Shared Access Licences

Update for UK SPF

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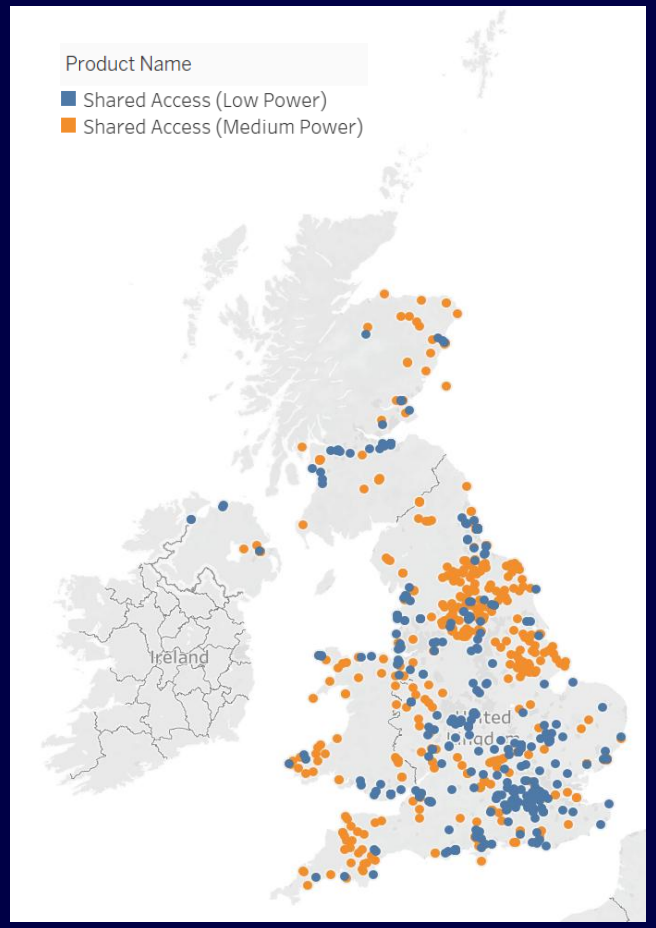
Foundations & evolution of take up since 2019

- Shared Access provides localised access to spectrum to support new connectivity solutions + innovation and growth
- Launched in 2019, recognising growing demand as potential 5G use cases emerged
- Designed to be simple, low cost and support a mix of solutions, with Low and Medium Power products across a range of bands

	1.8 GHz	2.3 GHz	3.8-4.2 GHz	26 GHz	Grand Total
Low Power	270	21	227	1	519
Medium Power	126		408	5	539
Total	396	21	635	6	1058

