

**Spectrum for Mobile (Broadcast) Multimedia and Licensing and
Regulatory Issues**

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Ø Ofcom – “Regulatory Convergence”

Ø Bands for (Broadcast) Mobile Multimedia

§ VHF

§ L-Band

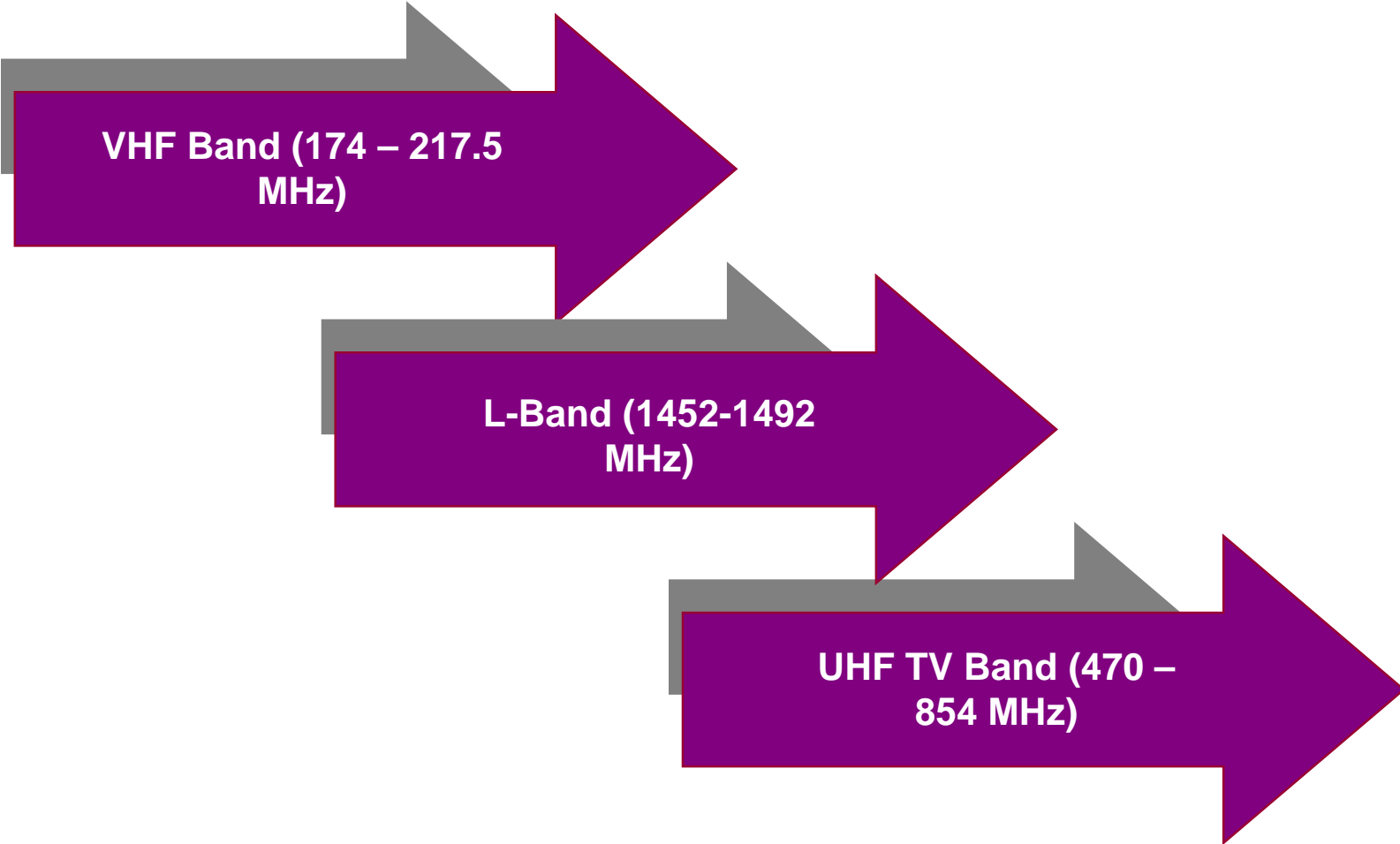
§ UHF

Ø Licensing Issues

Ofcom

- ∅ Created by Communications Act 2003: convergence in markets needs convergence in regulation
- ∅ Regulates Broadcasting and Telecommunications and manages radio spectrum
- ∅ Independent Statutory Corporation: 263 duties in Communications Act, Broadcasting Act and WT Acts
- ∅ Objective – “To further the interests of citizen-consumers through a regulatory regime which, where appropriate, encourages competition”
- ∅ Spectrum Duties:
 - ➔ Work spectrum as hard as possible: more efficient use of finite resource
 - ➔ Create opportunities for new services and new entrants: facilitate Innovation
 - ➔ Reduce barriers to entry
 - ➔ Maximise economic and social/cultural value of spectrum

