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Technical Report

LTE;
Evolved Universal Terrestrial Radio Access (E-UTRA)
and Evolved Universal Terrestrial
Radio Access Network (E-UTRAN);
Derivation of test tolerances for
Radio Resource Management (RRM) conformance tests
(3GPP TR 36.903 version 10.5.0 Release 10)

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650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00   Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
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Contents

Foreword

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y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

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Introduction

1 Scope

The present document specifies a general method used to derive Test Tolerances for Radio Resource Management tests, and establishes a system for relating the Test Tolerances to the measurement uncertainties of the Test System.

The test cases which have been analysed to determine Test Tolerances are included as .zip files.

The present document is applicable from Release 8 up to the release indicated on the front page of the present Terminal conformance specifications.

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.

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[<seq>]   <doctype> <#>[([up to and including]{yyyy[-mm]|V<a[.b[.c]]>}[onwards])]: "<Title>".

[1] to [8]   (void)

[9]   3GPP TS 36.903 Release 11: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Derivation of test tolerances for Radio Resource Management (RRM) conformance tests'

3 Definitions, symbols and abbreviations

Void

4 General Principles

The requirements of the present document are provided in 3GPP TS 36.903 Release 11 [9].

5 to 7 Void

Annex A to C: Void

Annex D:
Change History

Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2010-02	RAN5#46	R5-072185	-	-	TR 36.903 Skeleton proposed for RAN5#46	-	0.0.1
2010-06	-	-	-	-	TR 36.903 update proposed	0.0.1	0.0.x
2010-08	RAN5#48	-	-	-	TR 36.903 update proposed	0.0.x	0.0.2
2010-08	RAN5#48	R5-104409	-	-	TR 36.903 update proposed including all docs agreed on RAN5#48	0.0.2	0.1.0
2010-09	-	-	-	-	Small editorial corrections	0.1.0	0.1.1
2010-09	RAN5#49	R5-106802	-	-	TR 36.903 update proposed including all docs agreed on RAN5#49	0.1.1	1.0.0
2010-12	RAN5#50	R5-101182	-	-	TR 36.903 v1.0.0 on Derivation of test tolerances for multi-cell RRM conformance tests (Approval)	1.0.0	8.0.0
2010-12	RAN5#50	-	-	-	Raised to v9.0.0 with no change	8.0.0	9.0.0
2011-09	RAN5#52	R5-113225	0001	-	Test Tolerance analysis for RRM test case 4.3.1.3	9.0.0	9.1.0
2011-09	RAN5#52	R5-113227	0002	-	RRM Test Tools agreed at RAN5#50 in TR 36.903	9.0.0	9.1.0
2011-09	RAN5#52	R5-113228	0003	-	RRM Test Tools agreed at RAN5#51 in TR 36.903	9.0.0	9.1.0
2011-09	RAN5#52	R5-113248	0004	-	Add Test Tolerance analysis for the inter RAT E-UTRAN handover test cases 5.2.1 and 5.2.2	9.0.0	9.1.0
2011-09	RAN5#52	R5-114008	0005	-	Add Test Tolerance analysis for E-UTRAN to UTRA TDD handover test case 5.2.4	9.0.0	9.1.0
2011-09	RAN5#52	R5-114010	0006	-	RRM Test Tools Updates agreed at RAN5#50 for TR 36.903	9.0.0	9.1.0
2011-09	RAN5#52	R5-114011	0007	-	Update Test Tolerance analysis for Test cases 8.x	9.0.0	9.1.0
2011-09	RAN5#52	R5-114012	0008	-	Test Tolerance analysis for TS36.521-3 FDD SON ANR test case 8.5.2	9.0.0	9.1.0
2011-09	RAN5#52	R5-114015	0009	-	Add Test Tolerance analysis for E-UTRAN FDD/TDD - UTRA FDD CPICH Ec/No absolute measurement accuracy test cases	9.0.0	9.1.0
2011-09	RAN5#52	R5-114017	0010	-	Add Test Tolerance analysis for E-UTRAN FDD- UTRAN TDD event triggered reporting under fading propagation conditions	9.0.0	9.1.0
2011-09	RAN5#52	R5-114018	0011	-	Update analysis for TC 8.3.3+8.4.3 in 36.903	9.0.0	9.1.0
2011-09	RAN5#52	R5-114020	0012	-	Add Uncertainties and TT analysis for TC 4.3.4.3 in 36.903	9.0.0	9.1.0
2011-09	RAN5#52	R5-114058	0013	-	Add Test Tolerance analysis for E-UTRAN to UTRAN Cell Re-Selection test cases 4.3.4.1	9.0.0	9.1.0
2011-12	RAN5#53	R5-115149	0014	-	Add Inter-RAT test case groups in 36.903	9.1.0	9.2.0
2011-12	RAN5#53	R5-115825	0015	-	Test tolerances methodology for UE measurement procedures Inter-RAT event triggered reporting when DRX is used under fading test case 8.5.3 in TR 36.903	9.1.0	9.2.0
2011-12	RAN5#53	R5-115188	0016	-	Test Tolerance analysis for RRM test case 8.11.3	9.1.0	9.2.0
2011-12	RAN5#53	R5-115201	0017	-	Test Tolerance analysis for TS36.521-3 TDD SON ANR test case 8.7.3	9.1.0	9.2.0
2011-12	RAN5#53	R5-115402	0018	-	Test Tolerance analysis for RRM test case 4.3.3	9.1.0	9.2.0
2011-12	RAN5#53	R5-115788	0019	-	GCF Priority 2 - Add RRM Test Tolerance analysis for RRM test case 8.11.1 and 8.11.2	9.1.0	9.2.0
2011-12	RAN5#53	R5-115826	0020	-	Update of Test Tolerances analysis for ch.9 test cases	9.1.0	9.2.0
2011-12	RAN5#53	R5-115898	0021	-	Add test tolerance analysis for 6.1.3 and 6.1.4	9.1.0	9.2.0
2012-03	RAN5#54	R5-120108	0022	-	Test Tolerance analysis for TS36.521-3 TDD new CGI test cases 8.2.3 and 8.2.4	9.2.0	9.3.0
2012-03	RAN5#54	R5-120123	0023	-	Test Tolerance analysis for TS36.521-3 TDD Inter-frequency new CGI test cases 8.4.4 and 8.4.5.	9.2.0	9.3.0
2012-03	RAN5#54	R5-120246	0024	-	Update Test Tolerance analysis for RRM test cases 9.1.4.1 and 9.1.4.2	9.2.0	9.3.0
2012-03	RAN5#54	R5-120247	0025	-	Update RRM Test Tolerance analysis for TDD PRACH Test cases 6.2.3+6.2.4	9.2.0	9.3.0
2012-03	RAN5#54	R5-120248	0026	-	Add Test Tolerance analysis for RRM test case 8.11.4	9.2.0	9.3.0
2012-03	RAN5#54	R5-120906	0027	-	Add TT Analysis for TC 4.5.1.1 in 36.903	9.2.0	9.3.0
2012-03	RAN5#54	R5-120916	0028	-	Add TT Analysis for TC 5.3.1 in 36.903	9.2.0	9.3.0
2012-06	RAN5#55	R5-121246	0029	-	Grouping of positioning test cases in TR36.903	9.3.0	9.4.0
2012-06	RAN5#55	R5-121606	0030	-	Add Test Tolerance analysis for RRM test cases 4.2.4 and 4.2.5	9.3.0	9.4.0

