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**Universal Mobile Telecommunications System (UMTS);  
Base Station (BS) conformance testing (TDD)  
(3GPP TS 25.142 version 14.0.0 Release 14)**



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# Contents

Intellectual Property Rights .....	2
Foreword.....	2
Modal verbs terminology.....	2
Foreword.....	17
1    Scope .....	18
2    References .....	18
3    Definitions, symbols, and abbreviations .....	19
3.1    Definitions .....	19
3.2    Symbols .....	20
3.3    Abbreviations .....	20
4    Frequency bands and channel arrangement.....	22
4.1    General .....	22
4.2    Frequency bands.....	22
4.3    TX-RX frequency separation .....	23
4.3.1    3,84 Mcps TDD option .....	23
4.3.2    1,28 Mcps TDD option .....	23
4.3.3    7,68 Mcps TDD option .....	23
4.4    Channel arrangement.....	23
4.4.1    Channel spacing .....	23
4.4.1.1    3,84 Mcps TDD option .....	23
4.4.1.2    1,28 Mcps TDD option .....	23
4.4.1.3    7,68 Mcps TDD option .....	23
4.4.2    Channel raster .....	23
4.4.2.1    3,84 Mcps TDD Option.....	23
4.4.3    Channel number .....	23
5    General test conditions and declarations .....	24
5.1    Base station classes .....	24
5.1.1    Applicability of requirements and BS class definition .....	24
5.1.2    Manufacturer's declaration of supported RF configurations .....	24
5.2    Output power.....	25
5.3    Specified frequency range and supported channel bandwidth.....	25
5.3.1    RF bandwidth position for multi-carrier testing.....	26
5.4    Relationship between RF generation and chip clock.....	26
5.5    Spectrum emission mask .....	26
5.6    Adjacent Channel Leakage power Ratio (ACLR) .....	26
5.7    Tx spurious emissions .....	27
5.7.1    Category of spurious emissions limit.....	27
5.7.2    Co-existence with GSM.....	27
5.7.3    Co-existence with DCS 1800.....	27
5.7.4    Co-existence with UTRA FDD.....	27
5.7.5    Co-existence with unsynchronised UTRA TDD and/or E-UTRA TDD.....	28
5.8    Blocking characteristics .....	28
5.9    Test environments .....	28
5.9.1    Normal test environment .....	28
5.9.2    Extreme test environment .....	29
5.9.2.1    Extreme temperature .....	29
5.9.3    Vibration .....	29
5.9.4    Power supply .....	29
5.10    Acceptable uncertainty of Test System.....	30
5.10.1    Measurement of test environments .....	30
5.10.2    Measurement of transmitter .....	31
5.10.3    Measurement of receiver .....	36
5.10.4    Measurement of performance requirements .....	38

5.11	Test Tolerances (informative).....	38
5.11.1	Transmitter.....	39
5.11.2	Receiver .....	41
5.11.3	Performance requirements .....	41
5.12	Interpretation of measurement results .....	41
5.13	Selection of configurations for testing.....	42
5.14	BS Configurations .....	42
5.14.1	Receiver diversity .....	42
5.14.2	Duplexers.....	43
5.14.3	Power supply options.....	43
5.14.4	Ancillary RF amplifiers.....	43
5.14.5	BS using antenna arrays.....	43
5.14.5.1	Receiver tests .....	43
5.14.5.2	Transmitter tests.....	44
5.14.6	MIMO transmission.....	44
5.15	Overview of the conformance test requirements .....	44
5.16	Format and interpretation of tests.....	46
5.17	Regional requirements.....	46
5.18	Definition of Additive White Gaussian Noise (AWGN) Interferer.....	47
5.19	Applicability of requirements.....	47
5.20	Test configurations for multi-carrier operation .....	48
5.20.1	UTTC1: Multi-carrier operation test configuration .....	48
5.20.1.1	UTTC1 generation .....	48
5.20.1.1	UTTC1 power allocation.....	48
5.20.2	UTTC2: Multi-band test configuration for full carrier allocation.....	48
5.20.2.1	UTTC2 generation .....	48
5.20.2.2	UTTC2 power allocation.....	49
5.21	Applicability of test configurations .....	49
5.22	Requirements for BS capable of multi-band operation .....	51
6	Transmitter characteristics .....	52
6.1	General .....	52
6.1.1	IMB Test Models.....	52
6.1.1.1	IMB Test Model 1 - TM 1.....	52
6.1.1.2	IMB Test Model 2 - TM 2.....	53
6.2	Maximum output power .....	53
6.2.1	Definition and applicability .....	53
6.2.2	Minimum Requirements .....	53
6.2.3	Test purpose.....	53
6.2.4	Method of test .....	53
6.2.4.1	Initial conditions .....	53
6.2.4.1.0	General test conditions .....	53
6.2.4.1.1	3,84 Mcps TDD option.....	54
6.2.4.1.2	1,28 Mcps TDD option.....	54
6.2.4.1.3	7,68 Mcps TDD option.....	54
6.2.4.2	Procedure .....	55
6.2.4.2.1	3,84 Mcps TDD option.....	55
6.2.4.2.2	1,28 Mcps TDD option.....	55
6.2.4.2.3	7,68 Mcps TDD option.....	55
6.2.5	Test Requirements .....	55
6.3	Frequency stability .....	56
6.3.1	Definition and applicability .....	56
6.3.2	Minimum Requirements .....	56
6.3.3	Test purpose.....	56
6.3.4	Method of test .....	56
6.3.4.1	Initial conditions .....	56
6.3.4.1.0	General test conditions .....	56
6.3.4.1.1	3,84 Mcps TDD option.....	56
6.3.4.1.2	1,28 Mcps TDD option.....	57
6.3.4.1.3	7,68 Mcps TDD option.....	57
6.3.4.2	Procedure .....	58
6.3.5	Test Requirements .....	58

