

**Briefing for Stakeholders** 

# Consultation on assessment of future mobile competition and proposals for combined award of 800MHz and 2.6GHz spectrum

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#### Promoting investment, competition and coverage

- Our role is to secure the best use of the 800MHz and 2.6GHz spectrum for the benefit of UK citizens and consumers
- Our objective is to support investment, promote competition and ensure wide availability of services
- Some difficult judgements to be made; very much open to hearing your views and reviewing any evidence that you can provide



# Government Direction to Ofcom (December 2010)

- Liberalise existing 900MHz and 1800MHz licences
- Vary 2.1GHz licences
- Revise annual licence fees payable in respect of 900MHz and 1800MHz licences
- Make 900MHz, 1800MHz and 2.1GHz spectrum tradable
- Assess likely future competition in mobile markets, taking into account possible effects of the combined auction, and including consideration of potential for new entry; put in place appropriate and proportionate measures to promote competition in such markets, including rules governing the auction
- Hold auction as soon as practicable after completion of competition assessment



#### Assessment of likely future competition

- Grounded in results of Mobile Sector Assessment of 2009, and other work on mobile competition (e.g. mobile call termination)
- Considering different levels in the value chain:
  - retail, wholesale and network
- And different types of competitor:
  - national network operator, sub-national network operator, MVNO and reseller
- Focused on mobile broadband but considering implications for rest of the market
- Based in part on technical modelling of performance of next generation mobile broadband networks for a range of potential auction outcomes



#### **Provisional conclusions of assessment**

- Outcomes likely to be better for consumers and citizens if there are at least four national wholesale competitors
- Holding enough spectrum of the right type is likely to be key to being a competitive national wholesaler in future
- Additional benefits if competitive sub-national networks were to develop further in future
- Access to suitable spectrum is likely to be key to such sub-national network development
- Do not see a need for regulated wholesale access if there are at least four national wholesale competitors



#### **Consequent proposals for combined award**

- Rules to ensure that at least four parties each hold sufficient spectrum to be credible national wholesalers after the auction
- Safeguard caps on both sub 1GHz and overall mobile spectrum holdings, to mitigate the risk of distortions of competition in future from extremely asymmetric holdings
- Rules to facilitate bidding by potential sub-national network operators for part of the 2.6GHz band, to be used on a shared low power basis
- Possible reservation of part of the 2.6GHz band for this purpose



# Rules to promote minimum 4-player wholesale market

- Proposing rules guaranteeing that at least four licensees each hold at a minimum one of the following spectrum portfolios after the auction\*:
  - 2x5MHz of sub-1GHz spectrum plus 2x20MHz or more of 2.6GHz spectrum
  - 2x5MHz of sub-1GHz spectrum plus 2x15MHz or more of 1800MHz spectrum
  - 2x10MHz of sub-1GHz spectrum plus 2x15MHz or more of 2.6GHz spectrum
  - 2x10MHz of sub-1GHz spectrum plus 2x10MHz or more of 1800MHz spectrum
  - 2x15MHz or more of sub-1GHz spectrum
- Bidders that do not already hold one of these minimum portfolios to have the option at the start of the auction of electing to compete to be one of the four
- May also have to compete with each other to win the specific portfolio that they most prefer
- In any case, all bidders to compete on an equal footing for any other spectrum that they wish to acquire (in excess of that needed to satisfy the condition)

\*Other options are also considered in the consultation



### **Safeguard caps**

- Proposing safeguard caps on sub-1GHz and overall spectrum holdings in the auction:
  - sub-1GHz cap of **2x27.5MHz** (800MHz and 900MHz spectrum)
  - overall spectrum cap of **2x105MHz** (800MHz, 900MHz, 1800MHz, 2.1GHz paired, 2.6GHz paired and 2.6GHz unpaired spectrum)
- Intended not to prevent bidders from acquiring efficient quantities of spectrum, but to prevent them acquiring more spectrum than likely to be needed in practice
- Given only safeguard caps, no need for existing licensees to have option of relinquishing spectrum into the auction (although 2x15MHz of 1800MHz spectrum to be divested by EE might be included in the auction)



#### Shared low power use of some 2.6GHz spectrum

- Proposing rules to enable bidders interested in using some 2.6GHz spectrum on a shared low power basis (with perhaps up to 10 such concurrent users) to compete with individual high power bidders – most likely for 2x10MHz, but possibly for 2x20MHz
- Consulting on option of reserving some of the 2.6GHz spectrum for this purpose



# Ensuring availability of future mobile broadband services across the UK

- Proposing to include a coverage obligation in one 800MHz licence:
  - a minimum 2Mbps downlink service
  - covering 95% of UK population
  - to 90% of indoor locations
  - by end of 2017
- Consulting on whether, and if so how, to specify an additional obligation (on same licensee) to ensure a minimum level of coverage across the whole of the UK, including in 'rural' areas
- Consulting on option of retaining power to partially revoke licences in specific circumstances (when needed to meet specific public policy goals)



#### **Future annual licence fees**

- Consultation includes details of how we propose to:
  - Assess competitiveness of auction for purpose of deciding whether bids are likely to reflect true market value
  - Derive estimates of the full market value of 900MHz and 1800MHz spectrum from bids
  - Convert those estimates of full market value into annual licence fees



#### **Auction design**

- Proposing to use the same Combinatorial Clock Auction format as used for the L-band and 10-40GHz auctions, and proposed for the 2.6GHz auction
- Additional rules to implement competition proposals
- Slightly revised pricing rule
- Consulting on appropriate level of reserve prices:
  - Proposing that reserve prices should at least cover costs of clearance
  - Consulting on option of setting reserve prices for reserved spectrum (required to satisfy competition conditions) closer to market value of spectrum (to mitigate risk of inefficient outcome)



# **Non-technical licence conditions**

- Proposing that:
  - licences be of indefinite duration, continuing until relinquished by the licensee or revoked by Ofcom
  - revocation on spectrum management grounds to be possible with 5 years' notice, but only after an initial period of 20 years (to end of 2032)
  - rights and obligations to be tradable, with all types of transfer permitted, subject to Ofcom being content that any trade would not give rise to a distortion of competition
  - licensees to be obliged to provide us with information about their use of the spectrum which we may then publish



# **Other issues**

- Consultation document includes latest information about likely timing of clearance of 800MHz spectrum and remediation of 2.7GHz radars
  - Will publish further information as it becomes available
- Consultation does not include proposals for DTT protection, or technical licence conditions required to prevent harmful interference to other neighbouring spectrum users
  - Plan to publish proposals for these within the next few months (before end of this consultation)
- Propose to liberalise existing 900MHz and 1800MHz licences to allow use for LTE and WiMAX systems, as well as GSM and UMTS systems, once RSC Decision is amended (anticipate later this year); similarly for 2.1GHz licences in due course
- Separate work ongoing re mobile not-spots and how they might be addressed; further information in due course



#### Next steps

- Consultation runs until 31 May
  - Plan to hold a number of stakeholder events in this period
- Plan to make decisions and publish statement in the autumn, along with IM and draft regulations
- Plan to make regulations around the end of the year
- Plan to invite applications in Q1 2012 with auction starting shortly thereafter
- Anticipate auction ending in Q2 2012 with licences issued shortly thereafter
- Plan to consult on revised annual licence fees for 900MHz and 1800MHz licences reflecting full market value as soon as practicable thereafter