

RAN approved REL-13 NB_IOT CRs (RAN#72):

TSG Tdoc	WG Tdoc	spec	vers.	CR	rev	title
RP-161067	R1-165396	36.201	13.1.0	0014	1	Introduction of NB-IoT
RP-161067	R1-165971	36.211	13.1.0	0224	8	Introduction of NB-IoT
RP-161067	R1-166045	36.212	13.1.0	0192	3	Introduction of Rel-13 feature of NB-IoT in 36.212
RP-161067	R1-165972	36.213	13.1.1	0656	1	Introduction of NB-IoT
RP-161067	R1-165973	36.214	13.1.0	0033	2	Introduction of NB-IoT
RP-161081	R2-164415	36.300	13.3.0	0880	3	Introduction of NB-IoT
RP-161081	R2-164567	36.300	13.3.0	0882	-	Introduction Control Plane CIoT EPS Optimization
RP-161081	R2-164568	36.300	13.3.0	0883	-	Introduction of the UE context resume function
RP-161081	R2-164409	36.302	13.1.0	0076	1	Introduction of NB-IoT in 36.302
RP-161195	-	36.304	13.1.0	0311	2	Introduction of NB-IoT in 36.304 including correction of Paging UE_ID for NB-IOT
RP-161081	R2-164513	36.306	13.1.0	1328	2	Introduction of NB-IoT UE capabilities
RP-161081	R2-164521	36.321	13.1.0	0883	4	Introduction of NB-IoT in 36.321
RP-161081	R2-164511	36.322	13.1.0	0121	2	Introduction of NB-IoT
RP-161091	-	36.323	13.1.0	0171	4	Introduction of NB-IoT functionality to PDCP protocol
RP-161211	-	36.331	13.1.0	2231	7	Introduction of NB-IoT in 36.331
RP-161042	R3-160904	36.401	13.1.0	0078	5	Introduction of the UE context resume function
RP-161042	R3-161543	36.413	13.2.0	1383	11	Introduction of the UE Context Resume function
RP-161042	R3-161439	36.413	13.2.0	1393	7	Introduction of common impacts of NB-IoT solutions
RP-161042	R3-161053	36.413	13.2.0	1410	5	Introduction Control Plane CIoT EPS Optimization
RP-161042	R3-161527	36.413	13.2.0	1420	4	Indication of RAT Type
RP-161042	R3-161526	36.423	13.3.0	0965	7	Introduction of the inter-eNB UE Context Resume function
RP-161126	R4-163826	36.101	13.3.0	3589	-	Category NB1 CR for 36.101
RP-161126	R4-164452	36.104	13.3.0	0800	-	CR to TS36.104 for NB-IoT feature introduction
RP-161126	R4-164482	36.133	13.3.0	3573	1	CR on RRM requirements in Section 3 for NB-IoT
RP-161126	R4-164508	36.133	13.3.0	3574	1	Draft CR on RRM requirements in Annex B for NB-IoT
RP-161126	R4-164530	36.133	13.3.0	3638	1	Uplink transmit timing adjustments in HD-FDD operation
RP-161126	R4-164549	36.133	13.3.0	3659	1	Draft CR on RRC_IDLE state requirements for NB-IOT
RP-161126	R4-164457	36.133	13.3.0	3667	-	Modification on RRC re-establishment requirement for NB-IoT
RP-161126	R4-164481	36.133	13.3.0	3668	-	Modification for random access requirement for NB-IoT
RP-161126	R4-164483	36.133	13.3.0	3669	-	Intra-frequency Absolute NRSRP Accuracy for UE Category NB1 in Normal Mode
RP-161126	R4-164484	36.133	13.3.0	3670	-	Intra-frequency Absolute NRSRP Accuracy for UE Category NB1 in Enhanced Mode
RP-161126	R4-164485	36.133	13.3.0	3671	-	Intra-frequency Absolute NRSRQ Accuracy for UE Category NB1 in Normal Mode
RP-161126	R4-164486	36.133	13.3.0	3672	-	Intra-frequency Absolute NRSRQ Accuracy for UE Category NB1 in Enhanced Mode
RP-161126	R4-164487	36.133	13.3.0	3673	-	Inter-frequency Absolute NRSRP Accuracy for UE Category NB1 in Normal Mode
RP-161126	R4-164488	36.133	13.3.0	3674	-	Inter-frequency Absolute NRSRP Accuracy for UE Category NB1 in Enhanced Mode
RP-161126	R4-164548	36.133	13.3.0	3675	1	CR on measurement requirement in RRC_CONNECTED state for NB-IoT
RP-161126	R4-164901	36.133	13.3.0	3676	-	CR on Radio Link Monitoring for NB-IoT
RP-161126	R4-164010	37.104	13.1.0	0293	-	CR on introduction of NB-IoT in TS 37.104