6.4	Output power dynamics.....	58
6.4.1	Inner loop power control.....	58
6.4.2	Power control steps.....	58
6.4.2.1	Definition and applicability.....	58
6.4.2.2	Minimum Requirements.....	58
6.4.2.3	Test purpose .....	59
6.4.2.4	Method of test .....	59
6.4.2.4.1	Initial conditions.....	59
6.4.2.4.1.0	General test conditions.....	59
6.4.2.4.1.1	3,84 Mcps TDD option.....	59
6.4.2.4.1.2	1,28 Mcps TDD option.....	60
6.4.2.4.1.3	7,68 Mcps TDD option.....	60
6.4.2.4.2	Procedure.....	61
6.4.2.4.2.1	3,84 Mcps TDD option.....	61
6.4.2.4.2.2	1,28 Mcps TDD option.....	61
6.4.2.4.2.3	7,68 Mcps TDD option.....	61
6.4.2.5	Test Requirements.....	62
6.4.2.5.1	3,84 Mcps TDD option.....	62
6.4.2.5.2	1,28 Mcps TDD option.....	62
6.4.2.5.3	7,68 Mcps TDD option.....	62
6.4.3	Power control dynamic range .....	63
6.4.3.1	Definition and applicability.....	63
6.4.3.2	Minimum Requirements.....	63
6.4.3.3	Test purpose .....	63
6.4.3.4	Method of test .....	63
6.4.3.4.1	Initial conditions.....	63
6.4.3.4.1.0	General test conditions.....	63
6.4.3.4.1.1	3,84 Mcps TDD option.....	63
6.4.3.4.1.2	1,28 Mcps TDD option.....	64
6.4.3.4.1.3	7,68 Mcps TDD option.....	64
6.4.3.4.2	Procedure.....	65
6.4.3.4.2.1	3,84 Mcps TDD option.....	65
6.4.3.4.2.2	1,28 Mcps TDD option.....	65
6.4.3.4.2.3	7,68 Mcps TDD option.....	65
6.4.3.5	Test Requirements.....	66
6.4.4	Minimum output power .....	66
6.4.4.1	Definition and applicability.....	66
6.4.4.2	Minimum Requirements.....	66
6.4.4.3	Test purpose .....	66
6.4.4.4	Method of test .....	66
6.4.4.4.1	Initial conditions.....	66
6.4.4.4.1.0	General test conditions.....	66
6.4.4.4.1.1	3,84 Mcps TDD option.....	66
6.4.4.4.1.2	1,28 Mcps TDD option.....	67
6.4.4.4.1.3	7,68 Mcps TDD option.....	67
6.4.4.4.2	Procedure.....	68
6.4.4.4.2.1	3,84 Mcps TDD option.....	68
6.4.4.4.2.2	1,28 Mcps TDD option.....	68
6.4.4.4.2.3	7,68 Mcps TDD option.....	68
6.4.4.5	Test Requirements.....	69
6.4.5	Primary CCPCH power .....	69
6.4.5.1	Definition and applicability.....	69
6.4.5.2	Minimum Requirements.....	69
6.4.5.3	Test purpose .....	69
6.4.5.4	Method of test .....	70
6.4.5.4.1	Initial conditions.....	70
6.4.5.4.1.0	General test conditions.....	70
6.4.5.4.1.1	3,84 Mcps TDD option.....	70
6.4.5.4.1.2	1,28 Mcps TDD option.....	70
6.4.5.4.1.3	7,68 Mcps TDD option.....	70
6.4.5.4.2	Procedure.....	71
6.4.5.4.2.1	3,84 Mcps TDD option.....	71

6.4.5.4.2.2	1,28 Mcps TDD option .....	71
6.4.5.4.2.3	7,68 Mcps TDD option .....	71
6.4.5.5	Test Requirements.....	71
6.4.6	Differential accuracy of Primary CCPCH power.....	72
6.4.6.1	Definition and applicability.....	72
6.4.6.2	Minimum Requirements.....	72
6.4.6.3	Test purpose .....	72
6.4.6.4	Method of test .....	72
6.4.6.4.1	Initial conditions.....	72
6.4.6.4.1.0	General test conditions.....	72
6.4.6.4.1.1	3,84 Mcps TDD option .....	72
6.4.6.4.1.2	1,28 Mcps TDD option .....	73
6.4.6.4.1.3	7,68 Mcps TDD option .....	73
6.4.6.4.2	Procedure.....	74
6.4.6.4.2.1	3,84 Mcps TDD option .....	74
6.4.6.4.2.2	1,28 Mcps TDD option .....	74
6.4.6.4.2.3	7,68 Mcps TDD option .....	74
6.4.6.5	Test Requirements.....	74
6.5	Transmit ON/OFF power .....	74
6.5.1	Transmit OFF power.....	74
6.5.1.1	Definition and applicability.....	74
6.5.1.2	Minimum Requirements.....	74
6.5.1.2.1	3,84 Mcps TDD option .....	74
6.5.1.2.2	1,28 Mcps TDD option .....	75
6.5.1.2.3	7,68 Mcps TDD option .....	75
6.5.1.3	Test purpose .....	75
6.5.1.4	Method of test .....	75
6.5.1.4.1	Initial conditions.....	75
6.5.1.4.2	Procedure.....	75
6.5.1.5	Test Requirements.....	75
6.5.2	Transmit ON/OFF time mask .....	75
6.5.2.1	Definition and applicability.....	75
6.5.2.2	Minimum Requirements.....	75
6.5.2.2.1	3,84 Mcps TDD option .....	75
6.5.2.2.2	1,28 Mcps TDD option .....	76
6.5.2.2.3	7,68 Mcps TDD option .....	76
6.5.2.3	Test purpose .....	77
6.5.2.4	Method of test .....	77
6.5.2.4.1	Initial conditions.....	77
6.5.2.4.1.0	General test conditions.....	77
6.5.2.4.1.1	3,84 Mcps TDD option .....	77
6.5.2.4.1.2	1,28 Mcps TDD option .....	78
6.5.2.4.1.3	7,68 Mcps TDD option .....	78
6.5.2.4.2	Procedure.....	78
6.5.2.4.2.1	3,84 Mcps TDD option .....	78
6.5.2.4.2.2	1,28 Mcps TDD option .....	78
6.5.2.4.2.3	7,68 Mcps TDD option .....	79
6.5.2.5	Test Requirements.....	79
6.5.2.5.1	3,84 Mcps TDD option .....	79
6.5.2.5.2	1,28 Mcps TDD option .....	79
6.5.2.5.3	7,68 Mcps TDD option .....	79
6.6	Output RF spectrum emissions.....	79
6.6.1	Occupied bandwidth .....	79
6.6.1.1	Definition and applicability.....	79
6.6.1.2	Minimum Requirements.....	79
6.6.1.2.1	3,84 Mcps TDD option .....	79
6.6.1.2.2	1,28 Mcps TDD option .....	79
6.6.1.2.3	7,68 Mcps TDD option .....	79
6.6.1.3	Test purpose .....	80
6.6.1.4	Method of test .....	80
6.6.1.4.1	Initial conditions.....	80
6.6.1.4.1.0	General test conditions.....	80

