



20 June 2010

## **ESOA Consultation Response to Ofcom's SRSP: The Revised Framework for Spectrum Pricing**

Dear Mrs Esselmont

ESOA thanks Ofcom for the opportunity to provide input into the consultation on 'SRSP: The Revised Framework for Spectrum Pricing'. We welcome the public debate on spectrum fee policy and appreciate the effort that has been taken to describe the proposed principles and methodologies of the fee regime.

We take note of the scope of this consultation, which is to address general principles and methodological considerations, and does not address any sector in detail. However, we believe Ofcom would find it beneficial in developing principles to receive input on the proposed framework from the perspective of a sector with significant existing UK interests.

ESOA members have engaged in an extensive effort to describe the spectrum management principles required to maintain and foster the growth of the European commercial satellite sector – including principles that apply to spectrum charging methods. The principles are annexed and should be regarded as integral to this response. These principles describe the conditions for optimal spectrum use by the European satellite community.

In addition, ESOA believes that any policy discussion on the economics of spectrum charging should recognise that the long term investment cycles of the European satellite community has largely protected operators with in-orbit assets from the difficulties faced by other industries caused by the financial crisis.

In summary, we welcome the transparency brought to the process by this consultation; however, we have serious concerns regarding the concept and implementation of Administered Incentive Pricing (AIP) in general and in particular to the applicability of several of the principles described in the document. We also question and oppose the use of AIP in the satellite sector as an effective and efficient tool to incentivise the 'optimal' use of spectrum<sup>1</sup>. In contrast to Ofcom's expressed intent, the specifics of the commercial satellite sector indicate that AIP would be counter productive and would not promote optimal spectrum use.

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<sup>1</sup> Ofcom's statutory duty to promote the optimal use of spectrum is provided for under 3(2)(a) of the Communications Act 2003.

Specifically we wish to highlight that:

- **Strong market forces already stimulate efficient spectrum use by the satellite sector.**  
Satellite operators undertake significant investment to manufacture, launch, insure, and market satellites. Due to the long useful life of satellites (approximately 10 - 15 years), coupled with high and increasing demand for satellite bands (L, S, C, Ku, Ka), market-based drivers provide significant incentives for satellite operators to maximise the efficient use of spectrum. Strong, motivating market forces and the goal to maximise the commercial usefulness and life of each spacecraft assures that satellite operators make every effort to use spectrum as efficiently as possible.

The uncertainty caused by the potential implementation of AIP on the spectrum used by the commercial satellite sector would have a chilling effect on provision of satellite services and satellite investment in the UK specifically and Europe generally. In fact, AIP could not only raise competition concerns (for instance by distorting the competitive landscape of providing broadband and broadcast services via wireline and wireless means, including, but not limited to, satellite, in favour of wireline solutions) but could also force certain operators to cease provision of certain important services in the UK and even to withdraw from the UK market entirely. In certain situations, it could also lead to higher prices for end users in the UK (and therefore less attractive services) as affected satellite operators would have to pass these extra costs onto their UK customer base. We therefore believe that AIP would act as a disincentive to optimal spectrum use over the long and short term and hence oppose its application to the spectrum used by the satellite sector.

***Conclusion 1: AIP is neither an appropriate tool nor is it necessary to stimulate efficient spectrum use by the satellite sector and should therefore not be applied to spectrum which is or can be used for satellite services***

- **The inherently international nature of satellites and ITU allocations severely limit the feasible alternative uses of spectrum and hence preclude AIP applicability.**  
Satellites are typically designed to cover broad regions and not solely a single national territory. The satellites that serve the UK market almost exclusively are regional in nature. The investments in these satellites and the commercial plans associated with them are based on the ability to provide broad-based regional service and not service to a single national market alone.

Satellites rely on international spectrum harmonisation. It is therefore appropriate that Spectrum is made available for satellite use pursuant to ITU allocations, which are made on a regional or global basis rather than on a national basis. The ITU international coordination process ensures that the frequencies used by a satellite operator are available to the system without national fragmentation within the beam and without interference. Although some improvement may be brought to harmonisation policies and measures, a radical and quick overhaul as Ofcom seems to suggest in Section 2.18, would cause severe damage to the UK satellite industry in the widest sense (end-users, vendors, businesses).

We reject the assertion made in Sections 3.47 and 3.53 that international obligations should only be interpreted as leading to exclusions or constraints, even if such argument were perhaps justifiable in certain specific cases. From a commercial perspective, satellite operators invest in satellite assets for use on a regional and global basis based on ITU allocations that enable the delivery of valuable services which, often, would not be available otherwise. International spectrum availability is an essential element of the satellite value

proposition without which the full value and public benefit of commercial satellite services cannot be fully realised. Conversely, international harmonisation precisely brings the opportunity to provide such services, to the benefit of citizens, businesses and other customers in the UK.

