

# Business Radio 10

Paul Jarvis – Head of Business Radio  
Date 17<sup>th</sup> November 2010

## Agenda

- Introductions
- Licensing Changes – Online Payment
- Spectrum Information
- Spectrum Trading: context and background
- Spectrum Management
- Renewal Cycle and Revocations

## Licensing Changes - On-line payment

- Provision of an enhanced customer experience by way of faster processing time and increased confidence in payment success- platform to support end to end self service capability for our customers
- Enhancement of existing controls around data security
- Improvement of data accuracy
- Decrease in paper use in line with all Public bodies commitment to reduce carbon footprints
- Improving efficiency in Ofcom processes

## Online Payment Portal

- The online payments portal allows customer to pay online through the Ofcom website or using the following secure link:  
<https://secure.ofcom.org.uk/payments/welcome.php>
- All customers can pay online using their Customer Reference Number and Invoice Number to log on for any invoice value up to and including £5,000
- The following card types are accepted:



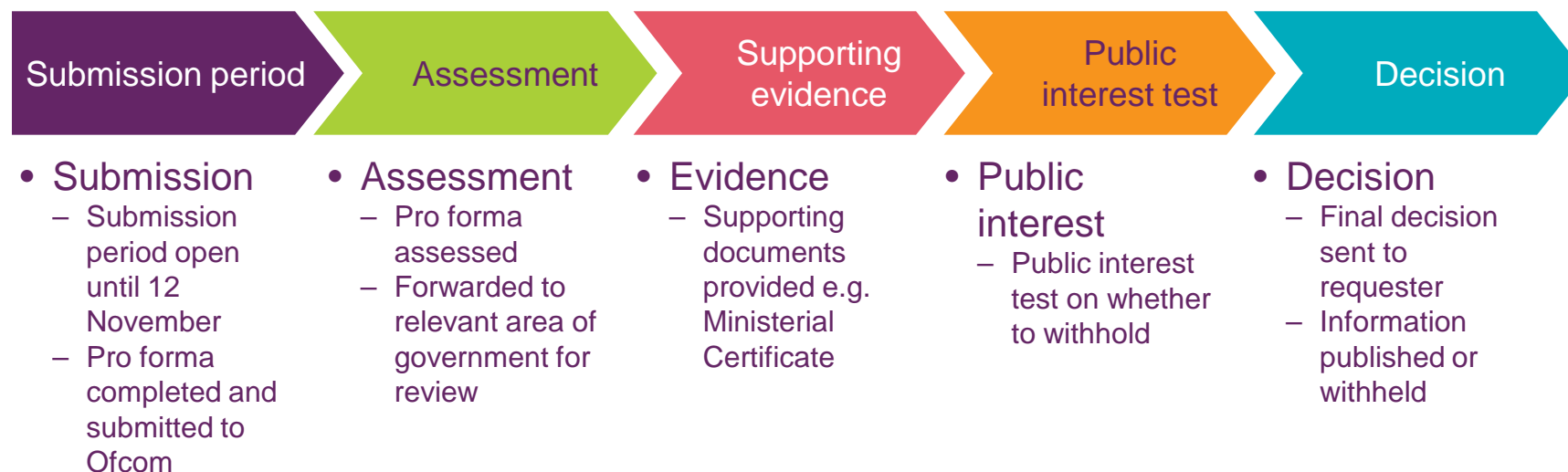
We do not accept American Express or Diners Club

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## Evaluation process

In order to properly evaluate requests for exception from disclosure under EIR we have set out the following process.



The submission period was open from **29 July 2010** until **12 November 2010**

**We will publish the Information after this date where we have not received a pro forma claiming exception from disclosure.**

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## Spectrum trading: context and background

