Cover sheet for response to an Ofcom consultation. BASIC DETAILS				
Consultation title: Applying spectrum pricing to the Aeronautical sector: A second consultation.				
CONFIDENTIALITY				
Please tick below what part of your reasons why	response you consider is confidential, giving your $\sqrt{}$			
Nothing	Name/contact details/job title			
Whole response	Organisation			
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Introductory Remarks

The flaws in Ofcom's thinking become evident as soon as the summary section of the main document is read.

- The spectrum used for aeronautical VHF communications is set by international agreement so AIP will do nothing to change the amount of spectrum used for this purpose. It will be no more and no less than an additional tax on aviation.
- The argument that by charging higher AIP in the densely populated South East and less in unpopulated areas the demand will increase in rural Scotland and decrease in the South East is illogical. Taxing the part of the UK with the highest cost of living even more for aeronautical radio stations will not have any effect on population distribution whatsoever and for that reason the demand will continue to remain high in the areas shown as such on the maps in the consultation. AIP charges will not, and cannot have, the effect of changing the distribution of demand.
- The argument that by charging lower AIP for 8.33 kHz channels their use will be promoted is a fiction. The agreement to limit their use to services to aircraft above Flight Level 195 is internationally agreed to avoid the need for all aircraft worldwide to have their radios replaced. In absolute numbers a small minority of civil aircraft fly at, or above FL195 probably less than 1,000 of the 21,000 aircraft on the UK register. The cost of upgrading the whole fleet is likely to be of the order of £128 million pounds (see detailed response for assumptions). Apart from a small number of sectors operated by NATS (National Air Traffic Services) to high altitude aircraft no ground stations are in a position to elect to provide air traffic services to aircraft below FL195 unless all aircraft replace their radios. AIP is not an appropriate tool to apply pressure to increase the use of 8.33 kHz channel spacing, hence one again it is simply a tax that will not change the way spectrum is used. The cost of reequipping aircraft with new radios will result in an increase in the number of aircraft flying without radios and hence a decrease in safety.
- The argument that where there is excess demand (no quantitative evidence was provided by Ofcom that that is true) the price of spectrum does not currently reflect its value to society in that some users willing to pay more are being denied access by users paying less that the true value is invalid where the purpose of the use of radio is to promote safety rather than profit. If some users are priced out of providing aeronautical radio services (the purpose of AIP where there is claimed to be excess demand) then the obvious result will be that flying will continue but non-radio. This will reduce safety and increase the number of accidents. Where is the value to society of having an increased number of mid-air collisions? What is the cost to society of one passenger jet crashing versus the benefit of the increased revenue to the government of AIP? Ofcom's impact analysis is silent on this matter.
- The statement that Ofcom is proposing to charge AIP to the aeronautical sector on a similar basis to that used for the marine and business sectors is misleading. Business mobile transceivers and ships VHF radios (when applied for via the web) do not have to pay a licence fee. All aircraft radio stations have to pay a licence fee of up to £350 per aircraft bringing in an estimated £1.4 million a year that is not collected from business and ships. If, as seems likely, Ofcom persists in charging AIP fees to the aeronautical sector it should remove the charge for all aircraft radio stations at the same time.

Impact Assessment

On the 5th of May 2009 (Daily Hansard – Written Answers) the Secretary of State for Transport, Jim Fitzpatrick MP, answered a question about AIP as follows:

"Ofcom, the independent regulator for the UK communications industries, published proposals for administered incentive pricing (AIP) in its 2008 consultation 'Applying spectrum pricing to the Maritime and Aeronautical sectors'. Ofcom did not publish an Impact Assessment with this consultation, but indicated that it would do so with its second consultation on AIP. Publication of this second consultation, which will feature more detailed proposals for the implementation of AIP in the maritime and aeronautical sectors, is anticipated in spring 2009.

We expect Ofcom's Impact Assessment to identify fully the potential effects of AIP on the maritime and aeronautical sectors."

This has not been done. The limited impact assessment in Annex 8 of this second consultation restricts itself only to the financial impacts and makes no attempt to consider the impacts on safety. The provided impact does not "identify fully the potential effects of AIP on the ... aeronautical sectors".

Since the primary purpose of aeronautical radio is safety, and that its usage for primarily safety related messages is laid down by statute (Air navigation Order) it is grossly negligent to ignore the possible safety related impacts of AIP.

Fees

A small number of frequencies are reserved for sporting use and are listed in 'Statutory Instrument 2003 No. 1902' as shown below:

Aeronautical Ground Station (General Aviation)

- 129.900 MHz, 130.100 MHz, 130.125 MHz, 130.400 MHz (Glider Ground Station (Standard))
- 129.975 (Glider Ground Station (Common Field Frequency))
- 122.475 MHz (Balloon Ground Station)
- 130.525 MHz, 129.900 MHz (Parachute Ground Station)
- 129.825 MHz (Microlight Ground Station)
- 118.675 MHz (Hang Gliders/Paragliders)

Currently when a licence for one of these frequencies is applied for it permits use of all frequencies from the above list that are appropriate to the sporting activity being undertaken for a single licence fee.