Ignoring the commercial realities and implications of a narrow interpretation of the UK's international spectrum allocation obligations, will be damaging to those UK customers and end users that rely on satellite services in their daily lives. This would be the case should satellite operators cease providing certain services in the UK market because they are no longer commercially feasible as a result of the implementation of AIP.

In addition, should AIP be implemented for the use of satellite spectrum, the satellite industry would be extremely concerned about other administrations following Ofcom's lead. Should other administrations implement similar approaches to AIP, a small patchwork of countries where satellite services are commercially feasible may remain. In the end, the result would be entirely counter to the intended goal of maximising spectrum efficiency and to protecting the public interest.

***Conclusion 2: International and regulatory concerns preclude the use of AIP for satellites.***

- **Public benefits provided by satellite would be harmed by AIP.**  
Satellite users such as those that utilise satellites (i.e., virtually all consumers and businesses in the UK) whether for public safety, health, education, commerce, government applications, national security, multi-channel television and radio, news gathering and live broadcast events, broadband, and more, are particularly vulnerable to any discontinuity in the availability of service. For example, evidence was provided to Ofcom by multiple respondents to a consultation on the application of AIP to aeronautical use that the levy of AIP will reduce the uptake of safety services, leading to a reduced safety of life. Similarly, levying additional costs on broadcast network providers acts as a disincentive for the provision of television programming that is beneficial and often essential to the circulation of critical information to all UK citizens as well as foreign communities within the UK. It is important to note that satellite is often the only communications platform able to reach isolated or underserved areas as well as ships at sea and aircraft. As such, it plays a vital role in ensuring social, economic and national cohesion in addition to public security.

We therefore reject the simplistic assertion of Principle 6, that spectrum fee policy can be divorced from other public policy objectives. In fact, there is substantial evidence to indicate the contrary. Principle 6 appears to contradict the requirement expressed in 2.29 that: *'spectrum is allocated and assigned to those uses and users that will provide the greatest benefits to society as a whole;'*. Ofcom should consider the impact of any implementation of AIP on the ability of the satellite sector to deliver critical services which result in important benefits to society.

***Conclusion 3: Ofcom should not disconnect AIP implementation from the public and consumer benefits to the UK society and from the public policy/public safety considerations defined by the UK Government.***

- **Any administrative fees should be proportionate and reflect the costs incurred in the management of the spectrum.**

We take account of Ofcom's intent not to substantially review other fee methods. We also welcome statements made to industry fora concerning Ofcom's intent to ensure that the cost

of administration is kept under review. It is important that administrative cost recovery fees are proportionate and relate directly to the spectrum management costs.

In direct response to Ofcom's consultation question, the satellite industry has the following comments<sup>2</sup>:

### **General principles**

***Question 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.*

We disagree with Principle 1 as we believe, for the reasons set out above, that AIP is neither an appropriate tool, nor is it necessary to stimulate efficient spectrum use by the satellite sector. Furthermore, we firmly believe that a tool like AIP, even if deemed attractive from a theoretical perspective, can never achieve its intended goals in practical situations and is therefore more likely than not to have significantly negative consequences on the satellite sector. For instance, a key element of the AIP calculation is the definition, and subsequent determination, of the opportunity cost. This is a largely theoretical exercise which must take full account of technical considerations, the broad competitive landscape, public and consumer benefits, as well as the public good attached to spectrum for cross-border services such as satellite. We have a serious concern that AIP, as described in the consultation document, does not give sufficient weight to these considerations. We are further concerned that, if implemented, AIP may ultimately have a damaging effect on the continued ability of the satellite sector to satisfy UK societal needs and provide important public benefits.

#### ***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.*

We welcome the concept of regulatory certainty over the long term. Regulatory certainty is a core requirement for the satellite sector. The useful life of a satellite is typically 10 years (Non-GSO) to 15 years (GSO FSS). The lead-time for investment, design construction, and launch of a satellite is 3-4 years. As a result, the satellite business requires long-term certainty related to satellite assets investments. A damaging AIP could force some operators to cease provision of certain important services in the UK and even to withdraw from the UK market entirely. As noted above, we believe that AIP would act as a disincentive to optimal spectrum use over the long and short term.

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<sup>2</sup> ESOA's comments are limited in scope to the European commercial satellite operator sector only. We do not express a view on the fee regime as it may apply to other sectors.

***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.*

As noted above, we believe that the applicability and effectiveness of AIP is highly questionable, especially for the satellite sector, and that therefore such a mechanism should not be applied to the spectrum used for satellite services. It is important that Ofcom not be judge and jury of future commercial and public services and applications. It is the market that should decide such matters. The inherent business uncertainty and distortion of the competitive landscape brought by AIP may have a chilling effect on important new investment and innovation as well as on established services in the satellite sector. In addition, given the uniquely international nature of satellites, the application of AIP in the UK national market could disrupt the overall ability of satellite operators to deliver important services to the public.

