

# Spectrum Sandbox Workshop (1)

16 February 2022

# Agenda

- 1. Welcome and introduction (2pm – 2.15pm)**  
*What and why are Spectrum Sandboxes within OFCOM's Spectrum roadmap*
- 2. Understanding diversity of use (2.15pm - 2.45pm)**  
*Discussing each participant's use and requirements regarding the 3.8 to 4.2Ghz band*
- 3. Collecting real world data (2.45pm - 3.15pm)**  
*How best to collect data on nature of propagation, interference and QoS? What data can be collected from existing deployments and equipment?*
- 4. Ways of working (3.15pm - 3.35pm)**  
*Terms of Reference and discussion of ways of working for stakeholders who wish to continue to participate in the Sandbox.*
- 5. AOB / Open discussion / Next steps (3.35 - 4pm)**

# Ofcom has a duty to secure the optimal use of the radio spectrum

*Making sure people and businesses have connectivity where and when they need it...*



*Whilst considering the spectrum needs of a wide and varied number of wireless applications...*



# Our spectrum management strategy focuses on enabling innovation and growth – the what

## Spectrum Management Vision

July 2021



Continued improvements in the wireless communications used by everyone, wherever and whenever they use them.



Businesses, public sector and other organisations with specialised requirements to be able to access the right wireless communication or spectrum options for them.



Increased flexibility in spectrum use to support innovation, with appropriate assurances for continued use.



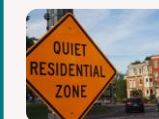
Sustained improvements in the efficiency of spectrum use.

Increased focus on:

Supporting wireless innovation

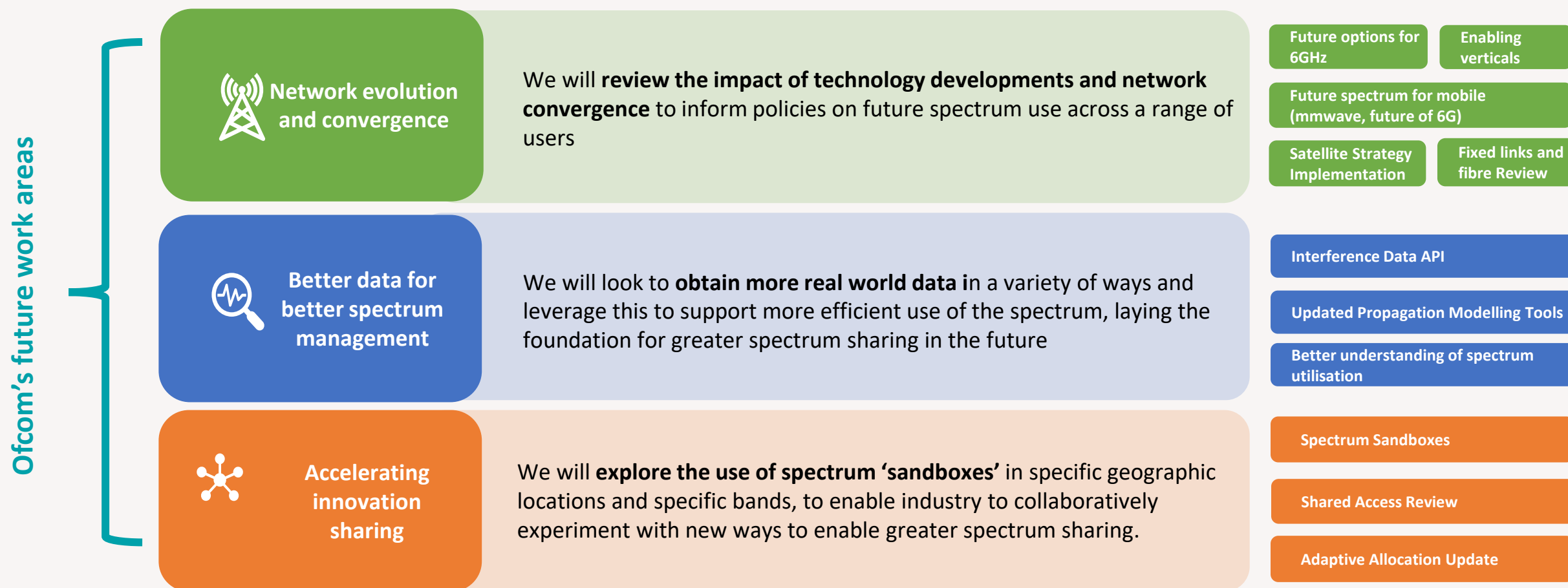
Licensing to fit local and national services

