

ASFCG

Aeronautical Spectrum Frequency Consultation Group

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OFCOM CONSULTATION ON APPLYING SPECTRUM PRICING TO THE MARITIME AND AERONAUTICAL SECTORS

Dear Mr Richardson,

In my capacity as Chairman of the ASFCG I have pleasure in attaching the response to the Ofcom Consultation on Applying Spectrum pricing to the Maritime and Aeronautical Sectors, which has been formulated from the ASFCG membership and is submitted on their behalf. Please note that many organisations, which are represented on the ASFCG, are submitting responses themselves.

This response is for publication in its entirety.

Yours sincerely



Andrew Knill
Chairman AFSCG

Enclosure

1. ASFCG Response to Ofcom Consultation 27 Oct 08

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Response to the Ofcom Consultation entitled

"Applying spectrum pricing to the Maritime and Aeronautical sectors"

Submitted by the Eurocontrol Agency

on behalf of the

Aeronautical Spectrum Frequency Consultation Group

BACKGROUND

Eurocontrol

EUROCONTROL is the European Organisation for the Safety of Air Navigation. Created in 1963 by six founding members, this civil and military intergovernmental organisation now counts 38 Member States from across Europe.

It ensures that airspace users and passengers benefit from a safe, expeditious and efficient air transport system in Europe. This is done together with its Member States, air navigation service providers, civil and military airspace users, airports, the aerospace industry, international organisations and the European institutions.

Activities span the entire range of air navigation service operations - from strategic and tactical flow management to controller training; from regional control of airspace to development of leading-edge, safety-proofed technologies and procedures, and the collection of air navigation charges.

Aeronautical Spectrum Frequency Consultation Group

The independent Aeronautical Spectrum Frequency Consultation Group (ASFCG) was established by Eurocontrol and includes Member States, European Commission, ICAO, Eurocontrol Agency, IATA, NATO, Air Navigation Service Providers, and other stakeholders.

INTRODUCTION

The following response has been reviewed and supported by ASFCG members.

Only the specific questions have been addressed. Other issues raised by Ofcom in the overall document have not been commented on. This lack of comment should not be construed as agreement. However, given the apparent lack of understanding in the document concerning the nature and operation of the aviation sector, it is appropriate to make some general comment to assist in the understanding of the implications of the proposals.

GENERAL COMMENTS

Aviation is an international sector that is regulated in the global context through ICAO, which operates on a similar basis to that of the ITU. Its constituent regulatory requirements are promulgated through the Standards and Recommended Practices, which are contained in

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the relevant Annexes to the Convention. These are essential to support the requirement for global interoperability, which is fundamental to delivering safety and regularity of flight. To support this, spectrum is sought through the formal ITU WRC process to ensure the global requirement can be met. To ensure a cooperative, interference free environment, the aeronautical spectrum is managed within internationally agreed planning criteria and each assignment (depending on application) is coordinated on a regional basis. To enhance efficient use of spectrum within Europe, States, Eurocontrol and ICAO have worked together to implement an automated system known as SAFIRE¹ which assists this process and has recently been upheld as a good example of best practise in work being undertaken by the EC on spectrum reforms.

Aviation is well aware of the need for efficient spectrum management, as it has had to react to increasing demand for frequencies to satisfy increased capacity requirements within existing ITU allocations. This has been, and continues to be, achieved through technical development and continual review of practices and processes. From a technical perspective, aviation continues to pursue greater use of 8.33 kHz spacing in the VHF communications band to meet future demand and is already working on a Future Communications System for global deployment from 2020.

It must be understood that because of the need to achieve global implementation, adoption of new technologies, standards and modification of behaviours is a lengthy and complex process, which is often driven by the need to accommodate the requirements of the lowest common denominator. In addition, unless driven by an urgent safety requirement, the normal time period to achieve regulatory change within ICAO is 7 years but often necessitates lengthy transition periods. Furthermore, it is important to note that aviation does not operate within States in isolation. The nature of the industry is such that close international coordination and harmonisation is a key element in delivering safe and efficient ATM across Europe. This is clearly demonstrated through the European Commission's (EC) initiative to launch the Single European Skies (SES) project, which seeks to deliver efficient and harmonised air traffic management across Europe. This programme recognises the requirement to ensure efficient use and management of scarce resources and will inevitably address this through legislation in due course.

Finally, the requirement to protect aeronautical spectrum to satisfy international obligations make it extremely unlikely that any spectrum, even if it were to be made available by UK aviation, could be released for non-aeronautical purposes. It either has to remain sterile to protect legitimate aeronautical use in adjacent States or will be returned to the collective European aviation community to serve requirements across the region, again requiring protection.

¹ Spectrum And Frequency Information ResourceE

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RESPONSE

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?

ASFCG Response

The United Kingdom Government has developed a Code of Consultation. Ofcom should respect this Code of Consultation and adhere to its requirements. Among other things an Impact Assessment is essential and should include safety, airspace efficiency and economic aspects. It should be noted that the value of the consultation has been undermined by this not having been completed prior to the consultation so that the full facts of the proposals and their implications could have been presented.

International regulation, that is essential for global aviation, must be respected.

In addition, Ofcom should confirm that any proposals will be within the scope of the UK Government's commitments to aviation as formulated in the recent 2007 Forward Look.

In the process of taking advice, Ofcom should ensure that users, regulators and government are fully aware of the recommendations of the Cave Audit and confirm that it is minded to respect these recommendations.

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.

ASFCG Response

Sharing of aeronautical radio spectrum that is used for safety of life could have a negative impact on safety, which may require additional regulatory burdens to ensure the necessary levels of safety are maintained.

Any proposed sharing must be considered on a case by case basis.

