



**Vodafone's response to Ofcom's consultation**

**"Variation of 900MHz, 1800MHz and 2100MHz Mobile licences"**

**March 2013**

**Non-confidential**

## Summary and conclusions

Vodafone welcomes the opportunity to respond to this consultation. Ofcom is, at the request of Vodafone and other mobile operators, consulting on two particular matters:

- The removal of the regulatory constraint on the use of LTE technology in 900/1800/2100MHz spectrum licences;
- An increase in maximum permitted base station transmit power for 900MHz.

Also, as part of this consultation, Ofcom is proposing to amend some of the detail of the 900MHz, 1800MHz and 2100MHz licences to ensure a consistent approach across the mobile sector for all spectrum licences as well as time-limiting the applicability of the 80% coverage obligation of the 2100MHz licence, given that a new 90% coverage obligation will take effect in June 2013. These changes require the consent of the licensees.

In our opinion neither of the first two proposed changes is unexpected or exceptional – rather they too represent merely the bringing of the licence conditions for these spectrum bands into line with those for the recently awarded auction spectrum.

Ofcom rightly notes in section 2 of the consultation document that the principle of technology neutrality or liberalisation that the European Commission has been seeking to promote over the past five years, through the enactment of Directives and the RSPP Decision, should mean that the 900MHz, 1800MHz and 2.1GHz licences are varied to give effect to that wider over-arching principle. Ofcom also highlights that the case law in the realm of spectrum management means that it must ensure that there are no impediments to the spectrum being authorised for use. No such impediments exist, and given the clear absence of any risk to competition on relevant markets resulting from licence variations, Ofcom must, as a matter of law, vary the licences to give effect to the objectives of the Community legislature.

We therefore support Ofcom's proposals.

### Proposed amendment to licence to allow LTE technology

The technology that can be used in each band has changed over time. We agree with Ofcom's comment in 2.8 (obviously made before the auction) that of the four mobile operators with their pre-auction holdings of 900/1800/2100MHz, only EE "*currently has spectrum suitable for 4G mobile services*".

We also agree that over time new technologies emerge, so that an operator's spectrum licence may no longer specifically allow all technologies that can potentially be used in each band. It therefore makes sense where this occurs for the spectrum licence terms to be amended so as not to preclude the use of other technologies (although there may be practical reasons why a particular technology, even when licenced for use in a given band, cannot be currently so used).

The latest emerging mobile technology, that of LTE, has now been licensed for use in the recently auctioned 800MHz and 2600MHz spectrum. Allowing its use in respect to licences for other mobile spectrum bands, even if the use is only theoretical, makes sense in the context of developing mobile spectrum licence consistency.

Clearly we are in agreement, since Vodafone has requested it, with Ofcom's proposal to remove any regulatory constraint on the use of LTE (and WiMAX) technology for any of the 900MHz, 1800MHz and 2100MHz bands, though we note that this removal, whilst a necessary first step, does not necessarily mean that it is practical<sup>1</sup> for any of the bands to be used for LTE by a particular licence holder in the short, medium or long term.

In this context, we would agree with Ofcom's finding that the variation of these licences would be unlikely to result in any distortion of competition on any relevant market; as Ofcom notes, the spectrum in the 900MHz band which is subject to the liberalisation is already allocated to support other services and would not be available to these operators to use for LTE for a very considerable period of time. Moreover, both EE and H3G have a significant holding in the 1800MHz spectrum band, coupled with additional spectrum in 800MHz and 2.6GHz bands that are capable of providing credible LTE services. In the case of EE, it has, through the merger of T-Mobile UK and Orange UK in 2010, acquired a very significant 2x45MHz carrier in the 1800MHz band that would also over time be available for exploitation to support LTE services. That spectrum is obviously already being used by EE to provide LTE services. Thus, Ofcom's positive decision to vary these licences does not create any risk to the competitive process and accordingly to the welfare of mobile consumers.

### **Increase in 900MHz maximum permitted base station transmit power**

Both Vodafone and Telefonica have requested a variation in their 900MHz licences to increase the maximum permitted base station transmit power for UMTS 900 technology by 3 dB. We agree with Ofcom's conclusion in section 4 of the consultation that this could bring benefits to consumers, since the additional flexibility provided by the increase can lead to improved quality of service, but it is unlikely to distort competition in a way that harms consumers. We also welcome Ofcom's provisional conclusion that the change is unlikely to represent a significant increase in the interference environment experienced by existing systems operating in neighbouring spectrum bands.

### **Other proposed changes to licences**

Vodafone agrees that as the 80% coverage obligation in 2100MHz licences has been superseded by the new 90% coverage obligation that becomes effective in June 2013, the 80% obligation can and should be removed. This is not just a tidying-up issue - the real need for withdrawal of the 80% obligation arises from the fact that the two

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<sup>1</sup> As Ofcom notes in paragraph 3.16

obligations, as Ofcom points out in paragraph 5.5, can be met in different ways, and therefore there could potentially be a difficulty from any need for simultaneous compliance with both obligations.

Other changes are more minor, and appear to reflect realignment of the old 900MHz, 1800MHz and 2100MHz licences with the much more recently developed terms of the 800MHz and 2600MHz licences awarded in auction this year. We are therefore broadly content with Ofcom's proposals; however, as noted in our responses to Ofcom's questions, we wish to confirm that where bespoke technical conditions or obligations are imposed that vary between licences, these have been adopted solely to enable the efficient operation of the spectrum band prospectively.

## **Response to Ofcom questions**

*Question 1: do you agree with the proposal to vary Vodafone's 900 MHz, 1800 MHz and 2100 MHz licences and H3G's 2100 MHz licence so as to permit those frequencies to be used to deploy 4G technologies?*

Vodafone response – yes.

*Question 2: do you agree with the proposal to vary Telefónica's 900 MHz, 1800 MHz and 2100 MHz licences and EE's 2100 MHz licence so as to permit those frequencies to be used to deploy 4G technologies where we receive formal requests to do so?*

Vodafone response – yes.

*Question 3: do you agree with the proposal to vary the 900 MHz licences to increase the maximum power limit for UMTS by 3dB from 62 dBm e.i.r.p. per carrier to 65 dBm e.i.r.p. per carrier?*

Vodafone response – yes.

*Question 4: do you agree with the changes proposed in section 5?*

We note that the main provisions of the licences now largely mirror those included in other licences recently awarded by Ofcom. We consider that this approach is critical for the regulatory consistency that Ofcom is required to promote. However, we have identified a number of technical conditions attached to the proposed licences that differ between the licences and also from other licences that have previously been awarded. We have assumed that these technical conditions vary in order to ensure the effective exploitation and operation of the specific frequency band, but would welcome confirmation of our view.

**Vodafone Limited**  
**March 2013**