

TSG RAN meeting #11
13 – 16 March 2001
Palm Springs, USA

Agenda Item:	5.5
Source:	ITU Ad Hoc Contact Person
Title:	Status Report
Document for:	Information

At its last meeting (Rabat, 21-27 February 2001) ITU-R WP 8F was able to finalise the procedure for the Revisions of Recommendation ITU-R M.1457 (RSPC). This is attached to this report as Annex 1. In addition, a detailed Workplan for year 2001 (Revision 1 of Rec. M.1457), identifying per each 8F meeting the expected input and outcome, has been developed; this is attached as Annex 2. In line with this Workplan, the revised material for the Overview of IMT-2000 TDMA SC (UWC-136 – section 5.4.1 of M.1457) was considered ready to be approved by 8F; the other material received by 8F on the revisions of the other Sections of Rec. M.1457 has been reviewed and the comments that were raised were captured into a document attached to this report as Annex 3. Also the Roadmap has been updated and it is attached as Annex 4.

In order to ensure that ITU-R WP 8F receives the relevant material as expected at its next meetings, it is suggested that RAN#11 approve the procedure in doc TSGR#11(01)0186 that was circulated within ITU Ad Hoc. This procedure clarifies what ITU Ad Hoc should develop during year 2001 and what is the expected outcome of the future RAN Plenaries.

Also two documents from IMT-2000 Project Manager were reviewed during the last ITU-R WP 8F meeting. The first one ('Update Procedure for Revisions of Recommendation ITU-R M.1457') addresses the collaborative arrangements between ITU-R and the SDOs on the relations between Sections 5.x.1 of Rec. M.1457 ('Overviews'), Sections 5.x.2 (reference to the SDOs transposed Deliverables), and the GCS (Global Core Specifications); this doc was also discussed at the 3GPP PCG level. The second document from IMT-2000 Project Manager ('Requirement to Provide Assurance for the Global Core Specification as Relates to Rec. ITU-R M.1457') proposed a procedure to guarantee that changes to the GCS as submitted to the ITU-R for actions within the ITU-R are done with full understanding of the positions of the individual SDOs that are stakeholders in the transposed standards. This document was modified based on the discussion in WP8F and the final version is attached to this report as Annex 5.

With reference to the Preliminary Draft New Recommendation (PDNR) IMT.UNWANT (“Generic Unwanted Emission Characteristics associated with the terrestrial Radio Interfaces of IMT-2000”), it was not possible to finalise it at this meeting since the material from TFES was not yet available. Therefore all material currently available (including the 3GPP input as per RP-000467) will be carried forward to the next meeting. It was agreed that, in order to clarify that the objectives are different for mobile stations (free circulation and harmonised market) and base stations (harmonised market only), IMT.UNWANT should be divided in two separate Recommendations, one for terminals and one for base stations.

WP 8F also addressed the revision of Rec. ITU-R M.1224 (‘Vocabulary of Terms for IMT–2000’) and sent a Liaison Statement to the External Organizations (see Annex 6) asking to provide their set of Definitions, Acronyms and Abbreviations. *In order to respond to this request, it is considered sufficient to provide for the next meeting of ITU-R WP 8F the last version of TR 25.990 (‘Vocabulary for UTRAN’).*

The next meeting of ITU-R WP 8F will take place in Stockholm (Sweden), 27 June – 3 July 2001.

Annex 1: Doc 8F/TEMP/86-E*

Annex 2: Doc 8F/TEMP/88-E*

Annex 3: Doc Rev1 8F/TEMP/95-E

Annex 4: Doc 8F/TEMP/85-E*

Annex 5: Doc 8F/TEMP/92-E

Annex 6: Doc 8F/TEMP/107-E

* The attached doc does not contain the small revisions agreed at the final ITU-R WP8F plenary (the official very final version of these docs has not been distributed yet)



4th Meeting of Working Party 8F
21 – 27 February 2001, Rabat, Morocco



Working Group RTECH, DG1

Roadmap for current work relevant to future updates of Recommendation ITU-R M.1457

Representatives of External Organizations (EOs) were invited to submit information to develop a road map of planned enhancements to their radio systems.

1 IMT-2000 CDMA-DS and IMT-2000 CDMA-TDD

The table below contains the title of the technical areas currently under investigation in 3GPP and a provisional target date for completion. The complete list, together with a short description of each technical area, can be found on the 3GPP web site www.3gpp.org.

Title	Provisional completion date
1.28 Mcps TDD option	March 2001
Base Station classification	March 2001
Hybrid ARQ II/III	September 2001
Node B Synchronization for TDD	March 2001
UTRA FDD repeater Specifications	March 2001
Terminal power saving features	March 2001
PS-Domain handover for real-time services	March 2001
RAB QoS Negotiation/Renegotiation over Iu	March 2001
RRM optimisation for Iur and Iub	March 2001
Radio Access Bearer support enhancements	March 2001

Improvement of inter-frequency and inter-system measurements	December 2001
Evolution of the transport in UTRAN	March 2001
Smart Antenna	March 2001
UE (User Equipment) positioning	March 2001
DSCH power control improvement in soft handover	March 2001
Radio link performance enhancements (feasibility study)	December 2001
High Speed downlink packet access (feasibility study)	March 2001
USTS (UL Synchronous Transmission Scheme) (feasibility study)	December 2001
Improved common DL channel for cell FACH state (feasibility study)	March 2001

