



**SLOVENSKI STANDARD**  
**SIST EN 301 908-13 V13.3.1:2025**  
**01-januar-2025**

---

**Celična omrežja IMT - Harmonizirani standard za dostop do radijskega spektra -  
13. del: Uporabniška oprema za razviti prizemni radijski dostop za UMTS (E-UTRA)**

IMT cellular networks - Harmonised Standard for access to radio spectrum - Part 13:  
Evolved Universal Terrestrial Radio Access (E-UTRA) User Equipment (UE)

**iTeh Standards**  
**(<https://standards.iteh.ai>)**

**Ta slovenski standard je istoveten z: ETSI EN 301 908-13 V13.3.1 (2024-10)**

---

[SIST EN 301 908-13 V13.3.1:2025](https://standards.iteh.ai/catalog/standards/sist/eba753ce-7160-47f3-9bac-1d36ed58bf5b/sist-en-301-908-13-v13-3-1-2025)

**ICS:**

33.060.99	Druga oprema za radijske komunikacije	Other equipment for radiocommunications
33.070.99	Druge mobilne storitve	Other mobile services

**SIST EN 301 908-13 V13.3.1:2025**      **en,fr,de**



# ETSI EN 301 908-13 V13.3.1 (2024-10)



**IMT cellular networks;  
Harmonised Standard for access to radio spectrum;  
Part 13: Evolved Universal Terrestrial Radio Access (E-UTRA)  
User Equipment (UE)**

[SIST EN 301 908-13 V13.3.1:2025](https://standards.iteh.ai/catalog/standards/sist/eba753ce-7160-47f3-9bac-1d36ed58bf5b/sist-en-301-908-13-v13-3-1-2025)

<https://standards.iteh.ai/catalog/standards/sist/eba753ce-7160-47f3-9bac-1d36ed58bf5b/sist-en-301-908-13-v13-3-1-2025>

---

**Reference**REN/MSG-TFES-1504

---

**Keywords**3G, 3GPP, cellular, digital, E-UTRA, IMT,  
IMT-2000, IMT-Advanced, LTE, LTE-Advanced,  
mobile, radio, regulation, UMS**ETSI**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 - APE 7112B  
Association à but non lucratif enregistrée à la  
Sous-Préfecture de Grasse (06) N° w061004871

---

**Important notice**

---

The present document can be downloaded from the  
ETSI [Search & Browse Standards](#) application.

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the prevailing version of an ETSI deliverable is the one made publicly available in PDF format on [ETSI deliver](#).

Users should be aware that the present document may be revised or have its status changed, this information is available in the [Milestones listing](#).

If you find errors in the present document, please send your comments to the relevant service listed under [Committee Support Staff](#).

If you find a security vulnerability in the present document, please report it through our [Coordinated Vulnerability Disclosure \(CVD\)](#) program.

---

**Notice of disclaimer & limitation of liability**

---

The information provided in the present deliverable is directed solely to professionals who have the appropriate degree of experience to understand and interpret its content in accordance with generally accepted engineering or other professional standard and applicable regulations.

No recommendation as to products and services or vendors is made or should be implied.  
In no event shall ETSI be held liable for loss of profits or any other incidental or consequential damages.

Any software contained in this deliverable is provided "AS IS" with no warranties, express or implied, including but not limited to, the warranties of merchantability, fitness for a particular purpose and non-infringement of intellectual property rights and ETSI shall not be held liable in any event for any damages whatsoever (including, without limitation, damages for loss of profits, business interruption, loss of information, or any other pecuniary loss) arising out of or related to the use of or inability to use the software.

---

**Copyright Notification**

---

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© ETSI 2024.  
All rights reserved.

