

# Mobile Multimedia: A Regulatory Perspective

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## Mobile multimedia: overview

- Ofcom's approach to spectrum management
- Bands potentially available for mobile multimedia
  - Pros and cons from a regulator's perspective
  - Not an exhaustive list....
- RSPG involvement

## Ofcom's Spectrum Management Agenda

### The Given: Fulfil our statutory duties

Ensure optimal use of the spectrum

Take account of the needs of all spectrum users

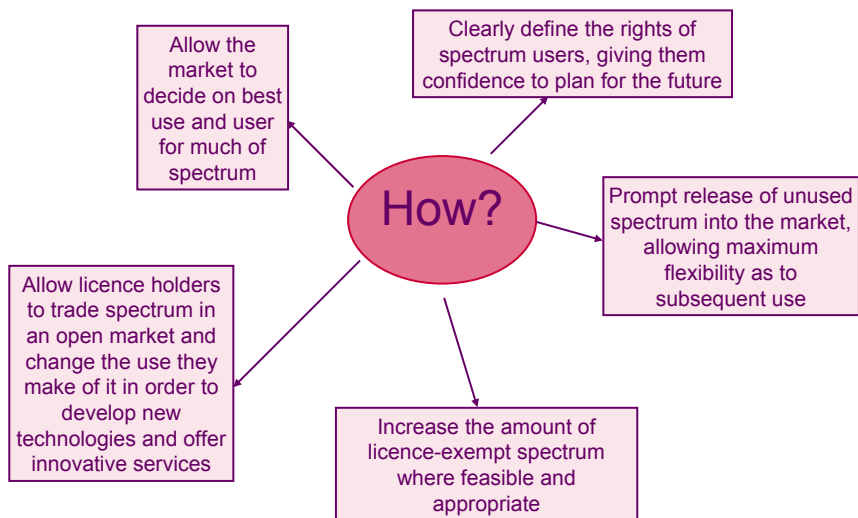
Maximise economic benefits of the spectrum

### The Ambition: Make the UK the leading country for wireless investment & innovation

A better signposted approach to spectrum, giving more certainty in the market

A flexible approach to spectrum, providing opportunity for innovation

A competitive communications market, providing opportunity for returns on investment



## Spectrum options for mobile multimedia in the UK (1)

- ☺ **Band III (sub band 3, 209 to 217.5 MHz)**
- ▶ Spectrum being allocated to DAB digital radio services (subject to outcome of RRC-06)
- ▶ But...
  - Limit of 20% of capacity can be used for non-programme related services such as data and multimedia services
  - Band III is used by most EU countries for terrestrial television
  
- ☺ **L-band (1452 to 1492 MHz)**
- ▶ Available in UK in 2007 when existing users move out of this band
- ▶ Could be made available for use by a wide range of potential services including mobile television

## Spectrum options for mobile multimedia in the UK (2)

- ☺ **1900 to 2170 MHz and 2500 to 2690 MHz**
- ▶ Spectrum and networks available now at 1900 to 2170 MHz (IMT-2000)
- ▶ 2500 to 2690 MHz also available in UK from 2007
- ▶ But 1900-2170 MHz
  - Configured for one-to-one communications
  - Uses expensive 2-way spectrumHowever technology developing.....
  
- ☺ **Spectrum released from digital switchover (UHF/VHF)**
- ▶ Depends on outcome of RRC 2006 but large amount of spectrum may be available
- ▶ Only available nationally in 2012 but possibility for early deployment in parts of the UK
- ▶ Ofcom project reviewing economic benefit of released spectrum uses
- ▶ But other contenders for spectrum
  - More DTT channels, HDTV, mobile voice/data, potential for low power/licence-exempt use

## The regulatory questions

- What role for regulatory authorities to make spectrum available for mobile broadcasting?
  - Why dictate specific uses or technologies?
  - How to identify which options are best?
  - Are other bands likely to be suitable?
  - Need for harmonisation – if so at what level?

To what extent can demand for mobile broadcasting services be addressed by the market?

## RSPG Opinion – WAPECS (adopted Nov 05)

- Covers broadcasting and mobile bands  
174-230, 470-862, 1452-1479.5, 1900-1980, 2010-2025, 2110-2170, 2500-2690 MHz
- Establishes set of principles ensuring equitable competition conditions between wireless access platforms offering similar services and addressing similar markets
  - Removal of constraints on spectrum use
  - Blurring of delineation of applications
  - Technology and service neutrality: frequency bands should not generally be reserved for a particular technology or use
- ➔ **More flexibility and increased responsiveness in spectrum management enabling rapid development of new services**
- Radio Spectrum Committee taking forward

## **RSPG: mobile multimedia**

- RSPG Opinion on Digital Switchover – November 04
- Commission Communications – May and September 05
- Presentations on mobile multimedia at November 05 RSPG
- Further discussion at RSPG held 22 February 06. Requests for Opinions adopted covering:
  - Introduction of multimedia services in particular in bands currently used for broadcasting
    - Rapid timetable to address short-term needs
  - Digital dividend
    - Longer term to reflect timetable for switchover