NORTEL NETWORKS

7th March 2007

Nortel Networks Comments on

Ofcom Public Consultation on

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

Nortel *is a recognized leader in delivering communications capabilities that enhance the human experience, ignite and power global commerce, and secure and protect the world's most critical information. Serving both service provider and enterprise customers, Nortel delivers innovative technology solutions encompassing end-to-end broadband, Voice over IP, multimedia services and applications, and wireless broadband designed to help people solve the world's greatest challenges. Nortel does business in more than 150 countries. For more information, visit Nortel on the Web at www.nortel.com*

Auction and Timing

Nortel welcomes Ofcom's initiative to release licenses for the use of radio spectrum on the region of 2.6 GHz in a timely manner and on a technology and application neutral basis. We also welcome the fact that Ofcom has preserved the ability of license holders to deploy FDD systems with the duplex spacing of 120 MHz suggested by the CEPT band plan.

Nortel notes that licenses for paired and unpaired tranches of spectrum are to be auctioned simultaneously with a certain amount of flexibility. In doing so we believe careful attention must be paid such that different technical conditions do not cause undue differences in the value of the individual spectrum chunks. Failure to do so may result in a degree of market failure (the bidder that most values any given block may fail to win that block).

The value of a minimum tranche of paired spectrum (5+5 MHz) seems to be largely unimpaired technically. However, the value of a minimum tranche of unpaired spectrum (10MHz) is impaired in that there are substantive technical restrictions on one of the 5 MHz blocks.

The utility value of spectrum is improved if licenses are granted for contiguous spectrum in tranches that are larger than the minimum. Nortel notes that bidders are not restricted from maximizing the value of spectrum in this way and supports Ofcom's decision to award FDD spectrum contiguously and, where possible, do the same for TDD spectrum.

Work presently underway within ETSI examining how the block 2570-2620 MHz might be paired with previously unpaired spectrum may have material impact on bidder's preferences. Clearly, 5+5 MHz 'matching pairs' will be more highly valued than two unrelated 5 MHz blocks by bidders.

Whilst a secondary market may well permit subsequent spectrum 'swaps' or sales to correct inefficiencies in the primary allocation Nortel believes this should not be a substitute for an efficient primary allocation method. With the present design one bidder has to purchase 10MHz (or more) unpaired with the intention to use one 5MHz to pair an existing holding in another band then either selling an 'unwanted' 5MHz (or more) to a competitor in the secondary market or leaving it fallow.

Therefore, the ideal auction design should not preclude either the unpaired use (for TDD or broadcast) or external pairing (for FDD) as realistic possibilities.

Interference, Spectrum Masks c.f. SUR

Ofcom has assumed 5 MHz allocations and worked interference levels and regulation from this premise. This assumption is likely to be incorrect with most future systems employing 10 MHz or 20 MHz; systems using these higher RF bandwidths are likely to be preferred by bidders. Ofcom should ensure any mandated wanted and unwanted emissions specifications are future proof rather than locked into the 5 MHz regime.

Although Nortel would acknowledge the SUR model has attractions in theory, it appears to be complex and is likely to be difficult, if not impossible, to verify in practice. From a vendor perspective, we would be unable to guarantee SUR without undertaking complex modelling and field verification whereas the tried and tested 'spectrum masks' model is simple and cost effective. Regulators have successfully run technology neutral auctions, including the Radio Agency 3G auction using defined masks. In the US and other regions mixed technology deployments (e.g. a GSM operator adjacent to CDMA operator in the same geographic area) have been achieved successfully without the need for SUR.

Likely Impact of the Auction on the UK Market

We believe that this release of new spectrum is likely to benefit the development of broadband services in the UK. In particular, the release of such a large amount of spectrum represents an excellent opportunity to enable development of emerging business models, such as a wholesale 'wireless broadband' service model. This model should not be restricted by the auction design. Some other factors that may restrict this business model include:

- There being insufficient unpaired spectrum for providing competitive wholesale service because paired spectrum is usually more highly valued than unpaired spectrum by bidders intending to build wide area two-way communications networks;

- Unnecessarily capping the total amount of spectrum available to any individual licensee, thus Nortel supports Ofcom's proposal not to cap spectrum holding;

- Division of the unpaired spectrum between competing licensees leading to much greater total impairment.

Concluding Comments

Nortel supports Ofcom's decision to make the 2.6 GHz and associated bands available in a timely manner as set out in the consultation.

In summary it is Nortel's view that:

- Definitions of interference for regulatory enforcement should be kept simple and future proof.

- Certain detailed aspects of the auction design/ packaging should be examined to ensure the potential restrictions highlighted in this response are minimized.

We believe the above matters are tractable and can be addressed within Ofcom's proposed timeframe.

Respectfully submitted on 8th March 2007,

Thomas Reynaert
Director of European Affairs
EMEA Government Relations & Regulatory Affairs

Nortel Networks N.V./S.A.
Ikaroslaan 14
B-1930 Zaventem (Belgium)
Telephone: +32 2 716 7511
Fascimile: +32 2 716 7626
Email: reynaert@nortel.com