As previously mentioned, spectrum is available for satellite use pursuant to ITU allocations. Such allocations are made on a regional or global basis rather than on a national basis. International obligations should not be interpreted narrowly. From a commercial perspective, satellite operators invest in satellite assets for use on a regional and global basis based on ITU allocations. International spectrum availability is an essential element without which the value and public benefit of commercial satellite services can not be fully realised. A narrow interpretation of the UK's international spectrum allocation obligations could be damaging to those UK customers and end users that rely on and benefit from satellite services in their daily lives should satellite operators cease providing certain services because they are no longer commercially feasible as a result of the implementation of AIP.

***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.*

We agree that investment cycles must be considered in any analysis, which, in the case of the satellite sector would equate to a timeframe of at least 15 – 20 years. In addition, Ofcom should consider unique qualities associated with the satellite sector such as those identified above.

***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.*

No comment

**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.*

As was set out before, the satellite industry believes AIP is not appropriate for spectrum available or used for satellite services.

We equally believe that policy goals should be facilitated, and not frustrated, by relevant spectrum policies and by appropriate fees. It is far from certain that direct subsidies will be put in place, certainly not in the current climate, but perhaps not even in the future, to allow operators to afford high spectrum prices in order to obtain resources from Ofcom. Therefore, fees, if any, should be fixed from the outset by Ofcom at a level that will enable rather than preclude socially beneficial services.

**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.*

ESOA believes that AIP will stifle rather than encourage innovation, and that indeed there is no evidence that AIP has led to any substantial innovation beyond the level of innovation that would have taken place without AIP. We further believe that AIP is fundamentally the incorrect approach for the satellite sector. We remind Ofcom that the satellite sector in the UK is already a highly innovative sector, as witnessed by the constant innovation not only by large UK based companies, but also by a wide variety of smaller and medium sized enterprises. Finally, we wish to remind Ofcom of the UK Government's intention to significantly strengthen the UK satellite sector in the years to come. It would be rather regrettable if such government initiatives were frustrated by counter-productive AIP or other spectrum fee mechanisms.

**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.*

No comment.

**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.*

No comment.

## **Fee-setting methodology**

**Question 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?*

We agree that licence exemption or cost-based fees should be used where AIP is inappropriate, which we believe is the case for spectrum available for or used for satellite services. Cost based fees should take account of the administrative costs incurred in regulating the satellite licence type. We find it fundamentally inappropriate to consider AIP as a means for OFCOM to, partially or wholly, recover its (administrative) costs. In addition, it may be appropriate to consider, through an impact assessment, its effect on the operator.

**Question 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.*

We understand the rationale as set out by OFCOM above. However, we do not believe that AIP in general and these conditions in particular, can be applied to the satellite sector without substantially impacting the sector in a negative way.

### **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.*

As above, it is not clear how these conditions can be meaningfully applied to the satellite sector. In particular the notion of “feasible alternative uses” is wholly inappropriate for the spectrum used or available for satellite services (even more so when taking into account the 15 – 20 year investment horizons).

**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.*

As above, it is not clear how these conditions can be meaningfully applied to the satellite sector. For instance, taking “account of the value of the amount of spectrum denied to others” would appear to require “feasible alternative uses” available beyond the “relevant timeframe” (as no earlier use would be possible for such “others” anyway). And as argued above, such relevant timeframe would equate to at least 15 – 20 years in the case of satellite services, which would make any such conversion of reference rates to fees rather theoretical, with no practical use or positive impact.

**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.*

In general, we agree that detailed and diligent impact assessments, taking all possible effects into account, are critical. With respect to the fee proposals, we reiterate that we do not believe that a mechanism like AIP is to be applied to the services that are, or can be, provided by the satellite sector.

**Plans and priorities for spectrum fee reviews**

**Question 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, ESOA agrees with this proposal. Long-term regulatory certainty is essential to the continued provision of important services in the UK by the satellite sector.

**Question 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?*

Externalities caused by the effect of fees on other public policy objectives (e.g., safety of life), informing the public, cultural diversity, broadband-for-all must be carefully considered, for instance through a detailed and diligent impact assessment.



**Question 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?

We believe that Ofcom's priority should be to ensure long term stability and predictability of the access to and use of spectrum in the UK, including the establishment of an approach to spectrum fees that does not jeopardise the ability of the satellite sector to continue to innovate and to provide entertainment, information and communications services of substantial benefit to society.

**Question 7:** Do you agree with our proposed approach to post-review evaluations?

We agree that post-review evaluations are useful.

Aarti Holla-Maini  
Secretary General

David Hartshorn  
Secretary General

Kumar Singarajah  
Chairman

European Satellite Operators  
Association

Global VSAT Forum

Satellite Action Plan Regulatory  
Group

aholla@esoa.net

david.hartshorn@gvf.org

kumar.singarajah@btinternet.com