# Contents

Intellectual Property Rights .....	11
Foreword.....	11
Modal verbs terminology.....	12
Introduction .....	12
1 Scope .....	13
2 References .....	16
2.1 Normative references .....	16
2.2 Informative references.....	16
3 Definition of terms, symbols and abbreviations.....	18
3.1 Terms.....	18
3.2 Symbols.....	21
3.3 Abbreviations .....	23
4 Technical requirements specifications .....	25
4.1 Environmental profile.....	25
4.2 Conformance requirements .....	25
4.2.0 General.....	25
4.2.1 Introduction.....	25
4.2.2 Transmitter Maximum Output Power .....	26
4.2.2.1 Transmitter maximum output power for Single Carrier .....	26
4.2.2.1.1 Definition.....	26
4.2.2.1.2 Limits .....	26
4.2.2.1.3 Conformance .....	26
4.2.2.2 Transmitter output power for Carrier Aggregation (DL CA and UL CA) .....	26
4.2.2.2.1 Definition.....	26
4.2.2.2.2 Limits .....	27
4.2.2.2.3 Conformance .....	28
4.2.2.3 Transmitter output power for UL-MIMO .....	28
4.2.2.3.1 Definition.....	28
4.2.2.3.2 Limits .....	28
4.2.2.3.3 Conformance .....	28
4.2.2.4 Transmitter output power for category NB1 .....	29
4.2.2.4.1 Definition.....	29
4.2.2.4.2 Limits .....	29
4.2.2.4.3 Conformance .....	29
4.2.2.5 Transmitter output power for UE category M1 .....	29
4.2.2.5.1 Definition.....	29
4.2.2.5.2 Limits .....	29
4.2.2.5.3 Conformance .....	30
4.2.3 Transmitter Spectrum Emission Mask .....	30
4.2.3.1 Transmitter spectrum emission mask for Single Carrier .....	30
4.2.3.1.1 Definition.....	30
4.2.3.1.2 Limits .....	30
4.2.3.1.3 Conformance .....	31
4.2.3.2 Transmitter spectrum emission mask for Carrier Aggregation (DL CA and UL CA) .....	31
4.2.3.2.1 Definition.....	31
4.2.3.2.2 Limits .....	31
4.2.3.2.3 Conformance .....	33
4.2.3.3 Transmitter spectrum emission mask for UL-MIMO .....	33
4.2.3.3.1 Definition.....	33
4.2.3.3.2 Limits .....	34
4.2.3.3.3 Conformance .....	34
4.2.3.4 Transmitter spectrum emission mask for Multi-Cluster PUSCH within a component carrier .....	34
4.2.3.4.1 Definition.....	34
4.2.3.4.2 Limits .....	34

4.2.3.4.3	Conformance .....	34
4.2.3.5	Transmitter spectrum emission mask for category NB1 .....	34
4.2.3.5.1	Definition.....	34
4.2.3.5.2	Limits .....	34
4.2.3.5.3	Conformance .....	34
4.2.4	Transmitter Spurious Emissions .....	35
4.2.4.1	Transmitter spurious emissions for Single Carrier .....	35
4.2.4.1.1	Definition.....	35
4.2.4.1.2	Limits .....	35
4.2.4.1.3	Conformance .....	39
4.2.4.2	Transmitter spurious emissions for Carrier Aggregation (DL CA and UL CA) .....	40
4.2.4.2.1	Definition.....	40
4.2.4.2.2	Limits .....	40
4.2.4.2.3	Conformance .....	45
4.2.4.3	Transmitter spurious emissions for UL-MIMO .....	45
4.2.4.3.1	Definition.....	45
4.2.4.3.2	Limits .....	45
4.2.4.3.3	Conformance .....	45
4.2.4.4	Transmitter spurious emissions for Multi-Cluster PUSCH within a component carrier .....	45
4.2.4.4.1	Definition.....	45
4.2.4.4.2	Limits .....	45
4.2.4.4.3	Conformance .....	46
4.2.4.5	Transmitter spurious emissions for category NB1 .....	46
4.2.4.5.1	Definition.....	46
4.2.4.5.2	Limits .....	46
4.2.4.5.3	Conformance .....	46
4.2.5	Transmitter Minimum Output Power.....	46
4.2.5.1	Transmitter minimum output power for Single Carrier.....	46
4.2.5.1.1	Definition.....	46
4.2.5.1.2	Limits .....	46
4.2.5.1.3	Conformance .....	46
4.2.5.2	Transmitter minimum output power for Carrier Aggregation (DL CA and UL CA) .....	47
4.2.5.2.1	Definition.....	47
4.2.5.2.2	Limits .....	47
4.2.5.2.3	Conformance .....	47
4.2.5.3	Transmitter minimum output power for UL-MIMO .....	47
4.2.5.3.1	Definition.....	47
4.2.5.3.2	Limits .....	47
4.2.5.3.3	Conformance .....	48
4.2.5.4	Transmitter minimum output power for category NB1 .....	48
4.2.5.4.1	Definition.....	48
4.2.5.4.2	Limits .....	48
4.2.5.4.3	Conformance .....	48
4.2.6	Receiver Adjacent Channel Selectivity (ACS) .....	48
4.2.6.1	Receiver Adjacent Channel Selectivity (ACS) for Single Carrier .....	48
4.2.6.1.1	Definition.....	48
4.2.6.1.2	Limits .....	48
4.2.6.1.3	Conformance .....	49
4.2.6.2	Receiver Adjacent Channel Selectivity (ACS) for Carrier Aggregation in DL-only bands .....	49
4.2.6.2.1	Definition.....	49
4.2.6.2.2	Limits .....	50
4.2.6.2.3	Conformance .....	50
4.2.6.3	Receiver Adjacent Channel Selectivity (ACS) for category NB1 .....	51
4.2.6.3.1	Definition.....	51
4.2.6.3.2	Limits .....	51
4.2.6.3.3	Conformance .....	51
4.2.7	Receiver Blocking Characteristics .....	51
4.2.7.1	Receiver Blocking Characteristics for Single Carrier .....	51
4.2.7.1.1	Definition.....	51
4.2.7.1.2	Limits .....	51
4.2.7.1.3	Conformance .....	53
4.2.7.2	Receiver Blocking Characteristics for Carrier Aggregation in DL-only bands.....	53

