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Michael Richardson, Administered Incentive Pricing Consultation, Ofcom, Riverside House, 2A Southwark Bridge Road, London SE1 9HA

30 October 2008

Dear Mr Richardson,

# RESPONSE TO CONSULTATION ON "APPLYING SPECTRUM PRICING TO THE MARITIME AND AERONAUTICAL SECTOR"

I am responding on behalf of the Chamber of Shipping which is the trade association for UK-based ship owners and ship managers. With 154 members and associate members, the Chamber represents 860 ships of about 23 million gross tonnes and is recognised as the voice of the UK shipping industry. This response reflects the consolidated views of our members who represent a diverse range of operational shipping interests.

First of all I would like to thank Ofcom for giving us an opportunity to respond to the consultation on applying AIP (Administered Incentive pricing) to the maritime and aeronautical sector and also inviting us to the workshop held on 26 September 2008 for the maritime stakeholders at Riverside House.

#### Introduction

The Chamber of Shipping is pleased to find that ships are exempted from the proposed spectrum pricing regime for the use of VHF and radars on board, but at the same time we are also concerned with the indirect implications of the AIP proposals on shipping related activities in the territorial limits of UK and on ships calling into UK ports.

The Chamber is also discontented with regards to the last minute changes that have been introduced by Ofcom for RNLI and other organisations. We do not, in principle, disagree with those proposals, but we fail to understand as to why this important decision was taken just 10 days before the consultation closing deadline of 30 October.



In the Chamber's opinion, this last minute announcement constitutes a fundamental policy change. The proposed changes lack clarity and need more time for a thorough assessment. In addition, they bring into question the integrity and purpose of this consultation process as it changes the implications of the concept of AIP application for other maritime users.

#### **Summary**

It is our understanding that the fundamental duty and principal of Ofcom as a regulator is to ensure and secure the optimal use of the spectrum for citizens and consumers. The key elements of the proposition include;

- a) AIP fees for ground stations only applying business radio pricing template to maritime VHF communications channels fees perhaps from 2009 and setting fees for radar not earlier than 2010.
- b) Possible discount for those charities with a 'safety of life' objective.

### Regulatory process and Cave Audit report

Our main concern is with regards to the impact on shipping and related activities as a result of applying AIP fees for the use of radar and VHF to ground stations. Although Ofcom proposals specify that they do not intend to charge ships for their spectrum usage (either for VHF and or radars) it is highly probable that these costs will be passed on to ships calling at UK ports. In our opinion, efforts to enhance spectrum efficiency would better be applied to technological improvements and better frequency management rather than introduction of charges. It is also imperative that any proposals put forward by Ofcom do not conflict with, or undermine, the UK's international maritime obligations, treaties and work by international committees like the IEC (International Electro-technical Committee), IMO (International Maritime Organisation) and ITU (International Telecommunication Union) at either the national or international level.

As per the Cave Audit Report's Conclusion on applying AIP to the Maritime Sector<sup>1</sup>

"Where there are international requirements which mean that the UK has no scope to act unilaterally, the opportunity cost of use is zero and there is no merit in introducing AIP for these licences classes. In these cases, spectrum efficiency measures should instead be pursued through international negotiations to update frequency allocations or adopt new standards or through the prescription of carriage requirements for more efficient technology (but again these would need to be implemented for equipment satisfying internationally recognised standards)".

<sup>&</sup>lt;sup>1</sup> Chapter 7 - Maritime, section 7.4 -Conclusions on applying AIP (Cave Audit's report on Independent Audit of Spectrum Holdings)

The Cave report recommendations also include<sup>2</sup>;

"There are instances of where it does not seem appropriate to price coastal stations."

These are:

"Coast station radio (marina) licence (VHF). Similar considerations apply here as to coast station radio (UK) licences. However, only two UK frequencies are involved and some uniformity is needed to resolve compatibility differences as vessels travel around the UK. Although there could in theory be some scope for applying pricing (for example to encourage use of one frequency at a time), in practice given the high usage of the limited number of frequencies all around the UK coast, coupled with no requirement for co-ordination, it is considered that there would not be a significant efficiency gain by applying pricing here.