2012-06	RAN5#55	R5-121608	0031	-	Add Test Tolerance analysis for RRM test cases 5.1.7 and 5.1.8	9.3.0	9.4.0
2012-06	RAN5#55	R5-121610	0032	-	Add Test Tolerance analysis for RRM test cases 8.14.1	9.3.0	9.4.0
2012-06	RAN5#55	R5-121612	0033	-	Add Test Tolerance analysis for RRM test cases 8.15.1	9.3.0	9.4.0
2012-06	RAN5#55	R5-121614	0034	-	Add Test Tolerance analysis for RRM test case 9.1.5.1	9.3.0	9.4.0
2012-06	RAN5#55	R5-121616	0035	-	Addition of Test Tolerance analysis for FDD - TDD Inter Frequency Relative Accuracy of RSRP test case 9.1.5.2	9.3.0	9.4.0
2012-06	RAN5#55	R5-121926	0036	-	TT 9.6.2 analysis for 36.903	9.3.0	9.4.0
2012-06	RAN5#55	R5-121928	0037	-	Resubmission of TT Analysis for TC 4.5.1.1 in 36.903	9.3.0	9.4.0
2012-06	RAN5#55	-	-	-	Added two missing TT Analysis zip files	9.4.0	9.4.1
2012-09	RAN5#56	R5-123213	0045	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 4.2.7 and 4.2.8	9.4.1	9.5.0
2012-09	RAN5#56	R5-123921	0038	-	Update Test Tolerance analysis for RRM test case 9.1.2.1	9.4.1	9.5.0
2012-09	RAN5#56	R5-123922	0039	-	Update Test Tolerance analysis for RRM test case 9.1.2.2	9.4.1	9.5.0