6.6.1.4.1.1	3,84 Mcps TDD option .....	80
6.6.1.4.1.2	1,28 Mcps TDD option .....	80
6.6.1.4.1.3	7,68 Mcps TDD option .....	81
6.6.1.4.2	Procedure .....	81
6.6.1.4.2.1	3,84 Mcps TDD option .....	81
6.6.1.4.2.2	1,28 Mcps TDD option .....	81
6.6.1.4.2.3	7,68 Mcps TDD option .....	82
6.6.1.5	Test Requirements .....	82
6.6.1.5.1	3,84 Mcps TDD option .....	82
6.6.1.5.2	1,28 Mcps TDD option .....	82
6.6.1.5.3	7,68 Mcps TDD option .....	82
6.6.2	Out of band emission .....	82
6.6.2.1	Spectrum emission mask .....	83
6.6.2.1.1	Definition and applicability .....	83
6.6.2.1.1.1	3,84 Mcps TDD option .....	83
6.6.2.1.1.2	1,28 Mcps TDD option .....	83
6.6.2.1.1.3	7,68 Mcps TDD option .....	83
6.6.2.1.2	Minimum Requirements .....	83
6.6.2.1.2.1	3,84 Mcps TDD option .....	83
6.6.2.1.2.2	1,28 Mcps TDD option .....	84
6.6.2.1.2.3	7,68 Mcps TDD option .....	86
6.6.2.1.3	Test purpose .....	87
6.6.2.1.4	Method of test .....	87
6.6.2.1.4.1	Initial conditions .....	87
6.6.2.1.4.1.0	General test conditions .....	87
6.6.2.1.4.1.1	3,84 Mcps TDD option - General test set up .....	87
6.6.2.1.4.1.2	1,28 Mcps TDD option - General test set up .....	87
6.6.2.1.4.1.3	1,28 Mcps TDD option - Special test set up for 16QAM capable BS .....	88
6.6.2.1.4.1.4	3,84 Mcps TDD option - Special test set up for 16QAM capable BS .....	88
6.6.2.1.4.1.5	7,68 Mcps TDD option - General test set up .....	89
6.6.2.1.4.1.6	7,68 Mcps TDD option - Special test set up for 16QAM capable BS .....	89
6.6.2.1.4.2	Procedure .....	90
6.6.2.1.4.2.1	3,84 Mcps TDD option .....	90
6.6.2.1.4.2.2	1,28 Mcps TDD option .....	90
6.6.2.1.4.2.3	1,28 Mcps TDD option - 16QAM capable BS .....	90
6.6.2.1.4.2.4	3,84 Mcps TDD option - 16QAM capable BS .....	90
6.6.2.1.4.2.5	7,68 Mcps TDD option .....	90
6.6.2.1.4.2.6	7,68 Mcps TDD option - 16QAM capable BS .....	90
6.6.2.1.5	Test Requirements .....	91
6.6.2.1.5.1	3,84 Mcps TDD option .....	91
6.6.2.1.5.2	1,28 Mcps TDD option .....	92
6.6.2.1.5.3	1,28 Mcps TDD option - 16QAM capable BS .....	93
6.6.2.1.5.4	3,84 Mcps TDD option - 16QAM capable BS .....	93
6.6.2.1.5.5	7,68 Mcps TDD option .....	93
6.6.2.1.5.6	7,68 Mcps TDD option - 16QAM capable BS .....	94
6.6.2.2	Adjacent Channel Leakage power Ratio (ACLR) .....	94
6.6.2.2.1	Definition and applicability .....	94
6.6.2.2.2	Minimum Requirements .....	94
6.6.2.2.2.1	Minimum requirement .....	94
6.6.2.2.2.1.1	3,84 Mcps TDD option .....	94
6.6.2.2.2.1.2	1,28 Mcps TDD option .....	95
6.6.2.2.2.1.3	7,68 Mcps TDD option .....	95
6.6.2.2.2.2	Void .....	95
6.6.2.2.2.2.1	Void .....	95
6.6.2.2.2.2.1.1	Void .....	95
6.6.2.2.2.2.1.2	Void .....	96
6.6.2.2.2.2.2	Void .....	96
6.6.2.2.2.2.2.1	Void .....	96
6.6.2.2.2.2.2.2	Void .....	96
6.6.2.2.2.2.3	Void .....	96
6.6.2.2.2.2.3.1	Void .....	96
6.6.2.2.2.2.3.2	Void .....	96

