Report From the Meeting of CEPT CPG PT-3 4-5, March 2004 (A. Roytblat/FCC)

The first meeting of Project Team 3 (PT-3) of the Conference Preparatory Group for WRC-03 (CPG03) of European Conference of Post and Telecommunications (CEPT) was held in Copenhagen, Denmark during 4-5, March 2004. In accordance with its Terms of Reference, PT-3 addressed the WRC-07 agenda items 1.5, 1.6, 1.8, 1.18 and 1.19. The highlights/decisions of the meeting, for each agenda item, are provided below.

Agenda Item 1.5 - *spectrum requirements and possible additional spectrum allocations for aeronautical telecommand and high bit-rate aeronautical telemetry.*

With regard to this agenda item, PT-3 noted the existing CEPT/ERC Recommendation 62-02 E. This recommendation calls for future airborne telemetry applications to be primarily in the frequency range 2300 - 2400 MHz; where the frequency band 2300 - 2330 MHz should be primarily used as a core band for airborne telemetry applications and that the band 2330 MHz - 2400 MHz should be used as an extension band where required. France, Germany and other administrations expressed concern that the 2300-2400 MHz band may not be appropriate or adequate for the wide-band aeronautical telemetry and telecommand. These administrations indicated that the overall necessary bandwidth for civil aircraft flight testing was preliminary estimated at about 60 MHz in a frequency below 7 GHz (below 5 GHz preferred). The 60 MHz requirement was derived based on five aircraft tested in-flight simultaneously with 12 MHz channel for each aircraft.

The PT-3 adopted a preliminary CEPT position that calls for accommodation of the spectrum requirement for aeronautical telemetry and telecommand, with priority given in the designation of frequency bands already allocated to mobile service on a primary basis.

Agenda Item 1.6 - additional allocations for the aeronautical mobile (*R*) service in parts of the bands between 108 MHz and 6 GHz, in accordance with Resolution 414 (WRC-03) and, to study current satellite frequency allocations, that will support the modernization of civil aviation telecommunication systems, taking into account Resolution 415 (WRC-03).

The PT-3 considered the following three issues under this agenda item:

<u>Issue 1</u>: Consideration of additional allocations for the aeronautical mobile (R) service in parts of the bands between 108 MHz and 6 GHz, for the introduction of new aeronautical applications in order to overcome expected shortage in spectrum for line-of-sight air-ground communications.

With regard to this issue, the PT-3 noted that the amount of spectrum required for AM(R)S is currently under study within ICAO. The spectrum currently available for aeronautical use, and is being considered in ICAO studies include the 108 - 137 MHz, 328.6 - 335.4 MHz, 960 - 1215 MHz, 1215 - 1350 MHz, 2700 - 2900 MHz, 4200 - 4400 MHz and 5030 - 5150 MHz bands. With the exceptions of the AM(R)S

allocation in the band 117.975 – 137 MHz, the remaining bands are used for radionavigation. The PT-3 adopted a preliminary CEPT position to support, in principal, new allocations for AM(R)S between 108 MHz and 6 GHz, preferably the bands currently available for use by aeronautical systems.

<u>Issue 2</u>: Consideration of the use of the band 5 091-5 150 MHz to meet two current aviation safety objectives, i.e. to provide more information to the pilot and cockpit, and to reduce runway incursions.

With regard to this issue, the PT-3 noted that ICAO is focusing its work on two frequency bands: 960-1164 MHz and 5030-5150 MHz. There may also be a proposal for allocations to accommodate the operation of the Universal Access Transceiver (UAT) systems in the band 960-1164 MHz. The PT-3 also noted that since the VOR usage is decreasing there may be a need for studies in the 112-118 MHz band.

<u>Issue 3</u>: The study of the extent, if any, to which current satellite frequency allocations could be used to meet aeronautical requirements to support the modernization of civil aviation telecommunication systems, especially those in developing countries.

With regard to this issue, the PT-3 noted that the Resolution 415 specifically did not contemplate the making of any new allocations in satellite frequency bands or of any changes to current satellite frequency allocations. The PT-3 noted that within ICAO, two main issues were identified:

- a) use of VSAT systems to overcome shortcomings in terrestrial ground-ground communication systems; and
- b) use of (generic) mobile satellite systems that could support aeronautical CNS/ATM communications.

Agenda Item 1.8 - studies on technical sharing and regulatory provisions for the application of high altitude platform stations operating in the bands 27.5-28.35 GHz and 31-31.3 GHz in response to Resolution 145 (WRC-03), and for high altitude platform stations operating in the bands 47.2-47.5 GHz and 47.9-48.2 GHz in response to Resolution 122 (rev. WRC-03)

With regard to this agenda item, the PT-3 acknowledged that CEPT primary interest is to complete the studies for the bands 47.2-47.5 GHz and 47.9-48.2 as required by Resolution 122 (Rev WRC-03). The PT-3 expectes that the studies required by Resolution 145 in other bands for other Regions would result in pressure to introduce these other bands in Region 1. The PT-3 expressed support for the studies on protection of the existing services and to seek protection for the passive services in the 31.3-31.8 GHz.

Agenda Item 1.18 - *pfd limits in the band 17.7-19.7 GHz for satellite systems using highly inclined orbits*

The PT-3 noted that in Europe the 17.7-19.7GHz band is extensively used by the FS for low, medium and high capacity fixed links. With regard to this agenda item, the PT-3 adopted a preliminary CEPT position to support the technical studies with the aim of

developing pfd limits that protect FS systems from satellite systems operating in Highly Inclined Orbits.

Agenda Item 1.19 - spectrum requirements for global broadband satellite systems in order to identify possible global harmonized FSS frequency bands for the use of Internet applications, and consider the appropriate regulatory/technical provisions The PT-3 decided to take a wait and see attitude on this agenda item. PT-3 will monitor developments/work on this agenda item at the ITU-R (WP-4A).

Documents

The documents of this meeting are available at: http://www.ero.dk

Next meeting

The next meeting of PT-3 is scheduled for 24-25 August 2004, in [TBD].