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?:

Consultation workshops and written submissions from participants should be followed up by formal public hearings. The current consultation reaches a limited audience and a public forum would give wider exposure to the safety arguments. Feedback must be taken into account, even when it demonstrates that safety is imperative and that AIP is inappropriate. In terms of any new institutional arrangements, it is essential that there is a review mechanism in place to assess the effectiveness or otherwise of any AIP measures put in place.

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.?:

The UK Government is a Contracting Government to the International Maritime Organisation?s Safety of Life at Sea (SOLAS) Convention. As a Contracting Government, the UK undertakes ?to provide, as deemed practical and necessary, either individually or in cooperation with other Contracting Governments, such aids to navigation as the volume of traffic justifies and the degree of risk requires?. The UK and Irish Governments delegate their obligations under the SOLAS Convention for the provision of marine aids to navigation and wreck marking to the General Lighthouse Authorities (GLAs).
The International Maritime Organisation is co-ordinating the transition to a digital, e-Navigation environment to improve safety and security at sea and protection of the marine environment. Charging ground station users for any spectrum will encourage service providers with limited budgets to make decisions on the basis of price rather than safety which is against the spirit of SOLAS. From an e-Navigation perspective, this may lead to implementing a concept of operations in which reverting from the primary system to the backup system is intrinsically dangerous.

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

Aids to navigation services are paid for by Light Dues charged on vessels entering UK or Irish ports. There is no UK tax payers? money used in the funding of the GLAs? services. Furthermore, the Merchant Shipping Act 1995 provides that all aids to navigation and light dues should be exempt from public or local taxes, duties and rates. This general exemption from such charges has traditionally been seen as the Government?s contribution towards the aids to navigation provided by the GLAs. Extending AIP to the GLAs? activities runs contrary to this clear, established principle.

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:

Operational use of VHF radiocommunications by the GLAs, including use in prevention of accidents and dealing with them when they happen, is dictated by international Conventions. There is little scope for using alternatives, or reducing usage, without increasing maritime risk and decreasing effectiveness. Therefore any increase in charges will result in higher costs for the end user and incentives to improve spectrum efficiency are largely irrelevant, other than reducing spending on the actual services provided.
On this basis, the ultimate consequence of AIP may be: loss of life; more ships colliding with each other; or with rocks; oiled birds and polluted beaches.

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:

The GLAs? direct use of aircraft is through contracted helicopter services. Since AIP charges to these aircraft would be passed on to the GLAs through the contract and the GLAs have no control over the usage of spectrum in this application, there is nothing to be gained.

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:

Much of the use of the VHF communications band and all of the provision of radio-navigation services is for the prevention of accidents and mitigation of their effects. Therefore there should be no fees for these applications. If fees are nevertheless to be introduced, there should be an exemption for charities, which provide for the safety of human life. The funding of such bodies is often by public donations and it would therefore appear wholly unjust that Government fees should be imposed on those donations. Light Dues are not charged on small craft and at this point we are not aware of a practical mechanism for introducing fees for small craft users.

[Note: The Corporation of Trinity House is a registered charity, one of the objects of which is the advancement of public safety, in particular the safety of mariners and shipping generally. The Commissioners of Irish Lights, which is responsible for marine aids to navigation in Northern Ireland, is also a registered charity.]

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?:

No. The relationship between charging for spectrum and managing congestion has not been clearly thought out. Charges per channel could result in increased use of fewer channels causing greater congestion. Present use of channels is largely dictated by national and international convention. If alternative applications are being denied access, it is these conventions that need to be considered.

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?:

No, it would not be appropriate. Business Radio is used for commercial purposes and competes with other services. Maritime (and aeronautical) VHF communications are used for safety purposes and their use is mandated. Use of alternatives would not only be against regulations, it would be a major safety hazard.
The effect of interference on Business Radio is also much less significant, therefore the use of 50 km squares is acceptable. This is not a realistic approach for safety services, where working ranges can extend much further than this and where most channels are, of necessity, shared.