6.6.2.2.2.3	Void .....	96
6.6.2.2.2.3.1	Void.....	96
6.6.2.2.2.3.1.1	Void.....	96
6.6.2.2.2.3.1.2	Void.....	96
6.6.2.2.2.3.2	Void.....	96
6.6.2.2.2.3.2.1	Void.....	96
6.6.2.2.2.3.2.2	Void.....	96
6.6.2.2.2.3.3	Void.....	96
6.6.2.2.2.3.3.1	Void.....	96
6.6.2.2.2.3.3.2	Void.....	96
6.6.2.2.3	Test purpose .....	96
6.6.2.2.4	Method of test.....	96
6.6.2.2.4.1	Initial conditions .....	96
6.6.2.2.4.1.0	General test conditions .....	96
6.6.2.2.4.1.1	3,84 Mcps TDD option - General test set up.....	97
6.6.2.2.4.1.2	1,28 Mcps TDD option - General test set up.....	97
6.6.2.2.4.1.3	1,28 Mcps TDD option - Special test set up for 16QAM capable BS .....	97
6.6.2.2.4.1.4	3,84 Mcps TDD option - Special test set up for 16QAM capable BS .....	98
6.6.2.2.4.1.5	7,68 Mcps TDD option - General test set up.....	98
6.6.2.2.4.1.6	7,68 Mcps TDD option - Special test set up for 16QAM capable BS .....	99
6.6.2.2.4.2	Procedure .....	99
6.6.2.2.4.2.1	3,84 Mcps TDD option.....	99
6.6.2.2.4.2.2	1,28 Mcps TDD option.....	100
6.6.2.2.4.2.3	1,28 Mcps TDD option - 16QAM capable BS .....	100
6.6.2.2.4.2.4	3,84 Mcps TDD option - 16QAM capable BS .....	100
6.6.2.2.4.2.5	7,68 Mcps TDD option.....	100
6.6.2.2.4.2.6	7,68 Mcps TDD option - 16QAM capable BS .....	101
6.6.2.2.5	Test Requirements .....	101
6.6.2.2.5.1	3,84 Mcps TDD option .....	101
6.6.2.2.5.2	1,28 Mcps TDD option .....	101
6.6.2.2.5.3	1,28 Mcps TDD option - 16QAM capable BS .....	102
6.6.2.2.5.4	3,84 Mcps TDD option - 16QAM capable BS .....	102
6.6.2.2.5.5	7,68 Mcps TDD option .....	102
6.6.2.2.5.6	7,68 Mcps TDD option - 16QAM capable BS .....	102
6.6.3	Spurious emissions .....	102
6.6.3.1	Definition and applicability.....	102
6.6.3.2	Minimum Requirements.....	103
6.6.3.2.1	Mandatory requirements.....	103
6.6.3.2.1.1	Spurious emissions (Category A) .....	103
6.6.3.2.1.1.1	3,84 Mcps TDD option.....	103
6.6.3.2.1.1.2	1,28 Mcps TDD option.....	103
6.6.3.2.1.1.3	7,68 Mcps TDD option.....	103
6.6.3.2.1.2	Spurious emissions (Category B).....	104
6.6.3.2.1.2.1	3,84 Mcps TDD option.....	104
6.6.3.2.1.2.2	1,28 Mcps TDD option.....	104
6.6.3.2.1.2.3	7,68 Mcps TDD option.....	105
6.6.3.2.2	Co-existence with GSM, DCS, UTRA and/or E-UTRA .....	105
6.6.3.2.2.1	Operation in the same geographic area .....	105
6.6.3.2.2.2	Co-located base stations.....	109
6.6.3.2.3	(void) .....	111
6.6.3.2.3.1	(void).....	111
6.6.3.2.3.2	Void .....	111
6.6.3.2.4	Void.....	111
6.6.3.2.5	Co-existence with unsynchronised UTRA TDD and/or E-UTRA TDD .....	111
6.6.3.2.5.1	Operation in the same geographic area .....	111
6.6.3.2.5.1.1	3,84 Mcps TDD option.....	111
6.6.3.2.5.1.2	1,28 Mcps TDD option.....	112
6.6.3.2.5.1.3	7,68 Mcps TDD option.....	112
6.6.3.2.5.2	Co-located base stations.....	113
6.6.3.2.5.2.1	3,84 Mcps TDD option.....	113
6.6.3.2.5.2.2	1,28 Mcps TDD option.....	114
6.6.3.2.5.2.3	7,68 Mcps TDD option.....	115

6.6.3.2.6	Co-existence with PHS .....	116
6.6.3.2.6.1	3,84 Mcps TDD option .....	116
6.6.3.2.6.2	(void).....	117
6.6.3.2.6.3	7,68 Mcps TDD option .....	117
6.6.3.3	Test purpose .....	117
6.6.3.3.1	3,84 Mcps TDD option.....	117
6.6.3.3.2	1,28 Mcps TDD option.....	117
6.6.3.3.3	7,68 Mcps TDD option.....	117
6.6.3.4	Method of test .....	117
6.6.3.4.1	Initial conditions.....	117
6.6.3.4.1.0	General test conditions.....	118
6.6.3.4.1.1	3,84 Mcps TDD option - General test set up .....	118
6.6.3.4.1.2	1,28 Mcps TDD option - General test set up .....	118
6.6.3.4.1.3	1,28 Mcps TDD option - Special test set up for 16QAM capable BS.....	118
6.6.3.4.1.4	3,84 Mcps TDD option - Special test set up for 16QAM capable BS.....	119
6.6.3.4.1.5	7,68 Mcps TDD option - General test set up .....	119
6.6.3.4.1.6	7,68 Mcps TDD option - Special test set up for 16QAM capable BS.....	120
6.6.3.4.2	Procedure.....	120
6.6.3.5	Test Requirements.....	120
6.7	Transmit intermodulation .....	121
6.7.1	Definition and applicability .....	121
6.7.1.1	3,84 Mcps TDD option .....	121
6.7.1.2	1,28 Mcps TDD option .....	121
6.7.1.3	7,68 Mcps TDD option .....	121
6.7.2	Minimum Requirements .....	122
6.7.3	Test purpose.....	122
6.7.4	Method of test .....	122
6.7.4.1	Initial conditions .....	122
6.7.4.1.0	General test conditions .....	122
6.7.4.1.1	3,84 Mcps TDD option - General test set up .....	122
6.7.4.1.2	1,28 Mcps TDD option - General test set up .....	123
6.7.4.1.3	1,28 Mcps TDD option - Special test set up for 16QAM capable BS .....	124
6.7.4.1.4	3,84 Mcps TDD option - Special test set up for 16QAM capable BS .....	125
6.7.4.1.5	7,68 Mcps TDD option - General test set up .....	126
6.7.4.1.6	7,68 Mcps TDD option - Special test set up for 16QAM capable BS .....	127
6.7.4.2	Procedure .....	128
6.7.5	Test Requirements .....	128
6.8	Transmit Modulation .....	128
6.8.1	Modulation accuracy.....	128
6.8.1.1	Definition and applicability.....	128
6.8.1.2	Minimum Requirements.....	129
6.8.1.3	Test purpose .....	129
6.8.1.4	Method of test .....	129
6.8.1.4.1	Initial conditions .....	129
6.8.1.4.1.0	General test conditions.....	129
6.8.1.4.1.1	3,84 Mcps TDD option - General test setup .....	129
6.8.1.4.1.2	1,28 Mcps TDD option - General test set up .....	129
6.8.1.4.1.3	1,28 Mcps TDD option - Special test set up for 16QAM capable BS .....	130
6.8.1.4.1.4	3,84 Mcps TDD option - Special test set up for 16QAM capable BS .....	130
6.8.1.4.1.5	7,68 Mcps TDD option - General test setup .....	131
6.8.1.4.1.6	7,68 Mcps TDD option - Special test set up for 16QAM capable BS .....	131
6.8.1.4.2	Procedure .....	132
6.8.1.4.2.1	3,84 Mcps TDD option - General procedure .....	132
6.8.1.4.2.2	1,28 Mcps TDD option - General procedure .....	132
6.8.1.4.2.3	1,28 Mcps TDD option - Special procedure for 16QAM capable BS .....	132
6.8.1.4.2.4	3,84 Mcps TDD option - Special test set up for 16QAM capable BS.....	133
6.8.1.4.2.5	7,68 Mcps TDD option - General procedure .....	133
6.8.1.4.2.6	7,68 Mcps TDD option - Special test set up for 16QAM capable BS .....	134
6.8.1.5	Test Requirements.....	134
6.8.2	Peak code domain error .....	134
6.8.2.1	Definition and applicability.....	134
6.8.2.2	Minimum Requirements.....	135

