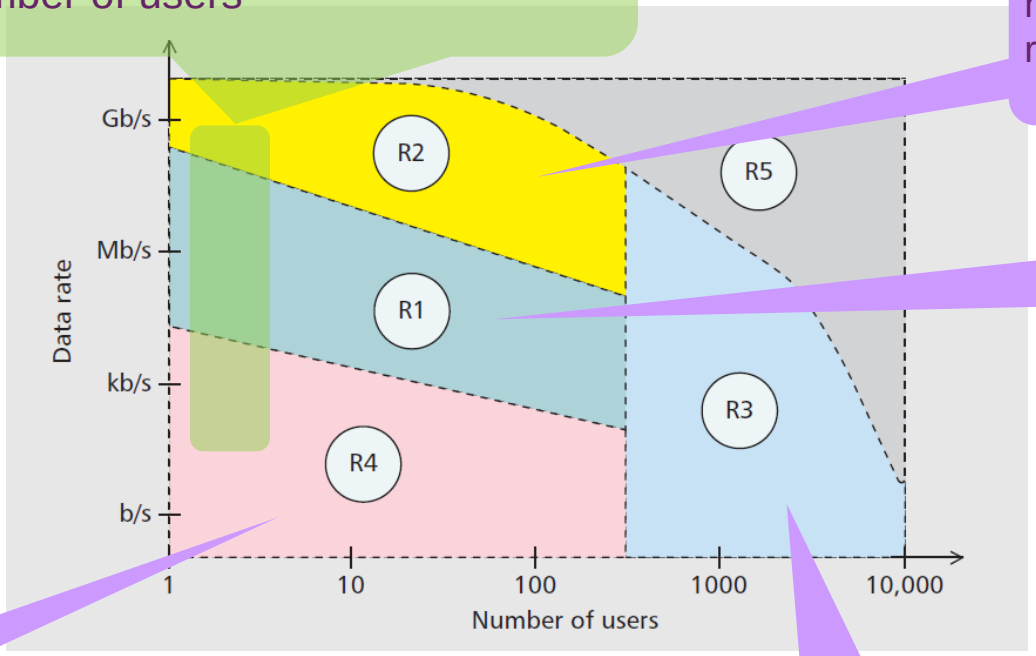
Debate on 5G has focused on three areas



5G will bring new services and bigger, faster versions of existing services

How do we ensure 5G services will reach all users?

Rural areas:
Enhancing macrocell capabilities to provide 5G services
In areas with a small number of users



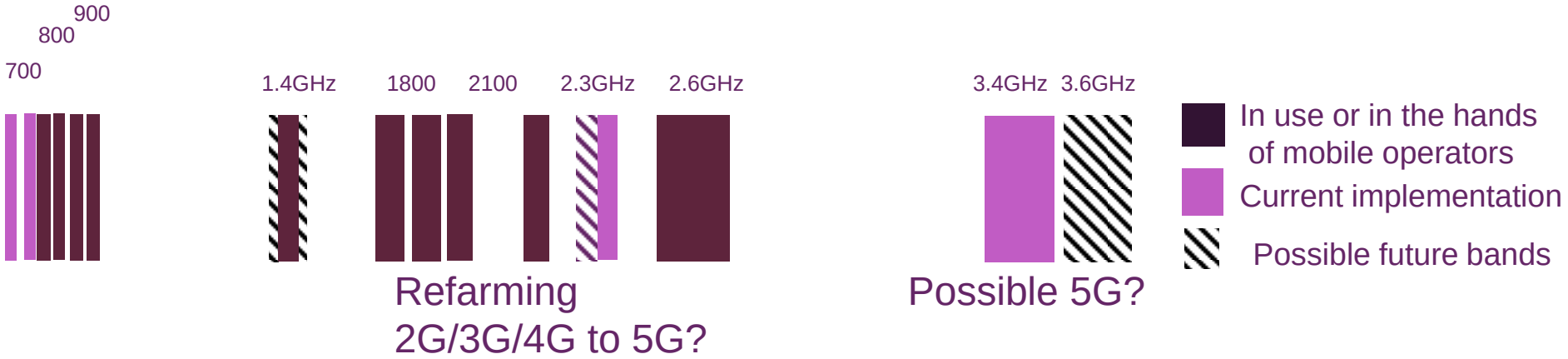
mmWave region

Evolution of current systems below 6 GHz

High reliability and/or low latency applications

Massive IoT

A diverse spectrum toolbox will cater for heterogeneous networks in 5G



plus mmWave

We are considering bands wider than 1 GHz and with good potential for global harmonisation…

