Source:	ITU Ad Hoc Contact person
Title:	Comments on the material submitted to ITU by September, 1st
Document for:	Information
Agenda Item:	6.5.2

This document contains the Comments elaborated by the 'focused drafting group' within ITU-R TG 8/1 WG5 on the material received by September, 1st.

With reference to the Overview of the 3GPP Radio Interface Specifications , some comments were circulated during the activity of the 'focused drafting group'. They main ones (see section 5.4 of the attached document) can be summarized as follows:

- The initial Overview is too long since it exceeds the 10 page limit required by ITU;

- Both IMT.RKEY and IMT.RSPC indicate the concept of 'two high level groupings with three modes'. If adequate, two subsections on FDD DS-CDMA and TDD CDMA can be provided.

Report of the Focused Drafting Group

1. Introduction

Background of this report

According to the liaison statement from ITU-R TG 8/1 (Beijing meeting) to External Organizations, SDOs and PPs were requested to submit to ITU by September, 1st, an initial version of their submissions to Sections 5.X.2 ("Extract from External Material") of IMT.RSPC. A "focused drafting group" within ITU-R TG 8/1 WG5 was expected to begin the task of collating, assembling and editing the different Sections 5.X.2s for each radio interface into a unified document. The purpose of this exercise is to facilitate the activity at the Helsinki meeting by promoting similar inputs (in terms of format and level of technical detail).

What was done?

In order to be compliant with the indications of the above mentioned liaison, it was felt appropriate to prepare two documents:

- a composite of the material received by ITU by September, 1st (this task was covered by ITU Secretariat[1])

- the present document that contains some background information, some clarifications on the process and some comments on the preliminary received material

These two documents are sent back by ITU to SDOs and PPs in order to provide guidance to External Organizations for their "best and final" updates to be submitted to ITU by Mid October. These "best and final" updates will be an official input to the ITU-R TG 8/1 meeting to be held in Helsinki (25 October – 5 November).

What is 'the focused drafting group'?

As stated in the above-mentioned liaison, the "focused drafting group" is acting within WG5 and therefore it is open to any member. His main activity is to develop the present document with particular reference to the comments to the material received by ITU by September, 1st.

2. Input documents

2.1   Base documents

(i)   Document 8-1/TEMP/218 Rev. 1, 10 June 1999, 'Preliminary Draft New Recommendation ITU-R M.[IMT.RSPC]'

(ii)   Document 8-1/TEMP/213 Rev. 1, 9 June 1999, 'Liaison to Standards Development Organizations, Partnership Projects and Proponents of Radio Interfaces to Provide Relevant Information on, and to Request Certain Information and Actions from these Organizations Necessary for Completion, Approval and Publication of Recommendation ITU-R M.[IMT.RSPC]'

2.2   Inputs from SDOs and 3GPPs

(i)   3GPP, UTRAN, 'Radio Interface No. X'

(ii)   TR45.5, cdma2000, 'TR-45.5 Inputs to ITU-R TG 8/1 for Draft IMT.RSPC Section 5.5.2'

(iii) CWTS, TD-SCDMA, 'Proposed Revision of Section 5 of Working Document towards New Recommendation Detailed Specifications of Radio Interfaces of IMT-2000 (IMT.RSPC)'

(iv) UWCC, UWC-136, '5.3.2 Overview of the UWC-136 Radio Interface'

(v)   EP-DECT, DECT, 'DECT Input for RSPC section 5'

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[1] The composite material was distributed to the TIES reflector 'tg8-1rad' on 23 Sep 1999 and posted at the ITU Web site on 27 Sep. 1999..

3. Clarification on the process
   Some questions on the process are answered in this section.
   Summary of major technical parameters table (see liaison from TG 8/1 to External Organizations, Annex 1): This summary has to be mainly focused on layer 1 aspects and it is supposed to be part of section 5.X.2 (i.e., it has to be included in the 5-10 pages)
   Sections 5.X.1: according to the above mentioned liaison, ITU-R TG 8/1 WG5 will in the Helsinki meeting develop these sections using member contributions and possibly drawing upon material supplied by the external organizations in their responses to other sections.