Licence numbers in May 2025

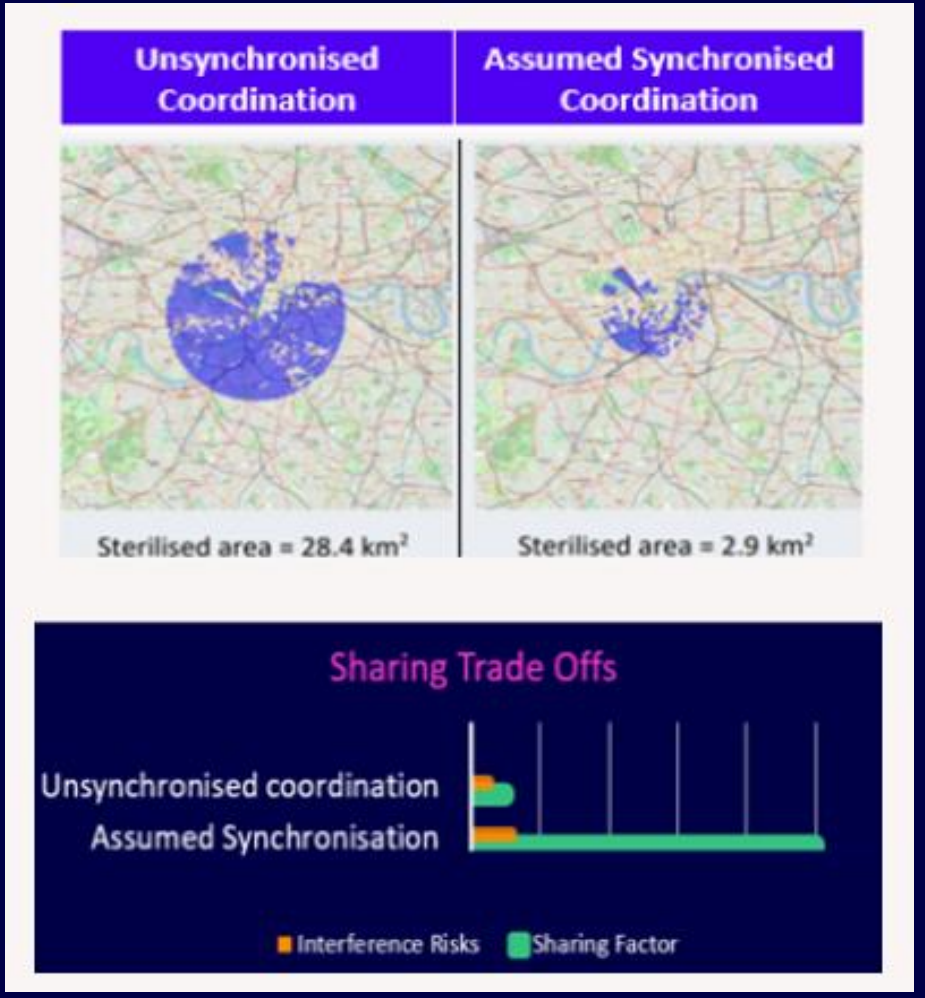


Take up is spread across the UK…

…and spectrum supply may be shared with a mix of other incumbents

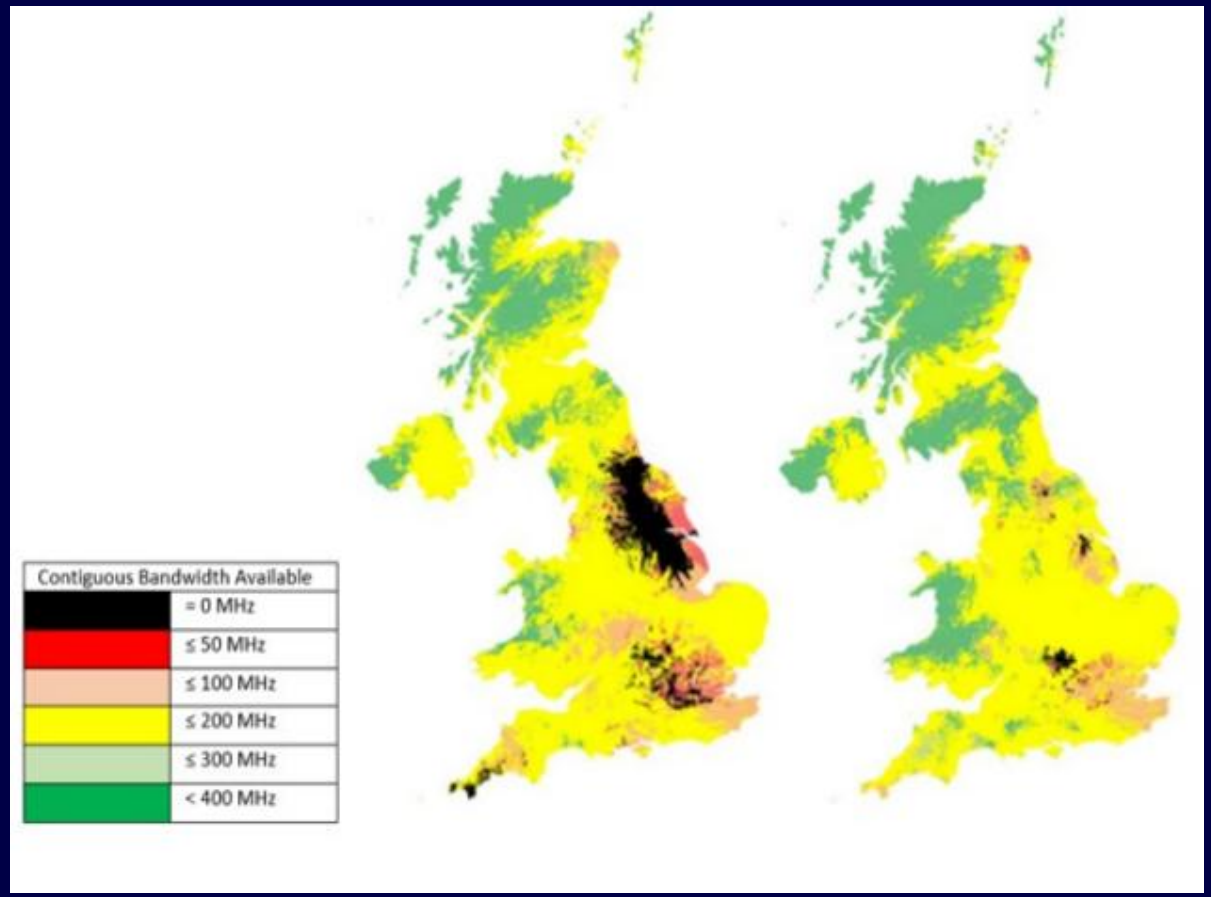
Our 2024 review took steps to support more use cases and growth

