

**Question 1: How should Ofcom manage the process of taking advice from users, regulators and government on efficient apportionment of AIP fees in the maritime and aeronautical sectors? Are any new institutional arrangements needed?:**

We note that the aviation organisations mentioned in the consultation document are all large public sector bodies. The majority of pilots in the UK are private not professional (57% of pilots licences held in 2005 and 53% of new issues 2006-07, source CAA website). The nature of private aviation and hence its use of radio spectrum is markedly different from commercial aviation but this aspect does not appear to have been addressed so far. We recommend that representatives of the private aviation community are included in these discussions.

**Question 2: If you consider that our proposals for pricing ground station users for any spectrum would be likely to have a detrimental impact on safety, please let us know. In order for us to understand your assessment fully, it would be helpful if you could outline the mechanisms whereby this might happen.?:**

We are concerned that safety matters are not being considered seriously enough in this process. In particular we believe it is wholly inappropriate for air safety to be treated merely as one more parameter in an economic equation. This contradicts the Indepen/Aegis report which states 'AIP should not have an impact on aviation safety, rather safety constraints will be binding and any impacts in terms of reduced spectrum use will be economic (i.e. reduced traffic levels)?

The cost of AIP will be felt most keenly by those ground stations with the lowest turnover, even though they will also have the lowest spectrum usage to start with. It is difficult to imagine that Heathrow for example will introduce strategic changes to their operations in order to save a few thousand pounds on radio licences. However for a small private airfield these sums could be highly significant. These same airfields are in some cases not legally obliged to maintain radio operations but do so out of good practice. The introduction of AIP will therefore create not only a desirable financial incentive in regard to spectrum efficiency but an undesirable incentive in regard to air safety.

Returning to the principle stated in the Indepen/Aegis report, the requirement to maintain safety regardless of economic efficiency can be satisfied by licensing to each airfield one radio channel for air traffic control purposes on the current basis (this excludes the general emergency channels for distress and fire at 121.5 and 121.6MHz). Any additional channels required due to traffic demand could reasonably be considered as candidates for AIP.

**Question 3: Do you have any evidence which indicates that AIP charged to ground stations could have a material detrimental impact on UK competitiveness?:**

Aviation in the UK is already more expensive than in many other nations. An assessment of this can be made from advertisements for flying training that can be seen in most aviation magazines. For the same qualification, flying schools in the

USA typically charge around 25% less than flying schools in the UK. As Ofcom's proposals relate only to the UK, this situation can only be exacerbated.

**Question 4: Taking into account the information available in this document, including that set out in Annex 5, our initial views on VHF radiocommunications licence fees and on the reference rates for bands in other uses, and any information you have about the organisations to whom we are proposing to charge fees, please provide any evidence that you think is relevant to us in considering the financial impact of the fees we intend to propose for VHF radiocommunications, or for other uses:**

We note the proposed charge for a VHF simplex channel is £4950 with the comment that a 50% discount can be applied if the channel is shared. The fixed 50% discount appears inconsistent with the attempt to charge a fixed sum per MHz of national spectrum. A more logical approach would be to charge 33% per licence where the channel has 3 licensees, 25% each for 4 licensees etc. It is conceivable that across the UK as a whole, smaller airfields with range limited by their equipment and the altitude of the aircraft involved may re-use the channel more than twice. However if the discount is fixed at 50% this removes the incentive for improving geographic re-use.

Regarding the overall charging level, in our response to Q.2 we explain that the proposed charges are likely to be onerous for smaller operators whilst not materially affecting larger operators.

**Question 5: Do you agree that there is little to be gained, in terms of economic efficiency, from charging AIP to WT Act licences for aircraft:**

We agree with this for two reasons. Firstly aircraft do not have spectrum allocations, they tune to the frequency of the ground station relevant to that part of the flight. It is difficult to see an incentive to reduce spectrum allocation working when applied to a user who does not have spectrum allocation to begin with. It is also difficult to see how this applies to receivers of broadcast services such as ATIS and most navigation aids.

Secondly this would increase the tendency to register UK-based aircraft under 'flags of convenience' as already happens to reduce costs in other areas. This would not improve spectrum efficiency as Ofcom's charges would not apply to these aircraft.

**Question 6: Do you consider that we should discount fees for any particular user or type of user? Specifically, do you consider that there should be a discount for charities whose object is the safety of human life in an emergency:**

No comment

**Question 7: Do you agree that Ofcom should apply AIP to ground stations? use of maritime and aeronautical VHF radiocommunications channels, to help manage growing congestion in current use and to**

**ensure that the cost of denying access to this spectrum by potential alternative applications is faced by current users?:**

We are concerned that applying AIP without limitation to the civil aeronautical bands may compromise safety as explained in our response to Q.2.

