SISVEL 5G MULTIMODE PROGRAM - PATENT BROCHURE

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Patent Owner Abbreviation
3G Licensing: 3G Licensing S.A.
Alfred Consulting: Alfred Consulting LLC
Ariscale: Technology in Ariscale, LLC
Intellectual Discovery: Intellectual Discovery Co., Ltd.
JVCKENWOOD: JVCKENWOOD Corporation
KDDI: KDDI Corporation
KPN: Koninklijke KPN N.V.
MELCO: Mitsubishi Electric Corporation
NTT: Nippon Telegraph and Telephone Corporation
Siemens: Siemens Aktiengesellschaft
Sisvel International: Sisvel International S.A.
Sisvel SPA: Sisvel S.p.A.
SK Telecom: SK Telecom Co., Ltd.
Telefónica: Telefónica, S.A.
TIM: TIM S.p.A.
UNISOC: UNISOC (Shanghai) Technologies Co., Ltd.
Wilus: Wilus Inc.
Wireless Innovations: Wireless Innovations, LLC

Family code	Patent Owner	Exemplary patent	Anticipated expiration	Illustrative claim(s) and relevant section(s) of the 3G Standard		Illustrative claim(s) and relevant section(s) of the 4G Standard		Illustrative claim(s) and relevant section(s) of the 5G Standard
ALF001	Alfred Consulting	EP3424238 (AT, DE, DK, ES, FI, FR, GB, IE, IT, NL, PL, SE)	22 Dec 2036		13	3GPP TS 24.008 V14.8.0: Sections 1, 1.5, 1.6, 4.1.1.2, 4.1.1.2.1, 4.1.1.5, 6.1.3.1.1, 9.4.1, 10.5.5.12, 10.5.5.37 3GPP TS 23.009 V14.0.0: Sections 4.3.1, 5, 6, 6.1 3GPP TS 23.401 V14.10.0: Sections 3.1, 4.3.7.4, 4.3.7.4.1, 5.5.1.2.2 3GPP TS 36.300 V14.8.0: Sections 8.7.6, 8.7.7, 19.2.1.9, 19.2.1.12 3GPP TS 45.002 V14.5.0: Sections 6.3.1.2, 7	13	3GPP TS 24.501 V17.8.0: Sections 1, 4.5.6, 4.6.2, 4.6.2.1, 6.1.1, 6.1.2; Table 4.5.6.1 3GPP TS 24.008 V16.1.0: Sections 4.1.1.5, 4.3.2, 10.1.3, 10.1.3.0, 13.0, 13.2 3GPP TS 23.009 V15.0.0: Sections 5, 6, 6.1 3GPP TS 23.401 V16.3.0: Section 5.5.1.2.2
		EP3930381 (AT, DE, DK, ES, FI, FR, GB, IE, IT, NL, PL, SE)	22 Dec 2036		14	3GPP TS 24.008 V14.8.0: Sections 1, 1.5, 1.6, 4.1.1.2, 4.1.1.2.1, 4.1.1.5, 6.1.3.1.1, 9.4.1, 10.5.5.12, 10.5.5.37 3GPP TS 23.009 V14.0.0: Sections 4.3.1, 5, 6, 6.1 3GPP TS 23.401 V14.10.0: Sections 3.1, 4.3.7.4, 4.3.7.4.1, 5.5.1.2.2 3GPP TS 36.300 V14.8.0: Sections 8.7.6, 8.7.7, 19.2.1.9, 19.2.1.12 3GPP TS 45.002 V14.5.0: Sections 6.3.1.2, 7	14	3GPP TS 24.501 V17.8.0: Sections 1, 4.5.6, 4.6.2, 4.6.2.1, 6.1.1, 6.1.2; Table 4.5.6.1 3GPP TS 24.008 V16.1.0: Sections 4.1.1.5, 4.3.2, 10.1.3, 10.1.3.0, 13.0, 13.2 3GPP TS 23.009 V15.0.0: Sections 5, 6, 6.1 3GPP TS 23.401 V16.3.0: Section 5.5.1.2.2
		JP7539713	13 Nov 2039		14	3GPP TS 23.009 V14.0.0: Sections 4.3.1, 5, 6, 6.1 3GPP TS 23.401 V14.10.0: Sections 3.1, 4.3.7.4.1, 4.3.17.4, 5.5.1.2.2 3GPP TS 24.008 V14.8.0: Sections 1, 1.5, 1.8, 4.1.1.2.1, 4.1.1.2.2, 4.1.1.5, 6.1.3.1.1, 9.4.2, 10.5.5.12n, 10.5.5.37 3GPP TS 36.300 V14.8.0: Sections 19.2.1.9, 19.2.1.12 3GPP TS 36.413 V16.1.0: Sections 8.7.6.1, 8.7.6.2, 8.7.7.1, 8.7.7.2; Figure 8.7.6.2-1, 8.7.7.2-1 3GPP TS 45.002 V14.5.0: Sections 6.3.1.2, 7	14	3GPP TS 24.501 V17.8.0: Sections 1, 4.5.6, 4.6.2, 4.6.2.1, 6.1.1, 6.1.2; Table 4.5.6.1 3GPP TS 24.008 V16.1.0: Sections 4.1.1.5, 4.3.2, 10.1.3, 10.1.3.0, 13.0, 13.2 3GPP TS 23.009 V15.0.0: Sections 5, 6, 6.1 3GPP TS 23.401 V16.3.0: Section 5.5.1.2.2
		US10129807	22 Dec 2035		18	3GPP TS 24.008 V14.8.0: Sections 1, 1.5, 1.6, 4.1.1.2, 4.1.1.2.1, 4.1.1.5, 6.1.3.1.1, 9.4.1, 10.5.5.12, 10.5.5.37 3GPP TS 23.009 V14.0.0: Sections 4.3.1, 5, 6, 6.1 3GPP TS 23.401 V14.10.0: Sections 3.1, 4.3.7.4, 4.3.7.4.1, 5.5.1.2.2 3GPP TS 36.300 V14.8.0: Sections 8.7.6, 8.7.7, 19.2.1.9, 19.2.1.12 3GPP TS 45.002 V14.5.0: Sections 6.3.1.2, 7	18	3GPP TS 24.501 V17.8.0: Sections 1, 4.5.6, 4.6.2, 4.6.2.1, 6.1.1, 6.1.2; Table 4.5.6.1 3GPP TS 24.008 V16.1.0: Sections 4.1.1.5, 4.3.2, 10.1.3, 10.1.3.0, 13.0, 13.2 3GPP TS 23.009 V15.0.0: Sections 5, 6, 6.1 3GPP TS 23.401 V16.3.0: Section 5.5.1.2.2
		US10609616	22 Dec 2035		15	3GPP TS 23.009 V14.0.0: Sections 4.3.1, 5, 6, 6.1 3GPP TS 23.401 V14.10.0: Sections 3.1, 4.3.7.4.1, 4.3.17.4, 5.5.1.2.2 3GPP TS 24.008 V14.8.0: Sections 1, 1.5, 1.8, 4.1.1.2.1, 4.1.1.2.2, 4.1.1.5, 6.1.3.1.1, 9.4.2, 10.5.5.12n, 10.5.5.37 3GPP TS 36.300 V14.8.0: Sections 19.2.1.9, 19.2.1.12 3GPP TS 36.413 V16.1.0: Sections 8.7.6.1, 8.7.6.2, 8.7.7.1, 8.7.7.2; Figure 8.7.6.2-1, 8.7.7.2-1 3GPP TS 45.002 V14.5.0: Sections 6.3.1.2, 7	15	3GPP TS 24.501 V17.8.0: Sections 1, 4.5.6, 4.6.2, 4.6.2.1, 6.1.1, 6.1.2; Table 4.5.6.1 3GPP TS 24.008 V16.1.0: Sections 4.1.1.5, 4.3.2, 10.1.3, 10.1.3.0, 13.0, 13.2 3GPP TS 23.009 V15.0.0: Sections 5, 6, 6.1 3GPP TS 23.401 V16.3.0: Section 5.5.1.2.2
		US10834656	22 Dec 2035		16	3GPP TS 23.009 V14.0.0: Sections 4.3.1, 5, 6, 6.1 3GPP TS 23.401 V14.10.0: Sections 3.1, 4.3.7.4.1, 4.3.17.4, 5.5.1.2.2 3GPP TS 24.008 V14.8.0: Sections 1, 1.5, 1.8, 4.1.1.2.1, 4.1.1.2.2, 4.1.1.5, 6.1.3.1.1, 9.4.2, 10.5.5.12n, 10.5.5.37 3GPP TS 36.300 V14.8.0: Sections 19.2.1.9, 19.2.1.12 3GPP TS 36.413 V16.1.0: Sections 8.7.6.1, 8.7.6.2, 8.7.7.1, 8.7.7.2; Figure 8.7.6.2-1, 8.7.7.2-1 3GPP TS 45.002 V14.5.0: Sections 6.3.1.2, 7	16	3GPP TS 24.501 V17.8.0: Sections 1, 4.5.6, 4.6.2, 4.6.2.1, 6.1.1, 6.1.2; Table 4.5.6.1 3GPP TS 24.008 V16.1.0: Sections 4.1.1.5, 4.3.2, 10.1.3, 10.1.3.0, 13.0, 13.2 3GPP TS 23.009 V15.0.0: Sections 5, 6, 6.1 3GPP TS 23.401 V16.3.0: Section 5.5.1.2.2
		US10841856	22 Dec 2035		17	3GPP TS 23.009 V14.0.0: Sections 4.3.1, 5, 6, 6.1 3GPP TS 23.401 V14.10.0: Sections 3.1, 4.3.7.4.1, 4.3.17.4, 5.5.1.2.2 3GPP TS 24.008 V14.8.0: Sections 1, 1.5, 1.8, 4.1.1.2.1, 4.1.1.2.2, 4.1.1.5, 6.1.3.1.1, 9.4.2, 10.5.5.12n, 10.5.5.37 3GPP TS 36.300 V14.8.0: Sections 19.2.1.9, 19.2.1.12 3GPP TS 36.413 V16.1.0: Sections 8.7.6.1, 8.7.6.2, 8.7.7.1, 8.7.7.2; Figure 8.7.6.2-1, 8.7.7.2-1 3GPP TS 45.002 V14.5.0: Sections 6.3.1.2, 7	17	3GPP TS 24.501 V17.8.0: Sections 1, 4.5.6, 4.6.2, 4.6.2.1, 6.1.1, 6.1.2; Table 4.5.6.1 3GPP TS 24.008 V16.1.0: Sections 4.1.1.5, 4.3.2, 10.1.3, 10.1.3.0, 13.0, 13.2 3GPP TS 23.009 V15.0.0: Sections 5, 6, 6.1 3GPP TS 23.401 V16.3.0: Section 5.5.1.2.2

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ID	Company	Patent	Date	#	Ref (blue)	#	Ref (green)	#	Ref (orange)
ALF001	Alfred Consulting	US11330498	22 Dec 2035			17	3GPP TS 23.009 V14.0.0: Sections 4.3.1, 5, 6, 6.1 3GPP TS 23.401 V14.10.0: Sections 3.1, 4.3.7.4.1, 4.3.17.4, 5.5.1.2.2 3GPP TS 24.008 V14.8.0: Sections 1, 1.5, 1.8, 4.1.1.2.1, 4.1.1.2.2, 4.1.1.5, 6.1.3.1.1, 9.4.2, 10.5.5.12n, 10.5.5.37 3GPP TS 36.300 V14.8.0: Sections 19.2.1.9, 19.2.1.12 3GPP TS 36.413 V16.1.0: Sections 8.7.6.1, 8.7.6.2, 8.7.7.1, 8.7.7.2; Figure 8.7.6.2-1, 8.7.7.2-1 3GPP TS 45.002 V14.5.0: Sections 6.3.1.2, 7	17	3GPP TS 24.501 V17.8.0: Sections 1, 4.5.6, 4.6.2, 4.6.2.1, 6.1.1, 6.1.2; Table 4.5.6.1 3GPP TS 24.008 V16.1.0: Sections 4.1.1.5, 4.3.2, 10.1.3, 10.1.3.0, 13.0, 13.2 3GPP TS 23.009 V15.0.0: Sections 5, 6, 6.1 3GPP TS 23.401 V16.3.0: Section 5.5.1.2.2
		US11706684	22 Dec 2035			13	3GPP TS 23.009 V14.0.0: Sections 4.3.1, 5, 6, 6.1 3GPP TS 23.401 V14.10.0: Sections 3.1, 4.3.7.4.1, 4.3.17.4, 5.5.1.2.2 3GPP TS 24.008 V14.8.0: Sections 1, 1.5, 1.8, 4.1.1.2.1, 4.1.1.2.2, 4.1.1.5, 6.1.3.1.1, 9.4.2, 10.5.5.12n, 10.5.5.37 3GPP TS 36.300 V14.8.0: Sections 19.2.1.9, 19.2.1.12 3GPP TS 36.413 V16.1.0: Sections 8.7.6.1, 8.7.6.2, 8.7.7.1, 8.7.7.2; Figure 8.7.6.2-1, 8.7.7.2-1 3GPP TS 45.002 V14.5.0: Sections 6.3.1.2, 7	13	3GPP TS 24.501 V17.8.0: Sections 1, 4.5.6, 4.6.2, 4.6.2.1, 6.1.1, 6.1.2; Table 4.5.6.1 3GPP TS 24.008 V16.1.0: Sections 4.1.1.5, 4.3.2, 10.1.3, 10.1.3.0, 13.0, 13.2 3GPP TS 23.009 V15.0.0: Sections 5, 6, 6.1 3GPP TS 23.401 V16.3.0: Section 5.5.1.2.2
		US11765638	22 Dec 2035			1	3GPP TS 23.009 V14.0.0: Sections 4.3.1, 5, 6, 6.1 3GPP TS 23.401 V14.10.0: Sections 3.1, 4.3.7.4.1, 4.3.17.4, 5.5.1.2.2 3GPP TS 24.008 V14.8.0: Sections 1, 1.5, 1.8, 4.1.1.2.1, 4.1.1.2.2, 4.1.1.5, 6.1.3.1.1, 9.4.2, 10.5.5.12n, 10.5.5.37 3GPP TS 36.300 V14.8.0: Sections 19.2.1.9, 19.2.1.12 3GPP TS 36.413 V16.1.0: Sections 8.7.6.1, 8.7.6.2, 8.7.7.1, 8.7.7.2; Figure 8.7.6.2-1, 8.7.7.2-1 3GPP TS 45.002 V14.5.0: Sections 6.3.1.2, 7	1	3GPP TS 24.501 V17.8.0: Sections 1, 4.5.6, 4.6.2, 4.6.2.1, 6.1.1, 6.1.2; Table 4.5.6.1 3GPP TS 24.008 V16.1.0: Sections 4.1.1.5, 4.3.2, 10.1.3, 10.1.3.0, 13.0, 13.2 3GPP TS 23.009 V15.0.0: Sections 5, 6, 6.1 3GPP TS 23.401 V16.3.0: Section 5.5.1.2.2
ARI001	Ariscale	KR10-1458790	05 Jul 2028	1	3GPP TS 25.214 V11.12.0: Sections 6A.4.1, 9, 12.1	1	3GPP TS 36.211 V11.7.0: Sections 6.3.4.2.1, 6.3.4.2.3; Table 6.3.4.2.3-1 3GPP TS 36.213 V11.13.0: Sections 7.1.4, 7.1.5, 7.2, 7.2.3, 7.2.4; Table 7.2.3-0		
ARI002	Ariscale	CNZL201680021262.3	08 Apr 2036			8, 10	3GPP TS 36.213 V14.9.0: Section 7.2 3GPP TS 36.211 V14.9.0: Sections 6.10.5, 6.10.5.1, 6.10.5.2; Tables 6.10.5-1, 6.10.5.2-1 3GPP TS 36.331 V14.9.0: Section 6.3.2.		
		CNZL201910119478.9	08 Apr 2036			12	3GPP TS 36.211 V14.9.0: Sections 6.10.5, 6.10.5.1, 6.10.5.2; Figure 6.10.5.1-1; Tables 6.10.5-1, 6.10.5.2-2 3GPP TS 36.213 V14.9.0: Sections 7.2, 7.2.5 3GPP TS 36.331 V14.9.0: Sections 6.3.2		
		KR10-1955940	16 Mar 2036			13	3GPP TS 36.211 V14.9.0: Sections 6.10.5, 6.10.5.1, 6.10.5.2; Tables 6.10.5-1, 6.10.5.2-1; Figure 6.10.5.2-1 3GPP TS 36.213 V14.9.0: Sections 7.2, 7.2.5 3GPP TS 36.331 V14.9.0: Sections 6.3.2, 6.10.5		
		US10256963	08 Apr 2036			14	3GPP TS 36.211 V14.9.0: Sections 6.10.5, 6.10.5.1, 6.10.5.2; Tables 6.10.5-1, 6.10.5.2-1; Figure 6.10.5.2-1 3GPP TS 36.213 V14.9.0: Sections 7.2, 7.2.5 3GPP TS 36.331 V14.9.0: Sections 6.3.2, 6.10.5		
ARI003	Ariscale	AU2019342135	19 Sep 2039			1	3GPP TS 36.211 V14.13.1: Section 6.10.5; Table 6.10.5-1 3GPP TS 36.213 V14.13.0: Section 7.2 3GPP TS 36.331 V14.13.0: Section 6.3.2		
		CNZL201980061783.5	19 Sep 2039			1	3GPP TS 36.211 V14.13.1: Section 6.10.5; Table 6.10.5-1 3GPP TS 36.213 V14.13.0: Section 7.2 3GPP TS 36.331 V14.13.0: Section 6.3.2		
		KR10-2239148	19 Sep 2039			1	3GPP TS 36.211 V14.13.1: Section 6.10.5; Table 6.10.5-1 3GPP TS 36.213 V14.13.0: Section 7.2 3GPP TS 36.331 V14.13.0: Section 6.3.2		
		US10707938	19 Sep 2039			10, 11	3GPP TS 36.211 V14.13.1: Section 6.10.5; Table 6.10.5-1 3GPP TS 36.213 V14.13.0: Section 7.2 3GPP TS 36.331 V14.13.0: Section 6.3.2		
BBY001	3G Licensing	CA2680720	20 Aug 2024					1	3GPP TS 22.011 V16.5.0: Sections 3.2.1, 3.2.2.1, 3.2.2.2 3GPP TS 23.003 V16.4.0: Section 12.1 3GPP TS 23.122 V16.7.0: Sections 1, 1.2, 3.1, 4.4.2, 4.4.3, 4.4.3.1.1, Annex A 3GPP TS 31.102 V16.5.0: Sections 1, 3.3, 4, 4.2.5, 4.2.53, 4.2.84 3GPP TS 38.304 V16.2.0: Sections 3.1, 3.2, 5.1, 5.1.1.1, 5.1.1.2 3GPP TS 38.331 V16.2.0: Sections 3.2, 5.2.1, 5.2.2.1, 5.2.2.2.1, 6.2.2, 6.3.2; Figure 5.2.2.1-1
		US8275374	08 Sep 2024					1	3GPP TS 22.011 V16.5.0: Sections 3.2.1, 3.2.2.1, 3.2.2.2 3GPP TS 23.003 V16.4.0: Section 12.1 3GPP TS 23.122 V16.7.0: Sections 1, 1.2, 3.1, 4.4.2, 4.4.3, 4.4.3.1.1, Annex A 3GPP TS 31.102 V16.5.0: Sections 1, 3.3, 4, 4.2.5, 4.2.53, 4.2.84 3GPP TS 38.304 V16.2.0: Sections 3.1, 3.2, 5.1, 5.1.1.1, 5.1.1.2 3GPP TS 38.331 V16.2.0: Sections 3.2, 5.2.1, 5.2.2.1, 5.2.2.2.1, 6.2.2, 6.3.2; Figure 5.2.2.1-1
		US8472955	02 Sep 2024	1	3GPP TS 23.122 V8.12.0: Sections 1.2, 4.2, 4.4.3.1.1; Annex A 3GPP TS 22.011 V8.11.0: Sections 1.2, 3.2.2.1 3GPP TS 31.102 V8.11.0: Sections 1, 4.2.84, 4.2.53, 5.1.1.2 3GPP TS 36.331 V8.21.0: Sections 6.1, 6.3.4 3GPP TS 24.301 V8.10.0: Sections 8.2.1.1, 9.9.3.32, 9.9.3.33; Table 8.2.1.1; Figures 9.9.3.32.1, 9.9.3.33.1 3GPP TS 22.101 V8.15.0: Sections A.3			1	3GPP TS 22.011 V16.5.0: Sections 3.2.1, 3.2.2.1, 3.2.2.2 3GPP TS 23.003 V16.4.0: Section 12.1 3GPP TS 23.122 V16.7.0: Sections 1, 1.2, 3.1, 4.4.2, 4.4.3, 4.4.3.1.1, Annex A 3GPP TS 31.102 V16.5.0: Sections 1, 3.3, 4, 4.2.5, 4.2.53, 4.2.84 3GPP TS 38.304 V16.2.0: Sections 3.1, 3.2, 5.1, 5.1.1.1, 5.1.1.2 3GPP TS 38.331 V16.2.0: Sections 3.2, 5.2.1, 5.2.2.1, 5.2.2.2.1, 6.2.2, 6.3.2; Figure 5.2.2.1-1
BBY002	3G Licensing	US8879503	03 Jun 2030			1	3GPP TS 24.301 V.11.10.0: Sections 1, 4.3.1, 4.3.2.4, 5.5.1.2.4, 5.5.3.2.4, 8.2.1.1, 8.2.26.1, 9.9.3.12A; Tables 4.3.2.4.1, 4.3.2.4.2, 8.2.1.1, 8.2.26.1, 9.9.3.12A.1 3GPP TS 24.229 V.11.9.0: Section 5.1.1.2.1, Annex L.3.1.2		
BBY003	3G Licensing	US7463887	03 Apr 2026			1	3GPP TS 36.304 V8.10.0: Sections 1, 5.2.1, 5.2.4.4		
		US8290491	25 Aug 2024			1	3GPP TS 36.304 V8.10.0: Sections 1, 5.2.1, 5.2.4.4		
		US8351940	25 Aug 2024			1	3GPP TS 36.304 V8.10.0: Sections 1, 5.2.1, 5.2.4.4	1	3GPP TS 36.304 V8.10.0: Sections 1, 5.2.1, 5.2.4.4
BBY004	3G Licensing	AU2007221785	02 Oct 2027			1	3GPP TS 24.237 V15.3.0: Sections 1, 4.1, 5.2, 5.3, 9.2.1AA, 9.3.2 3GPP TS 24.292 V15.1.0: Sections 7.2.2, 7.2.6, 7.4.1, 7.4.2.1. 3GPP TS 24.229 V15.1.0: Section 5.1.2A.1.1		
		CA2605098	02 Oct 2027			1	3GPP TS 24.237 V15.3.0: Sections 1, 4.1, 5.2, 5.3, 9.2.1AA, 9.3.2 3GPP TS 24.292 V15.1.0: Sections 7.2.2, 7.2.6, 7.4.1, 7.4.2.1. 3GPP TS 24.229 V15.1.0: Section 5.1.2A.1.1		

ID	Licensor	Patent	Date			Cnt	3GPP References	Cnt	3GPP References
BBY004	3G Licensing	EP1909451 (DE, FR, GB)	03 Oct 2026			1	3GPP TS 24.237 V15.3.0: Sections 1, 4.1, 5.2, 5.3, 9.2.1AA, 9.3.2 3GPP TS 24.292 V15.1.0: Sections 7.2.2, 7.2.6, 7.4.1, 7.4.2.1. 3GPP TS 24.229 V15.1.0: Section 5.1.2A.1.1		
		HK1114980	03 Oct 2026			1	3GPP TS 24.237 V15.3.0: Sections 1, 4.1, 5.2, 5.3, 9.2.1AA, 9.3.2 3GPP TS 24.292 V15.1.0: Sections 7.2.2, 7.2.6, 7.4.1, 7.4.2.1. 3GPP TS 24.229 V15.1.0: Section 5.1.2A.1.1		
		IN256206	25 Sep 2027			1	3GPP TS 24.237 V15.3.0: Sections 1, 4.1, 5.2, 5.3, 9.2.1AA, 9.3.2 3GPP TS 24.292 V15.1.0: Sections 7.2.2, 7.2.6, 7.4.1, 7.4.2.1. 3GPP TS 24.229 V15.1.0: Section 5.1.2A.1.1		
		JP4772021	02 Oct 2027			1	3GPP TS 24.237 V15.3.0: Sections 1, 4.1, 5.2, 5.3, 9.2.1AA, 9.3.2 3GPP TS 24.292 V15.1.0: Sections 7.2.2, 7.2.6, 7.4.1, 7.4.2.1. 3GPP TS 24.229 V15.1.0: Section 5.1.2A.1.1		
		KR10-0940548	02 Oct 2027			1	3GPP TS 24.237 V15.3.0: Sections 1, 4.1, 5.2, 5.3, 9.2.1AA, 9.3.2 3GPP TS 24.292 V15.1.0: Sections 7.2.2, 7.2.6, 7.4.1, 7.4.2.1. 3GPP TS 24.229 V15.1.0: Section 5.1.2A.1.1		
		SG161228	26 Sep 2027			1	3GPP TS 24.237 V15.3.0: Sections 1, 4.1, 5.2, 5.3, 9.2.1AA, 9.3.2 3GPP TS 24.292 V15.1.0: Sections 7.2.2, 7.2.6, 7.4.1, 7.4.2.1. 3GPP TS 24.229 V15.1.0: Section 5.1.2A.1.1		
		TWI355828	27 Sep 2027			1	3GPP TS 24.237 V15.3.0: Sections 1, 4.1, 5.2, 5.3, 9.2.1AA, 9.3.2 3GPP TS 24.292 V15.1.0: Sections 7.2.2, 7.2.6, 7.4.1, 7.4.2.1. 3GPP TS 24.229 V15.1.0: Section 5.1.2A.1.1		
		US7995565	03 Oct 2026			1	3GPP TS 24.237 V15.3.0: Sections 1, 4.1, 5.2, 5.3, 9.2.1AA, 9.3.2 3GPP TS 24.292 V15.1.0: Sections 7.2.2, 7.2.6, 7.4.1, 7.4.2.1. 3GPP TS 24.229 V15.1.0: Section 5.1.2A.1.1		
BBY005	3G Licensing	AU2006235810	02 Nov 2026			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		AU2010257363	02 Nov 2026			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		BRPI0622295-1	01 Nov 2026			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		CA2567115	03 Nov 2026			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		CNZL201010576392.8	03 Nov 2026			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		EP1924037 (DE, FR, GB, IT)	04 Nov 2025			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		EP2184946 (DE, FR, GB, IT, NL, SE)	04 Nov 2025					1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		HK1143266	04 Nov 2025					1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		IN314545	31 Oct 2026			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		JP4909707	01 Nov 2026			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		KR10-1116459	03 Nov 2026			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		KR10-1116524	03 Nov 2026			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		TWI338527	03 Nov 2026			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A	1	3GPP TS 23.501 V16.6.0: Sections 3.1, 3.2, 4.4.5, 5.6.1 3GPP TS 24.501 V16.6.0: Sections 6.2.3, 6.4.1.1, 6.4.1.2, 6.4.1.5
		US8189611	04 Sep 2026			1	3GPP TS 24.301 V11.7.0: Sections 6.5.1.1, 6.5.1.4A		
IND001	Intellectual Discovery	KR10-2024626	10 Dec 2034			1	3GPP TS 36.211 V13.13.0: Sections 6.4.1, 6.8B, 6.8B.1, 6.8B.5 3GPP TS 36.212 V13.10.0: Sections 5.3.3.1.12, 5.3.3.1.13, 7.1 3GPP TS 36.213 V13.16.0: Sections 7.1, 7.1.11 3GPP TS 36.331 V13.15.0: Sections 3.1, 6.2.2		
		US10028207	23 Jan 2035			1	3GPP TS 36.211 V13.13.0: Sections 6.4.1, 6.8B, 6.8B.1, 6.8B.5 3GPP TS 36.212 V13.10.0: Sections 5.3.3.1.12, 5.3.3.1.13, 7.1 3GPP TS 36.213 V13.16.0: Sections 7.1, 7.1.11 3GPP TS 36.331 V13.15.0: Sections 3.1, 6.2.2		
		US10805868	14 Jan 2035			1	3GPP TS 36.211 V13.13.0: Sections 6.4.1, 6.8B, 6.8B.1, 6.8B.5 3GPP TS 36.212 V13.10.0: Sections 5.3.3.1.12, 5.3.3.1.13, 7.1 3GPP TS 36.213 V13.16.0: Sections 7.1, 7.1.11 3GPP TS 36.331 V13.15.0: Sections 3.1, 6.2.2		
IND002	Intellectual Discovery	CNZL201580021748.2	05 Feb 2035			1	3GPP TS 36.211 V12.9.0: Section 6.11A 3GPP TS 36.331 V12.18.0: Sections 5.3.5.1, 5.5.2.5, 5.5.3.1, 6.3.5, 6.4		
		KR10-2306320	30 Jul 2034			1	3GPP TS 36.211 V12.9.0: Section 6.11A 3GPP TS 36.331 V12.18.0: Sections 5.3.5.1, 5.5.2.5, 5.5.3.1, 6.3.5, 6.4		
IND003	Intellectual Discovery	KR10-0880885	11 May 2027					1	3GPP TS 38.213 V16.9.0: Section 9.2.6
JKC001	JVCKENWOOD	CA2857481	25 Jul 2033			1	3GPP TS 36.212 V11.7.0: Section 5.3.3.1.5D 3GPP TS 36.213 V11.12.0: Sections 7.1, 7.1.9; Tables 7.1-5, 7.1.9-1 3GPP TS 36.300 V11.14.0: Section 4 3GPP TS 36.331 V11.17.0: Sections 5.3.5.1, 6.2.2, 6.3.2; Figure 5.3.5.1-1		
		CA2871263	25 Jul 2033			1	3GPP TS 36.212 V11.7.0: Section 5.3.3.1.5D 3GPP TS 36.213 V11.12.0: Sections 7.1, 7.1.9; Tables 7.1-5, 7.1.9-1 3GPP TS 36.300 V11.14.0: Section 4 3GPP TS 36.331 V11.17.0: Sections 5.3.5.1, 6.2.2, 6.3.2; Figure 5.3.5.1-1		
		CA2987989	25 Jul 2033			1	3GPP TS 36.212 V11.7.0: Section 5.3.3.1.5D 3GPP TS 36.213 V11.12.0: Sections 7.1, 7.1.9; Tables 7.1-5, 7.1.9-1 3GPP TS 36.300 V11.14.0: Section 4 3GPP TS 36.331 V11.17.0: Sections 5.3.5.1, 6.2.2, 6.3.2; Figure 5.3.5.1-1		
		EP2809025 (DE, ES, FR, GB, IT, NL, TR)	25 Jul 2033			14	3GPP TS 36.212 V11.7.0: Section 5.3.3.1.5D 3GPP TS 36.213 V11.12.0: Sections 7.1, 7.1.9; Tables 7.1-5, 7.1.9-1 3GPP TS 36.300 V11.14.0: Section 4 3GPP TS 36.331 V11.17.0: Sections 5.3.5.1, 6.2.2, 6.3.2; Figure 5.3.5.1-1		

ID	Company	Patent	Date			#	3GPP References		3GPP References
JKC001	JVCKENWOOD	IN358033	25 Jul 2033			1	3GPP TS 36.212 V11.7.0: Section 5.3.3.1.5D 3GPP TS 36.213 V11.12.0: Sections 7.1, 7.1.9; Tables 7.1-5, 7.1.9-1 3GPP TS 36.300 V11.14.0: Section 4 3GPP TS 36.331 V11.17.0: Sections 5.3.5.1, 6.2.2, 6.3.2; Figure 5.3.5.1-1		
		JP5846513	25 Jul 2033			14	3GPP TS 36.212 V11.7.0: Section 5.3.3.1.5D 3GPP TS 36.213 V11.12.0: Section 7.1.9; Table 7.1.9-1 3GPP TS 36.300 V11.14.0: Section 4 3GPP TS 36.331 V11.17.0: Sections 5.3.5, 5.3.5.1. 6.2.2, 6.3.2; Figure 5.3.5.1-1		
		JP5846521	25 Jul 2033			16	3GPP TS 36.300 V16.6.0: Section 5.1.9 3GPP TS 36.213 V16.7.0: Sections 7.2.1, 7.2.6; Table 7.2.1-1B 3GPP TS 36.331 V16.6.0: Section 6.3.2 3GPP TS 36.305 V16.4.0: Section 3.1		
		JP6512275	25 Jul 2033			1	3GPP TS 36.212 V11.7.0: Section 5.3.3.1.5D 3GPP TS 36.213 V11.12.0: Section 7.1.9; Table 7.1.9-1 3GPP TS 36.300 V11.14.0: Section 4 3GPP TS 36.331 V11.17.0: Sections 5.3.5, 5.3.5.1. 6.2.2, 6.3.2; Figure 5.3.5.1-1		
		KR10-1516666	25 Jul 2033			16	3GPP TS 36.300 V16.6.0: Section 5.1.9 3GPP TS 36.213 V16.7.0: Sections 7.2; 7.2.1, 7.2.6 3GPP TS 36.331 V16.6.0: Sections 6.2.2, 6.3.2 3GPP TS 36.305 V16.4.0: Section 3.1		
		KR10-1516667	25 Jul 2033			23	3GPP TS 36.213 V11.12.0: Sections 7.1.9; 7.1.10, 7.2.5; Table 7.1.9-1 3GPP TS 36.300 V11.14.0: Sections 4, 5.1.9 3GPP TS 36.331 V11.17.0: Sections 6.2.2, 6.3.2; Figure 5.3.5.1-1 3GPP TS 36.212 V11.7.0: Section 5.3.3.1.5D 3GPP TS 36.211 V11.7.0: Section 6.2.1		
		US9094145	14 Aug 2033			14	3GPP TS 36.212 V11.7.0: Section 5.3.3.1.5D 3GPP TS 36.213 V11.12.0: Sections 7.1, 7.1.9; Tables 7.1-5, 7.1.9-1 3GPP TS 36.300 V11.14.0: Section 4 3GPP TS 36.331 V11.17.0: Sections 5.3.5.1, 6.2.2, 6.3.2; Figure 5.3.5.1-1		
JKC002	JVCKENWOOD	JP5223409	26 Mar 2028			1	3GPP TS 36.211 V16.7.0: Sections 4.1, 6.11.1.2, 6.11.2.2; Figure 4.1-1 3GPP TS 36.212 V16.6.0: Section 5.3.3.1.3 3GPP TS 36.213 V16.7.1: Sections 4.1, 7.1	1	3GPP TS 38.213 V17.0.0: Section 4 3GPP TS 38.211 V17.0.0: Sections 4.3.1, 4.3.2 3GPP TS 38.214 V17.0.0: Sections 5.1, 5.1.2.1, 5.1.3 3GPP TS 38.331 V16.7.0: Sections 6.3.2
KDD001	KDDI	JP4831605	24 Jan 2026			7	3GPP TS 36.331 V11.17.0: Sections 4.2.1, 5.2.1, 5.2.1.1, 5.2.2, 5.2.2.1, 5.3.3.10, 6.3.1 3GPP TS 24.173 V11.5.0: Sections J.2.1.1 3GPP TS 22.011 V11.5.0: Sections 4.2		
KDD002	KDDI	JP4499177	31 Oct 2027			1	3GPP TS 36.211 V9.1.0: Sections 5.4, 5.4.1, 5.4.2 3GPP TS 36.213 V9.3.0: Sections 7.2.2, 10.1		
		JP4585038	31 Oct 2027			2	3GPP TS 36.211 V9.1.0: Sections 5.4.1, 5.4.2, 7.2		
		US8761145	23 Dec 2027			1	3GPP TS 36.211 V9.1.0: Sections 5.4, 5.4.1, 5.4.2; Tables 5.4.1-2, 5.4.1-3 3GPP TS 36.213 V9.3.0: Sections 7.2.2, 10.1		
		US9025431	11 Nov 2027			1	3GPP TS 36.211 V9.1.0: Sections 5.4, 5.4.1, 5.4.2; 5.4.1-2, 5.4.1-3 3GPP TS 36.213 V9.3.0: Sections 7.2.2, 10.1		
		US9143258	31 Oct 2027			1	3GPP TS 36.211 V9.1.0: Sections 5.4, 5.4.1, 5.4.2; Tables 5.4.1-2, 5.4.1-3 3GPP TS 36.213 V9.3.0: Sections 7.2.2, 10.1		
		US9148245	31 Oct 2027			1	3GPP TS 36.211 V9.1.0: Sections 5.4, 5.4.1, 5.4.2; Tables 5.4.1-2, 5.4.1-3 3GPP TS 36.213 V9.3.0: Sections 7.2.2, 10.1		
		US9160476	31 Oct 2027			1	3GPP TS 36.211 V9.1.0: Sections 5.4, 5.4.1, 5.4.2; Tables 5.4.1-2, 5.4.1-3 3GPP TS 36.213 V9.3.0: Sections 7.2.2, 10.1		
		US9219564	31 Oct 2027			1	3GPP TS 36.211 V9.1.0: Sections 5.4, 5.4.1, 5.4.2; Tables 5.4.1-2, 5.4.1-3 3GPP TS 36.213 V9.3.0: Sections 7.2.2, 10.1		
		US9270402	31 Oct 2027			1	3GPP TS 36.211 V9.1.0: Sections 5.4, 5.4.1, 5.4.2; Tables 5.4.1-2, 5.4.1-3 3GPP TS 36.213 V9.3.0: Sections 7.2.2, 10.1		
KDD003	KDDI	JP4527136	20 Jun 2027			1	3GPP TS36.211 V14.1.0: Sections 5.4, 5.4.3, 5.5, 5.5.1, 5.5.1.1, 5.5.1.3, 5.5.2, 5.5.2.2		
KDD004	KDDI	US7974203	16 Nov 2028			5	3GPP TS 23.401 V16.9.0: Section 4.7.2.1 3GPP TS36.321 V16.3.0: Section 5.4.3.1 3GPP TS 36.331 V16.3.0: Sections 5.3.10.3, 6.3.2		
KDD006	KDDI	JP6588135	07 May 2034			1	3GPP TS 36.300 V15.3.0: Sections 5.2.3, 10.1.2.8, 10.1.2.8.1; Figure 10.1.2.8.1-1 3GPP TS 36.423 V15.3.0: Sections 9.1.3, 9.1.3.1, 9.1.3.2 3GPP TS 36.331 V15.0.0: Sections 5.5.5, 5.5.5.1, 6.2.2, 6.3.5, 10.2.2; Figure 5.5.5.1-1 3GPP TS 36.221 V16.5.0: Section 6.11		
		JP6799653	07 May 2034			1	3GPP TS 36.300 V15.3.0: Sections 5.2.3, 10.1.2.8, 10.1.2.8.1; Figure 10.1.2.8.1-1 3GPP TS 36.423 V15.3.0: Sections 9.1.3, 9.1.3.1, 9.1.3.2 3GPP TS 36.331 V15.0.0: Sections 5.5.5, 5.5.5.1, 6.2.2, 6.3.5, 10.2.2; Figure 5.5.5.1-1		
KDD007	KDDI	CNZL201680026887.9	10 May 2036			1	3GPP TS 36.300 V15.3.0: Sections 10.1.5.1, 23.7b; Figure 10.1.5.1-1 3GPP TS 36.321 V15.3.0: Sections 5.1.1, 5.1.2		
		JP6502171	14 May 2035			1	3GPP TS 36.300 V15.3.0: Sections 10.1.5.1, 23.7b; Figure 10.1.5.1-1 3GPP TS 36.321 V15.3.0: Sections 5.1.1, 5.1.2		
		JP6656445	14 May 2035			1	3GPP TS 36.300 V15.3.0: Sections 10.1.5.1, 23.7b; Figure 10.1.5.1-1 3GPP TS 36.321 V15.3.0: Sections 5.1.1, 5.1.2		

Ref	Company	Patent	Date						
KDD007	KDDI	JP6761502	14 May 2035			1	3GPP TS 36.300 V15.3.0: Sections 10.1.5.1, 23.7b; Figure 10.1.5.1-1 3GPP TS 36.321 V15.3.0: Sections 5.1.1, 5.1.2		
KDD008	KDDI	CNZL201680054288.8	14 Oct 2036					9	3GPP TS 38.212 V15.8.0: Sections 7.3.1.2.1, 7.3.1.2.2 3GPP TS 38.213 V15.8.0: Section 9.2.3 3GPP TS 38.300 V15.8.0: Section 5.2.5.4
		JP6633889	29 Oct 2035					9	3GPP TS 38.212 V15.8.0: Sections 7.3.1.2.1, 7.3.1.2.2 3GPP TS 38.213 V15.8.0: Section 9.2.3 3GPP TS 38.300 V15.8.0: Section 5.2.5.4
KDD011	KDDI	JP7247154	28 Apr 2037			1	3GPP TS 36.331 V16.6.0: Sections 1, 5.5.4.1, 6.3.5		
		US11272418	07 Mar 2038			1	3GPP TS 36.331 V16.6.0: Sections 1, 5.5.4.1, 6.3.5		
KPN003*	KPN	EP0716796 (CH, DE, FR, GB, NL, SE)	31 Aug 2014			1, 3	3GPP TS 23.261 V10.2.0: Sections 4, 4.1, 5.2, 5.2.1, 5.2.2, 5.2.3, 5.3, 5.3.1, 5.3.2, 5.3.3 3GPP TS 23.401 V10.4.0: Sections 1, 5, 5.1, 5.1.1, 5.1.1.1, 5.2, 5.2.1, 5.2.2, 5.2.3, 5.3, 5.3.1, 5.3.1.1, 5.3.2, 5.3.2.1, 5.10, 5.10.1, 5.10.2 3GPP TS 23.402 V10.4.0: Section 7.3 3GPP TS 23.234 V11.1.0: Sections 6, 6.1 3GPP TS 23.003 V10.3.0: Sections 2, 2.1 IETF RFC 4306: Section 1.2		
		US5960365	23 Jan 2016			1, 3	3GPP TS 23.261 V10.2.0: Sections 4, 4.1, 5.2, 5.2.1, 5.2.2, 5.2.3, 5.3, 5.3.1, 5.3.2, 5.3.3 3GPP TS 23.401 V10.4.0: Sections 1, 5, 5.1, 5.1.1, 5.1.1.1, 5.2, 5.2.1, 5.2.2, 5.2.3, 5.3, 5.3.1, 5.3.1.1, 5.3.2, 5.3.2.1, 5.10, 5.10.1, 5.10.2 3GPP TS 23.402 V10.4.0: Section 7.3 3GPP TS 23.234 V11.1.0: Sections 6, 6.1 3GPP TS 23.003 V10.3.0: Sections 2, 2.1 IETF RFC 4306: Section 1.2		
KPN004*	KPN	US6212662	26 Jun 2016			1, 2, 3	3GPP TS 36.212 V9.3.0: Sections 5, 5.1, 5.1.1, 5.1.2, 5.1.3, Table 5.1.3-1, 5.1.3-3, 5.1.3.2, 5.1.3.2.1, Figure 5.1.3-2, 5.1.3.2.3,		
KPN005*	KPN	EP0785692 (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, NL, PT, SE)	29 Oct 2016	1	3GPP TS 23.060 V10.14.0: Sections 6.5.0, 6.5.3 3GPP TS 23.261 V10.2.0: Sections 5.3.1, 5.4.1, 5.4.2; Figure 5.4.2-1 3GPP TS 25.211 V10.0.0: Sections 4.1.2.3, 4.2, 5.3.3.10 3GPP TS 43.013 V4.0.0: Sections 1, 4	1	3GPP TS 23.060 V10.14.0: Sections 6.5.0, 6.5.3 3GPP TS 23.261 V10.2.0: Sections 5.3.1, 5.4.1, 5.4.2; Figure 5.4.2-1 3GPP TS 25.211 V10.0.0: Sections 4.1.2.3, 4.2, 5.3.3.10 3GPP TS 43.013 V4.0.0: Sections 1, 4		
KPN006	KPN	CNZL201310055256.8	19 Feb 2029	15, 30, 32	3GPP TS 22.368 V10.5.0: Annex A 3GPP TS 23.003 V10.10.0: Section 2.1 3GPP TS 23.060 V10.14.0: Sections 5.3.0, 5.3.1, 5.3.6.4, 5.3.6.2.1, 5.3.6.2.3, 5.3.6.2.4, 5.6.3, 6.5.0, 14.1, 14.2 3GPP TS 24.008 V10.15.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11, 9.4.4, 13.2.1, 13.2.3	15, 30, 32	3GPP TS 22.368 V10.5.0: Annex A 3GPP TS 23.003 V10.10.0: Section 2.1 3GPP TS 23.060 V10.14.0: Sections 5.3.0, 5.3.1, 5.3.6.4, 5.3.6.2.1, 5.3.6.2.3, 5.3.6.2.4, 5.6.3, 6.5.0, 14.1, 14.2 3GPP TS 24.008 V10.15.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11, 9.4.4, 13.2.1, 13.2.3		
		EP2250835 (AT, BE, DE, DK, ES, FI, FR, GB, IE, IS, IT, NL, PL, SE)	19 Feb 2029	38	3GPP TS 23.060 V10.5.0: Sections 5.3.6.2.3, 5.3.6.2.4 3GPP TS 24.008 V10.4.0: Sections 4.1.1.7, 4.7.3.1.4, 9.4.4, 9.4.4.2; Table 9.4.4	38	3GPP TS 23.060 V10.5.0: Sections 5.3.6.2.3, 5.3.6.2.4 3GPP TS 24.008 V10.4.0: Sections 4.1.1.7, 4.7.3.1.4, 9.4.4, 9.4.4.2; Table 9.4.4		
		EP2337403 (DE, FI, FR, GB, NL, SE)	19 Feb 2029	35	3GPP TS 23.060 V10.5.0: sections 5.3.0, 5.3.1, 5.3.6.2.1, 5.3.6.2.3, 5.3.6.2.4, 5.6.3, 6.5.0, 14.1, 14.2 3GPP TS 23.003 V10.3.0: Section 2.1 3GPP TS 24.008 V10.4.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11, 9.4.4, 9.4.4.2 3GPP TS 22.368 V11.3.0: Annex A	35	3GPP TS 23.060 V10.5.0: sections 5.3.0, 5.3.1, 5.3.6.2.1, 5.3.6.2.3, 5.3.6.2.4, 5.6.3, 6.5.0, 14.1, 14.2 3GPP TS 23.003 V10.3.0: Section 2.1 3GPP TS 24.008 V10.4.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11, 9.4.4, 9.4.4.2 3GPP TS 22.368 V11.3.0: Annex A		
		JP5308459	19 Feb 2029	35	3GPP TS 23.060 V10.5.0: Sections 5.3.0, 5.3.1, 5.3.6.2.1, 5.3.6.2.3, 5.3.6.2.4, 5.3.6.4, 5.6.3, 6.5.0, 14.1 and 14.2 3GPP TS 23.003 V10.3.0: Section 2.1 3GPP TS 24.008 V10.4.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11, 9.4.4, 9.4.4.2, 9.4.22, 9.4.22.1 3GPP TS 22.368 V11.3.0: Annex A	35	3GPP TS 23.060 V10.5.0: Sections 5.3.0, 5.3.1, 5.3.6.2.1, 5.3.6.2.3, 5.3.6.2.4, 5.3.6.4, 5.6.3, 6.5.0, 14.1 and 14.2. 3GPP TS 23.003 V10.3.0: Section 2.1. 3GPP TS 24.008 V10.4.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11, 9.4.4, 9.4.4.2, 9.4.22 and 9.4.22.1. 3GPP TS 22.368 V11.3.0: Annex A.		
		KR10-1231986	19 Feb 2029	37	3GPP TS 22.368 V11.3.0: Annex A; Figures A-1, A-2, A-3, A-4 3GPP TS 23.003 V10.3.0: Section 2.1 3GPP TS 23.060 V10.5.0: Sections 5.3.0, 5.3.6.2.1, 5.3.6.2.3, 5.3.6.2.4, 5.6.3, 6.5.0, 14.1, 14.2 3GPP TS 24.008 V10.4.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11, 9.4.4, 9.4.4.2; Table 9.4.4				
		US10187904	19 Feb 2029	3, 7	3GPP TS 22.368 V10.5.0: Sections 3.1, 3.2, 4, 7, Annex A 3GPP TS 23.003 V10.10.0: Sections 2.1, 2.2, 2.4 3GPP TS 23.060 V10.14.0: Sections 5.3.0, 5.3.1, 5.3.6.2, 5.3.6.2.3, 5.3.6.2.4, 5.3.6.4, 5.3.13.2, 5.6.3, 6.5.0, 6.5.2, 9.2, 9.2.2, 14.1, 14.2 3GPP TS 24.008 V10.15.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11, 6.1.3.1.3, 9.4.4, 9.4.4.2, 9.5.3	3, 7	3GPP TS 22.368 V10.5.0: Sections 3.1, 3.2, 4, 7, Annex A 3GPP TS 23.003 V10.10.0: Sections 2.1, 2.2, 2.4 3GPP TS 23.060 V10.14.0: Sections 5.3.0, 5.3.1, 5.3.6.2, 5.3.6.2.3, 5.3.6.2.4, 5.3.6.4, 5.3.13.2, 5.6.3, 6.5.0, 6.5.2, 9.2, 9.2.2, 14.1, 14.2 3GPP TS 24.008 V10.15.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11, 6.1.3.1.3, 9.4.4, 9.4.4.2, 9.5.3	3, 7	3GPP TS 22.368 V15.0.0: Sections 1, 3.1, 3.2, 4, 5.1.2, 5.1.3, 7.1.1, Annex A; Figures 5-1, 5-2, 5-3 3GPP TS 23.003 V15.8.0: Sections 1, 1.2, 2.1, 2.2, 2.2A, 2.10.1; Figure 1 3GPP TS 23.501 V15.9.0: Sections 4.2.2, 4.2.3, 4.2.4, 5.1, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.3.1, 5.3.2.1, 5.3.2.2.1, 5.3.2.2.2, 5.3.3.3.1, 5.3.3.3.2, 5.6.1, 5.6.2, 5.9.1, 5.9.2, 5.9.3, 5.9.4, 5.19.1, 5.19.7.1, 5.19.7.2, 5.19.7.3, 5.19.7.4, 6.1, 6.2.1, 6.2.2; Figures 4.2.3-1, 4.2.4-1. 3GPP TS 24.501 V15.6.0: Sections 3.2, 4.1, 4.2, 5.1.1, 5.1.3.1, 5.1.3.2.1.1, 5.1.3.2.1.2.2, 5.1.3.2.1.2.4, 5.3.2, 5.3.3, 5.3.10, 5.3.11, 6.1.1, 6.2.3, 6.2.7, 6.2.8, 6.3.3.1, 6.3.3.2, 6.3.3.3, 8.3.3.1, 8.3.3.2, 8.3.14.1, 8.3.14.2; Figure 5.1.3.2.1.1.1; Tables 8.3.3.1.1, 8.3.14.1.1
		US9014667	23 Oct 2029	35	3GPP TS 22.368 V10.5.0: Sections 3.1, 3.2, 4, 7.11, Annex A 3GPP TS 23.003 V10.10.0: Sections 2.1 3GPP TS 23.060 V10.14.0: Sections 5.3.0, 5.3.1, 5.3.6.2.1, 5.3.6.2.2, 5.3.6.2.3, 5.3.6.2.4, 5.3.6.3, 5.3.6.4, 5.3.13.2, 5.6.3, 6.5.0, 6.8.2.2, 13.1, 13.2.1, 13.2.3, 13.4, 14.1, 14.2 3GPP TS 24.008 V10.15.0: Sections 4.1.1.7, 4.7.3.1.4, 6.1.3.11	35	3GPP TS 22.368 V10.5.0; sections 3.1, 3.2, 4, 7.1.1 and Annex: A: Informative 3GPP TS 22.003 V10.10.0; section 2.1 3GPP TS 23.060 V10.14.0: sections 5.3.0, 5.3.1, 5.3.6.2.1, 5.3.6.2.2, 5.3.6.2.3, 5.3.6.2.4, 5.3.6.3, 5.3.6.4, 5.3.13.2, 5.6.3,6.5.0, 6.8.2.2, 13.1, 13.2.1, 13.2.3, 13.4, 14.1 and 14.2 3GPP TS 24.008 V10.15.0; sections 4.1.1.7, 4.7.3.1.4 and 6.1.3.11		
KPN007	KPN	CNZL200880121914.6	22 Dec 2028	1	3GPP TS26.237 V10.8.0, Sections 4.3, 8.1, 8.2.3, 8.2.3.1, 8.2.3.2, 13, 13.2, 21, 21.1 and 21.1.1, Figures 3, 4, 7, 30 and 46 3GPP TS26.114 V10.8.0, sections 4.1, 6, 6.1, 6.2 and 6.2.1 and Figure 4.1	1	3GPP TS26.237 V10.8.0, Sections 4.3, 8.1, 8.2.3, 8.2.3.1, 8.2.3.2, 13, 13.2, 21, 21.1 and 21.1.1, Figures 3, 4, 7, 30 and 46 3GPP TS26.114 V10.8.0, sections 4.1, 6, 6.1, 6.2 and 6.2.1 and Figure 4.1		
		JP4987126	22 Dec 2028	1	3GPP TS 26.237 V10.8.0: Section 4.3, 7, 7.1, 8, 8.1, 8.2.3, 8.2.3.1, 8.2.3.2, 13, 13.1, 13.2; Figures 3, 4, 7, 30 3GPP TS 26.114 V10.8.0: Section 4.1, 6, 6.1; Figure 4.1 3GPP TS 26.346 V9.15.0: Section 5.2, 5.2.1, 5.2.3, 5.2.3.1, 5.2.4, 5.2.5, 5.2.5.1, 5.2.5.7, 5.2.5.8	1	3GPP TS 26.237 V10.8.0: Section 4.3, 7, 7.1, 8, 8.1, 8.2.3, 8.2.3.1, 8.2.3.2, 13, 13.1, 13.2; Figures 3, 4, 7, 30 3GPP TS 26.114 V10.8.0: Section 4.1, 6, 6.1; Figure 4.1 3GPP TS 26.346 V9.15.0: Section 5.2, 5.2.1, 5.2.3, 5.2.3.1, 5.2.4, 5.2.5, 5.2.5.1, 5.2.5.7, 5.2.5.8		