Bands in the agenda for WRC-19*:

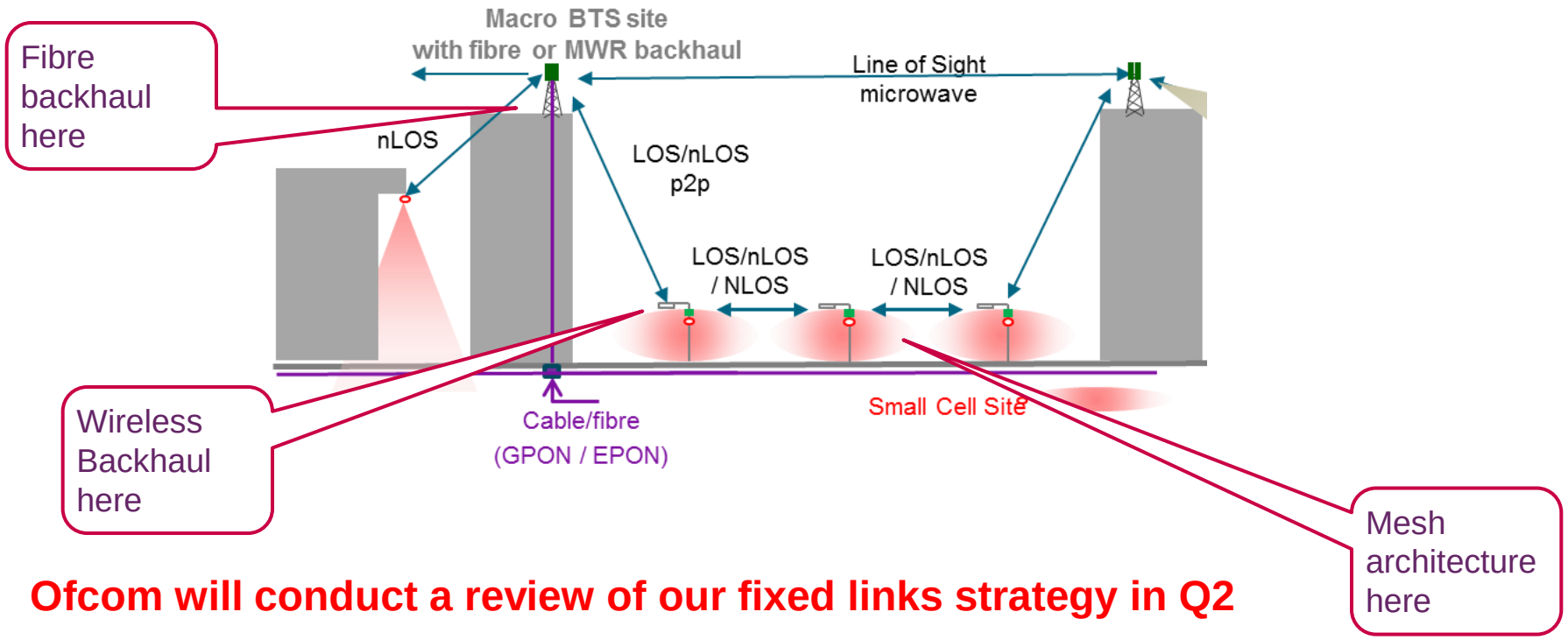
Band	Total size
24.25-27.5 GHz	3.25 GHz
31.8-33.4 GHz	1.6 GHz
37-43.5 GHz	6.5 GHz
45.5-50.2 GHz	4.7 GHz
50.4-52.6 GHz	2.2 GHz
66-76 GHz *	10 GHz
81-86 GHz	5 GHz

Many countries opposed specific bands at WRC where refarming would be difficult for them.
Some bands received support from all regions, an indication that usage of these bands is low worldwide: 32 GHz, 66 GHz (in bold).

**Some of these bands are broken up in sub-bands in the agenda text*

Greater number of cells means a greater number of backhaul connections

We need to complement fibre with fatter wireless backhaul



Ofcom will conduct a review of our fixed links strategy in Q2