

## Study Item Description

### **Title**

Feasibility Study considering the viable deployment of UTRA in additional and diverse spectrum arrangements

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

X	Radio Access
	Core Network
	Services

### **2 Linked work items**

*None*

### **3 Justification**

The present 3GPP specifications cover the IMT-2000 2 GHz band (Band I and II), in accordance with ITU-R Radio Regulations Article S5 Footnote S5.388, in R99 and Rel4 and the work is continuing with the UMTS1900 Band II improvements and UMTS 1800 Band III.

ITU-R WRC-2000 identified additional extension bands for IMT-2000 that requires further studies for the subsequent future deployment of UTRA in the whole or parts of the bands as indicated below:

- 806 – 960 MHz (The whole band 806 – 960 MHz is not identified on a global basis for IMT-2000 due to variation in the primary Mobile Service allocation across the three ITU Regions)
- 1710 – 1885 MHz, where the work is progressing under UMTS1800 WI.
- 2500 – 2690 MHz (In ITU Region 1 the bands 2500 – 2520 MHz and 2670 – 2690 MHz is also allocated on a co-primary basis to the Mobile Satellite Service subject to market demand)

### **4 Objective**

The viable deployment of UTRA in additional and diverse spectrum arrangements should be assessed, including

- Duplex spacing arrangements other than for Bands I, II and III.
- Arbitrary selectable or variable duplex spacing methods
- Use of asymmetric spectrum arrangements considering the need for additional downlink traffic capacity
- Terminal capabilities and signalling
- Possible interface impacts

The work will result in a technical report.

### **5 Service Aspects**

*None*

### **6 MMI-Aspects**

None

**7 Charging Aspects**

None

**8 Security Aspects**

None

**9 Impacts**

<b>Affects:</b>	<b>USIM</b>	<b>ME</b>	<b>AN</b>	<b>CN</b>	<b>Others</b>
<b>Yes</b>		X	X		
<b>No</b>	X			X	X
<b>Don't know</b>					

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

<b>New specifications</b>						
Spec No.	Title	Prime resp. WG	2ndary resp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
TBD	Feasibility study: UTRA operating in new frequency bands	RAN4	RAN2 RAN3	RAN #16	RAN #17	
<b>Affected existing specifications</b>						
Spec No.	CR	Subject	Approved at plenary#		Comments	

**11 Work item raporteurs**

Peter Ståhlhjäll, Ericsson

**12 Work item leadership**

TSG-RAN WG4

**13 Supporting Companies**

Ericsson, Nokia, Telia, Sonera

**14 Classification of the WI (if known)**

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

14a The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b The WI is a Building Block: parent Feature

Radio Interface Improvement Feature

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)