KPN007	KPN	US8549151	04 Jul 2029	1	3GPP TS 26.234 V10.5.0 Sections 5.6.1, 5.6.2 3GPP TS 26.237 V10.8.0 Sections 4.3, 8.1, 8.2.3.1, 8.2.3.2, 8.2.4.1, 8.2.4.2, 8.2.4.3, 13, 13.1, 13.2, 21, 21.1.1, 21.1.4; Figure 3, 4, 7, 8, 30, 46 3GPP TS 26.114 V10.8.0 Sections 4.1, 6.1, 6.2.1, 6.5; Figure 4.1	1	3GPP TS 26.234 V10.5.0 Sections 5.6.1, 5.6.2 3GPP TS 26.237 V10.8.0 Sections 4.3, 8.1, 8.2.3.1, 8.2.3.2, 8.2.4.1, 8.2.4.2, 8.2.4.3, 13, 13.1, 13.2, 21, 21.1.1, 21.1.4; Figure 3, 4, 7, 8, 30, 46 3GPP TS 26.114 V10.8.0 Sections 4.1, 6.1, 6.2.1, 6.5; Figure 4.1		
KPN008	KPN	EP2517495 (DE, ES, FI, FR, GB, NL, PL, SE)	16 Dec 2030			1	3GPP TS 32.521 V10.2.0: Section 4.1 3GPP TS 32.522 V10.6.0: Section 4.5.3.1 3GPP TS 36.331 V10.12.0: Sections 5.6.5.1, 5.6.5.2, 5.6.5.3, 5.6.6.1, 5.6.6.2 3GPP TS 37.320 V10.4.0: Sections 4.1, 5.1.1.1, 5.1.1.3.2, 5.1.1.3.3, 5.1.3, 5.1.4, 7, Annex A		
		USRE48089	08 Jan 2031	6	3GPP TS 37.320 V10.4.0: Sections 1, 3.1, 4.1, 5.1.1, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.3.2, 5.1.1.3.3, Annex A 3GPP TS 32.422 V10.13.0: Section 6 3GPP TS 36.331 V10.12.0: Sections 5.6.6, 5.6.6.1, 5.6.6.2, 6.2.2	6	3GPP TS 37.320 V10.4.0: Sections 1, 3.1, 4.1, 5.1.1, 5.1.1.1, 5.1.1.2, 5.1.1.3, 5.1.1.3.2, 5.1.1.3.3, Annex A 3GPP TS 32.422 V10.13.0: Section 6 3GPP TS 36.331 V10.12.0: Sections 5.6.6, 5.6.6.1, 5.6.6.2, 6.2.2		
KPN009	KPN	CNZL201080013541.8	19 Jan 2030	1, 5, 12, 13, 14	3GPP TS 23.228 V12.10.0: Sections U.1.0, U.1.2, U.1.3.1 and U.2.2, Figure U.1.2-1 3GPP TS 23.371 V12.4.0: Sections 1, 2, 4.1, 5D.1, 5D.2 and 7.1	1, 5, 12, 13, 14	3GPP TS 23.228 V12.10.0: Sections U.1.0, U.1.2, U.1.3.1 and U.2.2, Figure U.1.2-1 3GPP TS 23.371 V12.4.0: Sections 1, 2, 4.1, 5D.1, 5D.2 and 7.1	1, 5, 12, 13, 14	3GPP TS 23.228 V12.10.0: Sections U.1.0, U.1.2, U.1.3.1 and U.2.2, Figure U.1.2-1 3GPP TS 23.371 V12.4.0: Sections 1, 2, 4.1, 5D.1, 5D.2 and 7.1
		JP5436577	19 Jan 2030	17	3GPP TS 23.228 V12.4.0: Annex U.1.0, U.1.2, U.2.2; Fig. U.1.2-1 3GPP TS 24.371 V12.9.0: Sections 1, 2, 4.1 5D.1, 5D.2, 7.1	17	3GPP TS 23.228 V12.4.0: Annex U.1.0, U.1.2, U.2.2; Fig. U.1.2-1 3GPP TS 24.371 V12.9.0: Sections 1, 2, 4.1 5D.1, 5D.2, 7.1		
		US9667669	13 Oct 2030	1, 15, 16	3GPP TS 23.228 V12.10.0: Sections 4.6.1, U.1.0, U.1.2, U.1.3.1, U.2.2; Figure U.1.2-1 3GPP TS 23.371 V12.4.0: Sections 1, 2, 4.1, 5D.1, 5D.2, 7.1	1, 15, 16	3GPP TS 23.228 V12.10.0: Sections 4.6.1, U.1.0, U.1.2, U.1.3.1, U.2.2; Figure U.1.2-1 3GPP TS 23.371 V12.4.0: Sections 1, 2, 4.1, 5D.1, 5D.2, 7.1	1, 15,16	3GPP TS 23.228 V12.10.0: Sections 4.6.1, U.1.0, U.1.2, U.1.3.1, U.2.2; Figure U.1.2-1 3GPP TS 23.371 V12.4.0: Sections 1, 2, 4.1, 5D.1, 5D.2, 7.1
KPN010	KPN	US8660560	05 Oct 2030	1, 9	3GPP TS 37.320 V10.4.0: Sections 3.1, 4.1, 5.1.1, 5.1.1.1, 5.1.1.2, 5.1.1.3.2, 5.1.1.3.3; Figure 5.1.1.1-1 3GPP TS 25.484 V10.2.0: Section 4.1; Figure 4.1-1 3GPP TS 32.422 V10.13.0: Sections 4.1.1.2a, 4.1.5, 6; Figure 6.2 3GPP TS 25.331 V10.15.0: Sections 8.5.63, 8.5.63.1, 8.5.63.2, 8.5.64.1, 8.5.64.2, 8.5.64.3, 10.2, 10.2.16da, 10.2.48, 10.2.48.8, 10.2.48.8.6, 10.2.48.8.7, 10.2.48.8.14, 10.2.48.8.15, 10.3.7, 10.3.7.13, 10.3.7.23, 10.3.7.33, 11.3; Figure 8.5.64.1-1 3GPP TS 25.304 V10.7.0: Section 5.7 3GPP TS 25.306 V10.10.0: Section 4.7, 4.15	1, 9	3GPP TS 37.320 V10.4.0: Sections 3.1, 4.1, 5.1.1, 5.1.1.1, 5.1.1.2, 5.1.1.3.2, 5.1.1.3.3; Figure 5.1.1.1-1 3GPP TS 25.484 V10.2.0: Section 4.1; Figure 4.1-1 3GPP TS 32.422 V10.13.0: Sections 4.1.1.2a, 4.1.5, 6; Figure 6.2 3GPP TS 25.331 V10.15.0: Sections 8.5.63, 8.5.63.1, 8.5.63.2, 8.5.64.1, 8.5.64.2, 8.5.64.3, 10.2, 10.2.16da, 10.2.48, 10.2.48.8, 10.2.48.8.6, 10.2.48.8.7, 10.2.48.8.14, 10.2.48.8.15, 10.3.7, 10.3.7.13, 10.3.7.23, 10.3.7.33, 11.3; Figure 8.5.64.1-1 3GPP TS 25.304 V10.7.0: Section 5.7 3GPP TS 25.306 V10.10.0: Section 4.7, 4.15		
KPN011*	KPN	EP0831613 (BE, CH, DE, ES, FI, FR, GB, IE, IT, LU, NL, SE)	21 Nov 2016			1	3GPP TS 36.212 V8.8.0: Sections 5, 5.1.1, 5.1.2, 5.3.2, 5.3.2.1; Figure 5.3.2-1		
KPN012	KPN	EP2299649 (DE, ES, FI, FR, GB, HU, IT, NL, PL, SE)	16 Sep 2030			1, 15	3GPP TS 23.228 V10.4.0: Sections 3.1, 4.14, 3GPP TS 24.229 V10.3.0: Sections 1, 3.2, 5.3, 5.3.2, 5.3.2.1, 5.3.2.1A, 5.4, 5.4.3.1, 5.4.3.2, 5.7, 5.7.1.3A, 5.7.1.7, 5.7.1.7.25.10, 5.10.1, 5.10.3, 5.10.3.2, 7.2A, 7.2A.6, 7.2A.6.1, 7.2A.6.3 ETSI TS 124 229 V10.3.0		
		JP5237340	17 Sep 2030			1, 15	3GPP TS 23.228 V10.4.0: Sections 3.1, 4.14, 3GPP TS 24.229 V10.3.0: Sections 1, 3.2, 5.3, 5.3.2, 5.3.2.1, 5.3.2.1A, 5.4, 5.4.3.1, 5.4.3.2, 5.7, 5.7.1.3A, 5.7.1.7, 5.7.1.7.25.10, 5.10.1, 5.10.3, 5.10.3.2, 7.2A, 7.2A.6, 7.2A.6.1, 7.2A.6.3 ETSI TS 124 229 V10.3.0		
		US8601141	31 Jan 2031			1, 15	3GPP TS 23.228 V10.4.0: Sections 3.1, 4.14, 3GPP TS 24.229 V10.3.0: Sections 1, 3.2, 5.3, 5.3.2, 5.3.2.1, 5.3.2.1A, 5.4, 5.4.3.1, 5.4.3.2, 5.7, 5.7.1.3A, 5.7.1.7, 5.7.1.7.25.10, 5.10.1, 5.10.3, 5.10.3.2, 7.2A, 7.2A.6, 7.2A.6.1, 7.2A.6.3 ETSI TS 124 229 V10.3.0		
KPN014	KPN	EP2567564 (DE, FI, FR, GB, NL, SE)	04 May 2031			1	3GPP TS 32.551 V11.3.1: Sections 3.1, 4.1.1 3GPP TS 36.300 V11.9.0: Sections 20.2.2.15, 22.4.4.2 3GPP TS 36.413 V11.6.0: Sections B.1.14		
KPN015*	KPN	AU684543	31 Aug 2014			1	3GPP TS 22.278 V10.2.0: 2010-09: section 7.2 3GPP TS 23.402 V10.0.0: 2010-06: section 4.5.1, 4.8.2.1		
		EP0716797 (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, NL, PT, SE)	31 Aug 2014			1	3GPP TS 22.278 V10.2.0: Section 7.2 3GPP TS 23.402 V10.0.0: Section 4.5.1, 4.8.2.1		
		JP3525258	10 May 2019			1	3GPP TS 22.278 V10.2.0: 2010-09: section 7.2 3GPP TS 23.402 V10.0.0: 2010-06: section 4.5.1, 4.8.2.1		
KPN017	KPN	EP2566263 (DE, FI, FR, GB, IT, NL, PL, SE)	05 Oct 2030			1, 2, 9	3GPP TS 23.003 V13.10.0 (included by reference in TS 23.682 V13.9.0 and in TS 36.331 V13.6.1): Section 15.3 3GPP TS 23.246 V13.3.0 (included by reference in TS 23.682 V13.9.0 and in TS 36.331 V13.6.1): Sections 3.1, 4.4.3, 4.4.3.3, 4.4.3.4; Figure 4 3GPP TS 23.682 V13.9.0: Sections 1, 4.2, 4.5.5, 5.5.1; Figure 5.5.1-1 3GPP TS 36.331 V13.6.1: Sections 5.8.1.1, 5.8.2.1, 6.2.2, 6.3.7; Figure 5.8.2.1-1		
KPN018	KPN	US9699820	29 Aug 2033	1		16	3GPP TS 23.303 V12.8.0: Sections 5.6.2; Annex A.2		
KPN019	KPN	CNZL200980152983.8	28 Oct 2029			19	3GPP TS 23.401 V13.6.0: Sections 4.11, 5.3.2.1, 5.3.4B, 5.3.4B.1, 5.3.4B.2; Figure 5.3.2.1-1, 5.3.4B.2-1 3GPP TS 23.682 V13.5.0: Section 5.13.4; Figure 5.13.4-1		
		US9372098	13 Dec 2030			1, 15, 17, 21	3GPP TS 23.401 V13.8.0: Sections 4.11, 5.3.4 B, 5.3.4 B.1; Figure 5.3.4. B-1 3GPP TS 23.682 V13.6.0: Section 5.13.4; Figure 5.13.4-1	1, 21	3GPP TS 23.401 V16.4.0 (included by reference into TS 23.501): Sections 4.10 3GPP TS 23.501 V16.2.0: Sections 5.31.1, 5.31.4.1 3GPP TS 23.502 V16.2.0: Sections 4.24.1, 4.25.4; Figures 4.24.1-1, 4.25.4-1 3GPP TS 24.501 V16.4.1: Sections 4.1, 5.3.21, 5.6.1.1, 5.6.1.2.2, 5.6.1.4.2
KPN020	KPN	US9820134	23 Jan 2034			1, 10, 11, 12	3GPP TS 23.303 V13.6.0: Sections 3.1, 3.2, 4.6.4.2a, 5.3.1.2, 5.3.2A, 5.3.3A.2, 5.3.3A.4; Figures 5.3.2A-1, 5.3.3A.2A-1, 5.3.3A.4A-1		
KPN021	KPN	EP2656648 (DE, FI, FR, GB, IT, NL, SE)	06 Dec 2031			1, 9	3GPP TS 33.163 V15.3.0: Sections 3.1, 4.5, 4.6.2.2, 5.1.0, 5.1.3; Figures 4.6.2.2-1; Table: 5.1.3-1		

ID	Company	Patent Number	Date	#	3GPP Reference			#	3GPP Reference
KPN022	KPN	US9907101	15 Jul 2034					1, 12,19	3GPP TS 23.501 V15.4.0: Sections 1, 3.1, 3.2, 4.2.1, 4.2.2, 5.1, 5.2.1, 5.3.1, 5.3.2.1, 5.3.2.2.1, 5.3.2.2.2, 5.6.1, 5.6.2, 8.2.2.1, 8.2.2.2; Figure 8.2.2.2-1 3GPP TS 23.502 V15.4.0: Sections 4.2.2.2.1, 4.2.2.2.2, 4.3.2.1, 4.3.2.2.1, 5.2.2.2.1, 5.2.2.2.2, 5.2.3.3.1, 5.2.3.3.2; Figures 4.2.2.2.2-1, 4.3.2.2.1-1; Tables 5.2.2.2.2-1, 5.2.3.3.1-1 3GPP TS 38.202 V15.3.0: Sections 5, 5.1.1; Figure 5.1.1-1
KPN023	KPN	EP2377337 (DE, FR, GB, IT, NL)	15 Dec 2029					1, 12	3GPP TS 33.501 V15.0.0: Section 3.2, 6.1.1.1, 6.1.1.4.1, 6.1.1.4.2, 6.1.2, 6.1.3.2.0, Annex A.4
		US8881235	09 Jul 2030					1,10	3GPP TS 33.501 V15.0.0: Section 4.1, 6.1.1.1, 6.1.1.4.1, 6.1.1.4.2, 6.1.2, 6.1.3.2; Annex A4; Figure 6.1.2-1
LGE001*	3G Licensing	CNZL200410049109.0	15 Mar 2020	1, 3	3GPP TS 25.211 V6.10.0: Sections 5.2, 5.2.1, 5.2.1.1; Figure 1; Table 3				
		EP1850511 (DE, ES, FI, FR, GB, IT, NL, SE)	15 Mar 2020	1	3GPP TS 25.211 V6.10.0: Sections 5.2, 5.2.1, 5.2.1.1; Figure 1; Table 3				
		EP2081306 (DE, ES, FI, FR, GB, IT, NL, SE)	15 Mar 2020	1	3GPP TS 25.211 V6.10.0: Sections 5.2, 5.2.1, 5.2.1.1; Figure 1; Table 3				
		JP4318963	15 Mar 2020	1	3GPP TS 25.211 V6.10.0: Sections 5.2, 5.2.1, 5.2.1.1; Figure 1; Table 3				
		US7496132	30 Jan 2021	1	3GPP TS 25.211 V6.10.0: Sections 5.2, 5.2.1, 5.2.1.1; Figure 1; Table 3				
LGE002	3G Licensing	EP1483850 (DE, FR, GB, IT, NL, SE)	11 Feb 2023	1	3GPP TS 25.212 V6.10.0: Section 4.7.1.2; Table 14				
		GB2412553	14 Feb 2023	1	3GPP TS 25.212 V6.10.0: Section 4.7.1.2; Table 14				
		HK1084252	14 Feb 2023	1	3GPP TS 25.212 V6.10.0: Section 4.7.1.2; Table 14				
		IN201131	11 Feb 2023	1	3GPP TS 25.212 V6.10.0: Section 4.7.1.2; Table 14				
		JP4383887	11 Feb 2023	1	3GPP TS 25.212 V6.10.0: Section 4.7.1.2; Table 14				
		US7319718	03 Feb 2026	15	3GPP TS 25.212 V6.10.0: Section 4.7.1.2; Table 14				
LGE004	3G Licensing	AU2005249137	11 May 2025	1	3GPP TS 25.331 V6.26.0: Sections 8.1.1.6.5, 10.3.5.2a, 10.3.6.55				
		CNZL200580017591.2	11 May 2025	1	3GPP TS 25.331 V6.26.0: Sections 8.1.1.6.5, 10.3.5.2a, 10.3.6.55				
		IN253908	11 May 2025	1	3GPP TS 25.331 V6.26.0: Sections 8.1.1.6.5, 10.3.5.2a, 10.3.6.55				
		KR10-1141326	11 May 2025	1	3GPP TS 25.331 V6.26.0: Sections 8.1.1.6.5, 10.3.5.2a, 10.3.6.55				
		MX261740	11 May 2025	1	3GPP TS 25.331 V6.26.0: Sections 8.1.1.6.5, 10.3.5.2a, 10.3.6.55				
		RU2346392	11 May 2025	1	3GPP TS 25.331 V6.26.0: Sections 8.1.1.6.5, 10.3.5.2a, 10.3.6.55				
		US7580388	16 Mar 2027	1	3GPP TS 25.331 V6.26.0: Sections 8.1.1.6.5, 10.3.5.2a, 10.3.6.55				
		US7715344	25 Feb 2025	1	3GPP TS 25.331 V6.26.0: Sections 8.1.1.6.5, 10.3.5.2a, 10.3.6.55				
LGE006	3G Licensing	AU2005227794	30 Mar 2025	10	3GPP TS 25.211 V6.7.0: Sections 4.1.1.2, 5.3.3.14; Figure 26C 3GPP TS 25.309 V6.5.0: Section 9.1 3GPP TS 25.321 V6.8.0: Sections 8.1.2, 11.8.1.4				
		MX269368	30 Mar 2025	16	3GPP TS 25.211 V6.7.0: Sections 4.1.1.2, 5.3.3.14; Figure 26C 3GPP TS 25.309 V6.5.0: Section 9.1 3GPP TS 25.321 V6.8.0: Sections 8.1.2, 11.8.1.4				
		RU2381633	30 Mar 2025	16	3GPP TS 25.211 V6.7.0: Sections 4.1.1.2, 5.3.3.14; Figure 26C 3GPP TS 25.309 V6.5.0: Section 9.1 3GPP TS 25.321 V6.8.0: Sections 8.1.2, 11.8.1.4				
LGE009	3G Licensing	AU2005287986	29 Sep 2025	1	3GPP TS 25.301 V6.6.0: Sections 5.3.1.1.2.1; Figure 4 3GPP TS 25.321 V6.18.0: Sections 9.1.5; Figures 9.1.5.1, 9.1.5.2				
		BRPI0516317-0	29 Sep 2029	1	3GPP TS 25.301 V6.6.0: Sections 5.3.1.1.2.1; Figure 4 3GPP TS 25.321 V6.18.0: Sections 9.1.5; Figures 9.1.5.1, 9.1.5.2				
		CNZL200580033248.7	29 Sep 2025	1, 21	3GPP TS 25.301 V6.6.0: Sections 5.3.1.1.2.1; Figure 4 3GPP TS 25.321 V6.18.0: Sections 9.1.5; Figures 9.1.5.1, 9.1.5.2				
		EP1794987 (DE, ES, FI, FR, IT, NL, SE)	29 Sep 2025	1	3GPP TS 25.301 V6.6.0: Sections 5.3.1.1.2.1; Figure 4 3GPP TS 25.321 V6.18.0: Sections 9.1.5; Figures 9.1.5.1, 9.1.5.2				
		EP2252037 (DE, FR, GB, NL)	29 Sep 2025	1	3GPP TS 25.301 V6.6.0: Sections 5.3.1.1.2.1; Figure 4 3GPP TS 25.321 V6.18.0: Sections 9.1.5; Figures 9.1.5.1, 9.1.5.2				
		IN283724	29 Sep 2025	1	3GPP TS 25.301 V6.6.0: Sections 5.3.1.1.2.1; Figure 4 3GPP TS 25.321 V6.18.0: Sections 9.1.5; Figures 9.1.5.1, 9.1.5.2				
		JP4965723	29 Sep 2025	1	3GPP TS 25.301 V6.6.0: Sections 5.3.1.1.2.1; Figure 4 3GPP TS 25.321 V6.18.0: Sections 9.1.5; Figures 9.1.5.1, 9.1.5.2				
		KR10-1141650	15 Jun 2025	1	3GPP TS 25.301 V6.6.0: Sections 5.3.1.1.2.1; Figure 4 3GPP TS 25.321 V6.18.0: Sections 9.1.5; Figures 9.1.5.1, 9.1.5.2				
		US7649907	07 Jul 2027	1	3GPP TS 25.301 V6.6.0: Sections 5.3.1.1.2.1; Figure 4 3GPP TS 25.321 V6.18.0: Sections 9.1.5; Figures 9.1.5.1, 9.1.5.2				
		US7830913	29 Sep 2025	1	3GPP TS 25.301 V6.6.0: Sections 5.3.1.1.2.1; Figure 4 3GPP TS 25.321 V6.18.0: Sections 9.1.5; Figures 9.1.5.1, 9.1.5.2				
LGE011	3G Licensing	US8923237	25 Nov 2026	1	3GPP TS 25.322 V7.10.0: Sections 1, 3.2, 4.2, 4.2.1, 4.2.1.2, 4.2.1.2.2, 8, 8.1, 8.2, 9.2.2.3, 9.5, 9.6, 9.7.10; Figure 4.3a; Table 8.1				
		US9078254	31 Jul 2026	1	3GPP TS 25.322 V7.10.0: Sections 1, 3.2, 4.2, 4.2.1, 4.2.1.2, 4.2.1.2.2, 8, 8.1, 8.2, 9.2.2.3, 9.5, 9.6, 9.7.10; Figure 4.3a; Table 8.1				
		US9179460	31 Jul 2026	1	3GPP TS 25.322 V7.10.0: Sections 1, 3.2, 4.2, 4.2.1, 4.2.1.2, 4.2.1.2.2, 8, 8.1, 8.2, 9.2.2.3, 9.5, 9.6, 9.7.10; Figure 4.3a; Table 8.1				
		US9504030	31 Jul 2026	1	3GPP TS 25.322 V7.10.0: Sections 1, 3.2, 4.2, 4.2.1, 4.2.1.2, 4.2.1.2.2, 8, 8.1, 8.2, 9.2.2.3, 9.5, 9.6, 9.7.10; Figure 4.3a; Table 8.1				
LGE015	3G Licensing	US9319198	03 May 2025	3	3GPP TS 25.214 V6.11.0: Sections 3.2, 4.2.4.4, 6B, 6B.1 3GPP TS 25.321 V6.18.0: Sections 9.2.5, 9.2.5.1 3GPP TS 25.433 V6.17.0: Sections 9.1.17				
		US9923697	06 Jul 2025	4	3GPP TS 25.214 V6.11.0: Sections 3.2, 4.2.4.4, 6B, 6B.1 3GPP TS 25.321 V6.18.0: Sections 9.2.5, 9.2.5.1 3GPP TS 25.433 V6.17.0: Sections 9.1.17				
LGE019	3G Licensing	EP1315356 (DE, FI, FR, GB, IT, NL, SE)	22 Nov 2022	13	3GPP TS 25.323 V6.11.0: Section 5.1.2.3 3GPP TS 25.322 V6.12.0: Sections 8.1, 8.2; Table 8.1				
		IN206735	23 Nov 2022	14	3GPP TS 25.323 V6.11.0: Section 5.1.2.3 3GPP TS 25.322 V6.12.0: Sections 8.1, 8.2; Table 8.1				
		KR10-0765122	24 Nov 2021	30	3GPP TS 25.323 V6.11.0: Section 5.1.2.3 3GPP TS 25.322 V6.12.0: Sections 8.1, 8.2; Table 8.1				
		US7486699	08 Oct 2025	13	3GPP TS 25.323 V6.11.0: Section 5.1.2.3 3GPP TS 25.322 V6.12.0: Sections 8.1, 8.2; Table 8.1				
LGE023	3G Licensing	AU2004307900	03 Nov 2024	1	3GPP TS 25.321 V6.18.0: Section 11.6.2.3.2				
		BRPI0414892-4	03 Nov 2028	1	3GPP TS 25.321 V6.18.0: Section 11.6.2.3.2				

LGE023	3G Licensing	EP1683282 (DE, FI, FR, GB, IT, NL)	03 Nov 2024	1	3GPP TS 25.321 V6.18.0: Section 11.6.2.3.2				
		IN257749	03 Nov 2024	1	3GPP TS 25.321 V6.18.0: Section 11.6.2.3.2				
		JP4599361	03 Nov 2024	1	3GPP TS 25.321 V6.18.0: Section 11.6.2.3.2				
		KR10-1158912	10 Nov 2023	1	3GPP TS 25.321 V6.18.0: Section 11.6.2.3.2				
		RU2360363	03 Nov 2024	1	3GPP TS 25.321 V6.18.0: Section 11.6.2.3.2				
		US7593407	13 Nov 2026	1	3GPP TS 25.321 V6.18.0: Section 11.6.2.3.2				
		US7809000	09 Nov 2024	1	3GPP TS 25.321 V6.18.0: Section 11.6.2.3.2				
LGE027*	3G Licensing	US7656803	27 Aug 2020	1	3GPP TS 25.301 V8.7.0: Sections 5.1; Figure 2 3GPP TS 25.321 V8.17.0: Section 11.1 3GPP TS 25.331 V8.6.0: Section 14.4.2				
LGE032*	3G Licensing	CNZL01131011.1	31 Aug 2021	37	3GPP TS 25.322 V7.10.0: Sections 4.2.1.3, 9.2.2.1, 9.7.8; Figure 4.4, 9.19, 9.20				
		KR10-0365356	07 Oct 2020	2	3GPP TS 25.322 V7.10.0: Sections 4.2.1.3, 9.2.2.1, 9.7.8; Figure 4.4, 9.19, 9.20				
		US7154873	04 Feb 2024	12	3GPP TS 25.322 V7.10.0: Sections 4.2.1.3, 9.2.2.1, 9.7.8; Figure 4.4, 9.19, 9.20				
		US8325692	12 Jul 2022	4	3GPP TS 25.322 V7.10.0: Sections 4.2.1.3, 9.2.2.1, 9.7.8; Figure 4.4, 9.19, 9.20				
LGE034*	3G Licensing	CNZL02103099.5	19 Feb 2022	41	3GPP TS 25.321 V6.18.0: Sections 9.2.5.2.1, 9.2.5.3.1, 11.8.1.3 3GPP TS 25.212 V6.10.0: Section 4.11.2; Table 17				
		US7215653	30 Sep 2024	37	3GPP TS 25.321 V6.18.0: Sections 9.2.5.2.1, 9.2.5.3.1, 11.8.1.3 3GPP TS 25.212 V6.10.0: Sections 4.11.2; Table 17				
LGE036	3G Licensing	US9635142	25 Aug 2023			9	3GPP TS 36.331 V8.21.0: Sections 5.3.10.3, 6.3.2 3GPP TS 36.323 V8.6.0: Section 5.5.1	9	3GPP TS 38.323 V15.6.0: Sections 4.4., 5.7.1, 5.7.2, 5.7.3, 5.7.5; Table 5.7.1-1 3GPP TS 38.331 V15.6.0: Title; Sections 1, 3, 2, 5.3.5.1, 5.3.5.6.1, 5.3.5.6.5, 6.2.2, 6.3.2; Figure 5.3.5.1-1
LGE037*	3G Licensing	US8451818	26 Jun 2020	1	3GPP TS 25.322 V8.9.0: Sections 4.2, 4.2.1.1, 4.2.1.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.3, 9.2.1.3; Figures 4.2, 4.3, 4.4, 9.2				
LGE038*	3G Licensing	US7782833	03 Jul 2020			1	3GPP TS 36.321 V8.12.0: Sections 1, 3.2, 4.2.1, 4.3.1, 4.3.2, 4.4, 4.5, 4.5.1, 4.5.2, 4.5.3, 4.5.3.1, 4.5.3.2, 6.1.1, 6.1.2, 6.2.1; Figures 4.2.1.1, 4.5.3.1-1, 4.5.3.2-1, 6.1.2-1, 6.1.2-2, 6.1.2-3; Tables 4.4-1, 4.5.1-1, 4.5.2-1, 4.5.3.1-1, 4.5.3.2-1 3GPP TS 36.322 V8.8.0: Sections 3.2, 4.2.1, 4.3.2; Figure 4.2.1-1		
LGE041	3G Licensing	JP5685564	18 Jun 2027			1	3GPP TS 36.321 V8.12.0: Sections 5.3.2.1, 5.3.2.2 3GPP TS 36.212 V.8.8.0: Section 5.2.3.1 3GPP TS 36.213 V8.8.0: Section 10.1	1	3GPP TR 21.905 V15.1.0: Section 4 3GPP TS 38.213 V15.12.0: Sections 9.1, 9.1.2, 9.1.2.1 3GPP TS 38.321 V15.12.0: Sections 3.1, 3.2, 5.3.1, 5.3.2.1, 5.3.2.2 3GPP TS 38.213 V15.12.0: Sections 9.2, 9.2.6
		US8130819	15 Jun 2027			1	3GPP TS 36.321 V8.12.0: Sections 5.3.2.1, 5.3.2.2 3GPP TS 36.212 V.8.8.0: Section 5.2.3.1 3GPP TS 36.213 V8.8.0: Section 10.1	1,2	3GPP TR 21.905 V15.1.0: Section 4 3GPP TS 38.213 V15.12.0: Sections 9.1, 9.1.2, 9.1.2.1 3GPP TS 38.321 V15.12.0: Sections 3.1, 3.2, 5.3.1, 5.3.2.1, 5.3.2.2 3GPP TS 38.213 V15.12.0: Sections 9.2, 9.2.6
LNG001	Sisvel International	CNZL201410090475.4	12 Mar 2034			1	3GPP TS 36.212 V12.3.0: Sections 5.3.3, 5.3.3.1.1, 5.3.3.1.8 3GPP TS 36.213 V12.4.0: Sections 7.1, 8.0; Table 8-2 3GPP TS 36.306 V12.3.0: Sections 4.3.4, 4.3.4.28		
		EP3537814 (DE, ES, FR, GB, IT, NL)	05 Aug 2034			1	3GPP TS 36.212 V12.3.0: Sections 5.3.3, 5.3.3.1.1, 5.3.3.1.8 3GPP TS 36.213 V12.4.0: Sections 7.1, 8.0; Table 8-2 3GPP TS 36.306 V12.3.0: Sections 4.3.4, 4.3.4.28		
		KR10-2251839	05 Aug 2034			1	3GPP TS 36.212 V12.3.0: Sections 5.3.3, 5.3.3.1.1, 5.3.3.1.8 3GPP TS 36.213 V12.4.0: Sections 7.1, 8.0; Table 8-2 3GPP TS 36.306 V12.3.0: Sections 4.3.4, 4.3.4.28		
		US10498520	05 Aug 2034			1, 11	3GPP TS 36.213 V12.4.0: Sections 7.1, 8.0; Table 8-2 3GPP TS 36.306 V12.3.0: Sections 4.3.4.28 3GPP TS 36.212 V12.3.0: Sections 5.3.3, 5.3.3.1.1, 5.3.3.1.8		
		US9973324	21 Jan 2035			1, 11	3GPP TS 36.212 V12.3.0: Sections 5.3.3, 5.3.3.1.1, 5.3.3.1.8 3GPP TS 36.213 V12.4.0: Sections 7.1, 8.0; Table 8-2 3GPP TS 36.306 V12.3.0: Section 4.3.4		
LNG002	Sisvel International	CNZL201410852934.8	26 Dec 2034			1, 5, 9, 13	3GPP TS 36.212 V13.0.0: Sections 1, 5.3.3, 5.3.3.1, 5.3.3.1.1, 5.3.3.1.2, 5.3.3.1.3, 5.3.3.1.3A, 5.3.3.1.4A, 5.3.3.1.5, 5.3.3.1.5A, 5.3.3.1.5B, 5.3.3.1.5C, 5.3.3.1.5D, 5.3.3.1.8 3GPP TS 36.331 V13.1.0: Sections 1, 4.1, 5.3.5.1, 6.2.2, 6.3.2, 6.3.4, 6.4; Figures5.3.5.1-1, 5.3.5.1-2 3GPP TS 36.213 V13.1.0: Sections 7.1, 8.0		
		EP3240345 (DE, ES, FR, GB, IT, NL, PL)	28 Dec 2035			1	3GPP TS 36.212 V13.0.0: Sections 1, 5.3.3, 5.3.3.1, 5.3.3.1.1, 5.3.3.1.2, 5.3.3.1.3, 5.3.3.1.3A, 5.3.3.1.4A, 5.3.3.1.5, 5.3.3.1.5A, 5.3.3.1.5B, 5.3.3.1.5C, 5.3.3.1.5D, 5.3.3.1.8 3GPP TS 36.331 V13.1.0: Sections 1, 4.1, 5.3.5.1, 6.2, 6.2.2, 6.3.2, 6.3.4, 6.4, 8.0; Figures 5.3.5.1-1, 5.3.5.1-2 3GPP TS 36.213 V13.1.0: Sections 7.1, 8.0 3GPP TS 23.003 V8.17.0: Section 7.1	1	3GPP TS 38.212 V15.8.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.1.2, 7.3.1.2.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.9.0: Section 10.1 3GPP TS 38.300 V15.9.0: Sections 5.4.1, 7.1, 7.7 3GPP TS 38.331 V15.9.0: Sections 3.1, 3.2, 5.1.3, 5.3.3.1, 5.3.5.1, 5.3.5.5.1, 5.3.5.5.9, 6.2, 6.3.2, 6.4; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.5.1-2
		KR10-2483737	28 Dec 2035			1	3GPP TS 36.212 V13.0.0: Sections 1, 5.3.3, 5.3.3.1, 5.3.3.1.1, 5.3.3.1.2, 5.3.3.1.3, 5.3.3.1.3A, 5.3.3.1.4A, 5.3.3.1.5, 5.3.3.1.5A, 5.3.3.1.5B, 5.3.3.1.5C, 5.3.3.1.5D, 5.3.3.1.8 3GPP TS 36.331 V13.1.0: Sections 1, 4.1, 5.3.5.1, 6.2, 6.2.2, 6.3.2, 6.3.4, 6.4, 8.0; Figures 5.3.5.1-1, 5.3.5.1-2 3GPP TS 36.213 V13.1.0: Sections 7.1, 8.0 3GPP TS 23.003 V8.17.0: Section 7.1	1	3GPP TS 38.212 V15.8.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.1.2, 7.3.1.2.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.9.0: Section 10.1 3GPP TS 38.300 V15.9.0: Sections 5.4.1, 7.1, 7.7 3GPP TS 38.331 V15.9.0: Sections 3.1, 3.2, 5.1.2, 5.1.3, 5.3.3.1, 5.3.5.1, 5.3.5.5.1, 5.3.5.5.9, 6.2, 6.3.2, 6.4; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.5.1-2
		US10412748	14 Apr 2036			1	3GPP TS 36.212 V13.0.0: Sections:5.3.3, 5.3.3.1, 5.3.3.1.1, 5.3.3.1.2, 5.3.3.1.3 3GPP TS 36.331 V13.1.0: Sections6.2, 6.2.2, 6.3.2, 6.3.4, 6.4, 8.0 3GPP TS 23.003 V8.17.0: Section7.1	1,9	3GPP TS 38.212 V15.8.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.1.2, 7.3.1.2.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.9.0: Section 10.1 3GPP TS 38.300 V15.9.0: Sections 5.4.1, 7.1, 7.7 3GPP TS 38.331 V15.9.0: Sections 3.1, 3.2, 5.1.2, 5.1.3, 5.3.3.1, 5.3.5.1, 5.3.5.5.1, 5.3.5.5.9, 6.2, 6.3.2, 6.4; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.5.1-2
LNG003	Sisvel International	US9749969	12 Feb 2035			1, 9	3GPP TS 36.331 V13.1.0: Sections 3.1, 3.2, 4.2.2, 5.2.1.1, 5.2.2.1, 5.3.3.1, 6.2.2, 6.3.1, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1 3GPP TS 36.213 V12.5.0: Sections 5.1.2, 5.1.2.1, 5.1.4, 5.1.4.1, 5.1.4.2 3GPP TS 36.101 V12.5.0: Sections 6.2.5		
LNG004	Sisvel International	CNZL201510040667.9	27 Jan 2035			1, 8	3GPP TS 36.321 V14.3.0: Sections 5.4.4 3GPP TS 36.331 V14.3.0: Sections 3.1, 6.3.2 3GPP TS 36.213 V14.7.0: Sections 10, 10.1, 10.1.1, 10.1.5		

LNG004	Sisvel International	EP3253144 (DE, ES, FR, GB, IT, NL, PL)	28 Dec 2035			1, 8	3GPP TS 36.321 V14.3.0: Sections 3.1, 3.2, 5.4, 5.4.4 3GPP TS 36.331 V14.3.0: Sections 3.1, 6.3, 6.3.2 3GPP TS 36.213 V14.7.0: Sections 10, 10.1, 10.1.5	1, 8	3GPP TS 38.101-1 V16.9.0: Section 6.1 3GPP TS 38.202 V16.2.0: Sections 6, 6.1; Tables 6.1-1, 6.1-2 3GPP TS 38.211 V16.7.0: Sections 4.1, 4.3.1, 4.3.2, 4.4.2, 4.4.3, 4.4.4.1, 4.4.5, 4.5, 6.1.1, 6.2, 6.3.2.1; Table 6.3.2.1-1 3GPP TS 38.213 V16.7.0: Sections 3.3, 7.2, 9, 9.2, 9.2.1, 9.2.2, 9.2.4, 9.2.5, 9.2.5.1, 9.2.5.2; Tables 9.2.5-1, 9.2.5-2, 9.2.5.2-1 3GPP TS 38.321 V16.6.0: Section 5.4.4 3GPP TS 38.331 V16.6.0: Sections 3.1, 3.2, 4.2.1, 5.1.2, 5.3.3.1, 5.3.5.1, 5.3.5.5.1, 5.3.13.1, 6.2, 6.3.2; Figures 4.2.1-1, 4.2.1-2. 5.3.3.1-1, 5.3.5.1-1, 5.3.5.1-2, 5.3.13.1-1
		US10362566	29 Feb 2036			1	3GPP TS 36.321 V14.3.0: Sections 3.1, 3.2, 5.4, 5.4.4 3GPP TS 36.331 V14.3.0: Sections 3.1, 6.3, 6.3.2 3GPP TS 36.213 V14.7.0: Sections 10, 10.1, 10.1.5	1, 7	3GPP TS 38.101-1 V16.9.0: Section 6.1 3GPP TS 38.202 V16.2.0: Sections 6, 6.1; Tables 6.1-1, 6.1-2 3GPP TS 38.211 V16.7.0: Sections 4.1, 4.3.1, 4.3.2, 4.4.2, 4.4.3, 4.4.4.1, 4.4.5, 4.5, 6.1.1, 6.2, 6.3.2.1; Table 6.3.2.1-1 3GPP TS 38.213 V16.7.0: Sections 3.3, 7.2, 9, 9.2, 9.2.1, 9.2.2, 9.2.4, 9.2.5, 9.2.5.1, 9.2.5.2; Tables 9.2.5-1, 9.2.5-2, 9.2.5.2-1 3GPP TS 38.321 V16.6.0: Section 5.4.4 3GPP TS 38.331 V16.6.0: Sections 3.1, 3.2, 4.2.1, 5.1.2, 5.3.3.1, 5.3.5.1, 5.3.5.5.1, 5.3.13.1, 6.2, 6.3.2; Figures 4.2.1-1, 4.2.1-2. 5.3.3.1-1, 5.3.5.1-1, 5.3.5.1-2, 5.3.13.1-1
LNG005	Sisvel International	US10064176	09 Jun 2034			1, 6, 9	3GPP TS 36.331 V12.5.0: Sections 5.1.1, 5.10.1, 5.10.1a, 5.10.2.1, 5.10.2.2, 5.10.7.1, 5.10.7.4, 6.3.1, 6.3.2, 6.5.1, 6.5.2, Figures 5.10.2-1, 5.10.7.1-1, 5.10.7.1-2; 5.10.7.1-3 3GPP TS 36.221 V12.5.0: Sections 4, 4.2; Table 4.2-2 3GPP TS 23.303 V12.4.0: Sections 1, 4.4.1.1, 4.4.2, 4.5.1.1.2.3.1, 4.5.6		
LNG006	Sisvel International	CNZL201510698366.5	23 Oct 2035			1, 17	3GPP TS 36.211 V14.3.0: Sections 4.1, 4.2, 5.2.3, 6.2.3, 10.1.2.1, 10.1.2.3, 10.2.2.1, 10.2.5.1, 10.2.7, 10.2.7.1, 10.2.7.1.1, 10.2.7.1.2, 10.2.7.2,, 10.2.7.2.1, 10.2.7.2.2,; Tables 5.2.3-1, 6.2.3-1, 10.1.2.1-1, 10.2.5.1-1, 10.2.7.1.1-1 3GPP TS 36.213 V14.3.0: Sections 16.4, 16.4.1, 16.4.1.3, 16.5.1, 16.5.1.1,16.6; Table 16.4.1.3-1, 16.4.1.3-2, 16.5.1.1-2, 16.5.1.1-3, 16.6-1 3GPP TS 36.331 V14.3.0: Sections 3.1, 5.2.1.1, 5.2.1.2a, 6.7.2, 6.7.3.2; Figure 5.2.2.1-1 3GPP TS 36.212 V14.3.0: Sections 6.1, 6.4.3, 6.4.3.1, 6.4.3.2; Table 6.1-3		
		US10826665	06 Oct 2036			1	3GPP TS 36.211 V14.3.0: Sections 4.1, 4.2, 5.2.3, 6.2.3, 10.1.2.1, 10.1.2.3, 10.2.2.1, 10.2.5.1, 10.2.7, 10.2.7.1, 10.2.7.1.1, 10.2.7.1.2, 10.2.7.2,, 10.2.7.2.1, 10.2.7.2.2,; Tables 5.2.3-1, 6.2.3-1, 10.1.2.1-1, 10.2.5.1-1, 10.2.7.1.1-1 3GPP TS 36.213 V14.3.0: Sections 16.4, 16.4.1, 16.4.1.3, 16.5.1, 16.5.1.1,16.6; Table 16.4.1.3-1, 16.4.1.3-2, 16.5.1.1-2, 16.5.1.1-3, 16.6-1 3GPP TS 36.331 V14.3.0: Sections 3.1, 5.2.1.1, 5.2.1.2a, 6.7.2, 6.7.3.2; Figure 5.2.2.1-1 3GPP TS 36.212 V14.3.0: Sections 6.1, 6.4.3, 6.4.3.1, 6.4.3.2; Table 6.1-3		
LNG007	Sisvel International	CNZL201610121604.0	03 Mar 2036			1, 17	3GPP TS 36.213 V15.3.0: Sections 7.1, 7.3, 7.3.1, 10.1, 10.1.1, 10.1.2.1, 10.1.2.2.2, 10.1.2.2.3; Table 10.1-1 3GPP TS 36.211 V15.1.0: Sections 4.1; Figure 4.1-1; Table 4.1-1 3GPP TS 36.212 V15.2.1: Sections 5.3.3.1.3, 5.3.3.1.17, 5.3.3.1.18, 5.3.3.1.19, 5.3.3.1.20, 5.3.3.1.21, 5.3.3.1.22, 5.3.3.1.23; Table 5.3.3.1.17-1 3GPP TS 36.331 V15.3.0: Section 6.3.2		
		US10484143	01 Mar 2037			1	3GPP TS 36.213 V15.3.0: Sections 7.1, 7.3, 7.3.1, 10.1, 10.1.2.1, 10.1.2.2.2, 10.1.2.2.3; Table 10.1-1 3GPP TS 36.211 V15.1.0: Sections 4.1; Figure 4.1-1; Table 4.1-1 3GPP TS 36.212 V15.2.1: Sections 5.3.3.1.3, 5.3.3.1.17, 5.3.3.1.18, 5.3.3.1.19, 5.3.3.1.20, 5.3.3.1.21, 5.3.3.1.22, 5.3.3.1.23; Table 5.3.3.1.17-1 3GPP TS 36.331 V15.3.0: Section 6.3.2		
LNG008	Sisvel International	US9980306	21 Sep 2034			1, 13	3GPP TS 36.331 V12.5.0: Sections 1, 4, 4.1, 4.2, 5.10.1, 5.10.7.1, 5.10.7.2, 5.10.7.3, 5.10.7.4, 5.10.7.5, 5.10.9.1, 6.3.8, 6.5.2; Figures 4.1-1, 4.2-1, 5.10.7.1-1, 5.10.7.1-2, 5.10.7.1-3		
LNG015	Sisvel International	CNZL201410697509.6	26 Nov 2034			1, 4, 6, 10, 12	3GPP TS 36.211 V12.5.0: Sections 3.1, 5.3.1, 7.2, 9, 9.1, 9.1.1, 9.2, 9.2.4, 9.3, 9.3.1, 9.4, 9.4.1, 9.8 3GPP TS 36.212 V12.4.0: Sections 5, 5.2.2.6, 5.4, 5.4.3, 5.4.3.1, 5.4.3.1.1		
		KR10-2302025	26 Nov 2034			1	3GPP TS 36.211 V12.5.0: Sections 3.1, 5.3.1, 7.2, 9, 9.1, 9.1.1, 9.2, 9.2.4, 9.3, 9.3.1, 9.4, 9.4.1, 9.8 3GPP TS 36.212 V12.4.0: Sections 5, 5.2.2.6, 5.4, 5.4.3, 5.4.3.1, 5.4.3.1.1		
LNG016	Sisvel International	CNZL201711079561.5	06 Nov 2037			1	3GPP TS 36.211 V15.3.0: Sections 5.2.3A, 5.3.2, 5.6A, 5.6A.2; Table 5.2.3A-1 3GPP TS 36.212 V15.3.0: Section 5.3.3.1.10 3GPP TS 36.213 V15.3.0: Sections 8.1.6		
		EP3709591 (DE, FR, GB, NL)	15 Oct 2038			1	3GPP TS 36.211 V15.3.0: Sections 5.2.3A, 5.3.2, 5.6A, 5.6A.2; Table 5.2.3A-1 3GPP TS 36.212 V15.3.0: Section 5.3.3.1.10 3GPP TS 36.213 V15.3.0: Sections 8.1.6		
		US11153140	15 Oct 2038			1	3GPP TS 36.211 V15.3.0: Sections 5.2.3A, 5.3.2, 5.6A, 5.6A.2; Table 5.2.3A-1 3GPP TS 36.212 V15.3.0: Section 5.3.3.1.10 3GPP TS 36.213 V15.3.0: Sections 8.1.6		
LNG020	Sisvel International	CNZL201410255478.9	10 Jun 2034			9, 18	3GPP TS 36.212 V13.2.0: Sections 1, 3.3, 5.3, 5.3.3.1, 5.3.3.1.1, 5.3.3.1.2, 5.3.3.1.3, 5.3.3.1.3A, 5.3.3.1.4, 5.3.3.1.4A 3GPP TS 36.213 V13.2.0: Sections 1, 3.2, 3A, 4.1, 7.1, 13A, 15.1.1		
LNG021	Sisvel International	CNZL201410318536.8	04 Jul 2034			6, 16	3GPP TS 36.212 V14.3.0: Sections 1, 3.3, 4.2, 5.3.3.1.1A 3GPP TS 36.201 V14.1.0: Sections 1, 3.3, 4.2.2		
LNG023	Sisvel International	US10506624	16 Jan 2037			1	3GPP TS 36.211 V14.4.0: Sections 6.2.3,10.2.2, 10.2.2.1, 10.2.3, 10.2.3.4; Table 6.2.3-1 3GPP TS 36.212 V14.4.0: Sections 6.1, 6.4.3.2 3GPP TS 36.213 V14.4.0: Sections 16.4, 16.4.1		