"Costal station radio (international) licence (VHF). The spectrum for such use is internationally harmonised and it is necessary to comply with the spectrum use of visiting vessels to ensure compatibility and safe navigation of the vessels. Unlike radar, spectrum used under the CSR (International) licence relies on compatibility/co-operation with the vessels. Hence unilateral amendment of frequency (bandwidth) is not possible. There therefore appears to be zero opportunity cost for this use and therefore no case for applying pricing".

These recommendations clearly indicate that AIP is an inappropriate mechanism for increasing spectrum efficiency in the maritime sector.

#### **General comments**

Unfortunately the general tone of the consultation suggests a lack of understanding of the shipping and offshore sector and there are several points which cause our industry unease.

While there is talk of "efficiency", it is never clearly defined how this can be achieved by pricing alone. Presumably, it means using less "spectrum" for the same amount of information transfer and it is on this basis that many of our comments are predicated.

**Para 1.22** refers to the abilities of spectrum users to pass on costs. If spectrum users can pass on costs, then we fail to see the purpose of AIP as there is limited incentive to improve "efficiency".

**Para 2.5** states that maritime and aeronautical sectors use around 7% of the spectrum below 15GHz, but Figure 7 has rearranged the data to show aeronautical and maritime users taking nearly 25% of the spectrum below 3GHz. In our opinion

<sup>&</sup>lt;sup>2</sup> Chapter 7 – Maritime, section 7.3 – Coastal stations (Cave Audit's report on Independent Audit of Spectrum Holdings)

the presentation of this data is potentially misleading and overemphasises the case for applying AIP as a method of incentivisation.

For all the discussion of "value" and "opportunity cost", the basis for AIP is a basic assessment of what the highest bidder is prepared to pay. This implies that those users to whom spectrum is worth less than AIP will not have the incentive to use this spectrum. Hence, AIP can promote the efficient use of spectrum by creating incentives that ultimately lead to the allocation of spectrum to those who value it the most. This approach may be appropriate for entertainment and consumer channels but rather more thought should be applied when considering safety applications — and the majority of marine telecommunications are concerned, directly or indirectly, with safety. The logic of the AIP approach would allow, *reductio ad absurdum*, a Russian billionaire to restrict fuel and food shipments into the UK because he wanted to purchase (at any price) the port frequencies for broadcasting his football club matches.

Para 3.35 and 3.47 again brings into question the purpose of charging as a means to encourage efficiency. It openly discusses the passing on of extra costs and emphasises the point that "Ofcom does not believe that market disciplines in themselves threaten the future of safety critical facilities. Industry usually has a legal duty to provide such facilities, stemming either from general health and safety legislation or from prescriptive sector specific obligations. The cost of supporting safety critical services will generally be passed on to customers or, where this is not feasible or desirable from the perspective of sector regulators and funders, subsidised by charities or Government".

**Para 3.46** meanwhile would appear to suggest that because users already have to pay to purchase radar sets then they should be taxed for using them. This is not, in our view, a satisfactory argument.

## <u>Impact on Mobile Offshore Drilling Units (MODUs) and Offshore Oil and Gas</u> <u>Installations</u>

The direct effect on MODUs is likely to be limited as little use is made of land-based resources, and GPS and Inmarsat operations are outwith Ofcom's remit. However, port and airfield costs for the supply boats and helicopters servicing the offshore installation will rise; this will result in additional indirect costs to rig owners and add to the already high costs of drilling in the North Sea and hasten the arrival of the time at which operators (oil companies) will decide that exploiting the declining reserves in the North Sea is no longer cost effective.

Furthermore, every four or five years MODUs require a special periodic survey, effectively a multi-million dollar overhaul. For North Sea operators there is a choice between bases in Norway, the Netherlands, the UK and (to a limited extent) France. UK bases already tend to be less competitive than those in Norway and the Netherlands and increasing their costs will not encourage rig owners to use them.

#### Recommendations

In the Chamber's opinion the consultation is predicated upon the basis of introducing AIP to enhance revenue. The presumption that the alternative user shall benefit from the increased competition, "better optimisation of VHF and radar use", because there is a higher cost associated with it, is unlikely to deliver the intended results in the maritime sector. Until and unless there is a unilateral international mandate to design better equipment such as the Automatic Identification system (AIS) (which uses internationally allocated channels using a time division protocol with fixed slots assigned to each equipment in vicinity to coast station restricting the duration of the operation for each transmitter and receiver) the likelihood of AIP achieving the desired results is minimal.