Challenges Addressed	Measures Taken
Spectrum supply + growth	• ***Tighter packing of licensees*** *with base to terminal coordination*
More use cases and innovation	• ***Removal of Terminal Registration*** *for Low Power*
	• ***Increase in Low Power*** *transmit limit*
	• ***Permitting Medium Power in urban areas***
Speed of authorisation	• ***Refined exception criteria***
	• ***Interactive spectrum map***
Spectrum efficiency + supply	• ***New fees for Medium Power & 100 MHz limit***



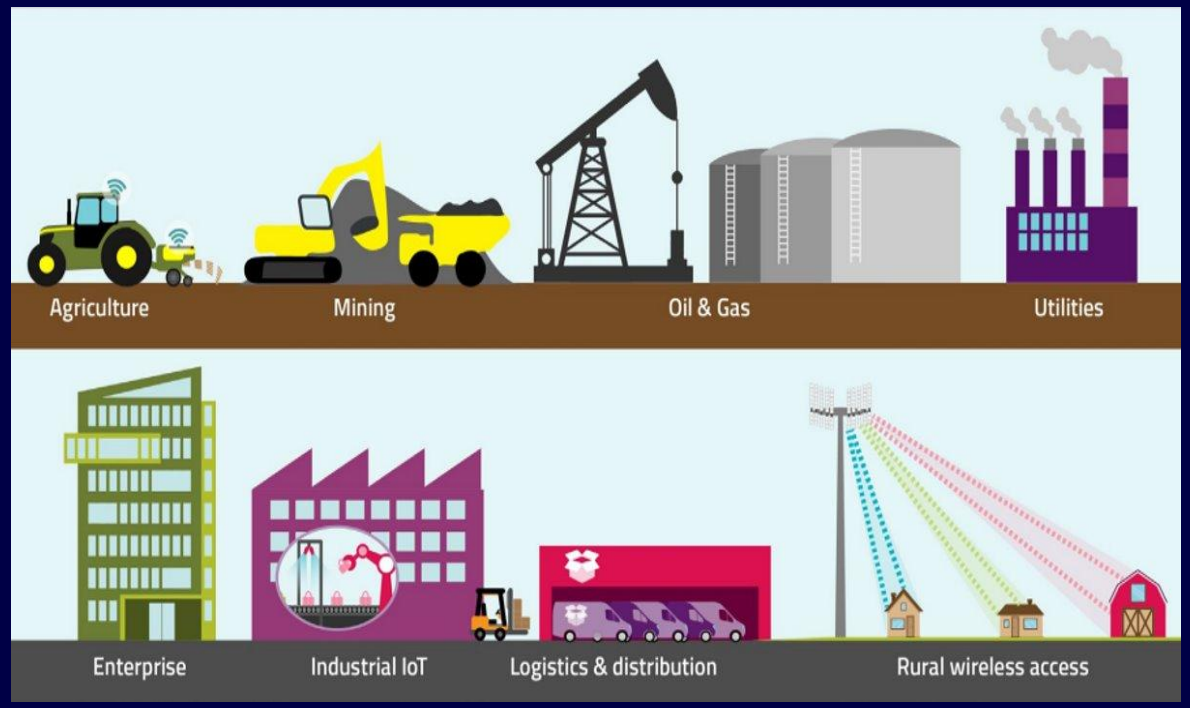
Coordination changes have increased spectrum availability in the 3.8–4.2 GHz band