Ofcom's proposals make a big change in that it proposes to charge £75 per frequency (Table 3 page 12). The effect of Ofcom's proposals is that sporting clubs will typically have to pay significantly more than the £75 implied – for most gliding sites this will rise to at least £375. Please permit sporting users to use all relevant frequencies from the above list for a single licence fee of no more than £75.

Question 1:

Do you consider that our proposed fee rates for licences in the aeronautical VHF frequencies are appropriate?

Do, I do not.

The various consultation documents and associated consultants reports make frequent comparisons with 'business' and 'maritime' radio usage and suggest that usage of the aviation VHF band is comparable and should be charged AIP on the same basis.

This is not a fair and reasonable comparison for the following reasons:

- 1. Mobile Licences are free to businesses and to ships mobile stations but not to aircraft.
 - Business radio users pay licence fees only for the base stations. Not for mobile transceivers.
 - Ofcom's Marine radio proposals are to charge for shore stations but not for ships radio licences if the licence application is made on the web-based application (otherwise £20).
 - Ofcom proposes to increase the licence fees of ground stations in the aeronautical service to include AIP but is not proposing to discontinue the fees charged for mobile (aircraft) licences. At present there are approximately 21,000 aircraft on the UK register. The aircraft radio station licence cost up to £350 per aircraft. (See http://www.caa.co.uk/docs/33/DAP1902enabled.pdf.)

It is unfair, unreasonable, discriminatory and disproportionate to charge AIP to ground stations and licence fees to aircraft when business and marine radio users are treated differently.

I don't know the exact breakdown of aircraft licences by price but a reasonable assumption for the UK fleet might be:

Weight Category	Number	Licence fee £	Total £
	1,000	Unlicenced (no radio fitted)	0
14,000 +	1,000	350	350,000
3201-13,999	5,000	150	750,000
<=3,200	12,000	20	240,000
Transportable	2,000	15	30,000
		Totals	1,370,000

(Exact analysis is difficult because published CAA data about aircraft on the UK register uses different weight bands. If anything the estimates above are on bthe low side.)

Ofcom has very conveniently forgotten to mention this very significant revenue stream from aviation in deciding to charge AIP to the aviation sector – a revenue stream not available from the business and marine sectors it likes to use as a comparison.

2. Lower charges for 8.3 kHz channel spacing (versus 25 kHz).

The proposal to charge less for narrower channels to encourage better spectrum usage is unjust because, in practice, neither individual licensees, nor the UK CAA, have the power to allocate narrower channels to most stations. By international agreement the narrower channels are currently used only for services to aircraft flying above Flight Level 195 (about 19,500'). For a single station in the UK to adopt an 8.3 kHz wide channel it would be necessary to require all aircraft not so equipped (probably in Europe as well as the UK) to replace their existing radio equipment with new radios.

Now of the 21,000 registered aircraft in the UK probably about 1,000 are already equipped with suitable 8.3 kHz radios. For the others to re-equip would cost a very significant amount of money. Recent estimates from a leading supplier of radios to General Aviation (GA) are that 8.3 kHz capable radios are approximately twice the price of 25 kHz equivalents. For a simple single radio, including £200 for fitting and VAT at 17.5% the cost will be about £1.800 per aircraft, glider or balloon. For the more commonly used Nav/Com sets, which include a VOR receiver within the radio transceiver, the comparative cost is £5,950. However, a single radio or Nav/Com is not permitted for many flight regimes - the Air Navigation Order requires duplicate equipment for safety. Thus the cost per aircraft for a large proportion of the 20,000 or so aircraft in the UK fleet that does not yet have an 8.3 kHz capability the retrofitting cost will be in the order of twice that figure – i.e. about £12,000 per aircraft. Furthermore the many handheld radios used as backup radios would become obsolete at the same time. Currently there does not seem to be a suitable 8.3 kHz handheld radio available in the UK, but if one assumes a price 50% above today's cheaper handhelds at about £250 then we are looking at £375 or so plus VAT – i.e. about £440 per handheld. If I assume 1,000 aircraft are non-radio and 1,000 are already 8.3 kHz capable then that leaves 19,000 aircraft to be upgraded. If I then assume that of those needing upgrades that one third install simple radios, one third, install a single Nav/Com and the remaining third dual Nav/Com then we can get an idea of the costs. I also assume that about one third of the fleet to be upgraded have a handheld radio associated with them.

Items & quantities	Unit Cost £	Total cost £
6333 simple radios	1,800	11,399,400
6333 Nav/Com	5,950	37,681,350
6333 Dual Nav.Com	12,000	75,996,000
6333 Handheld radios	440	2,786,520
Total		127,863,270

Nowhere in the consultation does Ofcom consider the huge potential financial impact of its glib suggestions that a lower charge for 8.3 kHz channel spacing will have the effect of encouraging more efficient use of spectrum. Its feeble impact assessment has totally failed to assess the impact of its proposals.