2 IMT-2000 CDMA-MC

3GPP2 is currently evaluating proposals for 1X Evolved Data and Voice enhancement (1xEV-DV), which continues to enhance the cdma2000 family of specifications. A working group has been formed to perform the evaluation process and to develop a framework for 1xEV-DV with a target date of May 2001. Once the 1xEV-DV framework has been developed, 3GPP2 TSG-C will generate 3GPP2 specifications. Once the specifications are complete, 3GPP2 will deliver the specifications to the 3GPP2 SDOs to be transposed into standards. 3GPP2, in conjunction with the 3GPP2 SDOs, will also provide RSPC updates to the ITU-R WP8F in accordance with the update process described in 8/LCCE/85+Corr.1. A target date of October 2001 has been proposed to 3GPP2 TSG-C for completion of the 3GPP2 specifications. This target date is currently being evaluated. 3GPP2 TSG-C will provide ITU-R WP 8F a more detailed work schedule when it becomes available.

3GPP2 has developed an evaluation process for 1xEV-DV. A stage 1 requirements document has also been developed and approved for 1xEV-DV. This requirements document includes the following key objectives:

- An improvement in the voice capacity and spectrum efficiency as compared to IMT-2000 CDMA MC 1X
- Integrated Voice and Data enhancement
- High-speed forward and reverse link packet data rate

3 IMT-2000 FDMA/TDMA

DECT Packet radio Service	June 2001
DECT/UMTS interworking	end of 2001
DECT access to IP-networks	end of 2001
Broadband DECT (10 Mbit/s)	beginning 2002

4 IMT-2000 TDMA-SC

Work item	Provisional completion date
Enhanced or hybrid access technologies	October/December 2001
Real-time IP-based Services	October/December 2001
Continuing Enhancements to QoS	October/December 2001
Improved User Throughput	October/December 2001
Enhanced UE positioning	October 2001
Enhanced Subscriber Authentication and encryption	October 2001
R-UIM application enhancements	October 2001

5 Focus areas for future studies

Based on input contributions, a key area for 2001 will be the development of fast packet access modes. WP 8F should consider setting expected performance requirements (e.g., for fast packet access) and criteria which will lead to continued harmonization and convergence among the IMT-2000 radio interfaces (e.g., refer to Document 8F/123).

It should be noted that at the 2nd meeting of WP 8F (San Diego, 21-25 August 2000), the following sentence on "Focus Areas" was agreed and was subsequently included in Circular-Letter 8/LCCE/82, *"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"*.



**4th Meeting of Working Party 8F
21 – 27 February 2001, Rabat, Morocco**



WG RTECH

UPDATE PROCEDURE FOR REVISIONS OF RECOMMENDATION ITU-R M.1457 (DETAILED SPECIFICATIONS OF THE RADIO INTERFACES OF IMT-2000)

1 Introduction

Five terrestrial radio interfaces are included in the existing Recommendation ITU-R M.1457, which were already approved to meet the IMT-2000 Requirements and Objectives and Minimum Performance Capability specified in the various ITU Recommendations (see Attachment 4 to Circular-Letter 8/LCCE/47, "Summary of IMT-2000 Requirements and Objectives and Compliance Template").

Working Party 8F has received contributions proposing updates to the terrestrial radio interfaces in Recommendation ITU-R M.1457. This document describes the procedure that will be used by WP 8F for the revisions¹. <Editor's note : change to the new footnote from 85 Corr 1>

¹ Note that the updating process described in Circular-Letter 8/LCCE/82 of 4 October 2000 has been superseded by the procedure contained in this letter. Comments are invited to be submitted to the 4th meeting of WP 8F (Rabat, Morocco, 21-27.2.2001) when the Working Party intends to conclude its deliberations on the updating process of Recommendation ITU-R M.1457 (RSPC). In addition, WP 8F has invited the Director, BR, to report to its 4th meeting on the integrity of the electronic presentation of the specifications in the current version of Recommendation ITU-R M.1457 (RSPC), as well as to provide information on the current status of the arrangements between ITU and the External Organizations relative to RSPC and its revisions. This request was made to assist WP 8F in its future deliberations on RSPC.

Three cases are considered in Sections 3, 4 and 5 below:

- *Section 3:* Proposed changes to Section 5.x.2 only of Recommendation ITU-R M.1457.
- *Section 4:* Proposed changes to Sections 5.x.1 and 5.x.2 of Recommendation ITU-R M.1457.
- *Section 5:* Proposed new Sections 5.y.1 and 5.y.2 ($y \geq 6$) in Recommendation ITU-R M.1457.

2 Frequency of revisions to Recommendation ITU-R M.1457

A yearly update cycle for the formal revision of Recommendation ITU-R M.1457 is envisaged (i.e., ITU-R approval according to Resolution ITU-R 1). This represents a good compromise between the need to maintain market stability (e.g., avoid frequent changes that would lead to market confusion) and the need to promote the advancement of technology and service capabilities available to the user.

