

**TSG-RAN Meeting #15  
Jeju-do, Korea, 5 - 8 March 2002**

***RP-020227***

**Source: Secretary**

**Title: Proposed "CR" to out-of-date Study Item sheets**

This document aims at correcting a number of SI sheets that seem to be out of date with the latest understanding of them in TSG-RAN and/or its WGs.

**General question on "Supporting companies"**

During TSG-RAN #9 (Oahu, Hawaii, USA), it was decided (see RP-000523) that supporting companies for approved SIs would be changed to "TSG-RAN". However, so far that decision has been interpreted as applying only to those SIs that were in existence at that time.

Guidance is requested whether this change should be applied to all approved Study Items.

## 10 Feasibility Study on UTRA Wideband Distribution Subsystems (WDS)

Last distributed as: RAN\_Study\_Items\_after\_RAN\_14 (originally in RP-010488)

### Study Item Description

**Title** Feasibility Study on UTRA Wideband Distribution Subsystems (WDS)

**1** **3GPP Work Area**

X	Radio Access
	Core Network
	Services

**2** **Linked work items**

*none*

**3** **Justification**

This study item shall assess the feasibility for a new class of equipment that would allow for improved flexibility of radio access network solutions; this is here called *Wideband Distribution Subsystem, or WDS* – and includes a generic interface to the UTRA FDD Node B. TDD applicability is possible and will also be considered as part of the feasibility study.

WDS are a capable of flexible remoting of multiple Node B's RF interface, on a possible multi-operator, multi-vendor scenario, both for indoor and outdoor applications while granting substantially compliant Node B performance.

*In many cases existing 2G WDS were accepted for network integration under Operator's direct responsibility, as existing specifications were not addressable for clearly and neatly defining equipment reference specification and network integration techniques, with even more severe issues in case of a multi-operator application scenario.*

**4** **Objective**

The feasibility study should identify the WDS' requirements for interfacing to Node B and demonstrate that WDS doesn't impact negatively into radio network performances on a multioperator environment. Therefore it shall include a study on WDS RF multicarrier performances, e.g.:

Linearity

Transparency

Inter-operator Power Control and RF transmit power behaviour

Transmit characteristics

Receive characteristics

These characteristics will be identified while considering WDS as ancillary equipment on a multi-vendor Node B scenario. TDD applicability shall also be investigated and clarified.

End-to-end system performance shall also be studied to identify the application scenario for WDS. Additionally the study shall identify the requirements and the impact for a communication interface (e.g. for O&M purposes) between WDS and other network elements. RAN WG3 and SA WG5 will be involved for evaluation of any impact in O&M aspects. Submission of initial results is planned for RAN4 #18.

**5 Service Aspects**

There could be service aspects to be considered, e.g. impact on LCS. The Feasibility Study should clarify this aspect.

**6 MMI-Aspects**

*None*

**7 Charging Aspects**

*None*

**8 Security Aspects**

*None*

**9 Impacts**

Affects :	USIM	ME	AN	CN	Others
Yes			X		O&M
No	X	X		X	
Don't know					

**10 Expected Output and Time scale (to be updated at each plenary)**

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
25.867		WG4			RAN#15	TR on feasibility for WDS
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	

**11 Work item rapporteurs**

Andrea Casini (Tekmar Sistemi)

**12 Work item leadership**

TSG-RAN WG4

**13 Supporting Companies**

Agilent  
Marconi Wireless  
Mitsubishi Electric Telecom  
Ntl  
Orange  
Tekmar Sistemi  
Telecom Italia  
Telefonica  
Telia Mobile

**14 Classification of the WI**

	Building Block (go to 14b)
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14b The WI is a Building Block: parent Feature is Radio Interface Improvement Feature