

Mobile services on aircraft

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Purpose of this session

- Ofcom's discussion paper "Mobile Services on Aircraft"
 - Published 10 April
 - Seeking responses by 23 June
- This session brings invited stakeholders together to discuss the issues raised in our paper
- We look forward to gathering your views today and to written contributions to the discussion
- Ofcom is making no proposals at present
 - We may develop a consultation document later in the year

Introduction

- Ofcom manages the civil radio spectrum in the UK. Its duties include securing the optimal use of the electromagnetic spectrum, while having regard to the desirability of promoting competition and the development of innovative services.
- Ofcom has been approached by a number of industry representatives from the avionic and telecommunications sectors requesting that it give consideration to whether to issue wireless telegraphy licences to permit the provision and use of GSM 1800 MHz services on aircraft.
- To enable the use of mobile services on aircraft there are a number of key regulatory, technical and licensing issues that will need to be addressed by National Regulatory Agencies.
- However this proposal also raises a number of complex aviation issues, which fall outside the area of Ofcom's responsibility. These will need to be addressed by the relevant aviation bodies before any mobile application could be deployed on an aircraft.

Current UK position

- Until now, use of mobile phones on aircraft has not been permitted in the UK due to safety concerns related to the potential interference to essential on-board systems and interference to terrestrial radio networks.
- Given the environment in which aircraft operate all reasonable measures must be taken on-board aircraft to prevent the use of any portable electronic device (PED) (this includes mobile telephony) that could adversely affect the performance of the aircraft or its systems.
- In the UK evaluation of these aviation risks and management of the regime to regulate them is the responsibility of the CAA.
- A number of companies are now proposing systems for aircraft which may be able to overcome the concerns of the relevant authorities by developing technical solutions to control the electromagnetic environment in the aircraft cabin to remove the possible interference issues to both essential on-board systems and terrestrial radio networks.

Aircraft safety issues

- There are a number of issues, outside Ofcom's field of responsibility, which must be dealt with before any airborne services can be provided.
- Aircraft safety is of primary importance, and ensuring that this is in no way compromised is the responsibility of the Civil Aviation Authority.
- The human dimension of ensuring passenger safety and welfare is also the responsibility of the CAA. The use of mobile phones on aircraft has the potential for increased levels of agitation from passengers and is a factor that must be noted.
- Consideration must be given to how it can be guaranteed that all mobile terminals on an aircraft are switched off when requested.
- The proposed services would have to satisfy the CAA's requirements before they could be introduced and an ETSO (European Technical Standard Order) developed.
- If such services were permitted, it would be a commercial decision for airlines whether to offer them or not and how, taking into account the needs and preferences of their customers.

Preferred Ofcom approach

- Assuming the safety issues can be satisfactorily dealt with, there are a number of regulatory and technical issues within Ofcom's responsibilities which need to be considered and resolved before these applications could be deployed in the UK's jurisdiction.
- The international nature of the service suggests a multi-lateral approach is the right one. Ofcom is therefore working with colleagues in CEPT to develop a common regulatory and technical approach, which will result in a common implementation.
- Ofcom's role would be in licensing and regulating the proposed services; and in particular ensuring that terrestrial systems do not receive harmful interference from airborne ones.
- Before Ofcom can take a decision as to whether and how to proceed in its decision making process for mobile services on aircraft, it needs to take steps to ensure that any planned introduction and implementation of GSM use on aircraft is both technically and legally satisfactory

European forums

- CEPT requested an ECC Decision to give a consistent regulatory and technical framework across Europe for the provision of GSM 1800 services on-board aircraft.
- Detailed work has been undertaken in the ECC working groups WGRA (regulatory aspects) and WGSE (spectrum engineering). Ofcom has been actively engaged in these forums.
- The WGRA draft ECC Decision and WGSE technical compatibility report are now both out for public consultation: closing date for responses is 1 August 2006.
- ETSI ERM/MSG – responsible for developing harmonised standards under the R&TTE Directive for GSM base stations onboard aircraft. First meeting 13 June 2006: Ofcom will be attending.
- The International Civil Aviation Organisation (ICAO) and International Air Transport Association (IATA) are also looking at this issue in parallel work streams. UK expertise to these groups is provided by the CAA.

Regulatory, technical and licensing issues

- The European approach assumes the mutual recognition of licensing arrangements by each country's regulatory authorities, based on the country of aircraft registration having jurisdiction
- Some of the Regulatory issues include:
 - the territorial jurisdiction of National Regulatory Agencies over airborne systems;
 - the legal status of the proposed systems under the R&TTE and EMC Directives;
 - the status of airborne services under the Authorisation Directive;
 - the regulation of the backhaul from aircraft to ground;
 - the arrangements for managing the systems in the air;
 - access to numbering resources;
 - the range of technologies covered by the current European work.
- The main technical issue raised is how to ensure that airborne systems do not create harmful interference to terrestrial or avionic systems.
- Licensing issues that need to be addressed:
 - the options for authorising such systems; and
 - who should hold such authorisations.

Questions for discussion

- Q1 Should the provision of services using GSM at 1800MHz be allowed on aircraft if the terrestrial networks and avionic systems are not compromised? Given Ofcom's statutory role, what other factors, if any, should inform a decision to allow the use of these services on aircraft?
- Q2 Is a multilateral rather than a unilateral approach to enabling these types of service appropriate?
- Q3 Should the equipment for mobile services on aircraft be licence exempt?
- Q4 If licensing for use of the equipment on board aircraft is required, who should hold the licence?
- Q5 What considerations (practical or otherwise) are relevant to compliance by the operators of on-board GSM systems with the General Conditions of Entitlement?
- Q6 Do you have any comments in relation to competition in the provision of these services?
- Q7 Should international mobile network codes be allocated to these on-board mobile systems rather or national codes?
- Q8 Has this discussion paper highlighted the key issues, discussion points and posed the right questions?

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