4.2.7.2.1	Definition.....	53
4.2.7.2.2	Limits .....	54
4.2.7.2.3	Conformance .....	56
4.2.7.3	Receiver Blocking Characteristics for category NB1 .....	57
4.2.7.3.1	Definition.....	57
4.2.7.3.2	Limits .....	57
4.2.7.3.3	Conformance .....	58
4.2.8	Receiver Spurious Response.....	58
4.2.8.1	Receiver Spurious Response for Single Carrier .....	58
4.2.8.1.1	Definition.....	58
4.2.8.1.2	Limits .....	59
4.2.8.1.3	Conformance .....	59
4.2.8.2	Receiver Spurious Response for Carrier Aggregation in DL-only bands .....	59
4.2.8.2.1	Definition.....	59
4.2.8.2.2	Limits .....	59
4.2.8.2.3	Conformance .....	59
4.2.8.3	Receiver Spurious Response for category NB1 .....	59
4.2.8.3.1	Definition.....	59
4.2.8.3.2	Limits .....	60
4.2.8.3.3	Conformance .....	60
4.2.9	Receiver Intermodulation Characteristic .....	60
4.2.9.1	Receiver Intermodulation Characteristics for Single Carrier .....	60
4.2.9.1.1	Definition.....	60
4.2.9.1.2	Limits .....	60
4.2.9.1.3	Conformance .....	61
4.2.9.2	Receiver Intermodulation Characteristics for Carrier Aggregation in DL-only bands.....	61
4.2.9.2.1	Definition.....	61
4.2.9.2.2	Limits .....	61
4.2.9.2.3	Conformance .....	62
4.2.9.3	Receiver Intermodulation Characteristics for category NB1 .....	62
4.2.9.3.1	Definition.....	62
4.2.9.3.2	Limits .....	62
4.2.9.3.3	Conformance .....	62
4.2.10	Receiver Spurious Emissions.....	63
4.2.10.1	Receiver Spurious Emissions for Single Carrier.....	63
4.2.10.1.1	Definition.....	63
4.2.10.1.2	Limits .....	63
4.2.10.1.3	Conformance .....	63
4.2.10.2	Receiver Spurious Emissions in DL-only bands .....	63
4.2.10.2.1	Definition.....	63
4.2.10.2.2	Limits .....	63
4.2.10.2.3	Conformance .....	63
4.2.11	Transmitter Adjacent Channel Leakage Power Ratio.....	64
4.2.11.1	Transmitter adjacent channel leakage power ratio for Single Carrier .....	64
4.2.11.1.1	Definition.....	64
4.2.11.1.2	Limits .....	64
4.2.11.1.3	Conformance .....	65
4.2.11.2	Transmitter adjacent channel leakage power ratio for Carrier Aggregation (DL CA and UL CA).....	65
4.2.11.2.1	Definition.....	65
4.2.11.2.2	Limits for CA UTRA.....	66
4.2.11.2.3	Limits for CA EUTRA .....	67
4.2.11.2.4	Conformance .....	68
4.2.11.3	Transmitter adjacent channel leakage power ratio for UL-MIMO.....	68
4.2.11.3.1	Definition.....	68
4.2.11.3.2	Limits .....	68
4.2.11.3.3	Conformance .....	69
4.2.11.4	Transmitter adjacent channel leakage power ratio for Multi-Cluster PUSCH within a component carrier .....	69
4.2.11.4.1	Definition.....	69
4.2.11.4.2	Limits .....	70
4.2.11.4.3	Conformance .....	70
4.2.11.5	Transmitter adjacent channel leakage power ratio for category NB1 .....	70

