SRSP: A revised framework for Spectrum Pricing

Intellect Response

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Introduction

Intellect is the UK trade association for the technology industry which comprises the information and communications technologies (ICT), electronics manufacturing and design and consumer electronics (CE) sectors, including defence and space-related IT. We are formed by 780 Small to Medium Sized Enterprises (SMEs) and multinational member companies with interests in these sectors and exist solely for their benefit. Over the last 12 months, we have hosted 550 meetings attended by 3,486 people visiting our London offices and hosted 60 events for our member companies. 3,900 delegates have attended conferences we have organised in the past year. The industries that Intellect represents contribute at least 10% of the UK's GDP, employ approximately 5m people and contribute £120 billion to the UK economy. Some of the companies involved in our work in relation to spectrum policy and allocation are shown in Annex One to this response.

Preamble

Intellect welcomes the Strategic Review of Spectrum Pricing that Ofcom has embarked upon, and we are pleased to now respond to this consultation document on *The Revised Framework for Spectrum Pricing*. The consultation paper is comprehensive in its treatment of the issues and broadly speaking Intellect is in agreement with the proposed way forward that Ofcom has laid out in the document as it may apply to a number of technologies. However, Intellect does not believe that some of the principles, as described, are appropriate to be applied to the satellite sector without fully taking into account the particular situation of satellite services that have a unique international dimension. Due to the international regulatory conditions in effect and the extensive cross-border use of satellite systems, AIP and auction methods have the potential to fragment satellite access under the beam, so undermining long term investment plans and harming users who depend on predictable access to global networks. High fees for up-links might also drive services out of the UK. Such approaches can impede development of satellite as a technology and may cause substantial externalities.

As the principles apply to non-satellite sectors, Intellect particularly welcomes the stated intention to take greater account of relevant market indications (e.g. auction results) when setting AIP. In this context, Intellect welcomes the proposal to review the fixed links detailed fees algorithm as a priority and would encourage Ofcom to initiate that review at the earliest opportunity, since we believe that the present fixed link annual fees are higher than appropriate given the fixed link spectrum values indicated by the 2008 fixed links spectrum auction. Intellect would like this review to start (and preferably complete) in 2010/11.

1) Do you agree with our proposed core principles of setting AIP? Are there additional matters that it would be helpful to clarify?

Proposed principle 1: role of AIP
AIP should continue to be used in combination with other spectrum management tools, in both the commercial and the public sectors, with the objective of securing optimal use of the radio spectrum in the long term. AIP's role in securing optimal use is in providing long-term signals of the value of spectrum which can be indicated by its opportunity cost.

Intellect agrees with the Proposed Principle 1 in some cases. The application of AIP should be made on a case-by-case basis, but not applied uniformly across all spectrum bands to all technologies.

Intellect has provided previous input to Ofcom arguing that AIP should be revisited to avoid exorbitantly high cost. Establishing the cost of AIP should take into account physical characteristics.

Proposed principle 2: users can only respond in the long term
The purpose of AIP is to secure the optimal use of spectrum in the long term, so as to allow users to be able to respond to AIP as part of their normal investment cycle. Even where users have constraints imposed on their use of spectrum, in general, some if not all users have some ability to respond to AIP.

If AIP is based on opportunity cost, the larger and most 'liquid' entities are always best placed to respond to AIP. In order for AIP to be part of the normal investment cycle of an operator, it needs to bear relation to what is reasonable to bear in the particular market. Constraints on what is reasonably achievable by way of efficiency improvements need to be taken into account if AIP is to lead to fees that are proportionate to the commercial possibilities.

We also note that equipment lifetime is not the only factor that affects the timeframe over which a spectrum user can respond. In some cases spectrum efficiency and spectrum requirements can be adjusted by altering network topology (e.g. buying additional, rather than new, equipment to enable lower power and smaller cells in a mobile network).

Proposed principle 3: when AIP should be applied
AIP should apply to spectrum that is expected to be in excess demand from existing and/or feasible alternative use, in future, if cost-based fees were applied. In determining *feasible* alternative uses, we will consider the relevant timeframe, any national or international regulatory constraints, the existence of equipment standards, and the availability and cost of equipment.

Intellect agrees with the Proposed Principle 3 in some cases. A more rigorous and transparent methodology should be worked out for determining whether there is excess demand. The availability of alternative bands for the incumbent and the newcomer should equally be part of the impact assessment before concluding that spectrum is or may become congested.

