Ofcom consultation on applying spectrum pricing to the Maritime and Aeronautical sectors

RESPONSE BY THE MANCHESTER AIRPORTS GROUP

30 October 2008

The Manchester Airports Group plc

Olympic House, Manchester Airport

Manchester M90 1QX

1 INTRODUCTION

1.1 This is the submission of the Manchester Airports Group plc (MAG). It seeks to respond to Ofcom's consultation questions raised in the document issued on 30 July 2008 and to comment on the proposals generally.

1.2 MAG is the UK's second largest airport operator and comprises the airports of Manchester, East Midlands, Humberside and Bournemouth. MAG handled over 29 million passengers in 2007-8, with Manchester alone accounting for over 22 million passengers travelling to over 220 destinations, more than any other UK airport. The Group is also engaged in property development and management; car parking; airport security; fire fighting; engineering; advertising and motor transport services.

1.3 MAG is publicly owned by the ten local authorities of Greater Manchester. These shareholders require us to grow the business profitably, to enhance the value of the business; and to maximise the economic and social contribution to the regions it serves.

2 GENERAL COMMENTS

2.1 MAG objects strongly to this proposal. The proposal is based on a false economic rationale, raises substantive safety concerns and has severe financial consequences for airports. We are also concerned that the limited consultation with the airport sector has meant that the timescales for introduction are unreasonable .

<u>The economic rationale for the proposal</u>

- **The proposals are based on a false premise that there is an 'Opportunity Cost' from other potential users of aviation spectrum**. This is not the case because re-allocation of spectrum within the UK cannot be achieved without international agreement, which itself is highly unlikely. Consequently, the proposals do not meet the precondition in the Cave Audit for the introduction of spectrum pricing in the aviation or maritime sectors[1]. The reality is that for aviation purposes, spectrum has either a zero or only nominal opportunity cost and therefore there is little or no economic justification for introducing such a charge.

[1] Cave Audit page 56 (final para) ' If there is judged to be no prospect of alternative use due to international restrictions and since the UK is unable to act unilaterally in spectrum that is internationally harmonised for on-board use, then the opportunity cost of the spectrum for alternative use should be judged to be zero'.

- **The proposals do not reflect the international implications in respect of ground based spectrum usage**. Aviation spectrum is allocated globally through the International Telecommunications Union (ITU), and such allocations already have status as recognised by ICAO. Unilateral reallocation of spectrum within the UK is likely to encounter international objections. Aviation's use of such allocations must confirm to ICAO developed standards, and any attempt by the UK to introduce procedures that differed from international standards, must also assume responsibility for any interference to safety within its airspace as well as its international implications. The proposals also seem to fail to reflect the Single European Sky initiative and associated SESAR programme to improve air traffic management within Europe, within which spectrum management will be an important issue. National trading or reallocation of aviation spectrum appears to ignore this and could seriously impact the ability of the European proposals to achieve their objectives.

- **The proposed exemptions** for aircraft and ship radios and navaids, on account of international obligations, **appear to be inconsistent with the treatment for ground based installations**. The 'opportunity cost' basis for introducing fees for use of ground based spectrum are surely the same when applied to airborne or ship-based installations, yet have been exempted apparently because of the likely difficulties of negotiating an international agreement on this. As a result, the decision to introduce AIP for ground-based installations only appears to be opportunistic.

- **The notion that a pricing regime would or should provide some incentive for UK negotiators (CAA and DfT) in international negotiations over spectrum allocation is unrealistic**. AIP is the wrong mechanism to achieve change in spectrum allocation on an international basis; changes in national or international mandates would be more appropriate. Even if the UK were able to release some aviation spectrum, because spectrum coverage does not follow national boundaries, the UK Government would be most likely to be concerned to ensure that the released frequencies were not claimed by other States. This would make such spectrum unusable in the UK, would not increase spectrum efficiency, and would represent a significant effective cost for UK aviation in general.

- **The proposal is heavily reliant on the economic rationale of Opportunity Cost** as an over arching justification for the introduction of AIP. The proposals make a heavy 'leap of faith' in using the values paid for Business Radio spectrum to impute values for other spectrum uses. MAG would question whether the imputation of these values into a 'market' that is in the main

uncongested and dominated by the public sector usage is a reasonable assumption.

