

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
		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		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	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
		US11765638	22 Dec 2035			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	

BBY005	3G Licensing	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		
		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 5.3.5.1, 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, 5.2.1.1, 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; Tables 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 TS 36.211 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 TS 36.321 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 6.1.1		
		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		
		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: Section 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		

KPN012	KPN	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			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: Sections 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		
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, 5.6.1, 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 5.5.1.1-1
KPN023	KPN	EP2377337 (DE, FI, 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				
		US7551625	02 Mar 2027	1	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				

LNG007	Sisvel International	CN201610121604.0	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	CN201410697509.6	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	CN201711079561.5	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	CN201410255478.9	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	CN201410318536.8	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	CN201510125007.0	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 3GPP TS 36.213 V9.0.1: Sections 7.2, 7.2.2		
		JP5160667	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
		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	CN201510577683.1	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		
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, 5.3.3.2.1, 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, 5.3.3.2.1, 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, 10.5.1.2 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		
		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	CNZL201410767521X	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		

MEL027	MELCO	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
		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 TS 36.300 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		
		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 TS 36.300 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 TS 36.300 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	25 Apr 2031			5	3GPP TS 36.300 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 8.3.1.2, 8.3.1.2, 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, 6.1.2 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

MEL042	MELCO	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
		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
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, 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
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, 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
		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
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, 6.4.1.1.2, 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, 6.4.1.6, 6.4.1.1.2, 6.4.1.1.3 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 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, 6.4.1.2.1.2, 6.4.1.2.2.1 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; 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	
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 TS 23.401 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, 8.3.2, 8.2.8.2.1 3GPP TS 25.402 V3.10.0: Sections 7, 7.1, 5, 9.3A, 9.3.1, 9.3.1A 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				
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				

NKO028*	Sisvel International	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 TS 25.212 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 TS 25.212 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 TS 25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS 25.321 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 TS 25.212 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 TS 25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS 25.321 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 TS 25.212 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 TS 25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS 25.321 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 TS 25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A						
		IN264926	12 Sep 2025	11	3GPP TS 25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS 25.321 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 TS 25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A						
		JP4514795	12 Sep 2025	11	3GPP TS 25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS 25.321 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 TS 25.212 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 TS 25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS 25.321 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 TS 25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A						
		US8787158	16 Sep 2025	1	3GPP TS 25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS 25.321 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 TS 25.212 V6.7.0: Sections 4.9.1, 4.9.2.3, 4.9.5; Figure 23; Table 16A						
		US9019829	13 Dec 2029	13	3GPP TS 25.211 V6.6.0: Sections 5.2.1, 5.2.1.3; Figure 2B 3GPP TS 25.321 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 TS 25.212 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						
		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						

NKO039	Sisvel International	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, 6.2.1.5-3; 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, SF, 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: Sections 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				
		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				

ORA002	3G Licensing	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				
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 REC 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, 4.2.3-1, 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				
		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				

ORA039	3G Licensing	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, 5.4.1.1, 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, 6.1.1.2, 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 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				
		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, 6.3.1-1, 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				
		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; 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, 4.7.1, 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					
		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					

ORA046	3G Licensing	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, 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 TS 29.060 V8.11.0: Sections 3.1, 4.1; Figure 1 3GPP TS 23.401 V8.10.0: Sections 5, 5.1, 5.1.1, 5.1.1.1, 5.1.1.4, 5.1.1.5, 5.1.1.6, 5.1.1.7, 5.1.1.8, 5.1.2.1, 5.1.2.2, 5.1.2.3, 5.1.2.4, 5.1.2.5; Figures 5.1.1.4-1, 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, 5.1.4.1, 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, 9.2.1, 9.2.2.1, 9.2.2.2, 9.2.2.3, 9.2.2.4				
		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, 5.1.4.2, 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, 9.2.2.2, 9.2.2.3, 9.2.2.4				
		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				
		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, 5.1.4.2, 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, 9.2.2.2, 9.2.2.3, 9.2.2.4				