Promoting spectrum sharing



# Our spectrum roadmap has identified three key themes for future work – the how

➤ These themes reflect market developments, changes in technology and broader international trends in spectrum use and management



International engagement and review and update of licensing process



# What's a spectrum sandbox?

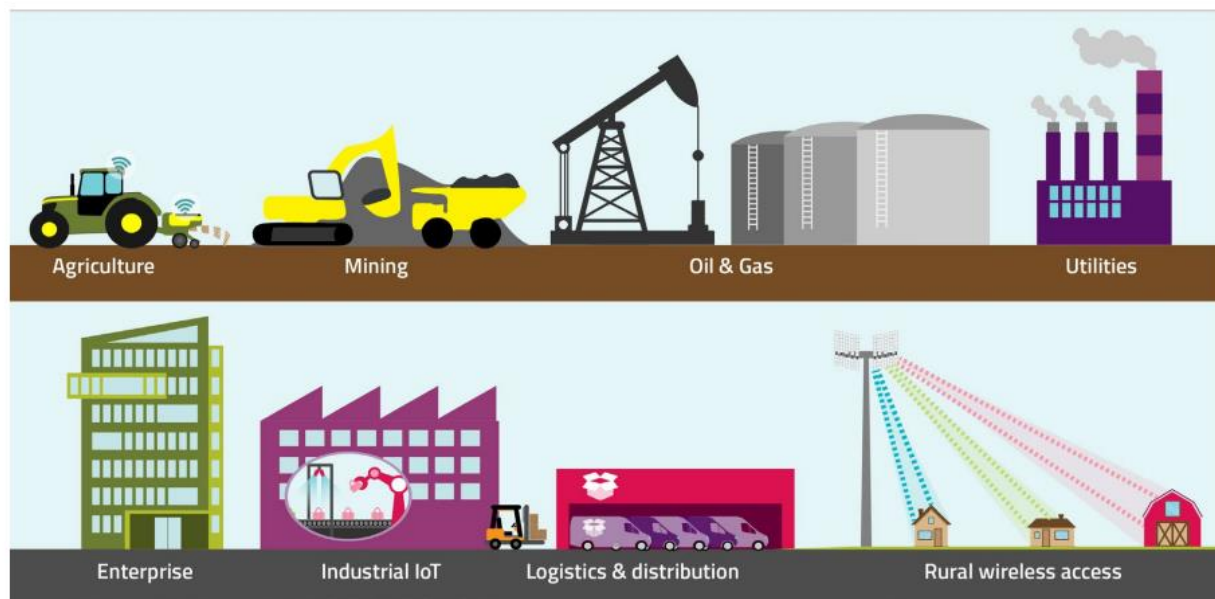


**Accelerating  
innovation and  
sharing with spectrum  
sandboxes**

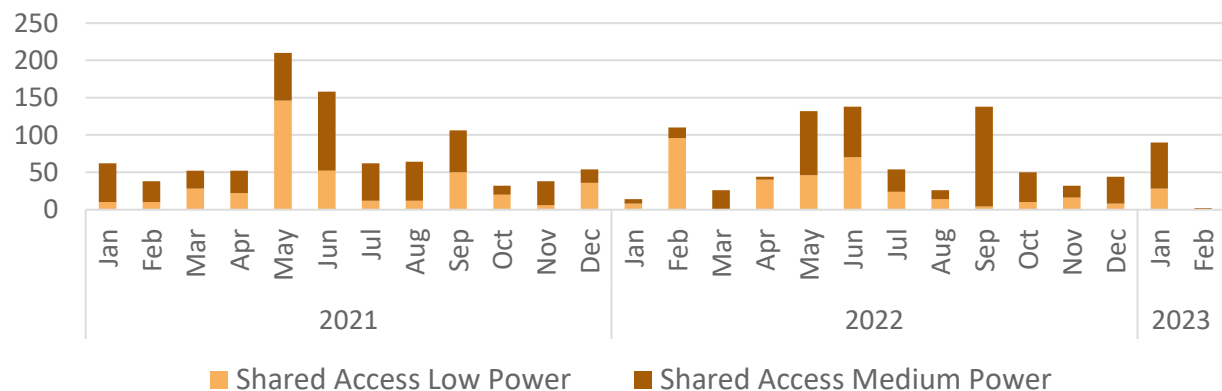
We will explore the use of spectrum 'sandboxes' in specific geographic locations and specific bands, to enable industry to collaboratively experiment with new ways to enable greater spectrum sharing, working directly with stakeholders to accelerate the process of specifying and agreeing coexistence and sharing conditions