6.8.2.3	Test purpose .....	135
6.8.2.4	Method of test .....	135
6.8.2.4.1	Initial conditions.....	135
6.8.2.4.1.0	General test conditions.....	135
6.8.2.4.1.1	3,84 Mcps TDD option - General test set up .....	135
6.8.2.4.1.2	1,28 Mcps TDD option- General test set up .....	135
6.8.2.4.1.3	1,28 Mcps TDD option - Special test set up for 16QAM capable BS.....	136
6.8.2.4.1.4	3,84 Mcps TDD option - Special test set up for 16QAM capable BS.....	136
6.8.2.4.1.5	7,68 Mcps TDD option - General test set up .....	137
6.8.2.4.1.6	7,68 Mcps TDD option - Special test set up for 16QAM capable BS.....	137
6.8.2.4.2	Procedure.....	138
6.8.2.5	Test Requirements.....	138
6.8.3	Relative Code Domain Error .....	138
6.8.3.1	Definition and applicability.....	138
6.8.3.2	Minimum requirement .....	138
6.8.3.3	Test Purpose.....	138
6.8.3.4	Method of test .....	138
6.8.3.4.1	Initial conditions.....	138
6.8.3.4.1.0	General test conditions.....	138
6.8.3.4.1.1	1.28 Mcps TDD option- General test set up .....	138
6.8.3.4.1.2	1.28 Mcps TDD option - Special test set up for 64QAM capable BS.....	139
6.8.3.4.2	Procedure.....	139
6.8.3.5	Test Requirements.....	140
6.8.4	Time alignment error in MIMO transmission.....	140
6.8.4.1	Definition and applicability.....	140
6.8.4.2	Minimum requirement .....	140
6.8.4.3	Test Purpose.....	140
6.8.4.4	Method of test .....	140
6.8.4.4.1	Initial conditions.....	140
6.8.4.4.1.0	General test conditions.....	140
6.8.4.4.1.1	1.28 Mcps TDD option- General test set up .....	140
6.8.4.4.2	Procedure.....	141
6.8.4.4.2.1	1.28 Mcps TDD option .....	141
6.8.4.5	Test Requirements.....	141
6.8.4.5.1	1.28 Mcps TDD option.....	141
7	Receiver characteristics .....	141
7.1	General .....	141
7.2	Reference sensitivity level.....	142
7.2.1	Definition and applicability .....	142
7.2.2	Minimum Requirements .....	142
7.2.2.1	3,84 Mcps TDD option .....	142
7.2.2.2	1,28 Mcps option.....	143
7.2.2.3	7,68 Mcps TDD option .....	143
7.2.3	Test purpose.....	143
7.2.4	Method of test .....	143
7.2.4.1	Initial conditions .....	143
7.2.4.1.0	General test requirements .....	143
7.2.4.1.1	3,84 Mcps TDD option .....	143
7.2.4.1.2	1,28 Mcps TDD option .....	144
7.2.4.1.3	7,68 Mcps TDD option .....	144
7.2.4.2	Procedure .....	144
7.2.5	Test Requirements .....	144
7.2.5.1	3,84 Mcps TDD option .....	144
7.2.5.2	1,28 Mcps TDD option .....	145
7.2.5.3	7,68 Mcps TDD option .....	145
7.3	Dynamic range .....	145
7.3.1	Definition and applicability .....	145
7.3.2	Minimum Requirements .....	145
7.3.2.1	3,84 Mcps TDD option .....	145
7.3.2.2	1,28 Mcps TDD option .....	145
7.3.2.3	7,68 Mcps TDD option .....	146

7.3.3	Test purpose.....	146
7.3.4	Method of test .....	146
7.3.4.1	Initial conditions .....	146
7.3.4.1.0	General test conditions .....	146
7.3.4.1.1	3,84 Mcps TDD option.....	146
7.3.4.1.2	1,28 Mcps TDD option.....	147
7.3.4.1.3	7,68 Mcps TDD option.....	147
7.3.4.2	Procedure .....	147
7.3.5	Test Requirements .....	147
7.3.5.1	3,84 Mcps TDD option .....	147
7.3.5.2	1,28 Mcps TDD option .....	148
7.3.5.3	7,68 Mcps TDD option .....	148
7.4	Adjacent Channel Selectivity (ACS).....	148
7.4.1	Definition and applicability .....	148
7.4.2	Minimum Requirements .....	148
7.4.2.1	3,84 Mcps TDD option .....	148
7.4.2.2	1,28 Mcps TDD option .....	149
7.4.2.3	7,68 Mcps TDD option .....	149
7.4.3	Test purpose.....	150
7.4.4	Method of test .....	150
7.4.4.1	Initial conditions .....	150
7.4.4.1.0	General test conditions .....	150
7.4.4.1.1	3,84 Mcps TDD option.....	150
7.4.4.1.2	1,28 Mcps TDD option.....	150
7.4.4.1.3	7,68 Mcps TDD option.....	151
7.4.4.2	Procedure .....	151
7.4.4.2.1	3,84 Mcps TDD option.....	151
7.4.4.2.2	1,28 Mcps TDD option.....	151
7.4.4.2.3	7,68 Mcps TDD option.....	151
7.4.5	Test Requirements .....	152
7.5	Blocking characteristics .....	152
7.5.1	Definition and applicability .....	152
7.5.1.1	3,84 Mcps TDD option .....	152
7.5.1.2	1,28 Mcps TDD option .....	152
7.5.1.3	7,68 Mcps TDD option .....	152
7.5.2	Minimum Requirements .....	152
7.5.2.1	3,84 Mcps TDD option .....	152
7.5.2.1.1	General requirements.....	152
7.5.2.1.2	Co-location with GSM, DCS, UTRA-FDD and/or E-UTRA FDD .....	154
7.5.2.1.3	Void.....	155
7.5.2.2	1,28 Mcps TDD option .....	155
7.5.2.2.1	General requirements.....	155
7.5.2.2.2	Co-location with GSM, DCS, UTRA FDD and/or E-UTRA FDD, UTRA TDD and/or E-UTRA TDD .....	159
7.5.2.2.3	Void.....	164
7.5.2.3	7,68 Mcps TDD option .....	164
7.5.2.3.1	General requirements.....	164
7.5.2.3.2	Void.....	166
7.5.2.3.3	Void.....	166
7.5.2.3.4	Co-location with GSM, DCS, UTRA-FDD and/or E-UTRA FDD .....	166
7.5.3	Test purpose.....	167
7.5.3.1	3,84 Mcps TDD option .....	167
7.5.3.2	1,28 Mcps TDD option .....	167
7.5.3.3	7,68 Mcps TDD option .....	167
7.5.4	Method of test .....	167
7.5.4.1	Initial conditions .....	167
7.5.4.2	Procedure .....	168
7.5.4.2.1	3,84 Mcps TDD option.....	168
7.5.4.2.2	1,28 Mcps TDD option.....	168
7.5.4.2.3	7,68 Mcps TDD option.....	169
7.5.5	Test Requirements .....	169
7.6	Intermodulation characteristics .....	169

