Dynamic Spectrum Access Developments in UK and Europe

Chris Woolford
Director, International Spectrum Policy, Ofcom

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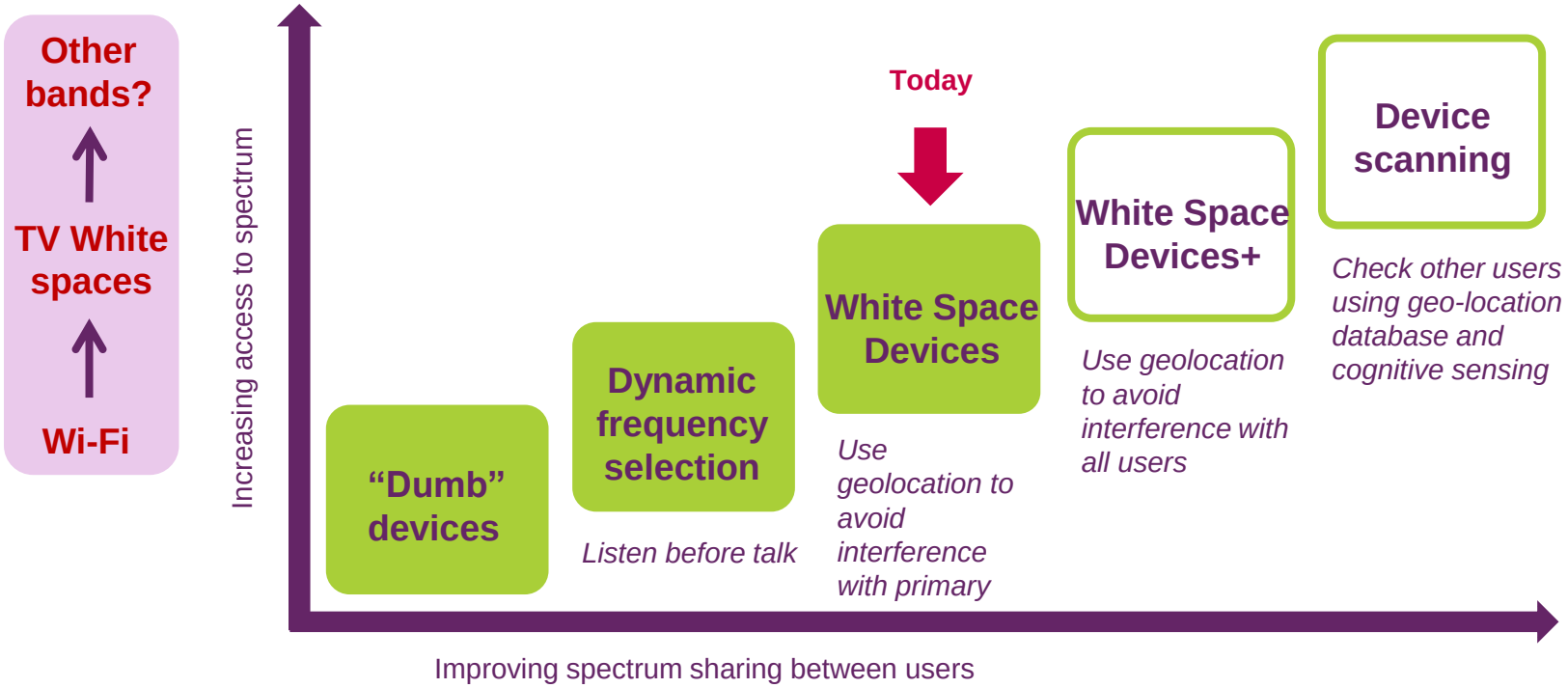
Advances in technology allow more intelligent approaches to sharing