Potential Spectrum Bands for Mobile Multimedia

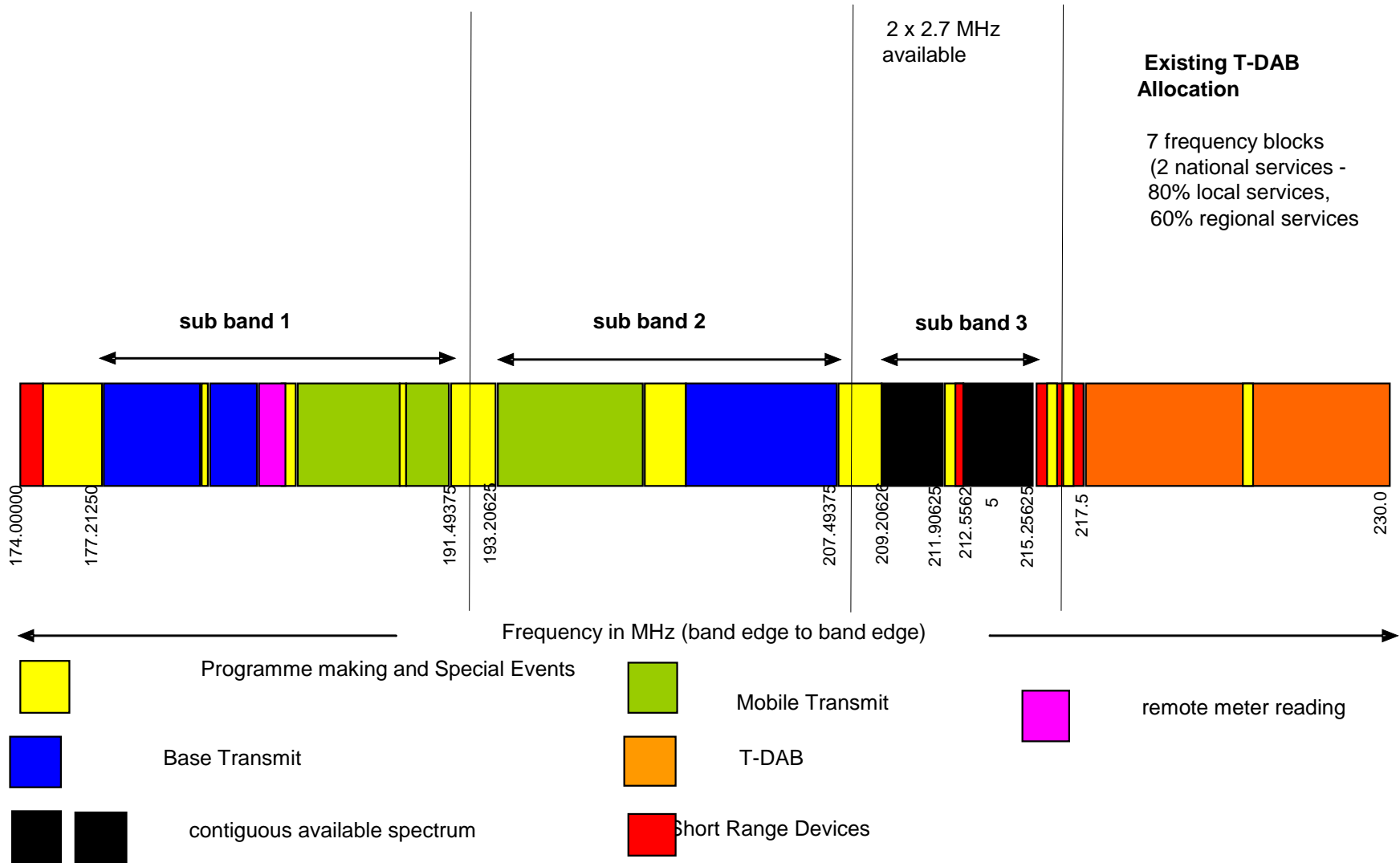


VHF Band (174 – 217.5
MHz)

L-Band (1452-1492
MHz)

UHF TV Band (470 –
854 MHz)

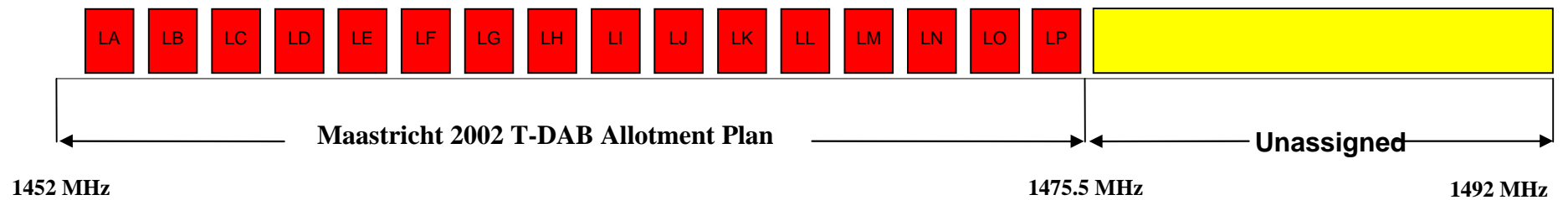
VHF Band - Current Spectrum Allocation



RA/Rau Consultation Document (October 2003)

