

Recommendation T/R 25-09 E (Chester 1990, revised at Budapest 1995)

DESIGNATION OF FREQUENCIES IN THE 900 MHZ BAND FOR RAILWAY PURPOSES

Recommendation proposed by the Frequency management Working Group of the ERC:

“The European Conference of Postal and Telecommunications Administrations,

considering:

- a) that railways are making increasingly extensive use of radio communications to facilitate the operation of railway traffic and increase its safety;
- b) that it would be desirable to be able to use common railway radio equipment in different countries in a common frequency band as well as for border crossing traffic;
- c) that CEPT Recommendation T/R 22-01 E allocated a band of two times 0.5 MHz (21 channels) in the 450 MHz band for international railways without excluding national requirements;
- d) that an advanced frequency economic digital radio system being developed under the aegis of the Union Internationale des Chemins de fer (UIC) should cover the international requirements without excluding national requirements for non public radiocommunication of the railways;
- e) that the amount of frequency spectrum required for railway purposes is different in different countries;
- f) that the introduction by the railways of this radio system would liberate frequencies presently used by railways;
- g) that CEPT Recommendation T/R 75-02 E concerning the use of frequencies in the band 862-960 MHz by the mobile except aeronautical mobile service includes sub-bands 870-888/915-933 MHz for use by land mobile systems preferably for non-public networks, and that digital systems should start at the lower end of that band;
- h) that the equipment must be capable of operating over the designated frequency band;

noting:

- that it is unlikely that frequencies will be available in most CEPT countries in the 900 MHz band before the year 2000 and in some CEPT countries not before the year 2005;
- that some of these requirements could be covered by GSM or any other public networks;

recommends:

1. that in CEPT countries the international requirements without excluding national requirements of railways for non-public digital radiocommunication system in the 900 MHz band should be covered by selecting appropriate sub-bands from the designated band 876-880 MHz (mobile station transmit) paired with 921-925 MHz (base station transmit) with a duplex separation of 45 MHz;
2. that close liaison between CEPT and UIC should be established in order to provide by the year 2005 the designated frequencies for international use;

further recommends:

that after the introduction of this radio system most of the frequencies presently used would be liberated by railways.”