- **The proposals as outlined do not appear to have any element of tradeability in them** (which was one of the Cave Audit recommendations[2]), nor any mechanism for moving towards this, therefore no 'market' will be established which will enable the true market value of such resource to be determined.

- In the absence of tradeability, **the proposals effectively reduces Ofcom's role as a regulator and changes it into being a monopoly supplier** of a finite resource – spectrum. Under such an effective regime MAG would asks what safeguards are proposed to prevent AIP merely becoming a revenue raising mechanism for HM Treasury ?

- **The proposal is unlikely to lead to an increase in the efficiency of overall spectrum use or to result in spectrum release for use by more valuable services**. Such efficiency gains within the aviation sector are far more likely to be achieved by technological innovations (in which the aviation industry has a good record) and do not need a pricing mechanism to achieve them. We comment further on this below. Indeed, the imposition of AIP will result in less money being available for investment in new technologies, including SESAR, which will result in the more efficient use of spectrum, and could therefore be counter-productive.

- **The willingness of the public sector to pay for spectrum is misleading and arguably a false premise**. Payments by the public sector users (including the Ministry of Defence) merely constitute 'wooden dollars' working round the Government financial system, and can never demonstrably have the same incentive effects as those involved with the true private sector, where such costs would have to be absorbed, and where market exit would occur if the additional cost made the enterprise unprofitable in the longer term.

<u>The safety concerns that will result from the proposals</u>

- The use of radio spectrum by airports (and their local ATC providers) is to permit the safe operation by aircraft, as is acknowledged by Ofcom. If the charging for what has previously been a 'free' or nominal cost 'good', has severe implications on an airport's profitability – and it will in the case of smaller and more marginally profitable airports and aerodromes – then **incentives will be created for airport operators to attempt to save costs**

[2] Recommendation 2.3, page 6

(and reduce safety) by reducing demand for spectrum, through reducing for example navaid provision[3]. The consultation makes some rather simplistic assumptions about airports having to meet defined regulator standards to operate safely, as though such standards are always clear-cut. In reality such definition is less clear as the aerodrome safety system is effectively 'risk based' and there is always some potential for over-provision and 'grey areas', the presence of which will enhance safety standards. If these are reduced, safety will be reduced, but establishing numerical evidence for this will be impossible because no 'with or without' comparisons will be available and a standard safety 'base-line' does not exist.

- The spectrum aviation uses must always be protected from harmful interference to ensure the integrity of the systems used and their part in ensuring the safety of both passengers and aircraft. **The trading of aviation spectrum generally with other users is therefore a highly unlikely outcome** as such spectrum will always require some form of reservation in accordance with international ICAO standards. Even if spectrum were traded internally within an aviation market, close regulation would still be required in order to prevent such interferences and alternative uses for frequencies becoming available may not be forthcoming.

- Because aviation spectrum needs to be protected in order to protect safety **imputing values for aviation use based on values paid by other sectors, e.g. business radio, is highly questionable**.

<u>The severe financial consequences for airports</u>

- **The proposals have considerable financial consequences for airports**. Not only do airports procure radio channels in their own right, at airports where local Air Traffic Control is contracted out to NATS, the costs of acquiring spectrum for radio communications, radars and other navaids will be passed on to the airport operator. These costs will be substantial.

- **For most airports, these costs cannot be passed onto to users.** Although theoretically contestable, the market for terminal ATC services is not well developed, and in the absence of any other effective competing providers, NATS has market dominance and is able to pass on such costs. In contrast, outside the London area,

[3] The same arguments apply in respect of aircraft operators, even if they do not have to pay for on-board radios. GA operators in particular will seek to minimise their costs by reducing or eliminating radio usage, which will have a detrimental effect on the safety of air transport. If such a scenario results from these proposals (and MAG believes it will), the result will run counter to the progress made recently within the ATSOCS initiative, which has a particular relevance to the GA sector.

airports themselves compete strongly with each other, and the ability to pass these costs onto airport users is unlikely. (NATS does not need to own the allocations and will pass them back to the respective airports).