Spectrum availability under old coordination (left) and new coordination (right)



- Our coordination changes have significantly improved spectrum availability
- Although supply remains limited in some areas, we find this is now largely the result of requirements from other incumbent sharers
- We have also found that it is now typically much quicker and easier to find a spectrum solution for new applicants in most locations

Other measures to enable more use cases



- Following these changes, we have seen some uptick in demand, especially in 3.8-4.2 GHz – although there is capacity for more growth.

- Enabling further access to medium power in urban areas in the 1800MHz and 3.8-4.2GHz bands to simplify access **(especially for private network users)**
- Making more spectrum available in 26GHz for all users, including **Fixed Wireless Access**
- New online applications for all bands and spectrum availability map in 3.8-4.2 GHz (see next slides)

Implementation Update

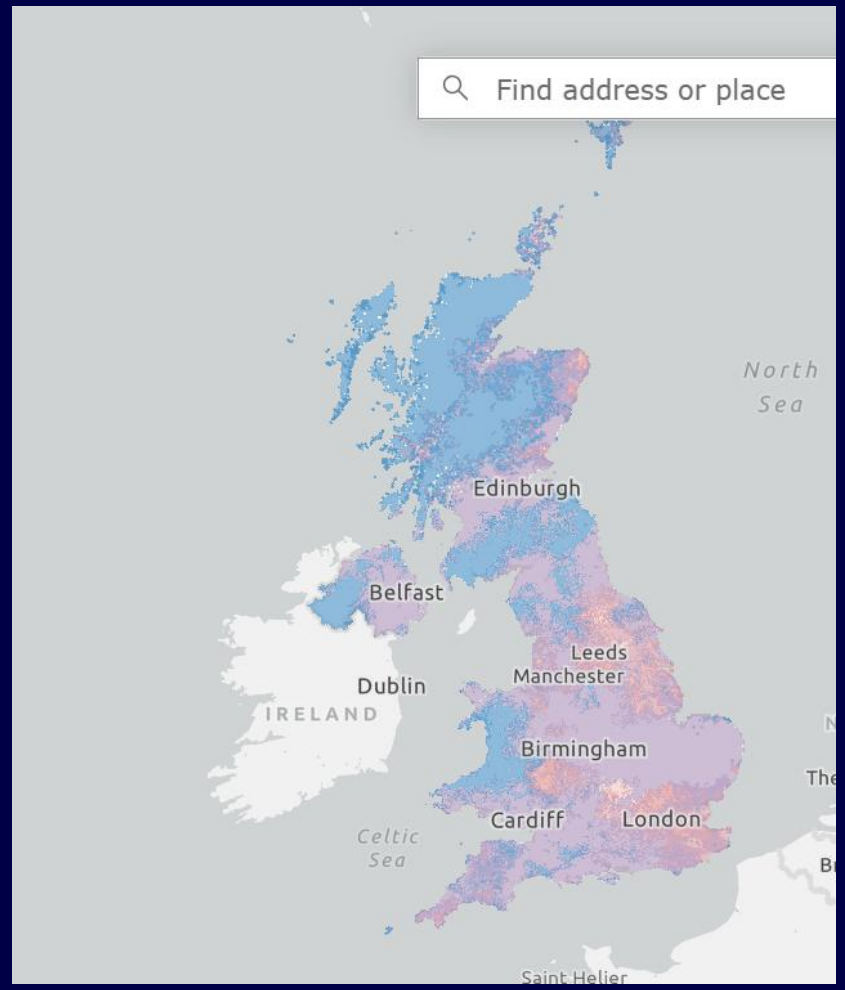
Completed

Clutter Model Update
Coordination Updates
Terminal Registration Requirement Removal for Low Power Licences
User Led Coordination Available
Spectrum Availability Map
Increase to Low Power limit
Reduction in exceptions needed

