# **UK Spectrum update**

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#### **WiMAX**

- UK Broadband / PCCW
  - Bought Freedom4 (Pipex Wireless)
- Backhaul still constraint
- LTE will dominate, though UK Broadband wants to offer LTE services
  - Handsets don't currently work in these bands, so would need to be a dongle based service





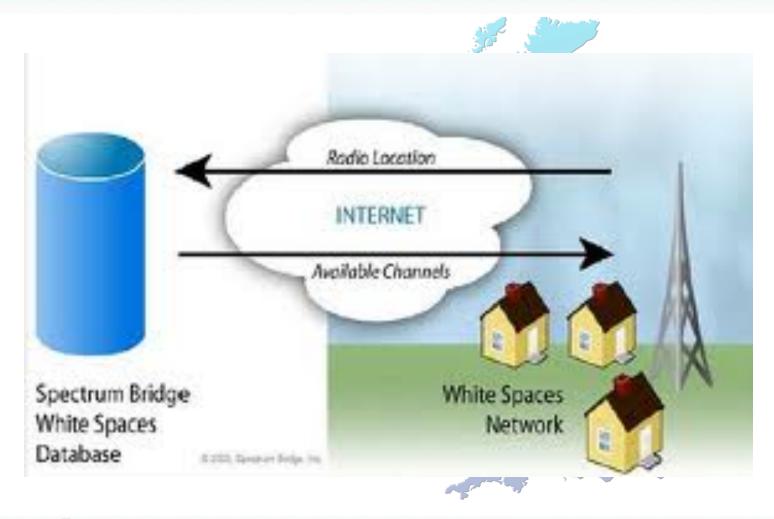
## Whitespace







## Whitespace





## Ofcom makes more spectrum license exempt

- 2GHz for mobile satellite terminals
- The 3400 3800 MHz band can be used for personal locator beacons on land, wireless road safety systems and wireless access terminals
- Terminals used for the 2012 London Games Tetra Network
- Also mobile handsets are also license exempt on boats (when connected to a mobile basestation on the boat)



## Ofcom offering new digital channel

- 5th HD channel on the HD Digital Terrestrial TV multiplex
- Uses MPEG-4 and DVB-T2
- Applications cost £15,000 payable to Ofcom (which is non-refundable whether the license is granted or not)



### **New spectrum for Transportable Earth Stations**

- O Ofcom has opened up new spectrum in the C and Ka bands for use by Transportable Earth Stations (TES) i.e. portable satellite communications devices.
- Available immediately
- Existing licensing regime





#### BT and EE trial LTE in Cornwall

- Another 800Mhz trial.
- The trial will support 200 users split between mobile and fixed users in an area where fixed broadband is currently unavailable.
- Using kit from Huawei.





#### 60GHz

- License exempt
- IEEE 802.11ad specification
- Chipsets are becoming available now
- Cable replacement service
  - Wireless HDMI
  - Intra-device comms





#### 800MHz / 2.6GHz

- All spectrum reserved for London Olympics 2012
- Auction held up by legal wrangles from pretty well all MNOs
- Ofcom have now published consultation
  - No caps sub 1GHz
- Everywhere expected to auction 1.8MHz excess very shortly (~£400m) 2 x 45MHz bands
- Auction to take place 2012, spectrum available end 2013



## Gig WiFi

- New chips supporting 802.11ac available (CES)
- Supports 80MHz channels, up to 3 "streams" using 5GHz band
- Great news for UK as currently 5GHz bands only support 20MHz channels as per Ofcom SI



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#### Thank you for listening!

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