3 Proposed changes to Section 5.x.2 only of Recommendation ITU-R M.1457

In the case that a proposed update is only a revision or an addition of Standard Development Organization (SDO) standards in Section 5.x.2, without modification of the overview part (Section 5.x.1 "Summary and technical parameters of the radio interface") and within the scope of the global core specification (GCS)² corresponding to that radio interface, the proponent must submit a document to WP 8F summarizing the changes, the rationale for those changes, and a self-declaration indicating that those changes are consistent with Section 5.x.1 and the GCS.

At each meeting of WP 8F, the Director, BR, is invited to provide a report of such proposed revisions he has received since the last meeting and WP 8F shall act on those proposals at each meeting.

The transposition process used during the development of the first version of Recommendation ITU-R M.1457 applies.

4 Proposed changes to Sections 5.x.1 and 5.x.2 of Recommendation ITU-R M.1457

In the case that a proposed update is a revision or an addition of SDO standards in Section 5.x.2 which require a modification of the overview part (Section 5.x.1) and/or to the global core specification, the following must be submitted to WP 8F:

² The GCSs are the specifications provided to ITU by the External Organizations (EOs), upon which the SDOs standards are based. The GCSs contained in the ITU website are indicated by hyperlinks at the beginning of each Section 5.x.2 of Recommendation ITU-R M.1457. Section 5.x.2 also contains hyperlinks to the SDO standards corresponding to a given GCS. The SDOs regularly transpose the jointly agreed specifications into published standards. The SDOs should formally certify to the ITU that their standards incorporated by reference into the revised and published Recommendation ITU-R M.1457 correspond to the set of specifications agreed by the SDOs to be transposed into standards. The SDOs should also certify that their standards are consistent with the relevant Section 5.x.1 of Recommendation ITU-R M.1457 as presented by WP 8F to SG 8. The process of transposition of those jointly agreed specifications into the SDOs standards, should maintain close consistency with the jointly agreed specifications.

- 1) the update of Section 5.x.2;
- 2) the proposed modification to Section 5.x.1, if applicable;
- 3) the modifications to the global core specification, if applicable;
- 4) a summary of the proposed update, including the rationale for the proposed update;
- 5) a self-evaluation of the proposed update against the evaluation criteria; and
- 6) a self-declaration that the proposed amendments are self-consistent between Section 5.x.1, Section 5.x.2 and the GCS.

This information may be submitted to WP 8F at any time and over more than one meeting; however, WP 8F will be unable to make a decision until all the required information is available. The transposition process used during the development of the first version of Recommendation ITU-R M.1457 applies.

5 Proposed new Sections 5.y.1 and 5.y.2 ($y \geq 6$) in Recommendation ITU-R M.1457

The proponent will indicate whether its submission is for a new section 5.Y.1, 5.Y.2.

However, it is the responsibility of WP 8F to determine whether a proposed submission will be considered for a new section in Rec. ITU-R M.1457.

This case therefore covers the addition of a new radio interface (i.e., addition of Sections 5.y.1 and 5.y.2, for $y \geq 6$) to Recommendation ITU-R M.1457.

New radio technologies are always encouraged; however, they should be directed towards the enhancement of the existing IMT-2000 radio interfaces, rather than the creation of a new radio interface. This will support one of the ITU primary goals of minimizing the number of different radio interfaces and maximizing their commonality, while incorporating the best possible performance capabilities in the various IMT-2000 radio operating environments.

The transposition process used during the development of the first version of Recommendation ITU-R M.1457 applies.

6 Meeting cycle

The following meeting cycle (of WP 8F) will be used for the consideration of proposed new capabilities. The cycle applies independently for each proposal received. While valid proposals are expected to be completed in no more than three meetings; the 3 meeting cycle does not guarantee eventual inclusion in M.1457. Suppose a proposal is received at meeting "x", then the following would occur:

Meeting "x" - The proposal is presented and discussed with a view to understand what is being proposed. Those proposals which are of such nature that WP 8F agrees that they meet the criteria and can be agreed immediately are adopted at this meeting and those that require further evaluation are carried forward for consideration at the next meeting together with contributions from external evaluation groups as required. WP 8F will notify the proponent of the proposal, and other organizations as required, of issues that require further clarification or additional material that may be required to resolve outstanding issues, in the context of the evaluation criteria (see Sections 7 and 8) and other considerations (see Section 9).

Meeting "x+1" - The proposal is further discussed and evaluated; including the involvement of external evaluation groups as required. Those proposals for which WP 8F agrees that they meet the criteria can be adopted at this meeting and those which WP 8F considers require further evaluation are carried forward to the next meeting. WP 8F will notify the proponent of the proposal, and other organizations as required, of issues that require further clarification or additional material that may be required to resolve outstanding issues, in the context of the evaluation criteria (see Sections 7 and 8) and other considerations (see Section 9).

Meeting "x+2" - The evaluation is completed for the proposed update to Recommendation ITU-R M.1457, except for exceptional circumstances. If the proposal is for a new radio interface, additional consideration at subsequent meetings will likely be necessary for completing this evaluation. Those proposals for which WP 8F agrees that they meet the criteria are adopted at this meeting for the next revision of Recommendation ITU-R M.1457.