4.2.11.5.1	Definition.....	70
4.2.11.5.2	Limits .....	70
4.2.11.5.3	Conformance .....	70
4.2.12	Receiver Reference Sensitivity Level .....	71
4.2.12.0	General .....	71
4.2.12.1	Receiver Reference Sensitivity Level for Single Carrier .....	71
4.2.12.1.1	Definition.....	71
4.2.12.1.2	Limits .....	71
4.2.12.1.3	Conformance .....	72
4.2.12.2	Receiver Reference Sensitivity Level for Carrier Aggregation in DL-only bands.....	72
4.2.12.2.1	Definition.....	72
4.2.12.2.2	Limits .....	72
4.2.12.2.3	Conformance .....	73
4.2.12.3	Receiver Reference Sensitivity Level for category NB1.....	73
4.2.12.3.1	Definition.....	73
4.2.12.3.2	Limits .....	73
4.2.12.3.3	Conformance .....	73
4.2.12.4	Receiver Reference Sensitivity Level for UE category 0.....	73
4.2.12.4.1	Definition.....	73
4.2.12.4.2	Limits .....	73
4.2.12.4.3	Conformance .....	74
4.2.12.5	Receiver Reference Sensitivity Level for UE category M1 .....	74
4.2.12.5.1	Definition.....	74
4.2.12.5.2	Limits .....	74
4.2.12.5.3	Conformance .....	75
4.2.13	Receiver Total Radiated Sensitivity (TRS).....	76
4.2.13.0	Applicability.....	76
4.2.13.1	Definition .....	76
4.2.13.2	Limits .....	77
4.2.13.3	Conformance.....	77
4.2.14	Total Radiated Power (TRP).....	77
4.2.14.0	Applicability.....	77
4.2.14.1	Definition .....	77
4.2.14.2	Limits .....	78
5	Testing for compliance with technical requirements.....	79
5.1	Environmental conditions for testing .....	79
5.2	Void.....	79
5.3	Essential radio test suites.....	79
5.3.0	General.....	79
5.3.1	Transmitter Maximum Output Power .....	80
5.3.1.1	Transmitter maximum output power for Single Carrier .....	80
5.3.1.1.1	Method of test.....	80
5.3.1.1.2	Test requirements .....	80
5.3.1.2	Transmitter maximum output power for intra-band contiguous Carrier Aggregation (DL CA and UL CA) .....	81
5.3.1.2.1	Method of test.....	81
5.3.1.2.2	Test requirements .....	81
5.3.1.2A	Transmitter maximum output power for inter-band Carrier Aggregation (DL CA and UL CA).....	82
5.3.1.2A.1	Method of test.....	82
5.3.1.2A.2	Test requirements .....	82
5.3.1.3	Transmitter maximum output power for UL-MIMO .....	83
5.3.1.3.1	Method of test.....	83
5.3.1.3.2	Test requirements .....	83
5.3.1.4	Transmitter maximum output power for category NB1 .....	83
5.3.1.4.1	Method of Test .....	83
5.3.1.4.2	Test requirements .....	84
5.3.1.5	Transmitter maximum output power for UE category 0 .....	84
5.3.1.5.1	Method of test.....	84
5.3.1.5.2	Test requirements .....	85
5.3.1.6	Transmitter maximum output power for UE category M1 .....	85
5.3.1.6.1	Method of test.....	85