2012-09	RAN5#56	R5-123923	0040	-	Update Test Tolerance analysis for RRM test cases 9.1.3.1+9.1.4.1	9.4.1	9.5.0
2012-09	RAN5#56	R5-123924	0041	-	Update Test Tolerance analysis for RRM test cases 9.1.3.2+9.1.4.2	9.4.1	9.5.0
2012-09	RAN5#56	R5-123925	0042	-	Update Test Tolerance analysis for RRM test cases 9.2.1.1+9.2.2.1	9.4.1	9.5.0
2012-09	RAN5#56	R5-123926	0043	-	Update Test Tolerance analysis for RRM test cases 9.2.3.1+9.2.4.1	9.4.1	9.5.0
2012-09	RAN5#56	R5-123927	0044	-	Update Test Tolerance analysis for RRM test cases 9.2.3.2+9.2.4.2	9.4.1	9.5.0
2012-12	RAN5#57	R5-125558	0048	-	Addition of uncertainties and test tolerance definition and analysis for TC 9.2.4A.1	9.5.0	9.6.0
2012-12	RAN5#57	R5-125815	0049	-	Addition of uncertainties and test tolerance definition and analysis for TC 4.5.2.1	9.5.0	9.6.0
2012-12	RAN5#57	R5-125816	0050	-	Addition of uncertainties and test tolerance definition and analysis for TC 5.3.5	9.5.0	9.6.0
2012-12	RAN5#57	R5-125817	0051	-	Addition of uncertainties and test tolerance definition and analysis for TC 8.14.2	9.5.0	9.6.0
2012-12	RAN5#57	R5-125818	0052	-	Addition of uncertainties and test tolerance definition and analysis for TC 8.15.2	9.5.0	9.6.0
2012-12	RAN5#57	R5-125819	0053	-	Addition of uncertainties and test tolerance definition and analysis for TC 8.14.3 and 8.15.3	9.5.0	9.6.0
2012-12	RAN5#57	R5-125820	0054	-	Addition of uncertainties and test tolerance definition and analysis for TC 9.2.4A.2	9.5.0	9.6.0
2012-12	RAN5#57	R5-125356	0046	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 8.16.1 and 8.16.2	9.6.0	10.0.0
2012-12	RAN5#57	R5-125362	0047	-	Update TS 36.521-3 Test cases 5.2.3+5.2.6 Test Tolerance analyses for >3GHz	9.6.0	10.0.0
2013-03	RAN5#58	R5-130055	0055	-	Update TS 36.521-3 Test cases 7.1.1+7.1.2 Test Tolerance analyses	10.0.0	10.1.0
2013-03	RAN5#58	R5-130057	0056	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.1.6.1 and 9.1.7.1	10.0.0	10.1.0
2013-03	RAN5#58	R5-130059	0057	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.1.6.2 and 9.1.7.2	10.0.0	10.1.0
2013-03	RAN5#58	R5-130061	0058	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.2.5.1 and 9.2.6.1	10.0.0	10.1.0
2013-03	RAN5#58	R5-130063	0059	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.2.5.2 and 9.2.6.2	10.0.0	10.1.0
2013-03	RAN5#58	R5-130393	0061	-	Addition of test tolerance analysis for TCs 6.3.1+6.3.9	10.0.0	10.1.0
2013-03	RAN5#58	R5-130394	0062	-	Addition of test tolerance analysis for TCs 6.3.3+6.3.10	10.0.0	10.1.0
2013-03	RAN5#58	R5-130933	0063	-	Addition of uncertainties and test tolerance definition and analysis for TC 8.16.3 and TC 8.16.4	10.0.0	10.1.0
2013-06	RAN5#59	R5-131179	0077	-	RRM: Add test tolerance analyses for TCs 8.1.5 and 8.1.6	10.1.0	10.2.0
2013-06	RAN5#59	R5-131181	0065	-	RRM: Add test tolerance analyses for TCs 8.3.4 and 8.3.5	10.1.0	10.2.0
2013-06	RAN5#59	R5-131279	0066	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.2.7.1, 9.2.8.1	10.1.0	10.2.0
2013-06	RAN5#59	R5-131285	0067	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 8.11.5, 8.11.6	10.1.0	10.2.0