MEL011	MELCO	CNZL201510125007.0	27 Dec 2026			3	3GPP TS 36.321 V9.1.0: Sections 4.2.1, 4.3.1, 4.3.2, 4.4, 5.4.4		
		JP5160667	27 Dec 2026			3	3GPP TS 36.213 V9.0.1: Sections 7.2, 7.2.2		
		US9635656	27 Dec 2026			3	3GPP TS 36.213 V9.0.1: Sections 7.2, 7.2.2 3GPP TS 36.201 V9.0.0: Section 5.5 3GPP TS 36.321 V9.1.0: Section 5.4.4	3	3GPP TS 38.212 V15.7.0: Sections 3.3, 6.3.1.1 3GPP TS 38.213 V15.7.0: Section 9.2.5 3GPP TS 38.214 V15.7.0: Sections 3.3, 5.2.1 3GPP TS 38.300 V15.7.0: Section 10.4 3GPP TS 38.321 V15.7.0: Sections 3.2, 4.2.2, 5.4.4 3GPP TS 38.331 V15.7.0: Section 6.3.2
MEL013	MELCO	CNZL201510577683.1	27 Apr 2027			4	3GPP TS 36.213 V8.2.0: Sections 7.2, 7.2.2 3GPP TS 36.300 V8.5.0: Sections 4.3, 4.3.2, 5.1, 5.1.3, 11.5, 12 3GPP TS 36.321 V8.4.0: Section 3.1, 4.3, 4.3.2, 5.7 3GPP TS 36.331 V8.5.0: Sections 6.3, 6.3.2		
		IN262788	27 Apr 2027			2	3GPP TS 36.213 V9.0.1: Sections 7.2, 10.1	2	3GPP TS 38.213 V15.7.0: Sections 9, 9.2.5, 9.2.6 3GPP TS 38.214 V15.7.0: Sections 3.3, 5.2.1, 5.2.1.1, 5.2.1.4 3GPP TS 38.215 V15.5.0: Sections 5.1, 5.1.2, 5.1.4, 5.1.6 3GPP TS 38.331 V15.7.0: Section 6.3.2
		JP4841630	27 Apr 2027			2	3GPP TS 36.213 V9.0.1: Sections 7.2, 10.1	2	3GPP TS 38.215 V15.5.0: Sections 5.1, 5.1.2, 5.1.4, 5.1.6 3GPP TS 38.213 V15.7.0: Sections 9, 9.2.5 3GPP TS 38.331 V15.7.0: Sections 5.5.1, 6.3.2
		JP5822996	27 Apr 2027			4	3GPP TS 36.213 V8.2.0: Sections 7.2, 7.2.2 3GPP TS 36.300 V8.5.0: Sections 4.3, 4.3.2, 5.1, 5.1.3, 11.5, 12 3GPP TS 36.321 V8.4.0: Section 3.1, 4.3, 4.3.2, 5.7 3GPP TS 36.331 V8.5.0: Sections 6.3, 6.3.2		
		KR10-1213062	27 Apr 2027			2	3GPP TS 36.213 V9.0.1: Sections 7.2, 10.1	2	3GPP TS 38.213 V15.7.0: Sections 9, 9.2.5, 9.2.6 3GPP TS 38.214 V15.7.0: Sections 3.3, 5.2.1, 5.2.1.1, 5.2.1.4 3GPP TS 38.215 V15.5.0: Sections 5.1, 5.1.2, 5.1.4, 5.1.6 3GPP TS 38.331 V15.7.0: Section 6.3.2
		US10701639	27 Apr 2027			4	3GPP TS 36.213 V8.2.0: Sections 7.2, 7.2.2 3GPP TS 36.300 V8.5.0: Sections 4.3, 4.3.2, 5.1, 5.1.3, 11.5, 12 3GPP TS 36.321 V8.4.0: Section 3.1, 4.3, 4.3.2, 5.7 3GPP TS 36.331 V8.5.0: Sections 6.3, 6.3.2		
		US10728857	27 Apr 2027					2	3GPP TS 38.213 V15.7.0: Sections 9, 9.2.5, 9.2.6 3GPP TS 38.214 V15.7.0: Sections 3.3, 5.2.1, 5.2.1.1, 5.2.1.4 3GPP TS 38.215 V15.5.0: Sections 5.1, 5.1.2, 5.1.4, 5.1.6 3GPP TS 38.331 V15.7.0: Section 6.3.2
MEL014	MELCO	US10404436	08 Sep 2024					1	3GPP TS 38.322 V17.2.0: sections 3.1, 4.2.1 3GPP TS 38.321 V17.3.0: sections 4.5, 4.5.1, 4.5.4.1, 5.4, 5.4.5, 5.4.3.2, 6.1.2, 6.1.3, 6.1.3.1, 6.2.1
		US11012217	08 Sep 2024					1	3GPP TS 38.322 V17.2.0: sections 3.2, 4.2.1 3GPP TS 38.321 V17.3.0: sections 4.5, 4.5.1, 4.5.3, 4.5.4, 5.4, 5.4.5, 5.4.3.2, 6.1.2 3GPP TS 38.331 V17.3.0: sections 6.2.2, 6.3.2
MEL016	MELCO	US9113445	06 Aug 2024			1	3GPP TS 36.300 V10.6.0: Sections 6, 6.1, 6.1.2, 11.3; Figure 6-2 3GPP TS 36.306 V10.4.0: Sections 4, 4.1, 4.2.5; Table 4.1-3 3GPP TS 36.321 V10.4.0: Sections 5.4.3.1, 5.4.3.2, 5.4.5, 6.1.2, 6.1.3.1; Figure 6.1.2-3; Tables 6.1.3.1-1, 6.1.3.1-2 3GPP TS 36.322 V10.0.0: Sections 4.2.1, 4.2.1.1.1, 4.2.1.2.1, 4.2.1.3.1, 4.5; Figures 4.2.1-1, 4.2.1.1.1-1, 4.2.1.2.1-1, 4.2.1.3.1-1 3GPP TS 36.331 V10.6.0: Sections 5.6.3.1, 5.6.3.3, 6.3.6; Figure 5.6.3.1-1		
MEL017	MELCO	AU2014204428	01 Feb 2028			5	3GPP TS 36.300 V8.7.1: Sections 11.1.1. 11.1.2 3GPP TS 36.321 V8.4.0: Sections 5.10, 5.10.1, 5.10.2 3GPP TS 36.213 V8.6.0: Section 9.2		
		BRPI0807033-4	01 Feb 2030			8	3GPP TS 36.300 V8.7.1: Sections 11.1.1. 11.1.2 3GPP TS 36.321 V8.4.0: Sections 5.10, 5.10.1, 5.10.2 3GPP TS 36.213 V8.6.0: Section 9.2		
		IN385950	01 Feb 2028			7	3GPP TS 36.300 V8.7.1: Sections 11.1.1. 11.1.2 3GPP TS 36.321 V8.4.0: Sections 5.10, 5.10.1, 5.10.2 3GPP TS 36.213 V8.6.0: Section 9.2		
		JP5550697	01 Feb 2028			5	3GPP TS 36.300 V8.7.1: Sections 11.1.1. 11.1.2 3GPP TS 36.321 V8.4.0: Sections 5.10, 5.10.1, 5.10.2 3GPP TS 36.213 V8.6.0: Section 9.2		
		KR10-1898932	01 Feb 2028			1, 6	3GPP TS 36.300 V8.7.1: Sections 11.1.1. 11.1.2 3GPP TS 36.321 V8.4.0: Sections 5.10, 5.10.1, 5.10.2 3GPP TS 36.213 V8.6.0: Section 9.2		
MEL018	MELCO	AU2014201266	26 Oct 2029			3	3GPP TS 24.301 V11.0.0: Sections 3.1, 3.2, 5.1.1, 5.1.3.2.2.4, 5.3.5, 5.5.3.1, 5.5.3.2.1, 5.5.3.2.2 3GPP TS 23.401 V11.0.0: Sections 4, 4.1, 4.2, 4.2.1, 4.2.2, 4.3.5.2, 4.3.5.3, 5.3.3, 5.3.3.0, 5.3.3.2, 5.3.3.2.4; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.2-3, 5.3.3.2-1 3GPP TS 36.300 V11.0.0: Sections 4, 4.1.; Figure 4-1		
		CNZL201410189671.7	26 Oct 2029			3	3GPP TS 23.401 V11.0.0: Sections 3.2, 4.3.13, 5.3.3.0, 5.3.3.2, 5.3.8.3		
		IDP000048649	26 Oct 2029			3	3GPP TS 24.301 V11.0.0: Sections 3.1, 3.2, 5.1.1, 5.1.3.2.2.4, 5.3.5, 5.5.3.1, 5.5.3.2.1, 5.5.3.2.2 3GPP TS 23.401 V11.0.0: Sections 4, 4.1, 4.2, 4.2.1, 4.2.2, 4.3.5.2, 4.3.5.3, 5.3.3, 5.3.3.0, 5.3.3.2, 5.3.3.2.4; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.2-3, 5.3.3.2-1 3GPP TS 36.300 V11.0.0: Sections 4, 4.1.; Figure 4-1		
		JP5538802	02 Oct 2029			3	3GPP TS 23.401 V11.0.0: Sections 4.3.13, 5.3.3, 5.7.2		
		RU2554533	26 Oct 2029			3	3GPP TS 24.301 V11.0.0: Sections 3.1, 3.2, 5.1.1, 5.1.3.2.2.4, 5.3.5, 5.5.3.1, 5.5.3.2.1, 5.5.3.2.2 3GPP TS 23.401 V11.0.0: Sections 4, 4.1, 4.2, 4.2.1, 4.2.2, 4.3.5.2, 4.3.5.3, 5.3.3, 5.3.3.0, 5.3.3.2, 5.3.3.2.4; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.2-3, 5.3.3.2-1 3GPP TS 36.300 V11.0.0: Sections 4, 4.1.; Figure 4-1		
		US9713068	26 Oct 2029			3	3GPP TS 24.301 V11.0.0: Sections 3.1, 3.2, 5.1.1, 5.1.3.2.2.4, 5.3.5, 5.5.3.1, 5.5.3.2.1, 5.5.3.2.2 3GPP TS 23.401 V11.0.0: Sections 4, 4.1, 4.2, 4.2.1, 4.2.2, 4.3.5.2, 4.3.5.3, 5.3.3, 5.3.3.0, 5.3.3.2, 5.3.3.2.4; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.2-3, 5.3.3.2-1 3GPP TS 36.300 V11.0.0: Sections 4, 4.1.; Figure 4-1		

ID	Owner	Patent No.	Date			Claims	3GPP Standard (LTE)	Claims	3GPP Standard (NR)
MEL019	MELCO	IN478712	15 Sep 2030					3	3GPP TS 38.300 V15.0.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 9.2.2.1; Figure 4.1-1 3GPP TS 23.501 V15.0.0: Sections 3.1, 5.2.3.1, 5.2.3.2.3, 5.3.2.1, 5.3.2.2.1, 5.3.2.2.3, 5.3.2.2.4, 5.3.2.3, 5.3.3.2.1, 5.4.1.1, 6.2.1 3GPP TS 24.501 V15.0.0: Sections 3.2, 5.3.4, 5.3.7, 5.5.1.1, 5.5.1.3.1, 5.5.1.3.2, 5.5.1.3.4, 8.2.6.1, 8.2.7.1, 8.2.7.15, 9.10.2.5, 9.10.3.8; Tables 8.2.6.1.1, 8.2.7.1.1, 9.10.3.8.1; Figure 9.10.3.8.1 3GPP TS 24.008 V15.0.0: Sections 10, 10.1, 10.5.7.4a; Table 10.5.163a; Figure 10.1.10.5.147a
		US10165482	15 Sep 2030			3	3GPP TS 36.300 V10.3.0: Sections 1, 3.2, 4, 4.1, 4.2.1, 4.2.2; Figures 4.2.1-1, 4.2.1-2. 4.2.2-1. 4.2.2-2, 4.2.2-3 3GPP TS 24.301 V10.2.0: Sections 1, 5.5.3.1, 5.5.3.2.1, 5.5.3.2.2, 5.5.3.2.4, 8.1, 8.2.26.1, 8.2.26.2, 8.2.26.15; Table 8.2.26.1	3	3GPP TS 38.300 V15.0.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 9.2.2.1; Figure 4.1-1 3GPP TS 23.501 V15.0.0: Sections 3.1, 5.2.3.1, 5.2.3.2.3, 5.3.2.1, 5.3.2.2.1, 5.3.2.2.3, 5.3.2.2.4, 5.3.2.3, 5.3.3.2.1, 5.4.1.1, 6.2.1 3GPP TS 24.501 V15.0.0: Sections 3.2, 5.3.4, 5.3.7, 5.5.1.1, 5.5.1.3.1, 5.5.1.3.2, 5.5.1.3.4, 8.2.6.1, 8.2.7.1, 8.2.7.15, 9.10.2.5, 9.10.3.8; Tables 8.2.6.1.1, 8.2.7.1.1, 9.10.3.8.1; Figure 9.10.3.8.1 3GPP TS 24.008 V15.0.0: Sections 10, 10.1, 10.5.7.4a; Table 10.5.163a; Figure 10.1.10.5.147a
MEL022	MELCO	US10887731	28 Jan 2030			5	3GPP TS 36.300 V17.3.0: Sections 3.2, 4.0, 4.6, 4.6.1, 10.5.1, 40.5.1.2 3GPP TS 36.331 V17.3.0: Sections 6.2.2, 6.3.4, 6.3.5		
MEL025	MELCO	EP2134006 (DE, FR, GB)	13 Jan 2026			1	3GPP TS 36.211 V8.6.0: Sections 3.1, 4.2, 5.2.3, 5.6, 6.2.3, 6.12, 8.1; Figures 4.2-1, 8.1-1; Tables 4.2-1, 4.2-2, 5.2.3-1, 5.6-1, 6.2.3-1, 6.12-1 3GPP TS 36.213 V8.6.0: Section 4.2.3 3GPP TS 36.321 V8.5.0: Section 6.2.3 3GPP TS 36.300 V8.8.0: Section 5.2.7.3		
		JP4852615	28 Sep 2026			1	3GPP TS 36.211 V8.6.0: Sections 3.1, 4, 4.2, 5.2, 6.2, 8.1 3GPP TS 36.213 V8.6.0: Section 4.2.3 3GPP TS 36.321 V8.5.0: Section 6.2.3 3GPP TS 36.300 V8.8.0: Section 5.2.7		
		US8068444	14 Dec 2026			1	3GPP TS 21.905 V8.8.0: Section 3 3GPP TS 21.211 V8.6.0: Sections 3.1, 4, 4.2, 5.2.1, 5.2.2, 5.2.3, 6.2.1, 6.2.2, 6.2.3, 8.1; Figures 4.2-1, 5.2.1-1, 6.2.2-1; Tables 4.2-1, 5.2.3-1, 6.2.3-1 3GPP TS 36.213 V8.6.0: Section 4.2.3 3GPP TS 36.321 V8.5.0: Sections 5.1.4, 5.2, 6.2.3 3GPP TS 36.300 V8.8.0: Sections 3.2, 5, 5.2.7.3; Figures 5-1, 5-2; Table 5-1		
MEL027	MELCO	CNZL201410767521.X	13 Apr 2027			1, 2, 7, 8	3GPP TS 36.201 V8.3.0: Sections 4.1, 4.1.1, 4.2, 4.2.1 3GPP TS 36.213 V8.8.0: Sections 7.2, 7.2.2		
		EP1845678 (DE, ES, FI, FR, GB, IT, NL, PL, SE, TR)	14 Apr 2026			1, 3	3GPP TS 36.201 V8.3.0: Sections 4.1.1, 4.2.1 3GPP TS 36.212 V8.6.0: Sections 5.2.2.6.2, 5.2.2.6.4 3GPP TS 36.213 V8.6.0: Sections 7.2, 7.2.1	3	3GPP TS 38.300 V15.13.0: Section 4.1 3GPP TS 38.201 V15.0.0: Section 4.1.1 3GPP TS 38.214 V15.15.0: Sections 5.2.1, 5.2.1.1, 5.2.1.4, 5.2.2.1, 5.2.3 3GPP TS 38.331 V15.16.0: Section 6.3.2 3GPP TS 38.212 V15.13.0: Section 6.3.2.1.2
		EP2086146 (DE, ES, FI, FR, GB, IT, NL, PL, SE, TR)	14 Apr 2026			1, 2	3GPP TS 36.201 V8.3.0: Sections 4.1.1, 4.2.1 3GPP TS 36.212 V8.7.0: Sections 5.2.2.6.2, 5.2.2.6.4 3GPP TS 36.213 V8.8.0: Sections 7.2, 7.2.1	2	3GPP TS 38.300 V15.13.0: Section 4.1 3GPP TS 38.201 V15.0.0: Section 4.1.1 3GPP TS 38.214 V15.15.0: Sections 5.2.1, 5.2.1.1, 5.2.1.4, 5.2.2.1, 5.2.3 3GPP TS 38.331 V15.16.0: Section 6.3.2 3GPP TS 38.212 V15.13.0: Section 6.3.2.1.2
		EP2256976 (DE, FR, GB)	14 Apr 2026			1, 2	3GPP TS 36.201 V8.3.0: Sections 1, 3, 4, 4.1, 4.1.1, 4.2, 4.2.1 3GPP TS 36.213 V8.8.0: Sections 3, 3.2, 7, 7.2, 7.2.2		
		JP5506861	16 Apr 2027			1, 8	3GPP TS 36.201 V8.3.0: Sections 4.1.1, 4.2.1 3GPP TS 36.213 V8.8.0: Sections 7.2		
MEL028	MELCO	EP2254259 (DE, FR, GB)	22 Sep 2026			1, 4	3GPP TS 36.211 V8.8.0: Sections 4.1.1, 4.2.1, 5.4.1, 5.5.2.2.1, 5.2.2.2.2 3GPP TS 36.213 V8.8.0: Sections 7.3, 10.1 3GPP TS 36.321 V8.7.0: Sections 5.4.1, 5.4.4, 5.4.5, 7.2.1 3GPP TS 36.331 V8.7.0: Sections 6.3.2	4	3GPP TS 38.300: Sections 4.1, 5.5, 10.3, 10.4 3GPP TS 38.321: Sections 4.5.4.2, 5.4.1, 5.4.4, 5.4.5 3GPP TS 38.213: Sections 9.2, 9.2.4 3GPP TS 38.211: Sections 5.2.2. 6.4.1.3.1, 6.4.1.3.2
		US8825067	14 Sep 2027			1, 4	3GPP TS 36.321 V8.7.0: Sections 5.4.1, 5.4.4, 5.4.5 3GPP TS 36.213 V8.8.0: Sections 7.3, 10.1; Table 10.1-5 3GPP TS 36.331 V8.7.0: Sections 6.3.2 3GPP TS 36.211 V8.8.0: Sections 5.4.1, 5.5, 5.5.2.2.1, 5.5.2.2.2; Table 5.5.2.2.2-1		
MEL038	MELCO	CNZL201510061928.5	24 Jul 2029					1	3GPP TS 38.211 V16.3.0: Sections 3.2, 4.4.2, 4.4.3, 5.3.1, 6.1.1, 6.3.1.1, 6.3.1.2, 6.3.1.3, 6.3.1.4, 6.3.1.5, 6.3.1.6, 6.3.1.7 3GPP TS 38.212 V16.3.0: Sections 4.1, 5, 6.2.1; Table 4.1-1 3GPP TS 38.214 V16.3.0: Sections 6.1.2.2, 6.1.2.2.2 3GPP TS 38.321 V16.2.1: Sections 4.2.2, 4.4; Figure 4.2.2-1 3GPP TS 38.300 V16.3.0: Sections 5.1, 5.4.1, 5.5, 6.2.1, 6.6 L2, 6.7; Figures 5.1-1, 6.6-1, 6.7-2
		KR10-1643434	24 Jul 2029					1	3GPP TS 38.211 V16.3.0: Sections 3.2, 4.4.2, 4.4.3, 5.3.1, 6.1.1, 6.3.1.1, 6.3.1.2, 6.3.1.3, 6.3.1.4, 6.3.1.5, 6.3.1.6, 6.3.1.7 3GPP TS 38.212 V16.3.0: Sections 4.1, 5, 6.2.1; Table 4.1-1 3GPP TS 38.214 V16.3.0: Sections 6.1.2.2, 6.1.2.2.2 3GPP TS 38.321 V16.2.1: Sections 4.2.2, 4.4; Figure 4.2.2-1 3GPP TS 38.300 V16.3.0: Sections 5.1, 5.4.1, 5.5, 6.2.1, 6.6 L2, 6.7; Figures 5.1-1, 6.6-1, 6.7-2
MEL040	MELCO	CNZL201710464231.1	09 Feb 2031					4	3GPP TS 37.340 V17.3.0: sections 3.1, 4.2.1, 4.3.1.1 3GPP TS 38.331 V17.3.0: sections 3.2, 6.2.2 3GPP TS 38.101-1 V18.0.0: sections 3.2, 6.2.4, 6.2B.4.1 3GPP TS 38.213 V17.3.0: section 7.4 3GPP TS 38.321 V17.3.0: sections 5.1.1, 5.1.3
		IDP000047999	09 Feb 2031					4	3GPP TS 37.340 V17.3.0: sections 3.1, 4.2.1, 4.3.1.1 3GPP TS 38.331 V17.3.0: sections 3.2, 6.2.2 3GPP TS 38.101-1 V18.0.0: sections 3.2, 6.2.4, 6.2B.4.1 3GPP TS 38.213 V17.3.0: section 7.4 3GPP TS 38.321 V17.3.0: sections 5.1.1, 5.1.3

5Gmultimode

version: 32JEOW

							3GPP (middle)		3GPP (right)
MEL040	MELCO	JP6076427	09 Feb 2031					4	3GPP TS 37.340 V17.3.0: sections 3.1, 4.2.1, 4.3.1.1 3GPP TS 38.331 V17.3.0: sections 3.2, 6.2.2 3GPP TS 38.101-1 V18.0.0: sections 3.2, 6.2.4, 6.2B.4.1 3GPP TS 38.213 V17.3.0: section 7.4 3GPP TS 38.321 V17.3.0: sections 5.1.1, 5.1.3
		KR10-1771415	09 Feb 2031					4	3GPP TS 37.340 V17.3.0: sections 3.1, 4.2.1, 4.3.1.1 3GPP TS 38.331 V17.3.0: sections 3.2, 6.2.2 3GPP TS 38.101-1 V18.0.0: sections 3.2, 6.2.4, 6.2B.4.1 3GPP TS 38.213 V17.3.0: section 7.4 3GPP TS 38.321 V17.3.0: sections 5.1.1, 5.1.3
		RU2704118	09 Feb 2031					4	3GPP TS 37.340 V17.3.0: sections 3.1, 4.2.1, 4.3.1.1 3GPP TS 38.331 V17.3.0: sections 3.2, 6.2.2 3GPP TS 38.101-1 V18.0.0: sections 3.2, 6.2.4, 6.2B.4.1 3GPP TS 38.213 V17.3.0: section 7.4 3GPP TS 38.321 V17.3.0: sections 5.1.1, 5.1.3
		US11405897	09 Feb 2031			3	3GPP TS 36.300 V17.3.0: Sections 3.1, 4.9, 4.9.1, 20.2, 20.2.0 3GPP TS 36.331 V17.3.0: Sections 3.2, 6.2.2 3GPP TS 36.101 V18.0.0: Section 6.2.5 3GPP TS 36.213 V17.4.0: Section 6.1 3GPP TS 36.321 V17.3.0: Sections 5.1.1, 5.1.3	3	3GPP TS 37.340 V17.3.0: sections 3.1, 4.2.1, 4.3.1.1 3GPP TS 38.331 V17.3.0: sections 3.2, 6.2.2 3GPP TS 38.101-1 V18.0.0: sections 3.2, 6.2.4, 6.2B.4.1 3GPP TS 38.213 V17.3.0: section 7.4 3GPP TS 38.321 V17.3.0: sections 5.1.1, 5.1.3
MEL041	MELCO	BR122020018183-4	25 Apr 2031			9	3GPP TS 36.300 V10.2.0: Sections 3.2, 5.1.16, 16.1.5.1 3GPP TS 36.331 V10.2.0: Sections 6.2.2, 6.3.5		
		CNZL201610021267.8	25 Apr 2031			4	3GPP TS36.300 V11.4.0: Sections 3.2, 4, 16.1.5 3GPP TS 36.423 V10.1.0: Sections 8.3.1.2, 9.1.2.1, 9.2.55		
		EP3962181 (DE, FR, GB, NL)	25 Apr 2031			5	3GPP TS 36.300 V17.3.0: Sections 16.1.5, 16.1.5.0, 20.2.0 3GPP TS 36.423 V17.3.0: Sections 8.3.1, 8.3.1.2, 9.1.2, 9.1.2.1		
		IDP000082932	25 Apr 2031			9	3GPP TS 36.300 V10.2.0: Sections 3.2, 5.1.16, 16.1.5.1 3GPP TS 36.331 V10.2.0: Sections 6.2.2, 6.3.5		
		JP6072859	25 Apr 2031			9	3GPP TS 36.300 V10.2.0: Sections 3.2, 5.1.16, 16.1.5.1 3GPP TS 36.331 V10.2.0: Sections 6.2.2, 6.3.5		
		JP6351699	25 Apr 2031			4	3GPP TS36.300 V11.4.0: Sections 3.2, 4, 16.1.5 3GPP TS 36.423 V10.1.0: Sections 8.3.1.2, 9.1.2.1, 9.2.55		
		KR10-1790569	25 Apr 2031			9	3GPP TS 36.300 V10.2.0: Sections 3.2, 5.1.16, 16.1.5.1 3GPP TS 36.331 V10.2.0: Sections 6.2.2, 6.3.5		
		KR10-1902174	25 Apr 2031			2	3GPP TS36.300 V11.4.0: Sections 3.2, 4, 16.1.5 3GPP TS 36.423 V10.1.0: Sections 8.3.1.2, 9.1.2.1, 9.2.55		
		RU2651808	01 Oct 2024			5	3GPP TS36.300 V11.4.0: Sections 3.2, 4, 16.1.5 3GPP TS 36.423 V10.1.0: Sections 8.3.1.2, 9.1.2.1, 9.2.55		
		RU2677689	25 Apr 2031			9	3GPP TS 36.300 V10.2.0: Sections 3.2, 5.1.16, 16.1.5.1 3GPP TS 36.331 V10.2.0: Sections 6.2.2, 6.3.5		
		US11496263	25 Apr 2031			4	3GPP TS 36.300 V17.3.0: Sections 16.1.5, 16.1.5.0, 20.2.0 3GPP TS 36.423 V17.3.0: Sections 8.3.1, 8.3.1.2, 9.1.2, 9.1.2.1		
MEL042	MELCO	CNZL201611067214.6	23 Mar 2030					3	3GPP TS 38.300 V16.8.0: Sections 3.1, 3.2, 4.1, 4.2, 4.3.2.2, 6.12 3GPP TS 38.306 V16.7.0: Sections 1, 4.2.1, 4.2.7.2, 4.2.7.6 3GPP TS 38.331 V16.7.0: Sections 4.2.1, 5.6.1.1, 5.6.1.2, 5.6.1.4, 6.2.2, 6.3.3; Figures 4.2.1-1, 5.6.1.1-1
		EP3661071 (DE, FR, GB, NL)	23 Mar 2030					3	3GPP TS 38.300 V16.8.0: Sections 3.1, 3.2, 4.1, 4.2, 4.3.2.2, 6.12 3GPP TS 38.306 V16.7.0: Sections 1, 4.2.1, 4.2.7.2, 4.2.7.6 3GPP TS 38.331 V16.7.0: Sections 4.2.1, 5.6.1.1, 5.6.1.2, 5.6.1.4, 6.2.2, 6.3.3; Figures 4.2.1-1, 5.6.1.1-1
		IN475735	23 Mar 2030					4	3GPP TS 38.300 V16.8.0: Sections 3.1, 3.2, 4.1, 4.2, 4.3.2.2, 6.12 3GPP TS 38.306 V16.7.0: Sections 1, 4.2.1, 4.2.7.2, 4.2.7.6 3GPP TS 38.331 V16.7.0: Sections 4.2.1, 5.6.1.1, 5.6.1.2, 5.6.1.4, 6.2.2, 6.3.3; Figures 4.2.1-1, 5.6.1.1-1
		JP6400131	23 Mar 2030					3	3GPP TS 38.300 V16.8.0: Sections 3.1, 3.2, 4.1, 4.2, 4.3.2.2, 6.12 3GPP TS 38.306 V16.7.0: Sections 1, 4.2.1, 4.2.7.2, 4.2.7.6 3GPP TS 38.331 V16.7.0: Sections 4.2.1, 5.6.1.1, 5.6.1.2, 5.6.1.4, 6.2.2, 6.3.3; Figures 4.2.1-1, 5.6.1.1-1
		US9705648	23 Mar 2030			1	3GPP TS 23.401 V12.0.0: Sections 4, 4.6, 4.6.3, 4.6.3.1, 4.6.3.2, 4.6.4 3GPP TS 36.300 V12.5.0: Sections 3.1, 3.2, 4, 4.3, 4.3.2, 4.9, 4.9.1, 4.9.3, 4.9.3.1, 10, 10.1, 10.1.2, 10.2.8, 10.1.2.8.1, 20, 20.2, 20.2.1	3	3GPP TS 38.300 V16.8.0: Sections 3.1, 3.2, 4.1, 4.2, 4.3.2.2, 6.12 3GPP TS 38.306 V16.7.0: Sections 1, 4.2.1, 4.2.7.2, 4.2.7.6 3GPP TS 38.331 V16.7.0: Sections 4.2.1, 5.6.1.1, 5.6.1.2, 5.6.1.4, 6.2.2, 6.3.3; Figures 4.2.1-1, 5.6.1.1-1
MEL043	MELCO	EP3595390 (DE, FR, GB)	20 Dec 2031					3	3GPP TS 38.300 V17.6.0: Sections 5.4.1. 7.7 3GPP TS 38.101-1 V17.11.0: Sections 5.2, 5.2A, 5.2A.2, 5.2A.2.1 3GPP TS 38.133 V17.11.0: Section 3.6.2.1 3GPP TS 38.331 V17.6.0: Sections 6.2.2, 6.3.2
		JP6767539	20 Dec 2031					3	3GPP TS 38.300 V17.6.0: Sections 5.4.1. 7.7 3GPP TS 38.101-1 V17.11.0: Sections 5.2, 5.2A, 5.2A.2, 5.2A.2.1 3GPP TS 38.133 V17.11.0: Section 3.6.2.1 3GPP TS 38.331 V17.6.0: Sections 6.2.2, 6.3.2
		US10200976	20 Dec 2031			2	3GPP TS 36.101 V11.3.0: Sections 2, 3.3, 5.5; Table 5.5-1 3GPP TS 36.300 V11.2.0: Sections 4, 7.5 3GPP TS 36.311 V11.2.0: Sections 3.2, 4.2.1, 5.1.2, 5.2.1.1, 5.2.2.1, 6.2.1, 6.3.1, 6.3.4; Figure 5.2.2.1-1		
		US10412712	20 Dec 2031			3	3GPP TS 36.101 V11.6.0: Sections 5.5, 5.5A; Tables 5.5-1, 5.5A-2	3	3GPP TS 38.300 V15.3.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 5.4.1, 7.7 3GPP TS 38.101-1 V15.3.0: Sections 3.1, 3.3, 5.1, 5.2, 5.2A.2, 5.5A.3; Tables 5.1-1, 5.2-1, 5.2A.2-1, 5.5A.3-1 3GPP TS 38.133 V15.3.0: Sections 3.1, 3.3, 3.6, 3.6.2.1
		US11337181	06 Mar 2032					3	3GPP TS 38.300 V17.6.0: Sections 5.4.1. 7.7 3GPP TS 38.101-1 V17.11.0: Sections 5.2, 5.2A, 5.2A.2, 5.2A.2.1 3GPP TS 38.133 V17.11.0: Section 3.6.2.1 3GPP TS 38.331 V17.6.0: Sections 6.2.2, 6.3.2
MEL044	MELCO	CNZL201810939948.1	26 Mar 2032			1	3GPP TS 36.300 V15.6.0: Sections 3.1, 3.2, 5.5.0, 7.5, 10.1.2.7, 10.1.5.0, 10.1.5.2; Figure 10.1.5.2-1 3GPP TS 36.321 V15.6.0: Sections 5.1.4, 6.1.3.5; Figure 6.1.3.5-1 3GPP TS 36.213 V15.6.0: Section 4.2.3 3GPP TS 36.104 V15.7.0: Sections 6.5.3, 6.5.3.1 3GPP TS 36.211 V15.6.0: Section 8.1; Figure 8.1-1	1	3GPP TR 21.905 V15.1.0: Section 4 3GPP TS 36.300 V15.6.0: Section 3.2 3GPP TS 38.213 V15.6.0: Sections 3.3, 4.2, 5.1; Figure 5.1-2 3GPP TS 38.300 V15.6.0: Sections 3.1, 3.2, 4.1, .5.4.1, 7.1, 7.7, 9.2.6, 9.2.9; Figure 9.2.6-1 3GPP TS 38.321 V15.6.0: Sections 5.1.4, 5.2, 6.1.3.4

ID	Company	Patent	Date				3GPP References		3GPP References
MEL044	MELCO	EP3451730 (DE, FR, GB, NL)	26 Mar 2032					1	3GPP TR 21.905 V15.1.0: Section 4 3GPP TS 36.300 V15.6.0: Section 3.2 3GPP TS 38.213 V15.6.0: Sections 3.3, 4.2, 5.1; Figure 5.1-2 3GPP TS 38.300 V15.6.0: Sections 3.1, 3.2, 4.1, .5.4.1, 7.1, 7.7, 9.2.6, 9.2.9; Figure 9.2.6-1 3GPP TS 38.321 V15.6.0: Sections 5.1.4, 5.2, 6.1.3.4
		JP7003201	26 Mar 2032			1	3GPP TS 36.300 V15.6.0: Sections 3.1, 3.2, 5.5.0, 7.5, 10.1.2.7, 10.1.5.0, 10.1.5.2; Figure 10.1.5.2-1 3GPP TS 36.321 V15.6.0: Sections 5.1.4, 6.1.3.5; Figure 6.1.3.5-1 3GPP TS 36.213 V15.6.0: Section 4.2.3 3GPP TS 36.104 V15.7.0: Sections 6.5.3, 6.5.3.1 3GPP TS 36.211 V15.6.0: Section 8.1; Figure 8.1-1	1	3GPP TR 21.905 V15.1.0: Section 4 3GPP TS 36.300 V15.6.0: Section 3.2 3GPP TS 38.213 V15.6.0: Sections 3.3, 4.2, 5.1; Figure 5.1-2 3GPP TS 38.300 V15.6.0: Sections 3.1, 3.2, 4.1, .5.4.1, 7.1, 7.7, 9.2.6, 9.2.9; Figure 9.2.6-1 3GPP TS 38.321 V15.6.0: Sections 5.1.4, 5.2, 6.1.3.4
		US10728889	26 Mar 2032			1	3GPP TS 36.300 V15.6.0: Sections 3.1, 3.2, 5.5.0, 7.5, 10.1.2.7, 10.1.5.0, 10.1.5.2; Figure 10.1.5.2-1 3GPP TS 36.321 V15.6.0: Sections 5.1.4, 6.1.3.5; Figure 6.1.3.5-1 3GPP TS 36.213 V15.6.0: Section 4.2.3 3GPP TS 36.104 V15.7.0: Sections 6.5.3, 6.5.3.1 3GPP TS 36.211 V15.6.0: Section 8.1; Figure 8.1-1	1	3GPP TR 21.905 V15.1.0: Section 4 3GPP TS 36.300 V15.6.0: Section 3.2 3GPP TS 38.213 V15.6.0: Sections 3.3, 4.2, 5.1; Figure 5.1-2 3GPP TS 38.300 V15.6.0: Sections 3.1, 3.2, 4.1, .5.4.1, 7.1, 7.7, 9.2.6, 9.2.9; Figure 9.2.6-1 3GPP TS 38.321 V15.6.0: Sections 5.1.4, 5.2, 6.1.3.4
		US11528700	08 Jun 2032					1	3GPP TS 38.133 V18.5.0: sections 3.3, 7.1, 7.1.1, 7.1.2 3GPP TS 38.211 V18.2.0: sections 3.2, 4.2, 4.3.1 3GPP TS 38.213 V18.2.0: sections 4.2, 5.2 3GPP TS 38.300 V18.1.0: sections 4.1, 4.4.1, 4.4.2, 5.4, 5.4.1, 7.7, 9.2.9 3GPP TS 38.321 V18.1.0: sections 5.2, 6.1.3, 6.1.3.4 3GPP TS 38.331 V18.1.0: sections 3.1, 6.3.2
MEL045	MELCO	CNZL201510225622.9	09 Aug 2026			4	3GPP TS 36.211 V10.5.0: Sections 1, 3.2, 6.1, 6.5, 6.11.1.2, 6.11.2.2 3GPP TS 36.331 V10.5.0: Sections 5.3.2.1, 5.3.2.2, 5.8.1.1, 6.3.7 3GPP TS 36.211 V10.5.0: Sections 7.1, 7.2		
		JP5602255	09 Aug 2026			4	3GPP TS 36.211 V10.5.0: Sections 6.1, 6.5, 6.11.1, 6.11.2 3GPP TS 36.304 V10.5.0: Sections 7.1, 7.2 3GPP TS 36.331 V10.5.0: Sections 5.3.2, 6.3.7		
MEL046	MELCO	JP6612940	09 Feb 2031			4	3GPP TS 36.300 V12.5.0: Sections 4, 4.9.1 and 10.1.2.8.1 3GPP TS 35.423 V12.5.0: Sections 1 and 9.1.3.2 3GPP TS 36.331 V12.5.0: Sections 6.2.2 and 6.3.2	4	3GPP TS 38.300 V15.0.0: Sections 1, 4.5 3GPP TS 37.340 V15.0.0: Sections 1, 3.1, 3.2, 4.1.2, 4.2.1, 10.2.1 3GPP TS 36.423 V15.2.0: Sections 1, 7, 8.7.4.2, 9.1.4.2 3GPP TS 38.331 V15.1.0: Sections 6.2.2, 6.3.2, 11.2 3GPP TS 36.331 V15.1.0: Sections 5.3.5.3, 6.2.2
MEL048	MELCO	CNZL201710562025.4	21 Apr 2030					4	3GPP TS 38.300 V17.3.0: sections 4.1, 5.4, 5.4.1 3GPP TS 38.331 V17.3.0: sections 5.6.1, 5.6.1.1, 5.6.1.3, 5.6.1.4, 6.3.3 3GPP TS 38.101-1 V17.8.0: section 3.1
		EP3661240 (DE, FR, GB, NL)	21 Apr 2030					5	3GPP TS 38.300 V17.3.0: sections 4.1, 5.4, 5.4.1 3GPP TS 38.331 V17.3.0: sections 5.6.1, 5.6.1.1, 5.6.1.3, 5.6.1.4, 6.3.3 3GPP TS 38.101-1 V17.8.0: section 3.1
		JP6815286	21 Apr 2030					4	3GPP TS 38.300 V17.3.0: sections 4.1, 5.4, 5.4.1 3GPP TS 38.331 V17.3.0: sections 5.6.1, 5.6.1.1, 5.6.1.3, 5.6.1.4, 6.3.3 3GPP TS 38.101-1 V17.8.0: section 3.1
		US10356635	07 Jul 2030			5	3GPP TS 36.300 V17.3.0: Sections 4.0, 5.5, 5.5.0, 7.5 3GPP TS 36.331 V17.3.0: Sections 5.6.3, 5.6.3.1, 5.6.3.3, 6.2, 6.2.2 3GPP TS 36.1.1 V17.8.0: Sections 3.1	5	3GPP TS 38.300 V17.3.0: sections 4.1, 5.4, 5.4.1 3GPP TS 38.331 V17.3.0: sections 5.6.1, 5.6.1.1, 5.6.1.3, 5.6.1.4, 6.3.3 3GPP TS 38.101-1 V17.8.0: section 3.1
MEL049	MELCO	JP6457578	15 Jun 2030					3	3GPP TS 38.101-1 V18.4.0: section 5.2 3GPP TS 38.211 V18.1.0: section 6.4.1.4.2 3GPP TS 38.212 V18.1.0: section 7.3.1.3.4 3GPP TS 38.213 V18.1.0: Section 11.4 3GPP TS 38.300 V18.0.0: sections 5.3.6, 5.4.1 3GPP TS 38.331 V18.0.0: section 6.2.2, 6.3.2
		US12003325	15 Jun 2030					2	3GPP TS 38.101-1 V18.4.0: section 5.2 3GPP TS 38.211 V18.1.0: section 6.4.1.4.2 3GPP TS 38.212 V18.1.0: section 7.3.1.3.4 3GPP TS 38.213 V18.1.0: Section 11.4 3GPP TS 38.300 V18.0.0: sections 5.3.6, 5.4.1 3GPP TS 38.331 V18.0.0: section 6.2.2, 6.3.2
MEL050	MELCO	CNZL201710073972.7	07 Feb 2032			2	3GPP TS 36.300 V17.3.0: Sections 3.1, 3.2, 4.0, 4.9, 4.9.1, 4.9.3.3, 6.3, 6.3.5, 7.6, 10.1.2.8.9 3GPP TS 36.331 V17.3.0: Sections 5.5.5, 5.5.5.1, 6.2		
		JP6366763	07 Feb 2032			2	3GPP TS 36.300 V17.3.0: Sections 3.1, 3.2, 4.0, 4.9, 4.9.1, 4.9.3.3, 6.3, 6.3.5, 7.6, 10.1.2.8.9 3GPP TS 36.331 V17.3.0: Sections 5.5.5, 5.5.5.1, 6.2		
		US10575191	07 Feb 2032			6	3GPP TS 36.300 V17.3.0: Sections 3.1, 3.2, 4.0, 4.9, 4.9.1, 4.9.3.3, 6.3, 6.3.5, 7.6, 10.1.2.8.9 3GPP TS 36.331 V17.3.0: Sections 5.5.5, 5.5.5.1, 6.2		
		US10893421	07 Feb 2032					3	3GPP TS 38.300 V17.3.0: sections 3.1, 3.2, 4.1, 5.4, 5.4.1, 7.7, 16.7, 16.7.1 3GPP TS 38.331 V17.3.0: sections 5.3.3.1, 5.3.3.4, 6.2, 6.2.2, 6.3.2
MEL054	MELCO	CNZL201911334776.6	05 Jun 2034					3	3GPP TS 38.401 V17.6.0: Sections 3.1, 6.1.1 3GPP TS 38.300 V17.6.0: Sections 4.1, 4.4.1 3GPP TS 38.425 V17.3.0: Sections 3.1, 5.4.3.1, 5.5.2.3, 5.5.3.39, 5.5.3.40, 5.5.3.44
		CNZL201911335452.4	05 Jun 2034					3	3GPP TS 38.401 V17.0.0: Sections 3.1, 6.1.1 3GPP TS 38.300 V17.0.0: Sections 1, 4.4.1 3GPP TS 38.473 V17.0.0: Sections 8.2.7.1, 8.2.7.2, 9.2.1.15
		CNZL201911336053.X	05 Jun 2034					3	3GPP TS 38.401 V17.0.0: Sections 3.1, 6.1.1 3GPP TS 38.300 V17.0.0: Sections 4.4.1 3GPP TS 38.473 V17.0.0: Sections 8.3.7.2
		JP6851438	05 Jun 2034					3	3GPP TS 38.401 V17.0.0: Sections 3.1, 6.1.1 3GPP TS 38.300 V17.0.0: Sections 4.4.1 3GPP TS 38.473 V17.0.0: Sections 8.3.7.2

ID	Owner	Patent	Priority Date	Count	3GPP Reference	Count	3GPP Reference
MEL054	MELCO	JP7072696	05 Jun 2034			3	3GPP TS 38.401 V17.0.0: Sections 3.1, 6.1.1 3GPP TS 38.300 V17.0.0: Sections 1, 4.4.1 3GPP TS 38.473 V17.0.0: Sections 8.2.7.1, 8.2.7.2, 9.2.1.15
		JP7254233	05 Jun 2034			3	3GPP TS 38.401 V17.6.0: Sections 3.1, 6.1.1 3GPP TS 38.300 V17.6.0: Sections 4.1, 4.4.1 3GPP TS 38.425 V17.3.0: Sections 3.1, 5.4.3.1, 5.5.2.3, 5.5.3.39, 5.5.3.40, 5.5.3.44
MEL055	MELCO	JP7463447	08 Aug 2034			8	3GPP TS 38.300 V18.1.0: Sections 4.4.1, 4.4.2 3GPP TS 38.331 V18.1.0: Sections 5.2.1, 5.2.2.1, 5.2.2.2.1, 6.2.2, 6.3.2
MEL056	MELCO	CNZL201910467299.4	07 Aug 2035			1	3GPP TS 38.211 V16.1.0: Sections 3.2, 6.3.1.4, 6.3.1.5, 6.3.1.6, 6.4.1.1.1.2, 6.4.1.1.3; Tables 6.4.1.1.3-1, 6.4.1.1.3-5 3GPP TS 38.300 V16.1.0: Sections 1, 4.4.1, 4.4.2, 5.1, 5.2.3, 5.3.2, 10.1; Figures 4.4.1-1, 4.4.2-1, 5.1-1.
		JP6239194	07 Aug 2035			1	3GPP TS 38.201 V16.0.0: Sections 3.3 3GPP TS 38.211 V15.6.0: Sections 3.2, 5.1, 5.2.2, 6.2, 6.3.1.6, 6.4.1.1,6.4.1.1.1.2, 6.4.1.1.1.3 3GPP TS 38.300 V15.6.0: Sections 5.1, 5.3.2
MEL057	MELCO	JP6300992	10 Mar 2034			1	3GPP TS 38.201 V16.0.0: Sections 3.3 3GPP TS 38.211 V15.6.0: Sections 3.2, 5.2.1, 6.2, 6.3.1.2, 6.3.1.3, 6.3.1.4, 6.4.1.2.1.2, 6.4.1.2.2.2 3GPP TS 38.300 V15.6.0: Sections 5.1
		US11290312	10 Mar 2034			2	3GPP TS 38.211 V15.6.0: Sections 3.2, 3.3, 5.1, 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 6.3.1.2, 6.3.1.3, 6.3.1.4, 6.4.1.2.2.2; Tables 6.3.1.2-1, 6.4.1.2.2.2-1 3GPP TS 38.300 V15.6.0: Sections 3.1, 3.2, 4.1, 5.1, 5.3.2; Figure 5.1-1
MEL058	MELCO	JP6852203	27 Sep 2036			1	3GPP TS 38.211 V15.8.0: Section 3.3 3GPP TS 38.213 V15.8.0: Sections 4.1, 10.1, 13; Tables 13-7, 13-8 3GPP TS 38.300 V15.8.0: Sections 4.1, 5.2.4, 5.5 3GPP TS 38.331 V15.8.0: Sections 4.4, 5.2.1, 5.2.2.3.2, 6.3.2
MEL069	MELCO	US11569968	24 Apr 2032			2	3GPP TS 38.300 V17.3.0: sections 3.1, 4.1, 4.2, 4.5 3GPP TS 38.331 V17.3.0: sections 5.5, 5.5.1, 5.5.5, 6.3.2, 11.2.2 3GPP TS 38.423 V17.3.0: sections 8.3, 8.3.3, 9.1.2.5, 9.2.2.27
MEL070	MELCO	US11324001	02 Aug 2033			9	3GPP TS 38.300 V17.3.0: sections 4.1, 9.2.4 3GPP TS 38.331 V17.3.0: sections 6.2.2, 6.3.2, 11.2.2 3GPP TS 37.340 V17.3.0: section 10.2.2
MEL071	MELCO	US11050595	27 Dec 2037			14	3GPP TS 38.211 V15.8.0: Sections 3.2, 3.3, 6.3.1.4, 6.4.1.2.2.2; Table 6.4.1.2.2.2-1 3GPP TS 38.214 V15.8.0: Sections 6.2.3.2; Table 6.2.3.2-1 3GPP TS 38.300 V15.8.0: Sections 3.1, 3.2, 4.1, 5.1, 5.3.2; Figure 5.1-1
MEL072	MELCO	US11363560	27 Sep 2031	9	3GPP TS 36.300 V17.3.0: Sections 23.7, 23.7a, 23.7b 3GPP TS 36.212 V17.1.0: Sections 3.1, 3.3, 5.3.3.1.10, 5.3.3.1.11, 5.3.3.1.12, 5.3.3.1.13, 5.3.3.1.14 3GPP TS 36.231 V17.4.0: Sections 7.1.11, 8.0		
MEL073	MELCO	CNZL202110260766.3	03 Aug 2035			3	3GPP TS 38.300 V18.0.0: Section 4.1 3GPP TS 38.211 V18.1.0: Sections 6.1.2, 6.4.1.4.2 3GPP TS 38.331 V18.0.0: Sections 3.2, 6.2.2 , 6.3.2
MEL074	MELCO	JP7433369	16 Dec 2034			5	3GPP TS38.331 V18.0.0: Section 6.2.2 3GPP TS 37.340 V18.0.0: sections 3.1, 3.2,4.1.1, 4.1.2, 7.1, 7.13
MEL075	MELCO	US11997557	16 Mar 2035			4	3GPP TS 37.340 V18.0.0: sections 3.1, 3.2, 4.1.1, 10.8.1
NKO002*	Sisvel International	CA2318480	31 Aug 2018	27	3GPP TS 24.301 V8.10.0: Sections 4.2, 6.1.1, 6.4.1.1, 6.4.3.1, 6.4.3.2, 6.4.3.3, 6.4.3.4, 6.5.3.1, 8.3.18.1, 9.3.2, 9.9.4.3; Figure 6.4.3.2.1; Tables 8.3.18.1		
		EP1051870 (DE, ES, FR, GB, IT, NL)	31 Aug 2018	18	3GPP TS 24.301 V8.10.0: Sections 6.4.3.1, 6.4.3.2, 6.4.3.4, 8.3.17.1, 8.3.18.1, 8.3.18.2, 9.3.2, 9.9.4.3, 9.9.4.4; Figure 6.4.3.2.1; Tables 8.3.17.1, 8.3.18.1		
		JP4002731	31 Aug 2018	1	3GPP TS 23.401 V8.18.0: Sections 4.2.1 3GPP TS 24.301 V8.10.0: Sections 6.4.2.2, 6.4.2.3, 6.4.3.2, 6.4.3.3, 8.3.18.1, 9.3.2, 9.9.4.3		
		US6826406	31 Aug 2018	1	3GPP TS 24.301 V8.10.0: Sections 4.2, 6.1.1, 6.4.1.1, 6.4.3.1, 6.4.3.2, 6.4.3.3, 6.4.3.4, 6.5.3.1, 8.3.18.1, 9.3.2, 9.9.4.3; Figure 6.4.3.2.1; Tables 8.3.18.1		
		US7599384	09 Sep 2022	17	3GPP TS 24.301 V8.10.0: Sections 4.2, 6.1.1, 6.4.1.1, 6.4.3.1, 6.4.3.2, 6.4.3.3, 6.4.3.4, 6.5.3.1, 8.3.18.1, 9.3.2, 9.9.4.3; Figure 6.4.3.2.1; Tables 8.3.18.1		
NKO003*	Sisvel International	EP0852885 (AT, BE, DE, ES, FR, GB, GR, IE, IT, NL)	25 Sep 2016	12	3GPP TS23.401 V8.18.0: Sections 4.7, 4.7.1, 4.7.2, 4.7.2.1, 5.4, 5.4.1, 5.7, 5.7.1; Tables 5.4.1-1, 5.7.1-1		
NKO005*	Sisvel International	CNZL99811826.5	05 Oct 2019	14	3GPP TS 23.003 V8.17.0: Sections 2.1, 2.8, 2.8.1 3GPP TS 23.401 V8.18.0: Section 5.3.7; Figure 5.3.7-1		
		EP1119997 (AT, BE, DE, ES, FR, GB, IT, NL, PT, SE)	05 Oct 2019	15	3GPP TS 23.003 V8.17.0: Sections 2.1, 2.8, 2.8.1 3GPP TS 23.401 V8.18.0: Section 5.3.7; Figure 5.3.7-1		
		JP4226786	05 Oct 2019	1	3GPP TS 23.003 V8.17.0: Sections 2.1, 2.8.1 3GPP TS 23.401 V8.18.0: Sections 4.2.1, 5.2.2, 5.3.2.1		
NKO009*	Sisvel International	BRPI9915081-6	05 Nov 2024	1	3GPP TS 25.301 V3.10.0: Sections 5.3.1, 5.3.1.1.1, 5.6.2, 7; Figure 13 3GPP TS 25.211 V3.12.0: Sections 3.2, 4.5, 7.6.1, 7.6.2, 7.6.3, 8.2, 8.2.1 3GPP TS 25.402 V3.10.0: Sections 7, 7.1, 5, 9.3 A, 9.3.1, 9.3.1 A 3GPP TS 33.102 V3.10.0: Sections 6.6.4, 6.6.4.1, 6.4.8; Figure 16c 3GPP TS 25.331 V3.10.0: Sections 8.2.2.3, 8.5.8, 8.5.9, 10.3.7.6, 10.3.3.38		

