ARIB STD-T104-36.307 V10.20.0

Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements on User Equipments (UEs) supporting a release-independent frequency band

(Release 10)

3GPP TS 36.307 V10.20.0 (2016-09)

Technical Specification

3rd Generation Partnership Project;
Technical Specification Group Radio Access Network;
Evolved Universal Terrestrial Radio Access (E-UTRA);
Requirements on User Equipments (UEs)
Supporting a release-independent frequency band
(Release 10)

Keywords

LTE, radio

3GPP

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Contents

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (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 the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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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 document.

1 Scope

The present document specifies requirements on UEs supporting a frequency band and inter-band/intra-band CA configurations that are independent of release. The present document also defines requirements for 4RX antenna port requirements that are independent of release.

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 TR 21.905: "Vocabulary for 3GPP Specifications".

 [2]   3GPP TS 36.101 (Release 10): "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) Radio Transmission and Reception".

[3]   3GPP TS 36.133 (Release 10): "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for Support of Radio Resource Management"..

3 Definitions and Abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in [1] apply.

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

CA	Carrier Aggregation
FDD	Frequency Division Duplex
RRC	Radio Resource Control
RRM	Radio Resource Management
TDD	Time Division Duplex
UE	User Equipment

3A General

3A.1 Operating bands and CA

TSG-RAN has agreed that the standardisation of new features listed in Tables 3A.1-1, 3A.1-2, and 3A.1-3 are independent of a release. UE conforming earlier release than when the feature was introduced into the specifications

shall comply with RRM- , demodulation- and RF-requirements as specified in the Annex-B2, Annex-B3 and, Annex-B4 of TS 36.307 in the release that the feature was introduced. The applicable UE Categories are specified in TS 36.306 according to the release to which the UE conforms.

Table 3A.1-1: E-UTRA operating bands and UE power class

Feature	Duplex-mode	Release independent from
Operating bands, band number <= 64, Power Class 3	FDD, TDD	8
Operating bands, band number > 64, Power Class 3	FDD, TDD	9
Asymmetric operating bands, Power Class 3	FDD	10
Operating bands, band number <= 64, Power Class 1	FDD	10

Table 3A.1-2: Intra-band contiguous CA

CA feature	DL/UL	CA BW Class	Duplex-mode	Release independent from
Intra-band contiguous CA	DL	B	FDD	10
		C	FDD, TDD	10
		D	TDD	10
	UL	B	FDD	10
		C	FDD, TDD	10

Table 3A.1-3: Inter-band CA

CA feature	DL/UL	number of bands	CA BW Classes	Duplex-mode	Release independent from
Inter-band CA	DL	2	A, B, C	FDD, TDD	10
		3	A	FDD, TDD	10

For example, Band 19 is contained in the Release 9 specifications. In order to implement a UE conforming to Release 8 but supporting Band 19, it is necessary for the UE to additionally conform to some parts of the Release 9 specifications, such as the radio frequency and radio resource management requirements for the Band 19.

For another example on carrier aggregations, CA configuration CA_1A-19A is contained in the Release 11 specifications. In order to implement a UE conforming to Release 10 but supporting the CA configuration CA_1A-19A, it is necessary for the UE to additionally conform to some parts of the Release 11 specifications, such as the radio frequency and radio resource management requirements for the CA configuration CA_1A-19A.

All frequency bands are fully specified in this release of the specifications. The present document does not contain any requirements for UEs supporting frequency bands independent of release.

NOTE: See NOTE in clause 4.4 in [2].

3A.2   Other features

Features other than frequency bands and CA configurations can also be implemented independent of release, as listed in Tables 3A.2-1.

4 Rx compliant Rel-10 UE that supports 4 Rx reception and declares compliance to 4 Rx requirements shall comply with RF requirements, UE demodulation and CSI requirements as specified in the Annex-C.1 and Annex-C.2 of TS 36.307 in the release that the feature was introduced.

Table 3A.2-1: Other feature

Feature	Release independent from
4RX	10
NOTE 1: For 4 Rx compliant Rel-10 UE, Test cases of Enhanced Performance Requirement Type A defined in 8.10.1.1.3, 8.10.1.1.5, 8.10.1.2.3, 8.10.1.2.5, 9.9.2.1, 9.9.2.2 are excluded	

4 - 292Void

Annex A (informative):
Frequency arrangement for overlapping operating bands

The following information is provided in order to assist a UE derive the DL EARFCN and UL EARFCN in a multi-band environment, in which multiple overlapping operating bands may be indicated in the fields *freqBandIndicator* and *multiBandInfoList* of SIB1.