In light of the recent changes that have been introduced at the last minute to the current consultation, it is impossible to thoroughly assess the impact of the new measures and also understand its true implications on the maritime sector. Therefore, we would like to recommend that the current consultation is either extended or withdrawn.

#### **Conclusion**

We are keen to work with Ofcom to help deliver greater spectrum efficiency and look forward to cooperating on how to achieve this. We firmly believe that the best way to achieve higher spectrum efficiency is through technological equipment changes in the international arena rather than localised pricing.

As such, the Chamber of Shipping cannot support the proposals in their current form as they seek to link pricing with the concept of incentivisation, contrary to both the recommendations of "Cave audit's report" and to the particular market conditions of the maritime sector.

Please find enclosed annex with our response to the consultation questions.

For information I am copying this letter to Mrs Theresa Crossley at the Department for Transport.

Kind regards,

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Captain S Sachdeva

**Nautical Consultant** 

Cc: Mrs Theresa Crossley, Department for Transport

#### Annex

**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?

**Answer.** The tone and substance of the consultation reflects a lack of understanding of the maritime sector. The consultation should have taken into account the concerns of maritime stakeholders before proceeding to formal consultation. Some of the concerns that were raised at the subsequent workshop are enlisted and form our line of approach as a response. It is our belief that these concerns should be followed up by a formal public hearing and should be belatedly reflected in the outcome of this consultation;

- a) No direct link between the application of AIP to the maritime communications and radar with incentivisation for more efficient use. All ship-borne systems usage and technical specifications are type approved and mandated by the IMO (International Maritime Organisation) and various treaties.
- b) IMO develops and evolves performance standards for maritime communications and navigation equipment. Through the IEC (International Electrotechnical Committee) and ISO (International Standards Organisation), international technical standards are developed which require specific implementation of technology and removes any national autonomy in, for example, use of frequency and bandwidth. All developments in the equipment technology require back-ward compatibility. The efficiency of the spectrum will therefore occur regardless of the application of AIP to VHF and radars over time as technology evolves and new regulations are approved. If Ofcom believes in enhancing efficiency for the users benefit, then they should request the above committees to look into their concerns for ensuring international harmonisation.
- c) The Cave report recommendations are not taken into account, especially as it is judges there to be no prospect of an alternative use due to international restrictions. As the UK is unable to act unilaterally in any spectrum that is internationally harmonised, then the opportunity cost of the spectrum for alternative use should be judged to be zero.
- d) Maritime licensees who use regulated spectrum will not be able to change their use whether the spectrum is priced high or low.
- e) The UK maritime sector operates in a competitive international market place and is currently experiencing severe financial pressure from high fuel prices and the economic downturn. Any additional cost burden on the operator will harm the competitive financial position of the industry.
- f) Most other maritime stakeholders have also expressed their concern with the concept of AIP and its implications for maritime safety. The fundamental principle of AIP is that there is an opportunity cost that exists to provide better services for consumers. But, in the case of maritime sector, the AIP concept is

not going to achieve the desired outcome because costs can be passed on. This in our view will fail to provide any incentive to improve or enhance the optimisation of the current usage and frequency as the ultimate payee will have no say in the effective utilisation of spectrum.

g) The Cave report highlights that there should be zero opportunity cost from the principle of AIP with regards to ports, administrators or operators as they need to fulfil their obligations to, and compliance with, the internationally binding regulations/treaties to ensure maritime safety, monitoring and reporting.

**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.

**Answer.** Regulatory compliance for international maritime legislative obligations requires that the port authorities and the Maritime and Coastguard Agency (MCA) should provide ships with radio and radar coverage in certain shipping areas with high traffic density and internationally adopted traffic separation schemes and routes (e.g. Dover Straits and Off Land's End).

The Ofcom proposals could well lead to the introduction of a forced charging regime to enable to access to these obligatory services. Inevitably, the additional costs will be passed on to users in order to finance the continued provision (this is recognised in **para 3.35** of the consultation document that states that the cost can be passed on).