Pending

Pricing Update (New fee for Medium Power in urban areas in the 1800 MHz and 3.8-4.2 GHz bands)
New Antenna Library to address residual coordination corner cases

Spectrum Availability Map



1. Searchable spectrum availability map for **3.8-4.2GHz band**

2. **Provides indicative spectrum availability based on the total and/or contiguous spectrum that may be available at that specific location (based on outdoor Medium Power availability)**

3. **Aiming to update every 3 months**

Online licensing portal

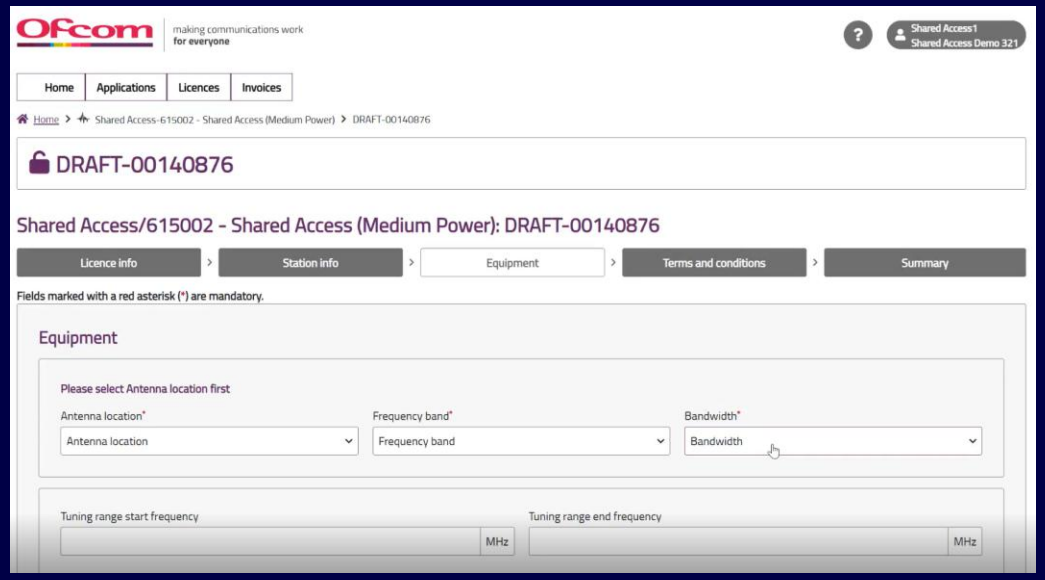
- On 24 March 2025 we went live with our latest licensing software release. You can now apply for and manage a Shared Access and some Business Radio licences online via our licensing portal.

- Through the portal you can:
  - Apply for a licence
  - Request to vary an existing licence
  - Surrender a licence
  - Update and amend your contact details
  - Download a copy of your licence
  - Pay for your licence
  - Permit others to manage your licence for you.

- This online process is supporting smoother, speedier application processes and decisions

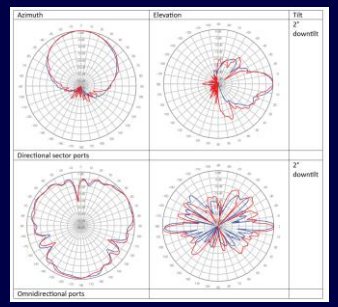
- For more information, see our Licensing portal https://www.ofcom.org.uk/spectrum/radio-equipment/licensing-portals

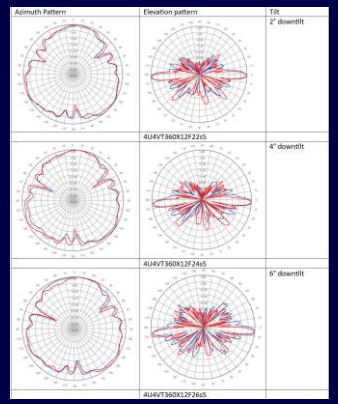
Illustration of new online user interface including band and bandwidth selection and location drop pin capability