The overlapping bands, independent of release, which may be indicated in a cell are shown in Table A-1 for applicable E-UTRA bands. The DL EARFCN and UL EARFCN are derived according to [2].

Table A-1: Overlapping bands (multi-band environments) for each E-UTRA band

E-UTRA Operating Band	Overlapping E-UTRA operating bands	Duplex Mode
2	25	FDD
3	9	FDD
4	10	FDD
5	18, 19, 26	FDD
9	3	FDD
10	4	FDD
12	17	FDD
17	12	FDD
18	5, 26, 27	FDD
19	5, 26	FDD
25	2	FDD
26	5, 18, 19, 27	FDD
27	18, 26	FDD
33	39	TDD
38	41	TDD
39	33	TDD
41	38	TDD

Annex B (normative): Common Requirements

B.1 Purpose of annex

The purpose of Annex B is to group the requirements that are common for several bands or CA configurations in this specification and use the common tables as references.

B.2 Common RRM requirements

B.2.1 Common RRM requirements for a band independent of release

The requirements and test cases listed in Table B.2.1-1 are specified in [3].

Table B.2.1-1: Common RRM requirements for a band independent of release

Section / Clause	Description
4 Note 1	E-UTRAN RRC_IDLE state mobility
5	E-UTRAN RRC_CONNECTED state mobility
6 Note 2	RRC Connection Mobility Control
7 Note 3	Timing and signalling characteristics
8 Note 4	UE Measurements Procedures in RRC_CONNECTED State
9 Note 5	Measurements performance requirements for UE
A.4 Note 1	E-UTRAN RRC_IDLE state
A.5	E-UTRAN RRC CONNECTED Mode Mobility
A.6 Note 2	RRC Connection Control
A.7 Note 3	Timing and Signalling Characteristics
A.8 Note 4	UE Measurements Procedures
A.9 Note 5	Measurement Performance Requirements
NOTE 1: All requirements and the corresponding test cases shall apply, except: - for supporting the corresponding band in Rel-9 and below: clause 4.3 (Minimization of Drive Tests). NOTE 2: All requirements and the corresponding test cases shall apply, except: - for supporting the corresponding band in Rel-8: clauses 6.3 (RRC Connection Release with Redirection), 6.4 (CSG Proximity Indication for E-UTRAN and UTRAN). NOTE 3: All requirements and corresponding test cases shall apply, except those defined in sections 7.4 and 7.5. NOTE 4: All requirements and corresponding test cases shall apply, except: - for supporting the corresponding band in Rel-8: clauses 8.1.2.5 (E-UTRAN OTDOA Intra-Frequency RSTD Measurements), 8.1.2.6 (E-UTRAN Inter-Frequency OTDOA Measurements), 8.1.2.7 (E-UTRAN E-CID Measurements). NOTE 5: All requirements and corresponding test cases shall apply, except: - for supporting the corresponding band in Rel-8: clauses 9.1.9 (UE Rx–Tx time difference), 9.1.10 (Reference Signal Time Difference). NOTE 6: All requirements and test cases in this table shall apply, except those defined for: carrier aggregation; measurements under time-domain measurement resource restriction, in addition to the exceptions listed above.	

B.2.2 Common RRM requirements for an intra-band contiguous CA configuration

The requirements and test cases listed in Table B.2.2-1 are specified in [3].

Table B.2.2-1: Common RRM requirements for a single-band CA configuration independent of release

Section / Clause	Description
7.1	UE transmit timing
7.7	SCell Activation and Deactivation Delay for E-UTRA Carrier Aggregation
7.8	Interruptions with Carrier Aggregation
8.2	Capabilities for Support of Event Triggering and Reporting Criteria
8.3	Measurements for E-UTRA carrier aggregation
8.4	OTDOA RSTD Measurements for E-UTRAN carrier aggregation
9.1.11	Carrier aggregation measurement accuracy
9.1.12	Reference Signal Time Difference (RSTD) Measurement Accuracy Requirements for Carrier Aggregation
A.8	UE Measurements Procedures
A.9	Measurement Performance Requirements
NOTE: Only requirements and test cases in this table defined for intra-band contiguous carrier aggregation shall apply.	

