

EUROPEAN RADIOCOMMUNICATIONS COMMITTEE

ERC Decision
of 12 March 2001
on the harmonised frequency bands
to be designated for
Air-Ground-Air operation (AGA)
of the Digital Land Mobile Systems
for the Emergency Services

(ERC/DEC/(01)20)



WITHDRAWN

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. The ERO questionnaire on AGA indicated that many administrations considered that there was a need for a harmonised AGA sub-band of sufficient size to meet core requirements within the emergency services band. This ERC Decision takes the process one stage further. Such a Decision would aid international co-operation between emergency services and keep to a minimum the amount of spectrum and administrative effort required to achieve this.

2 BACKGROUND

The main background detailing the requirement of the emergency services for digital land mobile systems, and the frequency requirements of these is given in ERC/DEC/(96)01. In order to protect the land mobile infrastructure, there is a need to identify a sub-band for airborne services.

3 REQUIREMENT FOR AN ERC DECISION

The allocation or designation of a frequency band for use by a service or system under specified conditions in CEPT member countries is laid down by law, regulation or administrative action. The ERC 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 ERC therefore believes that it is necessary to designate a frequency sub-band for Air-Ground-Air operation (AGA) to be used by digital land mobile systems for emergency services. A commitment by CEPT member countries to implement an ERC 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.

**ERC Decision
of 12 March 2001**

**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**

(ERC/DEC/(01)20)

"The European Conference of Postal and Telecommunications Administrations,

considering

- a) that Administrations have the right to exercise spectrum/frequency management which may affect the number of service suppliers, in conformity with their international trade obligations and to European Community legislation as far as EU Member States are concerned;
- b) that allocation, assignment and technical co-ordination of frequencies must be done in an objective, timely, impartial, transparent and non-discriminatory manner, and should not be more burdensome than necessary under international rules, in particular, to ensure the efficient use of the frequency spectrum;
- c) that in addition to the need for terrestrial operation, there is also a need for Air-Ground-Air services;
- d) that ERC Decision ERC/DEC/(96)01 designates the 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;
- e) that in the Memorandum of Understanding (MoU) of certain European countries, the channels in the frequency bands 384.8000 - 385.0000 MHz and 394.8000 - 395.0000 MHz have been identified as common channels, i.e. channels for which co-ordination between administrations is not required;
- f) that, notwithstanding *considering e)*, the introduction of AGA services onto these channels in a country may require that similar services in other countries be taken into account;
- g) that in addition to the harmonised AGA channels there may be national requirements for additional AGA channels which may need to be co-ordinated with a neighbouring country;
- h) that the systems proposed in this band operate in 10 kHz, 12.5 kHz or 25 kHz channel spacing;
- i) that the use of a frequency re-use pattern may be necessary in order to avoid co-site sharing problems.

DECIDES

1. to designate the frequency bands 384.8000 - 385.0000 MHz and 394.8000 - 395.0000 MHz for harmonised use by airborne applications of the Digital Land Mobile Systems for the emergency services;
2. that the channel centre frequencies within the AGA sub-band shall be derived as follows:

$$F_{CH} = \text{Band Edge} - (a \times 0.00125 \text{ MHz}) + (n \times \text{Channel Spacing MHz});$$

where:

a = constant, depending on the required channel spacing,

$a = 10$, in the case of 25 kHz channel spacing

$a = 5$, in the case of 12.5 kHz channel spacing

$a = 4$, in the case of 10 kHz channel spacing

n = channel number,

$n = 193 - 200$, in the case of 25 kHz channel spacing

$n = 385 - 400$, in the case of 12.5 kHz channel spacing

$n = 481 - 500$, in the case of 10 kHz channel spacing

Band Edge – lower edge of allocated frequency band, MHz, i.e. 380.0000 MHz and 390.0000 MHz;

3. that this Decision shall enter into force on 12 March 2001;
4. that CEPT Member Administrations shall communicate the national measures implementing this Decision to the ERC Chairman and the ERO when the Decision is nationally implemented.”

Note:

Please check the ERO web site (www.ero.dk) for the up to date position on the implementation of this and other ERC Decisions.