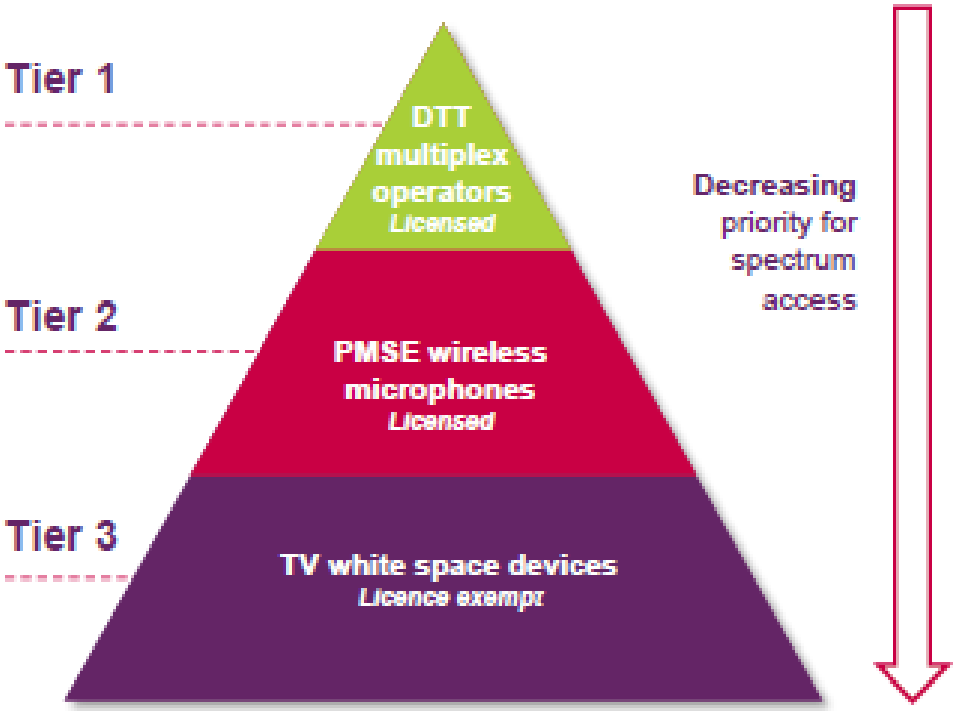


Tiered spectrum access in the UHF TV bands

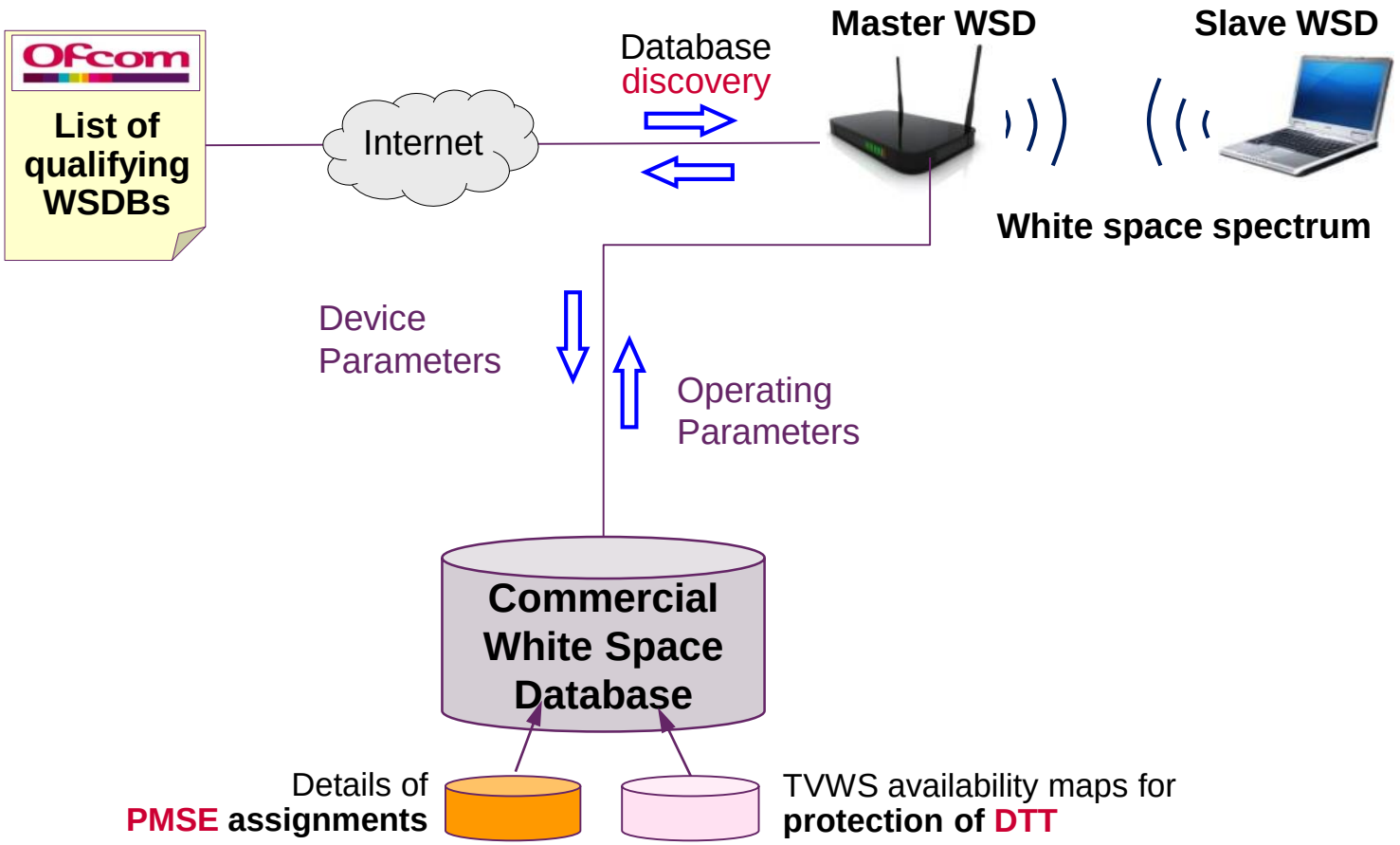
- Spectrum licensed to DTT multiplex operators for use at particular transmitter sites
- Spectrum not used at all locations in order to manage interference

