

ELECTRONIC COMMUNICATIONS COMMITTEE

ECC Decision
of 7 July 2006
on the harmonised frequency bands
to be designated for
Air-Ground-Air operation (AGA)
of the Digital Land Mobile Systems
for the Emergency Services

(ECC/DEC/(06)05)



EXPLANATORY MEMORANDUM

1 INTRODUCTION

Over the next few years, the emergency services of a number of European countries will be renewing their mobile radio networks. Operational requirements will incorporate Air-Ground-Air (AGA) applications*. Frequencies for the systems in general were identified in ERC/DEC/(96)01. Studies on European level indicate that there is a need for harmonised AGA sub-bands of sufficient size to meet core requirements within the emergency services band. This ECC Decision designates paired core bands as well as possible paired extension bands for AGA, thus it provides flexibility for administrations by assigning spectrum for emergency services networks.

2 BACKGROUND

DMO and AGA channels are within the bands designated by ERC/DEC/(96)01 for emergency services. In order to protect the land mobile infrastructure and to ease cross border operation, there is a need to identify sub-bands for airborne communications. Those applications are delivered by an AGA overlay network. Although the spectrum demand for AGA operation depends on the network planning, it is expected that most AGA communication implementations will be possible with 10 adjacent duplex channels. ETSI developed a system reference document on AGA in 2005 (ETSI TR 102 459), which defines AGA spectrum requirements. User requirements for AGA services can be found in ETSI TR 102 021-8 V1.1.1 (2003-09).

3 REQUIREMENT FOR AN ECC DECISION

The allocation or designation of a frequency band for use by a service or system under specified conditions in CEPT administrations is laid down by law, regulation or administrative action. The ECC recognises that, for digital land mobile systems for emergency services to be introduced successfully throughout Europe, administrations, manufacturers and operators must be given the confidence to make the necessary investment in these new radiocommunication systems. The ECC therefore believes that it is necessary to designate frequency sub-bands for Air-Ground-Air operation (AGA) to be used by digital land mobile systems for emergency services. A commitment by CEPT administrations to implement an ECC Decision will provide a clear indication that the required frequency bands will be made available on time and on a European basis.

* Air-Ground-Air in this context means emergency services communication to or from low flying (typically <1000 ft over the ground level) airborne objects.

**ECC Decision
of 7 July 2006**

**on the harmonised frequency bands
to be designated for
the Air-Ground-Air operation (AGA)
of the Digital Land Mobile Systems
for the Emergency Services**

(ECC/DEC/(06)05)

"The European Conference of Postal and Telecommunications Administrations,

considering

- a) that in addition to the need for terrestrial operation, there is a need for Air-Ground-Air operation;
- b) that ERC Decision ERC/DEC/(96)01 designates the duplex bands 380 - 385 MHz and 390 - 395 MHz as frequency bands within which the requirements of Digital Land Mobile Systems for the emergency services be met;
- c) that according to the ETSI TR 102 459 there may be a need for further spectrum in addition to the core bands (384.800 - 385.000 MHz / 394.800 - 395.000 MHz);
- d) that in addition to the AGA channels in the core bands and in the preferred extension bands there may be national requirements for additional AGA channels;
- e) that the systems proposed in this band typically operate in 10 kHz, 12.5 kHz or 25 kHz channel spacing;
- f) that the use of a frequency re-use pattern may be necessary in order to avoid co-site sharing problems (ETSI TR 102 459);

DECIDES

- 1. to designate the paired frequency bands 384.800 - 385.000 MHz and 394.800 - 395.000 MHz as core bands for harmonised use by airborne applications of the Digital Land Mobile Systems for the emergency services;
- 2. that the paired frequency bands 384.750 - 384.800 MHz and 394.750 - 394.800 MHz may be used as preferred extension bands of the Digital Land Mobile Systems for the emergency services when additional channels are required for airborne applications. The use of the channels in the preferred extension bands shall be co-ordinated with neighbouring countries;
- 3. that the centre frequency of the first channel shall be at a distance of channel spacing / 2 from the lower band edges as mentioned in decides 1 and 2;
- 4. that this Decision replaces the previous ERC Decision (01)20;
- 5. that this Decision enters into force on 7 July 2006;
- 6. that the preferred* date for implementation of this Decision shall be 1 October 2006;
- 7. that CEPT administrations shall communicate the national measures implementing this Decision to the ECC Chairman and the Office when the Decision is nationally implemented."

**Note:*

Please check the Office web site (<http://www.ero.dk>) for the up to date position on the implementation of this and other ERC/ECC Decisions.