- The amount of spectrum required to operate an airport varies only slightly with passenger or aircraft throughput ; it is largely driven by the number of runways in use. **The financial effect of introducing AIP will be proportionately greater on smaller airports and aerodromes**, and taken together with other proposals, could make them unprofitable. The estimated cost of introducing AIP at Humberside Airport alone is thought (on the basis of one interpretation of Ofcom's figures) to be over £600,000 – or nearly half the airport's current operating profit. (The same interpretation for Manchester Airport produces a number of £1.2M or 1.22% of operating profit). At the worst, AIP could lead to smaller airports and aerodromes becoming unviable commercially and closing, with associated job losses.

- **The proposals are far from clear – even from an initial indicative viewpoint and do not enable a proper assessment of the likely costs to airports to be properly ascertained**. By way of example, the likely costs of the proposals in respect of East Midlands Airport alone vary from £150,000 to £1.25M per annum, depending on the interpretation of the indicative numbers contained in the consultation paper. This needs to be addressed and a full regulatory impact assessment carried out.

- **AIP effectively increases cost to the aviation industry without adding value and – because of its unilateral nature -harms the position of UK plc in the process**. The increased costs born by NATS in respect of its en-route services will be passed onto airlines operating in UK airspace and serving UK airports. This could impact negatively on the entire UK travel and tourism industry and could harm the substantial economic benefits aviation brings to the UK economy in general and to regional development. (We comment further on this in our answer to Question 3 below)

  <u>The inadequate consultation processes and unreasonable timescales for the introduction of AIP</u>

- We do not consider that Ofcom has fully consulted with airports. Although the proposals have clearly developed and evolved over a few years, and meet the 'letter' of the government's normal consultation guidelines, there has been no direct approach to or consultation with the airports sector until very recently, particularly for a proposed introduction date (in respect of VHF radio) of 2009. Instead, such consultation that has taken place when the proposals

were in their formative stages has been with either the CAA or with NATS. Neither body can be regarded as an effective proxy for airports. The CAA – in relation to spectrum – effectively performs a sub regulator role on behalf of Ofcom. NATS, on the other hand, whilst responsible for much aviation spectrum use initially, is able to pass it on to its users – airlines in the case of its en-route national monopoly service, or airports in the case of its contracted local ATC services. No direct approach has been made by Ofcom to airports, either through the Airport Operators Association or with individual airports or airport groupings, until after the consultation paper was issued. MAG considers this to have been a serious omission since airports will have to bear the costs for spectrum used for local ATC purposes.

- **As a result of this inadequate consultation, the proposed time period for introducing the new charges is unreasonably short**. Although a phased introduction is proposed by Ofcom, this is on the grounds of the technical difficulties of devising appropriate pricing algorithms in respect of spectrum used for navaids, and is restricted to deferring the introduction of AIP for navaid and 'non-radio' uses by one year only. **The timescales outlined are totally inadequate for such a large increase in costs.** Compared to the timescales allowed in other sectors, for example the introduction of charging for business radio (where more than 2 years notice of licence fee changes was given in the 5 September 2008 regulatory statement) and digital terrestrial television and radio broadcasting where fees are due to be introduced from 2014 (as stated in 2007), the timetable is very short. MAG considers that a much longer period needs to elapse between finalisation of any substantive charging proposals and their implementation, similar to that adopted for terrestrial television.

3 RESPONSES TO QUESTIONS

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 ?

It is essential that Ofcom listens carefully to the views expressed by the aviation and maritime communities in relation to this proposal.

MAG considers that there is no true opportunity cost in respect of aviation spectrum as long as international agreements preclude the reallocation of spectrum to other uses, and prevent the creation of a marketable

commodity. One of the essential caveats in Professor Cave's recommendations on this subject has been disregarded.

Even if the proposals are progressed, it is essential that the charging proposals are clear from the outset so that their impact on the industry can be properly judged. The way in which the proposals might be interpreted could give rise to wide variations in cost. By way of example, the likely costs of the proposals in respect of East Midlands Airport alone vary from £150,000 to £1.25M per annum, depending on the interpretation of the indicative numbers contained in the consultation paper. This needs to be addressed.

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.

MAG considers that there will be detrimental effect on safety standards, particularly at the smaller and more financially-marginal airports and aerodromes, when reductions in navaid and radio coverage might be attempted by operators and GA users in order to save on spectrum costs.

As stated above, in our 'General Comments' section, radio and navaid provision as part of an aerodrome safety regime enjoys no clear-cut regulator-approved 'base line', and its provision is 'risk based'. Provision at any aerodrome could therefore include some 'grey areas' and redundancy, which collectively enhance safety. If aerodrome owners choose to dispense with or reduce such equipment, it is certain that safety standards would reduce as a result of these proposals.