5.3.1.6.2	Test requirements .....	85
5.3.2	Transmitter Spectrum Emission Mask .....	86
5.3.2.1	Transmitter spectrum emission mask for Single Carrier .....	86
5.3.2.1.1	Method of test.....	86
5.3.2.1.2	Test requirements .....	86
5.3.2.2	Transmitter spectrum emission mask for intra-band contiguous Carrier Aggregation (DL CA and UL CA) .....	87
5.3.2.2.1	Method of test.....	87
5.3.2.2.2	Test requirements .....	87
5.3.2.2A	Transmitter spectrum emission mask for inter-band Carrier Aggregation (DL CA and UL CA) .....	88
5.3.2.2A.1	Method of test.....	88
5.3.2.2A.2	Test requirements .....	89
5.3.2.3	Transmitter spectrum emission mask for UL-MIMO .....	89
5.3.2.3.1	Method of test.....	89
5.3.2.3.2	Test requirements .....	89
5.3.2.4	Transmitter spectrum emission mask for Multi-Cluster PUSCH within a component carrier .....	90
5.3.2.4.1	Method of test.....	90
5.3.2.4.2	Test requirements .....	90
5.3.2.5	Transmitter spectrum emission mask for category NB1 .....	91
5.3.2.5.1	Method of test.....	91
5.3.2.5.2	Test requirements .....	91
5.3.2.6	Transmitter spectrum emission mask for UE category 0 .....	92
5.3.2.6.1	Method of test.....	92
5.3.2.6.2	Test requirements .....	92
5.3.2.7	Transmitter spectrum emission mask for UE category M1 .....	92
5.3.2.7.1	Method of test.....	92
5.3.2.7.2	Test requirements .....	93
5.3.3	Transmitter Spurious Emissions .....	93
5.3.3.1	Transmitter spurious emissions for Single Carrier .....	93
5.3.3.1.1	Method of test.....	93
5.3.3.1.2	Test requirements .....	94
5.3.3.2	Transmitter spurious emissions for intra-band contiguous Carrier Aggregation (DL CA and UL CA).....	94
5.3.3.2.1	Method of test.....	94
5.3.3.2.2	Test requirements .....	95
5.3.3.2A	Transmitter spurious emissions for inter-band Carrier Aggregation (DL CA and UL CA) .....	95
5.3.3.2A.1	Method of test.....	95
5.3.3.2A.2	Test requirements .....	96
5.3.3.3	Transmitter spurious emissions for UL-MIMO .....	96
5.3.3.3.1	Method of test.....	96
5.3.3.3.2	Test requirements .....	97
5.3.3.4	Transmitter spurious emissions for Multi-Cluster PUSCH within a component carrier .....	97
5.3.3.4.1	Method of test.....	97
5.3.3.4.2	Test requirements .....	97
5.3.3.5	Transmitter spurious emissions for category NB1 .....	98
5.3.3.5.1	Method of test.....	98
5.3.3.5.2	Test requirements .....	98
5.3.3.6	Transmitter spurious emissions for UE category 0 .....	99
5.3.3.6.1	Method of test.....	99
5.3.3.6.2	Test requirements .....	99
5.3.3.7	Transmitter spurious emissions for UE category M1 .....	99
5.3.3.7.1	Method of test.....	99
5.3.3.7.2	Test requirements .....	100
5.3.4	Transmitter Minimum Output Power.....	100
5.3.4.1	Transmitter minimum output power for Single Carrier.....	100
5.3.4.1.1	Method of test.....	100
5.3.4.1.2	Test requirements .....	101
5.3.4.2	Transmitter minimum output power for intra-band contiguous Carrier Aggregation (DL CA and UL CA) .....	101
5.3.4.2.1	Method of test.....	101
5.3.4.2.2	Test requirements .....	102
5.3.4.2A	Transmitter minimum output power for inter-band Carrier Aggregation (DL CA and UL CA).....	102