NKO009*	Sisvel International	CNZL200510106324.4	05 Nov 2019	1	3GPP TS 25.301 V3.10.0: Sections 5.3.1, 5.3.1.1.1, 5.6.2, 7; Figure 13 3GPP TS 25.211 V3.12.0: Sections 3.2, 4.5, 7.6.1, 7.6.2, 7.6.3, 8.2, 8.2.1 3GPP TS 25.402 V3.10.0: Sections 7, 7.1, 5, 9.3 A, 9.3.1, 9.3.1 A 3GPP TS 33.102 V3.10.0: Sections 6.6.4, 6.6.4.1, 6.4.8; Figure 16c 3GPP TS 25.331 V3.10.0: Sections 8.2.2.3, 8.5.8, 8.5.9, 10.3.7.6, 10.3.3.38					
		CNZL99813850.9	05 Nov 2019	1	3GPP TS 25.301 V3.10.0: Sections 5.3.1, 5.3.1.1.1, 5.6.2, 7; Figure 13 3GPP TS 25.211 V3.12.0: Sections 3.2, 4.5, 7.6.1, 7.6.2, 7.6.3, 8.2, 8.2.1 3GPP TS 25.402 V3.10.0: Sections 7, 7.1, 5, 9.3 A, 9.3.1, 9.3.1 A 3GPP TS 33.102 V3.10.0: Sections 6.6.4, 6.6.4.1, 6.4.8; Figure 16c 3GPP TS 25.331 V3.10.0: Sections 8.2.2.3, 8.5.8, 8.5.9, 10.3.7.6, 10.3.3.38					
		JP3519688	05 Nov 2019	1	3GPP TS 25.301 V3.10.0: Sections 5.3.1, 5.3.1.1.1, 5.6.2, 7; Figure 13 3GPP TS 25.211 V3.12.0: Sections 3.2, 4.5, 7.6.1, 7.6.2, 7.6.3, 8.2, 8.2.1 3GPP TS 25.402 V3.10.0: Sections 7, 7.1, 5, 9.3 A, 9.3.1, 9.3.1 A 3GPP TS 33.102 V3.10.0: Sections 6.6.4, 6.6.4.1, 6.4.8; Figure 16c 3GPP TS 25.331 V3.10.0: Sections 8.2.2.3, 8.5.8, 8.5.9, 10.3.7.6, 10.3.3.38					
		US7085294	23 Aug 2022	21	3GPP TS 25.301 V3.10.0: Sections 5.3.1, 5.3.1.1.1, 5.6.2, 7; Figure 13 3GPP TS 25.211 V3.12.0: Sections 3.2, 4.5, 7.6.1, 7.6.2, 7.6.3, 8.2, 8.2.1 3GPP TS 25.402 V3.10.0: Sections 7, 7.1, 5, 9.3 A, 9.3.1, 9.3.1 A 3GPP TS 33.102 V3.10.0: Sections 6.6.4, 6.6.4.1, 6.4.8; Figure 16c 3GPP TS 25.331 V3.10.0: Sections 8.2.2.3, 8.5.8, 8.5.9, 10.3.7.6, 10.3.3.38					
NKO011*	Sisvel International	EP2139272 (AT, BE, CH, DE, EK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE)	13 Oct 2020				1	3GPP TS 23.401 V8.18.0: Sections 5.3.2, 5.3.2.1; Table 5.3.2.1-1		
		HK1132411	13 Oct 2020				1	3GPP TS 23.401 V8.18.0: Sections 5.3.2, 5.3.2.1; Table 5.3.2.1-1		
		US7580714	13 Oct 2020				1	3GPP TS 23.401 V8.18.0: Sections 5.3.2, 5.3.2.1, 5.3.5.1; Figures 5.3.2.1-1, 5.3.5.1-1		
		US7979070	05 Nov 2020				1	3GPP TS 23.401 V8.18.0: Sections 5.3.2, 5.3.2.1, 5.3.5.1; Figures 5.3.2.1-1, 5.3.5.1-1		
		US9008615	30 Apr 2022				1	3GPP TS 24.301 V8.10.0: Sections 5.5.1.2.2, 5.5.1.2.4, 6.4.1.1, 8.2.4.1 3GPP TS 23.401 V8.18.0: Section 5.3.2.1 3GPP TS 36.331 V8.21.0: Section 5.3.5		
NKO012	Sisvel International	BRPI0107654-0	08 Sep 2025	11	3GPP TS 25.331 V3.21.0: Sections 8.1.3, 8.1.3.9, 10.2.36, 10.3.3.29, 10.3.6.36; Figures 8.1.3-2					
		CA2395586	17 Jan 2021	11	3GPP TS 25.331 V3.21.0: Sections 8.1.3, 8.1.3.9, 10.2.36, 10.3.3.29, 10.3.6.36; Figures 8.1.3-2					
		CNZL01803214.1	17 Jan 2021	11	3GPP TS 25.331 V3.21.0: Sections 8.1.3, 8.1.3.9, 10.2.36, 10.3.3.29, 10.3.6.36; Figures 8.1.3-2					
		CNZL200510072602.9	17 Jan 2021	23	3GPP TS 25.331 V3.21.0: Sections 8.1.3, 8.1.3.9, 10.2.36, 10.3.3.29, 10.3.6.36; Figures 8.1.3-2					
		EP1249151 (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, NL, PT, SE, TR)	17 Jan 2021	11	3GPP TS 25.331 V3.21.0: Sections 8.1.3, 8.1.3.9, 10.2.36, 10.3.3.29, 10.3.6.36; Figures 8.1.3-2					
		HK1087293	17 Jan 2021	23	3GPP TS 25.331 V3.21.0: Sections 8.1.3, 8.1.3.9, 10.2.36, 10.3.3.29, 10.3.6.36; Figures 8.1.3-2					
		IN221857	17 Jan 2021	11	3GPP TS 25.331 V3.21.0: Sections 8.1.3, 8.1.3.9, 10.2.36, 10.3.3.29, 10.3.6.36; Figures 8.1.3-2					
		KR10-0554710	17 Jan 2021	11	3GPP TS 25.331 V3.21.0: Sections 8.1.3, 8.1.3.9, 10.2.36, 10.3.3.29, 10.3.6.36; Figures 8.1.3-2					
		RU2233047	17 Jan 2021	11	3GPP TS 25.331 V3.21.0: Sections 8.1.3, 8.1.3.9, 10.2.36, 10.3.3.29, 10.3.6.36; Figures 8.1.3-2					
NKO013	Sisvel International	EP1470684 (DE, FR, GB, IT)	21 Jan 2022	37	3GPP TS 24.229 V5.10.0: Sections 4.1, 5.1.1, 5.1.1.3, 5.1.1.7 3GPP TS 23.228 V5.10.0: Sections 5.3, 5.3.2, 5.3.2.2.1, 5.3.3; Figure 5.5 IETF RFC 3680: Section 4.7					
		JP4586056	21 Jan 2022	6	3GPP TS 24.229 V5.10.0: Sections 4.1, 5.1.1, 5.1.1.3, 5.1.1.7 3GPP TS 23.228 V5.10.0: Sections 5.3, 5.3.2, 5.3.2.2.1, 5.3.3; Figure 5.5 IETF RFC 3680: Section 4.7					
		KR10-0704036	21 Jan 2022	37	3GPP TS 24.229 V5.10.0: Sections 4.1, 5.1.1, 5.1.1.3, 5.1.1.7 3GPP TS 23.228 V5.10.0: Sections 5.3, 5.3.2, 5.3.2.2.1, 5.3.3; Figure 5.5 IETF RFC 3680: Section 4.7					
		US8571548	22 Apr 2027	26	3GPP TS 24.229 V5.10.0: Sections 4.1, 5.1.1, 5.1.1.3, 5.1.1.7 3GPP TS 23.228 V5.10.0: Sections 5.3, 5.3.2, 5.3.2.2.1, 5.3.3; Figure 5.5 IETF RFC 3680: Section 4.7					
NKO019*	Sisvel International	USRE40825	19 Feb 2023	46	3GPP TS 25.214 V3.12.0: Sections 7, 7.1, 7.3; Figure 3 3GPP TS 25.331 V5.13.0: Sections 8.6, 8.6.6, 8.6.6.24, 10.3.6, 10.3.6.21, 10.3.6.86 3GPP TS 25.211 V5.3.0: Sections 5.2.1; Figure 2					
NKO026	Sisvel International	USRE42692	21 Jul 2025	28	3GPP TS 25.211 V5.8.0: Sections 5.3.3.12, 5.3.3.13 3GPP TS 25.212 V5.8.0: Section 4.6.2.3 3GPP TS 25.213 V5.8.0: Section 5.2.1					

ID	Owner	Patent Number	Date	#	Standard References		#	Standard References		
NKO028*	Sisvel International	CA2395756	09 Jan 2021	18	3GPP TS 25.215 V3.6.0: Sections 6.1.1.1, 6.1.1.2; Figure 1 3GPP TS 25.212 V3.6.0: Sections 4.2, 4.4, 4.4.1; Figures 1, 11, 12 3GPP TS 25.331 V3.6.0: Sections 10.3.6.33, 14.2, 14.3					
		CNZL01803595.7	09 Jan 2021	17	3GPP TS 25.215 V3.6.0: Sections 6.1.1.1, 6.1.1.2; Figure 1 3GPP TS 25.212 V3.6.0: Sections 4.2, 4.4, 4.4.1; Figures 1, 11, 12 3GPP TS 25.331 V3.6.0: Sections 10.3.6.33, 14.2, 14.3					
		US7020108	09 Aug 2023	16	3GPP TS 25.215 V3.6.0: Sections 6.1.1.1, 6.1.1.2; Figure 1 3GPP TS 25.212 V3.6.0: Sections 4.2, 4.4, 4.4.1; Figures 1, 11, 12 3GPP TS 25.331 V3.6.0: Sections 10.3.6.33, 14.2, 14.3					
NKO030	Sisvel International	BRPI0108480-1	23 Feb 2028	16	3GPP TS 25.331 V7.2.0: Sections 7.1, 8.3.1.2, 8.3.1.13, 8.3.1.14, 8.2.2.1, 10.3.3.43, 13.1					
		CA2401037	23 Feb 2021	17	3GPP TS 25.331 V7.2.0: Sections 7.1, 8.3.1.2, 8.3.1.13, 8.3.1.14, 8.2.2.1, 10.3.3.43, 13.1					
		CNZL01805488.9	23 Feb 2021	17	3GPP TS 25.331 V7.2.0: Sections 7.1, 8.3.1.2, 8.3.1.13, 8.3.1.14, 8.2.2.1, 10.3.3.43, 13.1					
		EP1264504 (DE, ES, FR, GB, IT, NL)	23 Feb 2021	17	3GPP TS 25.331 V7.2.0: Sections 7.1, 8.3.1.2, 8.3.1.13, 8.3.1.14, 8.2.2.1, 10.3.3.43, 13.1					
		JP3961774	23 Feb 2021	17	3GPP TS 25.331 V7.2.0: Sections 7.1, 8.3.1.2, 8.3.1.13, 8.3.1.14, 8.2.2.1, 10.3.3.43, 13.1					
		KR10-0501836	23 Feb 2021	17	3GPP TS 25.331 V7.2.0: Sections 7.1, 8.3.1.2, 8.3.1.13, 8.3.1.14, 8.2.2.1, 10.3.3.43, 13.1					
		US7751803	01 Feb 2026	17	3GPP TS 25.331 V7.2.0: Sections 7.1, 8.3.1.2, 8.3.1.13, 8.3.1.14, 8.2.2.1, 10.3.3.43, 13.1					
NKO034*	Sisvel International	EP1540864 (DE, FR, GB)	19 Sep 2023	15	3GPP TS 25.211 V6.4.0: Sections 3.2, 5.2.1.2; Figure 2A 3GPP TS 25.214 V6.4.0: Sections 1, 3.2, 6A.1.1, 3GPP TS25.212 V6.3.0: Sections 4.7.1, 4.7.1.1; Table 13A					
		US7116651	27 Sep 2023	27	3GPP TS 25.211 V6.4.0: Sections 3.2, 5.2.1.2; Figure 2A 3GPP TS 25.214 V6.4.0: Sections 1, 3.2, 6A.1.1, 3GPP TS25.212 V6.3.0: Sections 4.7.1, 4.7.1.1; Table 13A					
NKO035	Sisvel International	EP1807956 (AT, BE, CH, CZ, DE, DK, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, NL, PL, PT, RO, SE, SK, TR)	13 Oct 2025				1	3GPP TS 36.201 V8.3.0: Sections 4.2.1 3GPP TS 36.212 V8.8.0: 5.2, 5.2.1, 5.2.2, 5.2.2.6 3GPP TS 36.213 V8.8.0: 7.2, 7.2.1, 7.2.2, 7.2.3, 7.2.4; Tables 7.2.1-1, 7.2.2-1, 7.2.3-0, 7.2.3-1		
		US7283499	12 Apr 2026				1	3GPP TS 36.201 V8.3.0: Sections 4.1.2, 4.2.1 3GPP TS 36.212 V8.8.0: Sections 4.2, 5, 5.3.2; Figure 5.3.2-1 3GPP TS 36.213 V8.8.0: Sections 7.2, 7.2.1. 7.2.2, 7.2.3, 7.2.4; Table: 7.2.3-1		
NKO036	Sisvel International	AU2005283836	12 Sep 2025	6	3GPP TS25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS25.321 V6.7.0: Sections 9.2.5.3, 9.2.5.3.1, 11.8.1.3, 11.8.1.3.1, 11.8.1.5, 3GPP TS25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A					
		CNZL201610989568.X	12 Sep 2025	10	3GPP TS25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS25.321 V6.7.0: Sections 9.2.5.3, 9.2.5.3.1, 11.8.1.3, 11.8.1.3.1, 11.8.1.5, 3GPP TS25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A					
		EP1794950 (DE, FR, GB, IT, RO)	12 Sep 2025	11	3GPP TS25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS25.321 V6.7.0: Sections 9.2.5.3, 9.2.5.3.1, 11.8.1.3, 11.8.1.3.1, 11.8.1.5, 3GPP TS25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A					
		IN264926	12 Sep 2025	11	3GPP TS25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS25.321 V6.7.0: Sections 9.2.5.3, 9.2.5.3.1, 11.8.1.3, 11.8.1.3.1, 11.8.1.5, 3GPP TS25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A					
		JP4514795	12 Sep 2025	11	3GPP TS25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS25.321 V6.7.0: Sections 9.2.5.3, 9.2.5.3.1, 11.8.1.3, 11.8.1.3.1, 11.8.1.5, 3GPP TS25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A					
		KR10-0915853	12 Sep 2025	33	3GPP TS25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS25.321 V6.7.0: Sections 9.2.5.3, 9.2.5.3.1, 11.8.1.3, 11.8.1.3.1, 11.8.1.5, 3GPP TS25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A					
		US8787158	16 Sep 2025	1	3GPP TS25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS25.321 V6.7.0: Sections 9.2.5.3, 9.2.5.3.1, 11.8.1.3, 11.8.1.3.1, 11.8.1.5, 3GPP TS25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A					
		US9019829	13 Dec 2029	13	3GPP TS25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS25.321 V6.7.0: Sections 9.2.5.3, 9.2.5.3.1, 11.8.1.3, 11.8.1.3.1, 11.8.1.5, 3GPP TS25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A					
NKO039	Sisvel International	AU2004315850	17 Dec 2024	16	3GPP TS 25.321 V6.15.0: Sections 3.1.2, 9.2.5.2.1, 11.8.1.3, 11.8.1.3.1 3GPP TS 25.211 V6.5.0: Section 5.3.2.4 3GPP TS 25.214 V6.11.0: Section 6B.2					
		BRPI0418494-7	17 Dec 2028	14	3GPP TS 25.321 V6.15.0: Sections 3.1.2, 9.2.5.2.1, 11.8.1.3, 11.8.1.3.1 3GPP TS 25.211 V6.5.0: Section 5.3.2.4 3GPP TS 25.214 V6.11.0: Section 6B.2					
		CA2554079	17 Dec 2024	16	3GPP TS 25.321 V6.15.0: Sections 3.1.2, 9.2.5.2.1, 11.8.1.3, 11.8.1.3.1 3GPP TS 25.211 V6.5.0: Section 5.3.2.4 3GPP TS 25.214 V6.11.0: Section 6B.2					

ID	Owner	Patent	Date		Standard		Standard		Standard
NKO039	Sisvel International	CNZL200480040893.7	17 Dec 2024	16	3GPP TS 25.321 V6.15.0: Sections 3.1.2, 9.2.5.2.1, 11.8.1.3, 11.8.1.3.1 3GPP TS 25.211 V6.5.0: Section 5.3.2.4 3GPP TS 25.214 V6.11.0: Section 6B.2				
		IN263794	17 Dec 2024	1	3GPP TS 25.321 V6.15.0: Sections 3.1.2, 9.2.5.2.1, 11.8.1.3, 11.8.1.3.1 3GPP TS 25.211 V6.5.0: Section 5.3.2.4 3GPP TS 25.214 V6.11.0: Section 6B.2				
		JP4468960	17 Dec 2024	16	3GPP TS 25.321 V6.15.0: Sections 3.1.2, 9.2.5.2.1, 11.8.1.3, 11.8.1.3.1 3GPP TS 25.211 V6.5.0: Section 5.3.2.4 3GPP TS 25.214 V6.11.0: Section 6B.2				
		KR10-0787532	17 Dec 2024	16	3GPP TS 25.321 V6.15.0: Sections 3.1.2, 9.2.5.2.1, 11.8.1.3, 11.8.1.3.1 3GPP TS 25.211 V6.5.0: Section 5.3.2.4 3GPP TS 25.214 V6.11.0: Section 6B.2				
		RU2337490	17 Dec 2024	16	3GPP TS 25.321 V6.15.0: Sections 3.1.2, 9.2.5.2.1, 11.8.1.3, 11.8.1.3.1 3GPP TS 25.211 V6.5.0: Section 5.3.2.4 3GPP TS 25.214 V6.11.0: Section 6B.2				
		RU2407238	17 Dec 2024	16	3GPP TS 25.321 V6.15.0: Sections 3.1.2, 9.2.5.2.1, 11.8.1.3, 11.8.1.3.1 3GPP TS 25.211 V6.5.0: Section 5.3.2.4 3GPP TS 25.214 V6.11.0: Section 6B.2				
		US7133690	15 May 2024	16	3GPP TS 25.321 V6.15.0: Sections 3.1.2, 9.2.5.2.1, 11.8.1.3, 11.8.1.3.1 3GPP TS 25.211 V6.5.0: Section 5.3.2.4 3GPP TS 25.214 V6.11.0: Section 6B.2				
NKO041	Sisvel International	BRPI0512333-0	20 Jun 2028	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
		CA2571423	20 Jun 2025	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
		CNZL200580026115.7	20 Jun 2025	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
		EP1759555 (DE, ES, FR, GB, IT, NL)	20 Jun 2025	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
		IN308766	20 Jun 2025	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
		JP4827839	20 Jun 2025	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
		KR10-1013227	20 Jun 2025	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
		KR10-1077598	20 Jun 2025	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
		RU2408170	20 Jun 2025	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
		TWI352551	21 Jun 2025	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
		US8155060	03 Oct 2026	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
		US8249012	17 Aug 2025	1	3GPP TS 25.214 V6.5.0: Section 4.3.1.2 3GPP TS 25.331 V6.6.0: Sections 8.3.1.2, 8.5.6, B.3.1.2 3GPP TS 25.211 V6.5.0: Section 5.3.2.6				
NKO044	Sisvel International	CNZL200680038765.8	22 Aug 2026			16	3GPP TS 36.322 V10.0.0: Sections 4.1, 4.2.1, 6.2, 6.2.1.1, 6.2.1.3, 6.2.1.4, 6.2.1.5, 6.2.2.1, 6.2.2.2, 6.2.2.5, 6.2.2.6; Figures 4.2.1-1, 6.2.1.3-3, 6.2.1.3-4, 6.2.1.3-5, 6.2.1.3-6, 6.2.1.4-2, 6.2.1.4-3, 6.2.1.5-1, 6.2.1.5-2, 6.2.1.5-3; Table 6.2.2.6-1	16	3GPP TS 38.322 V15.5.0: Sections 1, 4.2, 4.2.1, 4.2.1.2.2, 4.2.1.3.2, 6.2.2, 6.2.2.1, 6.2.2.3, 6.2.2.4, 6.2.3.4
		EP1925142 (AT, BE, CH, CZ, DE, ES, FR, GB, IE, IT, LU, NL, PL, PT, RO, SE, TR)	22 Aug 2026			14	3GPP TS 36.322 V10.0.0: Sections 4.1, 4.2.1, 6.2, 6.2.1.1, 6.2.1.3, 6.2.1.4, 6.2.1.5, 6.2.2.1, 6.2.2.2, 6.2.2.5, 6.2.2.6; Figures 4.2.1-1, 6.2.1.3-3, 6.2.1.3-4, 6.2.1.3-5, 6.2.1.3-6, 6.2.1.4-2, 6.2.1.4-3, 6.2.1.5-1, 6.2.1.5-2, 6.2.1.5-3; Table 6.2.2.6-1	14	3GPP TS 38.322 V15.5.0: Sections 1, 4.2, 4.2.1, 4.2.1.2.2, 4.2.1.3.2, 6.2.2, 6.2.2.1, 6.2.2.3, 6.2.2.4, 6.2.3.4
		IN318570	22 Aug 2026			14	3GPP TS 36.322 V10.0.0: Sections 4.1, 4.2.1, 6.2, 6.2.1.1, 6.2.1.3, 6.2.1.4, 6.2.1.5, 6.2.2.1, 6.2.2.2, 6.2.2.5, 6.2.2.6; Figures 4.2.1-1, 6.2.1.3-3, 6.2.1.3-4, 6.2.1.3-5, 6.2.1.3-6, 6.2.1.4-2, 6.2.1.4-3, 6.2.1.5-1, 6.2.1.5-2, 6.2.1.5-3; Table 6.2.2.6-1	14	3GPP TS 38.322 V15.5.0: Sections 1, 4.2, 4.2.1, 4.2.1.2.2, 4.2.1.3.2, 6.2.2, 6.2.2.1, 6.2.2.3, 6.2.2.4, 6.2.3.4
		JP4875084	22 Aug 2026					14	3GPP TS 38.322 V15.5.0: Sections 1, 4.2, 4.2.1, 4.2.1.2.2, 4.2.1.3.2, 6.2.2, 6.2.2.1, 6.2.2.3, 6.2.2.4, 6.2.3.4
		KR10-0950843	22 Aug 2026			16	3GPP TS 36.322 V10.0.0: Sections 4.1, 4.2.1, 6.2, 6.2.1.1, 6.2.1.3, 6.2.1.4, 6.2.1.5, 6.2.2.1, 6.2.2.2, 6.2.2.5, 6.2.2.6; Figures 4.2.1-1, 6.2.1.3-3, 6.2.1.3-4, 6.2.1.3-5, 6.2.1.3-6, 6.2.1.4-2, 6.2.1.4-3, 6.2.1.5-1, 6.2.1.5-2, 6.2.1.5-3; Table 6.2.2.6-1	16	3GPP TS 38.322 V15.5.0: Sections 1, 4.2, 4.2.1, 4.2.1.2.2, 4.2.1.3.2, 6.2.2, 6.2.2.1, 6.2.2.3, 6.2.2.4, 6.2.3.4
		US7894443	26 Dec 2028			16	3GPP TS 36.322 V10.0.0: Sections 4.1, 4.2.1, 6.2, 6.2.1.1, 6.2.1.3, 6.2.1.4, 6.2.1.5, 6.2.2.1, 6.2.2.2, 6.2.2.5, 6.2.2.6; Figures 4.2.1-1, 6.2.1.3-3, 6.2.1.3-4, 6.2.1.3-5, 6.2.1.3-6, 6.2.1.4-2, 6.2.1.4-3, 6.2.1.5-1, 6.2.1.5-2, 6.2.1.5-3; Table 6.2.2.6-1	16	3GPP TS 38.322 V15.5.0: Sections 1, 4.2, 4.2.1, 4.2.1.2.2, 4.2.1.3.2, 6.2.2, 6.2.2.1, 6.2.2.3, 6.2.2.4, 6.2.3.4
NTT001	NTT	JP6758472	14 Jul 2037					4	3GPP TS 23.228 V15.0.0: Sectios 4.14, 5.4.13 3GPP TS 24.229 V15.0.0: Sections 3.1, 3.2, 4.1, 5.10.7, 6.7.1.3, T2
ORA002	3G Licensing	BRPI0116844-4	19 Nov 2025	10	3GPP TS 22.243 V8.0.0: Sections 1, 3.1, 4, 5, 7; Figure 1 3GPP TS 26.243 V8.0.0: Section 2 3GPP TS 26.177 V8.0.0: Section 2 ETSI ES 202 050 V1.1.5: Sections 4, 5.1.1, 5.1.3, 5.1.4, 5.1.5; Figures 4.1, 5.1, 5.2				

version: 32.JEOW

ORA002	3G Licensing	CA2436318	19 Nov 2021	10	3GPP TS 22.243 V8.0.0: Sections 1, 3.1, 4, 5, 7; Figure 1 3GPP TS 26.243 V8.0.0: Section 2 3GPP TS 26.177 V8.0.0: Section 2 3GPP ETSI ES 202 050 V1.1.5 sections 4, 5.1.1, 5.1.3, 5.1.4, 5.1.5; Figures 4.1, 5.1, 5.2		
		CNZL01822358.3	19 Nov 2021	8	3GPP TS 22.243 V8.0.0: Sections 1, 2.2, 3.1, 4, 5, 7; Figure 1 ETSI ES 202 050 V1.1.5: Section 4, 5.1.1, 5.1.3, 5.1.4, 5.1.5; Figures 4.1, 5.1, 5.2		
		EP1356461 (DE, ES, FR, GB, IT, NL, TR)	19 Nov 2021	10	3GPP TS 22.243 V8.0.0: Sections 1, 3.1, 4, 5, 7; Figure 1 3GPP TS 26.243 V8.0.0: Section 2 3GPP TS 26.177 V8.0.0: Section 2 ETSI ES 202 050 V1.1.5: Sections 4, 5.1.1, 5.1.3, 5.1.4, 5.1.5; Figures 4.1, 5.1, 5.2		
		HK1057639	19 Nov 2021	10	3GPP TS 22.243 V8.0.0: Sections 1, 2.2, 3.1, 4, 5, 7; Figure 1 3GPP TS 26.243 V8.0.0: Section 2 3GPP TS 26.177 V8.0.0: Section 2 ETSI ES 202 050 V1.1.5: Sections 4, 5.1.1, 5.1.3, 5.1.4, 5.1.5; Figures 4.1, 5.1, 5.2		
		JP4210521	19 Nov 2021	10	3GPP TS 22.243 V8.0.0: Sections 1, 2.2, 3.1, 4, 5, 7; Figure 1 3GPP TS 26.243 V8.0.0: Section 2 3GPP TS 26.177 V8.0.0: Section 2 ETSI ES 202 050 V1.1.5: Sections 4, 5.1.1, 5.1.3, 5.1.4, 5.1.5; Figures 4.1, 5.1, 5.2		
		KR10-0549133	19 Nov 2021	10	3GPP TS 22.243 V8.0.0: Sections 1, 2.2, 3.1, 4, 5, 7; Figure 1 3GPP TS 26.243 V8.0.0: Section 2 3GPP TS 26.177 V8.0.0: Section 2 ETSI ES 202 050 V1.1.5: Sections 4, 5.1.1, 5.1.3, 5.1.4, 5.1.5; Figures 4.1, 5.1, 5.2		
		MX243041	19 Nov 2021	10	3GPP TS 22.243 V8.0.0: Sections 1, 2.2, 3.1, 4, 5, 7; Figure 1 3GPP TS 26.243 V8.0.0: Section 2 3GPP TS 26.177 V8.0.0: Section 2 ETSI ES 202 050 V1.1.5: Sections 4, 5.1.1, 5.1.3, 5.1.4, 5.1.5; Figures 4.1, 5.1, 5.2		
		US7313518	27 Apr 2024	10	3GPP TS 22.243 V8.0.0: Sections 1, 2.2, 3.1, 4, 5, 7; Figure 1 3GPP TS 26.243 V8.0.0: Section 2 3GPP TS 26.177 V8.0.0: Section 2 ETSI ES 202 050 V1.1.5: Sections 4, 5.1.1, 5.1.3, 5.1.4, 5.1.5; Figures 4.1, 5.1, 5.2		
ORA007	3G Licensing	EP1690361 (DE, FR, GB)	02 Dec 2024			12	3GPP TS 36.211 V10.7.0: Sections 6.3, 6.3.3, 6.3.4.3
		JP4845738	02 Dec 2024			12	3GPP TS 36.211 V10.7.0: Sections 6.3, 6.3.3, 6.3.4.3
		KR10-1092537	02 Dec 2024			12	3GPP TS 36.211 V10.7.0: Sections 6.3, 6.3.3, 6.3.4.3
		US7933564	23 Oct 2026			1	3GPP TS 36.211 V10.7.0: Sections 6.3, 6.3.2, 6.3.3, 6.3.3.3, 6.3.4, 6.3.4.3; Figure 6.3-1; Table 6.3.3.3-1
ORA008	3G Licensing	US7860069	07 Aug 2026	14	3GPP TS 23.401 V8.15.0: Sections 1, 4.2.1, 4.7.1, 5.1.2.1; Figures 5.1.2.1-1, 5.3.1.1, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 23.228 V8.12.0: Section 4.3.1 3GPP TS 23.221 V8.9.0: Section 5.6		
ORA030	3G Licensing	US8781469	13 Dec 2028	23	3GPP TS 23.401 V8.15.0: Sections 4.3.2.2, 4.7.5, 5.3.2.1, 5.4.1; Figures 5.3.2.1-1, 5.4.1-1 3GPP TS 23.203 V8.14.0: Sections 3.1, 4.1, 5.2.2 3GPP TS 29.212 V8.15.0: Section 4.5.1	23, 24	3GPP TS 23.122 V8.12.0: Sections 2, 3, 3.1 3GPP TS 24.008 V8.19.0: Sections 10, 10.5.5.12 3GPP TS 24.301 V8.10.0: Sections 1, 4.4, 4.3.1, 5.5.1.1, 5.5.1.2.1, 5.5.1.2.2, 5.5.1.2.4, 5.5.1.2.5, 8.2.1.1, 8.2.4.1, 9.9.3.9, 9.9.3.20; Tables 8.2.1.1, 8.2.4.1; Figure 9.9.3.9.1
ORA032	3G Licensing	EP2266351 (DE, ES, FR, GB, IT)	17 Mar 2029	1	3GPP TS 23.327 V8.4.0: Sections 1, 2, 3.2, 4.1, 5.2, 5.2.2, 5.3.3, 5.4, 6.1, 6.3.2.1; Figures 5.2.2-1, 6.1, 6.3.2.1-1 3GPP TS 23.060 V8.15.0: Sections 5.4.1.1, 5.4.1.2, 9.2.1 3GPP TS 23.234 V8.0.0: Sections 5.10.1 IETF RFC 3775: Sections 10.3.2 IETF RFC 5555: Sections 4.4.2.1		
		US8532076	15 Jan 2030	1	3GPP TS 23.327 V8.4.0: Sections 1, 2, 3.2, 4.1, 5.2, 5.2.2, 5.3.3, 5.4, 6.1, 6.3.2.1; Figures 5.2.2-1, 6.1, 6.3.2.1-1 3GPP TS 23.060 V8.15.0: Sections 5.4.1.1, 5.4.1.2, 9.2.1 3GPP TS 23.234 V8.0.0: Sections 5.10.1 IETF RFC 3775: Sections 10.3.2 IETF RFC 5555: Sections 4.4.2.1		
		US8964714	17 Mar 2029	1	3GPP TS 23.327 V8.4.0: Sections 1, 2, 3.2, 4.1, 5.2, 5.2.2, 5.3.3, 5.4, 6.1, 6.3.2.1; Figures 5.2.2-1, 6.1, 6.3.2.1-1 3GPP TS 23.060 V8.15.0: Sections 5.4.1.1, 5.4.1.2, 9.2.1 3GPP TS 23.234 V8.0.0: Sections 5.10.1 IETF RFC 3775: Sections 10.3.2 IETF RFC 5555: Sections 4.4.2.1		
ORA039	3G Licensing	CNZL200680017858.2	22 Mar 2026	1	3GPP TS 23.060 V8.9.0: Section 1, 3.1, 4, 5.1, 5.2.1, 5.3.2, 5.3.2.1, 5.3.2.2, 5.4.1.1., 5.4.1.2., 9.2.1A, 9.6: Figure 1 3GPP TS 23.401 V8.10.0: Sections 3.2, 4.2.1, 4.2.2, 4.3.2.1, 4.3.2.2, 4.4.3.1, 4.4.3.2, 4.4.7.1, 4.4.7.2, 4.4.7.3, 4.7.1, 4.7.2.1. 4.7.2.2; Figure 4.2.1-1, 4.2.1-2, 4.2.2.-1, 4.7.2.2-1 3GPP TS 23.402 V8.6.0: Sections 1, 4.2.1, 4.2.2, 4.2.3, 4.3.1.1, 4.3.1.2, 4.3.3.1, 4.3.3.2, 4.3.3.3, 4.3.5, 4.3.5.1, 4.3.5.2, 4.8.1, 4.8.2.1, 4.10.3,8.5.1: Figure 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.3-1, 4.2.3-2, 4.10.3-1, 4.8.1.1-1, 8.5.1-1 3GPP TS 23.203 V8.11.0: Sections 1, 3.1, 6.1.0, 6.1.1.1, 6.1.1.2, 6.1.1.3, 6.1.1.4, 6.2.10, A.1.0, A.1.1.2, A.1.13. A.4.0, A.4.1.1, A.4.1.2, A.5.0, A.5.1.0, A.5.1.1, D.1.1, D.2, H.1, H.2; Figures A.1, A.4, D.1.1, D.2.1		

ORA039	3G Licensing	EP1869840 (DE, ES, FR, GB, IT, NL, PL, TR)	22 Mar 2026	1	3GPP TS 23.060 V8.9.0: Sections 1, 3.1, 4, 5.1, 5.2.1, 5.3.2, 5.3.2.1, 5.3.2.2, 5.4.1.1, 5.4.1.2, 9.2.1A, 9.6; Figure 1 3GPP TS 23.401 V8.10.0: Sections 3.2, 4.2.1, 4.2.2, 4.3.2.1, 4.3.2.2, 4.4.3.1, 4.4.3.2, 4.4.7.1, 4.4.7.2, 4.4.7.3, 4.7.1, 4.7.2.1, 4.7.2.2; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.7.2.2-1 3GPP TS 23.402 V8.6.0: Sections 1, 4.2.1, 4.2.2, 4.2.3, 4.3.1.1, 4.3.1.2, 4.3.3.1, 4.3.3.2, 4.3.3.3, 4.3.5, 4.3.5.1, 4.3.5.2, 4.8.1, 4.8.2.1, 4.10.3 and 8.5.1; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.3-1, 4.2.3-2, 4.10.3-1, 4.8.1.1-1, 8.5.1-1 3GPP TS 23.203 V8.11.0: Sections 1, 3.1, 6.1.0, 6.1.1.1, 6.1.1.2, 6.1.1.3, 6.1.1.4, 6.2.1.0, A.1.0, A.1.1.2, A.1.1.3, A.4.0, A.4.1.1, A.4.1.2, A.5.0, A.5.1.0, A.5.1.1, D.1.1, D.2, H.1, H.2; Figures A.1, A.4, D.1.1, D.2.1
		IN319027	22 Mar 2026	1	3GPP TS 23.060 V8.9.0: Sections 1, 3.1, 4, 5.1, 5.2.1, 5.3.2, 5.3.2.1, 5.3.2.2, 5.4.1.1, 5.4.1.2, 9.2.1A, 9.6; Figure 1 3GPP TS 23.401 V8.10.0: Sections 3.2, 4.2.1, 4.2.2, 4.3.2.1, 4.3.2.2, 4.4.3.1, 4.4.3.2, 4.4.7.1, 4.4.7.2, 4.4.7.3, 4.7.1, 4.7.2.1, 4.7.2.2; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.7.2.2-1 3GPP TS 23.402 V8.6.0: Sections 1, 4.2.1, 4.2.2, 4.2.3, 4.3.1.1, 4.3.1.2, 4.3.3.1, 4.3.3.2, 4.3.3.3, 4.3.5, 4.3.5.1, 4.3.5.2, 4.8.1, 4.8.2.1, 4.10.3, 8.5.1; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.3-1, 4.2.3-2, 4.10.3-1, 4.8.1.1-1, 8.5.1-1 3GPP TS 23.203 V8.11.0: Sections 1, 3.1, 6.1.0, 6.1.1.1, 6.1.1.2, 6.1.1.3, 6.1.1.4, 6.2.1.0, A.1.0, A.1.1.2, A.1.1.3, A.4.0, A.4.1.1, A.4.1.2, A.5.0, A.5.1.0, A.5.1.1, D.1.1, D.2, H.1, H.2; Figures A.1, A.4, D.1.1, D.2.1
		JP4933528	22 Mar 2026	1	3GPP TS 23.060 V8.9.0: Sections 1, 3.1, 4, 4.7, 4.7.1, 4.7.2, 4.7.2.1, 5, 5.1, 5.2.1, 5.3.2, 5.3.2.1, 5.3.2.2, 5.4.0, 5.4.1, 5.4.1.1, 5.4.1.2, 9.2.1A, 9.6; Figure 1, 2, 2a 3GPP TS 23.203 V8.11.0: Sections 1, 3.1, 6, 6.1, 6.1.0, 6.1.1, 6.1.1.1, 6.1.1.2, 6.1.1.3, 6.1.1.4, 6.2.1, 6.2.1.0, Annex A (normative), A.1, A.1.0, A.1.1, A.1.1.1, A.1.1.2, A.1.1.3, A.4, A.4.0, A.4.1, A.4.1.1, A.4.1.2, A.5, A.5.0, A.5.1, A.5.1.0, A.5.1.1, A.5.2, A.5.2.1, Annex D (informative), D.1, D.1.1, D.2, Annex H (normative), H.1, H.2; Figures A.1, D.1.1, D.2.1 3GPP TS 23.401 V8.10.0: Sections 3.2, 4.2, 4.2.1, 4.2.2, 4.3.2, 4.3.2.1, 4.3.2.2, 4.4.3, 4.4.3.1, 4.4.3.2, 4.4.7, 4.4.7.1, 4.4.7.2, 4.4.7.3, 4.7, 4.7.1, 4.7.2, 4.7.2.1, 4.7.2.2; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.7.2.2-1 3GPP TS 23.402 V8.6.0: Sections 1, 4.2, 4.2.1, 4.2.2, 4.2.3, 4.3, 4.3.1, 4.3.1.1, 4.3.1.2, 4.3.3, 4.3.3.1, 4.3.3.2, 4.3.3.3, 4.3.5, 4.3.5.1, 4.3.5.2, 4.8.1, 4.8.2.1, 4.10.3, 8.5.1; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.3-1, 4-2.3-2, 4.10.3-1, 4.8.1.1-1, 8.5.1-1
		US8570936	10 May 2029	1	3GPP TS 23.060 V8.9.0: Sections 1, 3.1, 4, 5.1, 5.2.1, 5.3.2, 5.3.2.1, 5.3.2.2, 5.4.1.1, 5.4.1.2, 9.2.1A, 9.6; Figure 1 3GPP TS 23.401 V8.10.0: Sections 3.2, 4.2.1, 4.2.2, 4.3.2.1, 4.3.2.2, 4.4.3.1, 4.4.3.2, 4.4.7.1, 4.4.7.2, 4.4.7.3, 4.7.1, 4.7.2.1, 4.7.2.2; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.7.2.2-1 3GPP TS 23.402 V8.6.0: Sections 1, 4.2.1, 4.2.2, 4.2.3, 4.3.1.1, 4.3.1.2, 4.3.3.1, 4.3.3.2, 4.3.3.3, 4.3.5, 4.3.5.1, 4.3.5.2, 4.8.1, 4.8.2.1, 4.10.3, 8.5.1; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.3-1, 4.2.3-2, 4.10.3-1, 4.8.1.1-1, 8.5.1-1 3GPP TS 23.203 V8.11.0: Sections 1, 3.1, 6.1.0, 6.1.1.1, 6.1.1.2, 6.1.1.3, 6.1.1.4, 6.2.1.0, A.1.0, A.1.1.2, A.1.1.3, A.4.0, A.4.1.1, A.4.1.2, A.5.0, A.5.1.0, A.5.1.1, D.1.1, D.2, H.1, H.2; Figures A.1, A.4, D.1.1, D.2.1
ORA040	3G Licensing	CNZL200780009678.4	15 Jan 2027	1	3GPP TS 23.060 V8.15.0: Sections 1, 4 3GPP TS 23.327 V8.4.0: Sections 1, 4.1, 5.2.1, 5.3.1, 5.3.2, 6.1, 6.3.1, 6.3.2.2; Figures 5.2.1-1, 6.1, 6.3.1-1, 6.3.2.2-1 3GPP TS 23.234 V8.0.0: Sections 1, 4, 5.7.1, 6.1.2, 6.2.6; Figure 6.2a
		EP1974576 (DE, ES, FR, GB, IT)	15 Jan 2027	1	3GPP TS 23.060 V8.15.0: Sections 1, 4 3GPP TS 23.327 V8.4.0: Sections 1, 4, 4.1, 5.2.1, 5.3.1, 5.3.2, 6.1, 6.3.1, 6.3.2.2; Figures 5.2.1-1, 6.3.1-1, 6.3.2.2-1 3GPP TS 23.234 V8.0.0: Sections 1, 4, 5.7.1, 6.1.2, 6.2.6; Figure 6.2a
		EP2958292 (DE, ES, FR, GB, IT, NL)	15 Jan 2027	2	3GPP TS 23.060 V8.15.0: Sections 1, 4 3GPP TS 23.327 V8.4.0: Sections 1, 4, 4.1, 5.2.1, 5.3.1, 5.3.2, 6.1, 6.3.1, 6.3.2.2; Figures 5.2.1-1, 6.3.1-1, 6.3.2.2-1 3GPP TS 23.234 V8.0.0: Sections 1, 4, 5.7.1, 6.1.2, 6.2.6; Figure 6.2a
		HK1219367	15 Jan 2027	2	3GPP TS 23.060 V8.15.0: Sections 1, 4 3GPP TS 23.327 V8.4.0: Sections 1, 4, 4.1, 5.2.1, 5.3.1, 5.3.2, 6.1, 6.3.1, 6.3.2.2; Figures 5.2.1-1, 6.3.1-1, 6.3.2.2-1 3GPP TS 23.234 V8.0.0: Sections 1, 4, 5.7.1, 6.1.2, 6.2.6; Figure 6.2a
		IN322709	15 Jan 2027	1	3GPP TS 23.060 V8.15.0: Sections 1, 4 3GPP TS 23.327 V8.4.0: Sections 1, 4, 4.1, 5.2.1, 5.3.1, 5.3.2, 6.1, 6.3.1, 6.3.2.2; Figures 5.2.1-1, 6.3.1-1, 6.3.2.2-1 3GPP TS 23.234 V8.0.0: Sections 1, 4, 5.7.1, 6.1.2, 6.2.6; Figure 6.2a
		US8194608	18 May 2029	1	3GPP TS 23.060 V8.15.0: Sections 1, 4 3GPP TS 23.327 V8.4.0: Sections 1, 4, 4.1, 5.2.1, 5.3.1, 5.3.2, 6.1, 6.3.1, 6.3.2.2; Figures 5.2.1-1, 6.3.1-1, 6.3.2.2-1 3GPP TS 23.234 V8.0.0: Sections 1, 4, 5.7.1, 6.1.2, 6.2.6; Figure 6.2a
		US8565159	03 Nov 2028	2	3GPP TS 23.060 V8.15.0: Sections 1, 4 3GPP TS 23.327 V8.4.0: Sections 1, 4, 4.1, 5.2.1, 5.3.1, 5.3.2, 6.1, 6.3.1, 6.3.2.2; Figures 5.2.1-1, 6.3.1-1, 6.3.2.2-1 3GPP TS 23.234 V8.0.0: Sections 1, 4, 5.7.1, 6.1.2, 6.2.6; Figure 6.2a
ORA041	3G Licensing	CNZL200680016492.7	23 Mar 2026	1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.2.1, 5.10.2; Figures 4.2.1-1, 4.2.1-2, 4.7.2.2-1

