

# Annex 14 – Awards for 3.6 – 3.8GHz and 700MHz are likely to be delayed

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## A. Introduction

Ofcom says in the Consultation that it expects to conduct the 700MHz award in 2018/19<sup>1</sup> and that it expects at least three quarters of the band to be capable of being used in mainstream handsets from approximately mid-2020.<sup>2</sup>

On the subject of 3.6-3.8GHz spectrum, Ofcom says that it expects the band to be capable of being used in mainstream handsets at a similar time to the 3.4 GHz spectrum, from approximately 2018 onwards, albeit subject to some restrictions on use.<sup>3</sup> It does not say exactly when it expects an award of the spectrum to occur but says it “*assume[s] that it is auctioned sufficiently in advance that it would be possible to deploy it as soon as it is available and there are sufficient handsets*”.<sup>4</sup> This would seem to imply an award in 2017 or 2018.

These dates are important because Ofcom relies on the future availability of this spectrum, and its ability to impose competition measures in the award of it, as a reason for not proposing to impose more stringent competition measures in the current award and, in particular, for not proposing to impose any restrictions on bidding for 3.4GHz spectrum.<sup>5</sup>

As we discuss in Section 6 of the Response, Ofcom’s assumptions about when 3.6-3.8GHz will be used in mainstream handsets are flawed. It is unlikely the band will be used as early as Ofcom anticipates.

Even if Ofcom were right about the technical developments, however, its conclusions on the availability of both bands would still be flawed because it has not taken account of the scope for delay in the regulatory processes including as a result of litigation by MNOs that obtain 3.4GHz spectrum and consequently have an incentive to delay the availability of 3.6GHz and 700MHz spectrum.

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<sup>1</sup> Paragraph 1.6.

<sup>2</sup> Figure 4.2; paragraph 4.49

<sup>3</sup> Figure 4.2.

<sup>4</sup> Footnote 33.

<sup>5</sup> Paragraphs 4.46, 4.59, 4.80, 4.101, 4.114, 4.156-4.157, 4.159, 5.75

## **B. Current status of the 700MHz and 3.6GHz awards**

The latest position on 700MHz in the UK is as follows:

- Ofcom decided to make the band available for mobile data on 19 November 2014.<sup>6</sup> The aim at that time was to make the band available by the start of 2022.
- Ofcom decided on 17 October 2016 to “*work to accelerate the programme by 18 months*” to release the 700MHz band in Q2 2020.<sup>7</sup>
- No consultations have been published in relation to the award itself.

As Ofcom has acknowledged, the release of more spectrum at 3.6-3.8GHz for mobile use is “*not as certain as at 700MHz*”.<sup>8</sup> As this implies, Ofcom cannot really be said to have even begun to prepare an award of the 3.6-3.8GHz band. It is not even mentioned in the “prospective awards” section of Ofcom’s website. Indeed, all that Ofcom has done is publish a consultation document on 6 October 2016<sup>9</sup> presenting “*our initial thinking on how we could expand spectrum access for mobile services in the 3.6-3.8 GHz band*”. There are real issues in connection with the existing use of the band, as evidenced by stakeholder responses to this consultation, and these could significantly delay its use for mobile services.

## **C. Timing for previous awards**

There have only been two auctions of prime mobile spectrum:

- Award of the 2.1GHz band in 2000 (the “3G auction”); and
- Award of the 800MHz and 2.6GHz band in 2013 (the “4G auction”).

We can also, though, look at the timeline for the pending award of the 2.3GHz and 3.4GHz bands that is the subject of the Consultation and also some other spectrum auctions that were less directly relevant to mobile (and consequently less controversial).

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<sup>6</sup> *Decision to make the 700 MHz band available for mobile data – statement*, 19 November 2014.

<sup>7</sup> *Statement – Maximising the benefits of 700MHz clearance*, 17 October 2016.

<sup>8</sup> Paragraph 4.50.

<sup>9</sup> *Improving consumer access to mobile services at 3.6 GHz to 3.8 GHz*, 6 October 2016.

a. *Timeline for the 3G auction*

The UK Government first started consulting formally on the possibility of a 3G auction with the issue of an industry discussion document on 13 February 1997.<sup>10</sup> A further, more formal, consultation followed on 31 July 1997.<sup>11</sup> At that time, it was said that “*the spectrum for Third Generation should be offered by auction during financial year 1998-99*”.<sup>12</sup> The winners of the auction were not actually announced until 27 April 2000.<sup>13</sup>

Part of the delay was caused by litigation initiated by existing licensees to challenge a proposed auction provision (the national roaming condition) that was intended to benefit a new entrant. Further delay would have ensued but for the Government’s decision not to impose the national roaming condition on those licensees that had brought the litigation.

It is to be noted that the 3G auction was deliberately arranged as quickly as possible because the UK Government wanted to be the first to auction 3G licences. It might be suggested that one thought was that this would lead to higher auction revenues.

b. *Timeline for the 4G auction*

Ofcom started consulting on the award of the 2.6GHz band in January 2005.<sup>14</sup> It reached a decision to proceed with an award on 4 April 2008.<sup>15</sup>

This decision on the 2.6GHz award was later abandoned following litigation by the mobile operators and government intervention in the form of a direction to Ofcom. A decision was taken, as reflected in the Government direction, to combine the award of the 2.6GHz band with an award of the 800MHz band, on the clearing of which Ofcom had started consulting in 2009.<sup>16</sup>

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<sup>10</sup> See <http://webarchive.nationalarchives.gov.uk/20040104233440/http://www.ofcom.org.uk/static/archive/spectrumbauctions/3gindex.htm>.

<sup>11</sup> *Multimedia Communications On The Move*, DTI, 31 July 1997.