We are concerned with the proposed recommendation that higher charges should apply to the internationally harmonised channels and high power transmission and reception from a shore based stations. The AIP approach will have a detrimental impact on the safety of shipping and navigation in confined waters as in adverse conditions it might result in ships being denied the basic services that are needed to ensure and co-ordinate Maritime safety, reporting & rescue operations.

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

**Answer.** If the costs are absorbed by the payees identified in the consultation document then it is our understanding that the money would merely be circulating between the Government departments (in the case of the MCA), and absorbed by the port operating companies as an additional expenditure.

Most likely, however, is that the cost will be passed on by MCA and various ports authorities to their customers, namely shipping. What percentage of the cost would be passed on remains to be seen, but it could result in an additional cost burden to ships and offshore installations on the UK Register, in UK waters or calling at UK ports.

Ships calling into UK ports have to pay statutory Light dues. These dues are paid to the General lighthouse Authority (GLA) as they are legally obliged to provide Aids to Navigations in the UK waters. As the impact of AIP proposals shall also increase GLA's costs an increase in future light dues is probable. It should be noted that the "Study into the economic effect of light dues by MDS transmodal" commissioned by the DfT in 2003 highlighted that a reduction in dues would encourage growth of traffic through UK ports. In addition, to levy an additional, albeit indirect, charge on ships for services provided free in other directly competing European countries make UK a less favourable destination for shipping. Any additional costs incurred add to the cost of bringing goods into UK. The likelihood of these additional costs being passed on to the consumer is high and will have a detrimental impact on the consumer.

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**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 radio communications, or for other uses?

Answer. The implications of the proposal outlined in the Ofcom consultation are such that when the model charging regime was applied to the current use of VHF and marine bands by The Port of London, the cost of procuring license fees jumped from current £5000k to £27000k, a 540% increase. Given the fact that there will be no benefit in applying AIP to the maritime sector and to ensure and maintain safety of life the license fee should be left in its current form.

At the maritime workshop it was asked, who is the beneficiary of applying AIP in the maritime sector. The response drew comparisons between the maritime sector and those shore based sectors where the concept of AIP has delivered better utilisation of spectrum, like the radio stations, minicab firms and the telecommunication (mobile phones) sectors. It should be noted that mobile telephone companies generate revenue and earn profit by selling mobile connections at a price to the consumer. Radio stations generate revenue through advertising. Minicab companies have alternative means of communication available (such as mobile phones) if they choose to and if it is cheaper in comparison. Thus, the AIP model has succeeded in delivering the desired results. But, the crucial thing to note here is that all the above users have a vested interest to "optimise" the usage to "maximum" and pay a fee proportionate to their use because they are in a business to generate revenue by selling spectrum in a competitive environment to gain new customers or have alternative usage options available to them (choice).

However, the ports and other maritime organisations use VHF and radars without any commercial exploitation or means to generate revenue as they are being used to solely to enhance safety and meet international obligations. In our view, and as evident from above, there is no monetary benefit for providing the coverage at sea so we question how AIP will succeed in delivering the same benefits as on land as there are no other customers to sell connections to.

**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?

**Answer.** No comment, as this is question directed at aeronautical sector.

**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?

**Answer.** It is important that Ofcom appreciates and understands the difference between the emergency services that provide rescue of life at sea (HMG and self funded charities like the RNLI) with those that provide rescue of life on land (ambulance, fire brigade and police). Although Channel 16 and 70 are proposed to be free from charges under the current AIP proposals, we would like to stress that when a rescue or safety of life is concerned it should not be limited to the use of only two frequency channels.

Rather, the proposals should ensure that the coastguards and other charities do not encounter any operational costs as a result of these proposals.

**Question 7.** Do you agree that Ofcom should apply AIP to ground stations' use of maritime and aeronautical VHF radio communications 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?

**Answer.** No evidence has been provided that supports the argument that non-optimum utilisation of spectrum by VHF and radar use alone adds to the congestion.

In addition we would question Ofcom's conclusion "that due to the growing congestion the access to the spectrum has been denied to potential alternative user". We have not seen any statistical rationale or evidence that supports this statement. Indeed, who would be the alternative user of spectrum? No suggestions have been made. The use of 50km grid model is not appropriate in the case of VHF pricing that has been used for ports and coastal stations as it will not reduce any congestion as they have little option to use alternative frequencies due to the international constraints. On the contrary, the unintended consequences of these proposals might lead to a compromise on the maritime safety and thereby having detrimental implications for human life and the environment.