5.3.4.2A.1	Method of test.....	102
5.3.4.2A.2	Test requirements .....	103
5.3.4.3	Transmitter minimum output power for UL-MIMO .....	103
5.3.4.3.1	Method of test.....	103
5.3.4.3.2	Test requirements .....	104
5.3.4.4	Transmitter minimum output power for category NB1 .....	104
5.3.4.4.1	Method of test.....	104
5.3.4.4.2	Test requirements .....	104
5.3.4.5	Transmitter minimum output power for UE category 0 .....	105
5.3.4.5.1	Method of test.....	105
5.3.4.5.2	Test requirements .....	105
5.3.4.6	Transmitter minimum output power for UE category M1 .....	105
5.3.4.6.1	Method of test.....	105
5.3.4.6.2	Test requirements .....	106
5.3.5	Receiver Adjacent Channel Selectivity (ACS) .....	106
5.3.5.1	Receiver Adjacent Channel Selectivity (ACS) for Single Carrier .....	106
5.3.5.1.1	Method of test.....	106
5.3.5.1.2	Test requirements .....	107
5.3.5.2	Receiver Adjacent Channel Selectivity (ACS) for Carrier Aggregation in DL-only bands .....	107
5.3.5.2.1	Method of test.....	107
5.3.5.2.2	Test requirements .....	108
5.3.5.3	Receiver Adjacent Channel Selectivity (ACS) for category NB1 .....	108
5.3.5.3.1	Method of test.....	108
5.3.5.3.2	Test requirements .....	110
5.3.5.4	Receiver Adjacent Channel Selectivity (ACS) for UE category 0 .....	110
5.3.5.4.1	Method of test.....	110
5.3.5.4.2	Test requirements .....	110
5.3.5.5	Receiver Adjacent Channel Selectivity (ACS) for UE category M1 .....	110
5.3.5.5.1	Method of test.....	110
5.3.5.5.2	Test requirements .....	111
5.3.6	Receiver Blocking Characteristics .....	112
5.3.6.1	Receiver Blocking Characteristics for Single Carrier .....	112
5.3.6.1.1	Method of test.....	112
5.3.6.1.2	Test requirements .....	113
5.3.6.2	Receiver Blocking Characteristics for Carrier Aggregation in DL-only bands .....	114
5.3.6.2.1	Method of test.....	114
5.3.6.2.2	Test requirements .....	116
5.3.6.3	Receiver Blocking Characteristics for category NB1 .....	116
5.3.6.3.1	Method of test.....	116
5.3.6.3.2	Test requirements .....	117
5.3.6.4	Receiver Blocking Characteristics for UE category 0 .....	117
5.3.6.4.1	Method of test.....	117
5.3.6.4.2	Test requirements .....	118
5.3.6.5	Receiver Blocking Characteristics for UE category M1 .....	118
5.3.6.5.1	Method of test.....	118
5.3.6.5.2	Test requirements .....	120
5.3.7	Receiver Spurious Response .....	120
5.3.7.1	Receiver Spurious Response for Single Carrier .....	120
5.3.7.1.1	Method of test.....	120
5.3.7.1.2	Test requirements .....	120
5.3.7.2	Receiver Spurious Response for Carrier Aggregation in DL-only bands .....	120
5.3.7.2.1	Method of test.....	120
5.3.7.2.2	Test requirements .....	121
5.3.7.3	Receiver Spurious Response for category NB1 .....	121
5.3.7.3.1	Method of test.....	121
5.3.7.3.2	Test requirements .....	121
5.3.7.4	Receiver Spurious Response for UE category 0 .....	122
5.3.7.4.1	Method of test.....	122
5.3.7.4.2	Test requirements .....	122
5.3.7.5	Receiver Spurious Response for UE category M1 .....	122
5.3.7.5.1	Method of test.....	122
5.3.7.5.2	Test requirements .....	122