7 The evaluation criteria

Some of the criteria are measurable and may be numerically evaluated. However, other criteria which are of a more subjective nature may be evaluated qualitatively.

7.1 Modification of the existing radio interfaces in Recommendation ITU-R M.1457

The evaluation for this update should be based on whether the Recommendation including update proposal meets the "Requirements and Objectives of IMT-2000" and "Minimum Performance Capabilities for IMT-2000" or not, as a "total" radio interface (refer to Attachment 4 and 6 of Circular Letter 8/LCCE/47). Since time has moved on since the evaluation of the original radio technology proposals, WP8F may decide to develop new criteria for the performance capabilities and evaluation; until superseded the current quantitative values included in 8/LCCE/47 will be used (enhancements to the existing radio interfaces will be by definition compliant with these values). In addition, the technical impact on the other radio interfaces must be considered, taking into account the objective of convergence between radio interfaces. The proposals should be assessed based on consideration of evaluations and consensus building, recognizing the need to minimize the number of different radio interfaces and maximize their commonality, while incorporating the best possible performance capabilities in the various IMT-2000 radio operating environments. The evaluation should be done in the context of the "total" radio interface, as described in the current or proposed revision of Section 5.x.1. The evaluation expertise gathered during the initial evaluation of for the original radio interfaces may be utilized as required.

7.2 Addition of new radio interface (addition of 5.y.1 and 5.y.2, y≥6) to Recommendation ITU-R M.1457

The evaluation for this proposed update should follow a process similar to the one employed for the original evaluation and development of radio transmission technologies (Step 4 - 9 in Circular Letter 8/LCCE/47). However, the technical evaluation in Step 4 requires coordination between proponents of all radio interfaces in order to maximize their commonality. With reference to Step 6 WP 8F may decide to develop new criteria for the performance capabilities and evaluation. Until these new criteria are defined by WP 8F the current quantitative values included in 8/LCCE/47 will be used. Step 7 must require provision of opportunities for consensus building, grouping, etc, e.g. to

ensure harmonious geographical co-existence. Recognizing the existing five radio interfaces, special consideration should be given to other less objective factors such as risk, migration, regulatory aspects, technology, timing and other market considerations (including technology stability) already included in Step 7. In addition the evaluation criteria and other considerations in Sections 7, 8 and 9 must be considered, particularly the need for harmonization with the existing IMT-2000 radio interfaces. The proposal must identify the added value (see Section 9) of having an additional radio interface.

8 Additional evaluation criteria

The following additional criteria should be used to complement those in "The Evaluation Criteria" in Section 7 above, as well as taking into consideration the overview of the existing IMT-2000 radio interfaces in Section 5.x.1 of Recommendation ITU-R M.1457.

8.1 Compatibility with the existing IMT-2000 radio interfaces

This would help determine whether the proposal would fit well with the existing IMT-2000 radio interfaces (as per Recommendation ITU-R M.1457). The issue of technical compatibility with the existing IMT-2000 radio interfaces is of importance to operators and needs to be explored in more detail. In general this would be assessed through the elements of Section 5.1 of Recommendation ITU-R M.1225. The emphasis should be on evolutionary capabilities as much as possible.

8.2 Harmonization within multiple proposals

In evaluating similar proposals WP 8F needs to develop a common view on the multiple proposals that are received in order to facilitate discussion on harmonisation between those proposals. Therefore information (even in a preliminary stage) from all the External Organizations involved should be made available, and receipt of that information should be considered a requirement by ITU-R WP 8F for taking any decision on any specific proposal. Any decision taken shall be done consistently with the timing in Section 6.

9 Other considerations

9.1 Benefits of the proposed enhancement

The proponent should show the added value of going ahead with the enhancement. Specifically, additional service capabilities (e.g., bit rate, multimedia), QoS, performance capabilities, and reduction in complexity should be explained.

The proponent may use the applicable items in the table in ANNEX 3 (Detailed evaluation procedure) in the Recommendation ITU-R M.1225 (Guidelines for Evaluation of Radio Transmission Technologies for IMT-2000), as required in the explanation.

9.2 Harmonization and consensus building

Consensus and harmonisation are of extreme importance.

The proponent should prove that harmonization and consensus building between the SDOs that are stakeholders of the proposed changes was achieved during the development of the proposal; WP 8F will continue this activity by means of consensus building amongst the ITU members as usual. This will ensure that the objectives of IMT-2000 in terms of high-degree of commonality and worldwide global roaming are achieved.

9.3 Enhanced performance capabilities

Consideration of the ongoing activities on the vision for the enhancement of IMT-2000, market trends, the results of the focus areas activities, etc., will be required. This will be based in part on radio technology focus areas established by WP 8F (see Section 10). The intention of the identification focus areas is to provide guidance to proponents of new or updated radio interfaces as they relate to technology areas that will enhance meeting the goals of IMT-2000.

10 Road map of planned enhancements

A road map of planned further enhancements will be maintained by WP 8F based on the input proposals with a clear indication of their status, including target dates for standardization. This will allow the development of a coherent WP 8F workplan for the ongoing development of IMT-2000, in order to facilitate the orderly enhancements of IMT-2000 capabilities (see the current version in Doc. 8F/TEMP/?).