<sup>12</sup> <http://webarchive.nationalarchives.gov.uk/20040104233440/http://www.ofcom.org.uk/static/archive/spectrumbauctions/3gindex.htm>.

<sup>13</sup> See <http://webarchive.nationalarchives.gov.uk/20040104233440/http://www.ofcom.org.uk/static/archive/spectrumbauctions/3gindex.htm>.

<sup>14</sup> See discussion in *T-Mobile (UK) Limited v Office of Communications* [2008] CAT 15 at paragraph 52.

<sup>15</sup> *Award of available spectrum: 2500-2690 MHz, 2010-2025 MHz*, 4 April 2008.

<sup>16</sup> *Digital Dividend: clearing the 800MHz band*, [date]

The first formal consultation on the so-called “combined award” was published on 22 March 2011.<sup>17</sup> Further consultations followed. The results of the auction were announced on 1 March 2013.

It should be noted that the litigation referred to above did not just concern the award of the 4G bands but also liberalisation of the 900/1800MHz bands. The scope for other MNOs to use litigation to inject delay extends to the delay of any measure to liberalise spectrum already held by another MNO as well to delay the award of new spectrum.

*c. Award of the 2.3GHz and 3.4GHz bands*

Ofcom issued an initial consultation and call for inputs on an award of the 2.3GHz and 3.4GHz bands on 16 October 2013.<sup>18</sup> It reached a decision on 26 October 2015<sup>19</sup> and expected then that applications for the auction would be made in December 2015 with the bidding commencing early in 2016.

The decision of 26 October 2015 was abandoned and the auction delayed because of the interaction with the pending merger filings. It is now intended that the auction will take place in the first half of 2017 at the earliest.

*d. Other awards*

Even much less controversial spectrum awards have taken considerable periods of time to organise:

- The 3.4GHz fixed wireless access spectrum,<sup>20</sup> was the subject of an initial consultation in November 1999<sup>21</sup> and the auction ended on 17 June 2003.
- The GSM/DECT guard bands award was the subject of a consultation on outline proposals in January 2005.<sup>22</sup> The award itself occurred in October 2006.<sup>23</sup>
- The L-Band award was the subject of a consultation on outline proposals in January 2005.<sup>24</sup> The award itself took place in May 2008.

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<sup>17</sup> *Assessment of future mobile competition and proposals for the award of 800 MHz and 2.6 GHz spectrum and related issues*, 22 March 2011.

<sup>18</sup> *2.3 and 3.4 GHz spectrum award: consultation on a 3.4 GHz band plan, varying UK Broadband Limited’s licence and a call for inputs on other aspects of the award*, 16 October 2013.

<sup>19</sup> *Public Sector Spectrum Release (PSSR) – Competition and auction design issues for the 2.3 and 3.4 GHz spectrum award, including reserve prices: statement*, 26 October 2015

<sup>20</sup> Now licensed to UK Broadband Limited and UKB Networks Limited.

<sup>21</sup> *Consultation on 3.4 GHz Fixed Wireless Access Spectrum*, Radiocommunications Agency, November 1999 available at [http://webarchive.nationalarchives.gov.uk/frame/20040104233440/http://www.ofcom.org.uk/static/archive/ra/topics/pfwa/3-4ghz/consult/3\\_4ghz/3\\_4ghz.htm](http://webarchive.nationalarchives.gov.uk/frame/20040104233440/http://www.ofcom.org.uk/static/archive/ra/topics/pfwa/3-4ghz/consult/3_4ghz/3_4ghz.htm).

<sup>22</sup> *Spectrum Framework Review: Implementation Plan*, 13 January 2005

<sup>23</sup> <https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2006/ofcom-awards-licence-following-spectrum-auction>.

#### **D. Conclusions on timing for mobile use of the 700MHz and 3.6GHz bands**

Even where previous awards have been uncontroversial, or have been the subject of Government pressure to conclude them quickly, it has still taken a minimum of two to three years to conduct the auction from the issue of the first auction consultation document. Where the award has been more controversial and/or the subject of litigation designed to delay the award, it has taken as long as eight years.

In circumstances where Ofcom has not yet published any consultations on the award of either 700MHz or 3.6GHz spectrum, previous precedent suggests that it is realistically unlikely that either award could occur before late 2019 or, more likely, 2020 even if the processes proceed smoothly and without litigation designed to delay the awards.

Similarly, previous attempts to liberalise spectrum for (further) mobile use have typically taken a long time from gestation to realisation.

In fact, however, the situation in which Ofcom has to rely on early availability of the bands for mobile use to justify not imposing competition measures in the current auction is one where there would be a strong incentive for BT or Vodafone to try to inject delay, i.e. where they had won a large proportion of the 2.3GHz and 3.4GHz spectrum and could therefore gain a competitive advantage until 700MHz and/or 3.6GHz spectrum are deployed. In those circumstances, it is to be expected that litigation and/or political lobbying will occur to delay the awards and/or liberalisation of existing spectrum.

Whilst it is acknowledged that the Administrative Court would seek to deal quickly with any challenge, it is nevertheless likely that litigation could inject a delay of six months to a year even if Ofcom were successful and there were no appeals. If Ofcom lost any judicial review, it would likely need to run at least one more new consultation and that could easily add another six months to a year.

Moreover, it takes time to deploy spectrum after an award occurs or a liberalisation decision is made. Any competitive advantage from the 2.3 GHz and 3.4 GHz award would thus continue for a significant period after the 700MHz and/or 3.6 GHz award or liberalisation decision. Realistically, it would probably be 2022 before the competitive advantage might start to be eroded (assuming the advantage in the meantime had not afforded an irreversible benefit).

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<sup>24</sup> *Spectrum Framework Review: Implementation Plan*, 13 January 2005