Question 2:

In devising our revised proposals, have we identified all of the aeronautical uses of VHF communications frequencies which require a distinct approach to fee setting, as set out in tables 5 and 6?

No.

You have omitted SafetyCom. 135.475. See http://www.nats-uk.ead-it.com/aip/current/aic/EG_Circ_2004_Y_103_en.pdf

Question 3:

Do you agree with our proposal not to charge any fees for Fire assignments?

I disagree.

All civil communications made on channels assigned to aviation are generally restricted by UK law (Air Navigation Order) to matters that are safety related (distress, urgency and safety messages and signals, in accordance with general international aeronautical practice and messages and signals relating to the flight of the aircraft, in accordance with general international aeronautical practice). The exact phraseology to be used is laid down by international agreements and documented in CAA publication CAP 417. The primary purpose of these communications is to attempt to eliminate accidents. Not charging fees to fire services that are there to pick up the pieces after an accident has occurred is irrational when it is proposed to charge providers of air traffic services who are there to ensure safe air navigation and prevent accidents.

No charges should be made for use of the air band.

Question 4:

Do you agree with our proposal to set a £75 fee for licences in any of the sporting frequencies?

No.

This fee does not take account of the act that all sporting aircraft using these frequencies are required to have aircraft radio licences costing usually £20. The equivalent ships licences for sporting boats are free if applied for via the web. I would agree if the requirement for individual sporting aircraft to be licensed were removed.

Note: Your document is inconsistent in that in some places it proposes charging one fee for use of the complete block of frequencies. (E.g. 7.16 on page 74). Elsewhere it proposes charging £75 per sporting frequency (Table 3 in paragraph 2.8 on page 12.) If the information on page 12 is correct then the fee of £375 for a glider ground station using all five glider frequencies is totally unreasonable.

Mobile Glider and Balloon Ground Stations

This is a special class of licence that seems to have been forgotten. For many years mobile stations in, for example, vehicles have been licensed to allow balloon and glider ground crews following their balloon or glider to communicate with their airborne companions to know where they need to go to perform retrieves. Currently these stations pay £25 per annum. Increasing this to £75 or £375+ (depending on whether the charge is per frequency or per block as mentioned above) is entirely unreasonable for this usage. The transmitter power is >5 W and the antennae are such that range is limited. The fee should remain as it is at £25. These mobile stations are NOT equivalent to airfield base stations.

These mobile stations should be treated as equivalent to mobile business stations, ships or aircraft when setting the licence fee.

Question 5:

Do you agree with our proposal to set an annual fee of £19,800 per ACARS or VDL assignment, with no variation related to the number of transmitters?

No opinion.

Question 6:

Do you consider that our proposed approach to phasing in fees for use of the aeronautical VHF communications channels are appropriate? If there are particular reasons why you consider that any user or group of users would need longer phasing-in periods, please provide any supporting evidence for us to consider. Specifically, do you have any evidence for us to consider that would support either of Options 1 and 2 for the highest proposed fee in this sector?

No. The proposal to phase in increases is simply recognition that they are excessive. The AIP fees are not appropriate for the aviation VHF band because it is defined by international agreement and individual licensees cannot change that.

Question 7:

Do you have any further quantified information to contribute to the analysis of financial impacts of the proposed fees on particular spectrum users, as set out in Annex 5? We would like to publish all responses, but will respect the confidentiality of any material which is clearly marked as such.

Please see my response to question 1.

Question 8:

Do you consider that our assessment of the impacts of our proposals has taken full account of relevant factors? If you consider that there is additional evidence that would indicate particular impacts we should take into account, we would be grateful if you could provide this.

No.

Please see my earlier responses for more detail.

- 1. Account has not been taken of the estimated annual revenue stream of £1.4 million from aircraft licences to marine and business users do not have to pay.
- 2. Account has not been taken of the estimated one-off cost of £128 million to upgrade the UK fleet to support the use of 8.3 kHz wide channels below FL195. This estimate excludes the cost of upgrading ground stations.
- 3. Ofcom has failed to conduct an impact assessment to determine the numbers of airfields with an aeronautical ground station now that would relinquish their licence if AIP is introduced as proposed.
- 4. Ofcom has failed to conduct an impact assessment to determine the numbers of aircraft that would become non-radio as a consequence of a) more airfields becoming non-radio and b) their owners unable or unwilling to upgrade their aircraft to 8.3 kHz channel spaced radios.
- 5. Ofcom has failed to estimate the numbers of additional accidents that will occur as a result of points 3 and 4 above and their cost to the UK economy. (One non-radio aircraft venturing into the path of a commercial jet because a radar station is unable to make contact and instruct it to change course would cost a great many millions of pounds more than the revenue that will be raised by this foolish AIP tax on aviation safety.

End of response.