5.3.8	Receiver Intermodulation Characteristics .....	123
5.3.8.1	Receiver Intermodulation Characteristics for Single Carrier .....	123
5.3.8.1.1	Method of test.....	123
5.3.8.1.2	Test requirements .....	123
5.3.8.2	Receiver Intermodulation Characteristics for Carrier Aggregation in DL-only bands.....	124
5.3.8.2.1	Method of test.....	124
5.3.8.2.2	Test requirements .....	125
5.3.8.3	Receiver Intermodulation Characteristics for category NB1 .....	125
5.3.8.3.1	Test requirements .....	125
5.3.8.3.2	Test requirements .....	125
5.3.8.4	Receiver Intermodulation Characteristics for UE category 0.....	126
5.3.8.4.1	Method of test.....	126
5.3.8.4.2	Test requirements .....	126
5.3.8.5	Receiver Intermodulation Characteristics for UE category M1 .....	126
5.3.8.5.1	Method of test.....	126
5.3.8.5.2	Test requirements .....	127
5.3.9	Receiver Spurious Emissions.....	127
5.3.9.1	Receiver Spurious Emissions for Single Carrier .....	127
5.3.9.1.1	Method of test.....	127
5.3.9.1.2	Test requirements .....	128
5.3.9.2	Receiver Spurious Emissions in DL-only bands .....	128
5.3.9.2.1	Method of test.....	128
5.3.9.2.2	Test requirements .....	129
5.3.9.3	Receiver Spurious Emissions for UE category 0 .....	129
5.3.9.3.1	Method of test.....	129
5.3.9.3.2	Test requirements .....	129
5.3.9.4	Receiver Spurious Emissions for UE category M1 .....	129
5.3.9.4.1	Method of test.....	129
5.3.9.4.2	Test requirements .....	130
5.3.9.5	Receiver Spurious Emissions for UE category NB1 .....	130
5.3.9.5.1	Method of test.....	130
5.3.9.5.2	Test requirements .....	130
5.3.10	Transmitter Adjacent Channel Leakage Power Ratio .....	130
5.3.10.1	Transmitter adjacent channel leakage power ratio for Single Carrier .....	130
5.3.10.1.1	Method of test.....	130
5.3.10.1.2	Test requirements .....	131
5.3.10.2	Transmitter adjacent channel leakage power ratio for intra-band contiguous Carrier Aggregation (DL CA and UL CA).....	132
5.3.10.2.1	Method of test.....	132
5.3.10.2.2	Test requirements .....	133
5.3.10.2A	Transmitter adjacent channel leakage power ratio for inter-band Carrier Aggregation (DL CA and UL CA).....	133
5.3.10.2A.1	Method of test.....	133
5.3.10.2A.2	Test requirements .....	134
5.3.10.3	Transmitter adjacent channel leakage power ratio for UL-MIMO.....	134
5.3.10.3.1	Method of test.....	134
5.3.10.3.2	Test requirements .....	135
5.3.10.4	Transmitter adjacent channel leakage power ratio for Multi-Cluster PUSCH within a component carrier .....	135
5.3.10.4.1	Method of test.....	135
5.3.10.4.2	Test requirements .....	136
5.3.10.5	Transmitter adjacent channel leakage power ratio for category NB1 .....	136
5.3.10.5.1	Method of test.....	136
5.3.10.5.2	Test requirements .....	137
5.3.10.6	Transmitter adjacent channel leakage power ratio for UE category 0.....	137
5.3.10.6.1	Method of test.....	137
5.3.10.6.2	Test requirements .....	138
5.3.10.7	Transmitter adjacent channel leakage power ratio for UE category M1 .....	138
5.3.10.7.1	Method of test.....	138
5.3.10.7.2	Test requirements .....	139
5.3.11	Receiver Reference Sensitivity Level .....	139
5.3.11.1	Receiver Reference Sensitivity Level for Single Carrier .....	139