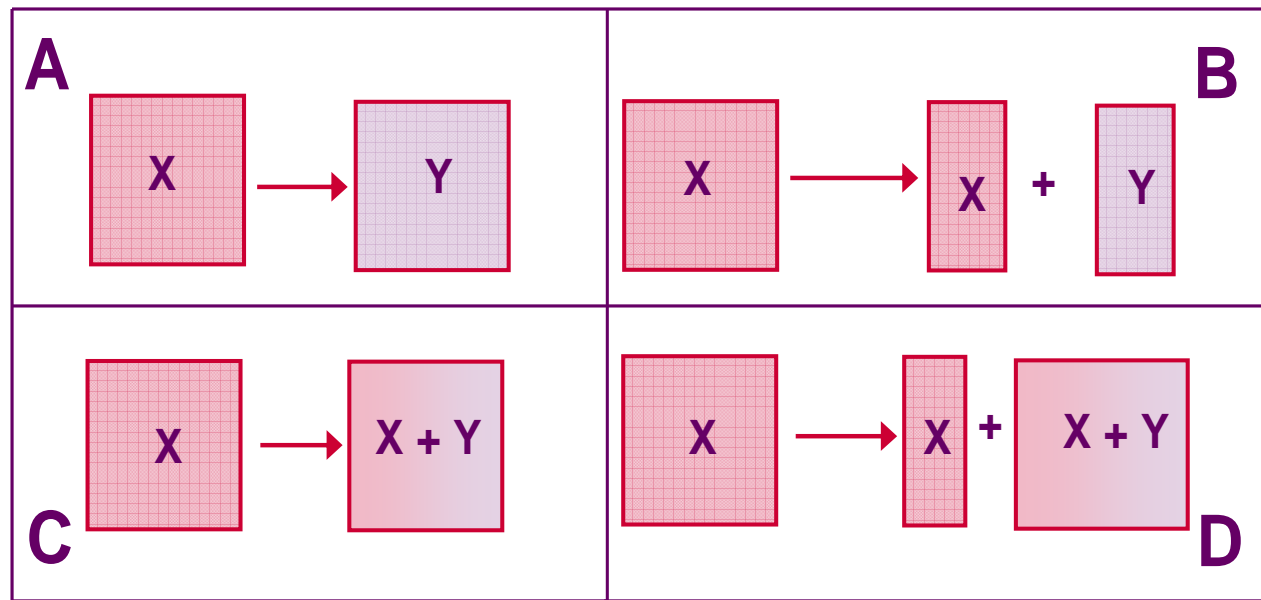
- Key component of Ofcom's market-based approach to managing spectrum
  - Allows spectrum to migrate to **users** – and **uses** if combined with liberalisation – that generate greatest benefit over time for society
- No regulator can have sufficient up-to-date knowledge to decide how best to use spectrum in conditions of rapid change in technologies and markets
- 'Command and control' where regulator decides cannot keep up with rapid and unpredictable change
- Market mechanisms like spectrum trading are more dynamic and allow the market to decide how best to use spectrum
- But markets can fail and regulator may need to intervene eg to:
  - maintain competition
  - ensure compliance with international obligations
  - secure spectrum for essential public services such as defence and safety of life
  - enforce rules and deal with interference

# Modes of trading

Total transfer

Partial transfer

Outright transfer



Concurrent transfer

## Current trading process in UK

1. Parties notify Ofcom of the request to transfer
2. Ofcom publishes the request to transfer
3. Ofcom decides whether or not to consent to the transfer
4. Ofcom notifies the parties of its decision on the proposed transfer
5. Ofcom puts the transfer into effect subject to any directions it has given
  - Involves surrender of existing licences and grant of replacements
6. Ofcom publishes information about transfer after it is effected
  - Steps 1 and 6 mandated by current EU Framework Directive
  - In addition, step 2 mandated by revised directive