ORA048	3G Licensing	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, 5.1.4.2, 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, A.2, 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, 6.3.4.4			
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, 9.2.3.2; 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 REC 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 REC 3344: Sections 1.5, 1.7, 3			
		IN227148	10 Mar 2024	1	3GPP TS 29.061 V8.7.0: Section 11.2.1.4; Figure 11e 3GPP TS 23.060 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 REC 3344: Sections 1.5, 1.7, 3			
		KR10-1007005	10 Mar 2024	1	3GPP TS 23.060 V8.9.0: Section 9.2.3.2 3GPP TS 23.401 V8.10.0: Section 4.2.2 3GPP TS 29.061 V8.7.0: 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 IETF REC 3344: Sections 1.5, 1.7, 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 REC 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 TS 23.107 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, 5.3.1, 6.3.1, 6.3.2, 6.3.2.2; 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 TS 23.107 V8.2.0: Section 6.3	
		IN300291	16 Feb 2027	11	3GPP TS 23.234 V8.0.0: Sections 1, 5.13.3, 5.3.1, 6.3.1, 6.3.2, 6.3.2.2; 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			

ORA059	3G Licensing	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 V3.4.0: Section 9.1 3GPP TS 11.14 V8.17.0: Sections 3.2, 7.1.1, 7.1.2 3GPP TS 22.003 V6.0.0: Sections A.1.3.4 3GPP TS 23.040 V3.9.0: 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 V8.13.0: Sections 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				
		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, 9.2.3.3; Figures 1, 72b 3GPP TS 23.228 V8.12.0: Sections 4.0, 4.16.1, 4.16.2, 5.4.4.5, 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				

SKT004	SK Telecom	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 Sections 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 TS 36.213 V12.8.0 Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C, 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, 5.3.10.6 and 6.3.2		
		KR10-2058816	01 Nov 2033			1	3GPP TS 36.211 V12.9.0 Section 4, 3GPP TS 36.213 V12.8.0 Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C, 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, 5.3.10.6 and 6.3.2		
		KR10-2058817	01 Nov 2033			1	3GPP TS 36.211 V12.9.0 Section 4, 3GPP TS 36.213 V12.8.0 Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C, 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, 5.3.10.6 and 6.3.2		
		US10348385	30 Oct 2034			1	3GPP TS 36.211 V12.9.0 Section 4, 3GPP TS 36.213 V12.8.0 Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C, 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, 5.3.10.6 and 6.3.2		
		US9510332	12 Mar 2035			1, 8	3GPP TS 36.211 V12.9.0 Section 4, 3GPP TS 36.213 V12.8.0 Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C, 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, 5.3.10.6 and 6.3.2		
		US9800313	30 Oct 2034			1, 9	3GPP TS 36.211 V12.9.0: Section 4 3GPP TS 36.213 V12.8.0: Sections 7.1, 7.2, 7.2.2, Table 7.2.2-1A, Table 7.2.2-1C 3GPP TS 36.300 V12.7.0: Sections 5.3.1.1, 5.5 and 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, 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		
		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, 5.3.5.1, 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 TS 36.213 V12.7.0: Sections 8.0, 8.3, and 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		
		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		

SKT007	SK Telecom	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		
		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		
		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

SKT011	SK Telecom	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
		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
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		
		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		
		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		
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		
		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		
		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		

SKT017	SK Telecom	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 4.3.2.2.1-4.3.3.1, 4.3.3.3 3GPP TS 38.300 V15.5.0: Section 12.1	
SKT018	SK Telecom	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	
SKT047	SK Telecom	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	16 Aug 2027				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, 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	
		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, 4.2.1.2.1, 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				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, 4.2.1.2.1, 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
		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, 4.2.1.2.1, 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		
		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		
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 9.2.2.2.1	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 9.2.2.2.1		
TIM002	TIM	US7995988	27 Dec 2025			1, 8, 14, 15	3GPP TS 36.305 V15.4.0: 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 5.1-1, 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
		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	CN201810290152.8	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	CN201710685505.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	CN201610302106.6	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
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	
		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	
		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	
		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	
WIL005	Wilus	CN201780018454.3	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	
		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	
		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	
		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	
		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	
		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	
		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	