Any costs involved in compatibility analyses and evaluation testing should not be borne by existing users.

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

ASFCG Response

It is inevitable that any AIP charges would be passed, either directly or indirectly, to airspace users, particularly airlines. This would affect their profitability. Moreover, if the UK introduced AIP it is reasonable to assume that other States would follow. Hence the cost burden on airspace users, particularly UK airlines, could be substantial without any added value. If spectrum reforms were to be progressed, it would be far more appropriate for them to be introduced as part of a coordinated European approach for international sectors such as aviation. The implementation of these proposals by a State in isolation may serve to undermine international programmes led by the EC such as SES.

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.

ASFCG Response

Ofcom's objective is to promote efficient use of radio spectrum.

With respect to VHF communications the consultation paper may be considered to oppose this objective.

The reality in Europe is that the VHF communications radio spectrum supports over 10,000 assignments. It is an excellent example of maximising value within the international constraints imposed on aviation. Also, these assignments substantially exceed the envisaged number when the spectrum, that has not been increased, was originally allocated.

However, the consultation paper argues that because the spectrum is efficiently used it is denying non-aviation users. International obligations of the United Kingdom would not allow non-aviation users so, by definition, no other users can be denied. In other words, the economic opportunity cost is zero. Indeed the Cave Audit, referred to in the consultation paper, supports a zero opportunity cost.

The consultation paper also argues that if spectrum is underused then there is no opportunity cost. Indeed this could imply that under-utilisation of spectrum is financially advantageous.

The paper does not consider the fact that ground transmissions are subject to different protection levels. En-route transmissions require a large protected volume while some services have no protection. If AIP were imposed then all license holders could reasonably demand protection which would make frequency planning in Europe impossible.

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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?

ASFCG Response

There is no substantial evidence that the UK economy would benefit from charging AIP to the aviation sector and the consultation document does not identify how any benefits would actually be delivered.

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?

ASFCG Response

The consultation paper seeks to distinguish between “safety of human life” and “safety of human life in an emergency”. Aviation uses its radio spectrum for safety of life purposes, regardless of situation, and should not be charged AIP. It is noted that the maritime industry also relies on safety of life communications.

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?

ASFCG Response

The economic theory related to opportunity cost assumes that the user has a choice. Imposing a charge where there is no choice is simply a form of taxation.

Aviation is a global industry that can only function if there is global interoperability. This is ensured through international standards agreed through the International Civil Aviation Organization (ICAO).

Manufacturing industry does not commit to the production of equipment without there being standards in place.

Hence, in the vast majority of cases, users have no choice and so opportunity costing is inappropriate.

With regards to VHF communications there is a choice between 25 kHz and 8.33 kHz systems. However, the propagation characteristics of VHF mean that transmissions from the UK can impact neighbouring States. For this reason frequency management is co-ordinated at international level. A UK provider may wish to convert to 8.33 kHz but the international ramifications may not permit it. AIP charging could not force the provider to change and so is inappropriate.

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?

ASFCG Response

No, ASFCG considers that there should not be any fee structure for aeronautical VHF channels. The business radio sector is significantly different to the aeronautical sector and its proposed application is inappropriate. A fee structure should not be developed without first assessing the impact on all users, particularly general aviation and the military.

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

ASFCG Response

The imposition of fees where users have no choice is not in accord with the economic theory behind incentive pricing.

It is noted that the broadcasting industry's conversion from analogue to digital television has been given an extended timescale to allow users to re-equip. Digital televisions are available today unlike new aviation equipment that is constrained by international agreements.

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.

ASFCG Response

The question presumes the application of fees. A key question is the degree to which the United Kingdom requires radar coverage for security purposes. Any radar providing information to the military and/or security services should not be considered. Any fees should be levied on new users who must also be entirely responsible for the costs of demonstrating compatibility.

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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.

ASFCG Response

The consultation paper is silent on whether pricing would be a function of transmitter bandwidth or receiver (front-end) bandwidth. Some radar front-ends have wide bandwidths that would need protecting which would be expensive for users. Failure to do so could result in unwanted interference reducing the sensitivity of the radar thereby impairing performance.

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?

ASFCG Response

No. X-band radar is sensitive to unlicensed UWB transmissions. Hence any fees levied would not guarantee protection from interference. Such interference could reduce the performance of the radar leading to a reducing in air traffic capacity.

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?

ASFCG Response

No. The majority of spectrum used for aeronautical radionavigation is congested. For example, DME and military use of L-band. This situation is not expected to change during the next 10-15 years.

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

ASFCG Response

No. Ofcom appears to support the argument that no congestion means zero opportunity cost. This suggests that underutilisation of aeronautical spectrum should be rewarded by zero opportunity cost ratings.

The zero opportunity cost is justified, as the Cave Audit recognises, because of international constraints.

CONCLUSION

Sharing of aeronautical radio spectrum that is used for safety of life could have a negative impact on safety.

Ofcom did not undertake an Impact Assessment before the Consultation as is required by the United Kingdom Government's Code of Consultation. Given the importance of aviation to the United Kingdom's economy, this is disappointing.

Ofcom supports the argument that no congestion means zero opportunity cost. This suggests that underutilisation of aeronautical spectrum should be rewarded by zero opportunity cost ratings whereas full use of spectrum should be penalised. This is in contradiction to Ofcom's objective to improve spectrum efficiency.

The Cave Audit, referred to in the consultation paper, supports a zero opportunity cost. Indeed, the imposition of fees where users have no choice is not in accord with the economic theory behind incentive pricing.

Therefore, the proposed implementation of Administrative Incentive Pricing for aviation does not demonstrate the delivery of benefits as required by application of the Cave Report recommendations and should not be introduced.