



Mr Brice Le Cannu
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31st Jan 2008

Dear Mr Le Cannu,

Consultation on "Award of available spectrum: 2500-2690 MHz, 2010-2025 MHz and 2290-2300 MHz"

UK Broadband welcomes the opportunity to respond to this consultation. We support Ofcom's market-based approach to spectrum management. We also support Ofcom's application and technology neutrality approach in relation to use of existing spectrum and the grant of new spectrum.

However, we continue to have major concerns regarding the design of the auction in terms of the boundary conditions which can arise between spectrum blocks (specifically at the boundary between paired and unpaired blocks) despite Ofcom's reasoning and conclusions that bidder behaviour will take care of differential pricing of boundary blocks. We have explained our reasoning in response to Q3 (attached as Annex) from the consultation document.

If you would like to discuss any of these issues further with me or any of my colleagues, please do not hesitate to contact me. We look forward to the publication of your response Statement later in 2008.

Yours sincerely,

Faisal Ahmed

VP Strategy and Market Planning
UK Broadband

Annex 1

*Question 3: Do you agree with Ofcom's proposals **not** to include additional bidding options for split supplementary bids and **not** to allow Assignment Stage bids to be made contingent on the identity of prospective neighbours?*

The current two-type (paired and unpaired), two-stage 2.6 GHz auction design creates a potential “trap” for bidders on unpaired lots. This trap arises because not all the unpaired spectrum lots are equally usable and therefore equally valuable. The two-stage auction design forces a bidder to commit in the first round to buying a specified amount of spectrum and only in the second stage to find out if they have been unfortunate to be left holding the undesirable 5MHz block at the boundary between paired and unpaired lots.

This trap is compounded by the fact that bidders require minimum amounts of spectrum and the undesirable lot may well become the “casting vote” between the competing bidders in the second round.

Potential improvements to the auction process include:

- a) Defining three types of lots (paired, unpaired, boundary) or
- b) Giving bidders the right to opt out in the second stage if they are left holding the boundary block
- c) Giving bidders the right to opt out of the boundary lot if they are left holding that
- d) Remove the boundary block from the auction

Below we consider a specific example of how this trap may arise.

The Principal Stage closes with two remaining bidders for 10 lots (50 MHz) of unpaired spectrum. At this stage both parties have committed substantial amounts of capital and have no option of backing out. Let's call these two parties, “Bidder20” and “Bidder30”. Bidder20 requires 20 MHz of spectrum whilst Bidder30 requires 30 MHz of spectrum.

Both parties have ostensibly secured the amount of spectrum that they need during the Principal Stage. However, neither bidder can use the boundary block (between paired and unpaired) because of interference and other restrictions on the block. Hence, there is in effect a demand of 10 lots (50 MHz) and a supply of only 9 lots (45 MHz).

A 25 MHz allocation is of no use to Bidder30 because his network has been designed around a 3 sector, 10 MHz channel plan i.e. a minimum of 30 MHz is required. An assignment of 25 MHz while appearing reasonable in percentage terms, would completely destroy the network plan and force a much less efficient 3 x 5 MHz plan instead. A 15 MHz allocation is of no use to Bidder20 who is basing his design on a 4 x 5 MHz plan

The situation then arises that one of the lots becomes the “casting vote” between the two bidders. If either party does not secure this uncompromised block, then their network plans will be severely compromised despite having committed large amounts of capital during the Principal Stage. The successful outcome of the auction for both parties now hangs on winning the “casting vote” lot. If a bidder does not win this then the balance of their spectrum won in the Principal Stage is useless or at least much less effective. While it is reasonable for bidders to compete by bidding higher for a particular lot, it is unreasonable to trap potential bidders in a situation where they either stand to compromise what they have bid in the Principal Stage or have to bid unreasonably to succeed at the Assignment Stage.