Robert W. Jones
Director, Radiocommunication Bureau

Annex: 1

Distribution:

- Administrations of Member States and Radiocommunication Sector Members participating in the work of Working Party 8F of Radiocommunication Study Group 8
- Chairman and Vice-Chairmen of Working Party 8F
- Secretary General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau



**4th Meeting of Working Party 8F
21 – 27 February 2001, Rabat, Morocco**



WG RTECH

TIMELINE OF M.1457 UPDATE AND DELIVERABLES

WP 8F Oct 00 INPUTS	WP 8F Feb 01 INPUTS	WP 8F June 01 INPUTS	WP 8F Oct 01 INPUTS	SG 8 Nov 01 INPUTS	ITU-R BR April 1, 02 INPUTS
	Best and Final Submission TDMA SC (8F/209)			Revision 1 M.1457	ITU-R BR provided with transposed material for incorporation into sections 5.X.2 See Note 2
	Initial Submission FDMA/TDMA (8F/221)	Update Submission FDMA/TDMA	Best and Final Submission FDMA/TDMA		Reference links for 5.X.2 tables
	Best and Final Submission CDMA MC (including DO) (8F/193)	Update Submission CDMA MC – DO See Note 1			
	Planning Information CDMA MC –DV (8F/193 Annex 7, 8F/239, CL85 Section 2 of Annex), 8F/254 Annex 1 section 3.4)	Initial Submission CDMA MC – DV See Note 1	Best and Final Submission CDMA MC – DV See Note 1		

	Planning Information CDMA DS – HSDPA (8F/211 Annex 2)	Initial Submission CDMA DS – HSDPA See Note 1	Best and Final Submission CDMA DS – HSDPA See Note 1		
	Initial submission of CDMA DS & CDMA TDD (8F/231) as well as planning information on other aspects for CDMA DS and CDMA TDD (8F/211 Annex 1,3,4,5,6) & CL85 Section 1 of Annex	Update submission of CDMA TDD and on other aspects for CDMA DS	Best and Final Submission of CDMA TDD and on other aspects for CDMA DS		

WP 8F Oct 00	WP 8F Feb 01	WP 8F June 01	WP 8F Oct 01	SG 8 Nov 01	ITU-R BR April 1, 02
OUTCOMES	OUTCOMES	OUTCOMES	OUTCOMES	OUTCOMES	OUTCOMES
CL 85 Suggested Process	CL 85 Revised Approved Process		COMPLETION OF ALL 5.X.1 SECTIONS		COMPLETION OF ALL 5.X.2 SECTIONS
	Complete and Approve 5.4.1 TDMA -SC of Revision 1 Update to M.1457	Complete and Approve 5.2.1 CDMA MC-DO of Revision 1 Update to M.1457	Complete and Approve 5.2.1 CDMA MC-DV of Revision 1 Update to M.1457	Approval for Adoption of Revision 1 M.1457	Completion of 5.X.2 of Revision 1 of M.1457
		x	Complete and Approve 5.1.1 CDMA DS- HSDPA + CDMA DS Other Aspects + 5.3.1 CDMA TDD of Revision 1 Update to M.1457		Rev 1 M.1457 in ITU process for approval by correspondence
			Complete and Approve 5.5.1 FDMA/TDMA of Revision 1 Update to M.1457		
			Complete Entirety of Revision 1 Update to M.1457 for submission to SG 8		

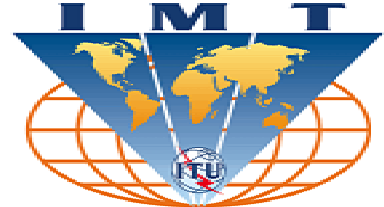
Notes

- 0) - **Planning Information** is considered to be an initial perspective on the enhancement to be considered for Rev.1 M.1457
- **Initial Submission** is additional detailed information on the enhancement to be considered for Rev.1 M.1457
- **Best and Final Submission** is the proposed final text for 5.X.1 received from the relevant external organisations of the enhancement to be included in Rev M.1457.

- 1) Input to WP 8F received from the relevant external organisations of adjustments to CDMA MC – DO, CDMA MC – DV, and CDMA DS – HSDPA, as a result of further development and potential harmonization among DO, DV, and HSDPA
 - 2) In accordance with procedures previously in place for first initial release of M.1457, the Standards Development Organizations complete the transposition, where appropriate, public enquiry and and publication by April 1, 2002.
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4th Meeting of Working Party 8F
21 – 27 February 2001, Rabat, Morocco



Chairman, AD HOC PROJECT

WP 8F REVISION TO DOCUMENT IMT/ITU2

REQUIREMENT TO PROVIDE ASSURANCE FOR THE GLOBAL CORE SPECIFICATION AS RELATES TO RECOMMENDATION ITU-R M.1457

1 Introduction

Recommendation ITU-R M.1457 defines the Radio Interface Specifications for IMT-2000. In particular, for the terrestrial component delineated in Section 5 of Recommendation ITU-R M.1457, the IMT-2000 specifications were developed around a “Global Core Specification” (GCS), which is directly related to externally developed materials incorporated by specific references. This GCS is the nucleus of Recommendation ITU-R M.1457, with each defined element of the specification being transposed into references to one or more individual standards development organization (SDO) standards. These SDO transposed standards reflect the essence of the GCS while allowing a limited amount of flexibility to accommodate minimal regional differences. An example of this would be a regional adjustment for differing frequency bands. Adherence to this format and principle assures a common global standard for IMT-2000 as codified in Recommendation ITU-R M.1457 and the “incorporated by reference” external materials.