RAN approved REL-13 LTE_extDRX RAN #72 CRs:

TSG Tdoc	WG Tdoc	title	spec	vers.	CR	rev
RP-161080	R2-164429	Corrections on SI update for eDRX	36.331	13.1.0	2188	1
RP-160959	-	Additional eDRX cycle value	36.413	13.2.0	1426	1
RP-161047	R3-161502	On Paging Time Window unit	36.413	13.2.0	1429	2

RAN approved REL-13 LTE_extDRX RAN #71 CRs:

TSG Tdoc	WG Tdoc	Title	Spec	CR #	rev	cat	SI/WI
RP-160456	R2-161294	Paging occasion monitoring when eDRX is configured	36.300	0830	-	F	LTE_extDRX-Core
RP-160456	R2-161896	Correction on PO monitoring during paing window in eDRX	36.304	0289	1	F	LTE_extDRX-Core
RP-160456	R2-161897	PTW terminology alignment	36.304	0293	1	F	LTE_extDRX-Core
RP-160456	R2-162015	Miscelanous corrections to TS 36.331 related to eDRX	36.331	2097	2	F	LTE_extDRX-Core
RP-160443	R3-160275	Addition of loose-SFN synchronisation for extended Idle mode DRX	36.401	0079		B	LTE_extDRX-Core
RP-160443	R3-160558	Introduction of eDRX parameters in the paging message	36.413	1388	2	B	LTE_extDRX-Core
RP-160476	R4-161225	Measurement requirements in RRC CONNECTED state	36.133	3366	1	B	LTE_extDRX-Core
RP-160476	R4-161443	Measurement requirements in RRC IDLE state	36.133	3367	2	B	LTE_extDRX-Core

SA approved REL-13 SA2 CloT CRs for 700012 CloT:

Spec	CR	rev	version	Title	WG	TSG
23.060	1999	4	13.6.0	MTU for non-IP PDN connection	S2-162062	SP-160286
23.203	1029	2	13.7.0	Update of 23.203 for CloT	S2-163216	SP-160287
23.272	0961	1	13.2.0	SMS support with EPS attach and TAU	S2-161348	SP-160161
23.401	3051	-	13.6.1	Handling of Exception Reports in the Core Network	S2-162719	SP-160286
23.401	3049	1	13.6.1	TAU trigger for Preferred Network Behaviour change	S2-162876	SP-160286
23.401	3046	1	13.6.1	MME selection for CloT Optimisation	S2-162875	SP-160286
23.401	3042	-	13.6.1	Updates of handover procedures for CloT Optimisation	S2-162559	SP-160286
23.401	3041	1	13.6.1	Introduction of Connection Establishment Indication procedure	S2-162889	SP-160286
23.401	3035	2	13.6.1	Correction on MME overload control for CIOT	S2-162913	SP-160286
23.401	3026	3	13.6.1	Support for UP optimisation from CP optimisation in ECM-IDLE state	S2-163062	SP-160286
23.401	3022	-	13.6.1	Handover support for Header Compression in CP optimization	S2-162338	SP-160286
23.401	3017	2	13.6.1	Clarification on CloT EPS Optimisation conflicting terminology	S2-162031	SP-160286
23.401	3015	4	13.6.1	RRC layer impacts and System information usage in attach procedure	S2-162051	SP-160286
23.401	3014	1	13.6.1	Network features need to be consistent across TAI LIST	S2-161910	SP-160286
23.401	3013	1	13.6.1	Alignment of MME selection in Attach and TAU procedures with section 4.3.8.3 'MME selection function'	S2-161908	SP-160286
23.401	3012	1	13.6.1	Clarification of the S1 release procedure usage in context of CIOT CP EPS Optimization	S2-161931	SP-160286
23.401	3008	1	13.6.1	Introduction of S11-U TEID for Control Plane CloT EPS optimization	S2-161932	SP-160286
23.401	3000	1	13.6.1	IRAT stage 3 reattach alignment	S2-161907	SP-160286
23.401	2999	8	13.6.1	Support for rate control of CloT data	S2-162868	SP-160286
23.401	2998	4	13.6.1	Active flag handling for Control Plane CloT Optimization	S2-162841	SP-160286
23.401	2996	1	13.6.1	Paging for CE in CP optimisation	S2-161926	SP-160286
23.401	2995	8	13.6.1	Simultaneous support for CP and UP optimisation	S2-163058	SP-160286
23.401	2994	4	13.6.1	Corrections for Header Compression in CP optimisation	S2-162873	SP-160286
23.401	2993	3	13.6.1	Correction of CloT inter-RAT handover conditions	S2-162890	SP-160286
23.401	2992	3	13.6.1	Alignment of S11-U procedures with stage 3	S2-162033	SP-160286
23.401	2989	1	13.5.0	DRX handling for NB-IoT	S2-161175	SP-160161
23.401	2988	2	13.5.0	Handover for non-NB-IoT devices using CloT optimisations	S2-161251	SP-160161
23.401	2986	3	13.5.0	TAU procedure update with Gn/Gp SGSN for CloT EPS optimization	S2-161255	SP-160161
23.401	2985	1	13.5.0	RAU procedure update for CloT EPS Optimisation	S2-161204	SP-160161
23.401	2982	2	13.5.0	HLcom feature update for CP optimisation	S2-161212	SP-160161
23.401	2981	3	13.5.0	Support for overload control	S2-161258	SP-160161
23.401	2980	4	13.5.0	Disabling IRAT mobility to and from NB-IOT	S2-161254	SP-160161
23.401	2977	2	13.5.0	UE Capability Handling for Control Plane CloT EPS optimization	S2-161168	SP-160161
23.401	2965	2	13.5.0	CloT-centric single node EPS architecture	S2-160835	SP-160161
23.401	2959	4	13.5.0	TAU procedure update for CloT EPS Optimisation	S2-161161	SP-160161
23.401	2954	3	13.5.0	Detach procedure for CloT optimization	S2-160908	SP-160161
23.401	2951	9	13.5.0	Introduction of attach procedure changes for CloT EPS optimization.	S2-161160	SP-160161
23.401	2948	8	13.5.0	Introduction of support for NB-IoT	S2-161162	SP-160161
23.401	2942	13	13.5.0	Introduction of Control Plane CloT EPS optimization	S2-161170	SP-160161
23.401	2941	5	13.5.0	Introducing CloT Optimisations	S2-160833	SP-160161
23.401	2934	9	13.5.0	Introducing support for Non-IP data for CloT	S2-161259	SP-160161
23.401	2930	11	13.5.0	Introduction of solution 18 - suspend and resume procedure	S2-161228	SP-160161
23.682	0183	2	13.5.0	Corrections to T6a Connection Establishment Procedure	S2-163064	SP-160287
23.682	0182	2	13.5.0	Keeping UE applications unaware of SCEF/PDN GW choice	S2-162036	SP-160287
23.682	0175	1	13.5.0	Delete the concept of valid/invalid T6a context	S2-162015	SP-160287
23.682	0174	6	13.5.0	Correction on User Identity	S2-163063	SP-160287
23.682	0173	1	13.5.0	Corrections to 5.3.2	S2-161954	SP-160287
23.682	0172	3	13.5.0	Specify Rate Control information for SCEF	S2-162059	SP-160287
23.682	0171	5	13.5.0	HLCOM and eDRX for NIDD via SCEF	S2-162844	SP-160287
23.682	0169	1	13.5.0	Removal of SCEF ID in T6a Authorization Request	S2-161934	SP-160287
23.682	0166	1	13.4.0	HLcom update for CloT CP optimisation	S2-161126	SP-160161
23.682	0165	2	13.4.0	Update HSS/HLR functionality to support non-IP data delivery via SCEF	S2-161220	SP-160161
23.682	0160	3	13.4.0	Introduction of non-IP data delivery via the SCEF for cellular IoT	S2-161158	SP-160161
33.401	0588	1	13.2.0	CloT Partial Ciphering For User Data via MME	S3-160699	SP-160386
33.401	0580	1	13.2.0	Security for RRC suspend and resume	S3-160822	SP-160386
33.401	0564	2	13.1.0	Add NB-IoT keys and processes	S3-160308	SP-160052

CT approved - CT aspects of Clot:

(REL-13 CRs for WI 700013 - Clot-CT)