7.6.1	Definition and applicability .....	169
7.6.2	Minimum Requirements .....	169
7.6.2.1	3,84 Mcps TDD option .....	169
7.6.2.2	1,28 Mcps TDD option .....	170
7.6.2.3	7,68 Mcps TDD option .....	170
7.6.3	Test purpose.....	171
7.6.4	Method of test .....	171
7.6.4.1	Initial conditions .....	171
7.6.4.1.1	3,84 Mcps TDD option.....	171
7.6.4.1.2	1,28 Mcps TDD option.....	171
7.6.4.1.3	7,68 Mcps TDD option.....	171
7.6.4.2	Procedure .....	172
7.6.4.2.1	3,84 Mcps TDD option.....	172
7.6.4.2.2	1,28 Mcps TDD option.....	172
7.6.4.2.3	7,68 Mcps TDD option.....	172
7.6.5	Test Requirements .....	173
7.7	Spurious emissions .....	173
7.7.1	Definition and applicability .....	173
7.7.2	Minimum Requirements .....	173
7.7.2.1	3,84 Mcps TDD option .....	173
7.7.2.2	1,28 Mcps TDD option .....	174
7.7.2.3	7,68 Mcps TDD option .....	174
7.7.3	Test purpose.....	175
7.7.4	Method of test .....	175
7.7.4.1	Initial conditions .....	175
7.7.4.1.0	General test conditions .....	175
7.7.4.1.1	3,84 Mcps TDD option.....	175
7.7.4.1.2	1,28 Mcps TDD option.....	175
7.7.4.1.3	7,68 Mcps TDD option.....	176
7.7.4.2	Procedure .....	176
7.7.4.2.1	3,84 Mcps TDD option.....	176
7.7.4.2.2	1,28 Mcps TDD option.....	177
7.7.4.2.3	7,68 Mcps TDD option.....	177
7.7.5	Test Requirements .....	178
8	Performance requirements.....	178
8.1	General .....	178
8.2	Demodulation in static propagation conditions .....	179
8.2.1	Demodulation of DCH.....	179
8.2.1.1	Definition and applicability.....	179
8.2.1.2	Minimum Requirements.....	179
8.2.1.2.1	3,84 Mcps TDD option.....	179
8.2.1.2.2	1,28 Mcps TDD option.....	180
8.2.1.2.3	7,68 Mcps TDD option.....	180
8.2.1.3	Test purpose .....	181
8.2.1.4	Method of test .....	181
8.2.1.4.1	Initial conditions.....	181
8.2.1.4.1.0	General test conditions.....	181
8.2.1.4.1.1	3,84 Mcps TDD option.....	181
8.2.1.4.1.2	1,28 Mcps TDD option .....	181
8.2.1.4.1.3	7,68 Mcps TDD option .....	182
8.2.1.4.2	Procedure .....	182
8.2.1.4.2.1	3,84 Mcps TDD option .....	182
8.2.1.4.2.2	1,28 Mcps TDD option .....	182
8.2.1.4.2.3	7,68 Mcps TDD option .....	183
8.2.1.5	Test Requirements.....	183
8.2.1.5.1	3,84 Mcps TDD option.....	184
8.2.1.5.2	1,28 Mcps TDD option .....	184
8.2.1.5.3	7,68 Mcps TDD option .....	184
8.3	Demodulation of DCH in multipath fading conditions .....	184
8.3.1	Multipath fading Case 1 .....	184
8.3.1.1	Definition and applicability.....	184

8.3.1.2	Minimum Requirements.....	184
8.3.1.2.1	3,84 Mcps TDD option.....	184
8.3.1.2.2	1,28 Mcps TDD option.....	185
8.3.1.2.3	7,68 Mcps TDD option.....	185
8.3.1.3	Test purpose .....	186
8.3.1.4	Method of test .....	186
8.3.1.4.1	Initial conditions.....	186
8.3.1.4.1.0	General test conditions.....	186
8.3.1.4.1.1	3,84 Mcps TDD option.....	186
8.3.1.4.1.2	1,28 Mcps TDD option.....	187
8.3.1.4.1.3	7,68 Mcps TDD option.....	187
8.3.1.4.2	Procedure.....	187
8.3.1.4.2.1	3,84 Mcps TDD option .....	187
8.3.1.4.2.2	1,28 Mcps TDD option .....	188
8.3.1.4.2.3	7,68 Mcps TDD option .....	188
8.3.1.5	Test Requirements.....	189
8.3.1.5.1	3,84 Mcps TDD option.....	189
8.3.1.5.2	1,28 Mcps TDD option.....	189
8.3.1.5.3	7,68 Mcps TDD option.....	189
8.3.2	Multipath fading Case 2.....	189
8.3.2.1	Definition and applicability.....	189
8.3.2.2	Minimum Requirements.....	189
8.3.2.2.1	3,84 Mcps TDD option.....	189
8.3.2.2.2	1,28 Mcps option.....	190
8.3.2.2.3	7,68 Mcps TDD option.....	191
8.3.2.3	Test purpose .....	191
8.3.2.4	Method of test .....	191
8.3.2.4.1	Initial conditions.....	191
8.3.2.4.1.0	General test conditions.....	191
8.3.2.4.1.1	3,84 Mcps TDD option.....	191
8.3.2.4.1.2	1,28 Mcps TDD option.....	192
8.3.2.4.1.3	7,68 Mcps TDD option.....	192
8.3.2.4.2	Procedure.....	192
8.3.2.4.2.1	3,84 Mcps TDD option .....	192
8.3.2.4.2.2	1,28 Mcps TDD option .....	193
8.3.2.4.2.3	7,68 Mcps TDD option .....	193
8.3.2.5	Test Requirements.....	194
8.3.2.5.1	3,84 Mcps TDD option .....	194
8.3.2.5.2	1,28 Mcps TDD option.....	194
8.3.2.5.3	7,68 Mcps TDD option .....	194
8.3.3	Multipath fading Case 3.....	194
8.3.3.1	Definition and applicability.....	194
8.3.3.2	Minimum Requirements.....	194
8.3.3.2.1	3,84 Mcps TDD option.....	194
8.3.3.2.2	1,28 Mcps TDD option.....	195
8.3.3.2.3	7,68 Mcps TDD option.....	196
8.3.3.3	Test purpose .....	196
8.3.3.4	Method of test .....	197
8.3.3.4.1	Initial conditions.....	197
8.3.3.4.1.0	General test conditions.....	197
8.3.3.4.1.1	3,84 Mcps TDD option .....	197
8.3.3.4.1.2	1,28 Mcps TDD option .....	197
8.3.3.4.1.3	7,68 Mcps TDD option .....	197
8.3.3.4.2	Procedure.....	197
8.3.3.4.2.1	3,84 Mcps TDD option .....	197
8.3.3.4.2.2	1,28 Mcps TDD option .....	198
8.3.3.4.2.3	7,68 Mcps TDD option .....	199
8.3.3.5	Test Requirements.....	199
8.3.3.5.1	3,84 Mcps TDD option .....	199
8.3.3.5.2	1,28 Mcps TDD option .....	199
8.3.3.5.3	7,68 Mcps TDD option .....	200
8.3A	Demodulation of DCH in high speed train conditions .....	200