B.2.3 Common RRM requirements for an inter-band CA configuration

The requirements and test cases listed in Table B.2.3-1 are specified in [3].

Table B.2.3-1: Common RRM requirements for a band-combination CA configuration

Section / Clause	Description
7.1	UE transmit timing
7.7	SCell Activation and Deactivation Delay for E-UTRA Carrier Aggregation
7.8	Interruptions with Carrier Aggregation
8.2	Capabilities for Support of Event Triggering and Reporting Criteria
8.3	Measurements for E-UTRA carrier aggregation
8.4	OTDOA RSTD Measurements for E-UTRAN carrier aggregation
9.1.11	Carrier aggregation measurement accuracy
9.1.12	Reference Signal Time Difference (RSTD) Measurement Accuracy Requirements for Carrier Aggregation
A.8	UE Measurements Procedures
A.9	Measurement Performance Requirements
NOTE: Only requirements and test cases in this table defined for inter-band carrier aggregation shall apply.	

B.3 Common UE performance requirements

B.3.1 Void

Table B.3.1-1: Void

B.3.2 Void

Table B.3.2-1: Void

B.3.3 Void

Table B.3.3-1: Void

B.4 Common UE RF requirements

B.4.1 Common UE RF requirements for a band independent of release

The requirements and test cases listed in Table B.4.1-1 are specified in [2].

Table B.4.1-1: Common UE RF requirements for a band independent of release

Section / Clause	Description
5.5	Operating bands
5.6	Channel bandwidth
5.7	Channel arrangement
6.2	Transmit power
6.3	Output power dynamics
6.5	Transmit signal quality
6.6	Output RF spectrum emissions
6.7	Transmit intermodulation
7.3	Reference sensitivity power level
7.4	Maximum input level
7.5	Adjacent Channel Selectivity (ACS)
7.6	Blocking characteristics
7.7	Spurious response
7.8	Intermodulation characteristics
7.9	RX spurious emissions

B.4.2 Common UE RF requirements for an intra-band contiguous CA configuration

The requirements and test cases listed in Table B.4.2-1 are specified in [2].

Table B.4.2-1: Common UE RF requirements for an intra-band contiguous CA configuration independent of release

Section / Clause	Description
5.5A	Operating bands for CA
5.6A	Channel bandwidths per operating band for CA
5.7.1A	Channel spacing for CA
5.7.2A	Channel raster for CA
5.7.4A	TX–RX frequency separation for CA
6.2.2A	UE maximum output power for CA
6.2.3A	UE maximum output power for modulation/channel bandwidth for CA
6.2.4A	UE maximum output power with additional requirements for CA
6.2.5A	Configured transmitted power for CA
6.3.2A	UE Minimum utput power for CA
6.3.3A	UE Trasnsmit OFF power for CA
6.3.4A	ON/OFF time mask for CA
6.3.5A	Power control for CA
6.5.1A	Frequency error for CA
6.5.2A	Transmit modulation quality for CA
6.6.1A	Occupied bandwidth for CA
6.6.2.1A	Spectrum emission mask for CA
6.6.2.2A	Additional Spectrum Emission mask for CA
6.6.2.3.2A	UTRA ACLR for CA
6.6.2.3.3A	E-UTRA ACLR for CA
6.6.3.1A	Minimum requirements for CA
6.6.3.2A	Spurious emission band UE co-existence for CA
6.6.3.3A	Additional spurious emissions for CA
6.7.1A	Minimum requirement for CA
7.3.1A	Reference sensitivity for CA
7.4.1A	Maximum input level for CA
7.5.1A	Adjacent Channel Selectivity (ACS) for CA
7.6.1.1A	In-band blocking for CA
7.6.2.1A	Out-of-band blocking for CA
7.6.3.1A	Narrow band blocking for CA
7.7.1A	Spurious response for CA
7.8.1A	Wideband intermodulation for CA
7.10.1A	Receiver response for CA

B.4.3 Common UE RF requirements for an inter-band CA configuration

The requirements and test cases listed in Table B.4.3-1 are specified in [2].