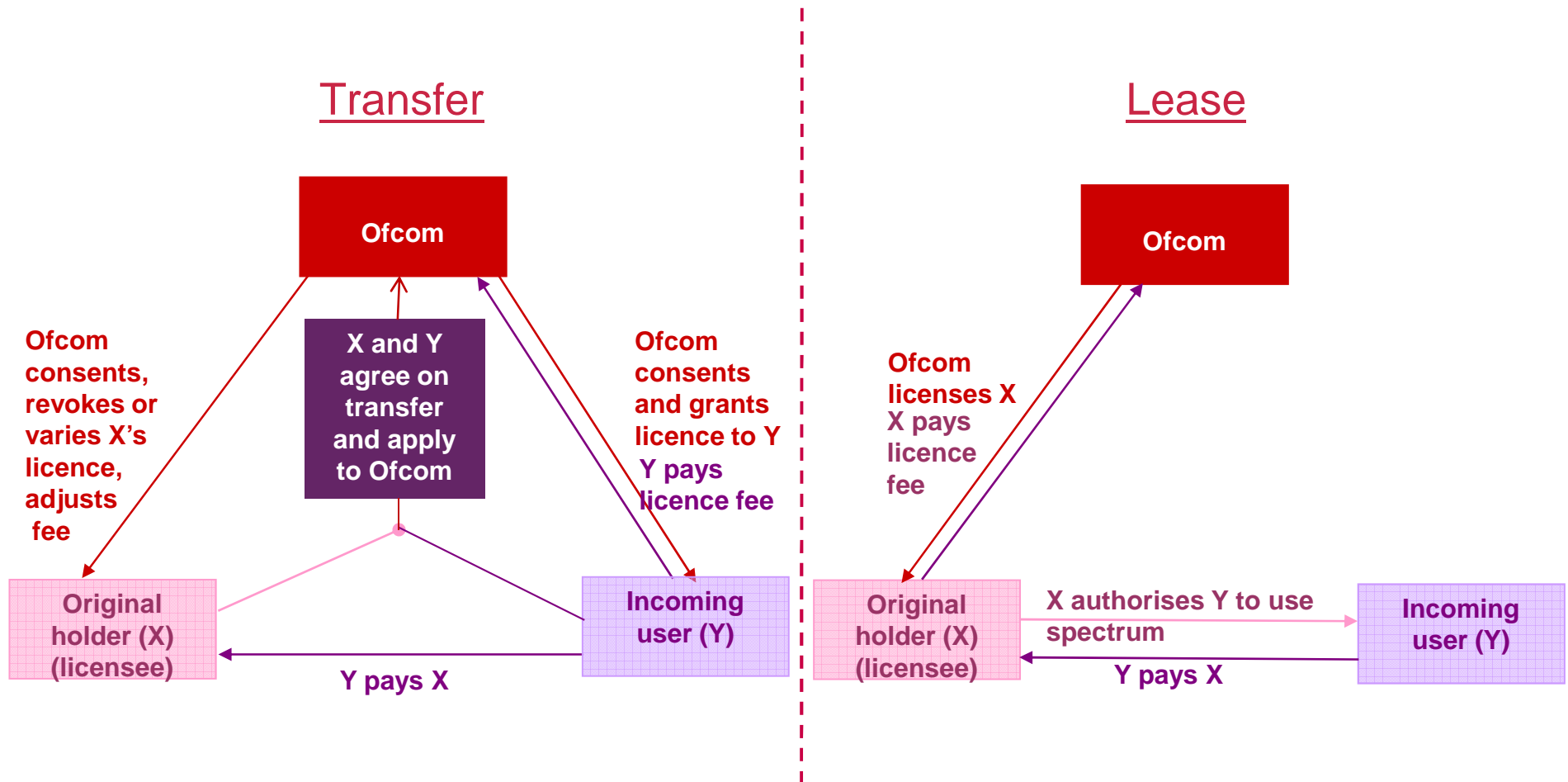
## Why review the trading process?

- Market developments
  - Growing interest in commercial band management could be frustrated by current regulatory framework
  - Current trading process would involve prohibitive transaction costs and process time
- Want to simplify process to make it **simpler**, **easier** and **faster**
  - Transaction costs might deter low-value but beneficial trades
  - Processing time might be excessive for assignments required at short notice and outside office hours if new licences have to be granted or details published ex-ante
  - Complex process involving two separate transactions for ‘time-limited trades’
  - Legal uncertainty about some sorts of trading
  - Avoid compromising market supervision, spectrum management, investigation /enforcement
- EU developments
  - Revised EU Framework Directive will introduce spectrum **leasing** (not defined but we envisage as being based on **contract** between parties) as alternative to **transfer** (involving **grant of new licence** to purchaser)

## What will be different?

- For currently tradable licences, dispense with need for Ofcom to give consent and simpler time-limited transfer if feasible
- **Leasing** as alternative to current transfer process
  - Contractual so no need for Ofcom to grant licences to execute trades
  - Limited to selected licence classes
  - Obligations on BMs to support investigation and enforcement
- For **leases** (less than 24 months in original proposals but currently reconsidering)
  - Ofcom would not be pre-notified by parties
  - Details of current users would not be kept in Ofcom's licensing database (but licensee would be under obligation to retain information and make it available on request)
- For **leases**, head licensee expected to:
  - plan spectrum usage by its customers within parameters of licence
  - be first port of call if customer experiences interference
  - resolve issues arising between customers and to enforce contracts with them
  - although Ofcom may need to be involved in some cases eg if third party affected