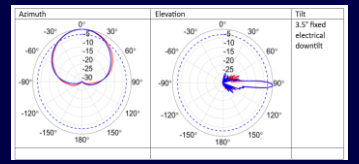


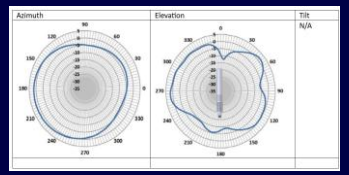
Antenna Library – sneak preview

We have used 3 “real-life” antennas to develop the figures below. We have adjusted the margin to cover side lobes and nulls in the real-life antenna plots. Licensees should select the antenna plot that covers their parameters. If the licensee’s antenna parameters are not contained by any of the available options, the isotropic should be used by default.



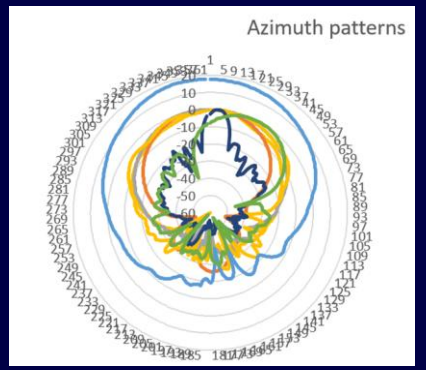


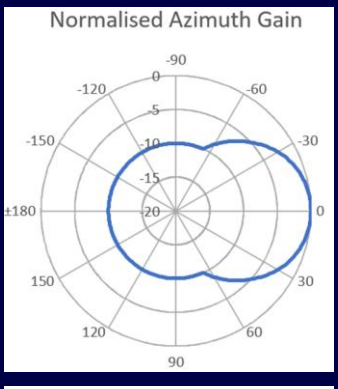


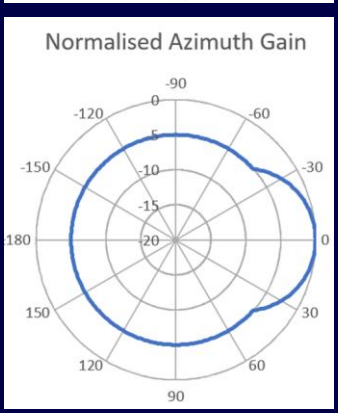


Antenna Type	Model				Valid range						Indicative Pattern
	AZ HPBW	AZ no. sectors	EL HPBW	Down tilt	AZ HPBW		EL HPBW		Down tilt		
					L	U	L	U	L	U	
	°		°	°	°	°	°	°	°	°	
Isotropic	360	1	180	0	360	360	180	180	0	0	
60° coverage	70	1	8	user spec	0	70	0	8		user spec	
90° coverage	100	1	8	user spec	70	100	0	8		user spec	
120° coverage	130	1	8	user spec	100	130	0	8		user spec	
240° coverage	240	2	8	user spec	0	240	0	8		user spec	
Dual Sector 180° Separation	70	2	8	0	0	70	0	8	0	0	
Dual Sector 180° Separation	70	2	8	6	0	70	0	8	6	>6	
Multi-Sector 60° Boresight Separation, each sector 60°	N/A	6	8	0	N/A	N/A	0	8	0	6	
Multi-Sector 60° Boresight Separation, each sector 60°	N/A	6	8	6	N/A	N/A	0	8	6	12	
Multi-Sector 60° Boresight Separation, each sector 60°	N/A	6	8	12	N/A	N/A	0	8	12	>12	

After evaluating the risk of User Equipment transmitting beyond the back of the Base Station it was decided that an inflation of the back and side lobes of -10dB relative to the peak gain was a reasonable mitigation for the risk







Next Steps

Implementing remaining changes and monitoring demand

Exploring new solutions, including short term access in 2.3 GHz, area models and sandbox outputs

Monitoring international developments in 3.8-4.2GHz band and considering applicability for UK

Continuing engagement on new use cases and evolving stakeholder needs

Continuing our consultation work on the 3.9GHz licence