**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?

**Answer.** No, our understanding is that the business radio-licensing model is not applicable to the maritime sector because it charges the user higher fees in more

spectrum-congested areas, thereby generating more revenue. In the maritime sector, this model is unsuitable, as it is highly unlikely to increase incentivisation or competitiveness as there is no alternative user.

In addition, shore based stations have to use internationally recognised maritime VHF frequencies and are in no position to consider using less crowded spectrum. We would recommend the creation of a new template that takes into account the particular circumstances of the maritime sector and suggest it should be developed in a manner that will incentivise and enhance optimisation without any detrimental impact on safety.

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

**Answer.** Any proposed increment in the cost of operations will reduce the competitiveness of the UK shipping industry. The AIP approach as we understand is entirely contrary to recent successful government policy initiatives to grow the UK fleet. Furthermore, domestic shipping competes directly with land-based transport and additional costs may well lead to modal back-shift again counter to government policy and with a negative environmental impact. It should also be noted that the budgets for fiscal year of 2009-2010 are set in advance and therefore it is not prudent to seek to apply or introduce charging at such a short notice.

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**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?

**Answer.** The question only allows respondents with an option to advise or assist Ofcom on setting the level of fees. What it does not allow them to do is to raise the issue and question, why Ofcom needs to appropriationate fees option for an individual radar users and racons in the first place.

In order to answer this question it is crucial to explain and highlight that racons do not transmit all the time. A radar (shore or ship) transmits a pulse out to the horizon and the racon beacon activates and responds by transmitting a morse letter back, which is prominently displayed on the recipient's radar screen with distinct morse letter display that can either be a (Morse D (used for wreck marking) or Morse U (used for you are running into danger) or any other Morse letters that could be used. Once the Morse letter is showing up on the radar screen, the ship's navigating officer or the operator can fix the ship's location referencing it with the bearing and distance on the chart to ascertain vessel's position. It is more common to have racons in the port approaches to allow pilots and vessel traffic monitoring operators to assess, control and monitor the traffic situation.

From shipping's perspective, the significance of a racon is to display a distinct morse letter on the radar screen that provides positive identification to ascertain vessel's position in a busy navigational channel or port approaches. This enhances position monitoring, safety and certainty and does not rely on any other satellite based position detection system, which is the primary means of position fixing. Therefore,

the factor which Ofcom should take into account is how significant these racons are in ensuring safety of navigation in confined and congested waters. Some major offshore oil and gas installations around the UK in the North and the Irish sea have racons that transmit morse "U" (You are running into danger), to warn the mariner and the shipping traffic of the risks and hazards well in advance and thereby averting a major shipping disaster. In the UK, the General lighthouse Authority(GLA) owns, operates and provide "Aids to navigation" as part of their statutory obligation. Racons are normally fitted on to the major buoys, light vessels and lighthouses to assist the mariner and the ships to ensure safety. The funding for the GLA is borne by the ship owners in the form of "Light dues". Therefore it is important to appreciate that the ships are already paying for the usage of aids to navigation and associated facilities.

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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.

Answer. No, as the method and the mechanism is not clear and explained in context for the maritime sector. If cost is associated with the band with, then the likelihood is that operators shall seek to reduce it, thereby having a detrimental effect on the equipment's ability to detect targets. **S band radars** operate on a wavelength of 8-15 cm and a frequency of 2-4 GHz. Because of the wavelength and frequency, S band radars are not easily attenuated and this makes them useful for close and long range detection of targets (but mainly closer object and it has a wavelength of 10 cm). In our opinion, prior to establishing a rate, Ofcom should review the current and future demand, especially in light of the current economic downturn, followed by an independent assessment of this model to ensure transparency and reliability. In our view the proposed concept is not tested, especially as the maritime sector and therefore too soon to arrive to any assessment on pricing.

**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?

**Answer.** No, as the concept is not justifiable in terms of the costing.

**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?

**Answer.** No comments, as it does not apply to the Maritime sector

<u>Chamber of Shipping response to the Consultation questions on "Applying Spectrum Pricing to the Maritime and Aeronautical Sectors"</u>

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

Answer. No comments, as it does not apply to the Maritime sector