## Difference between transfer and lease



## Consultation responses

- Stakeholders strongly support proposals in principle - especially leasing
- Some aspects attracted comments we are currently considering including:
  - whether to allow leases of longer than 24 months and (if so) whether they should be subject to additional reporting and publication requirements as for transfer
  - choice of 24 months as watershed for 'silent' leasing that does not have to be notified to us or included in WTR
  - whether and in what circumstances to allow sub-leasing
  - dispute resolution
  - whether TWLI has a role (probably not given current timeline for transposition)
  - what to do about time-limited transfer
  - application of contract-based leasing to the public sector (legally problematic)
  - possible justified exceptions where Ofcom consent will still be needed, eg cellular (case-by-case consideration needed)

WTR – Wireless Telegraphy Register  
TWLI – Transfer Without Licence Issue

## Issues for Consideration

- **Watershed:** is watershed needed and would “up to 24 months be too restrictive”?
  - Would longer leases (as opposed to time-limited transfer) serve useful purpose?
  - Would notification and inclusion in WTR be unduly burdensome for longer leases?
  - Less market and regulatory supervision without watershed but do not want to catch individual trades of minimal market significance
  - Alternative watersheds eg “up to 0.2% of frequency\* [or value?] and 5 years”
    - \*800kHz @ uhf, 2MHz @ 1GHz (5 2x200 kHz cellular channels) or 56 MHz @ 28 GHz
  - Anti-avoidance eg mandatory gap of 6 months
  - No watershed but mandatory return detailing leases over a given period.
- **Sub-leasing:** would it be too restrictive to prohibit sub-leasing?
  - Risk of complex chains impeding investigation and enforcement
  - Possibly allow single sub-lease and require BM to maintain records of users
- **Dispute resolution:** will Ofcom become embroiled in contractual disputes?
  - Empowering BMs means they should be first port of call for interference or dispute resolution
  - Recognise Ofcom may need to be involved ultimately
  - Possibly require leases to be in writing and provide for arbitration/mediation

## Timeline (provisional)

- *Ofcom consulted summer 2009 on simplifying spectrum trading*
- *New EU Framework adopted November 2009 for implementation May 2011 opens door to spectrum leasing*
- *Interim statement announcing decision to proceed in principle published 14 April 2010*
- *BIS consultation on transposing revised Framework published 13 September 2010 (closes 3 December 2010)*
- Further SST consultation/statement (January 2011)
- SIs to transpose Framework to be laid before Parliament (April 2011) by BIS to take effect 25 May 2011
- Ofcom publishes Statutory Notice on new trading and other regulations (1 month consultation followed by making and entry into force few weeks later)

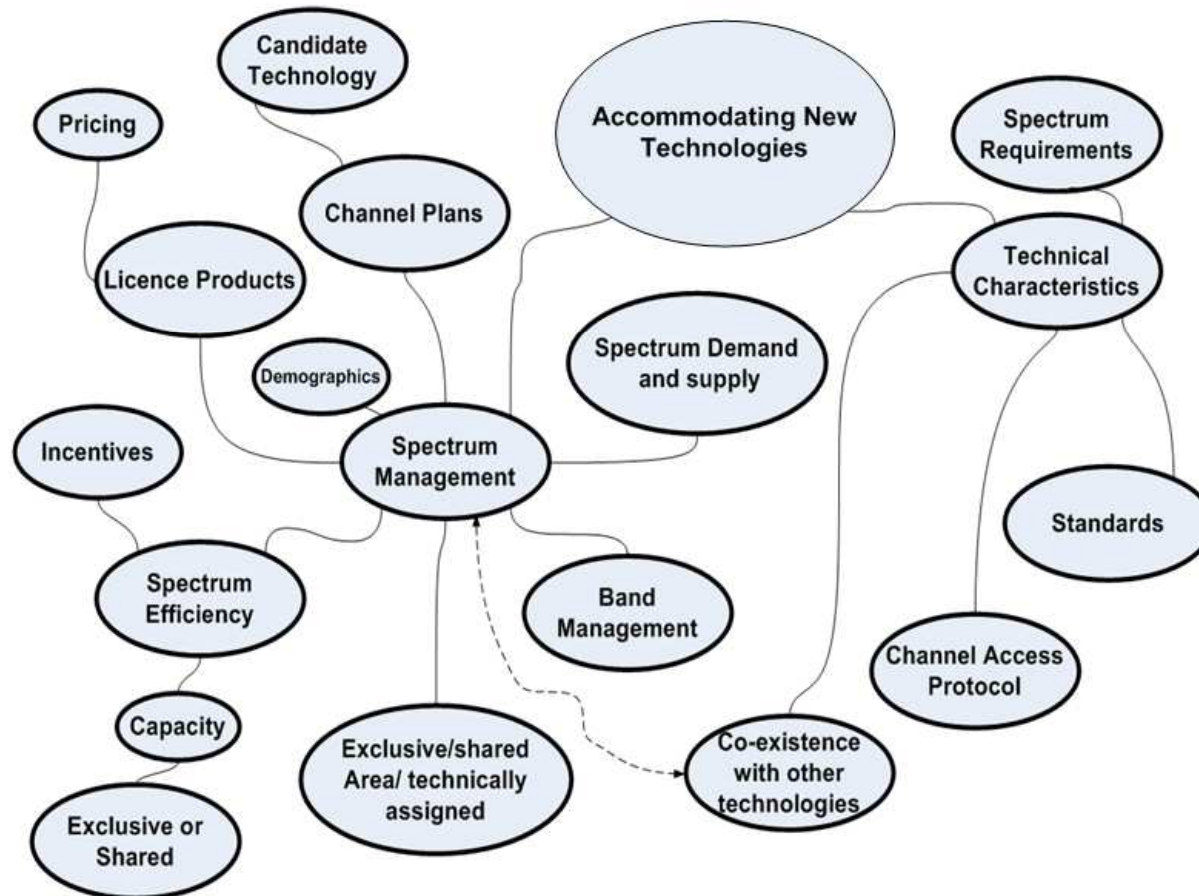
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## Congestion and handling failed assignments