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

Until a rational basis for the introduction of AIP has been established and an appropriate pricing system has been developed, it would be inappropriate to apply fees.

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:

Occupancy of the band by radars is dictated by operational requirements (Pulse length, power and height) and by the nature of the technology (magnetrons). None of these are under the voluntary control of the user. Racons only exist because the radars are there. They respond on the frequency of the radar that interrogates them, but at a power level several orders of magnitude lower (typically 1 W compared with many kW). The location of racons, generally out to sea, is dictated by their function and their removal would have absolutely no effect on the occupancy of the band. The carriage of radars in these bands by ships will continue for the forseeable future, since it is mandated by international convention.

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.:

The method of arriving at this reference rate is not clear, neither is the mechanism for translating it into charges for the individual user, given that the (S) band is shared by many users, whose band occupancy changes with time and location. Therefore it is not possible to indicate agreement or disagreement, or to offer alternatives.

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?:

The method of arriving at this reference rate is not clear, neither is the mechanism for translating it into fees for the individual user, given that the (X) band is shared by many users, whose band occupancy changes with time and location.
Therefore it is not possible to indicate agreement or disagreement.

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 GLAs have no view on this.

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

The GLAs have no view on this.

Comments:

General comments:

1. The GLAs support measures to improve spectrum efficiency, assuming that there are no negative effects on safety, the environment and national security and that they are in compliance with international agreements. The GLAs also support reducing regulatory barriers and simplifying processes, enabling faster access to spectrum, as long as harmful interference is prevented.

2. The spectrum used by the GLAs is regulated by international agreements and is used for safety of life services and the protection of the environment, in accordance with statutory obligations.

3. The scope for changing the services provided, in order to use spectrum more efficiently, is very limited.

4. The GLAs? services are financed from light dues charged on shipping calling at UK and Irish ports. Additional costs would have to be passed on to the user, but this would not apply any incentive to improve spectrum efficiency, as it is outside their control.

5. There are technical solutions to both the congestion in VHF bands (digital, narrow band technology) and reducing the bandwidth used by radar (solid state, pulse compression). These solutions are long-term and can only be achieved with leadership and facilitation from regulators.

Additional Information

The General Lighthouse Authorities
The Corporation of Trinity House, the Commissioners of Northern Lighthouses (operating as the Northern Lighthouse Board) and the Commissioners of Irish Lights are the General Lighthouse Authorities (GLA) for the UK (including the Channel Islands and the Isle of Man) and the Republic of Ireland pursuant to the Merchant Shipping Act 1995, as amended and the Merchant Shipping Act 1894 in respect of the statutory undertaking of the Commissioners of Irish Lights in the Republic of Ireland. The GLA have statutory responsibility for the provision of maritime aids to navigation in UK and Irish waters, including radio-navigation systems. The GLA are therefore service providers using radio spectrum for safety of life and wreck-marking applications. The provision of maritime aids to navigation by the GLA is funded from Light Dues charged on certain ships, regardless of where they are registered, entering UK and Irish ports, but not on ships in transit through those waters. Light Dues are paid into the General Lighthouse Fund, which is administered by the Secretary of State for Transport pursuant to the Merchant Shipping legislation.

VHF
VHF communications are used by the GLAs for operational purposes and when participating in search and rescue. In general the channel used and the duration of the usage is constrained by the operational requirements and there are no alternatives available.

AIS
AIS channels are used by aids to navigation, or base stations supporting them. The channels are allocated internationally and a time division protocol is used, with fixed slots assigned to aids to navigation. If the cost becomes too high then this use might have to be reconsidered, with consequences for safety, but this would not release any spectrum, or significantly affect channel loading.

Radar
The GLAs provide radar beacons (racons) as aids to navigation. These are all of the frequency agile type, which respond on the same frequency as the interrogating radar, but at a power several orders of magnitude lower (1 W compared with many kW).

This combined with their remote offshore location means that their removal would have no effect on the usage of the radar bands, although it would impact on safety and protection of the environment.

DGPS & eLoran

The MF DGPS and eLoran services provided by the GLAs are outside the bands considered for AIP.