Spec	CR	rev	version	Title	WG	TSG
23.007	0337	3	13.4.0	MME handling of GTP Error Indication and MO-Data-Answer (failure)	C4-163049	CP-160228
23.007	0336	2	13.3.0	Connection Resume procedure used during restoration	C4-161477	CP-160033
23.007	0335	3	13.3.0	Enhance restoration procedure to be compatible with PDN connection to the SCEF	C4-161481	CP-160033
23.007	0334	3	13.3.0	Behaviours upon receipt of unknown NIDD	C4-161546	CP-160033
23.007	0332	1	13.3.0	S11-U Error Indication handling	C4-161383	CP-160033
23.008	0501	2	13.4.0	Not Reachable for NIDD flag	C4-163292	CP-160228
23.008	0500	1	13.4.0	APN PLMN rate control	C4-163239	CP-160228
23.008	0499	1	13.4.0	Serving PLMN rate control	C4-163238	CP-160228
23.008	0498	2	13.4.0	Address editor's note on RoHC config and security context for small data over control plane	C4-163237	CP-160228
23.008	0496	2	13.4.0	SCEF Realm	C4-162273	CP-160225
23.008	0492	1	13.4.0	PDN type Storage	C4-162218	CP-160228
23.008	0490	2	13.4.0	NIDD authorisation update	C4-162266	CP-160228
23.008	0488	2	13.3.0	New PDN-Type for Cellular IoT	C4-161529	CP-160033
23.008	0487	1	13.3.0	Storage for Clot control plane optimization related information at MME	C4-161403	CP-160033
23.008	0486	1	13.3.0	Addition of NB-IoT radio access type to the Access-Restriction-Data feature	C4-161321	CP-160033
23.122	0298	3	13.4.0	PLMN selection when the network and UE capabilities for Clot do not match	C1-163137	CP-160309
23.122	0293	2	13.4.0	Disabling emergency calls for NB-IoT devices in limited service state	C1A160105	CP-160309
23.122	0292	7	13.4.0	Extend search cycle for higher priority PLMN	C1-163109	CP-160309
24.008	2964	2	13.5.0	Addition of APN rate control parameters	C1-163095	CP-160309
24.008	2961	4	13.5.0	Link MTU for non-IP connection	C1-162793	CP-160309
24.008	2958	1	13.5.0	Update to voice domain preference and UE's usage setting conditions	C1-162160	CP-160309
24.011	0044	5	13.0.0	SMS with no combined attach for Clot capable devices	C1-161533	CP-160071
24.301	2461	-	13.5.0	Updates to the UE network capability IE due to Clot	C1-163134	CP-160309
24.301	2460	-	13.5.0	Support of PCO signaling for SCEF PDN connection	C1-162797	CP-160309
24.301	2454	1	13.5.0	Paging timer for resume	C1-162930	CP-160309
24.301	2450	-	13.5.0	Clean-up Editorial Notes for Clot	C1-162706	CP-160309
24.301	2449	1	13.5.0	Principles of address handling for new ESM DUMMY MESSAGE	C1-162948	CP-160309
24.301	2448	-	13.5.0	Principles of address handling for new ESM DATA TRANSPORT message	C1-162704	CP-160309
24.301	2446	1	13.5.0	ACB handling in NB-S1 mode	C1-162949	CP-160309
24.301	2445	1	13.5.0	Rollback of MME paging behaviour in CP optimization and eDRX are used	C1-162929	CP-160339
24.301	2441	1	13.5.0	Introducing Access Barring (AB) for NB-IoT	C1-162967	CP-160309
24.301	2435	3	13.5.0	EPS attach with Clot EPS Optimisation based on System information	C1-163127	CP-160309
24.301	2433	1	13.5.0	EPS attached without PDN connectivity Indication	C1-162985	CP-160309
24.301	2431	2	13.5.0	SIB indications about support of Clot optimizations	C1-163126	CP-160309
24.301	2430	-	13.5.0	Correction to the Clot definitions	C1-162634	CP-160309
24.301	2429	2	13.5.0	Header compression configuration status IE handling	C1-163125	CP-160309
24.301	2427	3	13.5.0	Update of NAS timers to support NB-S1 mode	C1-163140	CP-160309
24.301	2417	4	13.5.0	Encoding of the Header Compression Configuration IE	C1-163156	CP-160309
24.301	2415	2	13.5.0	Addition of extended protocol configuration options	C1-163131	CP-160309
24.301	2412	-	13.5.0	General subscription update for new ESM procedure for Clot data transfer	C1A160064	CP-160309
24.301	2410	2	13.5.0	Enabling to switch from CP to UP Clot EPS optimization	C1A160122	CP-160309
24.301	2409	6	13.5.0	Signalling of link MTU during connection establishment	C1-163144	CP-160309
24.301	2408	2	13.5.0	SMS transfer using Control Plane Clot EPS optimization	C1A160120	CP-160309
24.301	2406	6	13.5.0	NAS signalling connection recovery for CP Clot Optimization	C1-162973	CP-160309
24.301	2405	1	13.5.0	Trigger to resume NAS signalling in EMM procedures	C1A160100	CP-160309
24.301	2401	1	13.5.0	Timer table for Data Service Request	C1A160097	CP-160309
24.301	2400	1	13.5.0	Network features per TAI list	C1A160098	CP-160309
24.301	2398	6	13.5.0	Procedures for APN Rate Control	C1-163138	CP-160309
24.301	2397	7	13.5.0	Serving PLMN Rate Control	C1-163139	CP-160309
24.301	2395	11	13.5.0	Clot Updates to Service Request Procedure for Transfer of Data via MME	C1-163155	CP-160309