*Spectrum Roadmap Discussion Document*

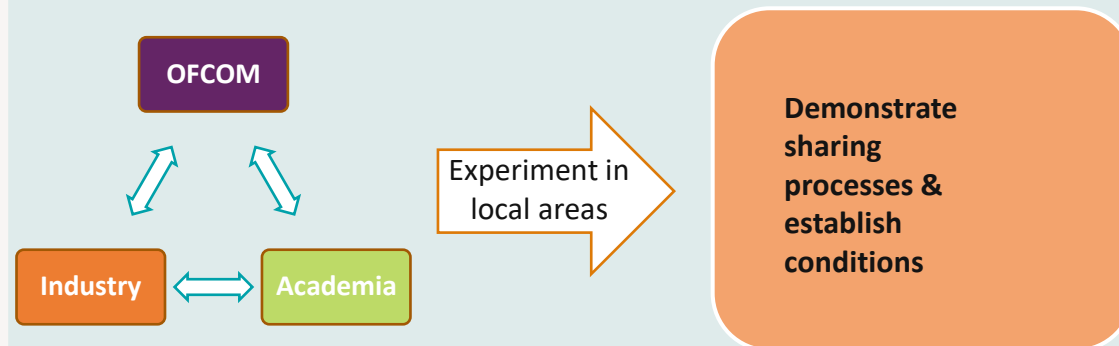
# Exploring more flexible access in 3.8 – 4.2 GHz