Table B.4.3-1: Common UE RF requirements for an inter-band CA configuration independent of release

Section / Clause	Description
5.5A	Operating bands for CA
5.6A.1	Channel bandwidths per operating band for CA
5.7.2A	Channel raster for CA
6.2.2A	UE maximum output power for CA
6.2.3A	UE maximum output power for modulation/channel bandwidth for CA
6.2.5	Configured transmitted power
7.3.1A	Reference sensitivity for CA
7.4.1A	Maximum input level for CA
7.5.1A	Adjacent Channel Selectivity (ACS) for CA
7.6.1.1A	In-band blocking for CA
7.6.2.1A	Out-of-band blocking for CA
7.6.3.1A	Narrow band blocking for CA
7.7.1A	Spurious response for CA
7.8.1A	Wideband intermodulation for CA

Annex C (informative): Change history

Table C.1: Change History

Date	Meeting	TDoc	CR	Rev	Cat	Subject/Comment	New version
11-2009	RP#46	RP-091141				TS36.307 V0.1.0 approved by RAN (Originally in R4-095022)	0.1.0
02-2010	R4#54	R4-100419				For release 9 version, replace sections 4 to 6 as 'Void' and add a new void section as section 7.	0.2.0
03-2010	RP#47	RP-100162				TS36.307 v1.0.0 for approval	1.0.0
03-2010	RP#47	RP-100162				Approved by RAN	9.0.0
09-2010	RP-49	RP-100927	2			CR LTE_TDD_2600_US spectrum band definition additions to TS 36.307 V900	9.1.0
						Correction of section numbering	9.1.1
12-2010	RP-50	RP-101356	008			Band 42 and 43 parameters for UMTS/LTE 3500 (TDD) for TS 36.307	9.2.0
12-2010	RP-50	RP-101361	005			Introduction of L-band in TS 36.307	9.2.0
12-2010	RP-50	RP-101344	016			CR creating the rel-10 of the 36.307 specification	9.3.0
12-2010	RP-50	RP-101356	012			Band 42 and 43 parameters for UMTS/LTE 3500 (TDD) for TS 36.307	9.3.0
12-2010	RP-50					Raised to Rel-10 with no technical change	10.0.0
01-2011						Correction to history table	10.0.1
06-2011	RP-52	RP-110804	015			Add Expanded 1900 MHz Band (Band 25) in 36.307	10.1.0
06-2011	RP-52	RP-110812	022			Add 2GHz S-Band (Band 23) in 36.307 (Rel 10)	10.1.0
09-2011	RP-53	RP-111255	025			Add Band 22 for LTE/UMTS 3500 (FDD) to TS 36.307	10.2.0
03-2012	RP-55	RP-120305	028			Introduction of Band 26/XXVI to TS 36.307	10.3.0
2012-06	RP-56	RP-120778	036r1			Correction of references	10.4.0
2012-06	RP-56	RP-120789	042			Introduction of CA_1A-19A to TS 36.307	10.4.0
2012-06	RP-56	RP-120785	044r1			Backdating CA_41C to Rel-10	10.4.0
2012-06	RP-56	RP-120793	048			Introduction of APAC700(FDD) into TS 36.307 Rel.10	10.4.0
2012-06	RP-56	RP-120793	052			Introduction of APAC700(TDD) into TS 36.307 Rel.10	10.4.0
2012-06	RP-56	RP-120791	056			Introduction of e850_LB (Band 27) to TS 36.307	10.4.0
2012-09	RP-57	RP-121335	058			Introduction of CA_1A-21A to TS 36.307	10.5.0
2012-09	RP-57	RP-121337	060r1			TS 36.307 CR for CA_38	10.5.0
2012-09	RP-57	RP-121327	061			Introduction of CA_B7_B20 in 36.307	10.5.0
2012-09	RP-57	RP-121334	062r1			Add requirements for inter-band CA of B_1-18 in TS36.307	10.5.0
2012-09	RP-57	RP-121329	063			Introduction of CA band combination Band3 + Band5 to TS 36.307	10.5.0
2012-09	RP-57	RP-121338	064r1			36.307 CR for LTE_CA_B7	10.5.0
2012-09	RP-57	RP-121331	065			Introduction of CA_3A-20A to TS 36.307	10.5.0
2012-09	RP-57	RP-121333	066			Introduction of CA_8_20 RF requirements into TS36.307	10.5.0
2012-09	RP-57	RP-121295	069r1			Relation between EARFCN for overlapping bands with multiple FBI indication	10.5.0
2012-09	RP-57	RP-121324	071			Introduction of CA_B3_B7 in 36.307	10.5.0
2012-12	RP-58	RP-121884	080			Introduction of CA_3A-8A to TS 36.307	10.6.0
2012-12	RP-58	RP-121890	085			Introduction of CA_4A-5A into 36.307	10.6.0
2012-12	RP-58	RP-121889	087			Introduction of CA band combination Band4 + Band13 to TS 36.307 (Rel-10)	10.6.0
2012-12	RP-58	RP-121894	089			Introduction of CA_B5_B12 in 36.307	10.6.0
2012-12	RP-58	RP-121896	090			Introduction of Band 5 + Band 17 inter-band CA configuration into 36.307	10.6.0
2012-12	RP-58	RP-121887	094			Introduction of CA_4-12 into TS 36.307 (Rel-10)	10.6.0
2012-12	RP-58	RP-121882	096			[Rel-10] Introduction of inter-band CA_11-18 into TS36.307	10.6.0
2012-12	RP-58	RP-121861	098			Release-independent implementation of carrier aggregation configuration CA_4-7	10.6.0
2012-12	RP-58	RP-121901	100			Introduction of Band 29	10.6.0
2012-12	RP-58	RP-121719	0103			Introduction of CA band combination Band2 + Band17 to TS 36.307 (Rel-10)	10.6.0