To ensure to the users of Recommendation ITU-R M.1457 that the integrity of the GCSs is being respected, and to ensure that the SDO’s transposed standards are consistent with the common globally agreed vision of IMT-2000, completeness and traceability of the GCS is a foremost obligation of the ITU. There is an acknowledgement that future evolution to the GCS will be undertaken by the ITU-R, by the relevant external organizations, by the SDOs or by the technology proponents. Consequently, the ITU must institute a procedure that guarantees that changes to the GCS as submitted to the ITU-R for actions within the ITU-R, are done with full understanding of the positions of the individual SDOs that are stakeholders in the transposed standards. That is, the ITU has a complete understanding of the “change authority” on the GCS.

It is understood that it is important for the ITU to be advised of the positions of the SDO’s (either individually or collectively) with regard to changes (i.e. “change authority”) to the GCS and its subsequent transposition particularly when utilizing a combination of ITU developed material in concert with normative external references that become an integral and essential portion of the Recommendation.

The format for receipt of such information must balance the business relationship of the ITU with the relevant external organizations with that of information that is also of import to activities undertaken within the relevant Study Groups within the ITU. It must be reiterated that this document does not portend to usurp the Study Group or Working Party authority but merely seeks to provide additional information to any deliberations on Recommendation ITU-R M.1457 as to the collective intent of the stakeholder SDOs that constitute a particular GCS.

This document does not presume any criteria placed on submissions, based on responses received in Part A or Part B of the Annex.

2 Proposed procedure

In conjunction with any proposed changes to the IMT-2000 terrestrial component specifications contained within Recommendation ITU-R M.1457 or any submission related to the said terrestrial component specifications, including so called editorial modifications, corrections, revisions, updates or enhancements, in support of those changes in any process, procedure, proposed or approved revision or update within ITU-R, the following certification will be required:

The ITU must receive letters of conveyance that provide for full disclosure of intent by all individual stakeholder¹ SDOs² to any proposed change or submission and an understanding of the stakeholder SDOs positions on the transposition of approved ITU specifications regardless of the source of the change or submission, be it an individual SDO or some combination of the SDOs.

Communication among, securing of the requisite disclosure by each of the pertinent parties and coordinating the submission of the materials and the letters of conveyance shall be the joint responsibility of the external parties.

When ITU-R receives a submission, it should notify the ITU IMT-2000 Project Manager. The IMT-2000 Project Manager is charged with oversight and summarization of the Letters of Conveyance. The IMT-2000 Project Manager will communicate as required with the requisite SDOs to ensure timely receipt of all relevant Letters of Conveyance.

SDOs should inform the IMT-2000 Project Manager, on an on-going basis and in a timely manner via revised Letters of Conveyance, of any changes in their plans or intentions.

¹ When one or more parties participating in the Third Generation Partnership Projects (3GPPs), or equivalent entity, proposes a GCS that has been developed by the 3GPPs as a change to Recommendation ITU-R M.1457, the “stakeholder SDOs” that are required to submit Letters of Conveyance to make representations to the ITU are not only the SDO’s that list the transposed standards in Sections 5.X.2 of Recommendation ITU-R M.1457 as a reference, but also the SDOs that participate in the 3GPPs as Organizational Partners (or equivalent) and own all copyrights.

² It should be noted that while the terminology utilized here is “SDO”, that in the future it is possible that a GCS could be comprised of jointly supported company based specifications (as they might exist and be properly incorporated as approved information within relevant ITU-R Recommendations) that are not under the purview of any SDO. In such a case (or in any analogous situation), the procedures outlined herein would be applicable to the individual entities that comprise the jointly supported GCS and any related transposed specifications.

3 Example

If the GCS for radio interface XYZ is developed by a Partnership Project ABC (or equivalent proponent entity) and for Recommendation ITU-R M.1457, text summaries or external references to the transposed standards are provided by SDOs 1, 2, 3, and 4 respectively, then the following would be required:

If SDO 3 submitted to ITU-R a revision to radio interface XYZ or GCS material, there would need to be an accompanying document signed by an authorized responsible party of each of the other SDOs. In this particular case, SDOs 1, 2, and 4 must provide a letter of conveyance disclosing the respective SDO's position on this change to the radio interface or GCS. Should the Partnership Project ABC itself submit (through an appropriate member) an update to the GCS or supply text for inclusion Recommendation ITU-R M.1457, then SDOs 1, 2, 3, and 4 would be required to each submit a conveyance letter (see annex).

If such conveyance letters signed by all appropriate parties are not received by ITU, then ITU-R may decide not to take any action on the transmitted material, until such time as this deficiency is corrected. The remedy to the deficiency could be by either having all parties tender letters of conveyance or by having the deficient party or parties formally notify ITU that they no longer intend to act in a capacity as a submitting or transposing SDO for any particular technology.

