

The Regulatory Scene

PMR – powering the market

Regional Meeting - Scotland

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Topics covered

- Timescale for switching off analogue
- What are the licensing implications
- Challenges
- Assessing Quality of Service
- European Commission – Spectrum Aspects of the Framework Review
- Current Issues
- General Update

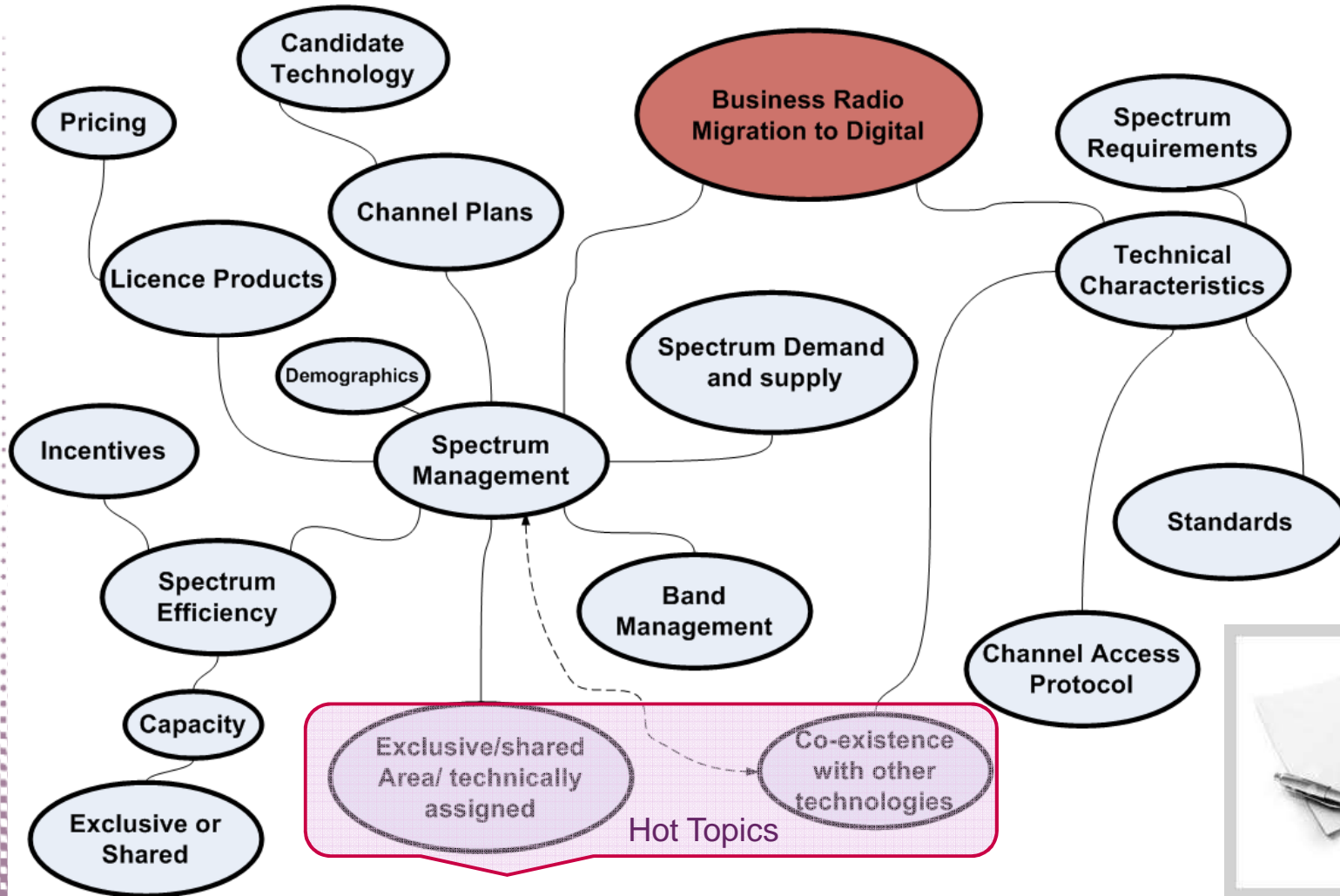


Timescale for switching off analogue

- May always be a need for analogue
- Industry estimate is that by 2020 70% of PMR market is digital
 - How realistic is this figure?
 - What will PMR look like in 2020?
 - What about 30% of customers who have no intention of moving?
 - If we mandate users to move who pays the cost of new equipment?
 - Why should they move if they perceive there is no benefit?
 - Industry has to prove to customers why they should move?
 - New facilities, especially IP/integration may attract users to switch!
 - Will manufacturers stop supporting analogue equipment?
 - Not for Ofcom to dictate to customers what is best for them
- Customers need incentives to move to digital technology
 - Double the traffic capacity in 12½kHz
 - Possibility of a reduced fee for narrow channels
 - Application software/services not available in analogue radios
 - Improvements in coverage / battery life



Licensing Implications



Challenges

- PMR in the UK is probably unique in respect that we have shared coverage on the same frequency.
 - EC rules for liberalisation and neutrality of use permits different technologies and use within the spectrum licence
 - Some evidence is building that suggests that analogue and digital don't co-exist well
 - Can this be addressed through channel access procedures?
 - If segmenting spectrum is necessary – it can't be done without re-farming!
- New technologies should be feeding innovation and vice versa
 - New applications and added value likely to drive migration
 - What is the industry vision
 - Can PMR become a bigger part of integrated communications
 - Who is up for developing a Smart PMR Pad !