- In locations where frequencies are not used by DTT multiplex operators, they can be licensed to wireless microphone users

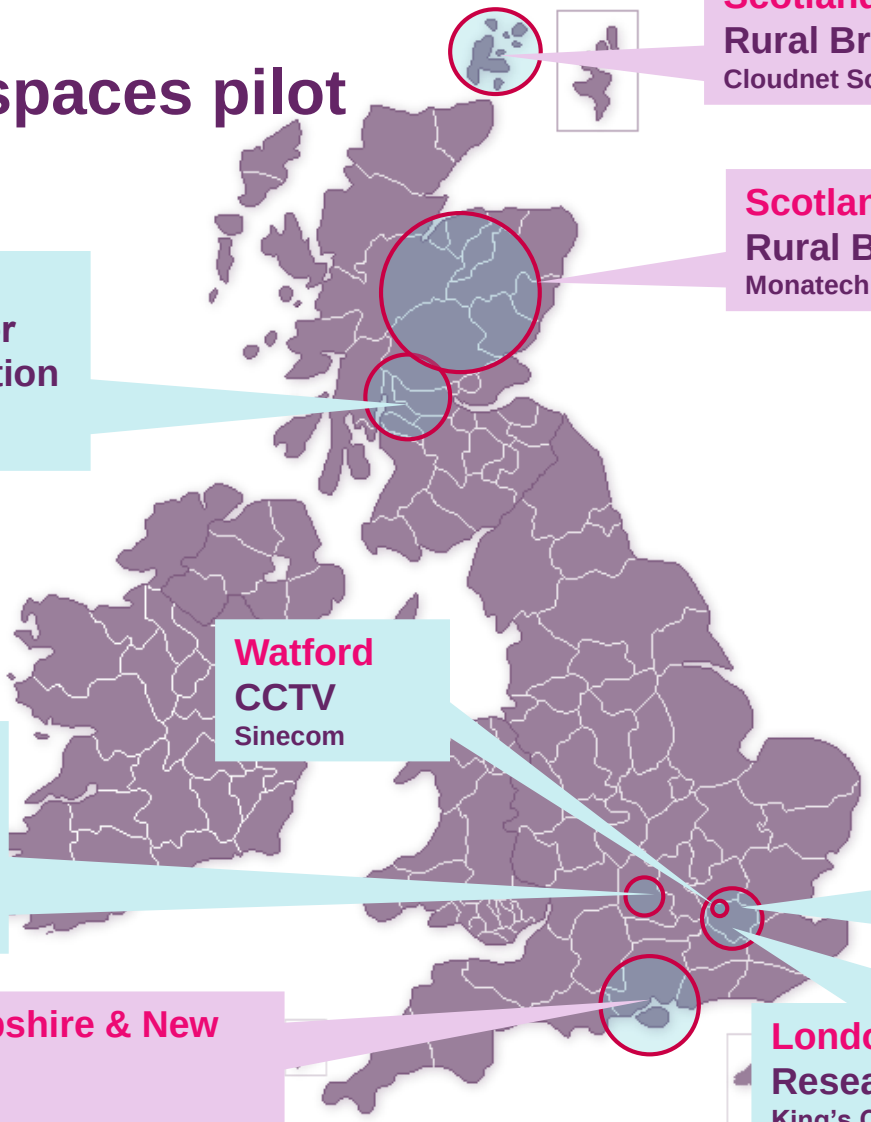
- In locations where there are no DTT transmissions on a particular frequency and no wireless microphones have been licensed, white space devices are allowed access on a licence exempt basis



