# **ELECTRONIC COMMUNICATIONS COMMITTEE**

ECC Decision of 15 March 2002 on the use of the band 40.5 – 42.5 GHz by terrestrial (fixed service/broadcasting service) systems and uncoordinated Earth stations in the fixed satellite service and broadcasting satellite service (space-to-Earth)

(ECC/DEC/(02)04)



## EXPLANATORY MEMORANDUM

### **1** INTRODUCTION

This ECC Decision addresses the use of the band 40.5 - 42.5 GHz by terrestrial Multimedia Wireless Systems (MWS) and/or Point-to-Point (P-P) Fixed Wireless Systems as well as uncoordinated Earth stations of the fixed satellite service (FSS) and broadcasting Satellite Service (BSS) (space-to-Earth) in relation to the requirements and priorities of CEPT Administrations.

## 2 BACKGROUND

The band covered by this ECC Decision is allocated to the fixed service, broadcasting service, broadcasting satellite service and fixed satellite service (space-to-Earth) on a primary basis in the Radio Regulations.

ERC/ECC has adopted an ERC Decision designating the band 40.5 - 43.5 GHz for MWS and/or Point-to-Point (P-P) Fixed Wireless Systems (CEPT/ERC/DEC/(99)15) and an ECC Recommendation offering guidelines for the accommodation and assignment of MWS and Point-to-Point (P-P) Fixed Wireless Systems in the frequency band 40.5 - 43.5 GHz (ECC Recommendation (01)04). The current definition of MWS is "terrestrial multipoint systems which have their origin in telecommunication and/or broadcasting, including MVDS (Multipoint Video Distribution Systems), and which provide fixed wireless access directly to the end user for multimedia services. These MWS may offer different degrees of interactivity". The current definition of Point-to-Point (P-P) Fixed Wireless Systems is "point-to-point links within the fixed service, to be used for infrastructure purposes and/or access to the end user".

The fixed service (FS) is a key medium for delivering cost effective telecommunication services with a rapid and local deployment. It is expected that development of terrestrial MWS and/or Point-to-Point (P-P) Fixed Wireless Systems will result in the deployment of large numbers of FS stations.

Satellite systems are also a key medium for the delivery of future telecommunication services enabling communication to rapidly be established over wide areas. MWS and/or Point-to-Point (P-P) Fixed Wireless Systems may not be economically viable in rural areas and hence a complementary satellite coverage could be needed. The band 40.5 - 42.5 GHz could also be used by coordinated FSS gateways.

However, by adopting CEPT/ERC/DEC(99)15 and Recommendation (01)04, CEPT has indicated that terrestrial MWS and/or Point-to-Point (P-P) Fixed Wireless Systems shall have the priority in this band over uncoordinated Earth stations.

Until recently, the sharing between the FS and the FSS was not a problem because the fixed systems and satellite Earth stations were few in number and could be easily co-ordinated in the same frequency bands. With the advent of the mass application of FSS and BSS systems and the expected high density of MWS and/or Point-to-Point (P-P) Fixed Wireless Systems terrestrial stations, the situation has changed. Compatibility studies have shown that the sharing between a high number of MWS and/or Point-to-Point (P-P) Fixed Wireless Systems terrestrial stations is expected to be difficult in the same area.

## **3** REQUIREMENT FOR AN ECC DECISION

In order to provide a clear regulatory framework for future investment and deployment of fixed, broadcasting, broadcasting-satellite and fixed-satellite systems, and to facilitate the use of transportable and uncoordinated FSS terminals, an ECC Decision setting out the priorities and regulatory framework for the use of terrestrial MWS and/or Point-to-Point (P-P) Fixed Wireless Systems as well as FSS/BSS Earth stations is necessary for the frequency range 40.5 - 42.5 GHz.

#### ECC Decision of 15 March 2002

#### on the use of the band 40.5 – 42.5 GHz by terrestrial (fixed service/broadcasting service) systems and uncoordinated Earth stations in the fixed satellite service and broadcasting-satellite service (space to Earth)

#### (ECC/DEC/(02)04)

"The European Conference of Postal and Telecommunications Administrations,

#### considering

- a) that the band 40.5 42.5 GHz is allocated to the fixed service, the broadcasting service, the broadcasting satellite service and the fixed-satellite-service (space-to-Earth) on a primary basis in the Radio Regulations;
- b) that ERC Decision CEPT/ERC/DEC/(99)15 designates the band 40.5 42.5 GHz as well as 42.5 43.5 GHz for the use of Multimedia Wireless Systems (MWS) and/or Point-to-Point (P-P) Fixed Wireless Systems in the fixed and/or broadcasting services;
- c) that ECC Recommendation (01)04 offers guidelines for the accommodation and assignment of frequencies for MWS in the frequency band 40.5 43.5 GHz;
- d) that the future expansion of the terrestrial services in this band is of vital importance to provide broadband multimedia wireless access throughout CEPT countries;
- e) that terrestrial MWS and/or Point-to-Point (P-P) Fixed Wireless Systems may not be economically viable in rural areas, where a complementary satellite coverage could be needed;
- f) that this band could also offer an important resource for large individually co-ordinated FSS Earth stations;
- g) that the sharing between a high number of MWS and/or Point-to-Point (P-P) Fixed Wireless Systems stations and uncoordinated Earth stations is expected to be difficult in the same geographical area.

#### DECIDES

- 1. that in the band 40.5 42.5 GHz, uncoordinated Earth stations in the fixed-satellite service or broadcasting-satellite service shall not claim protection from stations of the fixed and the broadcasting services;
- 2. that this Decision will enter into force on 15 March 2002;
- 3. 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: