

RADIOCOMMUNICATION STUDY GROUPS

Document 8F/TEMP/40-E 25 August 2000

## 2nd Meeting of Working Party 8F 21 - 25 August 2000, San Diego, USA

Source: Document 8F/46



Working Party 8F

## LIAISON STATEMENT TO RELEVANT EXTERNAL ORGANISATIONS

## UPDATING RECOMMENDATION ITU-R M.1457, "DETAILED SPECIFICATIONS OF THE RADIO INTERFACES OF IMT-2000"

#### 1 Introduction

ITU-R Working Party 8F wishes to thank the relevant External Organisations for providing contributions related to the updating of Recommendation ITU-R M.1457 "Detailed Specifications of the Radio Interfaces of IMT-2000".

This liaison discusses a number of issues upon which contributions are requested.

#### 2 Background

At the second meeting of WP 8F (21-25 August 2000, San Diego, USA) discussions took place on the update process for Recommendation ITU-R M.1457. The current update process for M.1457, put in place at the first meeting of ITU-R WP 8F (7-10 March 2000, Geneva) was intended to enable the efficient update of routine minor modifications to the existing radio interfaces.

It is now apparent that a review of this process is required to allow for non-routine major enhancements and also emerging technology changes.

#### **3** Distinguishing Between Routine Minor Updates and Non-routine Updates

WP 8F agreed that there is a difference between what can be called routine minor updates to the technologies and non-routine updates. There is a requirement to have a mechanism, process and definition that WP 8F can use to enable this distinction and decision to be made. This mechanism

## - 2 -

#### 8F/TEMP/40-E

may also be used as a framework for other new technologies to be considered as part of the IMT-2000 family.

It has been suggested that Recommendation ITU-R M.1455 (IMT-2000 Radio Interface Key Characteristics) could be used as the technical basis to enable WP 8F to determine the distinction between routine minor and non-routine updates. One possibility is that if an input to ITU-R M.1457 is consistent with the parameters within ITU-R M.1455, it can be considered a routine minor update. For those updates that are not consistent with these parameters, WP8F will have to determine if the proposed update is routine/minor or non-routine.

## 4 Emerging Technology Changes

ITU-R Working Party 8F is aware that there are a number of activities world-wide that are developing technology changes focussed on improving the existing terrestrial radio interfaces specified in Recommendation M.1457, especially for new emerging services and market applications which may require optimised performance and capabilities beyond those envisioned during the original development. WP 8F invites contributions on the planned technology changes to improve the performance of the radio interfaces that might be incorporated into Recommendation M.1457.

In this regard WP 8F recognises that the aggressive work plan outline in this document is important to these developments underway in the organisations external to the ITU. Furthermore, this work plan described assumes that any evaluation of proposals can take advantage of the previous work of ITU-R TG 8/1, suitably adjusted by consideration of comments received by WP 8F, as requested in this liaison. It should be noted that it is highly likely that proposals which diverge significantly from the radio interfaces currently in M.1457 may require additional time to evaluate. Consequently, WP 8F would welcome in the responses to the various questions raised in this liaison, sufficient information to enable the activities to proceed in an expeditious manner, consistent with the process being developed.

This process outlined below is considered to balance a number of requirements, such as;

- Allowing the ITU to add value in the ongoing development of IMT-2000, such as limiting the number of radio interfaces, enabling interoperability, supporting global roaming and facilitating convergence.
- Satisfying the need for a number of proposals to be evaluated together within a specified timeframe.
- Being responsive to market requirements.

It is also considered essential that whatever process is put in place should be sufficiently generic to allow WP 8F to be responsive to future developments.

WP 8F will identify focus area for the technology changes for the 2001 and future updates of ITU-R M.1457. At the next meeting (23-27 October 2000, Geneva), WP 8F will develop the requirements and process for technology changes determined to be non-routine updates. Focus areas could perhaps be techniques to improve spectrum efficiency, increased data rates, changes to the radio interfaces to improve packet and/or IP based services and applications, etc.

## 5 Update Process

The objective of WP8F, in this context, is to provide a balanced framework for the orderly growth of system capabilities, taking into account both the ITU development schedule and the schedule of the contributing external organisations. Consequently, WP 8F has determined as a goal that the following process should be followed:

#### - 3 -8F/TEMP/40-Е

## 2<sup>nd</sup> WP 8F (21-25 August'00):

- Circular letter is sent to all ITU members providing information on the Recommendation M.1457 update process and evaluation process for emerging technologies.
- This liaison is sent to External Organisations and other interested organisations.

## 3<sup>rd</sup> WP 8F (23-27 October'00)

- Receives final submissions from EOs for the 2000 ITU-R M.1457 update (M.1457 Rev.1) as requested in previous liaison correspondence from WP 8F to external organisations.
- Develops and applies a mechanism/definition so that WP8F can distinguish between routine minor updates and non-routine major updates
- Incorporate routine minor updates and send M.1457 Revision 1 to ITU-R Study Group 8
- Reviews material from EOs future work plans for indications of emerging technologies that WP 8F could expect to see in future submissions
- Identifies and prioritises the focus areas for the technology changes for the 2001 and future updates of ITU-R M.1457.
- Develops the requirements, process, and methodology for considering these focus areas.

## 4<sup>th</sup> WP 8F (21-27 February'01)

- Finalise process and any remaining work on requirements for the focus area(s)
- Finalises the call for emerging technologies based on the focus area priorities established

# 5<sup>th</sup> WP 8F (27 June-3 July'01)/6<sup>th</sup> WP 8F (10-16 October'01)

- Final proposals submitted and evaluated by WP 8F based on the process developed at the October 2000 meeting
- Finalise ITU-R M.1457 Revision 2

Please note that focussed Expert Groups may be required between meetings depending upon progress.

#### 6 Request for Input Contributions

Input contributions to the third meeting of ITU-R Working Party 8F (23-27 October'00, Geneva), are requested specifically on the following issues:

- 6.1 The process/mechanism/definition so that WP 8F can distinguish between routine minor updates and non-routine major updates
- 6.2 The focus areas and the timing of these focus area for the technology changes for M.1457 Revision 2.
- 6.3 The service and performance requirements for each focus area and the requirements that result for evaluating the technology changes
- 6.4 Review of the proposed update process as described in section 5.
- 6.5 The process for evaluating emerging technology proposals

#### - 4 -8F/TEMP/40-E

- 6.6 The work plans for the next 1-2 years from each External Organisation. It is critical that WP 8F receive the work plans as requested in the liaison sent to the EOs from the first meeting of WP 8F (7-10 March '00, Geneva). This information is needed so that WP 8F can develop a process to accommodate non-routine updates in a timely manner. This process would include the development of requirements and objectives, and the development of technical requirements for enhancements to the existing IMT-2000 requirements and objectives, and the development of a methodology for evaluation of multiple proposals for such enhancements, if more than one proposal is received. This is necessary to ensure that IMT-R M.1457 continues to support the features and design parameters of IMT-2000, including the capability to ensure world-wide compatibility and international roaming while providing a minimum number of IMT-2000 radio interfaces, which are harmonised to the maximum extent possible. In absence of this information WP 8F will establish a schedule that will only include routine/minor updates.
- 6.7 WP 8F is considering the usefulness of a phased approach for updates to be finalised within WP 8F in June and in October as a function of the external organisation work plan. Sections approved by WP 8F in June will not be subject to further revision in the October meeting. Comment on this phased approach is requested.

Contributors should take into account the requirement that this whole process is intended to be used as the basis for further updates of ITU-R M.1457.

\_\_\_\_\_