



---

# *Variation of 28 GHz Broadband Fixed Wireless Access Licences*

*Consulting on licence variation requests by  
Urban Wimax and Cable & Wireless.*

*Everything Everywhere Limited response  
to Ofcom's consultation*

*15<sup>th</sup> February 2013*



## *Table of Contents.*

<b>1. Introduction</b>	<b>3</b>
<b>2. Discussion</b>	<b>5</b>
<b>3. Consultation Questions.</b>	<b>7</b>

# 1. Introduction

EE is pleased to respond to the Ofcom document 'Variation of 28 GHz Broadband Fixed Wireless Access Licences – Consulting on licence variation requests by Urban Wimax and Cable & Wireless'. This consultation deals with requests by those operators to make the terms of their 28 GHz licences indefinite. Please find a summary of the EE response below.

## **Ofcom Analysis and Conclusions are Underdeveloped.**

Whilst supportive of Ofcom's duty to secure optimal use of the spectrum and to remove uncertainty for the incumbent licensees, EE believes Ofcom's analysis and conclusions are currently underdeveloped. EE believes the stated Ofcom preference for licence variation over an auction solution is premature and the balance of benefit between variation and auction more finely balanced than Ofcom suggests.

- Ofcom has not considered sufficiently the conditions of BFWA orientation and wider telecoms industry infrastructure use restriction attached to the licences at initial auction some time ago and their material impact on current spectrum allocation. EE views perpetuation of this legacy influenced allocation as potentially suboptimal in the face of the opportunity to achieve a more efficient outcome better aligned to current and future industry conditions.
- Trading is naturally bilateral and the value of a given transactions cannot be made conditional on acquiring complementary licences from other potential sellers. The secondary market does not offer buyers a way of mitigating the aggregation risk in the way that a combinatorial auction does. Suboptimal spectrum allocation (once established) is therefore likely to persist for medium to long periods in the secondary market.
- The setting of AIP levels is as Ofcom notes complex with uncertain benchmarks. Uncertainty with respect to future AIP levels may continue to inhibit investment irrespective of licence variation, with incumbents reluctant to fully commit to investment plans pending resolution. A similar stultifying effect on willingness to trade licences due lack of pricing certainty, pending AIP value resolution, is also not unlikely. A combinatorial clock auction would allow uncertainty to be removed and competitive market price to be simply determined in a similar or possibly earlier timeframe.

## **An auction potentially offers a more efficient solution than variation in the hands of incumbents**

The combination of the above lead EE to conclude that an auction of the spectrum in early 2014 may offer a more efficient solution in terms of spectrum allocation. EE suggests that Ofcom should reconsider the auction option.

Holding an auction may lead to a cost in terms of short delay to *future* investment. EE however believes the cost of short delay to future investment plans could be outweighed in the long term by a more fully efficient spectrum allocation. Auction operational costs could be reduced to a minimum if an

existing format (such as the 10-40GHz format) is re-used. An auction would solve the complexity and cost of establishment of AIP value by using direct market price determination.

Incumbent licensees must have formulated all current and ongoing investment plans with the rational expectation that licences would terminate in 2015 and thus should incur no unexpected costs.

**EE is supportive of Ofcom alignment of licence technical conditions.**

EE supports the Ofcom proposal to align licence technical conditions with those of the licences allocated in 2008 to facilitate more efficient technology neutral use of the spectrum.

## 2. Discussion

In November 2000 the Radiocommunications Agency auctioned three spectrum lots of 2x 112MHz in the 28GHz band in 14 geographic regions of the UK. Geographic regions and technical licence conditions were orientated towards facilitating the rollout of broadband fixed wireless access systems based on point to multipoint technology. Technology neutrality was for practical purposes confined to operator choice of TDMA, FDMA or CDMA solutions within the deployment of wide coverage sectorised antenna hub site deployment and lower power user premises directional antenna equipment. The use of the spectrum for the provision of infrastructure links to support non BFWA telecoms operator networks was prohibited<sup>1</sup>. The outcome of the auction was the sale of 16 licences with 26 licences left unsold.