8.3A.1	Definition and applicability .....	200
8.3A.2	Minimum requirement .....	200
8.3A.2.1	3.84 Mcps TDD option .....	200
8.3A.2.2	1.28 Mcps TDD option .....	200
8.3A.2.3	7.68 Mcps TDD option .....	201
8.3A.3	Test purpose.....	201
8.3A.4	Method of test.....	202
8.3A.4.1	Initial conditions .....	202
8.3A.4.1.1	General test conditions .....	202
8.3A.4.1.1	3.84 Mcps TDD option.....	202
8.3A.4.1.1	1.28 Mcps TDD option.....	202
8.3A.4.1.1	7.68 Mcps TDD option.....	202
8.3A.4.2	Procedure .....	202
8.3A.4.2.1	3.84 Mcps TDD option.....	202
8.3A.4.2.2	1.28 Mcps TDD option.....	202
8.3A.4.2.3	7.68 Mcps TDD option.....	203
8.3A.5	Test requirements.....	203
8.3A.5.1	3,84 Mcps TDD option .....	203
8.3A.5.2	1,28 Mcps TDD option .....	203
8.3A.5.3	7,68 Mcps TDD option .....	204
8.4	Demodulation of E-DCH FRC in multipath fading conditions .....	204
8.4.1	Definition and applicability .....	204
8.4.2	Minimum Requirements .....	204
8.4.2.1	3,84 Mcps TDD Option.....	204
8.4.2.2	1.28Mcps TDD option .....	205
8.4.2.3	7.68 Mcps TDD Option.....	206
8.4.3	Test purpose.....	206
8.4.4	Method of test .....	206
8.4.4.1	Initial conditions .....	206
8.4.4.1.0	General test conditions .....	206
8.4.4.1.1	3,84 Mcps TDD option.....	207
8.4.4.1.2	1.28Mcps TDD option .....	207
8.4.4.1.3	7.68 Mcps TDD option.....	207
8.4.4.2	Procedure .....	207
8.4.4.2.1	3,84 Mcps TDD option.....	207
8.4.4.2.2	1.28Mcps TDD option .....	208
8.4.4.2.3	7.68 Mcps TDD option.....	208
8.4.5	Test Requirements .....	209
8.4.5.1	3,84 Mcps TDD option .....	209
8.4.5.2	1.28Mcps TDD option .....	209
8.4.5.3	7.68 Mcps TDD option .....	209
8.5	Performance of ACK error detection for HS-SICH .....	209
8.5.1	ACK error detection in static propagation conditions .....	209
8.5.1.1	3.84 Mcps TDD option .....	209
8.5.1.2	1.28 Mcps TDD option .....	209
8.5.1.2.1	Definition and applicability .....	209
8.5.1.2.2	Minimum requirement .....	210
8.5.1.2.3	Test purpose .....	211
8.5.1.2.4	Method of test.....	211
8.5.1.2.4.1	Initial conditions .....	211
8.5.1.2.4.2	Procedure .....	211
8.5.1.2.5	Test requirements .....	211
8.5.2	ACK error detection in multipath fading conditions.....	212
8.5.2.1	3,84Mcps TDD option .....	212
8.5.2.2	1,28Mcps TDD option .....	212
8.5.2.2.1	Definition and applicability .....	212
8.5.2.2.2	Minimum requirement .....	212
8.5.2.2.3	Test purpose .....	214
8.5.2.2.4	Method of test.....	214
8.5.2.2.4.1	Initial conditions .....	214
8.5.2.2.4.2	Procedure .....	214
8.5.2.2.5	Test requirements .....	214