ORA041	3G Licensing	CNZL201110148681.2	23 Mar 2026	1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.1.1, 5.3.2.1; Figures 4.2.1-2, 4.7.2.2-1		
		JP5384934	23 Mar 2026	1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 3.2, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.1.1, 5.3.2.1, 5.10.2; Figures 4.2.1-1, 4.2.1-2, 4.7.2.2-1		
		US8072923	29 Dec 2027	1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.1.1, 5.3.2.1; Figures 4.2.1-2, 4.7.2.2-1		
		US8971246	20 Jun 2027	1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.1.1, 5.3.2.1; Figures 4.2.1-2, 4.7.2.2-1		
ORA042	3G Licensing	CNZL200680017166.8	23 Mar 2026	1	3GPP TS 23.060 V8.9.0: Sections 4, 9.2.1A, 9.2.2.1; Figures 63, 64 3GPP TS 23.401 V8.15.0: Sections 1.3.1, 4.1, 4.2.1, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.2.1; Figures 4.2.1-2, 4.7.2.2-1 3GPP TS 24.008 V8.10.0: Sections 10.5.6.4; Figure 10.5.137; Table 10.5.155		
		IN318550	23 Mar 2026	1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.1.1, 5.3.2.1; Figure 4.2.1-2, 4.7.2.2-1 3GPP TS 23.060 V8.9.0: Section 9.2.2.1; Figures 63, 64 3GPP TS 24.008 V8.10.0: Section 10.5.6.4; Figure 10.5.137; Table 10.5.155		
		JP4970422	23 Mar 2026	1	3GPP TS 23.401 V8.15.0: Sections 1, 3, 3.1, 4, 4.1, 4.2, 4.2.1, 4.4.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7, 4.7.1, 4.7.2, 4.7.2.1, 4.7.2.2, 5.3.2, 5.3.2.1; Figures 4.2.1-1, 4.2.1-2, 4.7.2.2-1 3GPP TS 23.060 V8.9.0: Sections 9.2.2, 9.2.2.1; Figures 63, 64 3GPP TS 24.008 V8.10.0: Section 10.5.6.4; Figure 10.5.137; Table 10.5.155		
		US8064384	25 Jul 2027	1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.1.1, 5.3.2.1; Figure 4.2.1-2, 4.7.2.2-1 3GPP TS 23.060 V8.9.0: Section 9.2.2.1; Figures 63, 64 3GPP TS 24.008 V8.10.0: Section 10.5.6.4; Figure 10.5.137; Table 10.5.155		
		US9001732	17 Aug 2030	1	3GPP TS 23.401 V8.15.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.3, 4.4.3.1, 4.4.3.2, 4.4.3.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.3.1.1, 5.3.2.1; Figure 4.2.1-2, 4.7.2.2-1 3GPP TS 23.060 V8.9.0: Section 9.2.2.1; Figures 63, 64 3GPP TS 24.008 V8.10.0: Section 10.5.6.4; Figure 10.5.137; Table 10.5.155		
ORA043	3G Licensing	EP1869841 (DE, FR, GB)	22 Mar 2026	1	3GPP TS 23.060 V8.7.0: Sections 9.2.1A, 9.2.1.1, 9.2.2.1, 9.2.2.1.1, 15.3.0, 15.3.1; Figures 63, 64 3GPP TS 23.207 V8.0.0: Sections 4.2, 4.7, 5.1, 5.2, 5.2.1, 5.2.2, 6.1, 6.1.1, 6.1.2, 6.4; Figures A.7; Annex A, A.2, A.2.5, Annex C; Figure A.7 3GPP TS 23.228 V8.12.0: Sections 4.0, 4.2.4, 4.2.4a, 4.6.0, 4.6.1, 4.6.3, 5.4.0, 5.4.2a; Figures 4.0, 5.5b; Annex E, E.0, E.5 3GPP TS 23.401 V8.8.0: Sections 1, 4.2.1, 4.2.2, 4.4.4; Figures 4.2.1-1, 4.2.1-2, 4.2.2-1, 4.2.2-2, 4.2.2-3 3GPP TS 24.008 V9.3.0: Sections 9.5.4, 9.5.4.1, 10.5.6.12; Tables 9.5.4, 10.5.162 3GPP TS 24.229 V8.11.0: Annex B, B.1, B.2.1, B.2.2.1, B.2.2.5.1, B.2.2.5.1A, B.2.2.5.1B 3GPP TS 29.060 V9.3.0: Section 7.7.36		
ORA046	3G Licensing	CNZL200580025881.1	11 Jul 2025	1	3GPP TS 29.060 V8.3.0: Section 3.1 3GPP TS 23.401 V8.10.0: Sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2; Figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, 5.1.2.5-1 3GPP TS 29.061 V8.6.0: Sections 11.2.1.3, 11.2.1.3.2, 11.2.1.4, 11.2.1.3.1, 11.3; Figures 11c, 11d, 11e, 11bb, 11ba 3GPP TS 23.060 V8.10.0: Sections 9.2.2, 9.2.2.1, 9.2.2.1A, 14.5; Figures 63, 64		
		EP1772030 (DE, ES, FR, GB)	11 Jul 2025	1	3GPP TS 23.401 V8.10.0 Sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, 14.5; Figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, 5.1.2.5-1 3GPP TS 29.060 V8.3.0: Sections 3.1, 7.3, 7.3.1, 7.3.2, 7.7.13; Table 6; Figure 21 3GPP TS 23.060 V8.10.0: Sections 9.2.2, 9.2.2.1, 9.2.2.1A; Figures 63, 64 3GPP TS 29.061 V8.6.0: Section 11.2.1.3, 11.2.1.3.1, 11.2.1.3.2, 11.2.1.4, 11.3; Figures 11ba, 11bb		
		IN271359	11 Jul 2025	1	3GPP TS 23.401 V8.10.0: Sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, 14.5; Figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, 5.1.2.5-1 3GPP TS 29.060 V8.3.0: Sections 3.1, 7.3, 7.3.1, 7.3.2, 7.7.13; Table 6; Figure 21 3GPP TS 23.060 V8.10.0: Sections 9.2.2, 9.2.2.1, 9.2.2.1A; Figures 63, 64 3GPP TS 29.061 V8.6.0: Sections 11.2.1.3, 11.2.1.3.1, 11.2.1.3.2, 11.2.1.4, 11.3; Figures 11ba, 11bb		
		US10200511	11 Jul 2025	1	3GPP TS 23.401 V8.10.0: Sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, 14.5; Figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, 5.1.2.5-1 3GPP TS 29.060 V8.3.0: Sections 3.1, 7.3, 7.3.1, 7.3.2, 7.7.13; Table 6; Figure 21 3GPP TS 23.060 V8.10.0: Sections 9.2.2, 9.2.2.1, 9.2.2.1A; Figures 63, 64 3GPP TS 29.061 V8.6.0: Sections 11.2.1.3, 11.2.1.3.1, 11.2.1.3.2, 11.2.1.4, 11.3; Figures 11ba, 11bb		

ORA046	3G Licensing	US8179888	19 Nov 2027	1	3GPP TS 23.401 V8.10.0: Sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, 14.5; Figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, 5.1.2.5-1 3GPP TS 29.060 V8.3.0: Sections 3.1, 7.3, 7.3.1, 7.3.2, 7.7.13; Table 6; Figure 21 3GPP TS 23.060 V8.10.0: Sections 9.2.2, 9.2.2.1, 9.2.2.1A; Figures 63, 64 3GPP TS 29.061 V8.6.0: Sections 11.2.1.3, 11.2.1.3.1, 11.2.1.3.2, 11.2.1.4, 11.3; Figures 11ba, 11bb
		US9237058	11 Jul 2025	1	3GPP TS 23.401 V8.10.0: Sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, 14.5; Figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, 5.1.2.5-1 3GPP TS 29.060 V8.3.0: Sections 3.1, 7.3, 7.3.1, 7.3.2, 7.7.13; Table 6; Figure 21 3GPP TS 23.060 V8.10.0: Sections 9.2.2, 9.2.2.1, 9.2.2.1A; Figures 63, 64 3GPP TS 29.061 V8.6.0: Sections 11.2.1.3, 11.2.1.3.1, 11.2.1.3.2, 11.2.1.4, 11.3; Figures 11ba, 11bb
ORA047	3G Licensing	CNZL200580024907.0	10 Jun 2025	1	3GPP TS 23.401 V8.10.0: Sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2; Figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, 5.1.2.5-1 3GPP TS 29.060 V8.3.0: Sections 3.1, 7.3.1, 7.3.2, 7.7.13; Table 6; Figure 21 3GPP TS 23.060 V8.10.0: Sections 9.2.1.1, 9.2.2, 9.2.2.1, 9.2.2.1A; Figures 62, 63, 64 3GPP TS 29.061 V8.6.0: Sections 11.2.1, 11.2.1.3, 11.2.1.3.2, 11.2.1.4; Figure 11bb
		EP1771978 (CH, DE, ES, FR, GB, IT)	10 Jun 2025	1	3GPP TS 23.401 V8.10.0: Sections 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5, 5.3.1, 5.3.1.1, 5.3.1.2, 5.3.1.2.1, 5.3.1.2.2, 14.5; Figures 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, 5.1.2.5-1 3GPP TS 29.060 V8.3.0: Sections 3.1, 7.3, 7.3.1, 7.3.2, 7.7.13; Table 6; Figure 21 3GPP TS 23.060 V8.10.0: Sections 9, 9.1, 9.1.0, 9.2.1.1, 9.2.2, 9.2.2.1, 9.2.2.1A, 9.2.3, 9.2.3.0, 9.2.3.3, 15.3, 15.3.0, 45.3.1; Figures 62, 63, 64 3GPP TS 29.061 V8.6.0: Sections 11.2.1, 11.2.1.3, 11.2.1.3.1, 11.2.1.3.2, 11.2.1.4, 11.3; Figure 11ba 3GPP TS 24.008 V8.10.0: Sections 9.5.10, 9.5.10.3, 10.5.6.12; Tables 9.5.10, 10.2.162, 10.5.144, 10.5.144a, 10.5.144b, 10.5.144c
		IN272738	10 Jun 2025	1	3GPP TS 23.060 v8.17.0: Sections 5.6.2.2, 9.2.1, 9.2.1.1, 9.2.2.1, 9.3; Figures 6a, 63 3GPP TS 24.008 v8.19.0: Sections 9.5.1, 10.5.6.4 3GPP TS 29.061 v8.12.0: Sections 11.2.1.3, 11.2.1.3.2, 11.2.1.4; Figures 11bb IETF RFC 4291: Section 2.5.1
		US7860073	10 May 2026	1	3GPP TS 23.060 v8.17.0: Sections 5.6.2.2, 9.2.1, 9.2.1.1, 9.2.2.1, 9.3; Figures 6a, 63 3GPP TS 24.008 v8.19.0: Sections 9.5.1, 10.5.6.4 3GPP TS 29.061 v8.12.0: Sections 11.2.1.3, 11.2.1.3.2, 11.2.1.4; Figures 11bb IETF RFC 4291: Section 2.5.1
ORA048	3G Licensing	CNZL200580020466.7	19 Apr 2025	1	3GPP TS29.060 V8.11.0: Sections 3.1, 4.1; Figure 1 3GPP TS23.401 V8.10.0: Sections 5, 5.1, 5.1.1, 5.1.1.4, 5.1.1.5, 5.1.1.6, 5.1.1.7, 5.1.1.8, 5.1.2, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5; Figures5.1.1.4-1, 5.1.1.5-1, 5.1.1.6-1, 5.1.1.7-1, 5.1.1.8-1, 5.1.2.1-1, 5.1.2.2-1, 5.1.2.3-1, 5.1.2.4-1, 5.1.2.5-1 3GPP TS 23.402 V8.8.0: Sections 4.3.3, 4.3.3.2, 4.3.3.3, 4.3.4, 5, 5.1, 5.1.1, 5.1.2, 5.1.3, 5.1.3.1, 5.1.4, 5.1.4.1, 5.1.4.2, 5.1.4.3, 5.1.4.4, Annex A, A.1, A.2; Figures 5.1.4.4-1, 5.1.3.1-1, 5.1.4.1-1, 5.1.4.2-1, 5.1.4.3-1, A.1-1, A.1-2, A.2-1, A.1-3 3GPP TS 23.228 V8.12.0: Sections 5.4.2a, Annex E, E.0, E.5; Figure 5.5b 3GPP TS 23.060 V8.7.0: Sections 4, 5.3.2.4, 5.3.2.5, 5.5, 5.6.2, 5.6.2.1, 5.6.2.2, 5.6.3, 5.6.3.1, 5.6.3.2, 9.2.1, 9.2.2.1; Figures 6a, 6b, 6c, 6d, 7, 8, 63, 64; Table 1
		EP1741264 (DE, ES, FR, GB, IT)	19 Apr 2025	1	3GPP TS 29.060 V8.11.0: Sections 3.1, 4.1; Figure 1 3GPP TS 23.401 V8.8.0: Sections 5.1, 5.1.1.1, 5.1.1.4; Figures 5.1.1.4-1, 5.1.1.5, 5.1.1.5-1, 5.1.1.6, 5.1.1.6-1, 5.1.1.7, 5.1.1.7-1, 5.1.1.8, 5.1.1.8-1, 5.1.2.1, 5.1.2.1-1, 5.1.2.2, 5.1.2.2-1, 5.1.2.3, 5.1.2.3-1, 5.1.2.4, 5.1.2.4-1, 5.1.2.5, 5.1.2.5-1 3GPP TS 23.402 V8.8.0: Sections 1, 4.2.2; Figures 4.2.2-2, 4.3.3.2, 4.3.3.3, 4.3.4, 5.1.2, 5.1.4.1, 5.1.4-1, 5.1.4.2, 5.1.4.2-1, 5.1.4.3, 5.1.4.3-1, 5.1.4.4, 5.1.4.4-1, 5.1.3.1, 5.1.3.1-1, 6.1.2, 6.1.2-1; Annex A, A.1; Figures A.1-1, A.1-2, A.1-3, A2, A.2-1 3GPP TS 23.228 V8.9.0: Sections 4.6.0, 4.6.1, 5.4.2a; Figure 5.5b, E0, E5 3GPP TS 23.060 V8.7.0: Sections 4, 5.3.2.4, 5.3.2.5, 5.5; Table 1, 5.6.2.1, 5.6.2.2; Figures 6a, 6b, 6c, 6d, 5.6.3, 5.6.3.1, 5.6.3.2, 7, 8, 9.2.1, 9.2.2.1, 63, 64
		IN255363	19 Apr 2025	1	3GPP TS 23.060 V8.7.0: Sections 4, 5.1, 5.3.2.4, 5.3.2.5, 5.6.2, 5.6.2.1, 5.6.2.2, 5.6.2.4, 5.6.2.5, 9.2.1, 9.2.2.1

ORA048	3G Licensing	JP4660539	19 Apr 2025	1	3GPP TS 29.060 V8.11.0: Sections 3.1, 4.1; Figure 1 3GPP TS 23.401 V8.8.0: Sections 5.1, 5.1.1.1, 5.1.1.4; Figures 5.1.1.4-1, 5.1.1.5, 5.1.1.5-1, 5.1.1.6, 5.1.1.6-1, 5.1.1.7, 5.1.1.7-1, 5.1.1.8, 5.1.1.8-1, 5.1.2.1, 5.1.2.1-1, 5.1.2.2, 5.1.2.2-1, 5.1.2.3, 5.1.2.3-1, 5.1.2.4, 5.1.2.4-1, 5.1.2.5, 5.1.2.5-1 3GPP TS 23.402 V8.8.0: Sections 1, 4.2.2; Figures 4.2.2-2, 4.3.3.2, 4.3.3.3, 4.3.4, 5.1.2, 5.1.4.1, 5.1.4-1, 5.1.4.2, 5.1.4.2-1, 5.1.4.3, 5.1.4.3-1, 5.1.4.4, 5.1.4.4-1, 5.1.3.1, 5.1.3.1-1, 6.1.2, 6.1.2-1; Annex A, A.1; Figures A.1-1, A.1-2, A.1-3, A2, A.2-1 3GPP TS 23.228 V8.9.0: Sections 4.6.0, 4.6.1, 5.4.2a; Figure 5.5b, E0, E5 3GPP TS 23.060 V8.7.0: Sections 4, 5.3.2.4, 5.3.2.5, 5.5; Table 1, 5.6.2.1, 5.6.2.2; Figures 6a, 6b, 6c, 6d, 5.6.3, 5.6.3.1, 5.6.3.2, 7, 8, 9.2.1, 9.2.2.1, 63, 64				
		US7907618	11 Jun 2027	1	3GPP TS 29.060 V8.11.0: Sections 3.1, 4.1; Figure 1 3GPP TS 23.401 V8.8.0: Sections 5.1, 5.1.1.1, 5.1.1.4; Figures 5.1.1.4-1, 5.1.1.5, 5.1.1.5-1, 5.1.1.6, 5.1.1.6-1, 5.1.1.7, 5.1.1.7-1, 5.1.1.8, 5.1.1.8-1, 5.1.2.1, 5.1.2.1-1, 5.1.2.2, 5.1.2.2-1, 5.1.2.3, 5.1.2.3-1, 5.1.2.4, 5.1.2.4-1, 5.1.2.5, 5.1.2.5-1 3GPP TS 23.402 V8.8.0: Sections 1, 4.2.2; Figures 4.2.2-2, 4.3.3.2, 4.3.3.3, 4.3.4, 5.1.2, 5.1.4.1, 5.1.4-1, 5.1.4.2, 5.1.4.2-1, 5.1.4.3, 5.1.4.3-1, 5.1.4.4, 5.1.4.4-1, 5.1.3.1, 5.1.3.1-1, 6.1.2, 6.1.2-1; Annex A, A.1; Figures A.1-1, A.1-2, A.1-3, A2, A.2-1 3GPP TS 23.228 V8.9.0: Sections 4.6.0, 4.6.1, 5.4.2a; Figure 5.5b, E0, E5 3GPP TS 23.060 V8.7.0: Sections 4, 5.3.2.4, 5.3.2.5, 5.5; Table 1, 5.6.2.1, 5.6.2.2; Figures 6a, 6b, 6c, 6d, 5.6.3, 5.6.3.1, 5.6.3.2, 7, 8, 9.2.1, 9.2.2.1, 63, 64				
ORA049	3G Licensing	US7995523	03 Jul 2027	1, 12	3GPP TS 23.401 V8.17.0: Sections 1, 4.2.1, 4.2.3, 4.7.1, 4.7.2.1, 4.7.2.2, 5.4.5; Figures 4.2.1-1, 5.4.5-1 3GPP TS 24.303 V8.9.0: Sections 1, 4.1, 5.1.1, 5.1.2.3, 5.1.2.4 IETF RFC 6275 (included by reference in TS 24.303 V8.9.0): Abstract, Sections 10.4.1, 10.4.2, 11.7.1				
ORA052	3G Licensing	CNZL200480006637.6	10 Mar 2024	1	3GPP TS 23.401 V8.10.0: Section 4.2.2; Figure 4.2.2-3 3GPP TS 23.060 V8.9.0: Sections 9.2.2, 9.2.2.1; Figures 63, 64 3GPP TS 24.008 V8.10.0: Section 10.5.6.4; Figure 10.5.137; Table 10.5.155 3GPP TS 29.061 V8.7.0: Section 11.2.1.4; Figures 11c, 11d, 11e 3GPP TS 23.228 V8.12.0: Sections 3.1, Annex I.1, I.2, I.3, I.3.1, and I.3.1.2; Figures I.1, I.3 IETF RFC 3344: Sections 1.5, 1.7, 3				
		EP1602215 (DE, FR, GB)	10 Mar 2024	1	3GPP TS 23.401 V8.10.0: Section 4.2.2; Figure 4.2.2-3 3GPP TS 23.060 V8.9.0: Sections 9.2.2, 9.2.2.1, 9.2.3.2; Figures 63, 64, 71a, 71b 3GPP TS 24.008 V8.10.0: Section 10.5.6.4; Figure 10.5.137; Table 10.5.155 3GPP TS 29.061 V8.7.0: Section 11.2.1.4; Figures 11, 11c, 11d 3GPP TS 23.228 V8.12.0: Sections 3.1, I.1, I.2, I.3, I.3.1, I.3.1.2; Figures I.1, I.3 IETF RFC 3344: Sections 1.5, 1.7, 3				
		IN227148	10 Mar 2024	1	3GPP TS29.061 V8.7.0: Section 11.2.1.4; Figure 11e 3GPP TS23.060 V8.9.0: Sections 9.2.2.1, 9.2.3.2				
		JP5248586	10 Mar 2024	1	3GPP TS 23.401 V8.10.0: Section 4.2.2; Figure 4.2.2-3 3GPP TS 23.060 V8.9.0: Sections 9.2.2, 9.2.2.1, 9.2.3.2; Figures 63, 64, 71a, 71b 3GPP TS 24.008 V8.10.0: Sections 10.5.6.4; Figure 10.5.137; Table 10.5.155 3GPP TS 29.061 V8.7.0: Sections 11.2.1.4; Figures 11c, 11d, 11e IETF RFC 3344: Sections 1.5, 1.7, 3				
		KR10-1007005	10 Mar 2024	1	3GPP TS 23.060 V.8.9.0: Section 9.2.3.2 3GPP TS 23.401 V.8.10.0: Section 4.2.2 3GPP TS 29.061 V.8.7.0: Section 11.2.1.4				
		US7640017	23 Jan 2026	1	3GPP TS 23.401 V8.10.0: Section 4.2.2; Figure 4.2.2-3 3GPP TS 23.060 V8.9.0: Sections 9.2.2, 9.2.2.1, 9.2.3.2; Figures 63, 64, 71a, 71b 3GPP TS 24.008 V8.10.0: Section 10.5.6.4; Figure 10.5.137; Table 10.5.155 3GPP TS 29.061 V8.7.0: Section 11.2.1.4; Figures 11, 11c, 11d 3GPP TS 23.228 V8.12.0: Sections 3.1, I.1, I.2, I.3, I.3.1, I.3.1.2; Figures I.1, I.3				
		US8023946	10 Mar 2024	1	3GPP TS 23.401 V8.10.0: Section 4.2.2; Figure 4.2.2-3 3GPP TS 23.060 V8.9.0: Sections 9.2.2, 9.2.2.1, 9.2.3.2; Figures 63, 64, 71a, 71b 3GPP TS 24.008 V8.10.0: Sections 10.5.6.4; Figure 10.5.137; Table 10.5.155 3GPP TS 29.061 V8.7.0: Sections 11.2.1.4; Figures 11c, 11d, 11e IETF RFC 3344: Sections 1.5, 1.7, 3				
ORA058	3G Licensing	CNZL200780010663.X	16 Feb 2027	20	3GPP TS 23.327 V8.4.0: Sections 5, 5.2, 5.2.1, 5.3, 5.3.1, 5.3.2, 5.4, 6, 6.1, 6.3, 6.3.1, 6.3.2, 6.3.2.2; Figures 5.2.1-1, 6.1, 6.3.1-1, 6.3.2.2-1 3GPP TS 23.234 V8.0.0: Sections 1, 2, 5, 5.13, 5.13.1, 5.13.2, 5.7, 5.7.1, 6, 6.1, 6.1.1, 6.2, 6.2.1, 6.2.5, 6.2.6; Figure 6.1 3GPP TS23.107 V8.2.0: Section 6.3				
		EP1838044 (DE, ES, FR, GB, IT)	24 Mar 2026	20	3GPP TS 23.234 V8.0.0: Sections 1, 5.13.3, 3GPP TS 23.327 V8.4.0: Sections 5.3.1, 6.3.1; Figures 6.3.1-1 IETF RFC 2474: Section 3	20	3GPP TS 23.327 V8.4.0: Sections 5, 5.2, 5.2.1, 5.3, 5.3.1, 5.3.2, 5.4, 6, 6.1, 6.3, 6.3.1, 6.3.2, 6.3.2.2; Figures 5.2.1-1, 6.1, 6.3.1-1, 6.3.2.2-1 3GPP TS 23.234 V8.0.0: Sections 1, 2, 5, 5.13, 5.13.1, 5.13.2, 5.7, 5.7.1, 6, 6.1, 6.1.1, 6.2, 6.2.1, 6.2.5, 6.2.6; Figure 6.1 3GPP TS23.107 V8.2.0: Section 6.3		
		IN300291	16 Feb 2027	11	3GPP TS 23.234 V8.0.0: Sections 1, 5.13.3, 3GPP TS 23.327 V8.4.0: Sections 5.3.1, 6.3.1; Figures 6.3.1-1 IETF RFC 2474: Section 3				

ORA059	3G Licensing	CNZL200780010562.2	19 Mar 2027	1	3GPP TS 23.060 V8.15.0: Sections 4, 5.1, 5.2, 5.2.1, 5.3.0, 5.3.1, 5.3.1.1, 5.3.2, 5.3.3.1, 5.6.2.2, 9.2.2.1; Figures 6a, 63, 64 3GPP TS 23.107 V8.2.0: Sections 6.4.3.1, 6.4.3.2 3GPP TS 24.008 V8.16.0: Sections 9.5.1, 10.5.6.5; Figure 10.5.138; Table 9.5.1, 10.5.156			
		IN282457	19 Mar 2027	18	3GPP TS 23.060 V8.15.0: Sections 4, 5.1, 5.2, 5.2.1, 5.3.0, 5.3.1, 5.3.1.1, 5.3.2, 5.3.3.1, 5.6.2.2, 9.2.2.1; Figures 6a, 63, 64 3GPP TS 23.107 V8.2.0: Sections 6.4.3.1, 6.4.3.2 3GPP TS 24.008 V8.16.0: Section 9.5.1, 10.5.6.5; Tables 9.5.1, 10.5.156; Figure 10.5.138			
		JP5740672	19 Mar 2027	18	3GPP TS 23.060 V8.15.0: Sections 4, 5.1, 5.2, 5.2.1, 5.3.0, 5.3.1, 5.3.1.1, 5.3.2, 5.3.3.1, 5.6.2.2, 9.2.2.1; Figures 6a, 63, 64 3GPP TS 23.107 V8.2.0: Sections 6.4.3.1, 6.4.3.2 3GPP TS 24.008 V8.16.0: Section 9.5.1, 10.5.6.5; Tables 9.5.1, 10.5.156; Figure 10.5.138			
		US8184646	06 Oct 2028	18	3GPP TS 23.060 V8.15.0: Sections 4, 5.1, 5.2, 5.2.1, 5.3.0, 5.3.1, 5.3.1.1, 5.3.2, 5.3.3.1, 5.6.2.2, 9.2.2.1; Figures 6a, 63, 64 3GPP TS 23.107 V8.2.0: Sections 6.4.3.1, 6.4.3.2 3GPP TS 24.008 V8.16.0: Section 9.5.1, 10.5.6.5; Tables 9.5.1, 10.5.156; Figure 10.5.138			
ORA063*	3G Licensing	EP0562890 (AT, BE, ES, GB, IE, IT, LU, NL)	29 Mar 2013	1, 5	3GPP TS 100 922 V8.0.0: Sections 1, 6.2 3GPP TS 101 622 V6.0.1: Sections 4.3, 5, 5.2 3GPP TS 122 038 V3.4.0: Sections 9.1 3GPP TS 100 977 V8.13.0: Annex E, Annex I 3GPP TS 101 267 V8.17.0: Sections 3.2, 7, 7.1, 7.1.1, 7.1.2 3GPP TS 122.003 V6.0.0: Annex A.1.3.4, A.1.3.4.2 3GPP TS 123.040 V3.9.0: Sections 3.1, 3.2.3, 9.2.3, 9.2.3.9, 9.2.3.22, 9.2.3.24, 9.2.3.24.10, 9.2.3.24.10.1, 9.2.3.24.10.1.1; Figure 1			
		HK1005009	29 Mar 2013	1, 5	3GPP TS 22.038 V 3.4.0: Section 9.1 3GPP TS 11.14 V 8.17.0: Sections 3.2, 7.1.1, 7.1.2 3GPP TS 22.003 V 6.0.0: Sections A.1.3.4 3GPP TS 23.040 V 3.9.0: Sections 3.1, 3.2.3, 9.2.3, 9.2.3.22, 9.2.3.24, 9.2.3.24.10.1, 9.2.3.24.10.1.1, 9.2.3.9. 3GPP TS 11.11 V 8.13.0: Annex Annex E, Annex I			
ORA064*	3G Licensing	AU729163	19 Jan 2018	18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1, 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1, 5.3.29; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1 ETSI TS 102.221 V7.4.0: Sections 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.5.2, Annex K and K.2; Figure 8.2, 8.4, K.1; Table 8.1, 11.11			
		CA2280150	19 Jan 2018	18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1, 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1, 5.3.29; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1 3GPP TS 102.221 V7.4.0: Sections 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.5.2, Annex K, K.2; Figure 8.2, 8.4, K.1; Table 8.1, 11.11			
		CNZL98802464.0	19 Jan 2018	18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1, 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1, 5.3.29; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1 ETSI TS 102.221 V7.4.0: Sections 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.5.2, Annex K, K.2; Figure 8.2, 8.4, K.1; Table 8.1, 11.11			
		EP0960542 (DE, ES, FR, GB, IT)	19 Jan 2018	18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1, 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1, 5.3.29; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1			
		IN208486	09 Feb 2018	18	3GPP TS 21.111 V7.1.0: Sections 4, 10.2.2, 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1; Figures 4.1, 4.2 ETSI TS 102.221 V7.4.0: Sections 7.3.1.1, 8.2.2.1, 8.2.2.2, 8.2.2.3, 8.2.2.4, 11.1.5.1; Figures 8.2, 8.3			
		JP4357596	19 Jan 2018	18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1, 11.2 3GPP TS 31.101 V7.0.1: Section 8.1 3GPP TS 31.102 V7.13.0: Sections 3.3, 4.4.2, 4.7, 5.1.1.1, 5.3.29; Figure 4.2 ETSI TS 102.221 V7.4.0: Sections 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, 11.1.6.1, Annex K, K.1, K.2; Figures 8.2, 8.4, K.1; Table 8.1			
		US6856818	19 Jan 2018	18	3GPP TS 21.111 V7.1.0: Sections 1, 4, 5.1, 5.2, 6.1, 11.2 3GPP TS 31.102 V7.13.0: Sections 4.4.2, 4.7, 5.1.1.1, 5.3.29; Figure 4.2 3GPP TS 31.101 V7.0.1: Section 8.1 ETSI TS 102.221 V7.4.0: Sections 3.1, 8.2.2.2, 8.4.1, 8.4.3, 11.1.1.1, 11.1.3.1, 11.1.5.1, Annex K, K.2; Figure 8.2, 8.4, K.1; Table 8.1			
ORA065	3G Licensing	CNZL01818343.3	16 Oct 2021	8	3GPP TS 22.279 V7.1.0: Sections 1, 2, 3.1, 6, 8 3GPP TS 23.279 V7.7.0: Sections 8.1, 8.3.1, 8.3.2; Figures 8-1, 8.3-1, 8.3-2 3GPP TS 23.228 V7.16.0: Sections 4.13.2, 4.13.3; Figure 4.13-1 3GPP TS 24.173 V9.1.0: Sections 4.2, 5.1, 5.2 3GPP TS 24.229 V7.28.0: Sections 5.1, 5.1.2A.1, 6.1.2, 6.1.3, 7.9.2, 7.2A.8.1, 7.2A.8.2, 7.2A.9.1, 7.2A.9.2, 7.9.2, 7.9.3 3GPP TS 24.279 V7.7.0: Sections 6.3.1.8, 6.3.1.9, 7.3.1.3, 7.3.1.4, A.1, A.2, A.3, 7.3.1.8, 7.3.1.9			
		CNZL200510097414.1	16 Oct 2021	1	3GPP TS 23.060 V8.9.0: Sections 5.1, 5.3.8, 5.4.6, 9.2.3.3; Figures 1, 72b 3GPP TS 23.228 V8.12.0: Sections 4.0, 4.16.1, 4.16.2, 5.4.4, 5.10.3.0, Annex E, E.0, E.2.1a.2, E.2.4.0, E.2.4.1; Figure E.2 3GPP TS 23.401 V8.17.0: Sections 4.7.1, 4.7.2.2; Figure 4.7.2.2-1			

ID	Program	Patent	Date	#	Mapping 1	#	Mapping 2	#	Mapping 3
ORA065	3G Licensing	EP1921855 (DE, ES, FR, GB, IE, IT, LU, NL, TR)	16 Oct 2021	1	3GPP TS 23.060 V8.9.0: Sections 5.1, 5.3.8, 5.4.6, 9.2.33; Figures 1, 72b 3GPP TS 23.228 V8.12.0: Sections 4.0, 4.16.1, 4.16.2, 5.4.4.5, 5.10.3.1, Annex E, E.0, E.2.1a.1, E.2.1a.2, E.2.4.0, E.2.4.1; Figure E.2 3GPP TS 23.401 V8.17.0: Sections 4.7.1, 4.7.2.2; Figure 4.7.2.2-1				
		US7102663	13 Nov 2023	26	3GPP TS 24.173 V9.1.0: Sections 4.2, 5.2 3GPP TS 22.279 V7.1.0: Sections 1, 2, 3.1, 6, 8 3GPP TS 23.279 V7.7.0: Sections 8.1, 8.3.1, 8.3.2; Figures 8-1, 8.3-1, 8.3-2 3GPP TS 23.228 V7.16.0: Sections 4.13.2, 4.13.3 3GPP TS 24.229 V7.28.0: Sections 5.1, 5.1.2A.1, 6.1.2, 6.1.3, 7.9.2, 7.2A.8.1, 7.2A.8.2, 7.2A.9.1, 7.2A.9.2, 7.9.3 3GPP TS 24.279 V7.7.0: Sections 6.3.1.8, 6.3.1.9, 7.3.1.3, 7.3.1.4, A.1, A.2, A.3, 7.3.1.8, 7.3.1.9				
		US7995091	09 Jul 2027	1	3GPP TS 23.060 V8.9.0: Sections 5.1, 5.3.8, 5.4.6, 9.2.33; Figures 1, 72b 3GPP TS 23.228 V8.12.0: Sections 4.0, 4.16.1, 4.16.2, 5.4.4.5, 5.10.3.1, Annex E, E.0, E.2.1a.1, E.2.1a.2, E.2.4.0, E.2.4.1; Figure E.2 3GPP TS 23.401 V8.17.0: Sections 4.7.1, 4.7.2.2; Figure 4.7.2.2-1				
SIE001	Siemens	AU2004214376	18 Feb 2024	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
		BRPI0407702-4	18 Feb 2027	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
		CNZL200480004608.6	18 Feb 2024	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
		EP1595420 (DE, ES, FI, FR, GB, IT, NL, SE, TR)	18 Feb 2024	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
		IDP000025685	18 Feb 2024	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
		IN225756	18 Feb 2024	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
		JP4284324	18 Feb 2024	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
		KR10-1050335	18 Feb 2024	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
		MX266549	18 Feb 2024	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
		RU2335866	18 Feb 2024	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
		US7676041	18 Jun 2027	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
		ZA200505960	25 Jul 2025	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V8.5.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 3.1, 4.1, 4.2.1, 4.2.2, 4.2.4, 4.4.11, 4.5.2, 4.5.3, Annex B.2, Annex B.3; Figures 4.1, 4.3, 4.4
SIE002	Siemens	EA013147	09 Aug 2027			1	3GPP TS 33.401 V13.2.0: Sections 6, 6.1, 6.1.1, 6.2, 7, 7.2, 7.2.8, 7.2.8.1, 7.2.8.1.1, 9, 9.2, Annex A.2	1	3GPP TS 33.401 V15.4.0: Sections 6, 6.1, 6.1.1, 6.2, 7, 7.2, 7.2.8, 7.2.8.1, 7.2.8.1.1, 9, 9.2, Annex A.2
		EP2052517 (DE, ES, FI, FR, GB, IE, IT, NL, PL)	09 Aug 2027	1	3GPP TS 33.401 V13.2.0: Sections 6, 6.1, 6.1.1, 6.2, 7, 7.2, 7.2.8, 7.2.8.1, 7.2.8.1.1, 9, 9.2, 9.2.1 Annex A.2 3GPP TS 21.905 V13.0.0: Section 3	1	3GPP TS 33.401 V13.2.0: Sections 6, 6.1, 6.1.1, 6.2, 7, 7.2, 7.2.8, 7.2.8.1, 7.2.8.1.1, 9, 9.2, Annex A.2	1	3GPP TS 33.401 V15.4.0: Sections 6, 6.1, 6.1.1, 6.2, 7, 7.2, 7.2.8, 7.2.8.1, 7.2.8.1.1, 9, 9.2, Annex A.2
		JP5054772	09 Aug 2027			1	3GPP TS 33.401 V13.2.0: Sections 6, 6.1, 6.1.1, 6.2, 7, 7.2, 7.2.8, 7.2.8.1, 7.2.8.1.1, 9, 9.2, Annex A.2	1	3GPP TS 33.401 V15.4.0: Sections 6, 6.1, 6.1.1, 6.2, 7, 7.2, 7.2.8, 7.2.8.1, 7.2.8.1.1, 9, 9.2, Annex A.2
		KR10-1401605	09 Aug 2027			1	3GPP TS 33.401 V13.2.0: Sections 6, 6.1, 6.1.1, 6.2, 7, 7.2, 7.2.8, 7.2.8.1, 7.2.8.1.1, 9, 9.2, Annex A.2	1	3GPP TS 33.401 V15.4.0: Sections 6, 6.1, 6.1.1, 6.2, 7, 7.2, 7.2.8, 7.2.8.1, 7.2.8.1.1, 9, 9.2, Annex A.2
		US9197615	03 Nov 2032			1	3GPP TS 33.401 V13.2.0: Sections 6, 6.1, 6.1.1, 6.2, 7, 7.2, 7.2.8, 7.2.8.1, 7.2.8.1.1, 9, 9.2, Annex A.2	1	3GPP TS 33.401 V15.4.0: Sections 6, 6.1, 6.1.1, 6.2, 7, 7.2, 7.2.8, 7.2.8.1, 7.2.8.1.1, 9, 9.2, Annex A.2
SIE003	Siemens	CNZL200780037127.9	03 Oct 2027			1	3GPP TS 36.321 V8.5.0: Sections 5.4.3, 5.4.3.1	1	3GPP TS 36.321 V15.2.0: Sections 5.4.3, 5.4.3.1
		EP2070269 (DE, FR, GB, SE)	03 Oct 2027			1	3GPP TS 36.321 V8.5.0: Sections 5.4.3, 5.4.3.1	1	3GPP TS 36.321 V15.2.0: Sections 5.4.3, 5.4.3.1
		JP4981139	03 Oct 2027			1	3GPP TS 36.321 V8.5.0: Sections 5.4.3, 5.4.3.1	1	3GPP TS 36.321 V15.2.0: Sections 5.4.3, 5.4.3.1
		KR10-1432792	03 Oct 2027			1	3GPP TS 36.321 V8.5.0: Sections 5.4.3, 5.4.3.1	1	3GPP TS 36.321 V15.2.0: Sections 5.4.3, 5.4.3.1
		US8374084	26 Apr 2028			1	3GPP TS 36.321 V8.5.0: Sections 5.4.3, 5.4.3.1	1	3GPP TS 36.321 V15.2.0: Sections 5.4.3, 5.4.3.1
SIE004	Siemens	CNZL200780005003.2	26 Jan 2027			1	3GPP TS 33.246 V14.2.0 Sections 1, 3.2, 4, 4.1, 4.1.1, 4.1.2, 6, 6.3, 6.3.2, 6.3.2.2, 6.3.2.2.1, 6.6, 6.6.1; Figures 4.1, 6.1	1	3GPP TS 33.246 V15.0.0 Sections 1, 3.2, 4, 4.1, 4.1.1, 4.1.2, 6, 6.3, 6.3.2, 6.3.2.2, 6.3.2.2.1, 6.6, 6.6.1; Figures 4.1, 6.1
		EP1982494 (BG, CY, DE, FR, GB, RO)	26 Jan 2027			1	3GPP TS 33.246 V14.2.0 Sections 1, 3.2, 4, 4.1, 4.1.1, 4.1.2, 6, 6.3, 6.3.2, 6.3.2.2, 6.3.2.2.1, 6.6, 6.6.1; Figures 4.1, 6.1	1	3GPP TS 33.246 V15.0.0 Sections 1, 3.2, 4, 4.1, 4.1.1, 4.1.2, 6, 6.3, 6.3.2, 6.3.2.2, 6.3.2.2.1, 6.6, 6.6.1; Figures 4.1, 6.1
		JP4856723	26 Jan 2027			1	3GPP TS 33.246 V14.2.0 Sections 1, 3.2, 4, 4.1, 4.1.1, 4.1.2, 6, 6.3, 6.3.2, 6.3.2.2, 6.3.2.2.1, 6.6, 6.6.1; Figures 4.1, 6.1	1	3GPP TS 33.246 V15.0.0 Sections 1, 3.2, 4, 4.1, 4.1.1, 4.1.2, 6, 6.3, 6.3.2, 6.3.2.2, 6.3.2.2.1, 6.6, 6.6.1; Figures 4.1, 6.1
SIE005	Siemens	CNZL200780005265.9	25 Jan 2027			1	3GPP TS 36.300 V9.10.0: Sections 5, 5.2, 9.1 3GPP TS 36.211 V9.1.0: Sections 4.1, 5.1.1, 6.1.1, 6.9, 6.9.1 3GPP TS 36.213 V9.3.0: Section 9.1.2	1	3GPP TS 36.300 V15.9.0: Sections 5, 5.2, 9.1 3GPP TS 36.211 V15.9.0: Sections 4.1, 5.1.1, 6.1.1, 6.9, 6.9.1 3GPP TS 36.213 V15.9.0: Section 9.1.2
		EA012923	25 Jan 2027			1	3GPP TS 36.300 V9.10.0: Sections 5, 5.2, 9.1 3GPP TS 36.211 V9.1.0: Sections 4.1, 5.1.1, 6.1.1, 6.9, 6.9.1 3GPP TS 36.213 V9.3.0: Section 9.1.2	1	3GPP TS 36.300 V15.9.0: Sections 5, 5.2, 9.1 3GPP TS 36.211 V15.9.0: Sections 4.1, 5.1.1, 6.1.1, 6.9, 6.9.1 3GPP TS 36.213 V15.9.0: Section 9.1.2
		EP1985052 (DE, ES, FR, GB, IT, PL, SE)	25 Jan 2027			1	3GPP TS 36.300 V9.10.0: Sections 5, 5.2, 9.1 3GPP TS 36.211 V9.1.0: Sections 4.1, 5.1.1, 6.1.1, 6.9, 6.9.1 3GPP TS 36.213 V9.3.0: Section 9.1.2	1	3GPP TS 36.300 V15.9.0: Sections 5, 5.2, 9.1 3GPP TS 36.211 V15.9.0: Sections 4.1, 5.1.1, 6.1.1, 6.9, 6.9.1 3GPP TS 36.213 V15.9.0: Section 9.1.2
		US8223702	05 Mar 2029			1	3GPP TS 36.300 V9.10.0: Sections 5, 5.2, 9.1 3GPP TS 36.211 V9.1.0: Sections 4.1, 5.1.1, 6.1.1, 6.9, 6.9.1 3GPP TS 36.213 V9.3.0: Section 9.1.2	1	3GPP TS 36.300 V15.9.0: Sections 5, 5.2, 9.1 3GPP TS 36.211 V15.9.0: Sections 4.1, 5.1.1, 6.1.1, 6.9, 6.9.1 3GPP TS 36.213 V15.9.0: Section 9.1.2
SIE006	Siemens	EP2055087 (DE, ES, FR, GB, IT, SE)	24 Aug 2027	1	3GPP TS 23.003 V15.0.0: Sections 14, 14.8 3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1	1	3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 4.6.1, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1 3GPP TS 23.003 V15.0.0: Section 14.8	1	3GPP TS 23.402 V15.3.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 4.6.1, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1 3GPP TS 23.003 V15.8.0: Section 14.8
		IN283348	24 Aug 2027	1	3GPP TS 23.003 V15.0.0: Sections 14, 14.8 3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1	1	3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 4.6.1, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1 3GPP TS 23.003 V15.0.0: Section 14.8	1	3GPP TS 23.402 V15.3.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 4.6.1, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1 3GPP TS 23.003 V15.8.0: Section 14.8
		JP4791445	25 Feb 2025	1	3GPP TS 23.003 V15.0.0: Sections 14, 14.8 3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1	1	3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 4.6.1, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1 3GPP TS 23.003 V15.0.0: Section 14.8	1	3GPP TS 23.402 V15.3.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 4.6.1, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1 3GPP TS 23.003 V15.8.0: Section 14.8
		KR10-1398950	24 Aug 2027	1	3GPP TS 23.003 V15.0.0: Sections 14, 14.8 3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1	1	3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 4.6.1, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1 3GPP TS 23.003 V15.0.0: Section 14.8	1	3GPP TS 23.402 V15.3.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 4.6.1, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1 3GPP TS 23.003 V15.8.0: Section 14.8

ID	Company	Patent No.	Date	Claims	3GPP Reference	Claims	3GPP Reference	Claims	3GPP Reference
SIE006	Siemens	US8208890	25 Oct 2028	1, 9	3GPP TS 23.003 V15.0.0: Sections 14, 14.8 3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1	1	3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 4.6.1, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1 3GPP TS 23.003 V15.0.0: Section 14.8	1	3GPP TS 23.402 V15.3.0: Sections 4.2.2, 4.5.7.2, 4.5.7.2.1, 4.5.7.2.4, 4.6.1, 7.2.1, 7.2.5; Figures 4.2.2-1, 7.2.5-1 3GPP TS 23.003 V15.8.0: Section 14.8
SIE007	Siemens	CNZL201310178459.6	24 Nov 2026			6	3GPP TS 36.300 V10.4.0: Sections 4.7, 10.1.5.1, 10.1.5.2	6	3GPP TS 36.300 V15.6.0: Sections 4.7, 10.1.5.1, 10.1.5.2
		EA011841	24 Nov 2026			1	3GPP TS 36.300 V10.4.0: Sections 4.7, 10.1.5.1, 10.1.5.2	1	3GPP TS 36.300 V15.6.0: Sections 4.7, 10.1.5.1, 10.1.5.2
		EP1796408 (DE, ES, GB, PL)	09 Dec 2025			1	3GPP TS 36.300 V10.4.0: Sections 4.7, 10.1.5.1, 10.1.5.2	1	3GPP TS 36.300 V15.6.0: Sections 4.7, 10.1.5.1, 10.1.5.2
SIE008	Siemens	US8745382	23 Nov 2030	1, 18	3GPP TS 26.346 V13.0.0: Sections 4.4.3, 4.4.4 3GPP TS 33.246 V13.0.0: Sections 4.1.1, 4.1.2, 6.3.1, 6.3.2.2.4, 6.6.2.1A; Figure 4.1	1, 18	3GPP TS 26.346 V13.0.0: Sections 4.4.3, 4.4.4 3GPP TS 33.246 V13.0.0: Sections 4.1.1, 4.1.2, 6.3.1, 6.3.2.2.4, 6.6.2.1A; Figure 4.1	1, 18	3GPP TS 26.346 V15.1.0: Sections 4.4.3, 4.4.4 3GPP TS 33.246 V15.0.0: Sections 4.1.1, 4.1.2, 6.3.1, 6.3.2.2.4, 6.6.2.1A; Figure 4.1
SIE009	Siemens	CNZL200680041147.9	31 Oct 2026	1	3GPP TS23.402 V15.0.0: Sections 4.1.3.2, 4.2.2, 4.2.3, 4.4.1; Figures 4.2.2-1, 4.2.3-1 3GPP TS29.273 V14.3.0: Sections 7, 7.1, 7.1.1, 7.1.2.1.1; Table 7.1.2.1.1/2	1	3GPP TS23.402 V15.0.0: Sections 4.1.3.2, 4.2.2, 4.2.3 and 4.4.1, Figures 4.2.2-1 and 4.2.3-1 3GPP TS29.273 V14.3.0: Sections 7, 7.1, 7.1.1 and 7.1.2.1.1, Table 7.1.2.1.1/2	1	3GPP TS23.402 V15.3.0: Sections 4.1.3.2, 4.2.2, 4.2.3 and 4.4.1, Figures 4.2.2-1 and 4.2.3-1 3GPP TS29.273 V15.3.0: Sections 7, 7.1, 7.1.1 and 7.1.2.1.1, Table 7.1.2.1.1/2
		EP1943806 (DE, ES, FR, GB)	31 Oct 2026	1	3GPP TS23.402 V15.0.0: Sections 4.1.3.2, 4.2.2, 4.2.3, 4.4.1; Figures 4.2.2-1, 4.2.3-1 3GPP TS29.273 V14.3.0: Sections 7, 7.1, 7.1.1, 7.1.2.1.1; Table 7.1.2.1.1/2	1	3GPP TS23.402 V15.0.0: Sections 4.1.3.2, 4.2.2, 4.2.3 and 4.4.1, Figures 4.2.2-1 and 4.2.3-1 3GPP TS29.273 V14.3.0: Sections 7, 7.1, 7.1.1 and 7.1.2.1.1, Table 7.1.2.1.1/2	1	3GPP TS23.402 V15.3.0: Sections 4.1.3.2, 4.2.2, 4.2.3 and 4.4.1, Figures 4.2.2-1 and 4.2.3-1 3GPP TS29.273 V15.3.0: Sections 7, 7.1, 7.1.1 and 7.1.2.1.1, Table 7.1.2.1.1/2
		JP4681656	31 Oct 2026	1	3GPP TS23.402 V15.0.0: Sections 4.1.3.2, 4.2.2, 4.2.3, 4.4.1; Figures 4.2.2-1, 4.2.3-1 3GPP TS29.273 V14.3.0: Sections 7, 7.1, 7.1.1, 7.1.2.1.1; Table 7.1.2.1.1/2	1	3GPP TS23.402 V15.0.0: Sections 4.1.3.2, 4.2.2, 4.2.3 and 4.4.1, Figures 4.2.2-1 and 4.2.3-1 3GPP TS29.273 V14.3.0: Sections 7, 7.1, 7.1.1 and 7.1.2.1.1, Table 7.1.2.1.1/2	1	3GPP TS23.402 V15.3.0: Sections 4.1.3.2, 4.2.2, 4.2.3 and 4.4.1, Figures 4.2.2-1 and 4.2.3-1 3GPP TS29.273 V15.3.0: Sections 7, 7.1, 7.1.1 and 7.1.2.1.1, Table 7.1.2.1.1/2
		KR10-0945612	31 Oct 2026	1	3GPP TS23.402 V15.0.0: Sections 4.1.3.2, 4.2.2, 4.2.3, 4.4.1; Figures 4.2.2-1, 4.2.3-1 3GPP TS29.273 V14.3.0: Sections 7, 7.1, 7.1.1, 7.1.2.1.1; Table 7.1.2.1.1/2	1	3GPP TS23.402 V15.0.0: Sections 4.1.3.2, 4.2.2, 4.2.3 and 4.4.1, Figures 4.2.2-1 and 4.2.3-1 3GPP TS29.273 V14.3.0: Sections 7, 7.1, 7.1.1 and 7.1.2.1.1, Table 7.1.2.1.1/2	1	3GPP TS23.402 V15.3.0: Sections 4.1.3.2, 4.2.2, 4.2.3 and 4.4.1, Figures 4.2.2-1 and 4.2.3-1 3GPP TS29.273 V15.3.0: Sections 7, 7.1, 7.1.1 and 7.1.2.1.1, Table 7.1.2.1.1/2
		US8769261	02 Jan 2030	1	3GPP TS23.402 V15.0.0: Sections 4.1.3.2, 4.2.2, 4.2.3, 4.4.1; Figures 4.2.2-1, 4.2.3-1 3GPP TS29.273 V14.3.0: Sections 7, 7.1, 7.1.1, 7.1.2.1.1; Table 7.1.2.1.1/2	1	3GPP TS23.402 V15.0.0: Sections 4.1.3.2, 4.2.2, 4.2.3 and 4.4.1, Figures 4.2.2-1 and 4.2.3-1 3GPP TS29.273 V14.3.0: Sections 7, 7.1, 7.1.1 and 7.1.2.1.1, Table 7.1.2.1.1/2	1	3GPP TS23.402 V15.3.0: Sections 4.1.3.2, 4.2.2, 4.2.3 and 4.4.1, Figures 4.2.2-1 and 4.2.3-1 3GPP TS29.273 V15.3.0: Sections 7, 7.1, 7.1.1 and 7.1.2.1.1, Table 7.1.2.1.1/2
SIE010	Siemens	CNZL200680020548.6	10 Apr 2026	1	3GPP TS 33.220 V12.3.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3	1	3GPP TS 33.220 V12.3.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3	1	3GPP TS 33.220 V15.4.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3
		EP1889503 (DE, ES, FR, GB, IT, PL)	10 Apr 2026	1	3GPP TS 33.220 V12.3.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3	1	3GPP TS 33.220 V12.3.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3	1	3GPP TS 33.220 V15.4.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3
		JP4663011	10 Apr 2026	1	3GPP TS 33.220 V12.3.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3	1	3GPP TS 33.220 V12.3.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3	1	3GPP TS 33.220 V15.4.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3
		KR10-0980132	10 Apr 2026	1	3GPP TS 33.220 V12.3.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3	1	3GPP TS 33.220 V12.3.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3	1	3GPP TS 33.220 V15.4.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3
		US8291222	14 Oct 2029	1	3GPP TS 33.220 V12.3.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3	1	3GPP TS 33.220 V12.3.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3	1	3GPP TS 33.220 V15.4.0: Sections 4.1, 4.4.9, I.2.1, I.5.2; Figures 4.1, I.3
SIE011	Siemens	CNZL200680041205.8	27 Oct 2026	1	3GPP TS 33.402 V15.0.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS 29.273 V15.0.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2	1	3GPP TS33.402 V15.0.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS23.402 V15.0.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS29.273 V15.0.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2	1	3GPP TS 33.402 V15.3.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS 23.402 V15.1.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS 29.273 V15.3.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2
		EP1943855 (DE, ES, FR, GB, IT, PL)	27 Oct 2026	1	3GPP TS 33.402 V15.0.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS 29.273 V15.0.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2	1	3GPP TS33.402 V15.0.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS23.402 V15.0.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS29.273 V15.0.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2	1	3GPP TS 33.402 V15.3.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS 23.402 V15.1.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS 29.273 V15.3.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2
		JP4806028	27 Oct 2026	1	3GPP TS 33.402 V15.0.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS 29.273 V15.0.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2	1	3GPP TS33.402 V15.0.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS23.402 V15.0.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS29.273 V15.0.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2	1	3GPP TS 33.402 V15.3.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS 23.402 V15.1.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS 29.273 V15.3.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2
		KR10-0960747	27 Oct 2026	1	3GPP TS 33.402 V15.0.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS 29.273 V15.0.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2	1	3GPP TS33.402 V15.0.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS23.402 V15.0.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS29.273 V15.0.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2	1	3GPP TS 33.402 V15.3.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS 23.402 V15.1.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS 29.273 V15.3.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2
		US8533471	01 Feb 2029	1	3GPP TS 33.402 V15.0.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS 23.402 V15.0.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS 29.273 V15.0.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2	1	3GPP TS33.402 V15.0.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS23.402 V15.0.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS29.273 V15.0.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2	1	3GPP TS 33.402 V15.3.0: Sections 6.2, 9.2.1; Figures 6.2-1, 9.2.1.2.1-1 3GPP TS 23.402 V15.1.0: Sections 4.2.2, 4.3.3.3, 4.6.1, 6.2.3; Figures 4.2.2-1, 6.2.3-1 3GPP TS 29.273 V15.3.0: Section 9.1.2.6; Tables 9.1.2.6.1/1, 9.1.2.6.1/2
SIE012	Siemens	BRPI0409400-0	22 Dec 2028			1	3GPP TS 23.379 V14.7.0: Sections 1, 7.3.1, 7.4.2.3.2, 10.4.1, 10.4.2.1, 10.9.1.1, 10.9.1.2.1, 10.9.1.2.2, 10.9.1.2.3; Figure 7.3.1; Tables 10.4.2.1-1, 10.9.1.2.2-1, 10.9.1.2.3-1	1	3GPP TS 23.379 V15.6.0: Sections 1, 7.3.1, 7.4.2.3.2, 10.4.1, 10.4.2.1, 10.9.1.1, 10.9.1.2.1, 10.9.1.2.2, 10.9.1.2.3; Figure 7.3.1; Tables 10.4.2.1-1, 10.9.1.2.2-1, 10.9.1.2.3-1
		CNZL200480009912.X	22 Dec 2024			1	3GPP TS 23.379 V14.7.0: Sections 1, 7.3.1, 7.4.2.3.2, 10.4.1, 10.4.2.1, 10.9.1.1, 10.9.1.2.1, 10.9.1.2.2, 10.9.1.2.3; Figure 7.3.1; Tables 10.4.2.1-1, 10.9.1.2.2-1, 10.9.1.2.3-1	1	3GPP TS 23.379 V15.6.0: Sections 1, 7.3.1, 7.4.2.3.2, 10.4.1, 10.4.2.1, 10.9.1.1, 10.9.1.2.1, 10.9.1.2.2, 10.9.1.2.3; Figure 7.3.1; Tables 10.4.2.1-1, 10.9.1.2.2-1, 10.9.1.2.3-1
		EP1597935 (DE, ES, FR, GB, IT)	22 Dec 2024			1	3GPP TS 23.379 V14.7.0: Sections 1, 7.3.1, 7.4.2.3.2, 10.4.1, 10.4.2.1, 10.9.1.1, 10.9.1.2.1, 10.9.1.2.2, 10.9.1.2.3; Figure 7.3.1; Tables 10.4.2.1-1, 10.9.1.2.2-1, 10.9.1.2.3-1	1	3GPP TS 23.379 V15.6.0: Sections 1, 7.3.1, 7.4.2.3.2, 10.4.1, 10.4.2.1, 10.9.1.1, 10.9.1.2.1, 10.9.1.2.2, 10.9.1.2.3; Figure 7.3.1; Tables 10.4.2.1-1, 10.9.1.2.2-1, 10.9.1.2.3-1
		IN258504	22 Dec 2024			1	3GPP TS 23.379 V14.7.0: Sections 1, 7.3.1, 7.4.2.3.2, 10.4.1, 10.4.2.1, 10.9.1.1, 10.9.1.2.1, 10.9.1.2.2, 10.9.1.2.3; Figure 7.3.1; Tables 10.4.2.1-1, 10.9.1.2.2-1, 10.9.1.2.3-1	1	3GPP TS 23.379 V15.6.0: Sections 1, 7.3.1, 7.4.2.3.2, 10.4.1, 10.4.2.1, 10.9.1.1, 10.9.1.2.1, 10.9.1.2.2, 10.9.1.2.3; Figure 7.3.1; Tables 10.4.2.1-1, 10.9.1.2.2-1, 10.9.1.2.3-1
		US7203509	22 Dec 2024			1	3GPP TS 23.379 V14.7.0: Sections 1, 7.3.1, 7.4.2.3.2, 10.4.1, 10.4.2.1, 10.9.1.1, 10.9.1.2.1, 10.9.1.2.2, 10.9.1.2.3; Figure 7.3.1; Tables 10.4.2.1-1, 10.9.1.2.2-1, 10.9.1.2.3-1	1	3GPP TS 23.379 V15.6.0: Sections 1, 7.3.1, 7.4.2.3.2, 10.4.1, 10.4.2.1, 10.9.1.1, 10.9.1.2.1, 10.9.1.2.2, 10.9.1.2.3; Figure 7.3.1; Tables 10.4.2.1-1, 10.9.1.2.2-1, 10.9.1.2.3-1
SIE013	Siemens	CNZL200580025538.7	22 Jun 2025	1	3GPP TS 23.228 V14.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V14.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1	1	3GPP TS 23.228 V14.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V14.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1	1	3GPP TS 23.228 V15.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V15.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1
		EP1771993 (DE, FR, GB)	22 Jun 2025	1	3GPP TS 23.228 V14.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V14.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1	1	3GPP TS 23.228 V14.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V14.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1	1	3GPP TS 23.228 V15.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V15.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1