Proposed principle 4: the 'relevant timeframe' for AIP
In general, we seek to assess excess demand, congestion and feasible alternative use over a timeframe that reflects the length of existing users' investment cycles.

Intellect agrees with the Proposed Principle 4, although we believe greater recognition of the difference between investment cycles as they apply to different participants within the overall value chain for spectrum use. The term 'investment cycle' has an entirely different meaning depending on which user is being referred to. Each participant can have vastly different investment timeframes, amounts and drivers. To take a hypothetical example, investment cycles of various factors involved in the provision of terrestrial mobile services are all variable. A producer of infrastructure might have an investment cycle of ten of years, and a handset manufacturer one in the region of a few months. How Ofcom might reflect these different periods in determining demand, congestion and feasible alternative use is a moot point.

These views were reflected in the comments that stakeholders submitted to Ofcom in the series of workshops that were held during the consultation period. We would urge due consideration of them in moving towards a statement on the future of spectrum pricing.

Proposed principle 5: AIP and spectrum trading

Many secondary markets are unlikely to be sufficiently effective to promote the optimal use of the spectrum without the additional signal from AIP. Therefore AIP will likely continue to be needed to play a role complementary to spectrum trading for most licence sectors.

Intellect agrees with the Proposed Principle 5 in some cases.

Proposed principle 6: AIP and wider policy objectives
Socially beneficial uses of spectrum do not, as a general rule, justify AIP fee concessions, because direct subsidies and/or regulatory tools other than AIP are normally more likely to be efficient and effective. For cost-based fees there might be some circumstances in which it could be appropriate to provide a concession.

Intellect agrees with the Proposed Principle 6 in limited cases. While direct subsidies or regulatory tools may be more efficient and effective, they may not be as readily available as concessions on AIP fees. Furthermore, some satellite operators have worldwide public service obligations for which it is unlikely that a subsidy exists or will be created. AIP should not be applied in the latter case.

Proposed principle 7: AIP and the promotion of innovation
It will generally not be appropriate to provide AIP concessions in order to promote innovation. We may consider whether cost-based fees should be set at a lower level in order to promote innovation.

Intellect agrees with the Proposed Principle 7 in certain cases. In particular, we question whether Ofcom is able to demonstrate a specific causal relationship between investment in relation to use of spectrum, and the effect of the use of AIP on the level or frequency of that investment.

Proposed principle 8: use of market valuations
We will take account of observed market valuations from auctions and trading alongside other evidence where available. However, such market valuations will be interpreted with care and not applied mechanically to set AIP fees.

Intellect agrees with the Proposed Principle 8. This appears to be one of the significant areas of change from the past approach and we agree that greater emphasis should be placed on this factor now that relevant data from auctions are becoming available.

If AIP Spectrum costs are substantially out of line with similar auction spectrum costs then the AIP may be either i) acting partly as a “tax” rather than as a tool to promote efficient spectrum use, or (ii) may result in less incentive for more efficient use and/or competitive distortions. If there is a connection between market values and AIP then spectrum users may consider either option as a supply of spectrum and spectrum costs may tend to even out between the two sources of supply.

Proposed principle 9: setting AIP fees to take account of uncertainty
Where there is uncertainty in our valuations and the likelihood of demand for feasible uses appearing we will consider the risks from setting fees too high, or too low, in light of the specific circumstances. When spectrum is tradable we will consider the extent to which trading is expected to promote optimal use, and will also have particular regard to the risk of undermining the development of secondary markets.

Intellect agrees with the Proposed Principle 9.

2) Do you agree that we should charge cost-based fees where AIP is not appropriate or AIP would not cover our costs? How do you think we should set cost-based fees in future fee reviews? Are there particular factors you think we should take into account, for specific licences fees or cost-based fees in general?

Yes, it seems reasonable that Ofcom covers its costs and that those cost are met by parties that stand to benefit from the work that Ofcom undertakes. There is however, a more fundamental question at stake which does not appear to come within the scope of this review. AIP has, since its introduction been seen both as a way of recovered costs of spectrum management *and* as way to influence market behaviour on the part of Ofcom. However, Ofcom does not directly retain the revenue raised by AIP. HM Treasury does. In our view, this implies additional *de facto* purpose of AIP as a revenue raising measure for HM Treasury. The fact that HM Treasury's remit to maximise revenue for the exchequer calls into question the credibility of AIP as purely a regulatory tool designed to cover costs and induce appropriate market behaviour.