Comparison should also be made with the recent introduction of revised rules and procedures by the CAA's Directorate of Airspace Policy for flying outside of controlled airspace (ATSOCAS). This has put great emphasis on improving safety, largely for general aviation and the military. But, it relies on the presence and operation of radar and radio services at no cost to the users. With the addition of AIP costs, it is predictable that these services will be withdrawn in areas.

Even if the Ofcom argument about mandatory safety minimum requirements is accepted, there is a contradiction in this argument in terms of supporting the rationale for introducing AIP as it would be clear that (technological change excepted), there would be no effective release of aviation spectrum for other possible use. In such a scenario, the phrase 'more efficient use of aviation spectrum' becomes meaningless.

Question 3

Do you have any evidence which indicates AIP charged to ground stations could have a materially detrimental impact on UK competitiveness ?

AIP charged in respect of NATS en-route services will be 'passed through' the NATS regulatory formula onto airline users, and will increase the costs of aircraft flying to and from the UK, or using UK airspace. There could be negative climate change consequences if aircraft re-route to lengthier routes not involving UK airspace in order to avoid the increased NATS en-route charges that will flow from the introduction of AIP. The UK already has one of the highest levels of en-route charges in Europe.

AIP charged in respect of NATS terminal ATC contracts will be passed onto airport operators. In the case of Heathrow, Gatwick & Stansted, which are all regulated for price control purposes, spectrum costs will become part of the allowed Opex and will directly increase aviation charges at those airports. As Heathrow and (to a lesser extent) Gatwick operate as the UK's major international air hubs, AIP will increase the costs to airlines who use those airports, and – taken together with other cost factors - adversely affect their position viv-a-vis the major European hubs of Amsterdam, Frankfurt and Paris with which they are actively competing.

With smaller and more marginally profitable airports, AIP taken together with other newly imposed costs (airport policing costs, Aviation Duty etc), may cause their operators to wish to close the airport and offer it for redevelopment. This will lead to reduced travel choices and 'connectivity' for UK passengers and air freight shippers and will have detrimental effects on efforts to promote regional development, in which airports play a key role.

AIP will have a disproportionately costly effect on small remote airports (e.g. Scottish Highlands & Islands) and on small airfields and aerodromes. The reduced choices available to the travelling public will have similar effects to those described in the preceding paragraph.

It is essential that a full Regulatory Impact Assessment is carried out by Ofcom, and that the above matters are examined in some detail. Ofcom would be well advised to seek outside help in this area, which should include the CAA's Economic Regulation Group.

Question 4

Taking into account the information 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.

The proposals represent a large cost increase for the aviation sector at a time when the industry is least well capable of bearing such a cost.

AIP as proposed will be based not on the size of airport, passenger throughput or profitability, but on the scale of its VHF and radionavigation aid use. Consequently, its impact will be greatest on the smaller and less profitable airports.

Question 5

Do you agree that there is little to be gained, in terms of spectrum efficiency, from charging AIP to WT Act licences for aircraft ?

MAG considers that the 'Opportunity Cost' justification for applying AIP to ground based stations applies equally in the case of aircraft. If spectrum efficiency arguments are considered valid for the former, then they equally apply to the latter. Consequently, MAG does not agree with the statement implied in the question.

MAG considers that Ofcom has decided to exclude aircraft (and ships) from AIP on the grounds that introducing it for them would require international agreement, which is highly unlikely. The proposal to levy AIP in respect of ground-based stations suffers from the same international limitation, and the differentiation between the two types of station is specious and appears opportunistic.

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 ?

MAG has no comments on this question.

Question 7

Do you agree that Ofcom should apply 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.

MAG does not favour the proposals. They are based on a number of false premises, as outlined in our 'general comments' section above.

Release of aeronautical spectrum to other 'profitable' use is unlikely in the short or the longer terms and international agreement on this is unlikely. UK negotiators do not require 'incentives' imposed on them in the form of

AIP to encourage them to argue at a European level for the release of aeronautical spectrum.

Release of aeronautical spectrum in the UK is unlikely, except where permitted by technological changes, or in other marginal cases at smaller and less profitable aerodromes, where it may have detrimental safety implications. Any potential reallocation may not be in the UK market as the frequency could be allocated to an international competitor.