ID	Company	Patent	Date		Mapping (group 1)		Mapping (group 2)		Mapping (group 3)
SIE013	Siemens	KR10-0912972	22 Jun 2025	1	3GPP TS 23.228 V14.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V14.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1	1	3GPP TS 23.228 V14.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V14.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1	1	3GPP TS 23.228 V15.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V15.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1
		US8305902	30 Jul 2025	1	3GPP TS 23.228 V14.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V14.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1	1	3GPP TS 23.228 V14.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V14.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1	1	3GPP TS 23.228 V15.4.0: Sections 4.0, 5.1.4, 5.2.2.3, 5.6.1; Figures 4.0, 5.1 3GPP TS 23.218 V15.0.0: Sections 3.1, 5.1A, 5.1B, 5.2.1, 6.3, 6.4.2, 6.9.1
SIE014*	Siemens	CNZL200480039818.9	29 Oct 2024	1	3GPP TS 33.246 V9.0.0: Sections 3.1, 3.2, 4.1.1, 4.1.3, 6.3.1, 6.3.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.5.4, Annexes D.1, D.3; Figures 4.1, 4.2b, 6.4b, 6.5, 6.7	1	3GPP TS 33.246 V9.0.0: Sections 3.1, 3.2, 4.1.1, 4.1.3, 6.3.1, 6.3.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.5.4, Annexes D.1, D.3; Figures 4.1, 4.2b, 6.4b, 6.5, 6.7	1	3GPP TS 33.246 V15.0.0: Sections 3.1, 3.2, 4.1.1, 4.1.3, 6.3.1, 6.3.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.5.4, Annexes D.1, D.3; Figures 4.1, 4.2b, 6.4b, 6.5, 6.7
		CNZL201010260863.4	29 Oct 2024	1	3GPP TS 33.246 V9.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4; Figures 4.1, 4.2b, 6.5; Annex D	1	3GPP TS 33.246 V9.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4, D1, D3; Figures 4.1, 4.2b, 6.5	1	3GPP TS 33.246 V15.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4, D1, D3; Figures 4.1, 4.2b, 6.5
		EP1680906 (AT, CH, DE, ES, FR, GB, IT, NL, SE)	29 Oct 2024	1	3GPP TS 33.246 V9.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4; Figures 4.1, 4.2b, 6.5; Annex D	1	3GPP TS 33.246 V9.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4, D1, D3; Figures 4.1, 4.2b, 6.5	1	3GPP TS 33.246 V15.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4, D1, D3; Figures 4.1, 4.2b, 6.5
		IDP000021408	29 Oct 2024	1	3GPP TS 33.246 V9.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4; Figures 4.1, 4.2b, 6.5; Annex D	1	3GPP TS 33.246 V9.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4, D1, D3; Figures 4.1, 4.2b, 6.5	1	3GPP TS 33.246 V15.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4, D1, D3; Figures 4.1, 4.2b, 6.5
		MX263723	29 Oct 2024	1	3GPP TS 33.246 V9.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4; Figures 4.1, 4.2b, 6.5; Annex D	1	3GPP TS 33.246 V9.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4, D1, D3; Figures 4.1, 4.2b, 6.5	1	3GPP TS 33.246 V15.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4, D1, D3; Figures 4.1, 4.2b, 6.5
		RU2358406	29 Oct 2024	1	3GPP TS 33.246 V9.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4; Figures 4.1, 4.2b, 6.5; Annex D	1	3GPP TS 33.246 V9.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4, D1, D3; Figures 4.1, 4.2b, 6.5	1	3GPP TS 33.246 V15.0.0: Sections 3, 3.1, 3.2, 4.1.1, 4.1.3, 5, 6.3.1, 6.3.3.2.1, 6.4.1, 6.4.4, 6.4.5.1, 6.4.5.3, 6.5.4, D1, D3; Figures 4.1, 4.2b, 6.5
SIE015	Siemens	BRPI0407837-3	12 Jan 2027	1	3GPP TS 26.233 V10.0.0: Sections 2, 10	1	3GPP TS 26.233 V10.0.0: Sections 2, 10	1	3GPP TS 26.233 V15.0.0: Sections 2, 10
		CNZL201310065093.1	12 Jan 2024	9	3GPP TS 26.233 V10.0.0: Sections 2, 10	9	3GPP TS 26.233 V10.0.0: Sections 2, 10	9	3GPP TS 26.233 V15.0.0: Sections 2, 10
		EP1597894 (DE, ES, FR, GB, IT, NL, SE)	12 Jan 2024	1	3GPP TS 26.233 V10.0.0: Sections 2, 10	1	3GPP TS 26.233 V10.0.0: Sections 2, 10	1	3GPP TS 26.233 V15.0.0: Sections 2, 10
		IN328562	12 Jan 2024	1	3GPP TS 26.233 V10.0.0: Sections 2, 10	1	3GPP TS 26.233 V10.0.0: Sections 2, 10	1	3GPP TS 26.233 V15.0.0: Sections 2, 10
		US7970710	17 May 2027	15	3GPP TS 26.233 V10.0.0: Sections 2, 10	15	3GPP TS 26.233 V10.0.0: Sections 2, 10	15	3GPP TS 26.233 V15.0.0: Sections 2, 10
SIE016	Siemens	US8699394	01 May 2028	1, 14, 16	3GPP TS 23.002 V6.10.0: Sections 1, 3, 3.2, 4.4.1, 4.2, 4.2.2,, 4.2.2.1, 4.2.2.2, 4.3 3GPP TS 23.246 V6.12.0: Sections 4.1, 5.2, 5.3 3GPP TS 25.331 V6.14.0: Sections 1, 8.6.9, 8.6.9.6, 8.7.1.1, 8.7.2, 8.7.2.1, 8.7.2.3, 8.7.2.4, 8.7.4.1, 8.7.4.2, 10.2.16j; Figures 8.7.2.1, 8.7.4.1 3GPP TS 25.346 V6.11.0: Sections 5.1.5, 5.2.5	16	3GPP TS 36.300 V12.0.0: Sections 3.1, 3.2, 4, 4.6.1, 15, 15.1.1, 15.1.3, 15.3.5: Figures 15-1, 15.1.1-1, 15.1.3-1 3GPP TS 36.331 V12.0.0: Sections 1, 5.8.2.1, 5.8.2.2, 5.8.4.1, 5.8.4.2, 5.8.4.3, 6.2.1, 6.2.2; Figures 5.8.2.1-1, 5.8.4.1-1	16	3GPP TS 36.300 V15.2.0: Sections 3.1, 3.2, 4, 4.6.1, 15, 15.1.1, 15.1.3, 15.3.5: Figures 15-1, 15.1.1-1, 15.1.3-1 3GPP TS 36.331 V15.3.0: Sections 1, 5.8.2.1, 5.8.2.2, 5.8.4.1, 5.8.4.2, 5.8.4.3, 6.2.1, 6.2.2; Figures 5.8.2.1-1, 5.8.4.1-1
SIE017	Siemens	US8073973	26 Nov 2027			1	3GPP TS 36.233 V14.0.0: Sections 4, 4.1, 4.2.2, 5.5, 5.5.1, 5.5.4; Table 5.5.1.1; Figure 4.2.2.1	1	3GPP TS 36.233 V15.0.0: Sections 4, 4.1, 4.2.2, 5.5, 5.5.1, 5.5.4; Table 5.5.1.1; Figure 4.2.2.1
SIE018	Siemens	US8619667	09 Jun 2027			1	3GPP TS 36.300 V11.1.0: Section 5.2.4 3GPP TS 36.211 V9.0.0: Sections 5.2.3, 5.3.4, 5.5.2.1.2; Table 5.2.3-1 3GPP TS 36.213 V9.1.0: Section8.1	1	3GPP TS 36.300 V15.3.0: Section 5.2.4 3GPP TS 36.211 V15.2.0: Sections 5.2.3, 5.3.4, 5.5.2.1.2; Table 5.2.3-1 3GPP TS 36.213 V15.3.0: Section8.1
SIE019	Siemens	US7746841	04 Mar 2025	1	3GPP TS 25.321 V5.5.0: Sections 4.2.3.2, 4.2.3.3, 2.2.4.3, 9.1.2, 9.1.3, 9.1.4, 9.2.1, 11.6.1, 11.6.1.3, 11.6.2, 11.6.2.2; Figures 4.2.3.3.1. 9.1.2.1; Table 9.2.1.5a	1, 17	3GPP TS 36.300 V9.36.0: Sections 1, 6.9, 9.1; Figure 6-2 3GPP TS 36.321 V9.3.0: Sections 1, 3.2, 5.4.2.1, 5.4.2.2, 6.1.2, 6.2.1: Figutrd 6.1.2-1, 6.1.2-3	1, 17	3GPP TS 36.300 V15.6.0: Sections 1, 6.9, 9.1; Figure 6-2 3GPP TS 36.321 V15.6.0: Sections 1, 3.2, 5.4.2.1, 5.4.2.2, 6.1.2, 6.2.1: Figutrd 6.1.2-1, 6.1.2-3
SIE020	Siemens	US7729349	07 Jan 2026			10	3GPP TS 36.300 V12.0.0: Sections 4, 4.3, 4.3.1, 5.3, 6, 6.1, 6.1.1, 6.1.2, 6.1.2.1, 6.1.2.2, 6.1.3.2; Figure 4.3.1-1 3GPP TS 36.321 V12.0.0: Sections 4.2. 4.2.1. 5.11. 5.12. 6.1.2. 6.2. 6.2.1; Figures 6.1.2-1, 6.1.2-3 3GPP TS 36.331 V12.0.0: Section 5.8.4, 5.8.4.1, 6.3.7; Figures 5.8.4.1-1. 6.1.3.2-1	10	3GPP TS 36.300 V15.6.0: Sections 4, 4.3, 4.3.1, 5.3, 6, 6.1, 6.1.1, 6.1.2, 6.1.2.1, 6.1.2.2, 6.1.3.2; Figure 4.3.1-1 3GPP TS 36.321 V15.6.0: Sections 4.2. 4.2.1. 5.11. 5.12. 6.1.2. 6.2. 6.2.1; Figures 6.1.2-1, 6.1.2-3 3GPP TS 36.331 V15.6.0: Section 5.8.4, 5.8.4.1, 6.3.7; Figures 5.8.4.1-1. 6.1.3.2-1
SIE021*	Siemens	US7894802	04 Aug 2024			16	3GPP TS 36.306 V9.0.0: Section 4.1; Tables 4.1-1, 4.1-2 3GPP TS 36.331 V9.0.0: Sections 1, 3.2, 4.4, 5.6.3.1, 6.2.2, 6.3.6; Figure 5.6.3.1-1	16	3GPP TS 36.306 V15.5.0: Section 4.1; Tables 4.1-1, 4.1-2 3GPP TS 36.331 V15.6.0: Sections 1, 3.2, 4.4, 5.6.3.1, 6.2.2, 6.3.6; Figure 5.6.3.1-1
SIE022*	Siemens	US7286554	02 Jul 2024			10	3GPP TS 36.300 V10.3.0: Sections 3.2, 4, 15.1.1; Figure 15.1.1-1 3GPP TS 36.331 V10.1.0: Sections 1, 6.2.2	10	3GPP TS 36.300 V15.6.0: Sections 3.2, 4, 15.1.1; Figure 15.1.1-1 3GPP TS 36.331 V15.6.0: Sections 1, 6.2.2
SIE023*	Siemens	US7499414	18 Sep 2024			1	3GPP TS 26.346 V10.0.0: Sections 4.4.1, 4.4.3, 5.2.1, 5.3.1, 5.3.2, 5.3.5.1; Figures 4, 6, 7	1	3GPP TS 26.346 V15.1.0: Sections 4.4.1, 4.4.3, 5.2.1, 5.3.1, 5.3.2, 5.3.5.1; Figures 4, 6, 7
SIE024*	Siemens	US7689662	26 Oct 2024			1	3GPP TS 33.220 V14.0.0: Sections 1, 4.1, 4.2.1, 4.5.2, 4.5.3; Figures 4.1, 4.3, 4.4	1	3GPP TS 33.220 V15.4.0: Sections 1, 4.1, 4.2.1, 4.5.2, 4.5.3; Figures 4.1, 4.3, 4.4
SIE025*	Siemens	US7315537	29 Jun 2024			1	3GPP TS 23.379 V14.0.0: Sections 4, 5.1, 7.4.2.3.2, 7.4.2.3.3, 7.4.2.3.4, 10.2, 10.9.1.2.1, 10.9.1.2.2; Figure 10.2-1; Table 10.9.1.2.2-1	1	3GPP TS 23.379 V15.6.0: Sections 4, 5.1, 7.4.2.3.2, 7.4.2.3.3, 7.4.2.3.4, 10.2, 10.9.1.2.1, 10.9.1.2.2; Figure 10.2-1; Table 10.9.1.2.2-1
SKT002*	SK Telecom	KR10-0501031	29 Aug 2022			1,8	3GPP TS 36.113 V8.14.0: Section 6.2.2.1.1 3GPP TS 36.213 V8.8.0: Sections 5.1.1.1, 6.1 3GPP TS 36.321 V8.9.0: Sections 5.1.1, 5.1.2, 5.1.3, 5.1.4 3GPP TS 36.331 V8.14.0: Sections 5.2.1.1, 6.3.1, 6.3.2		
SKT003	SK Telecom	BRPI0706360-1	25 May 2029			1	3GPP TS 36.211 V10.1.0: Sections 3.1, 6.11, 6.11.2.1, 6.11.2.2 and 6.12; Tables 6.11.2.1-1 3GPP TS 36.213 V10.1.0: Section 4.1 3GPP TS 36.101 V10.3.0: Sections 7.1; Annex C; Table C.2-1		
		CNZL200780006495.7	25 May 2027			11	3GPP TS 36.211 V10.1.0: Sections 3.1, 6.11, 6.11.2.1, 6.11.2.2 and 6.12; Tables 6.11.2.1-1 3GPP TS 36.213 V10.1.0: Section 4.1 3GPP TS 36.101 V10.3.0: Sections 7.1; Annex C; Table C.2-1		
		EP2057811 (DE, ES, FR, GB, NL, SE, TR)	25 May 2027			13	3GPP TS 36.211 V10.1.0: Sections 3.1, 6.11, 6.11.2.1, 6.11.2.2 and 6.12; Tables 6.11.2.1-1 3GPP TS 36.213 V10.1.0: Section 4.1 3GPP TS 36.101 V10.3.0: Sections 7.1; Annex C; Table C.2-1		
		IN263473	25 May 2027			8	3GPP TS 36.101 V10.3.0: Sections: 7.1, C.1, C.2; Table C.2-1 3GPP TS 36.211 V10.1.0: Section 3.1, 6.2.3, 6.11, 6.11.2.1, 6.11.2.2 3GPP TS 36.213 V10.1.0: Section 4.1		
		KR10-0874485	23 May 2027			1	3GPP TS 36.211 V10.1.0: Sections 3.1, 6.11, 6.11.2.1, 6.11.2.2 and 6.12; Tables 6.11.2.1-1 3GPP TS 36.213 V10.1.0: Section 4.1 3GPP TS 36.101 V10.3.0: Sections 7.1; Annex C; Table C.2-1		
		US8125976	22 Jul 2027			13	3GPP TS 36.211 V10.1.0: Sections 3.1, 6.11, 6.11.2.1, 6.11.2.2 and 6.12; Tables 6.11.2.1-1 3GPP TS 36.213 V10.1.0: Section 4.1 3GPP TS 36.101 V10.3.0: Sections 7.1; Annex C; Table C.2-1		

SKT004	SK Telecom	CNZL201480052265.4	25 Sep 2034			1	3GPP TS36.300 V12.4.0: Sections 6.5, 7.6, and 11.2; Figure 6.5-1 3GPP TS36.321 V12.4.0: Section 6.1.3.8; Figure 6.1.3.8-1 3GPP TS36.133 V12.4.0: Sections 7.7.2 and 7.7.3	1	3GPP TS 36.300 V16.7.0: Section 6.5; Figure 6.5-1 3GPP TS 37.340 V16.8.0: Sections 4.1.1, 6.1 3GPP TS 38.213 V16.8.0: Section 4.3 3GPP TS 38.321 V16.7.0: Section 5.9, 6.1.3.10; Figure 6.1.3.10-1
		CNZL201910925953.1	25 Sep 2034			1	3GPP TS 36.133 V12.4.0: Sections 7.7.2 and 7.7.3 3GPP TS 36.300 V12.4.0: Sections 6.5, 7.6 and 11.2; Figure 6.5-1 3GPP TS 36.321 V12.4.0: Section 6.1.3.8; Figure 6.1.3.8-1	1	3GPP TS 36.300 V16.7.0: Section 6.5; Figure 6.5-1 3GPP TS 37.340 V16.8.0: Sections 4.1.1, 6.1 3GPP TS 38.213 V16.8.0: Section 4.3 3GPP TS 38.321 V16.7.0: Section 5.9, 6.1.3.10; Figure 6.1.3.10-1
		KR10-2101517	18 Mar 2034			1	3GPP TS 36.133 V12.4.0: Sections 7.7.2 and 7.7.3 3GPP TS 36.300 V12.4.0: Sections 6.5, 7.6 and 11.2; Figure 6.5-1 3GPP TS 36.321 V12.4.0: Section 6.1.3.8; Figure 6.1.3.8-1	1	3GPP TS 36.300 V16.7.0: Section 6.5; Figure 6.5-1 3GPP TS 37.340 V16.8.0: Sections 4.1.1, 6.1 3GPP TS 38.213 V16.8.0: Section 4.3 3GPP TS 38.321 V16.7.0: Section 5.9, 6.1.3.10; Figure 6.1.3.10-1
		KR10-2101577	18 Mar 2034			1	3GPP TS 36.133 V12.4.0: Sections 7.7.2 and 7.7.3 3GPP TS 36.300 V12.4.0: Sections 6.5, 7.6 and 11.2; Figure 6.5-1 3GPP TS 36.321 V12.4.0: Section 6.1.3.8; Figure 6.1.3.8-1	1	3GPP TS 36.300 V16.7.0: Section 6.5; Figure 6.5-1 3GPP TS 37.340 V16.8.0: Sections 4.1.1, 6.1 3GPP TS 38.213 V16.8.0: Section 4.3 3GPP TS 38.321 V16.7.0: Section 5.9, 6.1.3.10; Figure 6.1.3.10-1
		KR10-2101578	18 Mar 2034			1	3GPP TS 36.133 V12.4.0: Sections 7.7.2 and 7.7.3 3GPP TS 36.300 V12.4.0: Sections 6.5, 7.6 and 11.2; Figure 6.5-1 3GPP TS 36.321 V12.4.0: Section 6.1.3.8; Figure 6.1.3.8-1	1	3GPP TS 36.300 V16.7.0: Section 6.5; Figure 6.5-1 3GPP TS 37.340 V16.8.0: Sections 4.1.1, 6.1 3GPP TS 38.213 V16.8.0: Section 4.3 3GPP TS 38.321 V16.7.0: Section 5.9, 6.1.3.10; Figure 6.1.3.10-1
		US10028328	26 Sep 2034			1, 9	3GPP TS 36.133 V12.4.0: Sections 7.7.2 and 7.7.3 3GPP TS 36.300 V12.4.0: Sections 6.5, 7.6 and 11.2; Figure 6.5-1 3GPP TS 36.321 V12.4.0: Section 6.1.3.8; Figure 6.1.3.8-1	1, 9	3GPP TS 36.300 V16.7.0: Section 6.5; Figure 6.5-1 3GPP TS 37.340 V16.8.0: Sections 4.1.1, 6.1 3GPP TS 38.213 V16.8.0: Section 4.3 3GPP TS 38.321 V16.7.0: Section 5.9, 6.1.3.10; Figure 6.1.3.10-1
		US10397975	09 Nov 2034			1	3GPP TS 36.300 V12.4.0 Sections 6.5, 7.6, 11.2; Fig. 6.5-1 3GPP TS 36.321 V12.4.0 Section 6.1.3.8, Fig. 6.1.3.8-1 3GPP TS 36.133 V12.4.0 Sections 7.7.2 and 7.7.3	1	3GPP TS 36.300 V16.7.0: Section 6.5; Figure 6.5-1 3GPP TS 37.340 V16.8.0: Sections 4.1.1, 6.1 3GPP TS 38.213 V16.8.0: Section 4.3 3GPP TS 38.321 V16.7.0: Section 5.9, 6.1.3.10; Figure 6.1.3.10-1
		US9439233	07 Dec 2034			1, 9	3GPP TS 36.300 V12.4.0: Sections 6.5, 7.6 and 11.2; Figure 6.5-1 3GPP TS 36.321 V12.4.0: Section 6.1.3.8: Figure 6.1.3.8-1 3GPP TS 36.133 V12.4.0: Sections 7.7.2 and 7.7.3	1, 9	3GPP TS 36.300 V16.7.0: Section 6.5; Figure 6.5-1 3GPP TS 37.340 V16.8.0: Sections 4.1.1, 6.1 3GPP TS 38.213 V16.8.0: Section 4.3 3GPP TS 38.321 V16.7.0: Section 5.9, 6.1.3.10; Figure 6.1.3.10-1
SKT005	SK Telecom	KR10-2023671	01 Nov 2033			1	3GPP TS 36.211 V12.9.0 Section 4, 3GPP TS36.213 V12.8.0 Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C, 3GPP TS36.300 V12.7.0 Sections 5.3.1.1, 5.5, 7.5, 3GPP TS36.331 V12.7.0 Sections 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10.3b, 5.3.10.6 and 6.3.2		
		KR10-2058816	01 Nov 2033			1	3GPP TS 36.211 V12.9.0 Section 4, 3GPP TS36.213 V12.8.0 Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C, 3GPP TS36.300 V12.7.0 Sections 5.3.1.1, 5.5, 7.5, 3GPP TS36.331 V12.7.0 Sections 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10.3b, 5.3.10.6 and 6.3.2		
		KR10-2058817	01 Nov 2033			1	3GPP TS 36.211 V12.9.0 Section 4, 3GPP TS36.213 V12.8.0 Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C, 3GPP TS36.300 V12.7.0 Sections 5.3.1.1, 5.5, 7.5, 3GPP TS36.331 V12.7.0 Sections 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10.3b, 5.3.10.6 and 6.3.2		
		US10348385	30 Oct 2034			1	3GPP TS 36.211 V12.9.0 Section 4, 3GPP TS36.213 V12.8.0 Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C, 3GPP TS36.300 V12.7.0 Sections 5.3.1.1, 5.5, 7.5, 3GPP TS36.331 V12.7.0 Sections 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10.3b, 5.3.10.6 and 6.3.2		
		US9510332	12 Mar 2035			1, 8	3GPP TS 36.211 V12.9.0 Section 4, 3GPP TS36.213 V12.8.0 Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C, 3GPP TS36.300 V12.7.0 Sections 5.3.1.1, 5.5, 7.5, 3GPP TS36.331 V12.7.0 Sections 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10.3b, 5.3.10.6 and 6.3.2		
		US9800313	30 Oct 2034			1, 9	3GPP TS 36.211 V12.9.0: Section 4 3GPP TS36.213 V12.8.0: Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C 3GPP TS36.300 V12.7.0: Sections 5.3.1.1, 5.5 and 7.5 3GPP TS36.331 V12.7.0: Sections 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10.3b, 5.3.10.6 and 6.3.2		
SKT006	SK Telecom	KR10-2120497	29 Jan 2034			1	3GPP TS 36.213 V12.7.0 Sections 7.1, 7.3, 7.3.2.1, 7.3.2.2, .7.3.4, 10.1.1, 10.1.3A, Table 10.1.3A-1 3GPP TS 36.300 V12.7.0 Sections 5.3.1.1, 5.5, 7.5 3GPP TS 36.331 V12.7.0 Sections 3.1, 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10 and 5.3.10.3b		
		KR10-2173193	29 Jan 2034			1	3GPP TS 36.213 V12.7.0 Sections 7.1, 7.3, 7.3.2.1, 7.3.2.2, .7.3.4, 10.1.1, 10.1.3A, Table 10.1.3A-1 3GPP TS 36.300 V12.7.0 Sections 5.3.1.1, 5.5, 7.5 3GPP TS 36.331 V12.7.0 Sections 3.1, 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10 and 5.3.10.3b		
		US10122514	28 Jan 2035			19	3GPP TS 36.213 V12.7.0 Sections 7.1, 7.3, 7.3.2.1, 7.3.2.2, .7.3.4, 10.1.1, 10.1.3A, Table 10.1.3A-1 3GPP TS 36.300 V12.7.0 Sections 5.3.1.1, 5.5, 7.5 3GPP TS 36.331 V12.7.0 Sections 3.1, 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10 and 5.3.10.3b		

SKT006	SK Telecom	US10355845	28 Jan 2035				1	3GPP TS 36.213 V12.7.0: Sections 7, 7.1, 7.3, 7.3.2.1, 7.3.2.2, 10.1.1, 10.1.3A 3GPP TS 36.300 V12.7.0: Sections 5.3, 5.3.1.1, 5.5, 7.5 3GPP TS 36.331 V12.7.0: Sections 3.1, 5.3.5, 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10, 5.3.10.3b	
		US9853795	18 Jun 2035				19	3GPP TS 36.213 V12.7.0 Sections 7.1, 7.3, 7.3.2.1, 7.3.2.2, .7.3.4, 10.1.1, 10.1.3A, Table 10.1.3A-1, 3GPP TS 36.300 V12.7.0 Sections 5.3.1.1, 5.5, 7.5, 3GPP TS 36.331 V12.7.0 Sections 3.1, 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10 and 5.3.10.3b	
SKT007	SK Telecom	CNZL201480054683.7	02 Oct 2034				1	3GPP TS36.213 V12.7.0: Sections 8.0, 8.3, and 9.1.2 3GPP TS36.300 V12.7.0: Section 5.5 3GPP TS36.321 V12.7.0: Section 5.4.1 3GPP TS36.331 V12.7.0: Sections 5.3.5.3, 5.3.5.4, 5.3.10.3b, and 6.3.2	
		CNZL201910940520.3	02 Oct 2034				1	3GPP TS 36.213 V12.7.0: Sections 8.0, 8.3, 9.1.2 3GPP TS 36.300 V12.7.0: Sections 5.5 3GPP TS 36.321 V12.7.0: Sections 5.4, 5.4.1 3GPP TS 36.331 V12.7.0: Sections 5.3.5, 5.3.5.3, 5.3.5.4, 5.3.10, 5.3.10.3b, 6.3.2	
		KR10-2118750	04 Oct 2033				1	3GPP TS 36.213 V12.7.0: Sections 8.0, 8.3, 9.1.2 3GPP TS 36.300 V12.7.0: Sections 5.5 3GPP TS 36.321 V12.7.0: Sections 5.4, 5.4.1 3GPP TS 36.331 V12.7.0: Sections 5.3.5, 5.3.5.3, 5.3.5.4, 5.3.10, 5.3.10.3b, 6.3.2	
		KR10-2251123	04 Oct 2033				1	3GPP TS 36.213 V12.7.0: Sections 8.0, 8.3, 9.1.2 3GPP TS 36.300 V12.7.0: Sections 5.5 3GPP TS 36.321 V12.7.0: Sections 5.4, 5.4.1 3GPP TS 36.331 V12.7.0: Sections 5.3.5, 5.3.5.3, 5.3.5.4, 5.3.10, 5.3.10.3b, 6.3.2	
		KR10-2314101	04 Oct 2033				1	3GPP TS 36.213 V12.7.0: Sections 8.0, 8.3, 9.1.2 3GPP TS 36.300 V12.7.0: Sections 5.5 3GPP TS 36.321 V12.7.0: Sections 5.4, 5.4.1 3GPP TS 36.331 V12.7.0: Sections 5.3.5, 5.3.5.3, 5.3.5.4, 5.3.10, 5.3.10.3b, 6.3.2	
		US10389492	27 Nov 2034				1	3GPP TS 36.213 V12.7.0: Sections 8.0, 8.3, 9.1.2 3GPP TS 36.300 V12.7.0: Sections 5.5 3GPP TS 36.321 V12.7.0: Sections 5.4, 5.4.1 3GPP TS 36.331 V12.7.0: Sections 5.3.5, 5.3.5.3, 5.3.5.4, 5.3.10, 5.3.10.3b, 6.3.2	
		US10615926	03 Oct 2034				1	3GPP TS 36.213 V12.7.0 Sections 8.0, 8.3, 9.1.2, 3GPP TS 36.300 V12.7.0 Section 5.5, 3GPP TS 36.321 V12.7.0 Section 5.4.1, 3GPP TS 36.331 V12.7.0 Sections 5.3.5.3, 5.3.5.4, 5.3.10.3b and 6.3.2.	
		US9768918	03 Oct 2034				1	3GPP TS 36.213 V12.7.0 Sections 8.0, 8.3 3GPP TS 36.300 V12.7.0 Section 5.5 3GPP TS 36.321 V12.7.0 Section 5.4.1 3GPP TS 36.331 V12.7.0 Sections 5.3.5.3, 5.3.5.4, 5.3.10.3b and 6.3.2	
SKT008	SK Telecom	CNZL201580070137.7	14 Oct 2035				1	3GPP TS 36.211 V12.8.0 Sections 9.1, 9.1.2, 9.2, 9.2.4, 9.3.1, 9.3.6, 9.7, 9.7.1, 9.7.2, 9.8, Table 9.8-1 3GPP TS 36.213 V12.8.0 Sections 14.1.1, 14.1.3, 14.3.1, 14.3.2, 14.4 3GPP TS 36.331 V12.7.0 Sections 5.10.7.1 and Figure 5.10.7.1-2	
		CNZL202110785960.3	14 Oct 2035				1	3GPP TS 36.211 V12.8.0 Sections 9.1, 9.1.2, 9.2, 9.2.4, 9.3.1, 9.3.6, 9.7, 9.7.1, 9.7.2, 9.8, Table 9.8-1 3GPP TS 36.213 V12.8.0 Sections 14.1.1, 14.1.3, 14.3.1, 14.3.2, 14.4 3GPP TS 36.331 V12.7.0 Sections 5.10.7.1 and Figure 5.10.7.1-2	
		EP3216139 (DE, ES, FR, GB, IT)	14 Oct 2035				1	3GPP TS 36.211 V12.8.0 Sections 9.1, 9.2, 9.2.4, 9.3.6, 9.8, Table 9.8-1, 3GPP TS 36.213 V12.8.0 Sections 14.1.1, 14.1.3	
		EP3614785 (DE, ES, FR, GB, IT, NL)	14 Oct 2035				1	3GPP TS 36.211 V12.8.0 Sections 9.1, 9.1.2, 9.2, 9.2.4, 9.3.1, 9.3.6, 9.7, 9.7.1, 9.7.2, 9.8, Table 9.8-1 3GPP TS 36.213 V12.8.0 Sections 14.1.1, 14.1.3, 14.3.1, 14.3.2, 14.4 3GPP TS 36.331 V12.7.0 Sections 5.10.7.1 and Figure 5.10.7.1-2	
		EP3793321 (DE, ES, FR, GB, IT, NL)	14 Oct 2035				1	3GPP TS 36.211 V12.8.0 Sections 9.1, 9.1.2, 9.2, 9.2.4, 9.3.1, 9.3.6, 9.7, 9.7.1, 9.7.2, 9.8, Table 9.8-1 3GPP TS 36.213 V12.8.0 Sections 14.1.1, 14.1.3, 14.3.1, 14.3.2, 14.4 3GPP TS 36.331 V12.7.0 Sections 5.10.7.1 and Figure 5.10.7.1-2	
		KR10-2078424	18 Nov 2034				1	3GPP TS 36.211 V12.8.0 Sections 9.1, 9.1.2, 9.2, 9.2.4, 9.3.1, 9.3.6, 9.7, 9.7.1, 9.7.2, 9.8, Table 9.8-1 3GPP TS 36.213 V12.8.0 Sections 14.1.1, 14.1.3, 14.3.1, 14.3.2, 14.4 3GPP TS 36.331 V12.7.0 Sections 5.10.7.1 and Figure 5.10.7.1-2	
		KR10-2238523	18 Nov 2034				1	3GPP TS 36.211 V12.8.0 Sections 9.1, 9.1.2, 9.2, 9.2.4, 9.3.1, 9.3.6, 9.7, 9.7.1, 9.7.2, 9.8, Table 9.8-1 3GPP TS 36.213 V12.8.0 Sections 14.1.1, 14.1.3, 14.3.1, 14.3.2, 14.4 3GPP TS 36.331 V12.7.0 Sections 5.10.7.1 and Figure 5.10.7.1-2	
		KR10-2255690	18 Nov 2034				1	3GPP TS 36.211 V12.8.0 Sections 9.1, 9.1.2, 9.2, 9.2.4, 9.3.1, 9.3.6, 9.7, 9.7.1, 9.7.2, 9.8, Table 9.8-1 3GPP TS 36.213 V12.8.0 Sections 14.1.1, 14.1.3, 14.3.1, 14.3.2, 14.4 3GPP TS 36.331 V12.7.0 Sections 5.10.7.1 and Figure 5.10.7.1-2	

ID	Company	Patent	Date				Standard Reference		Standard Reference 2
SKT008	SK Telecom	US10334644	30 Apr 2035			1	3GPP TS 36.211 V12.8.0 Sections 9.1, 9.1.2, 9.2, 9.2.4, 9.3.1, 9.3.6, 9.7, 9.7.1, 9.7.2, 9.8, Table 9.8-1 3GPP TS 36.213 V12.8.0 Sections 14.1.1, 14.1.3, 14.3.1, 14.3.2, 14.4 3GPP TS 36.331 V12.7.0 Sections 5.10.7.1 and Figure 5.10.7.1-2		
		US10652941	30 Apr 2035			1	3GPP TS 36.211 V12.8.0: Sections 9.1, 9.1.2, 9.2, 9.2.4, 9.3.1, 9.3.6, 9.5, 9.7, 9.7.1, 9.7.2 and 9.8; Table 9.8-1 3GPP TS 36.213 V12.8.0: Sections 14.1.3, 14.3.1, 14.3.2, 14.4 3GPP TS 36.331 V12.7.0: Sections 5.10.7.1; Figure 5.10.7.1-2		
		US10986681	30 Apr 2035			1	3GPP TS 36.211 V12.8.0: Sections 9, 9.1, 9.1.2, 9.2, 9.2.4, 9.3, 9.3.1, 9.3.6, 9.7, 9.7.1, 9.7.2, 9.8 3GPP TS 36.213 V12.8.0: Sections 14, 14.1, 14.1.3, 14.3, 14.3.1 3GPP TS 36.331 V12.7.0: Sections 5.10.7, 5.10.7.1		
SKT009	SK Telecom	US10128986	24 Dec 2034			1	3GPP TS 36.213 V12.7.0: Sections 7, 7.1, 7.1.8, 7.3.4, 10.2; Table 7-2 3GPP TS 36.300 V12.7.0: Sections 5.3.1.1, 5.5, 7.5 3GPP TS 36.331 V12.7.0: Sections 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10.3b		
		US10637614	08 Apr 2035			1	3GPP TS 36.213 V12.7.0: Sections 7, 7.1, 7.3, 10.2; Table 7-2 3GPP TS 36.300 V12.7.0: Section 7.5 3GPP TS 36.331 V12.7.0: Sections 5.3.1.1, 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10.3b		
		US11038627	06 May 2035			1	3GPP TS 36.213 V12.7.0: Sections 7, 7.1, 7.1.8, 7.3.4, 10.2; Table 7-2 3GPP TS 36.300 V12.7.0: Sections 5.3.1.1, 5.5, 7.5 3GPP TS 36.331 V12.7.0: Sections 5.3.5.1, 5.3.5.3, 5.3.5.4, 5.3.10.3b		
SKT011	SK Telecom	CNZL201680079838.1	18 Nov 2036			1	3GPP TS 23.214 V14.2.0: Sections 4.2, 4.2.1, 5.9, 5.9.1, 5.9.3, 5.9.3.1, 5.9.3.2 6.2.3, 6.3, 6.3.1, 6.3.1.5; Figures 4.2.1-1, 6.2.3-1	1	3GPP TS 23.501 V17.2.0: Sections 4.1, 4.2.1, 4.2.6, 5.3.3.2.4, 5.8.2.11.15, 5.8.3.1, 5.8.3.2; Table 5.8.2.11.15-1 3GPP TS 23.502 V17.2.1: Section 4.2.3.3
		EP3410774 (DE, ES, FR, GB, IT, NL)	18 Nov 2036			1	3GPP TS 23.214 V14.2.0: Sections 4.2, 4.2.1, 5.9, 5.9.1, 5.9.3, 5.9.3.1, 5.9.3.2 6.2.3, 6.3, 6.3.1, 6.3.1.5; Figures 4.2.1-1, 6.2.3-1	1	3GPP TS 23.501 V17.2.0: Sections 4.1, 4.2.1, 4.2.6, 5.3.3.2.4, 5.8.2.11.15, 5.8.3.1, 5.8.3.2; Table 5.8.2.11.15-1 3GPP TS 23.502 V17.2.1: Section 4.2.3.3
		IN477387	01 Nov 2036			1	3GPP TS 23.214 V14.2.0: Sections 4.2, 4.2.1, 5.9, 5.9.1, 5.9.3, 5.9.3.1, 5.9.3.2 6.2.3, 6.3, 6.3.1, 6.3.1.5; Figures 4.2.1-1, 6.2.3-1		
		JP6638091	18 Nov 2036			1	3GPP TS 23.214 V14.2.0: Sections 4.2, 4.2.1, 5.9, 5.9.1, 5.9.3, 5.9.3.1, 5.9.3.2 6.2.3, 6.3, 6.3.1, 6.3.1.5; Figures 4.2.1-1, 6.2.3-1	1	3GPP TS 23.501 V17.2.0: Sections 4.1, 4.2.1, 4.2.6, 5.3.3.2.4, 5.8.2.11.15, 5.8.3.1, 5.8.3.2; Table 5.8.2.11.15-1 3GPP TS 23.502 V17.2.1: Section 4.2.3.3
		JP6876116	18 Nov 2036			1	3GPP TS 23.214 V14.2.0: Sections 4.2, 4.2.1, 5.9, 5.9.1, 5.9.3, 5.9.3.1, 5.9.3.2 6.2.3, 6.3, 6.3.1, 6.3.1.5; Figures 4.2.1-1, 6.2.3-1	1	3GPP TS 23.501 V17.2.0: Sections 4.1, 4.2.1, 4.2.6, 5.3.3.2.4, 5.8.2.11.15, 5.8.3.1, 5.8.3.2; Table 5.8.2.11.15-1 3GPP TS 23.502 V17.2.1: Section 4.2.3.3
		KR10-1893917	25 Jan 2036			1	3GPP TS 23.214 V14.2.0: Sections 4.2, 4.2.1, 5.9, 5.9.1, 5.9.3, 5.9.3.1, 5.9.3.2 6.2.3, 6.3, 6.3.1, 6.3.1.5; Figures 4.2.1-1, 6.2.3-1	1	3GPP TS 23.501 V17.2.0: Sections 4.1, 4.2.1, 4.2.6, 5.3.3.2.4, 5.8.2.11.15, 5.8.3.1, 5.8.3.2; Table 5.8.2.11.15-1 3GPP TS 23.502 V17.2.1: Section 4.2.3.3
		KR10-1932574	25 Jan 2036			1	3GPP TS 23.214 V14.2.0: Sections 4.2, 4.2.1, 5.9, 5.9.1, 5.9.3, 5.9.3.1, 5.9.3.2 6.2.3, 6.3, 6.3.1, 6.3.1.5; Figures 4.2.1-1, 6.2.3-1	1	3GPP TS 23.501 V17.2.0: Sections 4.1, 4.2.1, 4.2.6, 5.3.3.2.4, 5.8.2.11.15, 5.8.3.1, 5.8.3.2; Table 5.8.2.11.15-1 3GPP TS 23.502 V17.2.1: Section 4.2.3.3
		US10659397	18 Nov 2036			1	3GPP TS 23.214 V14.2.0: Sections 4.2, 4.2.1, 5.9, 5.9.1, 5.9.3, 5.9.3.1, 5.9.3.2 6.2.3, 6.3, 6.3.1, 6.3.1.5; Figures 4.2.1-1, 6.2.3-1	1	3GPP TS 23.501 V17.2.0: Sections 4.1, 4.2.1, 4.2.6, 5.3.3.2.4, 5.8.2.11.15, 5.8.3.1, 5.8.3.2; Table 5.8.2.11.15-1 3GPP TS 23.502 V17.2.1: Section 4.2.3.3
		US12107777	18 Nov 2036			1	3GPP TS 23.214 V14.2.0: Sections 4.2, 4.2.1, 5.9, 5.9.1, 5.9.3, 5.9.3.1, 5.9.3.2 6.2.3, 6.3, 6.3.1, 6.3.1.5; Figures 4.2.1-1, 6.2.3-1		
SKT012	SK Telecom	CNZL201680066884.8	08 Nov 2036			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		CNZL201680067157.3	08 Nov 2036			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		CNZL202111192410.7	31 Dec 1919			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		EP3364695 (DE, ES, FI, FR, GB, IT, NL, TR)	08 Nov 2036			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		EP3379867 (DE, ES, FR, GB, IT, NL, TR)	08 Nov 2036			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		IN418542	08 Nov 2036			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		IN507192	31 Dec 1919			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		JP7128234	08 Nov 2036			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		KR10-1795786	19 Nov 2035			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		KR10-1795787	19 Nov 2035			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		US10609636	08 Nov 2036			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		US11178600	08 Nov 2036			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		US11265809	24 Nov 2036			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		
		US11792728	08 Nov 2036			1	3GPP TS 23.401 V14.3.0: Sections 4.3.25.1a, 5.3.2.1; Figure 5.3.2.1-1 3GPP TS 24.301 V14.3.0: Sections 5.3.1.1, 5.5.1.2.4		