WIL015	Wilus	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
		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
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; 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; 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; 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; 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; Figures 5.2.2.1-1, 5.3.3.1-1, 5.3.5.1-1, 5.3.13.1-1
WIL017	Wilus	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
		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
WIL018	Wilus	EP3740002 (DE, FR, GB, ES, FI, 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
WIL019	Wilus	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; 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; 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; Figure 5.3.5.1-1
WIL021	Wilus	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
WIL026	Wilus	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
		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

WIL027	Wilus	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
		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
WIL032	Wilus	KR10-2492932	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, 7.3.1.2, 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
		US11490406	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, 7.3.1.2, 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
		US11653353	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, 7.3.1.2, 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
WIL033	Wilus	US11464035	04 May 2040						1	3GPP TS 38.214 V16.8.0: Sections 5.1.2.1, 5.1.2.1.1, 6.1.2.1 3GPP TS 38.300 V16.7.0: Section 5.2.3 3GPP TS 38.331 V16.7.0: Section 6.3.2
WIL034	Wilus	US11570803	03 Aug 2040						12	3GPP TS 38.214 V16.14.0: Section 6.1.2.1 3GPP TS 38.213 V16.14.0: Section 10.1 3GPP TS 38.211 V16.10.0: Section 7.3.2.2 3GPP TS 38.331 V16.14.0: Section 6.3.2
WIL035	Wilus	US11503653	06 Aug 2040						1	3GPP TS 37.213 V16.12.0: Sections 1, 4.2.1, 4.2.1.0.1, 4.2.1.1, 4.2.1.2, 4.2.1.2.1, 4.2.1.2.2 3GPP TS 38.212 V16.11.0: Section 7.3.1.1.2
WIL037	Wilus	US11601966	07 Oct 2040						1	3GPP TS 38.213 V16.11.0: Section 11.2A 3GPP TS 38.331 V16.11.0: Section 6.3.2
WIR002	Wireless Innovations	CNZL200480040372.1	27 Feb 2024				7	3GPP TS 23.122 V10.0.0: Sections 1.2, 2, 3.1, 4.4.3.1.1, 4.4.3.3.1		
		EP1695584 (BE, DE, ES, FI, GR, GB, IT, SE)	27 Feb 2024				6	3GPP TS 23.122 V10.0.0: Section 1.2, 2, 3.1, 4.4.3.1.1, 4.4.3.3, 4.4.3.3.1; Annex A		
		JP4990341	27 Feb 2024				6	3GPP TS 23.122 V14.5.0: Sections 1.2, 2, 4.4.1, 4.4.3.1, 4.4.3.1.1, 4.4.3.3.1 3GPP TS 24.002 V14.0.0: Sections 3.0; Figure 2 3GPP TS 31.102 V14.8.0: Section 4.2.2 3GPP TS 36.304 V14.7.0: Sections 5.1, 5.1.2.1, 5.1.2.2		