Proposed UK framework for access to TV White Spaces



UK TV white spaces pilot



Scotland:
Rural Broadband
Cloudnet Solutions

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Rural Broadband
Monatech Broadband

Glasgow
Wi-Fi, 'Smart City' (sensor network) and AV distribution
Microsoft, Centre for White Space Communications

Other locations
Wi-Fi, broadband

Watford
CCTV
Sinecom

Oxford
Community Sensor networks (flood detection)
Love Hz

London
Broadband and public sector applications
Neul, LFB, Cabinet Office

Isle of Wight, Hampshire & New Forest:
Rural Broadband
Sinecom, Click4Internet, Carlson Wireless

London
Research and development
King's College / Joint Research Centre of the European Commission/EURECOM

Developments in Europe

- Significant interest in promoting opportunities for spectrum sharing
  - Initiatives within the EU, including around Licensed Shared Access
  - Technical work in CEPT, including sharing opportunities in the 2.3 GHz band

- European Commission Communication on spectrum sharing published Sept 2012
  - Highlights cognitive technologies and geo-location databases
  - Supports technical standards to foster compliance with EU and national legislation
  - A range of different flavours of spectrum sharing

- UK inputting to technical work in CEPT studying White Space technologies

- Ongoing interest in white space in UHF band…..
  …… but also interest in other potential other bands