2013-06	RAN5#59	R5-131287	0068	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.5.1, 9.5.2	10.1.0	10.2.0
2013-06	RAN5#59	R5-131290	0069	-	Remove superseded analysis zip files	10.1.0	10.2.0
2013-06	RAN5#59	R5-131400	0070	-	Test Tolerance analyses for TS 36.521-3 test cases 5.2.4 and 5.2.5	10.1.0	10.2.0
2013-06	RAN5#59	R5-131401	0071	-	Test Tolerance analyses for TS 36.521-3 test case 8.5.4	10.1.0	10.2.0
2013-06	RAN5#59	R5-131402	0072	-	Test Tolerance analyses for TS 36.521-3 test cases 8.7.4 and 8.9.2	10.1.0	10.2.0
2013-06	RAN5#59	R5-131461	0073	-	Addition of test tolerance analysis for TCs 6.3.2+6.3.12	10.1.0	10.2.0
2013-06	RAN5#59	R5-131464	0074	-	Addition of test tolerance analysis for TCs 6.3.4+6.3.11	10.1.0	10.2.0
2013-06	RAN5#59	R5-131467	0075	-	Addition of test tolerance analysis for TCs 6.3.5+6.3.6+6.3.7+6.3.8	10.1.0	10.2.0
2013-09	RAN5#60	R5-133100	0078	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.1.8.1+9.1.9.1	10.2.0	10.3.0
2013-09	RAN5#60	R5-133102	0079	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.1.8.2+9.1.9.2	10.2.0	10.3.0
2013-09	RAN5#60	R5-133104	0080	-	Update Test Tolerance analyses for TS 36.521-3 Test cases 9.1.3.x and 9.1.4.x	10.2.0	10.3.0
2013-09	RAN5#60	R5-133106	0081	-	Test Tolerances update for eICIC absolute RSRQ Test cases 9.2.7.1+9.2.8.1	10.2.0	10.3.0
2013-09	RAN5#60	R5-133219	0082	-	RRM: Test tolerance analyses for TCs 9.6.1 and 9.6.2	10.2.0	10.3.0
2013-09	RAN5#60	R5-133349	0083	-	Update Test Tolerance analyses for TS 36.521-3 Test cases 9.1.1.1 and 9.1.2.1	10.2.0	10.3.0
2013-09	RAN5#60	R5-133374	0084	-	Add Test Tolerance Analyses for TS 37.571-1 Test Cases 9.1.1 and 9.1.2	10.2.0	10.3.0
2013-09	RAN5#60	R5-133376	0085	-	Add Test Tolerance Analyses for TS 37.571-1 Test Cases 9.1.3 and 9.1.4	10.2.0	10.3.0
2013-09	RAN5#60	R5-133843	0086	-	LBS Perf: Test tolerance analyses for TCs 8.1.1 and 8.1.2	10.2.0	10.3.0
2013-12	RAN5#61	R5-134144	0087	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.1.12.1 and 9.1.13.1	10.3.0	10.4.0
2013-12	RAN5#61	R5-134146	0088	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.1.12.2 and 9.1.13.2	10.3.0	10.4.0
2013-12	RAN5#61	R5-134148	0089	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.2.11.1 and 9.2.12.1	10.3.0	10.4.0
2013-12	RAN5#61	R5-134150	0090	-	Add Test Tolerance analyses for TS 36.521-3 Test cases 9.2.11.2 and 9.2.12.2	10.3.0	10.4.0
2013-12	RAN5#61	R5-134220	0091	-	Add Test Tolerance analysis for TS 36.521-3 Test case 8.20.3	10.3.0	10.4.0
2013-12	RAN5#61	R5-134222	0092	-	Add Test Tolerance analysis for TS 36.521-3 Test cases 9.2.9.1 and 9.2.10.1	10.3.0	10.4.0
2013-12	RAN5#61	R5-135015	0093	-	Add Test Tolerance Analyses for TS 37.571-1 Test Cases 9.2.1 and 9.2.2	10.3.0	10.4.0
2013-12	RAN5#61	R5-135017	0094	-	Add Test Tolerance Analyses for TS 37.571-1 Test Cases 9.2.4 and 9.2.5	10.3.0	10.4.0
2014-03	RAN5#62	R5-140130	0111	-	Removal of technical content in 36.903 v10.4.0 and substitution with pointer to the next Release	10.4.0	10.5.0

History

Document history		
V10.0.0	February 2013	Publication
V10.1.0	April 2013	Publication
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