2012-12	RP-58	RP-121721	0105			Introduction of CA band combination Band4 + Band17 to TS 36.307 (Rel-10)	10.6.0
2013-06	RP-60	RP-130771	106r1			Introduction of CA 1+8 into TS36.307(Rel-10)	10.7.0
2013-06	RP-60	RP-130782	109r1			Introduction of LTE Advanced inter-band Carrier Aggregation of Band 3 and Band 28 to TS 36.307 Rel-10	10.7.0
2013-06	RP-60	RP-130785	112			Introduction of LTE Advanced inter-band Carrier Aggregation of Band 23 and Band 29 to TS 36.307 (Rel-10)	10.7.0
2013-06	RP-60	RP-130779	115			Introduction of LTE Advanced inter-band Carrier Aggregation of Band 3 and Band 26 to TS 36.307 (Rel-10)	10.7.0
2013-06	RP-60	RP-130777	118			Introduction of CA_3A-19A to TS 36.307	10.7.0
2013-06	RP-60	RP-130783	121			Introduction of CA_19A-21A to TS 36.307	10.7.0
2013-06	RP-60	RP-130775	129			Introduction of CA_2A-13A to TS 36.307	10.7.0
2013-06	RP-60	RP-130791	134r1			Introduction of Band 30	10.7.0
2013-06	RP-60	RP-130790	141			Introduction of LTE 450 into TS 36.307 R10	10.7.0
2013-06	RP-60	RP-130765	145			Corrections to release independent specifications	10.7.0
09-2013	RP-61	RP-131300	151			36.307 CR for LTE_CA_C_B3 (Rel-10)	10.8.0
09-2013	RP-61	RP-131303	154r1			Band 31 release independence for UE demodulation performance	10.8.0
09-2013	RP-61	RP-131285	156			[Rel-10] Modify requirements for CA_1A-18A in TS36.307	10.8.0
09-2013	RP-61	RP-131296	157			[Rel-10] Add requirements for CA_1A-26A into TS36.307	10.8.0
09-2013	RP-61	RP-131297	161			Introduction of CA_2A-4A into 36.307 REL-10	10.8.0
09-2013	RP-61	RP-131298	165			Introduction of inter-band CA Band 2+5	10.8.0
12-2013	RP-62	RP-131946	176			Introduction of CA band combination Band2 + Band12 to TS 36.307	10.9.0
12-2013	RP-62	RP-131954	179			Introduction of CA band combination Band12 + Band25 to TS 36.307	10.9.0
12-2013	RP-62	RP-131927	188r1			Correction to release independent specification	10.9.0
12-2013	RP-62	RP-131957	190			Introduction of CA_23B to TS 36.307	10.9.0
12-2013	RP-62	RP-131950	198			Introduction of CA band combination Band5 + Band25 to TS 36.307	10.9.0
12-2013	RP-62	RP-131948	202r1			Introduction of CA band combination B5 + B7 to TS 36.307	10.9.0
12-2013	RP-62	RP-131952	205			Introduction of CA band combination B7 + B28 to TS 36.307	10.9.0
12-2013	RP-62	RP-131925	214r1			UE performance requirements in release independent specification for CA	10.9.0
12-2013	RP-62	RP-131924	222			Introducing 'General' clause with note referring to note in clause 4.4 in TS36.101, editorial corrections and modifications to Forward and Scope clauses	10.9.0
12-2013	RP-62	RP-131959	224			Introduction of LTE_CA_C_B27 to 36.307 (Rel-10)	10.9.0
03-2014	RP-63	RP-140386	225r1			Introduction of CA band combination Band 3 and Band 27 to TS 36.307	10.10.0
03-2014	RP-63	RP-140368	230r1			CR on UE performance requirements in release independent specification	10.10.0
03-2014	RP-63	RP-140368	243r1			Correction to release independent specification	10.10.0
03-2014	RP-63	RP-140371	233			Release independence of Band 14 HPUE	10.10.0
03-2014	RP-63	RP-140187	246			Addition of bandwidth combination set for CA_2A-29A and CA_4A-29A	10.10.0
03-2014	RP-63	RP-140387	195r1			Introduction of CA_39A-41A to TS 36.307	10.10.0
03-2014	RP-63	RP-140388	208r2			Introduction of CA_39C to TS 36.307	10.10.0
06-2014	RP-64	RP-140911	298			Correction of Common RRM requirements for CA in release independent specification (Rel-10)	10.11.0
06-2014	RP-64	RP-140911	257			Introduction of CA band combination Band 1 and Band 5 to TS 36.307	10.11.0
06-2014	RP-64	RP-140911	270			CR on UE performance requirements in release independent specification	10.11.0
06-2014	RP-64	RP-140926	278			Introduction of Band 20+32 CA	10.11.0
06-2014	RP-64	RP-140931	263			Introduction of CA 1+11 to 36.307 (Rel-10)	10.11.0
06-2014	RP-64	RP-140932	344			Additional bandwidth combination set for LTE Advanced inter-band Carrier Aggregation of Band 3 and Band 20, independent of LTE Release	10.11.0
06-2014	RP-64	RP-140933	273			Introduction of CA band combination Band 4 and Band 27 to TS 36.307	10.11.0
06-2014	RP-64	RP-140935	276			Addition of bandwidth combination sets for CA_3A-5A, CA_4A-5A, and CA_4A-12A into 36.307	10.11.0

