

Work Item Description

Title: **DS-CDMA Introduction in the 800 MHz Band**

1 3GPP Work Area

X	Radio Access
	Core Network
	Services

2 Linked work items

None

3 Justification

As for IMT-2000, spectrum was first identified by WARC-92. WRC-2000 also considered issues related to IMT-2000, resulting in the additional spectrum identification for the terrestrial component of IMT-2000. In addition, ITU-R Study Group 8 has recently forwarded into the ITU approval process a revision to ITU-R Recommendation M. [1036-1]. This revision includes recommended frequency arrangements for the additional IMT-2000 spectrum identified at WRC-2000; in particular the band 806-960 MHz.

In Japan, currently the band 806-960MHz is mainly used for several Mobile Services. The allocation for the services are rather fragmented and complicated compared with other countries. A working group has been established under the national telecommunication council in Japan to consider the technical condition of the frequency re-arrangement in 800MHz band in order to enhance frequency efficiency. Therefore, the proponents of this work item believe that there is high possibility that IMT-2000 would be introduced in Japan in the band near future.

It is suggested that the consideration of the evolution and migration to introduce DS-CDMA in the band 806-960MHz [being studied in the working group under the national telecommunication council](#) in Japan could be used as the basis for this work, which would reduce the effort required within 3GPP.

4 Objective

The purpose of this work item is to:

- 4.1 ~~Generate a report summarizing a~~ study of DS-CDMA in the 800 MHz band (as described below) ~~for a potential deployment only in Japan. The study~~ ~~which~~ includes ~~impact of the migration or~~ co-existing studies with the following technologies: ARIB STD-27(PDC), ARIB STD-T53(IS-95), and ARIB STD-T64 (cdma 2000), ~~taking the frequency reframing plan in Japan into account. Generate a new technical report based on study results.~~

The specific bands to be studied are¹:

- [810 – 855] MHz: Up-link (UE transmit, Node B receive)
- [855 – 900] MHz: Down-link (Node B transmit, UE receive)

- 4.2 Generate CR's to update the appropriate documents
- 4.3 TSG RAN WG2 - study ~~signaling any~~ issues related to IMT-2000 DS-CDMA in 800 MHz band.
- 4.4 TSG RAN WG3 - study any possible interface impacts to IMT-2000 DS-CDMA networks.
- 4.5 Any additional related issues.

¹ These uplink/downlink pairings are consistent with the revision of ITU-R M.[1036-1].

5 Service Aspects

None

6 MMI-Aspects

None

7 Charging Aspects

None

8 Security Aspects

None

9 Impacts

Affects :	USI M	ME	AN	CN	Others
Yes		X	X		
No	X			X	X
Don't know					

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
	[DS-CDMA Introduction in the 800 MHz Band]	RAN4	RAN2	RAN#20	RAN#21	New technical report.
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#	Comments	
25.101		UE Radio transmission and reception (FDD)		RAN#21 (September 2003)		
25.104		UTRA (BS) FDD; Radio transmission and reception		RAN#21 (September 2003)		
25.113		Base Station Electromagnetic compatibility		RAN#21 (September 2003)		
25.133		Requirements for Support of Radio Resource Management (FDD)		RAN#21 (September 2003)		
25.141		Base station conformance testing (FDD)		RAN#21 (September 2003)		
25.331		RRC Protocol		RAN#21 (September 2003)		
25.942		RF System Scenarios		RAN#21 (September 2003)		
25.306		Radio UE capability		RAN#21 (September 2003)		
25.307		Requirements on UEs supporting a Release Independent Frequency Band		RAN#21 (September 2003)		
34.121		Terminal Conformance Specification, Radio Transmission and Reception		T#21 (September 2003)		

11 Work item rapporteurs

| [Takehiro Nakamura](#) (NTT DoCoMo)

12 Work item leadership

RAN WG 4

13 Supporting Companies

NTT DoCoMo, Fujitsu, Mitsubishi Electric, NEC, Panasonic

14 Classification of the WI (if known)

	Feature (go to 14a)
X	Building Block (go to 14b)
	Work Task (go to 14c)

14b The WI is a Building Block:

This WI is a building block part of the radio interface improvement feature.