SKT013	SK Telecom	CNZL201780049384.8	09 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		EP3498023 (ES, FR, GB, IT, NL)	09 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		EP4120781 (DE, ES, FR, GB, IT, NL)	09 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		IDP000079936	09 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		IN517235	09 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		RU2711952	09 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		RU2722424	09 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		RU2735387	09 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		US10645527	07 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		US10721588	07 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		US11044576	07 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		VN1-2019-01223	09 Aug 2037			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		ZA201901397	06 Mar 2039			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		ZA202203814	04 Apr 2042			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
		ZA202203815	04 Apr 2042			1	3GPP TS 36.212 V14.7.0: Section 5.3.3.1.9A 3GPP TS 36.213 V14.3.0: Sections 14.1.5, 14.2, 14.2.1 3GPP TS 36.321 V14.8.0: Sections 3.1, 5.14.1.1 3GPP TS 36.331 V14.8.0: Section 6.3.2		
SKT015	SK Telecom	CNZL201780077099.7	26 Dec 2037					1	3GPP TS 38.300 V15.5.0: Sections 9.2.1.2, 9.2.2.1, 9.2.2.2 3GPP TS 38.304 V15.5.0: Section 5.2.4.2
		CNZL202110941186.0	26 Dec 2037					1	3GPP TS 38.300 V15.5.0: Sections 9.2.1.2, 9.2.2.1, 9.2.2.2 3GPP TS 38.304 V15.5.0: Section 5.2.4.2
		CNZL202110941194.5	26 Dec 2037					1	3GPP TS 38.300 V15.5.0: Sections 9.2.1.2, 9.2.2.1, 9.2.2.2 3GPP TS 38.304 V15.5.0: Section 5.2.4.2
		IN469448	26 Dec 2037					1	3GPP TS 38.300 V15.5.0: Sections 9.2.1.2, 9.2.2.1, 9.2.2.2 3GPP TS 38.304 V15.5.0: Section 5.2.4.2
		JP6898994	26 Dec 2037					1	3GPP TS 38.300 V15.5.0: Sections 9.2.1.2, 9.2.2.1, 9.2.2.2 3GPP TS 38.304 V15.5.0: Section 5.2.4.2
		JP7261834	26 Dec 2037					1	3GPP TS 38.300 V15.5.0: Sections 9.2.1.2, 9.2.2.1, 9.2.2.2 3GPP TS 38.304 V15.5.0: Section 5.2.4.2
		KR10-1859564	01 Aug 2037					1	3GPP TS 38.300 V15.5.0: Sections 9.2.1.2, 9.2.2.1, 9.2.2.2 3GPP TS 38.304 V15.5.0: Section 5.2.4.2
		US10912006	26 Dec 2037					1	3GPP TS 38.300 V15.5.0: Sections 9.2.1.2, 9.2.2.1, 9.2.2.2 3GPP TS 38.304 V15.5.0: Section 5.2.4.2
		US11419032	29 Mar 2038					1	3GPP TS 38.300 V15.5.0: Sections 9.2.1.2, 9.2.2.1, 9.2.2.2 3GPP TS 38.304 V15.5.0: Section 5.2.4.2
SKT016	SK Telecom	CNZL201780028882.4	28 Apr 2037			1	3GPP 23.401 V15.4.0: Sections 3.2, 4..1, 4.3.2a, 4.7.3, 5.3.2.1; Figures 4.2.1-1, 4.2.1-2 3GPP TS 24.301 V15.4.0: Sections 3.2, 5.5.1.2.2, 5.5.1.2.4 3GPP TS 38.300 V15.4.0: Sections 3.1, 3.2, 4, 4.9.1, 4.9.2, 4.9.3.1; Figures 4-1, 4.9.2-1, 4.9.3.1-1	1	3GPP 23.401 V17.8.0: Sections 3.1, 3.2, 4.2.1, 4.7.3; Figures 4.2.1-1, 4.2.1-2 3GPP TS 23.501 V17.6.0: Sections 3.1, 4.2.8.0, 5.1, 5.11.1, 5.7.2.6 3GPP TS 23.502 V17.9.0: Sections 4.2.2.1, 4.2.2.2.1, 4.2.2.2.2, 4.3.2a 3GPP TS 38.300 V17.5.0: Sections 3.1, 3.2, 4.1, 4.5; Figure 4.1-1
		EP3445013 (DE, ES, GR, GB IT, NL, TR)	28 Apr 2037			1	3GPP 23.401 V15.4.0: Sections 3.2, 4..1, 4.3.2a, 4.7.3, 5.3.2.1; Figures 4.2.1-1, 4.2.1-2 3GPP TS 24.301 V15.4.0: Sections 3.2, 5.5.1.2.2, 5.5.1.2.4 3GPP TS 38.300 V15.4.0: Sections 3.1, 3.2, 4, 4.9.1, 4.9.2, 4.9.3.1; Figures 4-1, 4.9.2-1, 4.9.3.1-1	1	3GPP 23.401 V17.8.0: Sections 3.1, 3.2, 4.2.1, 4.7.3; Figures 4.2.1-1, 4.2.1-2 3GPP TS 23.501 V17.6.0: Sections 3.1, 4.2.8.0, 5.1, 5.11.1, 5.7.2.6 3GPP TS 23.502 V17.9.0: Sections 4.2.2.1, 4.2.2.2.1, 4.2.2.2.2, 4.3.2a 3GPP TS 38.300 V17.5.0: Sections 3.1, 3.2, 4.1, 4.5; Figure 4.1-1

ID	Company	Patent	Date				Specifications		Specifications
SKT016	SK Telecom	IN459692	30 Jun 2037			1	3GPP 23.401 V15.4.0: Sections 3.2, 4..1, 4.3.2a, 4.7.3, 5.3.2.1; Figures 4.2.1-1, 4.2.1-2 3GPP TS 24.301 V15.4.0: Sections 3.2, 5.5.1.2.2, 5.5.1.2.4 3GPP TS 38.300 V15.4.0: Sections 3.1, 3.2, 4, 4.9.1, 4.9.2, 4.9.3.1; Figures 4-1, 4.9.2-1, 4.9.3.1-1	1	3GPP 23.401 V17.8.0: Sections 3.1, 3.2, 4.2.1, 4.7.3; Figures 4.2.1-1, 4.2.1-2 3GPP TS 23.501 V17.6.0: Sections 3.1, 4.2.8.0, 5.1, 5.11.1, 5.7.2.6 3GPP TS 23.502 V17.9.0: Sections 4.2.2.1, 4.2.2.2.1, 4.2.2.2.2, 4.3.2a 3GPP TS 38.300 V17.5.0: Sections 3.1, 3.2, 4.1, 4.5; Figure 4.1-1
		IN472589	28 Apr 2037			1	3GPP 23.401 V15.4.0: Sections 3.2, 4..1, 4.3.2a, 4.7.3, 5.3.2.1; Figures 4.2.1-1, 4.2.1-2 3GPP TS 24.301 V15.4.0: Sections 3.2, 5.5.1.2.2, 5.5.1.2.4 3GPP TS 38.300 V15.4.0: Sections 3.1, 3.2, 4, 4.9.1, 4.9.2, 4.9.3.1; Figures 4-1, 4.9.2-1, 4.9.3.1-1	1	3GPP 23.401 V17.8.0: Sections 3.1, 3.2, 4.2.1, 4.7.3; Figures 4.2.1-1, 4.2.1-2 3GPP TS 23.501 V17.6.0: Sections 3.1, 4.2.8.0, 5.1, 5.11.1, 5.7.2.6 3GPP TS 23.502 V17.9.0: Sections 4.2.2.1, 4.2.2.2.1, 4.2.2.2.2, 4.3.2a 3GPP TS 38.300 V17.5.0: Sections 3.1, 3.2, 4.1, 4.5; Figure 4.1-1
		JP7128874	28 Apr 2037			1	3GPP 23.401 V15.4.0: Sections 3.2, 4..1, 4.3.2a, 4.7.3, 5.3.2.1; Figures 4.2.1-1, 4.2.1-2 3GPP TS 24.301 V15.4.0: Sections 3.2, 5.5.1.2.2, 5.5.1.2.4 3GPP TS 38.300 V15.4.0: Sections 3.1, 3.2, 4, 4.9.1, 4.9.2, 4.9.3.1; Figures 4-1, 4.9.2-1, 4.9.3.1-1	1	3GPP 23.401 V17.8.0: Sections 3.1, 3.2, 4.2.1, 4.7.3; Figures 4.2.1-1, 4.2.1-2 3GPP TS 23.501 V17.6.0: Sections 3.1, 4.2.8.0, 5.1, 5.11.1, 5.7.2.6 3GPP TS 23.502 V17.9.0: Sections 4.2.2.1, 4.2.2.2.1, 4.2.2.2.2, 4.3.2a 3GPP TS 38.300 V17.5.0: Sections 3.1, 3.2, 4.1, 4.5; Figure 4.1-1
		KR10-2076816	12 May 2036			1	3GPP 23.401 V15.4.0: Sections 3.2, 4..1, 4.3.2a, 4.7.3, 5.3.2.1; Figures 4.2.1-1, 4.2.1-2 3GPP TS 24.301 V15.4.0: Sections 3.2, 5.5.1.2.2, 5.5.1.2.4 3GPP TS 38.300 V15.4.0: Sections 3.1, 3.2, 4, 4.9.1, 4.9.2, 4.9.3.1; Figures 4-1, 4.9.2-1, 4.9.3.1-1	1	3GPP 23.401 V17.8.0: Sections 3.1, 3.2, 4.2.1, 4.7.3; Figures 4.2.1-1, 4.2.1-2 3GPP TS 23.501 V17.6.0: Sections 3.1, 4.2.8.0, 5.1, 5.11.1, 5.7.2.6 3GPP TS 23.502 V17.9.0: Sections 4.2.2.1, 4.2.2.2.1, 4.2.2.2.2, 4.3.2a 3GPP TS 38.300 V17.5.0: Sections 3.1, 3.2, 4.1, 4.5; Figure 4.1-1
		US10499445	28 Apr 2037			1	3GPP 23.401 V15.4.0: Sections 3.2, 4..1, 4.3.2a, 4.7.3, 5.3.2.1; Figures 4.2.1-1, 4.2.1-2 3GPP TS 24.301 V15.4.0: Sections 3.2, 5.5.1.2.2, 5.5.1.2.4 3GPP TS 38.300 V15.4.0: Sections 3.1, 3.2, 4, 4.9.1, 4.9.2, 4.9.3.1; Figures 4-1, 4.9.2-1, 4.9.3.1-1	1	3GPP 23.401 V17.8.0: Sections 3.1, 3.2, 4.2.1, 4.7.3; Figures 4.2.1-1, 4.2.1-2 3GPP TS 23.501 V17.6.0: Sections 3.1, 4.2.8.0, 5.1, 5.11.1, 5.7.2.6 3GPP TS 23.502 V17.9.0: Sections 4.2.2.1, 4.2.2.2.1, 4.2.2.2.2, 4.3.2a 3GPP TS 38.300 V17.5.0: Sections 3.1, 3.2, 4.1, 4.5; Figure 4.1-1
		US10873988	28 Apr 2037			1	3GPP 23.401 V15.4.0: Sections 3.2, 4..1, 4.3.2a, 4.7.3, 5.3.2.1; Figures 4.2.1-1, 4.2.1-2 3GPP TS 24.301 V15.4.0: Sections 3.2, 5.5.1.2.2, 5.5.1.2.4 3GPP TS 38.300 V15.4.0: Sections 3.1, 3.2, 4, 4.9.1, 4.9.2, 4.9.3.1; Figures 4-1, 4.9.2-1, 4.9.3.1-1	1	3GPP 23.401 V17.8.0: Sections 3.1, 3.2, 4.2.1, 4.7.3; Figures 4.2.1-1, 4.2.1-2 3GPP TS 23.501 V17.6.0: Sections 3.1, 4.2.8.0, 5.1, 5.11.1, 5.7.2.6 3GPP TS 23.502 V17.9.0: Sections 4.2.2.1, 4.2.2.2.1, 4.2.2.2.2, 4.3.2a 3GPP TS 38.300 V17.5.0: Sections 3.1, 3.2, 4.1, 4.5; Figure 4.1-1
		US11412564	17 May 2037			1	3GPP 23.401 V15.4.0: Sections 3.2, 4..1, 4.3.2a, 4.7.3, 5.3.2.1; Figures 4.2.1-1, 4.2.1-2 3GPP TS 24.301 V15.4.0: Sections 3.2, 5.5.1.2.2, 5.5.1.2.4 3GPP TS 38.300 V15.4.0: Sections 3.1, 3.2, 4, 4.9.1, 4.9.2, 4.9.3.1; Figures 4-1, 4.9.2-1, 4.9.3.1-1	1	3GPP 23.401 V17.8.0: Sections 3.1, 3.2, 4.2.1, 4.7.3; Figures 4.2.1-1, 4.2.1-2 3GPP TS 23.501 V17.6.0: Sections 3.1, 4.2.8.0, 5.1, 5.11.1, 5.7.2.6 3GPP TS 23.502 V17.9.0: Sections 4.2.2.1, 4.2.2.2.1, 4.2.2.2.2, 4.3.2a 3GPP TS 38.300 V17.5.0: Sections 3.1, 3.2, 4.1, 4.5; Figure 4.1-1
SKT017	SK Telecom	CNZL201780030831.5	06 Mar 2037					1	3GPP TS 23.501 V15.3.0: Sections 5.1.5.1, 5.7.1.1, 5.7.5.1, 5.7.5.2, 5.7.5.3 3GPP TS 23.502 V15.9.0: Sections 4.3.2.2.2; Figure 4.3.2.2.2-1, 4.3.3.1, 4.3.3.3 3GPP TS 38.300 V15.5.0: Section 12.1
		EP3445082 (DE, ES, FR, GB, IT, NL, TR)	06 Mar 2037					1	3GPP TS 23.501 V15.3.0: Sections 5.1.5.1, 5.7.1.1, 5.7.5.1, 5.7.5.2, 5.7.5.3 3GPP TS 23.502 V15.9.0: Sections 4.3.2.2.2; Figure 4.3.2.2.2-1, 4.3.3.1, 4.3.3.3 3GPP TS 38.300 V15.5.0: Section 12.1
		JP6674051	06 Mar 2037					1	3GPP TS 23.501 V15.3.0: Sections 5.1.5.1, 5.7.1.1, 5.7.5.1, 5.7.5.2, 5.7.5.3 3GPP TS 23.502 V15.9.0: Sections 4.3.2.2.2; Figure 4.3.2.2.2-1, 4.3.3.1, 4.3.3.3 3GPP TS 38.300 V15.5.0: Section 12.1
		JP6952816	06 Mar 2037					1	3GPP TS 23.501 V15.3.0: Sections 5.1.5.1, 5.7.1.1, 5.7.5.1, 5.7.5.2, 5.7.5.3 3GPP TS 23.502 V15.9.0: Sections 4.3.2.2.2; Figure 4.3.2.2.2-1, 4.3.3.1, 4.3.3.3 3GPP TS 38.300 V15.5.0: Section 12.1
		KR10-2115213	19 Sep 2036					1	3GPP TS 23.501 V15.3.0: Sections 5.1.5.1, 5.7.1.1, 5.7.5.1, 5.7.5.2, 5.7.5.3 3GPP TS 23.502 V15.9.0: Sections 4.3.2.2.2; Figure 4.3.2.2.2-1, 4.3.3.1, 4.3.3.3 3GPP TS 38.300 V15.5.0: Section 12.1
		KR10-2115218	19 Sep 2036					1	3GPP TS 23.501 V15.3.0: Sections 5.1.5.1, 5.7.1.1, 5.7.5.1, 5.7.5.2, 5.7.5.3 3GPP TS 23.502 V15.9.0: Sections 4.3.2.2.2; Figure 4.3.2.2.2-1, 4.3.3.1, 4.3.3.3 3GPP TS 38.300 V15.5.0: Section 12.1
		US10945159	19 Aug 2037					8	3GPP TS 23.501 V15.3.0: Sections 5.1.5.1, 5.7.1.1, 5.7.5.1, 5.7.5.2, 5.7.5.3 3GPP TS 23.502 V15.9.0: Sections 4.3.2.2.2; Figure 4.3.2.2.2-1, 4.3.3.1, 4.3.3.3 3GPP TS 38.300 V15.5.0: Section 12.1
		US11627494	29 May 2037					1	3GPP TS 23.501 V15.3.0: Sections 5.1.5.1, 5.7.1.1, 5.7.5.1, 5.7.5.2, 5.7.5.3 3GPP TS 23.502 V15.9.0: Sections 4.3.2.2.2; Figure 4.3.2.2.2-1, 4.3.3.1, 4.3.3.3 3GPP TS 38.300 V15.5.0: Section 12.1
		US11917453	06 Mar 2037					1	3GPP TS 23.501 V15.3.0: Sections 5.1.5.1, 5.7.1.1, 5.7.5.1, 5.7.5.2, 5.7.5.3 3GPP TS 23.502 V15.9.0: Sections 4.3.2.2.2; Figure 4.3.2.2.2-1, 4.3.3.1, 4.3.3.3 3GPP TS 38.300 V15.5.0: Section 12.1

ID	Company	Patent Number	Date						References
SKT018	SK Telecom	CNZL201780049651.1	30 Jun 2037					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		EP3496451 (DE, ES, FR, GB, IT)	30 Jun 2037					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		EP3525513 (DE, ES, FR, GB, IT)	30 Jun 2037					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		IN475189	04 Apr 2038					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		JP6872006	30 Jun 2037					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		JP6983885	04 Apr 2038					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		JP7051995	30 Jun 2037					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		KR10-2039534	26 Jul 2037					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		KR10-2139466	06 Sep 2037					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		US11082879	30 Jun 2037					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		US11297524	04 Apr 2038					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		US11337102	04 Apr 2038					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
		US11653248	30 Jun 2037					1	3GPP TS 38.331 V16.12.0: Sections 3.2, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1, 5.3.13.1-2 3GPP TS 23.501 V16.16.0: Sections 3.2, 5.7.1.1, 5.7.1.5; Figure 5.7.1.5-1 3GPP TS 38.300 V16.12.0: Sections 3.1, 3.2, 4.1
SKT019	SK Telecom	CNZL201680085944.0	28 Dec 2036					1	3GPP TS 38.321 V15.13.0: Sections 5.1.2, 5.1.3
		EP3444958 (GB, FR, DE, IT, ES)	28 Dec 2036					1	3GPP TS 38.321 V15.13.0: Sections 5.1.2, 5.1.3
		IDP000065766	28 Dec 2036					1	3GPP TS 38.321 V15.13.0: Sections 5.1.2, 5.1.3
		IN434700	28 Dec 2036					1	3GPP TS 38.321 V15.13.0: Sections 5.1.2, 5.1.3
		JP6873161	28 Dec 2036					1	3GPP TS 38.321 V15.13.0: Sections 5.1.2, 5.1.3
		KR10-2021086	24 Jun 2036					1	3GPP TS 38.321 V15.13.0: Sections 5.1.2, 5.1.3
		KR10-2021089	24 Jun 2036					1	3GPP TS 38.321 V15.13.0: Sections 5.1.2, 5.1.3
		US11019664	14 Jan 2037					1	3GPP TS 38.321 V15.13.0: Sections 5.1.2, 5.1.3
SKT021	SK Telecom	CNZL201780023252.8	16 May 2037					9	3GPP TS 38.211 V17.4.0: Sections 4.3.1, 4.3.2, 4.4.2, 4.4.3, 6.1.1, 6.1.2, 6.4.1, 6.4.1.1.1.1, 6.4.1.1.1.2, 6.4.1.1.3, 6.4.1.2.1.1, 6.4.1.2.1.2, 6.4.1.2.2.1, 6.4.1.2.2.2, 7.4.1 3GPP TS 38.214 V17.4.0: Section 6.1.2.1; Table 6.1.2.1-1 3GPP TS 38.300 V17.3.0: Sections 3.1, 6.2

Code	Company	Patent Number	Date		Count A	Reference A		Count B	Reference B
SKT021	SK Telecom	IN502299	16 May 2037					9	3GPP TS 38.211 V17.4.0: Sections 4.3.1, 4.3.2, 4.4.2, 4.4.3, 6.1.1, 6.1.2, 6.4.1, 6.4.1.1.1.1, 6.4.1.1.1.2, 6.4.1.1.3, 6.4.1.2.1.1, 6.4.1.2.1.2, 6.4.1.2.2.1, 6.4.1.2.2.2, 7.4.1 3GPP TS 38.214 V17.4.0: Section 6.1.2.1; Table 6.1.2.1-1 3GPP TS 38.300 V17.3.0: Sections 3.1, 6.2
		JP6961676	16 May 2037					9	3GPP TS 38.211 V17.4.0: Sections 4.3.1, 4.3.2, 4.4.2, 4.4.3, 6.1.1, 6.1.2, 6.4.1, 6.4.1.1.1.1, 6.4.1.1.1.2, 6.4.1.1.3, 6.4.1.2.1.1, 6.4.1.2.1.2, 6.4.1.2.2.1, 6.4.1.2.2.2, 7.4.1 3GPP TS 38.214 V17.4.0: Section 6.1.2.1; Table 6.1.2.1-1 3GPP TS 38.300 V17.3.0: Sections 3.1, 6.2
		KR10-2124050	22 Jul 2036					9	3GPP TS 38.211 V17.4.0: Sections 4.3.1, 4.3.2, 4.4.2, 4.4.3, 6.1.1, 6.1.2, 6.4.1, 6.4.1.1.1.1, 6.4.1.1.1.2, 6.4.1.1.3, 6.4.1.2.1.1, 6.4.1.2.1.2, 6.4.1.2.2.1, 6.4.1.2.2.2, 7.4.1 3GPP TS 38.214 V17.4.0: Section 6.1.2.1; Table 6.1.2.1-1 3GPP TS 38.300 V17.3.0: Sections 3.1, 6.2
		US11088795	13 Jun 2037					9	3GPP TS 38.211 V17.4.0: Sections 4.3.1, 4.3.2, 4.4.2, 4.4.3, 6.1.1, 6.1.2, 6.4.1, 6.4.1.1.1.1, 6.4.1.1.1.2, 6.4.1.1.3, 6.4.1.2.1.1, 6.4.1.2.1.2, 6.4.1.2.2.1, 6.4.1.2.2.2, 7.4.1 3GPP TS 38.214 V17.4.0: Section 6.1.2.1; Table 6.1.2.1-1 3GPP TS 38.300 V17.3.0: Sections 3.1, 6.2
		US11621744	16 May 2037					9	3GPP TS 38.211 V17.4.0: Sections 4.3.1, 4.3.2, 4.4.2, 4.4.3, 6.1.1, 6.1.2, 6.4.1, 6.4.1.1.1.1, 6.4.1.1.1.2, 6.4.1.1.3, 6.4.1.2.1.1, 6.4.1.2.1.2, 6.4.1.2.2.1, 6.4.1.2.2.2, 7.4.1 3GPP TS 38.214 V17.4.0: Section 6.1.2.1; Table 6.1.2.1-1 3GPP TS 38.300 V17.3.0: Sections 3.1, 6.2
		US12107645	16 May 2037					9	3GPP TS 38.211 V17.4.0: Sections 4.3.1, 4.3.2, 4.4.2, 4.4.3, 6.1.1, 6.1.2, 6.4.1, 6.4.1.1.1.1, 6.4.1.1.1.2, 6.4.1.1.3, 6.4.1.2.1.1, 6.4.1.2.1.2, 6.4.1.2.2.1, 6.4.1.2.2.2, 7.4.1 3GPP TS 38.214 V17.4.0: Section 6.1.2.1; Table 6.1.2.1-1 3GPP TS 38.300 V17.3.0: Sections 3.1, 6.2
SKT022	SK Telecom	CNZL201880039161.8	15 Jan 2038					1	3GPP TS 38.214 V17.6.0: Sections 5.2.1, 5.2.3 3GPP TS 38.300 V17.0.0: Sections 3.1, 3.2, 4.1, 7.2, 18.0, 18.2; Figure 18.2-1 3GPP TS 38.331 V17.1.0: Section 4.2.1
		IN524057	15 Jan 2038					1	3GPP TS 38.214 V17.6.0: Sections 5.2.1, 5.2.3 3GPP TS 38.300 V17.0.0: Sections 3.1, 3.2, 4.1, 7.2, 18.0, 18.2; Figure 18.2-1 3GPP TS 38.331 V17.1.0: Section 4.2.1
		KR10-2163867	28 Jun 2037					1	3GPP TS 38.214 V17.6.0: Sections 5.2.1, 5.2.3 3GPP TS 38.300 V17.0.0: Sections 3.1, 3.2, 4.1, 7.2, 18.0, 18.2; Figure 18.2-1 3GPP TS 38.331 V17.1.0: Section 4.2.1
		KR10-2226156	28 Jun 2037					1	3GPP TS 38.214 V17.6.0: Sections 5.2.1, 5.2.3 3GPP TS 38.300 V17.0.0: Sections 3.1, 3.2, 4.1, 7.2, 18.0, 18.2; Figure 18.2-1 3GPP TS 38.331 V17.1.0: Section 4.2.1
		US11272401	25 Mar 2038					1	3GPP TS 38.214 V17.6.0: Sections 5.2.1, 5.2.3 3GPP TS 38.300 V17.0.0: Sections 3.1, 3.2, 4.1, 7.2, 18.0, 18.2; Figure 18.2-1 3GPP TS 38.331 V17.1.0: Section 4.2.1
SNY001*	Sisvel International	US7171230	11 Nov 2022		1	3GPP TS 36.213 V8.7.0: Sections 5, 5.1, 5.1.1, 5.1.1.1, 6.1 3GPP TS 36.331 V8.5.0: Sections 5.5.3.2, 6.3.2			
SNY002	Sisvel International	KR10-1392025	01 Feb 2026		1	3GPP TS 36.300 V12.4.0: Sections 5.1, 5.1.1, 5.1.4, 5.1.5, 5.1.8 3GPP TS 36.211 V8.5.0: Sections 3.1, 6.10, 6.10.1, 6.10.1.1, 6.10.1.2, 7.2; Figure 6.10.1.2-1			
		US8811466	17 Feb 2025		7	3GPP TS 36.300 V12.4.0: Sections 5.1, 5.1.1, 5.1.4, 5.1.5, 5.1.8 3GPP TS 36.211 V8.5.0: Sections 3.1, 6.10, 6.10.1, 6.10.1.1, 6.10.1.2, 7.2; Figure 6.10.1.2-1			
		US9432103	16 Mar 2025		1	3GPP TS 36.300 V12.4.0: Sections 5.1, 5.1.1, 5.1.4, 5.1.5, 5.1.8 3GPP TS 36.211 V8.5.0: Sections 3.1, 6.10, 6.10.1, 6.10.1.1, 6.10.1.2, 7.2; Figure 6.10.1.2-1			
TCH001	Sisvel SPA	EP2315383 (AT, BE, CH, CZ, DE, DK, ES, FI, FR, GB, HU, IE, IT, NL, PL, PT, RO, SE, TR)	03 Jan 2027					1	3GPP TS 36.321 V16.1.0: Sections 1, 3.1 and 3.2 3GPP TS 38.322 V16.1.0: Sections 1, 3.2, 5.2.3.2.1, 5.2.3.2.3., 5.3.1, 5.3.3.3, 5.3.4, 6.1.3, 6.2.2.5, 6.1.3.10, 6.2.3.12, 7.1 and 7.3
		JP4968858	03 Jan 2027					1	3GPP TS 36.321 V16.1.0: Sections 1, 3.1 and 3.2 3GPP TS 38.322 V16.1.0: Sections 1, 3.2, 5.2.3.2.1, 5.2.3.2.3., 5.3.1, 5.3.3.3, 5.3.4, 6.1.3, 6.2.2.5, 6.1.3.10, 6.2.3.12, 7.1 and 7.3
		KR10-0912784	22 Dec 2026					1	3GPP TS 36.321 V16.1.0: Sections 1, 3.1 and 3.2 3GPP TS 38.322 V16.1.0: Sections 1, 3.2, 5.2.3.2.1, 5.2.3.2.3., 5.3.1, 5.3.3.3, 5.3.4, 6.1.3, 6.2.2.5, 6.1.3.10, 6.2.3.12, 7.1 and 7.3
		MX287630	03 Jan 2027					1	3GPP TS 36.321 V16.1.0: Sections 1, 3.1 and 3.2 3GPP TS 38.322 V16.1.0: Sections 1, 3.2, 5.2.3.2.1, 5.2.3.2.3., 5.3.1, 5.3.3.3, 5.3.4, 6.1.3, 6.2.2.5, 6.1.3.10, 6.2.3.12, 7.1 and 7.3
		RU2392752	03 Jan 2027					1	3GPP TS 36.321 V16.1.0: Sections 1, 3.1 and 3.2 3GPP TS 38.322 V16.1.0: Sections 1, 3.2, 5.2.3.2.1, 5.2.3.2.3., 5.3.1, 5.3.3.3, 5.3.4, 6.1.3, 6.2.2.5, 6.1.3.10, 6.2.3.12, 7.1 and 7.3
		US7869396	16 May 2027					1	3GPP TS 36.321 V16.1.0: Sections 1, 3.1 and 3.2 3GPP TS 38.322 V16.1.0: Sections 1, 3.2, 5.2.3.2.1, 5.2.3.2.3., 5.3.1, 5.3.3.3, 5.3.4, 6.1.3, 6.2.2.5, 6.1.3.10, 6.2.3.12, 7.1 and 7.3
		US8165596	03 Jan 2027					1	3GPP TS 36.321 V16.1.0: Sections 1, 3.1 and 3.2 3GPP TS 38.322 V16.1.0: Sections 1, 3.2, 5.2.3.2.1, 5.2.3.2.3., 5.3.1, 5.3.3.3, 5.3.4, 6.1.3, 6.2.2.5, 6.1.3.10, 6.2.3.12, 7.1 and 7.3
		US8369865	03 Jan 2027		1	3GPP TS 36.322 V8.5.0: Sections 4.2.1, 4.2.1.3.1, 4.2.1.3.3, 5.1.3.1.1, 5.1.3.2.3, 5.2.1, 5.2.3, 6.1.2, 6.2.1.6, 6.2.2.14, 7.1, 7.3; Figure 6.2.1.6-1			
TCH002	Sisvel SPA	CNZL201310036114.7	10 Sep 2029					1	3GPP TS 38.213 V16.2.0: Sections 1, 3, 10.2; Table 10.2-2 3GPP TS 38.321 V16.1.0: Sections 3.1, 3.2, 5.3.1, 5.8.1
		JP5238067	10 Sep 2029		1	3GPP TS 36.321 V8.5.0: Sections 5.4.1, 5.10.2; Table 7.1-2 3GPP TS 36.213 V8.6.0: Sections 8, 9.1.1, 9.2; Table 8-5, 9.2-1A 3GPP TS 36.212 V8.8.0: Sections 5.3.3, 5.3.3.1.1 3GPP TS 36.331 V8.4.0: Sections 6.2, 6.3.2		1	3GPP TS 36.321 V8.5.0: Sections 5.4.1, 5.10.2; Table 7.1-2 3GPP TS 36.213 V8.6.0: Sections 8, 9.1.1, 9.2; Table 8-5, 9.2-1A 3GPP TS 36.212 V8.8.0: Sections 5.3.3, 5.3.3.1.1 3GPP TS 36.331 V8.4.0: Sections 6.2, 6.3.2
		JP5426001	10 Sep 2029					1	3GPP TS 38.213 V16.2.0: Sections 1, 3, 10.2; Table 10.2-2 3GPP TS 38.321 V16.1.0: Sections 3.1, 3.2, 5.3.1, 5.8.1

ID	Owner	Patent	Date	Claims	Reference	Claims	Reference	Claims	Reference
TCH002	Sisvel SPA	JP6002118	10 Sep 2029			1	3GPP TS 36.321 V8.5.0: Sections 5.4.1, 5.10.2; Table 7.1-2 3GPP TS 36.213 V8.6.0: Sections 8, 9.1.1, 9.2; Table 8-5, 9.2-1A 3GPP TS 36.212 V8.8.0: Sections 5.3.3, 5.3.3.1.1 3GPP TS 36.331 V8.4.0: Sections 6.2, 6.3.2		
		US8411633	28 Dec 2029					1	3GPP TS 38.213 V16.2.0: Sections 1, 3, 10.2; Table 10.2-2 3GPP TS 38.321 V16.1.0: Sections 3.1, 3.2, 5.3.1, 5.8.1
		US8971279	03 Apr 2030			1	3GPP TS 36.321 V8.5.0: Sections 5.4.1, 5.10.2; Table 7.1-2 3GPP TS 36.213 V8.6.0: Sections 8, 9.1.1, 9.2; Table 8-5, 9.2-1A 3GPP TS 36.212 V8.8.0: Sections 5.3.3, 5.3.3.1.1 3GPP TS 36.331 V8.4.0: Sections 6.2, 6.3.2		
		US9369254	19 Oct 2029			1	3GPP TS 36.321 V8.5.0: Sections 5.4.1, 5.10.2; Table 7.1-2 3GPP TS 36.213 V8.6.0: Sections 8, 9.1.1, 9.2; Table 8-5, 9.2-1A 3GPP TS 36.212 V8.8.0: Sections 5.3.3, 5.3.3.1.1 3GPP TS 36.331 V8.4.0: Sections 6.2, 6.3.2		
TCH003	Sisvel SPA	EP2073588 (DE, GB, IT)	07 Apr 2023					1	3GPP TS 38.300 V16.7.0: Sections 4, 4.4 and 4.4.1 3GPP TS 38.323 V16.5.0: Sections 4, 4.1, 4.2, 4.2.1, 4.2.2, 4.4 3GPP TS 38.322 V16.2.0: Sections 4, 4.1, 4.2, 4.2.1, 4.2.1.1, 4.2.1.1.1, 4.2.1.1.2, 4.2.1.1.3, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3, 4.2.1.3, 4.2.1.3.1, 4.2.1.3.2, 4.2.1.3.3, 4.4
		US8260287	13 Mar 2025	1	3GPP TS25.323 V8.5.0: Sections 4.2; Figure 1 3GPP TS25.322 V8.9.0: Sections 4.2.1, 6				
		US9072006	21 Feb 2027					13	3GPP TS 38.300 V16.7.0: Sections 4, 4.4 and 4.4.1 3GPP TS 38.323 V16.5.0: Sections 4, 4.1, 4.2, 4.2.1, 4.2.2, 4.4 3GPP TS 38.322 V16.2.0: Sections 4, 4.1, 4.2, 4.2.1, 4.2.1.1, 4.2.1.1.1, 4.2.1.1.2, 4.2.1.1.3, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3, 4.2.1.3, 4.2.1.3.1, 4.2.1.3.2, 4.2.1.3.3, 4.4
TEF001	Telefónica	EP2716111 (DE, ES, GB)	22 May 2032			1	3GPP TS 36.214 V12.3.0: Section 5.1.1 3GPP TS 36.300 V12.7.0: Section 16.1.10 3GPP TS 36.304 V12.6.0: Sections 4.2, 5.2.3.2, 5.2.4.6; Table 4.2-1	1	3GPP TS 36.214 V12.3.0: Section 5.1.1 3GPP TS 36.300 V12.7.0: Section 16.1.10 3GPP TS 36.304 V12.6.0: Sections 4.2, 5.2.3.2, 5.2.4.6; Table 4.2-1
		US9439115	17 Sep 2033			1	3GPP TS 36.214 V12.3.0: Section 5.1.1 3GPP TS 36.300 V12.7.0: Section 16.1.10 3GPP TS 36.304 V12.6.0: Sections 4.2, 5.2.3.2, 5.2.4.6; Table 4.2-1	1	3GPP TS 36.214 V12.3.0: Section 5.1.1 3GPP TS 36.300 V12.7.0: Section 16.1.10 3GPP TS 36.304 V12.6.0: Sections 4.2, 5.2.3.2, 5.2.4.6; Table 4.2-1
TEF002	Telefónica	EP2861033 (DE, ES, GB)	08 Oct 2033			1	3GPP TS 24.301 V14.9.0: Sections 5.3.12, 9.9.3.46 3GPP TS 24.008 V14.7.0: Sections 2.1.2, 4.7.3.1.1, 4.7.3.1.3, 9.4.1, 9.4.2, 10.5.5.32; Figure 10.5.5.32; Tables 9.4.1, 9.4.2 3GPP TS 36.321 V11.6.0: Section 3.1; Figure 3.1-1	1	3GPP TS 24.301 V14.9.0: Sections 5.3.12, 9.9.3.46 3GPP TS 24.008 V14.7.0: Sections 2.1.2, 4.7.3.1.1, 4.7.3.1.3, 9.4.1, 9.4.2, 10.5.5.32; Figure 10.5.5.32; Tables 9.4.1, 9.4.2 3GPP TS 36.321 V11.6.0: Section 3.1; Figure 3.1-1
		US9313736	11 Nov 2034			1	3GPP TS 24.301 V14.9.0: Sections 5.3.12, 9.9.3.46 3GPP TS 24.008 V14.7.0: Sections 2.1.2, 4.7.3.1.1, 4.7.3.1.3, 9.4.1, 9.4.2, 10.5.5.32; Figure 10.5.5.32; Tables 9.4.1, 9.4.2 3GPP TS 36.321 V11.6.0: Section 3.1; Figure 3.1-1	1	3GPP TS 24.301 V14.9.0: Sections 5.3.12, 9.9.3.46 3GPP TS 24.008 V14.7.0: Sections 2.1.2, 4.7.3.1.1, 4.7.3.1.3, 9.4.1, 9.4.2, 10.5.5.32; Figure 10.5.5.32; Tables 9.4.1, 9.4.2 3GPP TS 36.321 V11.6.0: Section 3.1; Figure 3.1-1
TIM001	TIM	CNZL201110028222.0	30 Sep 2024	1, 10	3GPP TS 23.402 V9.3.0: Sections 1; 4.1.0; 4.3.3.3; 4.5.2; 6.3; 6.10; 12.3; Figure 6.10-1	1, 10	3GPP TS 23.402 V9.3.0: Sections 1; 4.1.0; 4.3.3.3; 4.5.2; 6.3; 6.10; 12.3; Figure 6.10-1		
		EP2341723 (AT, BE, CH, CZ, DE, DK, ES, FR, GB, HU, IE, IT, NL, PL, PT, RO, SE, TR)	30 Sep 2024			1, 3	3GPP TS 23.402 V9.3.0: Sections 1, 4.1.0, 4.3.3.3, 4.4.1, 6.3, 6.10, 12.3; Figure 6.10-1		
		US8593963	13 Apr 2025			8	3GPP TS 23.402 V9.3.0: Sections 1, 4.1.3.2, 4.3.3.1, 4.3.3.3, 4.4.1, 4.5.2, 6.10, 12.3; Figure 6.10-1		
		US9357374	19 Oct 2024	1, 9	3GPP TS 23.402 V9.3.0: Sections 1, 3.2, 4.1.0, 4.3.3.3, 4.4.1, 6.3, 6.10; Figures 6.10-1, 12.3 3GPP TS 33.402 V15.1.0: Section 9.2.2.1	1, 9	3GPP TS 23.402 V9.3.0: Sections 1, 3.2, 4.1.0, 4.3.3.3, 4.4.1, 6.3, 6.10; Figures 6.10-1, 12.3 3GPP TS 33.402 V15.1.0: Section 9.2.2.1		
TIM002	TIM	US7995988	27 Dec 2025			1, 8, 14, 15	3GPP TS 36.305 V14.4.0: Sections 1, 4.1, 4.3, 5, 5.3.3, 5.3.4, 6.1.3, 6.1.4, 6.1.5, 6.2.1, 7.1.1, 7.1.2.1, 8.1.3.3.1, 8.6.3.1, 8.7.3.1.1, 8.8.3.1.1, 8.9.3.1.1; Figures 5-1, 8.9.3.1.1-1; Table 4.3-1	1, 8, 14, 15	3GPP TS 38.305 V15.5.0: Sections 1, 4.1, 4.3.1, 5.1, 5.4.4, 6.1.4, 6.1.5, 6.2.1, 7.1.1, 7.1.2.1, 8.1.3.3.1, 8.4.3.3.1, 8.5.3.3.1, 8.6.3.3.1, 8.7.3.3.1, 8.8.3.2; Figures 5.1-1, 8.1.3.3.1-1; Table 4.3.1-1
TIM003	TIM	US10567913	25 Oct 2036			1	3GPP TS 23.303: Sections 1, 4.2, 5.3.3.2, 7A.1; Annex C.1, C.2; Table C.2-1; Figure 4.2-1, C.2-1 3GPP TS 22.278: Section 4.1		
UNI001	UNISOC	CNZL201710290717.8	27 Apr 2037					10, 14, 16	3GPP TS 36.331 V15.6.0: Sections 3.1, 3.2, 5.6.3.1, 5.6.3.2, 5.6.3.3, 6.2.2 3GPP TS 38.331 V15.2.1: Sections 5.6.1.4, 6.3.3 3GPP TS 37.340 V15.6.0: Sections 3.2, 4.2.1, 10.2.1
UNI002	UNISOC	CNZL201611140968.X	12 Dec 2036			1	3GPP TS 36.213 V15.3.0: Sections 6.1, 6.1.1 3GPP TS 36.331 V15.3.0: Section 6.2, 6.2.1, 6.3, 6.3.1		
		CNZL201911280547.0	12 Dec 2036			1	3GPP TS 36.213 V15.3.0: Sections 6.1, 6.1.1 3GPP TS 36.331 V15.3.0: Section 6.2, 6.2.1, 6.3, 6.3.1		
UNI003	UNISOC	CNZL201510859850.1	30 Nov 2035			1	3GPP TS 36.213 V15.8.0: Sections 7.2, 7.2.3 3GPP TS 36.331 V15.8.0: Section 6.3, 6.3.2 3GPP TS 36.300 V15.8.0: Section 5.2.3		
UNI004	UNISOC	CNZL201510868781.0	01 Dec 2035					1	3GPP TS 38.214 V15.5.0: Sections 3.3, 5.1.2.1, 6.1.2.1 3GPP TS 38.213 V15.5.0: Section 10.1 3GPP TS 38.212 V15.4.0: Sections 7.3, 7.3.1.1, 7.3.1.1.1, 7.3.1.2, 7.3.1.2.1 3GPP TS 38.331 V15.5.0: Section 6.3.2
		CNZL201910722587.X	01 Dec 2035					1	3GPP TS 38.214 V15.5.0: Sections 3.3, 5.1.2.1, 6.1.2.1 3GPP TS 38.213 V15.5.0: Section 10.1 3GPP TS 38.212 V15.4.0: Sections 7.3, 7.3.1.1, 7.3.1.1.1, 7.3.1.2, 7.3.1.2.1 3GPP TS 38.331 V15.5.0: Section 6.3.2
UNI005	UNISOC	CNZL201510573735.8	10 Sep 2035					1	3GPP TS 37.355 V16.0.0: Sections 3.1, 3.2, 4.1.1, 5.1.1, 5.3.1, 6.3, 6.5.3.4, 6.5.9.4
UNI006	UNISOC	CNZL201910367603.8	05 May 2039			1	3GPP TS 36.300 V17.2.0: Sections 23, 23.20, 23.20.2 3GPP TS 23.401 V17.4.0: Sections 4, 4.3, 4.3.33, 4.3.33.5		
UNI007	UNISOC	CNZL201710184384.0	24 Mar 2037					15	3GPP TS 38.211 V15.2.0: Sections 3.2, 4.3.1, 4.3.2; Tables 4.3.2-1, 4.3.2-2 3GPP TS 38.213 V15.2.0: Sections 1, 4.1 3GPP TS 38.215 V15.2.0: Section 5.1.1
		CNZL202110875829.6	24 Mar 2037					14	3GPP TS 38.211 V15.2.0: Sections 3.2, 4.3.1, 4.3.2; Tables 4.3.2-1, 4.3.2-2 3GPP TS 38.213 V15.2.0: Sections 1, 4.1 3GPP TS 38.215 V15.2.0: Section 5.1.1

UNI007	UNISOC	US11246108	07 Mar 2038			11	3GPP TS 38.211 V15.2.0: Sections 3.2, 4.3.1, 4.3.2; Tables 4.3.2-1, 4.3.2-2 3GPP TS 38.213 V15.2.0: Sections 1, 4.1 3GPP TS 38.215 V15.2.0: Section 5.1.1
UNI008	UNISOC	CNZL201710181786.5	24 Mar 2037			1	3GPP TS 38.133 V16.7.0: Section 8.5.1 3GPP TS 38.213 V16.6.0: Sections 3.3, 6 3GPP TS 38.300 V16.4.0: Sections 3.1, 9.2.8 3GPP TS 38.321 V16.4.0: Sections 5.17, 6.1.3.23; Figures 6.1.3.23-1, 6.1.3.23-2
		CNZL202110694184.6	24 Mar 2037			1	3GPP TS 38.133 V16.7.0: Section 8.5.1 3GPP TS 38.213 V16.6.0: Sections 3.3, 6 3GPP TS 38.300 V16.4.0: Sections 3.1, 9.2.8 3GPP TS 38.321 V16.4.0: Sections 5.17, 6.1.3.23; Figures 6.1.3.23-1, 6.1.3.23-2
		US10582514	27 Dec 2037			1	3GPP TS 38.133 V16.7.0: Section 8.5.1 3GPP TS 38.213 V16.6.0: Sections 3.3, 6 3GPP TS 38.300 V16.4.0: Sections 3.1, 9.2.8 3GPP TS 38.321 V16.4.0: Sections 5.17, 6.1.3.23; Figures 6.1.3.23-1, 6.1.3.23-2
		US11019635	27 Dec 2037			1	3GPP TS 38.133 V16.7.0: Section 8.5.1 3GPP TS 38.213 V16.6.0: Sections 3.3, 6 3GPP TS 38.300 V16.4.0: Sections 3.1, 9.2.8 3GPP TS 38.321 V16.4.0: Sections 5.17, 6.1.3.23; Figures 6.1.3.23-1, 6.1.3.23-2
UNI009	UNISOC	CNZL201810290152.8	03 Apr 2038			9	3GPP TS 37.213 V16.2.0: Sections 1, 3.3, 4.0, 4.1, 4.1.1, 4.2.1.0.0, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.3 3GPP TS 38.212 V16.4.0: Sections 3.3, 7.3.1; Table 7.3.1-1 3GPP TS 38.213 V16.4.0: Sections 10.4, 11.1.1; Table 11.1.1-1 3GPP TS 38.300 V16.4.0: Sections 3.1, 3.2, 4.1 3GPP TS 38.331 V16.2.0: Section 6.3.2
		US11477822	04 Apr 2039			9	3GPP TS 37.213 V16.2.0: Sections 1, 3.3, 4.0, 4.1, 4.1.1, 4.2.1.0.0, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.3 3GPP TS 38.212 V16.4.0: Sections 3.3, 7.3.1; Table 7.3.1-1 3GPP TS 38.213 V16.4.0: Sections 10.4, 11.1.1; Table 11.1.1-1 3GPP TS 38.300 V16.4.0: Sections 3.1, 3.2, 4.1 3GPP TS 38.331 V16.2.0: Section 6.3.2
UNI010	UNISOC	CNZL201710685505.X	11 Aug 2037			1	3GPP TS 38.211 V15.4.0: Sections 4.4.4.1, 4.4.4.2, 4.4.4.3, 4.4.4.4 3GPP TS 38.212 V15.4.0: Sections 7.3.1, 7.3.1.0, 7.3.1.2.1; Table 7.3.1-1 3GPP TS 38.213 V15.4.0: Sections 3.3, 13; Tables 13-1, 13-2, 13-3 3GPP TS 38.214 V15.4.0: Sections 3.3, 5.1.2.2, 5.1.2.2.2, 5.1.4 3GPP TS 38.331 V15.3.0: Sections 5.2.1, 6.2.2, 6.3.2; Figure 5.2.2.1-1
		US10652891	09 Aug 2038			1	3GPP TS 38.211 V15.4.0: Sections 4.4.4.1, 4.4.4.2, 4.4.4.3, 4.4.4.4 3GPP TS 38.212 V15.4.0: Sections 7.3.1, 7.3.1.0, 7.3.1.2.1; Table 7.3.1-1 3GPP TS 38.213 V15.4.0: Sections 3.3, 13; Tables 13-1, 13-2, 13-3 3GPP TS 38.214 V15.4.0: Sections 3.3, 5.1.2.2, 5.1.2.2.2, 5.1.4 3GPP TS 38.331 V15.3.0: Sections 5.2.1, 6.2.2, 6.3.2; Figure 5.2.2.1-1
		US11317408	21 Oct 2038			1	3GPP TS 38.211 V15.4.0: Sections 4.4.4.1, 4.4.4.2, 4.4.4.3, 4.4.4.4 3GPP TS 38.212 V15.4.0: Sections 7.3.1, 7.3.1.0, 7.3.1.2.1; Table 7.3.1-1 3GPP TS 38.213 V15.4.0: Sections 3.3, 13; Tables 13-1, 13-2, 13-3 3GPP TS 38.214 V15.4.0: Sections 3.3, 5.1.2.2, 5.1.2.2.2, 5.1.4 3GPP TS 38.331 V15.3.0: Sections 5.2.1, 6.2.2, 6.3.2; Figure 5.2.2.1-1
		US11659537	09 Aug 2038			1	3GPP TS 38.211 V15.4.0: Sections 4.4.4.1, 4.4.4.2, 4.4.4.3, 4.4.4.4 3GPP TS 38.212 V15.4.0: Sections 7.3.1, 7.3.1.0, 7.3.1.2.1; Table 7.3.1-1 3GPP TS 38.213 V15.4.0: Sections 3.3, 13; Tables 13-1, 13-2, 13-3 3GPP TS 38.214 V15.4.0: Sections 3.3, 5.1.2.2, 5.1.2.2.2, 5.1.4 3GPP TS 38.331 V15.3.0: Sections 5.2.1, 6.2.2, 6.3.2; Figure 5.2.2.1-1
UNI011	UNISOC	CNZL201610302106.6	09 May 2036			12	3GPP TS 38.212 V15.5.0: Sections 7.3.1, 7.3.1.2.1; Tables 7.3.1-1, 7.3.1.2.1-1 3GPP TS 39.213 V15.5.0: Sections 3.3, 10.1, 12 3GPP TS 38.300 V15.5.0: Sections 3.1, 6.2, 4.2 3GPP TS 38.331 V15.8.0: Sections 5.2.1, 5.2.2.1, 5.2.2.4.2, 5.3.3.1, 5.3.3.4, 5.3.5.1, 5.3.5.2, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1
		US10367613	06 May 2037			15	3GPP TS 38.212 V15.5.0: Sections 7.3.1, 7.3.1.2.1; Tables 7.3.1-1, 7.3.1.2.1-1 3GPP TS 39.213 V15.5.0: Sections 3.3, 10.1, 12 3GPP TS 38.300 V15.5.0: Sections 3.1, 6.2, 4.2 3GPP TS 38.331 V15.8.0: Sections 5.2.1, 5.2.2.1, 5.2.2.4.2, 5.3.3.1, 5.3.3.4, 5.3.5.1, 5.3.5.2, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1
UNI012	UNISOC	CNZL202010193035.7	18 Mar 2040			1	3GPP TS 38.213 V17.4.0: Sections 10, 10.1, 10.1.1 3GPP TS 38.331 V17.4.0: Section 6.3.2
UNI013	UNISOC	CNZL201810026977.9	11 Jan 2038			1	3GPP TS 38.213 V15.4.0: Sections 3.3, 10, 10.2 3GPP TS 38.300 V15.4.0: Sections 4.1, 5.2.3 3GPP TS 38.212 V15.4.0: Sections 7.3.1.1.1, 7.3.1.1.2, 7.3.1.2.1, 7.3.1.2.2
UNI014	UNISOC	CNZL201711146316.1	17 Nov 2037			1	3GPP TS 38.300 V15.6.0: Sections 9, 9.2, 9.2.8 3GPP TS 38.213 V15.6.0: Sections 3, 3.3, 6, 10, 10.1 3GPP TS 38.331 V15.6.0: Sections 6, 6.3, 6.3.2

