Where next for spectrum sharing in the UK?

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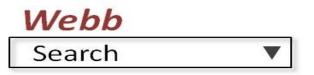
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Working towards an optimal network

- Everything is connected wirelessly – that means we need wireless everywhere
- Wireless in-building *much much* better provided from within
  - Better signal level
  - Building fabric acts to reduce interference between cells
  - Wi-Fi must be provided, most laptops, tablets, etc only have Wi-Fi
  - 5G important where URLLC or similar needed
- Wireless outdoors is cellular – but if indoor traffic moves to in-building networks then coverage simplified and data demands mostly off-loaded
- (As a further advantage, in-building systems can more readily adopt O-RAN, achieving supply chain diversification)

Implications: Simple access to shared 5G (3.5GHz and mmWave) and 5/6GHz unlicensed spectrum in millions of buildings, campuses, stadium, etc

A highly automated and flexible sharing solution is needed

- It must be fully automated, instant and permissive to allow for millions of requests
- It must be based on realistic protection criteria that take into account building penetration and ideally feedback from license holders and others
- It must provide some level of certainty for those deploying systems while allow licence holders the full ability to use their spectrum

- Implications: Ofcom need to move from a "beta trial" to a full commercial sharing solution

The sharing solution must come first – equipment and deployment will follow. Waiting for "evidence of demand" is not a viable strategy.