The IMT-2000 Project Manager will communicate to the relevant working parties within ITU-R a summary record of the supplied letters of conveyance on the particular submission. The intent of this internal notification is to convey receipt of all requisite letters and thus to subsequently facilitate the utilization of these submitted materials in question by the appropriate activities within the ITU-R.

In the unlikely event that an SDO notifies the ITU that it declines to continue to participate as a submitting and transposing SDO of the GCS in conjunction with the proposed revision to the terrestrial component information contained within Recommendation ITU-R M.1457 and related Recommendations, the IMT-2000 Project Manager will communicate this fact to the relevant working parties in the ITU-R. In addition, the IMT-2000 Project Manager will validate this withdrawal by any SDO with other relevant SDOs pertinent to the GCS in question, unless such coordination of withdrawal is supplied by the withdrawing SDO at the time of notification to ITU.

It should be understood that any SDO that declines to participate in future revisions of Recommendation ITU-R M.1457, as may be approved from time to time by ITU-R, will be subject to having their transposed standards references removed in these future editions.

4 Conclusion

It is the ITU's perspective that this procedural adjustment is in accord with the intent of prior understandings with the external organizations, addresses aspects of "change authority", provides important information to the deliberation that may occur within the relevant Working Parties and does not present an undue burden on the submitter of inputs to ITU-R as they relate to updates and enhancements of terrestrial radio interfaces encompassed by Recommendation ITU-R M.1457 and related Recommendations. It should be further noted that the ITU shall be the sole determiner of whether such statements of authority are required to the ITU-R related to IMT-2000 and Beyond. The requirement to utilize this procedure for confirming of intent among various responsible entities, as it relates to submissions to ITU-R, may be applicable to other ITU-R Recommendations on IMT-2000 (for example Recommendation ITU-R M.1455).

ANNEX

REQUESTED FORM LETTER TO BE USED AS A TEMPLATE LETTER FOR:

**LETTER OF CONVEYANCE WITH REGARD TO INTENT ON SUBMITTED MATERIALS
TO ITU-R IN RELATION TO THE GLOBAL CORE SPECIFICATIONS, TRANSPOSED
STANDARDS REFERENCES, AND RECOMMENDATION ITU-R M.1457**

Date: <*ENTER DATE*>

To: ITU IMT-2000 Project Manager

From: <*ENTER INFORMATION HERE (full particulars and contact information)*>

Subject: Conveyance of disclosure for Global Core Specification (GCS) Related Materials

The undersigned, a duly authorized representative of

<**INSERT ORGANIZATION NAME**>

*affirms its intentions with regard to the subsequent material being submitted to the ITU as indicated
by the responses selected in Part A and Part B below.*

PART A

**CONCURRENCE ON CHANGES TO GCS SUBMISSION BY (INSERT SOURCE OF
SUBMISSION)**

(Choose one)

- I. SDO has approved or intends to approve (as such approval is defined within the SDO organization) proposed changes to the GCS as submitted to the ITU by (insert source of submission) on (insert date). Furthermore: (select one of the following:)
 - a) ----- SDO fully supports changes as submitted
 - b) ----- SDO supports changes as submitted with the exception of selected material which SDO submits as differing from the submission (See Note 1)
- II. SDO will not or does not intend to approve proposed changes to the GCS as submitted to the ITU by (insert source of submission).
- III. SDO wishes to not be a party to these changes to the GCS as submitted to the ITU by (insert source of submission) and neither agrees nor disagrees with the proposal.

PART B

**INTENT TO TRANSPOSE ITU APPROVED GCS AS RELATES TO GCS SUBMISSION
REFERENCED IN "PART A"**

(Choose one)

- IV. SDO will agree to "transpose" GCS version as approved by ITU, providing accommodation for minimal regional differences while maintaining close consistency with the ITU agreed GCS.

- V. SDO will not “transpose” revised GCS version as approved by the ITU. SDO will continue to maintain current (prior) version as shown in ITU Recommendation (state Recommendation) as transposed standard. (See Note 2)
- VI. SDO will not “transpose” revised GCS and further, SDO wishes to be removed from relevant ITU Recommendations (state Recommendation) as a transposing SDO of current (prior) GCS’s as defined in ITU Recommendations (state Recommendation) currently or previously in effect.
- VII. SDO is not prepared at this time to address whether the SDO will or will not transpose the revised GCS.

Note 1: SDO selecting this option shall clearly indicate and provide the specific text of the differing/exception material .

Note 2: SDO making this statement shall identify the specific text of the GCS that will not be transposed.

<INSERT FULL TITLE AND SUMMARY DESCRIPTION OF SUBMITTED MATERIALS (this letter applies to in such details as to allow ITU to correlate this with the appropriate submission)>

and that it intends to provide in a timely manner a transposed standard consistent with the above described statements as relates to the submission.