- Following BRIG/customer feedback the Ofcom Licensing Centre has improved its procedures for customers who are notified of a failed application.
- We have reviewed our process and made changes starting 7<sup>th</sup> November
- We are pushing for more spectrum efficiency - Also improving service consistency
- For failed assignments the OLC Technical Team will now :
  - After initial assignment failure phone technical representative/applicant
  - Failing above then email technical representative/applicant
  - Discuss details of the application and suggest options and band alternatives
  - Reattempt assignment with revised criteria
  - Failing reattempt then direct customer to online WT ACT Trading Register
  - Backed up with an assignment failure letter (so far none issued)
- We welcome any feedback regarding this process

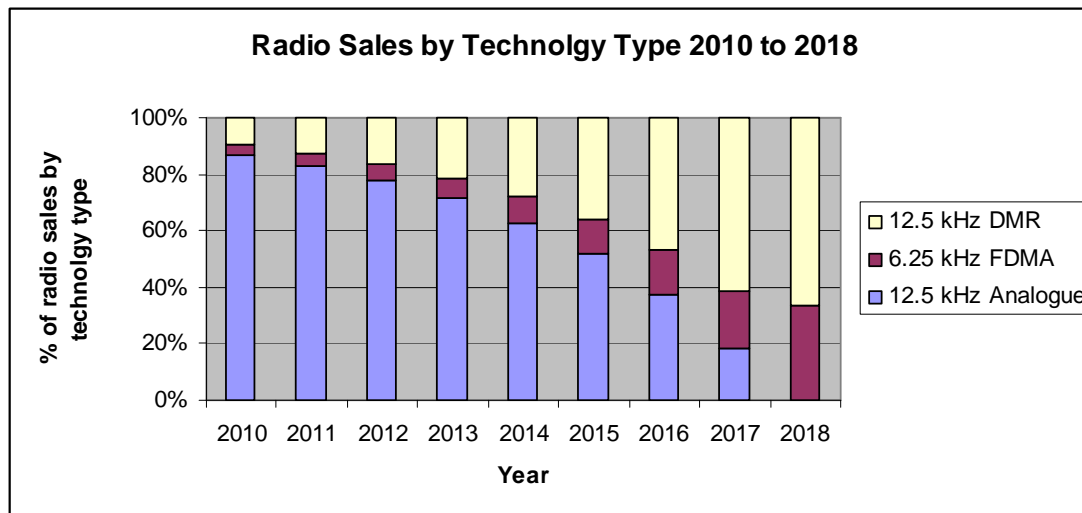
# Licensing Implications



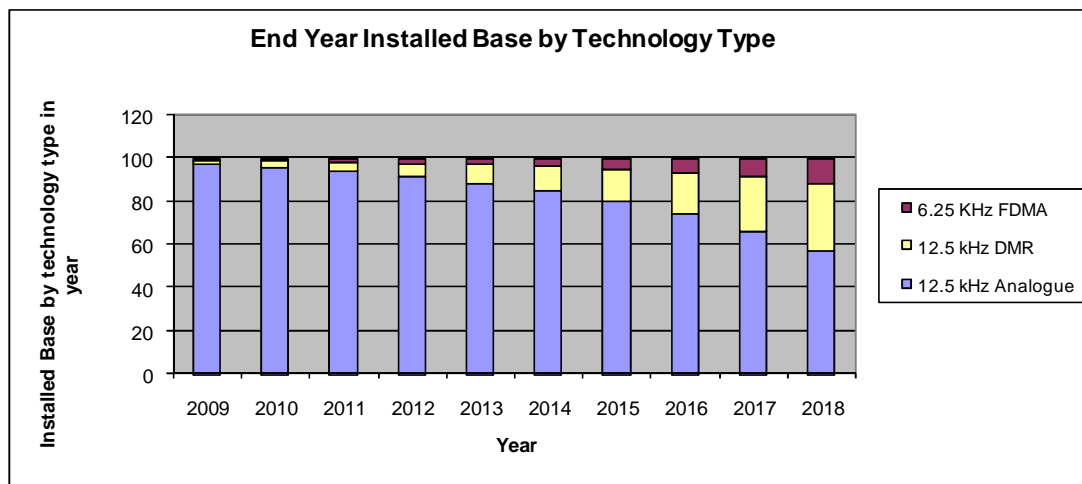
## Accommodating Digital Technologies

- PMR Bands heavily used in urban areas
- No vacant spectrum to support new technologies - they have to co-exist
- Emission Masks of digital technologies fit with existing analogue technology
- The 3 narrow band technologies (TETRA, DMR (TDMA and FDMA)) offer twice the number of channels than 12.5kHz analogue and have data capability.
- Existing licence products are technology and use agnostic – therefore provide a licensing framework for digital technologies.
- FDMA can be assigned a 6.25kHz channel – priced at half the cost of a 12.5kHz channel (subject to Ofcom's minimum fee)
- Existing licensees can change technology and they can return any unused bandwidth or trade the unused portion..
- TDMA can use existing 12.5kHz assignments

# Projected Market



Information from the DMR Association



Assumes a 7 year replacement cycle.

## New Technologies

- We are considering Incentives to encourage a switch to digital
- Spectrum Efficiency is a key driver and Ofcom is considering when to stop licensing analogue and if/when analogue should be withdrawn.