- Ø Immediate Focus on Land Mobile Services
- Ø Digital Radio and Mobile Multimedia Issues above 209 MHz
- Ø 5.5 MHz contiguous spectrum
- Ø Responses:
 - § DVB-H vs Eureka 147
 - § 20% data limit

L-Band



L-Band

1452 to 1492 MHz

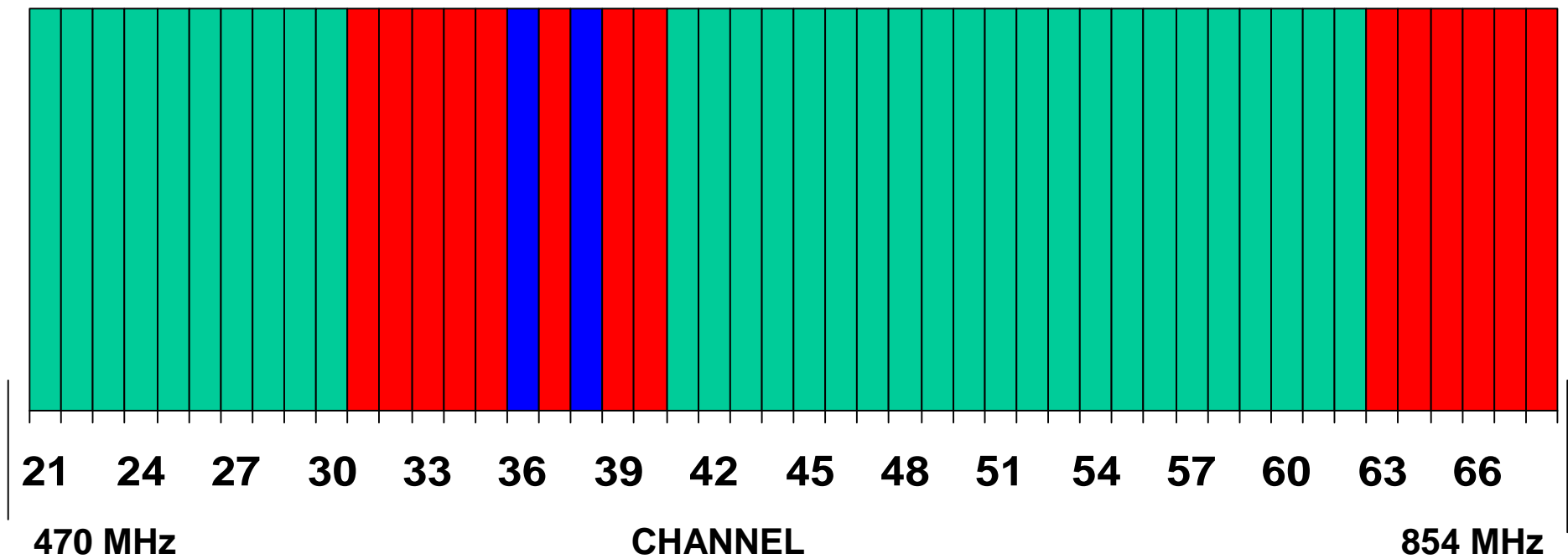
Eureka 147 vs DVB:
Digital Radio vs Mobile
Multimedia




Fixed Links in Band until
end 2007

Current Position on VHF and L-Band

- Ø Consultation provided much food for thought
 - § How much spectrum for digital radio?
 - § How to deploy resources for national, local, community etc multiplexes?
 - § 20% of country cannot receive a local digital multiplex
- Ø Digital Radio Review (DRR)
- Ø Balancing Broadcasting, Spectrum and Competition Promotion objectives
- Ø Consider further the options, finish the DRR and consult again on firmer proposals

UHF Band



-  TV Channels
-  Possible Channels Released on Switchover
-  Channel 36 Radar; Channel 38 Radio astronomy

UHF Band (470-854 MHz)

1. Background

- Ø Channels 21 to 68 (excluding channels 36 and 38)
- Ø Resources released on switchover
 - § 14 nationwide clear channels
 - § channels interleaved among the 6 Multiplexes
- Ø Switchover a matter for Government
- Ø “Driving Digital Switchover” Ofcom Report to the Secretary of State

UHF Band

2. Potential Uses of Spectrum

- Ø Difficult to anticipate future demands
- Ø Priority is to ensure maximum flexibility to accommodate ways in which markets, technology and public policy may move
- Ø Range of candidates
 - § More fixed reception TV multiplexes (national/local; commercial/community)
 - § Portable/mobile multiplexes
 - § Interactive broadcasting
 - § Programme making
 - § Mobile
 - § Mobile Multimedia/converged uses
 - § “Other!”

Licensing Issues

- Ø Broadcasting Act v General Multiplexes
- Ø General Multiplexes
 - § Awarded under term of Wireless Telegraphy Act 1998
 - § Pre-disposition to Auction
 - § Terms of competition, spectrum packaging etc determined by Ofcom (following consultation)
 - § Purpose of use at operators' discretion not regulator's
 - § No data % limits; broadcast services will require "content" licences
 - § Spectrum Trading