Signed,

**<ENTER SIGNATURE
AND PARTICULARS OF THE DULY AUTHORIZED REPRESENTATIVE>**



**4th Meeting of Working Party 8F
21 – 27 February 2001, Rabat, Morocco**



WG RTECH

LIST OF COMMENTS ON THE RECEIVED INPUT CONTRIBUTIONS CONTAINING MATERIAL FOR REVISION 1 OF RECOMMENDATION ITU-R M.1457

IMT-2000 CDMA DS & IMT-2000 CDMA TDD (Doc 8F/231 & Doc 8F/211)

- The update of section 5.1.2 and 5.3.2 are missing. External Organisations are informed that the transposition process has to be completed by April, 1st, 2002 when ITU needs to receive all updates of sections 5.x.2.
- With reference to the technical areas addressed in Doc 8F/211 as well as in the updated Roadmap (see Annex 1), the proposed modifications to Section 5.x.1 needs to be submitted to ITU-R WP 8F, as well as the modifications to the global core specifications that may be required.
- The summary of the proposed update provided in Doc 8F/231 needs to be completed with the rationale for the proposed changes that needs also to be provided for the other technical areas addressed in Doc 8F/211 as well as in the updated Roadmap (see Annex 1).
- The self-evaluation needs to include the Table of “Requirements and Objectives of IMT-2000” as well as the Table of “Minimum Performance Capabilities for IMT-2000” (refer to Circular Letter 8/LCCE/47). With reference to the other criteria listed in sections 8 and 9 of the approved procedure for Revisions of Rec. M.1457 (see Annex 2), External Organisations are encouraged to investigate the potential of harmonisation with the other technologies since an important goal of ITU-R WP 8F is to minimize the number of different radio interfaces and maximize their commonality, while incorporating the best possible performance capabilities in the various IMT-2000 radio operating environments. In particular, WP8F has received information on three technologies addressing the fast packet access: 1xEV-DO, 1xEV-DV, HSDPA. External Organisations are encouraged to investigate the potential of harmonization between these three technologies.
- A self-declaration that the proposed amendments are self-consistent between Section 5.x.1, Section 5.x.2 and the Global Core Specifications needs to be provided.

- With reference to the technical areas addressed in Doc 8F/211 as well as in the updated Roadmap (see Annex 1), updated material needs to be received at the next meeting of ITU-R WP 8F.

IMT-2000 CDMA MC (Doc 8F/193 & Doc 8F/239)

- The text contained in section 9.2 of Annex 5 of Doc 8F/193 with reference to the harmonisation and consensus building is somehow general. External Organisations are encouraged to investigate the potential of harmonisation with the other technologies since an important goal of ITU-R WP 8F is to minimize the number of different radio interfaces and maximize their commonality, while incorporating the best possible performance capabilities in the various IMT-2000 radio operating environments. In particular, WP8F has received information on three technologies addressing the fast packet access: 1xEV-DO, 1xEV-DV, HSDPA. External Organisations are encouraged to investigate the potential of harmonization between these three technologies.
- With reference to the text in section 9.3 of Annex 5 of Doc 8F/193, it has to be clarified that the purpose of section 9.3 of the approved procedure for Revisions of Rec. M.1457 is to require proponents to provide information on how their proposed updates relates to the vision for the enhancements of IMT-2000, market trends, focus areas activities, etc. The updated Roadmap (see Annex 1) can be used as reference.
- [With reference to the technical area addressed in Doc 8F/239, updated material needs to be received at the next meeting of ITU-R WP 8F.]

IMT-2000 FDMA/TDMA (Doc 8F/221)

- A rationale for the proposed update needs to be provided.
- The self-evaluation needs to include the Table of “Requirements and Objectives of IMT-2000” as well as the Table of “Minimum Performance Capabilities for IMT-2000” (refer to Circular Letter 8/LCCE/47). Also the other criteria listed in sections 8 and 9 of the approved procedure for Revisions of Rec. M.1457 (see Annex 2) needs to be addressed by the self-evaluation.
- With reference to the sensitivity level –86dBm, a reference to the DECT GAP Specifications needs to be included.

Annexes (not included):

- Doc 8F/TEMP/85 (Roadmap for current Work)
- Doc 8F/TEMP/86 (Update Procedure for Revisions of Rec. ITU-R M.1457)



INTERNATIONAL TELECOMMUNICATION UNION

**RADIOCOMMUNICATION
STUDY GROUPS**

**Document 8F/TEMP/107-E
26 February 2001**

**4th Meeting of Working Party 8F
21 – 27 February 2001, Rabat, Morocco**



AH TERM

LIAISON STATEMENT TO EXTERNAL ORGANIZATIONS AND OTHER INTERESTED PARTIES

ITU-R WP 8F responsible for the development of IMT2000 and beyond has formed an Ad hoc Group for Terminology with should revise, RECOMMENDATION ITU-R M.1224 VOCABULARY OF TERMS FOR INTERNATIONAL MOBILE TELECOMMUNICATIONS-2000 (IMT-2000) (Question ITU-R 39/8)“

This Recommendation was created by ITU-R TG 8/1 over 4 years ago.

In this quick living time it is necessary to revise this Recommendation and ITU-R WP 8F would like to see support from other important groups which deal with the development of IMT-2000 and beyond.

WP 8F believes that it is very important for the further development of the 3rd Generation of Mobile Systems to have common understandings in terminology. We want the term that applies to the global core specification.

For this reason WP 8F would like to ask you to send your Definitions, Acronyms and Abbreviations for incorporation in the revised Rec. M.1224.

Contact point would be the Chairman of Ad hoc Group Term Mr. Horst Mennenga.

Horst Mennenga
Chairman, Ad hoc Term