06-2014	RP-64	RP-140942	338			Introduction of CA band combination Band 1 and Band 20 to TS 36.307	10.11.0
06-2014	RP-64	RP-140942	251			Introduction of CA band combination Band 1 and Band 20 to TS 36.307	10.11.0
06-2014	RP-64	RP-140943	345			Introduction of CA band combination CA_41D into TS 36.307 (Rel-10)	10.11.0
06-2014	RP-64	RP-140946	343			Introduction of CA_42C to TS 36.307	10.11.0
06-2014	RP-64	RP-140952	0304			Introduction of a new CA_7C bandwidth combination set into 36.307 (Rel-10)	10.11.0
09-2014	RP-65	RP-141112	0390r1			[Rel-10] Introduction of inter-band CA_18-28 into TS36.307	10.12.0
09-2014	RP-65	RP-141198	0364r1			Introduction of CA_B1_B3_B19 into TS 36.307 (Rel-10)	10.12.0
09-2014	RP-65	RP-141203	0361r1			Introduction of CA_B1_B3 into TS 36.307 (Rel-10)	10.12.0
09-2014	RP-65	RP-141329	0427r1			Introduction of CA_1A-7A into 36.307 (REl-10)	10.12.0
09-2014	RP-65	RP-141338	0374r2			Introduction of CA_B1_B5_B7 into TS 36.307 (Rel-10)	10.12.0
09-2014	RP-65	RP-141465	0430			Introduction of 3 DL CA for Band 1+7+20	10.12.0
09-2014	RP-65	RP-141527	413			CR for 36.307 on CA UE performance requirement in Rel-10	10.12.0
09-2014	RP-65	RP-141541	411			CR on UE performance requirement for Band 31 for 36.307 Rel-10	10.12.0
09-2014	RP-65	RP-141551	358			Introduction of CA 8+11 to 36.307 (Rel-10)	10.12.0
09-2014	RP-65	RP-141552	377			Introduction of CA_41A-42A to TS 36.307	10.12.0
09-2014	RP-65	RP-141554	416r1			Introduction of requirements for 3DL inter-band carrier aggregation (FDD) and 2DL fallback	10.12.0
09-2014	RP-65	RP-141554	419r1			Introduction of requirements for 3DL inter-band carrier aggregation including Band 30 and 2DL fallback	10.12.0
09-2014	RP-65	RP-141555	382r1			Introduction of 3 Band Carrier Aggregation of Band 1,Band 3 and Band 5 to TS 36.307(Rel.10)	10.12.0
09-2014	RP-65	RP-141556	355r1			Introduction of 3 Band Carrier Aggregation (3DL/1UL) of Band 1, Band 3 and Band 8 to TS 36.307	10.12.0
09-2014	RP-65	RP-141558	400			Introduction of CA band combination Band 1, Band 3 and Band 20 to TS 36.307	10.12.0
09-2014	RP-65	RP-141560	350			Introduction of new CA_40C bandwidth combination set into 36.307	10.12.0
12-2014	RP-66	RP-142142	438			UE RF requirements in the release independent spec	10.13.0
12-2014	RP-66	RP-142166	441			Inclusion of 40D in 36.307	10.13.0
12-2014	RP-66	RP-142182	446			[Rel-10] Introduction of inter-band CA_1-28 into TS36.307	10.13.0