		US7366510	07 Nov 2024				1, 6, 11, 16	3GPP TS 23.122 V10.0.0: Sections 1.2, 2, 3.1, 4.3.3.1.1, 4.4.3.1.1, 4.4.3.3.1		
WIR003	Wireless Innovations	EP1683380 (BE, DE, ES, FI, FR, GB, IT, SE)	27 Feb 2024				7	3GPP TS 23.122 V8.12.0: Sections 1.2, 2, 3.1, 4.4.1, 4.4.2, 4.4.3, 4.4.3.1, 4.4.3.1.1, 4.4.3.3.1		
		HK1093275	27 Feb 2024				7	3GPP TS 23.122 V8.12.0: Sections 1.2, 2, 3.1, 4.4.1, 4.4.2, 4.4.3, 4.4.3.1, 4.4.3.1.1, 4.4.3.3.1		
		KR10-0763867	27 Feb 2024				7	3GPP TS 23.122 V8.12.0: Sections 3.1, 4.4, 4.4.1, 4.4.2, 4.4.3, 4.4.3.1 and 4.4.3.1.1		
WIR007	Wireless Innovations	CNZL200880119450.5	05 Dec 2028				9	3GPP TS 36.331 V9.18.0: Sections 5.8.1.1, 5.8.1.2 and 6.3.7 3GPP TS 36.321 V9.6.0: Sections 4.5.2 and 5.12; Table 4.5.2-1		
		EP2068492 (DE, ES, FI, FR, GB, IE, IT, NL, SE)	02 Jan 2028				15	3GPP TS 36.331 V9.18.0: Sections 5.8.1.1, 6.3.7 3GPP TS 36.321 V9.6.0: Sections 4.5.2, 5.12; Table 4.5.2-1		
		JP5140160	05 Dec 2028				15	3GPP TS 36.331 V9.18.0: Sections 5.8.1.1, 6.3.7 3GPP TS 36.321 V9.6.0: Sections 4.5.2, 5.12; Table 4.5.2-1		
		KR10-1420909	05 Dec 2028				6	3GPP TS 36.331 V9.18.0: Sections 5.8.1.1, 6.3.7 3GPP TS 36.321 V9.6.0: Sections 5.12, 6.1.3.7 3GPP TS 36.300 V9.10.0: Section 5.1.6		
		US8755400	20 Dec 2028				4	3GPP TS 36.211 V11.7.0: Section 6.5 3GPP TS 36.212 V11.7.0: Section 4.2; Table 4.2-1 3GPP TS 36.300 V11.14.0: Section 15.3.3 3GPP TS 36.321 V11.6.0: Sections 4.2.1, 5.12, 6.1.2, 6.1.3.7; Figure 6.1.3.7-1		
		US9001725	07 Dec 2027				4	3GPP TS 36.211 V11.7.0: Section 6.5 3GPP TS 36.212 V11.7.0: Section 4.2; Table 4.2-1 3GPP TS 36.300 V11.14.0: Section 15.3.3 3GPP TS 36.321 V11.6.0: Sections 5.12, 6.1.2 and 6.1.3.7; Figure 6.1.3.7-1		
WIR008	Wireless Innovations	KR10-1658686	12 Mar 2030				5	3GPP TS 36.321 V10.10.0: Sections 5.3.2.1, 5.3.2.2, 5.7, 5.13 3GPP TS 36.213 V10.13.0: Sections 7.1, 7.1.6.3, 9.1.1 3GPP TS 36.212 V10.9.0: Sections 5.3.3, 5.3.3.1.3 3GPP TS 36.300 V10.12.0: Section 7.5		
		KR10-1761824	12 Mar 2030				9	3GPP TS 36.212 V10.9.0: section 5.3.3.1.3 3GPP TS 36.213 V10.13.0: sections 4.3, 7.1, 9.1.1 3GPP TS 36.321 V10.10.0: sections 5.3.1, 5.13, 6.1.3.8; Figure 6.1.3.8-1		
		KR10-1863520	12 Mar 2030				9	3GPP TS 36.321 V10.10.0: Sections 5.3.1, 5.3.2.1, 5.13 3GPP TS 36.300 V10.12.0: Section 11.1 3GPP TS 36.213 V10.13.0: Sections 7.1, 9.1.1 3GPP TS 36.212 V10.9.0: Section 5.3.3.1.3		
		US10412724	12 Mar 2030				11	3GPP TS 36.321 V10.10.0: Sections 5.7, 5.13 3GPP TS 36.331 V10.22.0: Sections 5.3.1.1, 5.3.3.1, 5.3.3.4, 5.3.5.1, 5.3.5.3, 5.1.3; Figures 5.3.3.1-1, 5.3.5.1-1		