It would provide great reassurance to industry if, in cases where AIP revenue is demonstrably greater than provable costs for administering the regulation of that spectrum, Ofcom were required demonstrate to an independent 3rd party that such charges are reasonable and appropriate. There should be clear understanding of what happens to revenue raised over and above that required for cost recovery.

3) Do you agree with our proposed fee-setting methodology principles (set out below? Are there additional matters that it would be helpful to clarify?

Proposed methodology 1: AIP and congestion
In setting AIP fees, we will assess current and future congestion in existing use and demand for feasible alternative uses in the frequency band in question and at different geographic locations over the relevant timeframe, given technological, regulatory and international constraints and using readily available evidence.

Intellect agrees with the proposed methodology 1. As set out in our reply to point 3 (When to apply AIP) above, a more transparent and rigourous methodology needs to be devised to identify where demand exceeds availability. Also the availability of alternative bands and the impact on incumbents, including the international dimension, needs to be assessed.

Proposed methodology 2: reference rates
Reference rates will be based on the estimated value of the spectrum in the current use and any feasible alternative uses. These estimates will be informed, where appropriate, by the available market information (if any), and economic studies of spectrum value.

Intellect agrees with the proposed methodology 2 to the extent that there is transparency in the manner in which economic studies are framed, commissioned, conducted, and obtained.

Proposed methodology 3: calculating individual licence fees
In converting reference rates to fees, we will take account of the value of the amount of spectrum denied to others. This will generally be based on frequency, geographical location, bandwidth, geographical coverage or other measure that reflects the geographical extent of co-ordination requirements and in some cases the exclusivity of an assignment.

Intellect agrees with the proposed methodology 3 in certain cases. In general, Intellect believes, however, that ultimately a reality check needs to take place so that fees are proportionate with, and not excessive compared to, the business and the commercial possibilities in order to improve spectrum efficiency over a reasonable timescale.

Proposed methodology 4: impact assessments
We will undertake Impact Assessments on our fee proposals to identify any potential detrimental impacts to spectrum users, consumers and citizens. We will need to consider carefully the balance of benefits and risks of the implementation of all changes in fees.

Intellect agrees with the proposed methodology 4.

4) Do you agree with our proposal to move away from regular full-scale reviews to reviewing in response to evidence, as set out in Option 5?

Yes, Intellect agrees that Option 5 is the best approach.

5) Do you agree with our process for assessing the priority of future fee reviews? Are there other sources of evidence of misalignment between fees and spectrum value or spectrum management costs that you can think of, and what weight should we give them?

Yes, Intellect agrees with the proposed process for assessing the priority of future fee reviews.

6) Based on our proposed criteria or other criteria you would propose we use, what do you think our priorities for future fee reviews should be? Please tell us your reasons for thinking these should be prioritised. Do you agree that we should prioritise a fixed link fee, as some stakeholders have suggested to us?

Intellect agrees that the fixed links fees algorithm should be reviewed as a matter of priority, and a revised fees structure developed as soon as possible. We would prefer the review to be initiated (and preferably completed) in FY 2010/11, not left as an item to be included and prioritized within in the Ofcom Annual Plan for 2011/12 as indicated on page 6 of the consultation paper.

7) Do you agree with our proposed approach to post-review evaluations?

Yes, Intellect agrees with the proposed approach to post-review evaluations.

_____END OF INTELLECT RESPONSE_____

Annex One

The following member companies are involved in Intellects work in relation to Radio Spectrum:

Airwave Solutions Ltd
Analysys Mason Limited
Arqiva
Astrium Limited
Avanti Communications Limited
BAE Systems
Bird & Bird
Bluenowhere Ltd
BT Group Plc
Cable & Wireless UK
Capgemini UK Plc
Dell Corporation Ltd
Deloitte
Eutelsat
Ericsson Limited
Gemserv Ltd
General Dynamics UK Limited
Hardcat Limited
Hewlett-Packard
Huawei Technologies (UK) Co Ltd
Hughes Network Systems Ltd
IBM United Kingdom Limited
Inmarsat Global Limited
Intel Corporation (UK) Ltd
Logica CMG
Microsoft Ltd.
Motorola Ltd
Mott MacDonald Limited
Nokia (UK) Ltd
Nokia Siemens Networks
Nortel Networks UK Limited
Olswang
Plextek Ltd
QinetiQ Group
QUALCOMM
Research in Motion UK Limited
Samsung Electronics UK Ltd
SES- Astra (GB) Limited
Sapient Ltd
SELEX Communications Limited
SELEX GALILEO
Sony Europe
Thales Plc
UK Broadband Ltd
VEGA
VT Communications Limited