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UNI015	UNISOC	CNZL202010274796.5	09 Apr 2040				1	3GPP TS 38.214 V18.0.0: Section 6.1 3GPP TS 38.331 V18.1.0: Section 6.3.2
UNI016	UNISOC	CNZL201910028667.5	11 Jan 2039				1	3GPP TS 38.214 V16.3.0: Sections 5, 5.1 3GPP TS 38.211 V16.3.0: Sections 7, 7.3, 7.3.1, 7.3.1.1 3GPP TS 38.306 V16.3.0: Sections 4, 4.2, 4.2.7, 4.2.7.6 3GPP TS 38.305 V16.3.0: Sections 3, 3.1
UNI017	UNISOC	CNZL201710689594.5	11 Aug 2037				9	3GPP TS 38.211 V15.5.0: Section 4.2; Table 4.2-1 3GPP TS 38.213 V15.5.0: Sections 3.3, 13; Tables 13-1 to 13-15 3GPP TS 38.331 V15.6.0: Sections 3, 6.2.1, 6.2.2
		CNZL202011443335.2	11 Aug 2037				8	3GPP TS 38.211 V15.5.0: Section 4.2; Table 4.2-1 3GPP TS 38.213 V15.5.0: Sections 3.3, 13; Tables 13-1 to 13-15 3GPP TS 38.331 V15.6.0: Sections 3, 6.2.1, 6.2.2
		US10680779	09 Aug 2038				10	3GPP TS 38.211 V15.5.0: Section 4.2; Table 4.2-1 3GPP TS 38.213 V15.5.0: Sections 3.3, 13; Tables 13-1 to 13-15 3GPP TS 38.331 V15.6.0: Sections 3, 6.2.1, 6.2.2
		US11323226	14 Oct 2038				10	3GPP TS 38.211 V15.5.0: Section 4.2; Table 4.2-1 3GPP TS 38.213 V15.5.0: Sections 3.3, 13; Tables 13-1 to 13-15 3GPP TS 38.331 V15.6.0: Sections 3, 6.2.1, 6.2.2
UNI018	UNISOC	CNZL202110519801.9	11 May 2037				5	3GPP TS 37.340 V15.6.0: Sections 3.1, 3.2, 7.2, 7.4, 7.5 3GPP TS 36.331 V15.6.0: Sections 6.2.2, 6.3.5 3GPP TS 38.133 V15.6.0: Section 9.1.2 3GPP TS 38.331 V15.6.0: Sections 6.2.2, 6.3.2
UNI019	UNISOC	CNZL201810299535.1	04 Apr 2038				13	3GPP TS 38.212 V16.3.0: Section 4.2; Table 4.2-2 3GPP TS 38.213 V16.3.0: Sections 3.3, 10.1, 10.4, 11.1.1 3GPP TS 38.331 V16.3.0: Sections 3, 5.3.3.1, 5.3.5.1, 5.3.7.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.7.1-1, 5.3.13.1-1, 5.3.13.1-2
		US11683701	04 Apr 2039				11	3GPP TS 38.212 V16.3.0: Section 4.2; Table 4.2-2 3GPP TS 38.213 V16.3.0: Sections 3.3, 10.1, 10.4, 11.1.1 3GPP TS 38.331 V16.3.0: Sections 3, 5.3.3.1, 5.3.5.1, 5.3.7.1, 5.3.13.1, 6.2.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.7.1-1, 5.3.13.1-1, 5.3.13.1-2
UNI020	UNISOC	CNZL201810912849.4	10 Aug 2038				1	3GPP TS 38.213 V16.7.0: Sections 4.2, 7.3.1, 7.3.1.1.2, 7.3.1.2.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.7.0: Sections 3.3, 10.3 3GPP TS 38.321 V16.7.0: Section 5.7
		CNZL202110916095.1	10 Aug 2038				1	3GPP TS 38.213 V16.7.0: Sections 4.2, 7.3.1, 7.3.1.1.2, 7.3.1.2.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.7.0: Sections 3.3, 10.3 3GPP TS 38.321 V16.7.0: Section 5.7
		CNZL202110916286.8	10 Aug 2038				1	3GPP TS 38.213 V16.7.0: Sections 4.2, 7.3.1, 7.3.1.1.2, 7.3.1.2.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.7.0: Sections 3.3, 10.3 3GPP TS 38.321 V16.7.0: Section 5.7
		IN547237	19 Jul 2039				1	3GPP TS 38.213 V16.7.0: Sections 4.2, 7.3.1, 7.3.1.1.2, 7.3.1.2.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.7.0: Sections 3.3, 10.3 3GPP TS 38.321 V16.7.0: Section 5.7
		US11653305	08 Oct 2039				1	3GPP TS 38.213 V16.7.0: Sections 4.2, 7.3.1, 7.3.1.1.2, 7.3.1.2.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.7.0: Sections 3.3, 10.3 3GPP TS 38.321 V16.7.0: Section 5.7
		US11937184	19 Jul 2039				1	3GPP TS 38.213 V16.7.0: Sections 4.2, 7.3.1, 7.3.1.1.2, 7.3.1.2.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.7.0: Sections 3.3, 10.3 3GPP TS 38.321 V16.7.0: Section 5.7
WIL004	WILUS	IN420846	20 Jan 2037		1	3GPP TS 36.212 V14.15.0: Sections 3.3, 5.2.2, 5.2.2.6, 5.3.3, 5.3.3.1, 5.3.3.1.1A; Table 5.3.3.1.1A-1 3GPP TS 36.211 V14.15.0: Sections 4.3, 5.2.1, 5.2.3; Table 5.2.3-1	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1 3GPP TS 38.214 V16.6.0: Sections 6.1.2, 6.1.2.1; Table 6.1.2.1-1
		KR10-2353817	20 Jan 2037		1	3GPP TS 36.212 V14.15.0: Sections 3.3, 5.2.2, 5.2.2.6, 5.3.3, 5.3.3.1, 5.3.3.1.1A; Table 5.3.3.1.1A-1 3GPP TS 36.211 V14.15.0: Sections 4.3, 5.2.1, 5.2.3; Table 5.2.3-1	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1 3GPP TS 38.214 V16.6.0: Sections 6.1.2, 6.1.2.1; Table 6.1.2.1-1
		US11064364	20 Jan 2037		1	3GPP TS 36.212 V14.15.0: Sections 3.3, 5.2.2, 5.2.2.6, 5.3.3, 5.3.3.1, 5.3.3.1.1A; Table 5.3.3.1.1A-1 3GPP TS 36.211 V14.15.0: Sections 4.3, 5.2.1, 5.2.3; Table 5.2.3-1	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1 3GPP TS 38.214 V16.6.0: Sections 6.1.2, 6.1.2.1; Table 6.1.2.1-1
		US11646922	20 Jan 2037		1	3GPP TS 36.212 V14.15.0: Sections 3.3, 5.2.2, 5.2.2.6, 5.3.3, 5.3.3.1, 5.3.3.1.1A; Table 5.3.3.1.1A-1 3GPP TS 36.211 V14.15.0: Sections 4.3, 5.2.1, 5.2.3; Table 5.2.3-1	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1 3GPP TS 38.214 V16.6.0: Sections 6.1.2, 6.1.2.1; Table 6.1.2.1-1
		US11770279	20 Jan 2037		1	3GPP TS 36.212 V14.15.0: Sections 3.3, 5.2.2, 5.2.2.6, 5.3.3, 5.3.3.1, 5.3.3.1.1A; Table 5.3.3.1.1A-1 3GPP TS 36.211 V14.15.0: Sections 4.3, 5.2.1, 5.2.3; Table 5.2.3-1	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1 3GPP TS 38.214 V16.6.0: Sections 6.1.2, 6.1.2.1; Table 6.1.2.1-1
WIL005	WILUS	CNZL201780018454.3	22 Mar 2037		1	3GPP TS 36.212 V14.10.0: Sections 3.3, 5.3, 5.3.3, 5.3.3.1.4 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 13A, 15.1, 15.2, 15.2.1, 15.2.1.1, 15.2.1.2; Tables 13A-2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.1, 4.2.1.0.0 3GPP TS 37.213 V16.2.0: Sections 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2
		EP3435725 (DE, GB, FR, ES, IT, NL, PL, FI, SE, TR)	22 Mar 2037		1	3GPP TS 36.212 V14.10.0: Sections 3.3, 5.3, 5.3.3, 5.3.3.1.4 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 13A, 15.1, 15.2, 15.2.1, 15.2.1.1, 15.2.1.2; Tables 13A-2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.1, 4.2.1.0.0 3GPP TS 37.213 V16.2.0: Sections 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2
		HK1261574	22 Mar 2037		1	3GPP TS 36.212 V14.10.0: Sections 3.3, 5.3, 5.3.3, 5.3.3.1.4 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 13A, 15.1, 15.2, 15.2.1, 15.2.1.1, 15.2.1.2; Tables 13A-2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.1, 4.2.1.0.0 3GPP TS 37.213 V16.2.0: Sections 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2
		IN436532	22 Mar 2037		1	3GPP TS 36.212 V14.10.0: Sections 3.3, 5.3, 5.3.3, 5.3.3.1.4 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 13A, 15.1, 15.2, 15.2.1, 15.2.1.1, 15.2.1.2; Tables 13A-2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.1, 4.2.1.0.0 3GPP TS 37.213 V16.2.0: Sections 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2
		KR10-2285189	22 Mar 2037		1	3GPP TS 36.212 V14.10.0: Sections 3.3, 5.3, 5.3.3, 5.3.3.1.4 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 13A, 15.1, 15.2, 15.2.1, 15.2.1.1, 15.2.1.2; Tables 13A-2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.1, 4.2.1.0.0 3GPP TS 37.213 V16.2.0: Sections 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2
		KR10-2413222	22 Mar 2037		1	3GPP TS 36.212 V14.10.0: Sections 3.3, 5.3, 5.3.3, 5.3.3.1.4 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 13A, 15.1, 15.2, 15.2.1, 15.2.1.1, 15.2.1.2; Tables 13A-2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.1, 4.2.1.0.0 3GPP TS 37.213 V16.2.0: Sections 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2

WIL005	WILUS	KR10-2526853	22 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 3.3, 5.3,5.3.3,5.3.3.1.4 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 13A, 15.1, 15.2, 15.2.1, 15.2.1.1, 15.2.1.2; Tables 13A-2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.1, 4.2.1.0.0 3GPP TS 37.213 V16.2.0: Sections 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2
		KR10-2586587	22 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 3.3, 5.3,5.3.3,5.3.3.1.4 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 13A, 15.1, 15.2, 15.2.1, 15.2.1.1, 15.2.1.2; Tables 13A-2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.1, 4.2.1.0.0 3GPP TS 37.213 V16.2.0: Sections 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2
		US10757717	22 Mar 2037			1, 2	3GPP TS 36.212 V14.10.0: Sections 3.3, 5.3,5.3.3,5.3.3.1.4 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 13A, 15.1, 15.2, 15.2.1, 15.2.1.1, 15.2.1.2; Tables 13A-2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.1, 4.2.1.0.0 3GPP TS 37.213 V16.2.0: Sections 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2
		US11330609	22 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 3.3, 5.3,5.3.3,5.3.3.1.4 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 13A, 15.1, 15.2, 15.2.1, 15.2.1.1, 15.2.1.2; Tables 13A-2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.1, 4.2.1.0.0 3GPP TS 37.213 V16.2.0: Sections 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2
		US11973701	22 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 3.3, 5.3,5.3.3,5.3.3.1.4 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 13A, 15.1, 15.2, 15.2.1, 15.2.1.1, 15.2.1.2; Tables 13A-2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.1, 4.2.1.0.0 3GPP TS 37.213 V16.2.0: Sections 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2
WIL006	WILUS	CNZL201780030922.9	27 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A 3GPP TS 36.213 V14.13.0: Sections 1, 3.2, 15.1, 15.1.1, 15.2, 15.2.1, 15.2.1.1; Table 15.2.1-1 3GPP TS 36.300 V11.2.0: Sections 3.3, 5.7	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2; Tables 7.3.1.1.1-4, 7.3.1.1.2-35 3GPP TS 38.300 V16.6.0: Section 5.6.2; Table 5.6.2-1
		CNZL202210031169.8	27 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A 3GPP TS 36.213 V14.13.0: Sections 1, 3.2, 15.1, 15.1.1, 15.2, 15.2.1, 15.2.1.1; Table 15.2.1-1 3GPP TS 36.300 V11.2.0: Sections 3.3, 5.7	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2; Tables 7.3.1.1.1-4, 7.3.1.1.2-35 3GPP TS 38.300 V16.6.0: Section 5.6.2; Table 5.6.2-1
		CNZL202210031956.2	27 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A 3GPP TS 36.213 V14.13.0: Sections 1, 3.2, 15.1, 15.1.1, 15.2, 15.2.1, 15.2.1.1; Table 15.2.1-1 3GPP TS 36.300 V11.2.0: Sections 3.3, 5.7	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2; Tables 7.3.1.1.1-4, 7.3.1.1.2-35 3GPP TS 38.300 V16.6.0: Section 5.6.2; Table 5.6.2-1
		CNZL202210031992.9	27 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A 3GPP TS 36.213 V14.13.0: Sections 1, 3.2, 15.1, 15.1.1, 15.2, 15.2.1, 15.2.1.1; Table 15.2.1-1 3GPP TS 36.300 V11.2.0: Sections 3.3, 5.7	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2; Tables 7.3.1.1.1-4, 7.3.1.1.2-35 3GPP TS 38.300 V16.6.0: Section 5.6.2; Table 5.6.2-1
		HK1263214	27 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A 3GPP TS 36.213 V14.13.0: Sections 1, 3.2, 15.1, 15.1.1, 15.2, 15.2.1, 15.2.1.1; Table 15.2.1-1 3GPP TS 36.300 V11.2.0: Sections 3.3, 5.7	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2; Tables 7.3.1.1.1-4, 7.3.1.1.2-35 3GPP TS 38.300 V16.6.0: Section 5.6.2; Table 5.6.2-1
		IN473118	27 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A 3GPP TS 36.213 V14.13.0: Sections 1, 3.2, 15.1, 15.1.1, 15.2, 15.2.1, 15.2.1.1; Table 15.2.1-1 3GPP TS 36.300 V11.2.0: Sections 3.3, 5.7	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2; Tables 7.3.1.1.1-4, 7.3.1.1.2-35 3GPP TS 38.300 V16.6.0: Section 5.6.2; Table 5.6.2-1
		KR10-2287383	27 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A 3GPP TS 36.213 V14.13.0: Sections 1, 3.2, 15.1, 15.1.1, 15.2, 15.2.1, 15.2.1.1; Table 15.2.1-1 3GPP TS 36.300 V11.2.0: Sections 3.3, 5.7	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2; Tables 7.3.1.1.1-4, 7.3.1.1.2-35 3GPP TS 38.300 V16.6.0: Section 5.6.2; Table 5.6.2-1
		KR10-2479663	27 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A 3GPP TS 36.213 V14.13.0: Sections 1, 3.2, 15.1, 15.1.1, 15.2, 15.2.1, 15.2.1.1; Table 15.2.1-1 3GPP TS 36.300 V11.2.0: Sections 3.3, 5.7	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2; Tables 7.3.1.1.1-4, 7.3.1.1.2-35 3GPP TS 38.300 V16.6.0: Section 5.6.2; Table 5.6.2-1
		KR10-2696172	27 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A 3GPP TS 36.213 V14.13.0: Sections 1, 3.2, 15.1, 15.1.1, 15.2, 15.2.1, 15.2.1.1; Table 15.2.1-1 3GPP TS 36.300 V11.2.0: Sections 3.3, 5.7	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2; Tables 7.3.1.1.1-4, 7.3.1.1.2-35 3GPP TS 38.300 V16.6.0: Section 5.6.2; Table 5.6.2-1
		US10805950	27 Apr 2037			1, 2	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A 3GPP TS 36.213 V14.13.0: Sections 1, 3.2, 15.1, 15.1.1, 15.2, 15.2.1, 15.2.1.1; Table 15.2.1-1 3GPP TS 36.300 V11.2.0: Sections 3.3, 5.7	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2; Tables 7.3.1.1.1-4, 7.3.1.1.2-35 3GPP TS 38.300 V16.6.0: Section 5.6.2; Table 5.6.2-1
		US11968680	20 Apr 2039			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A 3GPP TS 36.213 V14.13.0: Sections 1, 3.2, 15.1, 15.1.1, 15.2, 15.2.1, 15.2.1.1; Table 15.2.1-1 3GPP TS 36.300 V11.2.0: Sections 3.3, 5.7	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2, 4.2.1.2.3; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2; Tables 7.3.1.1.1-4, 7.3.1.1.2-35 3GPP TS 38.300 V16.6.0: Section 5.6.2; Table 5.6.2-1
WIL007	WILUS	KR10-2283178	30 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2, 15.2.1.1, 15.2.2; Table 15.2.1-1 3GPP TS 36.300 V14.10.0: Sections 3.3	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.321 V16.5.0: Sections 5.3.2.2
		KR10-2511208	30 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2, 15.2.1.1, 15.2.2; Table 15.2.1-1 3GPP TS 36.300 V14.10.0: Sections 3.3	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.321 V16.5.0: Sections 5.3.2.2

version: 32JEOW

ID	Company	Patent Number	Date						
WIL007	WILUS	KR10-2531756	30 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2, 15.2.1.1, 15.2.2; Table 15.2.1-1 3GPP TS 36.300 V14.10.0: Sections 3.3	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.321 V16.5.0: Sections 5.3.2.2
		KR10-2637865	30 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2, 15.2.1.1, 15.2.2; Table 15.2.1-1 3GPP TS 36.300 V14.10.0: Sections 3.3	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.321 V16.5.0: Sections 5.3.2.2
		US10743344	30 Mar 2037			1, 2	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2, 15.2.1.1, 15.2.2; Table 15.2.1-1 3GPP TS 36.300 V14.10.0: Sections 3.3	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.321 V16.5.0: Sections 5.3.2.2
		US11234270	30 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2, 15.2.1.1, 15.2.2; Table 15.2.1-1 3GPP TS 36.300 V14.10.0: Sections 3.3	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.321 V16.5.0: Sections 5.3.2.2
		US11991746	30 Mar 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2, 15.2.1.1, 15.2.2; Table 15.2.1-1 3GPP TS 36.300 V14.10.0: Sections 3.3	1	3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.321 V16.5.0: Sections 5.3.2.2
WIL008	WILUS	CNZL201780057852.6	24 Jul 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2.1, 15.2.1.1, 15.2.1.2 3GPP TS 36.300 V14.10.0: Section 3.3	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1
		IN517466	24 Jul 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2.1, 15.2.1.1, 15.2.1.2 3GPP TS 36.300 V14.10.0: Section 3.3	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1
		KR10-2278751	24 Jul 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2.1, 15.2.1.1, 15.2.1.2 3GPP TS 36.300 V14.10.0: Section 3.3	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1
		KR10-2325682	24 Jul 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2.1, 15.2.1.1, 15.2.1.2 3GPP TS 36.300 V14.10.0: Section 3.3	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1
		KR10-2492953	24 Jul 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2.1, 15.2.1.1, 15.2.1.2 3GPP TS 36.300 V14.10.0: Section 3.3	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1
		KR10-2536090	24 Jul 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2.1, 15.2.1.1, 15.2.1.2 3GPP TS 36.300 V14.10.0: Section 3.3	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1
		US10728919	24 Jul 2037			1, 2	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2.1, 15.2.1.1, 15.2.1.2 3GPP TS 36.300 V14.10.0: Section 3.3	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1
		US11297636	07 Nov 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2.1, 15.2.1.1, 15.2.1.2 3GPP TS 36.300 V14.10.0: Section 3.3	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1
		US11711182	24 Jul 2037			1	3GPP TS 36.212 V14.10.0: Sections 5.3, 5.3.3, 5.3.3.1.1A, 5.3.3.1.1B, 5.3.3.1.8A, 5.3.3.1.8B 3GPP TS 36.213 V14.11.0: Sections 1, 3.2, 15.2.1, 15.2.1.1, 15.2.1.2 3GPP TS 36.300 V14.10.0: Section 3.3	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1
WIL009	WILUS	CNZL201880020634.X	26 Mar 2038			1	3GPP TS 37.213 V16.5.0: Sections 4.2.1, 4.2.1.0, 4.2.1.0.1, 4.2.1.1, 4.2.2, 4.2.2.1; Tables: 4.2.1-1 3GPP TS 36.212 V16.5.0: Sections: 5.3.3.1, 5.3.3.1.1A, 5.3.3.1.1B; Tables: 5.3.3.1.1A-1, 5.3.3.1.1A-2, 5.3.3.1.1A-3	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 38.214 V16.6.0: Section 6.1.2, 6.1.2.1; Table 6.1.2.1-1
		IN438314	26 Mar 2038			1	3GPP TS 37.213 V16.5.0: Sections 4.2.1, 4.2.1.0, 4.2.1.0.1, 4.2.1.1, 4.2.2, 4.2.2.1; Tables: 4.2.1-1 3GPP TS 36.212 V16.5.0: Sections: 5.3.3.1, 5.3.3.1.1A, 5.3.3.1.1B; Tables: 5.3.3.1.1A-1, 5.3.3.1.1A-2, 5.3.3.1.1A-3	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 38.214 V16.6.0: Section 6.1.2, 6.1.2.1; Table 6.1.2.1-1
		KR10-2278753	26 Mar 2038			1	3GPP TS 37.213 V16.5.0: Sections 4.2.1, 4.2.1.0, 4.2.1.0.1, 4.2.1.1, 4.2.2, 4.2.2.1; Tables: 4.2.1-1 3GPP TS 36.212 V16.5.0: Sections: 5.3.3.1, 5.3.3.1.1A, 5.3.3.1.1B; Tables: 5.3.3.1.1A-1, 5.3.3.1.1A-2, 5.3.3.1.1A-3	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 38.214 V16.6.0: Section 6.1.2, 6.1.2.1; Table 6.1.2.1-1
		KR10-2550409	26 Mar 2038			1	3GPP TS 37.213 V16.5.0: Sections 4.2.1, 4.2.1.0, 4.2.1.0.1, 4.2.1.1, 4.2.2, 4.2.2.1; Tables: 4.2.1-1 3GPP TS 36.212 V16.5.0: Sections: 5.3.3.1, 5.3.3.1.1A, 5.3.3.1.1B; Tables: 5.3.3.1.1A-1, 5.3.3.1.1A-2, 5.3.3.1.1A-3	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 38.214 V16.6.0: Section 6.1.2, 6.1.2.1; Table 6.1.2.1-1

WIL009	WILUS	KR10-2674795	26 Mar 2038			1	3GPP TS 37.213 V16.5.0: Sections 4.2.1, 4.2.1.0, 4.2.1.0.1, 4.2.1.1, 4.2.2, 4.2.2.1; Tables: 4.2.1-1 3GPP TS 36.212 V16.5.0: Sections: 5.3.3.1, 5.3.3.1.1A, 5.3.3.1.1B; Tables: 5.3.3.1.1A-1, 5.3.3.1.1A-2, 5.3.3.1.1A-3	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 38.214 V16.6.0: Section 6.1.2, 6.1.2.1; Table 6.1.2.1-1
		KR10-2683105	26 Mar 2038			1	3GPP TS 37.213 V16.5.0: Sections 4.2.1, 4.2.1.0, 4.2.1.0.1, 4.2.1.1, 4.2.2, 4.2.2.1; Tables: 4.2.1-1 3GPP TS 36.212 V16.5.0: Sections: 5.3.3.1, 5.3.3.1.1A, 5.3.3.1.1B; Tables: 5.3.3.1.1A-1, 5.3.3.1.1A-2, 5.3.3.1.1A-3	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 38.214 V16.6.0: Section 6.1.2, 6.1.2.1; Table 6.1.2.1-1
		US11096060	30 May 2038			1	3GPP TS 37.213 V16.5.0: Sections 4.2.1, 4.2.1.0, 4.2.1.0.1, 4.2.1.1, 4.2.2, 4.2.2.1; Tables: 4.2.1-1 3GPP TS 36.212 V16.5.0: Sections: 5.3.3.1, 5.3.3.1.1A, 5.3.3.1.1B; Tables: 5.3.3.1.1A-1, 5.3.3.1.1A-2, 5.3.3.1.1A-3	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 38.214 V16.6.0: Section 6.1.2, 6.1.2.1; Table 6.1.2.1-1
		US11595824	26 Mar 2038			1	3GPP TS 37.213 V16.5.0: Sections 4.2.1, 4.2.1.0, 4.2.1.0.1, 4.2.1.1, 4.2.2, 4.2.2.1; Tables: 4.2.1-1 3GPP TS 36.212 V16.5.0: Sections: 5.3.3.1, 5.3.3.1.1A, 5.3.3.1.1B; Tables: 5.3.3.1.1A-1, 5.3.3.1.1A-2, 5.3.3.1.1A-3	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 38.214 V16.6.0: Section 6.1.2, 6.1.2.1; Table 6.1.2.1-1
		US11974140	26 Mar 2038			1	3GPP TS 37.213 V16.5.0: Sections 4.2.1, 4.2.1.0, 4.2.1.0.1, 4.2.1.1, 4.2.2, 4.2.2.1; Tables: 4.2.1-1 3GPP TS 36.212 V16.5.0: Sections: 5.3.3.1, 5.3.3.1.1A, 5.3.3.1.1B; Tables: 5.3.3.1.1A-1, 5.3.3.1.1A-2, 5.3.3.1.1A-3	1	3GPP TS 37.213 V16.6.0: Sections 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.2.2; Table 4.2.1-1 3GPP TS 38.212 V16.6.0: Sections 7.3.1.1, 7.3.1.1.1, 7.3.1.1.2, 7.3.1.1.3 3GPP TS 38.214 V16.6.0: Section 6.1.2, 6.1.2.1; Table 6.1.2.1-1
WIL010	WILUS	KR10-2389027	13 Aug 2038			1	3GPP TS 37.213 V15.3.0: Sections 4.2.1, 4.2.1.1, 4.2.1.2 3GPP TS 36.300 V15.12.0: Sections 5.7, 5.7.0, 11.1.2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0, 4.2.1.0.0, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.1.2.1.2.2 3GPP TS 38.213 V16.6.0: Sections 11, 11.1, 11.1.1 3GPP TS 38.214 V16.6.0: Sections 6, 6.1, 6.1.2.3
		KR10-2520327	13 Aug 2038			1	3GPP TS 37.213 V15.3.0: Sections 4.2.1, 4.2.1.1, 4.2.1.2 3GPP TS 36.300 V15.12.0: Sections 5.7, 5.7.0, 11.1.2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0, 4.2.1.0.0, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.1.2.1.2.2 3GPP TS 38.213 V16.6.0: Sections 11, 11.1, 11.1.1 3GPP TS 38.214 V16.6.0: Sections 6, 6.1, 6.1.2.3
		KR10-2647787	13 Aug 2038			1	3GPP TS 37.213 V15.3.0: Sections 4.2.1, 4.2.1.1, 4.2.1.2 3GPP TS 36.300 V15.12.0: Sections 5.7, 5.7.0, 11.1.2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0, 4.2.1.0.0, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.1.2.1.2.2 3GPP TS 38.213 V16.6.0: Sections 11, 11.1, 11.1.1 3GPP TS 38.214 V16.6.0: Sections 6, 6.1, 6.1.2.3
		KR10-2683090	13 Aug 2038			1	3GPP TS 37.213 V15.3.0: Sections 4.2.1, 4.2.1.1, 4.2.1.2 3GPP TS 36.300 V15.12.0: Sections 5.7, 5.7.0, 11.1.2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0, 4.2.1.0.0, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.1.2.1.2.2 3GPP TS 38.213 V16.6.0: Sections 11, 11.1, 11.1.1 3GPP TS 38.214 V16.6.0: Sections 6, 6.1, 6.1.2.3
		US11044752	13 Aug 2038			12	3GPP TS 37.213 V15.3.0: Sections 4.2.1, 4.2.1.1, 4.2.1.2 3GPP TS 36.300 V15.12.0: Sections 5.7, 5.7.0, 11.1.2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0, 4.2.1.0.0, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.1.2.1.2.2 3GPP TS 38.213 V16.6.0: Sections 11, 11.1, 11.1.1 3GPP TS 38.214 V16.6.0: Sections 6, 6.1, 6.1.2.3
		US12028897	18 Aug 2039			1	3GPP TS 37.213 V15.3.0: Sections 4.2.1, 4.2.1.1, 4.2.1.2 3GPP TS 36.300 V15.12.0: Sections 5.7, 5.7.0, 11.1.2	1	3GPP TS 37.213 V16.6.0: Sections 4.2, 4.2.1, 4.2.1.0, 4.2.1.0.0, 4.2.1.0.1, 4.2.1.0.3, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.1.2.1.2.2 3GPP TS 38.213 V16.6.0: Sections 11, 11.1, 11.1.1 3GPP TS 38.214 V16.6.0: Sections 6, 6.1, 6.1.2.3
WIL011	WILUS	CNZL201880009423.6	05 Feb 2038					1	3GPP TS 38.300 V15.12.0: Section 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V15.8.0: Section 4.4.1, 7.1.1, 7.1.2, 7.4.1.1.2; Tables 7.4.1.1.2-3, 7.4.1.1.2-4 3GPP Ts 38.331 V15.13.0: Section 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		IN476090	05 Feb 2038					1	3GPP TS 38.300 V15.12.0: Section 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V15.8.0: Section 4.4.1, 7.1.1, 7.1.2, 7.4.1.1.2; Tables 7.4.1.1.2-3, 7.4.1.1.2-4 3GPP Ts 38.331 V15.13.0: Section 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		US11012209	05 Feb 2038					1	3GPP TS 38.300 V15.12.0: Section 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V15.8.0: Section 4.4.1, 7.1.1, 7.1.2, 7.4.1.1.2; Tables 7.4.1.1.2-3, 7.4.1.1.2-4 3GPP Ts 38.331 V15.13.0: Section 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		US12047317	05 Feb 2038					1	3GPP TS 38.300 V15.12.0: Section 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V15.8.0: Section 4.4.1, 7.1.1, 7.1.2, 7.4.1.1.2; Tables 7.4.1.1.2-3, 7.4.1.1.2-4 3GPP Ts 38.331 V15.13.0: Section 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		US12088518	17 Jul 2038					1	3GPP TS 38.300 V15.12.0: Section 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V15.8.0: Section 4.4.1, 7.1.1, 7.1.2, 7.4.1.1.2; Tables 7.4.1.1.2-3, 7.4.1.1.2-4 3GPP Ts 38.331 V15.13.0: Section 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
WIL012	WILUS	CNZL201880029109.4	26 Mar 2038					1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
		CNZL202111492481.9	26 Mar 2038					1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
		CNZL202111494259.2	26 Mar 2038					1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2

WIL012	WILUS	CNZL202111495007.1	26 Mar 2038			1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
		EP3605885 (DE, GB, FR, ES, IT, NL, PL, FI, SE, TR)	26 Mar 2038			1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
		EP4120589 (DE, GB, FR, ES, IT, NL, PL, FI, SE, TR)	26 Mar 2038			1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
		EP4120590 (DE, GB, FR, ES, IT, NL, PL, FI, SE, TR)	26 Mar 2038			1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
		IN533202	26 Mar 2038			1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
		JP7395352	26 Mar 2038			8	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
		JP7447222	26 Mar 2038			1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
		KR10-2241122	26 Mar 2038			1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
		KR10-2592399	26 Mar 2038			1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
		US11729748	26 Mar 2038			1	3GPP TS 38.211 V15.8.0: Section 7.4.1.5.3 3GPP TS 38.212 V15.8.0: Sections 7.3, 7.3.1, 7.3.1.2, 7.3.1.3, 7.3.1.3.1 3GPP TS 38.213 V15.8.0: Sections 10.1, 11, 11.1.1 3GPP TS 38.300 V15.9.0: Section 4.4.2 3GPP TS 38.331 V15.9.0: Section 6.3.2
WIL013	WILUS	CNZL201880040071.0	18 Jun 2038			7	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		CNZL202210628563.X	18 Jun 2038			4	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		CNZL202210629129.3	18 Jun 2038			4	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		CNZL202210629149.0	18 Jun 2038			6	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		EP3641197 (DE, ES, FI, FR, GB, IT, NL, PL, SE, TR)	18 Jun 2038			4	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1

WIL013	WILUS	IN526596	18 Jun 2038				2	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		JP6995392	18 Jun 2038				7	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		JP7313724	18 Jun 2038				4	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		KR10-2469365	18 Jun 2038				9	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		KR10-2671486	18 Jun 2038				4	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		KR10-2674803	18 Jun 2038				6	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		US11381369	19 Jul 2038				7	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		US11811705	18 Jun 2038				7	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		US11936594	18 Jun 2038				4	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1, 14 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.3.2; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V15.14.0: Sections 3.3, 10, 10.1, 11.1, 11.2 3GPP TS 38.331 V15.14.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
WIL014	WILUS	CNZL201880057581.9	06 Aug 2038				1	3GPP TS 38.213 V15.15.0: Sections 9.1, 9.1.3, 9.1.3.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2, 7.3.1.2.2 3GPP TS 38.214 V15.16.0: Section 5.1
		IN466091	06 Aug 2038				1	3GPP TS 38.213 V15.15.0: Sections 9.1, 9.1.3, 9.1.3.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2, 7.3.1.2.2 3GPP TS 38.214 V15.16.0: Section 5.1
		JP7242074	06 Aug 2038				1	3GPP TS 38.213 V15.15.0: Sections 9.1, 9.1.3, 9.1.3.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2, 7.3.1.2.2 3GPP TS 38.214 V15.16.0: Section 5.1
		JP7442853	06 Aug 2038				1	3GPP TS 38.213 V15.15.0: Sections 9.1, 9.1.3, 9.1.3.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2, 7.3.1.2.2 3GPP TS 38.214 V15.16.0: Section 5.1
		JP7508129	06 Aug 2038				1	3GPP TS 38.213 V15.15.0: Sections 9.1, 9.1.3, 9.1.3.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2, 7.3.1.2.2 3GPP TS 38.214 V15.16.0: Section 5.1
		KR10-2374139	06 Aug 2038				1	3GPP TS 38.213 V15.15.0: Sections 9.1, 9.1.3, 9.1.3.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2, 7.3.1.2.2 3GPP TS 38.214 V15.16.0: Section 5.1
		KR10-2443893	06 Aug 2038				1	3GPP TS 38.213 V15.15.0: Sections 9.1, 9.1.3, 9.1.3.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2, 7.3.1.2.2 3GPP TS 38.214 V15.16.0: Section 5.1
		KR10-2554096	06 Aug 2038				1	3GPP TS 38.213 V15.15.0: Sections 9.1, 9.1.3, 9.1.3.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2, 7.3.1.2.2 3GPP TS 38.214 V15.16.0: Section 5.1

WIL014	WILUS	KR10-2651563	06 Aug 2038			1	3GPP TS 38.213 V15.15.0: Sections 9.1, 9.1.3, 9.1.3.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2, 7.3.1.2.2 3GPP TS 38.214 V15.16.0: Section 5.1
		US11533131	06 Aug 2038			1	3GPP TS 38.213 V15.15.0: Sections 9.1, 9.1.3, 9.1.3.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2, 7.3.1.2.2 3GPP TS 38.214 V15.16.0: Section 5.1
WIL015	WILUS	CNZL201880052102.4	13 Aug 2038			1	3GPP TS 38.300 V16.7.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V16.7.0: Sections 6.3.2.2, 6.3.2.2.2, 6.3.2.3.1, 6.3.2.5.3, 6.4.1.3.2.2 3GPP TS 38.213 V16.7.0: Section 3.3, 6, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5.1; Tables 9.2.3-3, 9.2.3-4, 9.2.5-1, 9.2.5-2 3GPP TS 38.321 V16.6.0: Sections 3.2, 5.4.4, 5.17
		IN449154	13 Aug 2038			1	3GPP TS 38.300 V16.7.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V16.7.0: Sections 6.3.2.2, 6.3.2.2.2, 6.3.2.3.1, 6.3.2.5.3, 6.4.1.3.2.2 3GPP TS 38.213 V16.7.0: Section 3.3, 6, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5.1; Tables 9.2.3-3, 9.2.3-4, 9.2.5-1, 9.2.5-2 3GPP TS 38.321 V16.6.0: Sections 3.2, 5.4.4, 5.17
		KR10-2356054	13 Aug 2038			1	3GPP TS 38.300 V16.7.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V16.7.0: Sections 6.3.2.2, 6.3.2.2.2, 6.3.2.3.1, 6.3.2.5.3, 6.4.1.3.2.2 3GPP TS 38.213 V16.7.0: Section 3.3, 6, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5.1; Tables 9.2.3-3, 9.2.3-4, 9.2.5-1, 9.2.5-2 3GPP TS 38.321 V16.6.0: Sections 3.2, 5.4.4, 5.17
		KR10-2537798	13 Aug 2038			1	3GPP TS 38.300 V16.7.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V16.7.0: Sections 6.3.2.2, 6.3.2.2.2, 6.3.2.3.1, 6.3.2.5.3, 6.4.1.3.2.2 3GPP TS 38.213 V16.7.0: Section 3.3, 6, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5.1; Tables 9.2.3-3, 9.2.3-4, 9.2.5-1, 9.2.5-2 3GPP TS 38.321 V16.6.0: Sections 3.2, 5.4.4, 5.17
		KR10-2662410	13 Aug 2038			1	3GPP TS 38.300 V16.7.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V16.7.0: Sections 6.3.2.2, 6.3.2.2.2, 6.3.2.3.1, 6.3.2.5.3, 6.4.1.3.2.2 3GPP TS 38.213 V16.7.0: Section 3.3, 6, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5.1; Tables 9.2.3-3, 9.2.3-4, 9.2.5-1, 9.2.5-2 3GPP TS 38.321 V16.6.0: Sections 3.2, 5.4.4, 5.17
		US11240081	13 Aug 2038			1	3GPP TS 38.300 V16.7.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V16.7.0: Sections 6.3.2.2, 6.3.2.2.2, 6.3.2.3.1, 6.3.2.5.3, 6.4.1.3.2.2 3GPP TS 38.213 V16.7.0: Section 3.3, 6, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5.1; Tables 9.2.3-3, 9.2.3-4, 9.2.5-1, 9.2.5-2 3GPP TS 38.321 V16.6.0: Sections 3.2, 5.4.4, 5.17
		US11689403	13 Aug 2038			1	3GPP TS 38.300 V16.7.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V16.7.0: Sections 6.3.2.2, 6.3.2.2.2, 6.3.2.3.1, 6.3.2.5.3, 6.4.1.3.2.2 3GPP TS 38.213 V16.7.0: Section 3.3, 6, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5.1; Tables 9.2.3-3, 9.2.3-4, 9.2.5-1, 9.2.5-2 3GPP TS 38.321 V16.6.0: Sections 3.2, 5.4.4, 5.17
		US12074747	13 Aug 2038			1	3GPP TS 38.300 V16.7.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.211 V16.7.0: Sections 6.3.2.2, 6.3.2.2.2, 6.3.2.3.1, 6.3.2.5.3, 6.4.1.3.2.2 3GPP TS 38.213 V16.7.0: Section 3.3, 6, 9.2, 9.2.1, 9.2.2, 9.2.3, 9.2.4, 9.2.5.1; Tables 9.2.3-3, 9.2.3-4, 9.2.5-1, 9.2.5-2 3GPP TS 38.321 V16.6.0: Sections 3.2, 5.4.4, 5.17
WIL016	WILUS	CNZL201880064924.4	10 Sep 2038			1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		EP3681079 (DE, GB, FR, ES, IT, NL, PL, FI, SE, TR)	10 Sep 2038			1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		IN467345	10 Sep 2038			1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		JP7142960	10 Sep 2038			1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		JP7421237	10 Sep 2038			1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1

WIL016	WILUS	JP7421238	10 Sep 2038				1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		KR10-2481201	10 Sep 2038				1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		KR10-2568599	10 Sep 2038				1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		KR10-2650205	10 Sep 2038				1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		US11304181	02 Oct 2038				1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		US11832255	10 Sep 2038				1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
		US12004161	14 Sep 2038				1	3GPP TS 38.300 V15.13.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.214 V15.13.0: Section 5.1.4.1 3GPP TS 38.331 V15.16.0: Sections 5.2.1, 5.2.2.1, 5.3.3.1, 5.3.5.1, 5.3.13.1, 6.2.2, 6.3.2, B.2; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
WIL017	WILUS	CNZL201880069046.5	11 Sep 2038				1	3GPP TS 38.300 V15.6.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.213 V15.6.0: Sections 3.3, 8, 8.1, 11.1; Tables 8.1-1, 8.1-2
		IN503254	11 Sep 2038				1	3GPP TS 38.300 V15.6.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.213 V15.6.0: Sections 3.3, 8, 8.1, 11.1; Tables 8.1-1, 8.1-2
		JP6980317	11 Sep 2038				1	3GPP TS 38.300 V15.6.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.213 V15.6.0: Sections 3.3, 8, 8.1, 11.1; Tables 8.1-1, 8.1-2
		JP7313721	11 Sep 2038				1	3GPP TS 38.300 V15.6.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.213 V15.6.0: Sections 3.3, 8, 8.1, 11.1; Tables 8.1-1, 8.1-2
		US11412507	18 Jan 2039				1	3GPP TS 38.300 V15.6.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.213 V15.6.0: Sections 3.3, 8, 8.1, 11.1; Tables 8.1-1, 8.1-2
		US12047922	11 Sep 2038				1	3GPP TS 38.300 V15.6.0: Sections 1, 3.1, 3.2, 4.1 3GPP TS 38.213 V15.6.0: Sections 3.3, 8, 8.1, 11.1; Tables 8.1-1, 8.1-2
WIL018	WILUS	CNZL201980008079.3	14 Jan 2039				11	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2
		EP3740002 (DE, ES, FI, FR, GB, IT, NL, PL, SE, TR)	14 Jan 2039				11	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2
		EP4050954 (DE, ES, FI, FR, GB, IT, NL, PL, SE, TR)	14 Jan 2039				1	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2
		EP4050955 (DE, ES, FI, FR, GB, IT, NL, PL, SE, TR)	14 Jan 2039				1	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2
		JP7235340	14 Jan 2039				11	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2

WIL018	WILUS	JP7427279	14 Jan 2039				1	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2
		JP7446641	14 Jan 2039				1	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2
		JP7515921	14 Jan 2039				1	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2
		KR10-2411788	14 Jan 2039				11	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2
		US11497033	30 Apr 2039				11	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2
		US11632768	14 Jan 2039				1	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2
		US11737078	14 Jan 2039				1	3GPP TS 38.211 V15.16.0: Section 4.4.5 3GPP TS 38.212 V15.13.0: Sections 4.2, 7.3.1, 7.3.1.1.1, 7.3.1.2.1 3GPP TS 38.214 V15.16.0: Sections 5.1.2.2, 5.1.2.2.2, 6.1.2.2, 6.1.2.2.2
WIL019	WILUS	CNZL201980007966.9	14 Jan 2039				1	3GPP TS 38.300 V16.10.0: sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V16.10.0: sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.11.0: sections 3.3, 10.3, 11, 11.2A 3GPP TS 38.331 V16.10.0: sections 5.3.5.1, 5.3.5.5.1, 6.2.2, 6.3.2, B.2; Figure 5.3.5.1-1
		EP3739795 (DE, ES, FI, FR, GB, IT, NL, PL, SE, TR)	14 Jan 2039				1	3GPP TS 38.300 V16.10.0: sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V16.10.0: sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.11.0: sections 3.3, 10.3, 11, 11.2A 3GPP TS 38.331 V16.10.0: sections 5.3.5.1, 5.3.5.5.1, 6.2.2, 6.3.2, B.2; Figure 5.3.5.1-1
		EP4080812 (DE, ES, FI, FR, GB, IT, NL, PL, SE, TR)	14 Jan 2039				1	3GPP TS 38.300 V16.10.0: sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V16.10.0: sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.11.0: sections 3.3, 10.3, 11, 11.2A 3GPP TS 38.331 V16.10.0: sections 5.3.5.1, 5.3.5.5.1, 6.2.2, 6.3.2, B.2; Figure 5.3.5.1-1
		EP4113891 (DE, ES, FI, FR, GB, IT, NL, PL, SE, TR)	14 Jan 2039				1	3GPP TS 38.300 V16.10.0: sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V16.10.0: sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.11.0: sections 3.3, 10.3, 11, 11.2A 3GPP TS 38.331 V16.10.0: sections 5.3.5.1, 5.3.5.5.1, 6.2.2, 6.3.2, B.2; Figure 5.3.5.1-1
		IN500030	14 Jan 2039				1	3GPP TS 38.300 V16.10.0: sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V16.10.0: sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.11.0: sections 3.3, 10.3, 11, 11.2A 3GPP TS 38.331 V16.10.0: sections 5.3.5.1, 5.3.5.5.1, 6.2.2, 6.3.2, B.2; Figure 5.3.5.1-1
		JP7345196	14 Jan 2039				1	3GPP TS 38.300 V16.10.0: sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V16.10.0: sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.11.0: sections 3.3, 10.3, 11, 11.2A 3GPP TS 38.331 V16.10.0: sections 5.3.5.1, 5.3.5.5.1, 6.2.2, 6.3.2, B.2; Figure 5.3.5.1-1
		KR10-2484273	14 Jan 2039				1	3GPP TS 38.300 V16.10.0: sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V16.10.0: sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.11.0: sections 3.3, 10.3, 11, 11.2A 3GPP TS 38.331 V16.10.0: sections 5.3.5.1, 5.3.5.5.1, 6.2.2, 6.3.2, B.2; Figure 5.3.5.1-1
		US11523414	14 Jan 2039				1	3GPP TS 38.300 V16.10.0: sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V16.10.0: sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.11.0: sections 3.3, 10.3, 11, 11.2A 3GPP TS 38.331 V16.10.0: sections 5.3.5.1, 5.3.5.5.1, 6.2.2, 6.3.2, B.2; Figure 5.3.5.1-1
		US11950226	14 Jan 2039				1	3GPP TS 38.300 V16.10.0: sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V16.10.0: sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.11.0: sections 3.3, 10.3, 11, 11.2A 3GPP TS 38.331 V16.10.0: sections 5.3.5.1, 5.3.5.5.1, 6.2.2, 6.3.2, B.2; Figure 5.3.5.1-1
		US11956774	14 Jan 2039				1	3GPP TS 38.300 V16.10.0: sections 1, 3.1, 3.2, 4.1 3GPP TS 38.212 V16.10.0: sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.11.0: sections 3.3, 10.3, 11, 11.2A 3GPP TS 38.331 V16.10.0: sections 5.3.5.1, 5.3.5.5.1, 6.2.2, 6.3.2, B.2; Figure 5.3.5.1-1

WIL021	WILUS	CNZL201980031500.2	13 May 2039				1	3GPP TS 38.213 V15.11.0: Sections 9, 9.1.3.2 3GPP TS 38.214 V15.11.0: Sections 6.1.2, 6.1.2.1
		IN541731	13 May 2039				1	3GPP TS 38.213 V15.11.0: Sections 9, 9.1.3.2 3GPP TS 38.214 V15.11.0: Sections 6.1.2, 6.1.2.1
		JP7338880	13 May 2039				1	3GPP TS 38.213 V15.11.0: Sections 9, 9.1.3.2 3GPP TS 38.214 V15.11.0: Sections 6.1.2, 6.1.2.1
		US11102806	13 May 2039				1	3GPP TS 38.213 V15.11.0: Sections 9, 9.1.3.2 3GPP TS 38.214 V15.11.0: Sections 6.1.2, 6.1.2.1
		US11729788	13 May 2039				1	3GPP TS 38.213 V15.11.0: Sections 9, 9.1.3.2 3GPP TS 38.214 V15.11.0: Sections 6.1.2, 6.1.2.1
WIL026	WILUS	CNZL201980082979.2	11 Nov 2039				1	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2 3GPP TS 38.212 V16.10.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.8.0: Section 9.1.3.1
		IN535680	11 Nov 2039				1	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2 3GPP TS 38.212 V16.10.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.8.0: Section 9.1.3.1
		JP7138379	11 Nov 2039				1	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2 3GPP TS 38.212 V16.10.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.8.0: Section 9.1.3.1
		JP7450285	11 Nov 2039				1	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2 3GPP TS 38.212 V16.10.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.8.0: Section 9.1.3.1
		JP7523816	11 Nov 2039				1	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2 3GPP TS 38.212 V16.10.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.8.0: Section 9.1.3.1
		KR10-2484270	11 Nov 2039				1	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2 3GPP TS 38.212 V16.10.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.8.0: Section 9.1.3.1
		US11290218	11 Nov 2039				1	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2 3GPP TS 38.212 V16.10.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.8.0: Section 9.1.3.1
		US11888626	23 Feb 2040				1	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2 3GPP TS 38.212 V16.10.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.8.0: Section 9.1.3.1
		US11894932	17 Jan 2040				1	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2 3GPP TS 38.212 V16.10.0: Sections 4.2, 7.3, 7.3.1; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.8.0: Section 9.1.3.1
WIL027	WILUS	CNZL202080013306.4	09 Jan 2040				11	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 5.2.3 3GPP TS 38.212 V16.9.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2.2, 7.3.1.2.3; Tables 4.2-2, 7.3.1-1
		IN480615	09 Jan 2040				7	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 5.2.3 3GPP TS 38.212 V16.9.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2.2, 7.3.1.2.3; Tables 4.2-2, 7.3.1-1
		JP485410	09 Jan 2040				11	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 5.2.3 3GPP TS 38.212 V16.9.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2.2, 7.3.1.2.3; Tables 4.2-2, 7.3.1-1
		JP7214272	09 Jan 2040				11	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 5.2.3 3GPP TS 38.212 V16.9.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2.2, 7.3.1.2.3; Tables 4.2-2, 7.3.1-1
		JP7483280	09 Jan 2040				11	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 5.2.3 3GPP TS 38.212 V16.9.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2.2, 7.3.1.2.3; Tables 4.2-2, 7.3.1-1
		KR10-2577881	09 Jan 2040				11	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 5.2.3 3GPP TS 38.212 V16.9.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2.2, 7.3.1.2.3; Tables 4.2-2, 7.3.1-1
		US11405903	09 Jan 2040				11	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 5.2.3 3GPP TS 38.212 V16.9.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2.2, 7.3.1.2.3; Tables 4.2-2, 7.3.1-1
		US11997682	02 Mar 2040				1	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 5.2.3 3GPP TS 38.212 V16.9.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2.2, 7.3.1.2.3; Tables 4.2-2, 7.3.1-1
		US12082198	18 Mar 2040				1	3GPP TS 38.300 V16.9.0: Sections 1, 3.1, 3.2, 4.1, 4.2, 5.2.3 3GPP TS 38.212 V16.9.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.2.2, 7.3.1.2.3; Tables 4.2-2, 7.3.1-1
WIL032	WILUS	CNZL202080042075.X	04 May 2040				1	3GPP TS 38.300 V16.9.0: Sections 3.1, 3.2, 4.1, 4.2 3GPP TS 38.212 V16.9.0: Sections 4.2, 7.3, 7.3.1, 7.3.1.1.2, 7.3.1.2.3; Tables 4.2-2, 7.3.1-1 3GPP TS 38.213 V16.9.0: Sections 9.1.3.1, 9.1.3.2; Table 9.1.3-2