12-2014	RP-66	RP-142189	453			CR for TR 36.307: LTE_CA_B5_B13	10.13.0
12-2014	RP-66	RP-142190	456r2			Introduction of additional band combinations for 3DL inter-band CA	10.13.0
03-2015	RP-67	RP-150392	466			CR for 36.307 on CA UE performance requirement in Rel-10	10.14.0
07-2015	RP-68	RP-151024	473r3			Introduction of CA_42D to TS 36.307(Rel-10)	10.15.0
07-2015	RP-68	RP-150958	480			Removal of CA_2A-2A-13A, CA_4A-4A-13A from rel-10 36.307	10.15.0
07-2015	RP-68	RP-150968	496r2			Release independence CR for 2DL inter-band CA Rel-10	10.15.0
07-2015	RP-68	RP-150972	500r1			Release independence CR for 3DL inter-band CA Rel-10	10.15.0
09-2015	RP-69	RP-151501	0517			Introduction of the finished 4DL inter-band CAs fall back mode to TS 36.307 ==This CR was not implemented as the cover page said it is for 36.101==	10.16.0
09-2015	RP-69	RP-151498	531r1			Rel-13 2DL combinations	10.16.0
09-2015	RP-69	RP-151499	535			Rel-13 3DL combinations	10.16.0
09-2015	RP-69	RP-151487	0542			Correction of TS 36.307 for release independent	10.16.0
12-2015	RP-70	RP-152157	0558r1			Introducing B20 + B67 CA into TS 36.307	10.17.0
12-2015	RP-70	RP-152168	0565			Introduction of intra-band CA_8B to TS 36.307	10.17.0
12-2015	RP-70	RP-152171	0577			Introduction of Band 65	10.17.0
12-2015	RP-70	RP-152162	0601			Introduction of the finished 4DL inter-band CAs fall back mode to TS 36.307	10.17.0
12-2015	RP-70	RP-152173	0609			Introduction of 1447-1467MHz Band into 36.307	10.17.0
12-2015	RP-70	RP-152161	0617			Rel-13 3DL combinations	10.17.0
12-2015	RP-70	RP-152172	0625			Introduction of Band 66	10.17.0
12-2015	RP-70	RP-152167	0635			Introduction of intra-band CA_5B to TS 36.307	10.17.0
03/2016	RP-71	RP-160480	0652		B	Rel-13 3DL combinations	10.18.0
03/2016	RP-71	RP-160482	0648		B	Introduction of 5DL/1UL CA combinations into TS 36.307 (Rel-10)	10.18.0
03/2016	RP-71	RP-160483	0644		B	Introduction of Band 68	10.18.0

06/2016	RP-72	RP-161139	679	1		F	CR TS 36.307 REL-10	10.19.0
09/2016	RP-73	RP-161628	696			A	Release 10 36.307 CAT A CR to make Band 41 power class 2 release independent ==The CR was not implemented because it was not based on the latest version of the Spec==	10.20.0
09/2016	RP-73	RP-161632	700			F	Correction of REL-10 TS 36.307 references	10.20.0
09/2016	RP-73	RP-161613	704			B	CR for correction of 4Rx features for release independent in Rel-10 in 36.307	10.20.0