- Ofcom is not favouring any specific technology and there is competition in the market.
- Congestion apparent in UHF1, UHF2 and High Band and it is becoming difficult to make new assignments.
- Licence costs – effectively half the cost of analogue because the technology supports twice the number of channels
- Licence costs – maximise the use of spectrum investment using DMR
- Manufacturers will gradually stop supporting analogue
- End users demanding integration and applications that can be supported.
- In America the FCC has stopped certification of equipment that is not 6.25kHz efficient
- 1<sup>st</sup> Jan 2011 – FCC will halt licensing of new 25kHz wideband systems

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## Renewal Cycle and Revocations

- We don't revoke for fun
- All customers are given two opportunities to pay for their licence with three months notice of the impending renewal notice including one month remittance terms
- The consequences of revocation are:
  1. Frequencies go back in the pot for new assignments
  2. Cannot guarantee same frequencies for reapplication
  3. In congested areas high probability that these cannot be reassigned
  4. Therefore item 3 gives possibility that assignments cannot be offered in same band
  5. Potential reprogramming costs to customer outweigh licence fee
- It is the customer's responsibility to pay on time.
- National Debt - Treasury expenditure target demanding 28.2% efficiency savings.
- Need to be firmer with process to maintain an effective licensing service.

## Renewal Cycle and Revocations cont..

- The number of revocations we are seeing explain to some extent why the licence numbers have fallen over the past years, however equipment sales still seem to be increasing and this has led to Ofcom investigating the PMR market. The FCS has also made significant contributions to our work
- Ofcom's Spectrum Engineering and Enforcement (SE & E) have also been following up the revocation story – Steve Kennett who is Head of Business Support will explain more in his presentation – coming up next. .