EE suggests that the legacy of the above auction was that licences were not awarded in a fully technology neutral manner and in a way inconsistent with current thinking on spectrum licensing. The existence of a clause prohibiting use for wider telecoms operator infrastructure discouraged non specialized BFWA operator auction entry and undermined the possibility of the spectrum being aggregated efficiently with respect to widest possible industry commercial and technical drivers. The result was the allocation of spectrum into holdings based on a sub optimally narrow technology foundation and unreflective of widest industry auction competitive pressure.

In subsequent spectrum release of unsold lots from the 2000 auction, Ofcom removed these narrow technology definitions and restrictive infrastructure use clauses but by this point licences, sold in year 2000, offering the most attractive commercial opportunities were already issued.

Whilst subsequent trading has re-shuffled the year 2000 issued licences the potentially inefficient initial geographic packaging of the licences has to a significant extent remained under new owners. This is unsurprising given the nature of such trading. Trading is naturally bilateral and the value of a given transactions cannot be made conditional on acquiring complementary licences from other potential sellers. The secondary market does not offer buyers a way of mitigating the aggregation risk in the way that a combinatorial auction does. This means that there is potential hold-up problem whereby potential buyers cannot offer sufficient value to current licensees in order to convince them to sell. Hence although there have been trades, which may have improved the efficiency of the initial primary allocation, we believe there is scope for improving the efficiency further and that it is unreasonable to expect that the secondary market can achieve this. Ofcom implicitly recognises this in its comments in section 4.14 of the consultation<sup>2</sup> where it notes that "*the value a bidder places on one particular lot (package) is dependent on whether or not they are successful in acquiring other lots (packages)*". In such a market suboptimal allocation is likely to persist into the medium and long term.

Fragmentation of the spectrum resulting from the 2008 auction is an inhibitor to full re-organisation of the spectrum. EE however believes that merit still exists in Ofcom reconsidering a combinatorial auction for the spectrum with widest

---

<sup>1</sup> Section 2.2.5 Information Memorandum , Auction of 28GHz, Volume 1, Radiocommunications Agency, 2000

<sup>2</sup> Variation of 28GHz Broadband Fixed Wireless Access Licences, Ofcom, 19<sup>th</sup> December 2012

possible industry participation and in the context of a definition of technology neutrality consistent with licences being allocated today.

### **3. Consultation questions**

EE's responses to the consultation questions are as follows:-

#### **Question 1**

***Do you agree that Ofcom should grant Urban Wimax's and Cable & Wireless's request to vary their licences as soon as practicable?***

EE believes Ofcom should reconsider the option of a 2014 combinatorial clock auction prior to reaching any final decision to grant variation of Urban Wimax's and Cable & Wireless's licences and to make their term indefinite. EE does support the alignment of technical licence conditions, as soon as practicable, with those awarded in 2008 for the interim period up to relinquishment in 2015. Auctioned or varied licences should follow the technical licence conditions of the 2008 licences.

#### **Question 2**

***Do you agree with our proposals to align the technical conditions of the licences with those awarded in 2008 in these and adjacent spectrum bands?***

EE supports the alignment of technical licence conditions with those awarded in 2008. This will facilitate more efficient technology neutral use of the spectrum. Coordination arrangements as outlined in the UK Coordination and Registration document<sup>3</sup> should be applied.

#### **Question 3**

***Do you agree with Ofcom's proposals to set an AIP level in context with the review of fees within bands used for fixed links?***

EE agrees with the principle that should a decision be reached not to auction the spectrum AIP should be applied and that this should reflect fixed link pricing. AIP should be amended in line with any changes to fees resulting from the forthcoming fixed link pricing review. A suitable billing methodology will be required to ensure fixed link AIP is adequately reflected in licence charging.

---

<sup>3</sup> UK Spectrum Coordination & Registration Document, Broadband Fixed Wireless Access in 28GHz, Ofcom.

EE notes that setting AIP is a complex process with, as Ofcom suggests uncertain benchmarks. Uncertainty over AIP levels will likely continue to deter investment and licence trading in the bands until resolved. An auction offers the opportunity to directly determine market price and resolve uncertainty in a possibly shorter timeframe.

#### **Question 4**

***Do you agree that Ofcom should offer this variation to other BFWA licence holders?***

EE believes Ofcom should first reconsider the option of auctioning the 28GHz BFWA licences. Variation of licences should be offered if Ofcom decides not to proceed with an auction. The variation should in those circumstances be offered to all 28GHz BFWA licensees.