

Mobile Communication Services in Airlines

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MCA Services

The framework for the provision of Mobile Communication Services on Aircraft (MCA services) is in full implementation. As a matter of fact, according to the latest data nearly 50 aircrafts in Europe offer in-flight mobile communication services, with no interference problems reported yet.

The way for providing these services was opened by two regulatory documents published last year by the European Commission, following a public consultation with the member states and interested providers. These works are Decision 2008/294/EC and Recommendation 2008/295/EC.

According to these, MCA means the Electronic Communications services which are provided by companies, aiming to allow airline passengers to use public communication networks in-flight, without setting up a direct link with ground mobile communication networks. These services must neither cause interference to other Electronic Communications services nor are they themselves protected by potential interference.

The anticipated radio frequencies range for MCA services is GSM1800, i.e. 1710-1785MHz and 1805-1880MHz, while the use of the GSM system is allowed in accordance with ETSI standards and the provisions in Report 016 by the Conference of European Postal and Telecommunications (CEPT). So as to avoid harmful interference to ground systems, a minimum altitude of 3,000 meters is stipulated for the operation of the MCA system. Moreover, an aircraft base station is expected to limit the power of mobile GSM terminals below the 0dBm in all stages of communication.

The following shall be taken into account for MCA services licensing:

- Member states have granted usage rights for ground mobile services in the GSM 1800 range which however do not cover the provision of MCA services.
- The passenger cabin is under the jurisdiction and control of the registration country of the aircraft.

Following the above, the registration country of the aircraft is responsible for MCA services licensing, according to the licensing scheme of the specific country, while member states do not require further licences for the operation of MCA services in their air space regarding aircrafts already licensed by their country of registration (mutual recognition).

In its simplest form, MCA services licensing is carried out under the regime of a general licence, without requiring

the granting of usage rights, and this process facilitates the development of MCA networks.

It must be noted that, further to the licence for the provision of communication services and use of the spectrum, MCA services may only be provided as long as they meet flight safety requirements, with appropriate certification of the airworthiness and of all the relevant aeronautical regulations. Airworthiness certificates, valid for the whole of the EU, are issued by the European Aviation Safety Agency (EASA).

Finally, in case of interference problems in the services of one member state due to MCA systems licensed by another member state, the member state responsible for the licensing is immediately notified so as to resolve such issues.