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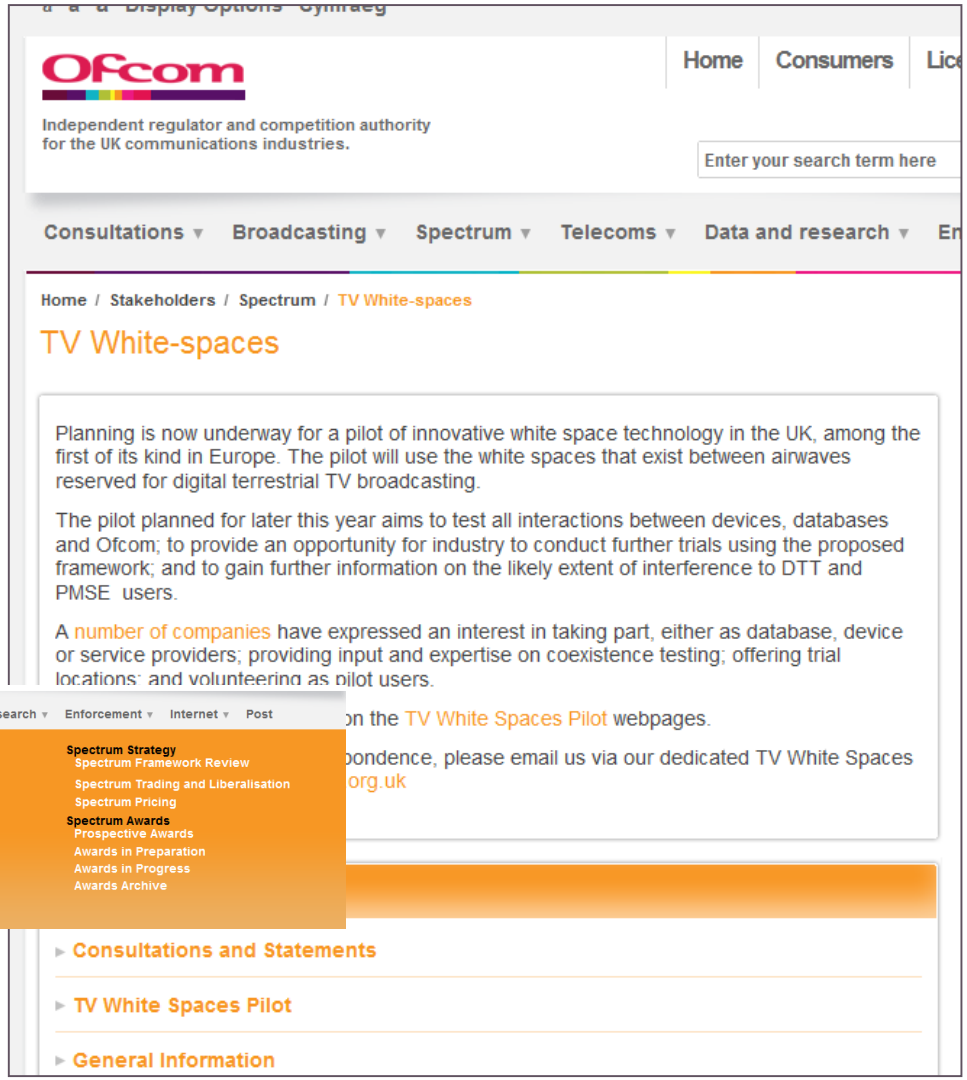
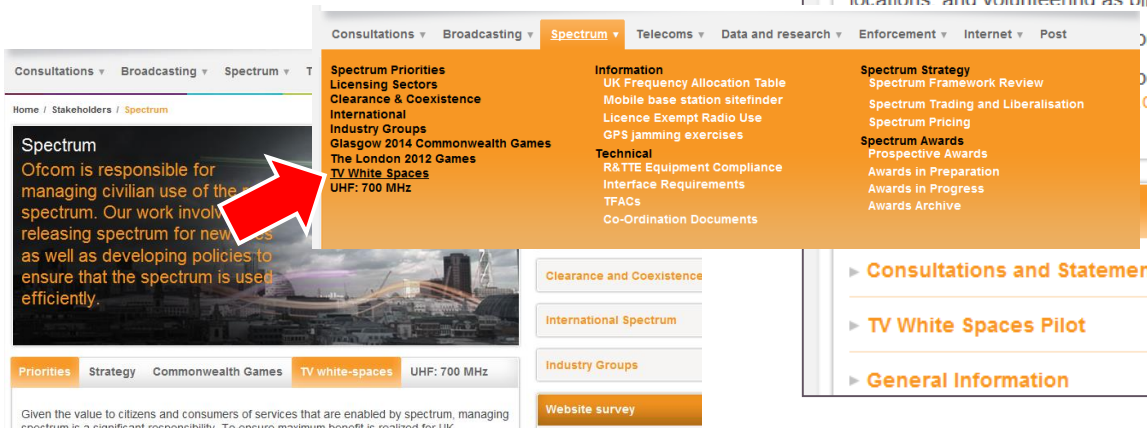
More information

For information about Ofcom's TV White Spaces Pilot please visit our dedicated pilot webpages http://stakeholders.ofcom.org.uk/spectrum/tv-white-spaces/white-spaces-pilot/