<b>Annex A (normative): Measurement Channels.....</b>	<b>216</b>
A.1 (void) .....	216
A.2 Reference measurement channel .....	216
A.2.1 UL reference measurement channel (12,2 kbps) .....	216
A.2.1.1 3,84 Mcps TDD option .....	216
A.2.1.2 1,28 Mcps option .....	217
A.2.1.3 7,68 Mcps TDD Option .....	218
A.2.2 UL reference measurement channel (64 kbps) .....	219
A.2.2.1 3,84 Mcps TDD option .....	219
A.2.2.2 1,28 Mcps TDD option .....	221
A.2.2.3 7,68 Mcps TDD Option .....	222
A.2.3 UL reference measurement channel (144 kbps) .....	223
A.2.3.1 3,84 Mcps TDD option .....	223
A.2.3.2 1,28 Mcps TDD option .....	225
A.2.3.3 7,68 Mcps TDD Option .....	226
A.2.4 UL reference measurement channel (384 kbps) .....	227
A.2.4.1 3,84 Mcps TDD option .....	227
A.2.4.2 1,28 Mcps TDD option .....	229
A.2.4.3 7,68 Mcps TDD Option .....	230
A.2.5 RACH reference measurement channel .....	231
A.2.5.1 3,84 Mcps TDD option .....	231
A.2.5.1.1 RACH mapped to 1 code SF16.....	231
A.2.5.1.2 RACH mapped to 1 code SF8.....	232
A.2.5.2 1,28 Mcps TDD option .....	232
A.2.5.2.1 RACH mapped to 1 code SF16.....	233
A.2.5.2.2 RACH mapped to 1 code SF8.....	233
A.2.5.2.3 RACH mapped to 1 code SF4.....	234
A.2.5.3 7,68 Mcps TDD option .....	234
A.2.5.3.1 RACH mapped to 1 code SF16.....	235
A.2.5.3.2 RACH mapped to 1 code SF32.....	235
A.3 E-DCH Reference measurement channels .....	236
A.3.1 E-DCH Fixed Reference Channels.....	236
A.3.1.1 3,84 Mcps TDD Option .....	236
A.3.1.1.1 Fixed Reference Channel 1 (FRC1) .....	236
A.3.1.1.2 Fixed Reference Channel 2 (FRC2) .....	237
A.3.1.1.3 Fixed Reference Channel 3 (FRC3) .....	237
A.3.1.2 1.28Mcps TDD Option .....	238
A.3.1.2.1 Fixed reference channel 1(FRC1).....	238
A.3.1.2.2 Fixed reference channel 2(FRC2) .....	239
A.3.1.2.3 Fixed reference channel 3(FRC3) .....	240
A.3.1.2.4 Fixed reference channel 4(FRC4).....	241
A.3.1.3 7,68 Mcps TDD Option .....	242
A.3.1.3.1 Fixed Reference Channel 1 (FRC1) .....	242
A.3.1.3.2 Fixed Reference Channel 2 (FRC2) .....	243
A.3.1.3.3 Fixed Reference Channel 3 (FRC3) .....	244
A.4 HS-SICH Reference measurement channels .....	245
A.4.1 3,84 Mcps TDD Option.....	245
A.4.2 1,28 Mcps TDD Option.....	245
<b>Annex B (normative): Propagation conditions.....</b>	<b>247</b>
B.1 Static propagation condition.....	247
B.2 Multi-path fading propagation conditions .....	247
B.2.1 3,84 Mcps TDD option.....	247
B.2.2 1,28 Mcps TDD option.....	247
B.2.3 7,68 Mcps TDD option.....	248
B.3 High speed train conditions .....	249

<b>Annex C (normative):</b>	<b>Global in-channel Tx test .....</b>	<b>251</b>
C.1	General .....	251
C.2	Definition of the process .....	251
C.2.1	Basic principle.....	251
C.2.2	Output signal of the Tx under test .....	251
C.2.3	Reference signal .....	251
C.2.4	Classification of measurement results .....	252
C.2.5	Process definition to achieve results of type "deviation".....	252
C.2.5.1	Decision Point Power.....	253
C.2.5.2	Code-Domain Power.....	253
C.2.6	Process definition to achieve results of type "residual".....	253
C.2.6.1	Error Vector Magnitude (EVM) .....	254
C.2.6.2	Peak Code Domain Error (PCDE) .....	254
C.2.6.3	Relative Code Domain Error (RCDE) .....	254
C.3	Notes.....	255
C.3.1	Symbol length .....	255
C.3.2	Deviation .....	255
C.3.3	Residual .....	255
C.3.4	TDD.....	255
C.3.5	Synch channel .....	255
C.3.6	Formula for the minimum process .....	256
C.3.7	Formula for EVM.....	257
<b>Annex D (informative):</b>	<b>Derivation of Test Requirements.....</b>	<b>258</b>
<b>Annex E (informative):</b>	<b>Acceptable uncertainty of Test Equipment .....</b>	<b>267</b>
<b>Annex F (normative):</b>	<b>General rules for statistical testing.....</b>	<b>269</b>
F.1	Statistical testing of receiver BER/BLER performance .....	269
F.1.1	Error Definition .....	269
F.1.2	Test Method.....	269
F.1.3	Test Criteria.....	269
F.1.4	Calculation assumptions.....	269
F.1.4.1	Statistical independence.....	269
F.1.4.2	Applied formulas .....	269
F.1.4.3	Approximation of the distribution .....	270
F.1.5	Definition of good pass fail decision.....	270
F.1.6	Good balance between test time and statistical significance .....	271
F.1.7	Pass fail decision rules .....	272
F.1.8	Test conditions for BER,BLER Tests.....	273
F.1.9	Practical Use (informative).....	274
<b>Annex G (informative):</b>	<b>Change History .....</b>	<b>277</b>
History .....		281

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## Foreword

This Technical Specification has been produced by the 3GPP.

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of this TS, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 Indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the specification.

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## 1 Scope

The present document specifies the Radio Frequency (RF) test methods and conformance requirements for UTRA Base Stations (BS) operating in the TDD mode. These have been derived from, and are consistent with, the UTRA base station (BS) specifications defined in 3GPP TS 25.105 [1]. The document covers all three options of the TDD mode, which are the 3,84 Mcps (incorporating MBSFN IMB), the 1,28 Mcps and the 7.68 Mcps options respectively. The requirements are listed in different subsections only if the parameters deviate.

In this TS, the reference point for RF connections (except for the measurement of mean transmitted RF carrier power) is the antenna connector, as defined by the manufacturer. This TS does not apply to repeaters or RF devices which may be connected to an antenna connector of a BS.

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## 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document in the same Release as the present document.

- [1] 3GPP TS 25.105: "UTRA (BS) TDD: Radio transmission and reception".
- [2] IEC 60721-3-3 (1994): "Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 3: Stationary use at weather protected locations".
- [3] IEC 60721-3-4 (1995): "Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 4: Stationary use at non-weather protected locations".
- [4] IEC 60068-2-1 (1990): "Environmental testing - Part 2: Tests. Tests A: Cold".
- [5] ETR 028: "Uncertainties in the measurement of mobile radio equipment characteristics".
- [6] Recommendation ITU-R SM.329: "Unwanted emissions in the spurious domain".
- [7] Recommendation ITU-R SM.328: "Spectra and bandwidth of emissions".
- [8] IEC 60068-2-6 (1995): "Environmental testing - Part 2: Tests - Test Fc: Vibration (sinusoidal)".
- [9] 3GPP TR 25.942: "RF System Scenarios".
- [10] ITU-T recommendation O.153: "Basic parameters for the measurement of error performance at bit rates below the primary rate".
- [11] 3GPP TS 36.104: "Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) radio transmission and reception".
- [12] 3GPP TS 37.141: "E-UTRA, UTRA and GSM/EDGE; Multi-Standard Radio (MSR) Base Station (BS) conformance testing".
- [13] ITU-R Recommendation M.1545, "Measurement uncertainty as it applies to test limits for the terrestrial component of International Mobile Telecommunications-2000".