In addition it is difficult to see the incentive working on this band as it is of necessity subject to worldwide agreement. Changing the frequency allocation would require not only that all ground stations and UK registered aircraft have their radio equipment changed, but that all aircraft visiting or even transiting through UK airspace are also subject to the same change. Further, any aircraft operating in both UK and foreign airspace would need to comply with both sets of frequency allocations. The costs and logistical difficulties of such a change would be massive.

By contrast but for related reasons the opportunity cost of not releasing civil aeronautical spectrum is minimal. We are not aware of any neighbouring country with similar plans. An aircraft at an altitude of 39,000 feet will have a line-of-sight range of 240 nautical miles. Most of the UK land mass is within this range of foreign airspace. Therefore any non-aviation user of this band will have to co-ordinate their specific frequencies, powers etc. with the relevant foreign aviation authority/ies and the result of such co-ordination is likely to be restrictive. The opportunities for alternate uses of this band within the UK that do not compromise the safety of aircraft in neighbouring airspace are therefore minimal.

**Question 8: Do you agree with our initial view that it would be appropriate to apply a pricing system similar to that already existing for Business Radio licences to maritime and aeronautical VHF communications? If not, what are your reasons for proposing that we should develop a fee structure for maritime and aeronautical VHF channels which is distinct from that already established for Business Radio?:**

The principle of a national allocation (to the CAA as band manager) rather than the 'population centres' concept in the Business Radio licences is sensible. Most airfields and navigation aids are outside population centres in any case, and the long line-of-sight range referred to in our response to Q.7 means that an individual ground station's coverage area may include all three categories of density.

The concentration of demand by band (section 3.7, Modifications to Spectrum Pricing, Ofcom 10/1/07) is not appropriate to aviation usage. This is because all aircraft need to be able to communicate with all ground stations. Thus there is one large amorphous user group that must use the same frequency allocation. Contrast this with the very large number of Business Radio licensees who are organised as many small groups with no requirement to communicate between those user groups. Consequently variable pricing may work for Business Radio, where distinct user groups can migrate to alternate bands and even out the demand. However for aviation use the entire user group will have to migrate, thereby just moving the congestion rather than resolving it.

**Question 9: Are there any short term reasons specific to the sector(s) why it would be inappropriate to apply fees from April 2009?:**

There are three reasons why introduction in 2009 would be premature. Firstly, the well-publicised economic conditions make investment, for example in new or modified radio equipment, more difficult than usual at present. Forecasts have indicated this is likely to remain the case until at least 2010.

Secondly, whilst we note your comment that AIP has been discussed as a principle for some years, there have been no specific rules laid down for civil aeronautical spectrum in this respect and so investment thus far has not been possible. Any substantial increase in licence prices should be announced first and then implementation delayed until the licensees have had sufficient time to respond, if their chosen course of action is to change their spectrum usage according to the incentive. Finally, there is an aviation-specific reason for a delay in introducing AIP. The CAA has mandated that Mode S transponders be fitted to most types of aircraft before April 2012. This requires a significant investment in radio equipment, but it is a short term effect whilst the UK fleet is being equipped. Adding AIP costs, including indirectly, at the same time would impose excessive costs over a short period.

**Question 10: Ofcom would welcome stakeholders' views on the factors which should be taken into account when apportioning fees between individual users of radars and racons:**

As per Q.5 it is inappropriate to levy charges directly on aircraft. Instead the service charge levied by the navigation aid operator should reflect the AIP cost as it reflects other costs at present. These service charges are for example airways fees, instrument approach fees and landing fees.

**Question 11: Do you agree with our initial view that a reference rate of £126k per 1 MHz of national spectrum for L band and S band radar spectrum would achieve an appropriate balance between providing incentives to ensure efficient use of spectrum while guarding against the risks of regulatory failure in setting the reference rate too high? If you consider a different rate would be more appropriate, please provide any evidence that you think we should take into account.:**

No comment

**Question 12: Do you agree with our initial view that a reference rate of £25k per single MHz of national spectrum would be appropriate for deriving fees for licences to use X band radar?:**

No comment

**Question 13: Do you agree that, generally, spectrum used by aeronautical radionavigation aids is currently uncongested? Do you believe that this may change during the next few years and, if so, approximately when?:**

The CAA has recently trialled the use of GPS as an alternative to ILS. We do not anticipate an immediate mass switchover although it is likely that in the long term

GPS will become more popular for instrument approaches. Adding AIP costs onto ILS fees is likely to hasten this migration

**Question 14: Do you agree with the basis on which Ofcom has arrived at its initial view on reference rates for aeronautical radionavigation aids?:**

No comment

**Comments:**

Mid-Anglia School of Flying is a registered flight training facility and has been based at Cambridge Airport since 1996. We operate a fleet of 5 light aircraft and currently have 49 students and 73 qualified pilots.

Our interest in this consultation arises from our regular use of the communication and navigation facilities referred to.