

EUROPEAN COMMON PROPOSALS

PART 22

Agenda Item 1.22 : Future development of IMT-2000 and systems beyond IMT-2000

Introduction

In Resolution 228 (WRC-2000), the ITU-R was invited to continue its studies on overall objectives, applications and technical and operational implementation for the future development of IMT-2000 and Systems Beyond. It was also invited to study spectrum requirements and potential frequency ranges suitable for the future development of IMT-2000 and systems beyond IMT-2000, and in what time-frame such spectrum would be needed.

The requirements for the future development of IMT-2000 and Systems Beyond are to be reviewed by WRC-2006, taking into consideration market requirements and the results of ITU-R studies presented to WRC-2003.

Proposals

ARTICLE 5

Frequency allocations

NOC **EUR/1.22/1**

Reason: *No change of allocations at WRC03 since studies on the spectrum requirements cannot be finalised by WRC-03.*

MOD **EUR/1.22/2**

RESOLUTION 228 (Rev.WRC-03)

Studies to consider frequency-related matters for the future development of IMT-2000 and systems beyond IMT-2000 as defined by ITU-R

The World Radiocommunication Conference (Geneva, 2003),

considering

a) that International Mobile Telecommunications-2000 (IMT-2000) systems started operation in the year 2000;

- b) that Question ITU-R 229/8 addresses the future development of IMT-2000 and systems beyond IMT-2000;
- c) that the future development of IMT-2000 and systems beyond IMT-2000 is being studied within ITU-R;
- d) that the technical characteristics of IMT-2000 are specified in ITU-R and ITU-T Recommendations, including Recommendation ITU-R M.1457 which contains the detailed specifications of the radio interfaces of IMT-2000;
- e) that it was eight years ahead of the IMT-2000 initial deployment that WARC-92 identified the spectrum for IMT-2000 in No. 5.388 and in Resolution 212;
- f) that the review of IMT-2000 spectrum requirements at WRC-2000 concentrated on the bands below 3 GHz;
- g) that information technology and telecommunication markets evolve rapidly;
- h) that adequate spectrum availability is a prerequisite for the market and technological success of the future development of IMT-2000 and systems beyond IMT-2000;
- i) that a continuing and accelerating growth in the demand for multimedia applications such as high-speed data, IP-packet and video by mobile communication systems is forecasted;
- j) that the future development of IMT-2000 and systems beyond IMT-2000 is foreseen to address the need for higher data rates than those currently deployed for IMT-2000;
- k) that an orderly process of change and development of IMT-2000 towards the capabilities and functionalities of systems beyond IMT-2000 is needed;
- l) that, for global operation and economy of scale, which are key requirements for success of mobile communications services, it is desirable to agree on a harmonized time-frame and common technical, operational and spectrum-related parameters of systems, taking account of relevant IMT-2000 and other experience;
- m) that it is therefore timely to study market, technical, spectrum and regulatory issues pertinent to the future development of IMT-2000 and systems beyond IMT-2000;
- n) that sharing and compatibility should be addressed between existing services and the future development of IMT-2000 and systems beyond IMT-2000;
- o) that Question ITU-R 77-4/8 is to consider the needs of developing countries in the development and implementation of mobile radiocommunication technology,

noting

- a) that the IMT-2000 radio interfaces as defined in Recommendation ITU-R M.1457 are expected to evolve within the framework of ITU-R beyond those initially specified, to provide enhanced services and services beyond those envisaged in the initial implementation;
- b) that ITU-R has envisaged that new elements of systems beyond IMT-2000 will be developed, which will closely interwork and be interoperable with currently operating IMT-2000 and its future enhancements;
- c) that there is a need for appropriate naming to be developed in advance of WRC-07 for the future development of IMT-2000 and systems beyond IMT-2000, recognizing

- a) the time necessary to develop and agree on the technical, operational, spectrum and regulatory issues associated with the continuing enhancement of mobile services;

b) that service functionalities in fixed, mobile and broadcasting networks are increasingly converging;

c) that, in the future, mobile systems are expected to adopt more spectrum-efficient techniques;

d) the needs of developing countries for the cost-effective implementation of advanced mobile communication technologies and the propagation characteristics of lower frequency bands that result in larger cells,

resolves

1 to invite ITU-R to further study and develop Recommendations on technical and operational issues relating to the future development of IMT-2000 and systems beyond IMT-2000;

2 to invite ITU-R to complete studies on the spectrum requirements and the potential frequency ranges suitable for the future development of IMT-2000 and systems beyond IMT-2000, and in what time-frame such spectrum would be needed, taking into consideration the evolving market, including the growth in demand for IMT-2000 services, and the evolution of IMT-2000 and other mobile systems through advances in technology;

3 that the studies referred to in *resolves* 1 and 2 should take into consideration the particular needs of developing countries;

4 that the studies referred to in *resolves* 1 and 2 should include sharing and compatibility studies with services already allocated in potential spectrum for the future development of IMT-2000 and systems beyond IMT-2000;

5 that the spectrum requirements for the future development of IMT-2000 and systems beyond IMT-2000 should be considered by WRC-07, taking into account the results of the ITU-R studies referred to in *resolves* 2,

urges administrations

to participate actively in the studies by submitting contributions to ITU-R.