

Radiocommunication Study Groups



**Revision 2 to
Document 5D/TEMP/161-E
17 February 2009
English only**

Working Party 5D (Sub-Working Group Sharing)

LIAISON STATEMENT TO EXTERNAL ORGANIZATIONS

IMT PARAMETERS IN THE 790-862 MHz FREQUENCY BAND

1 Following the submission by WP 5D of its liaison statement at its Seoul meeting, October 2008,
2 WP 5D would like to thank the external organizations for providing some additional information of
3 the parameters for IMT in the band 790-862 MHz.

4 For the purpose of facilitating the sharing studies between IMT and systems of other services,
5 WP 5D has defined a preliminary set of generic parameters best representing the systems for which
6 WP 5D has received some information from the external organizations. WP 5D would appreciate
7 your review of the generic parameters.

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Status: EO for action

Deadline: none

Contact: Colin Langtry E-mail: colin.langtry@itu.int

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14 **Attachment:** 1

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Attention: The information contained in this document is temporary in nature and does not necessarily represent material that has been agreed by the group concerned. Since the material may be subject to revision during the meeting, caution should be exercised in using the document for the development of any further contribution on the subject.

Attachment 1

Preliminary generic set of parameters for IMT in the band 790-862 MHz

No	Parameter	Wideband systems		Narrow-band systems ¹	
		Base station	Mobile station	Base station	Mobile station
1.	Class of emission				
2.	Modulation parameters	QPSK 16-QAM 64-QAM	QPSK 16-QAM 64-QAM	GMSK 8-PSK QPSK, 16-QAM, 32-QAM	GMSK 8-PSK QPSK
3.	Duplex mode	FDD/TDD		FDD	
4.	Spectral mask of signals, including			-2	-2
4.1	-3 dB radiation bandwidth	TBD	TBD	-2	-2
4.2	-30 dB radiation bandwidth	TBD	TBD	-2	-2
4.3	-60 dB radiation bandwidth	TBD	TBD	-2	-2
5.	Maximum spectral power density, dB(mW/Hz)	-23	-42.5	-2	-2
6.	Signal bandwidth (MHz)	-3		0.2	0.2
7.	Transmitter e.i.r.p. (dBm)	55	21 to 23	44	34
8.	Typical height of the transmitting antenna (m)	20 to 30	1.5	20 to 30	1.5
9.	Transmitting antenna type (sectorized/omnidirectional)	3 sectors	omni	3 sectors	omni
10.	Transmitting antenna gain, dBi	15	0	15	0
11.	Feeder loss (dB)	3	0	3	0
12.	Antenna pattern model	ITU-R F.1336-2	omni	ITU-R F.1336-2	omni
12.1	- aperture in the horizontal plane (at 3 dB)	65°	NA	65°	NA
12.2	- aperture in the vertical plane (at 3 dB)	15° ⁴	NA		NA
12.3	- antenna downtilt	3°	NA	3°	NA
13.	Relative level of side lobes	-20 dB	NA		

¹ The narrow-band systems are not deployed in the Regions of interest for the studies called [for](#) under Resolution 749.

² See Document: 3GPP 45.005 v 7.16.0.

³ Depending on the technology, this parameter can take the following values: 3.84 MHz, 4.5 MHz or 4.6 MHz in a block of 5 MHz; 1.2288 MHz in a block of 1.25 MHz.

⁴ This value is derived from Recommendation ITU-R F.1336-2 (recommends 3.3) using an antenna gain of 15 dBi and a horizontal aperture of 65°.

No	Parameter	Wideband systems		Narrow-band systems ¹	
		Base station	Mobile station	Base station	Mobile station
14.	Channel bandwidth (MHz) ⁵	5 1.25	5 1.25	0.2	0.2
15.	Power control range (dB)	20	60	30 ⁶	34
16.	density of the equipments (number per km ²)	TBD	TBD	TBD	TBD
17.	density of the equipments (number per km ²) operating at co-frequency	TBD	TBD	TBD	TBD
18.	Polarization	TBD	TBD	TBD	TBD
19.	Capacity criteria, including capacity per cell	TBD	TBD	TBD	TBD
20.	Frequency reuse factor	TBD	TBD	4/12	NA
21.	Receiver thermal noise (dBm/channel)	-102 ⁷	-98 ⁷	TBD	TBD
22.	Reference sensitivity	TBD	TBD	TBD	TBD
23.	Receiver blocking response	TBD	TBD	TBD	TBD

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⁵ This figure refers to the block size.

⁶ Optional (see 3GPP 45.005 v 7.16.0).

⁷ For a 5 MHz channel.