4. Comment for each proposal:
   5.1 TD-SCDMA
   A) Editorial comments
   B) Format and style
   C) Maximum page: OK
   D) Relation with the guideline of "2 Groupings and 3 modes"
       • Please consider to use the terminology of TDD CDMA.
   E) Suggestion from the focused drafting group:
       • Some additional information on Layer 2 and 3 would make this 'Overview' more aligned with other ones
       • Sections 5.1.2.3.2 and 5.1.2.3.3 are unclear. For example, CWTS Standard includes 'advanced digital signal processing algorithm' for the smart antenna? CWTS Standard includes DSP programs for 'Software Radio'? If algorithm and programs are implementation issue and will not described in the Standard, please consider those sections.
       • Please add the reference column in the major technical parameter table.

   5.2 DECT
   A] Editorial comments
   B] Format and style
       • Format and style of the document should be based on the ITU style guide. For example, the font should be changed. Please refer ITU Recommendations and also the 'Composite Draft for RSPC Recommendation' received with the present document.
   C] Maximum page: OK
   D] Relation with the guideline of "2 Groupings and 3 modes"
       • Please consider to use the terminology of TDD TDMA.
   E] Suggestion from the focused drafting group:

   5.3 UWC-136
   A] Editorial comments
   B] Format and style
   C] Maximum page OK
   D] Relation with the guideline of "2 Groupings and 3 modes"
       • Section 4.7 of the Recommendation M.IMT.RKEY and section 4.1.1 of the Recommendation M.IMT.RSPC indicate the concept of 'two high level groupings with three modes'. Proposed radio interface consists of FDD TDMA and TDD TDMA. Please consider if two modes can be described independently. If adequate, please provide two subsections, i.e. 5.X and 5.Y, separately.
   E] Suggestion from the focused drafting group:
       • The Standard consists of three components, 136+, 136HS Outdoor, and 136HS Indoor. Each component 'supports' two modulation types. The meaning of 'support' is unclear, i.e. if those variations of the Standard are optional or mandatory for the radio interface. For example, should the base station of the 136HS Outdoor have

capability of both GMSK and 8-PSK?

- The Standard consists of FDD TDMA and TDD TDMA. The table in Section 5.3.2.6 indicates that TDD mode is optional for 136HS Indoor. It is unclear the meaning of 'optional'. Is it optional feature for terminals or for base stations?

5.4 Comment from the editors group on UTRAN

A] Editorial comments

B] Format and style

C] Maximum page

- too many: it must be 10 pages maximum
- Also see item D].

D] Relation with the guideline of "2 Groupings and 3 modes"

- Section 4.7 of the Recommendation M.IMT.RKEY and section 4.1.1 of the Recommendation M.IMT.RSPC indicate the concept of 'two high level groupings with three modes'. Proposed radio interface consists of FDD DS-CDMA and TDD CDMA. Please consider if two modes can be described independently. If adequate, please provide two subsections, i.e. 5.X and 5.Y, separately.

E] Suggestion from the focused drafting group:

- The proposed radio access scheme is direct-sequence Code Division Multiple Access (DS-CDMA) for both FDD and TDD duplex modes. FDD access scheme is called "Direct Spread (DS) mode" and TDD access scheme is called "TDD mode" in the text. Please make clear definition between "direct-sequence Code Division Multiple Access (DS-CDMA)" and "Direct Spread (DS) mode". The word "DS" is confusing[2].

5.5 Comment from the editors group on cdma2000

A] Editorial comments

B] Format and style

C] Maximum page

- too many: it must be 10 pages maximum

D] Relation with the guideline of "2 Groupings and 3 modes"

- Please consider to use the terminology of FDD MC-CDMA instead of cdma2000.

E] Suggestion from the focused drafting group:

- The technical content is rather detailed when comparing to the other 'Overviews'

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[2] There are mainly two types of CDMA technologies, i.e. direct sequence and frequency hopping. All the CDMA related proposals to ITU are based on the direct sequence technology. The original intention of the OHG is that the direct sequence CDMA consists of 'direct spread mode', 'multi-carrier mode', and TDD mode. The sentence 'The CDMA grouping accommodates FDD direct sequence, FDD multi-carrier and TDD' in the section 4.1.1 of Document 8-1/TEMP/218 Rev. 1 is not adequate from a technical viewpoint.