

**Title:** Information to ITU-R WP8F about the ongoing studies within 3GPP on variable duplex spacing

**Agenda Item:** 9

**Source:** ITU-R Ad Hoc Contact Person

**Document for:**

Decision	<b>X</b>
Discussion	
Information	

**[ITU Member]<sup>1</sup>**

**INFORMATION ABOUT THE ONGOING STUDIES WITHIN 3GPP ON  
VARIABLE DUPLEX SPACING**

Following the indication of ITU-R WP 8F, 3GPP TSG RAN would like to provide information on the ongoing studies on variable duplex spacing currently carried on within 3GPP.

Attachment 1 contains the latest available version of the Study Item sheet indicating the objective and timeframe of the ongoing feasibility study on the viable deployment of UTRA in additional and diverse spectrum arrangements; variable duplex spacing issues are included in this Study Item. In particular, a Technical Report (“Feasibility Study considering the viable deployment of UTRA in additional and diverse spectrum arrangements” - TR 25.889) is currently being developed.

Technical details on the current status of the ongoing activity can be found in the 3GPP web site ([www.3gpp.org](http://www.3gpp.org)), in the RAN4 documents area (in particular: /ftp/tsg\_ran/WG4\_Radio/TSGR4\_23/Report/ where the last RAN4 meeting report is available)

3GPP TSG RAN would like to continue the successful dialog with ITU-R WP 8F.

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<sup>1</sup> This contribution was developed in 3GPP TSG RAN.

# Attachment 1

## 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 SI.
- 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**

Affects :	USIM	ME	AN	CN	Others
Yes		X	X		
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 resp. WG	2ndary resp. WG(s)	Presented for endorsement at plenary#	Approved at plenary#	Comments
TBD	Feasability study: UTRA operating in new frequency bands	RAN4	RAN2 RAN3	RAN #16	RAN #17	
Affected existing specifications						
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**

TSG-RAN

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

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

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

(list of Work Items identified as building blocks)

14b The SI is a Building Block: parent Feature

Radio Interface Improvement Feature

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

(one Work Item identified as a building block)