There is also a need to make any reallocated VHF spectrum subject to strict controls on interference, to prevent the diminution of aviation safety.

Question 8

Do you agree with our initial view that it would be appropriate to apply a pricing system 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 ?

We do not agree that the values obtained for Business Radio licences are a reasonable proxy for aeronautical VHF licences, even on a generously adjusted basis. Business Radio has no safety concerns and relies largely on advertising income, which would not be the case with aviation use frequency.

Business Radio is also a broadcast medium where one party clearly needs use of radio spectrum to operate. Aviation use of spectrum is frequently shared and there is no single procurer, which results in the need to devise complex apportionment mechanisms to share out any AIP payable. Such bureaucracy does not add value.

We do not agree that any pricing incentive needs to be created, however small, that would encourage rationalisation of radio or navaid provision from aviation purposes.

Question 9

Are there any short term reasons specific to the sectors why it would be inappropriate to apply fees from 2009 ?

MAG considers that the consultation process adopted by Ofcom has been inadequate. The CAA and NATS do not fully represent the interests of airports in this connection, who will be the end-payers for the increased costs imposed in respect of airport ATC functions. Consultation with airports, in the early stages of these proposals, was non-existent, and has only been undertaken on a ‘last minute’ basis.

The industry therefore has had little time to consider how to adapt to the substantial increased costs that these proposals entail. The imposition of such new or increased costs by airports on their own customers i.e. the airlines, would attract criticism and possible sanctions from our own regulator (i.e. the CAA), unless the proposals were well signalled in advance. Market conditions, longer term fixed price contracts and customer resistance mean that such costs cannot be passed through in the majority of cases.

Such consultation would involve, at least, a phased approach spread over a number of years, as was adopted by Ofcom in respect of terrestrial TV.

MAG would urge that if the proposals are progressed, then such similar principles should be adopted, and the proposed 2009 & 2010 introduction dates be deferred.

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.

Use of bandwidth for aviation purposes including navaids is a complex matter.

Are Ofcom proposing to take a particular level of bandwidth used for radar, find out how many organisations are using it and divide the resulting cost by the number ? What about different strengths and coverage of radars – will wide coverage radars be charged more than narrower coverage equipment. If bandwidth fees are 'apportioned' what happens when one user withdraws and transfers to a different technology ? Do the remaining users pay more ? Do Ofcom monitor spectrum usage and do their proposals involve any changes to this level of monitoring ?

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 ?

We disagree that a reference rate needs to be set. There are better ways of reallocating spectrum within the aviation sector than an artificial charging regime.

Is there any evidence to suggest that these areas of spectrum are in fact suffering from a lack of capacity now ?

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 ?

See our answer to Question 11 above.

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 ?

Generally, aviation spectrum is uncongested, and is likely to remain so in the short and medium terms. Technological changes, e.g the transfer of VHF services onto datalink is likely to be a much more efficient means of reallocating aviation spectrum.

In some geographical areas where the network of airports and airspace is more dense, then aspect of spectrum have experienced congestion, notably VHF communications. It should be noted that due to frequency safeguarding requirements, congestion can relate to the presence of operations within the spectrum internationally, not within the UK. AIP cannot address thus unilaterally. The pressures to increase spectrum usage in aviation has led to technology change, with the introduction of the 8.33khz spacing. This has been a significant cost to the industry and one that arguable would have been less affordable if an AIP regime cost had been in place.

Question 14

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

See our answer to question 11 above.

CONCLUSIONS

MAG is totally opposed to these proposals. They are based on a number of false premises, and seek to attain a theoretical economic efficiency gain at the cost of safety and additional cost for the UK aviation industry. They add no value to the industry and will be perceived as just another opportunistic ‘tax’.

The proposals fail to recognise the international dimensions to the matter of spectrum allocation and as a result, make the introduction of a UK based market mechanism somewhat meaningless. They also fail to recognise the interaction between spectrum allocation and the Single European Sky Network Management proposals and the SESAR initiatives.

MAG is of the strong view that Ofcom should defer the proposals and recommend to Government that such reforms should be postponed until regional and international agreements have been reached through the current European initiatives on new concepts of operation, equipment standardisation and spectrum reform to enable the necessary changes to be progressed on a Europe-wide basis.