5.3.11.1.1	Method of test.....	139
5.3.11.1.2	Test requirements .....	139
5.3.11.2	Receiver Reference Sensitivity Level for Carrier Aggregation in DL-only bands.....	140
5.3.11.2.1	Method of test.....	140
5.3.11.2.2	Test requirements .....	141
5.3.11.3	Receiver Reference Sensitivity Level for category NB1.....	141
5.3.11.3.1	Method of test.....	141
5.3.11.3.2	Test requirements .....	141
5.3.11.4	Receiver Reference Sensitivity Level for UE category 0.....	141
5.3.11.4.1	Method of test.....	141
5.3.11.4.2	Test requirements .....	142
5.3.11.5	Receiver Reference Sensitivity Level for UE category M1 .....	142
5.3.11.5.1	Method of test.....	142
5.3.11.5.2	Test requirements .....	143
5.3.12	Receiver Total Radiated Sensitivity (TRS).....	143
5.3.12.1	Method of test .....	143
5.3.12.1.1	Initial conditions.....	143
5.3.12.1.2	Procedure.....	143
5.3.12.1.3	Procedure, reverberation chamber method .....	143
5.3.12.2	Test requirements .....	143
5.3.13	Total Radiated Power (TRP).....	143
5.3.13.1	Method of test .....	143
5.3.13.1.1	Initial conditions .....	143
5.3.13.1.2	Procedure.....	143
5.3.13.1.3	Procedure, reverberation chamber method .....	144
5.3.13.2	Test requirements.....	144
<b>Annex A (informative):</b>	<b>Relationship between the present document and the essential requirements of Directive 2014/53/EU .....</b>	<b>145</b>
<b>Annex B (normative):</b>	<b>Environmental profile .....</b>	<b>147</b>
B.1	General .....	147
B.1.1	Introduction .....	147
B.1.2	Temperature .....	147
B.1.3	Voltage .....	147
B.1.4	Test environment.....	148
<b>Annex C (informative):</b>	<b>Maximum Measurement Uncertainty.....</b>	<b>149</b>
<b>Annex D (informative):</b>	<b>Bibliography.....</b>	<b>150</b>
<b>Annex E (informative):</b>	<b>Change history .....</b>	<b>151</b>
History .....		152

---

# Intellectual Property Rights

## Essential patents

IPRs essential or potentially essential to normative deliverables may have been declared to ETSI. The declarations pertaining to these essential IPRs, if any, are publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<https://ipr.etsi.org/>).

Pursuant to the ETSI Directives including the ETSI IPR Policy, no investigation regarding the essentiality of IPRs, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

## Trademarks

The present document may include trademarks and/or tradenames which are asserted and/or registered by their owners. ETSI claims no ownership of these except for any which are indicated as being the property of ETSI, and conveys no right to use or reproduce any trademark and/or tradename. Mention of those trademarks in the present document does not constitute an endorsement by ETSI of products, services or organizations associated with those trademarks.

**DECT™**, **PLUGTESTS™**, **UMTS™** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members. **3GPP™** and **LTE™** are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners. **oneM2M™** logo is a trademark of ETSI registered for the benefit of its Members and of the oneM2M Partners. **GSM®** and the GSM logo are trademarks registered and owned by the GSM Association.

---

# Foreword

This Harmonised European Standard (EN) has been produced by ETSI Technical Committee Mobile Standards Group (MSG).

For non-EU countries the present document may be used for regulatory (Type Approval) purposes.

The present document has been prepared under the Commission's standardisation request C(2015) 5376 final [i.9] to provide one voluntary means of conforming to the essential requirements of Directive 2014/53/EU on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC [i.2].

Once the present document is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of the present document given in table A-1 confers, within the limits of the scope of the present document, a presumption of conformity with the corresponding essential requirements of that Directive and associated EFTA regulations.

The present document is part 13 of a multi-part deliverable. Full details of the entire series can be found in part 1 [i.12].

This version of the harmonized standard includes the following revisions:

- Revision of the maximum output power requirements outlined in clause 4.2.2.
- Inclusion of requirements for band 41.
- Inclusion of Additional spurious emissions limits for frequency range 470 to 694 MHz to protect Broadband Public Protection and Disaster Relief (BB-PPDR) and Digital Terrestrial Television (DTT) operations.
- Inclusion of specific requirements for bands 72, 87, and 88 to protect Broadband Public Protection and Disaster Relief (BB-PPDR) and Digital Terrestrial Television (DTT) operations.

National transposition dates	
Date of adoption of this EN:	1 October 2024
Date of latest announcement of this EN (doa):	31 January 2025
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 July 2025
Date of withdrawal of any conflicting National Standard (dow):	31 July 2026

---

## Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

---

## Introduction

The present document is part of a set of standards developed by ETSI and is designed to fit in a modular structure to cover all radio and telecommunications terminal equipment within the scope of the Radio Equipment Directive [i.2]. The present document is produced following the guidance in ETSI EG 203 336 [i.3] as applicable.

(<https://standards.iteh.ai>)  
Document Preview

[SIST EN 301 908-13 V13.3.1:2025](#)

<https://standards.iteh.ai/catalog/standards/sist/eba753ce-7160-47f3-9bac-1d36ed58bf5b/sist-en-301-908-13-v13-3-1-2025>