Shared Access Licenses issued per month

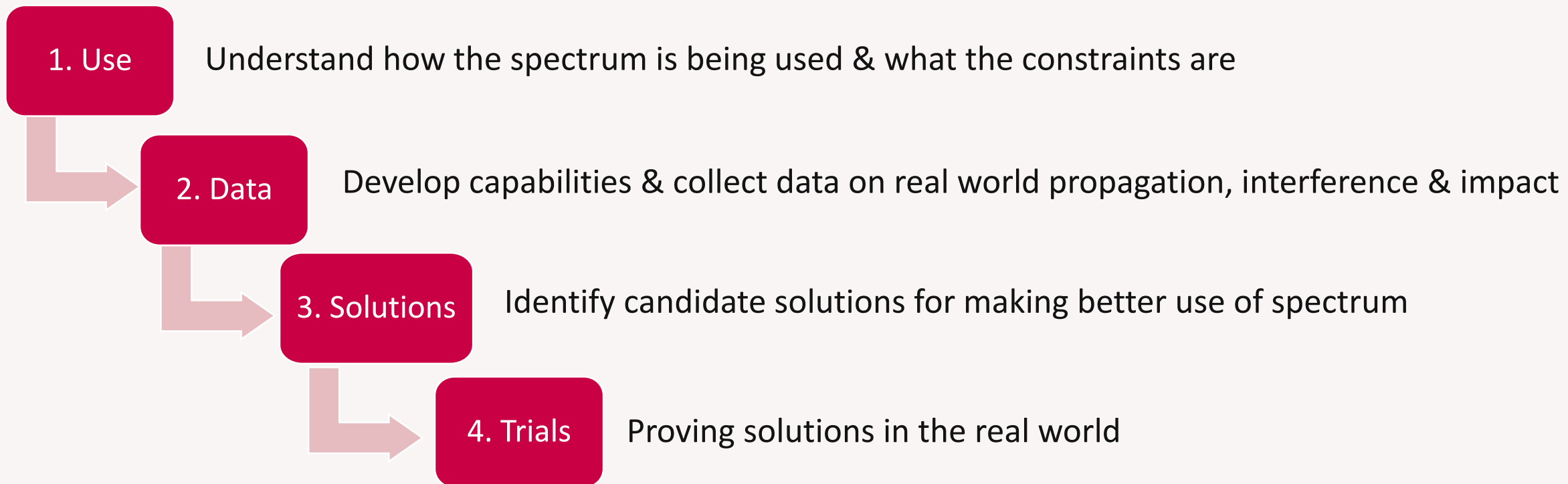


## Spectrum sandboxes



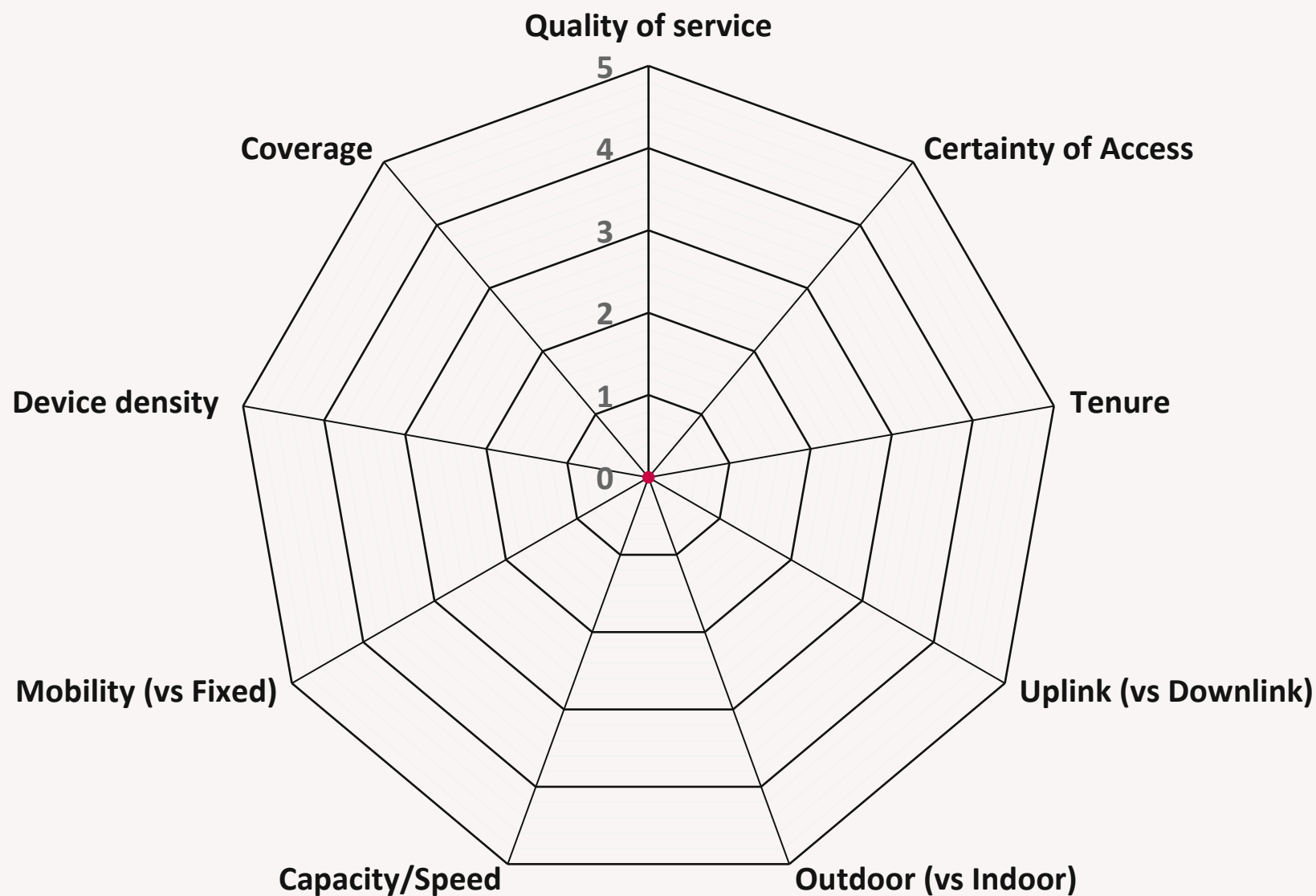
**3.8 to 4.2 GHz band is also used by Satellite Earth Stations & Fixed Links**

# Proposed Approach





# 1. Understanding diversity of use



## 2. Collecting Data

What data can be gathered from existing deployments?

**Propagation**

**Interference**

**Achieved QoS**

**Active Antenna**

**Software Defined Radio**

**Network Function Virtualisation**

**Ofcom Interference API**

**Collaboration**

**Inter & Intra  
Network**

# Ways of working : building on best practice & lessons learnt

## Different models of collaboration...

**JOTS**

Shared standards established through direct agreement

**OTA**

Shared standards established with facilitation by 3rd party

**DCMS 5G Testbeds & Trials**

Multiple consortia to invest in and foster individual projects

## Delivering outcomes whilst protecting interests...

**Transparency**

**Confidentiality**

**Commitment**

**Competition**

**GDPR**

**Terms of Reference**

**Programme Management**

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