Assessing Quality of Service

- Spectrum is at a premium – especially in major conurbations
- London – Olympic demands for spectrum exacerbate the problem
 - *Maybe similar for the Commonwealth games*
- Sharing – what does Ofcom mean?
- Sharing – what does it mean to users?
- Digital technologies – how do they share and can we apply the same rules?
- Could we make more intense use of sharing?

EC - Spectrum aspects of the Framework Review

- **Framework and Authorisation Directives**
 - Technology and service neutrality / ITU Radio Regulations
 - Need to justify restrictions
 - Mandating service neutrality is new
 - Trading and leasing
 - Mandate that certain bands must be tradable
 - Leasing is new
 - Commission harmonisation powers
 - Greater Influence in licensing/duration etc
 - General authorisations
 - Greater use of licence exemption
 - Increased oversight / greater European Parliament involvement / increased role for Radio Spectrum Policy Group
 - Able to influence international and World Radio Conference



Current Issues

- Spectrum Leasing
 - Consultation document was published in April
 - Government Revise Wireless Telegraphy/Communications Act by 25th May
 - Govt gave Ofcom options for implementing; varying licences or through regulation
 - Statement published on 29 June
 - <http://stakeholders.ofcom.org.uk/consultations/simplify/statement-spectrum-leasing/>
 - Probable implementation in September
 - A chance for a customer to maximise use of their spectrum
- In addition to traditional bandwidths, 6¼kHz spectrum available in Mid band, High Band, UHF1, UHF2
- Spectrum Availability – always best to check before committing to a solution
 - Major conurbations – *limited but is possible*
 - Suburban and rural – *usually spectrum available*
- Changes to Technically Assigned and Area Defined forms
 - Addition of checkbox for 6¼kHz
 - Customer to indicate if system is analogue or digital (FDMA/TDMA)
- Requests for 25kHz channels are facilitated

Provision of spectrum

Notes

- 8721 Technically Assigned assignments in 2010, 726 per month, mixture of renewals, revocations and new applications
- 6¼kHz spectrum is available for 136 to 174 and 425 to 470MHz
- TETRA applications continue, primarily for city centres and power stations.
- 10MHz TETRA no longer available but we have frequencies available with 7MHz split
- Low Band duplex no longer used by Emergency Services so increase in available duplex. Channel width not limited to 25kHz as we have blocks of contiguous unallocated channels, 100kHz duplex channel can be licensed.
- ERMES provisionally allocated, 3 to Area Defined and 3 to Technically Assigned, channels also rastered to 12½ and 6¼
- 3 x 25kHz simplex at 467, use limited to onsite, 2 watts maximum for Technically Assigned or can be used as Area Defined

Questions

- Feedback from Spectrum Licensing Team is that 70% of applications are for UHF (why do customers not like VHF?)
- DGPS and Paging use 25kHz simplex. Other potential uses? Should be channels be split into 12½ and 6¼?

Spectrum availability – unallocated spectrum - 13th June 2011

Frequency Band	Simplex (12½kHz)	Duplex (12½kHz)	Simplex (25kHz)	Duplex (25kHz)
Band 1 (55.75 to 68.0)	28 (BR 3, OT25)	367 (BR 34, OT 333)	394 (BR 40, OT 354)	0 channels available
Low (68.08125 to 87.49375)	3 (BR)	124 (BR 72, OT 52)	0 channels available	0 channels available
Mid (137.9625 to 165.04375)	1 (BR)	0	6 (BR)	0
High (165.04375 to 173.09375)	1 (1 TA in Jersey)	0	7 (ERMES) (BR 6, OT 1)	0
Band 3 (sb1) (177.2125 to 191.4875)	75 (BR 15, OT 60)	119 (All BR)	0	0 channels available
Band 3 (sb2) (193.20625 and 207.49375)	0	334 (BR 31, OT 303)	0 channels available	0 channels available
UHF1 (425.00625 to 449.49375)	0	0	0	0
UHF2 (453.00625 to 466.08750)	0	0	0	0

BR = Business Radio

OT = Olympics Team

General update

Customers can pay for renewal of licences online

- Customers can access the payment portal via the Ofcom website or by using the URL:- <https://secure.ofcom.org.uk/payments>
- Customer number and invoice number is all the information that is required to make a payment
- Can pay any invoice value up to and including £5000
- Receive an immediate email confirming payment and licence issued on the same/next day if customer signed up to receive e:communications or within 3 days if licence dispatched by post

