

**Ofcom Consultation  
Award of Available Spectrum 1452-1492 MHz**

**Intellect Response**

**About Intellect**

Intellect is the UK trade association for the IT, telecoms and electronics industries including the fixed, mobile and satellite telecommunications industries. Its members account for over 80 per cent of these markets and include blue-chip multinationals as well as early stage technology companies. These industries together generate around 10 per cent of UK GDP and 15 per cent of UK trade. For more information about Intellect go to:

<http://www.intellectuk.org>.

**Background**

Ofcom has expressed quite clearly, through the issue of a consultation document and also its open workshop held in London on 22<sup>nd</sup> May 2006, its intention to proceed with an auction process to award a number of licences for the uses of parts of the L-band spectrum (1451-1492MHz).

At present Ofcom has not finalized its plans regarding what lots (chunks of spectrum) will be put up for auction and also the details of how the auction will be run. This will be decided after 9<sup>th</sup> June 2006 when the consultation period ends. It is keen to promote effective use of the band through an “independent of technology, independent of use” approach. Ofcom also appears to believe that the current European allocations for this spectrum are somewhat dated: newer standards have appeared in recent years giving rise to new opportunities that clearly offer the public the possibility of a better range of broadcast services. The existing international agreements had envisaged the spectrum being used for Digital Audio Broadcast and, in the lower part of the band, allocations of 1.7 MHz blocks was assumed. Ofcom has indicated that it would like to modify this agreement so that these blocks, which are too narrow for several of the new services / technology so that contiguous blocks may be utilized as wider band blocks. The upper 12.5 MHz was intended for satellite audio broadcast and Ofcom sees little alternative to auctioning this block as a single lot that is open to terrestrial or satellite operators for UK services.

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## Developments

The current international allocations for the band are focused on its use for DAB – whether terrestrial or satellite. In recent years there have been several developments, both technical and business, that have led to interest in a broader range of services than the rather limited audio services (with a bit of broadcast data) of DAB. Audio services are very important – most people listen to radio programmes for at least an hour a day – but there is little need for so much spectrum allocation. It is difficult to foresee at present how the commercial radio business will migrate to the new digital world where the number of channels on offer at a single location is over 100. Can subscription radio take off in the UK? Would advertising fund over 100 channels? It is difficult to see a driving factor towards a willingness to pay subscriptions for radio alone; dominance of content worked for subscription TV but this does not map onto the audio scene.

Multimedia services – a broader mix of video, audio and data services – can be expected to grow. Ofcom appears to support this as it is keen to remove any restrictions to DAB-only services in the band through the use of groups of 1.7MHz slots. This approach is very welcome. The combination of the uncertainty over the feasibility of contiguous spectrum blocks, major concerns about interference to or from neighbouring states creates some uncertainty for those who may enter an auction. On the other hand until the use to which the spectrum is to be put is determined in an auction it may be difficult to conclude international negotiations with the UK's neighbours. The proceeds from the auction may be lower if the international framework is not settled as the full value business value cannot be foreseen at present. There is a possibility that licences will be acquired at modest prices with the aim of future sale when the scene matures.

## The Satellite Scene

The success of XM and Sirius radio in the US has promoted a frenzy of activity around the world with entrepreneurs seeking opportunities elsewhere. In Europe there are a number of companies interested in satellite DAB and also in broader multimedia services. The US business model does not map onto Europe particularly well owing to language differences, terrestrial coverage and the existence, normally, of good quality radio content. It looks probable that at least one company will raise the capital and launch an audio or multimedia service. Such services involve satellites together with terrestrial repeaters for urban coverage. It is a particularly efficient and environmentally friendly approach. The UK auction process introduces a major uncertainty into the market for operators looking to establish a pan-European business. The satellite owner is likely to be the supplier of the delivery system with the different linguistic services being used by different operators. For someone to assess how much he could bid for a UK licence (only) is difficult. What will the other countries do? The international service dimension puts a *would be* satellite operator at a

disadvantage to a terrestrial operator. It makes sense to delay the auction process for the top part of the band (satellite part) for a while so that the business community can see the value. Ultimately it is the number of users (subscribers or absorbers of advertising) that determine the value of the spectrum and that is largely independent of technology apart from its impact on cost. The pros and cons of a satellite component at the full system level have not yet been put forward and an auction of the top part of the band designated for satellite may be premature. It could be argued that the auction process in terms of the satellite part of the band is effectively implementing "Recognised Spectrum Access", an issue that Intellect has raised serious concerns over in the past.

## **Summary**

Intellect supports Ofcom's aim to release spectrum as soon as is practically possible and welcomes this consultation. Intellect supports an award process that maximises the flexibility of spectrum use and is technology neutral. For this reason we support the proposals to offer the lower band in 1.7MHz blocks. Whilst we support release of the lower band without delay, to maximise the efficiency of the auction, negotiations with other countries should be accelerated so as to provide bidders with the best information. We also ask Ofcom to recognise that some services will require multiple contiguous blocks and that the bidding process does not penalise such requirements.

We recommend the release of the upper band in one block, however release of the upper band for Satellite Services without International agreements in place comes with a degree of risk for both the bidder and Ofcom. Without such agreements there is uncertainty as to what is actually being auctioned and this could be reflected in the bidding price. This risk could be mitigated by a modest delay in the release to allow proposals for formation of International Agreements to be effected.

## **Answers to the specific consultation questions:**

### ***1. Do stakeholders agree with these proposals for the award of this band or have any other comments on the contents of this document?***

Most of our comments are covered in the narrative above and the response to the questions below.

In addition Intellect proposes consideration is given to spreading payments in order to maximise the number of bidders who are able to take part and thereby enhancing competition.

### ***2. Do you agree with Ofcom's proposed approach to address the international issues resulting from the Maastricht Plan applicable to the 1452 – 1479.5 MHz frequency band in this spectrum?***

Yes. Intellect supports maintaining flexibility for the use of this spectrum and supports Ofcom's proposal to seek a relaxation of the Maastricht special arrangements.

**3. Do you agree with Ofcom's proposed approach to award of all the spectrum between 1452 and 1492MHz at the same time and as soon as practically possible (i.e. a simultaneous award of the top 12.5MHz and the lower 27.5MHz of this spectrum)?**

Intellect supports Ofcom's aim to release spectrum as soon as is practically possible and Intellect recommend the release of the lower band without delay. Satellite spectrum (the upper band) is however strongly tied up with International agreements. Immediate release will mean that a prospective buyer will be at some risk and it is possible that this could be reflected in the bids. Any initiative to progress International agreements in advance of an auction would be welcomed

**4. What are your views on the preferred packaging option for the lower 27.5 MHz of this spectrum?**

Intellect has a preference for Option A: package in 1.7MHz lots, as it is felt that this is the most flexible and technology neutral option. However it is essential that bidders will be allowed to aggregate adjacent blocks.

**5. Do you agree the upper 12.5 MHz of available spectrum should be awarded as one lot?**

Yes (para 6.44)

**6. Do you agree with the proposals for an industry code of practice on engineering coordination to control adjacent-channel interference?**

Yes, Intellect broadly supports control of adjacent – channel interference through an industry code of practice (para 8.25). There is however some concern that problems might arise where bands are used for very dissimilar services.

We are of the view that that one of the Industry standard approaches, use of EIRP mask, out of band PFD mask, technical co-ordination or technical standards, could be employed depending on circumstances. All approaches have advantages and disadvantages in terms of risk of interference, allowed flexibility of usage, spectral efficiency and administrative burden/cost. No single approach would seem to be ideal in all circumstances hence the recommendation for an industry code of practice.

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