



Orna Gora
AGENCIJA ZA ELEKTRONSKE
KOMUNIKACIJE I POŠTANSKU DJELATNOST
Broj 0102-707/1
Podgorica, 7.2. 2014 god.

TECHNICAL AGREEMENT

**BETWEEN THE NATIONAL FREQUENCY
MANAGEMENT AUTHORITIES OF**

MONTENEGRO

and

REPUBLIC OF ALBANIA

ON BORDER COORDINATION OF GSM/DCS1800 SYSTEMS

IN THE FREQUENCY BANDS

880-915/925-960 MHz and 1710-1785/1805-1880 MHz

Podgorica, February 7th, 2014

1. Introduction

Based on respective national legislation and pursuant to Article 6 of the ITU Radio Regulations, the Agency for Electronic Communications and Postal Services of Montenegro (EKIP) (The Administration of Montenegro) and the Electronic and Postal Communications Authority of the Republic of Albania (AKEP) (The Administration of the Republic of Albania) (hereinafter called "Signatory Authorities") conclude this Technical Agreement on border coordination of GSM/DCS1800 systems in the frequency bands 880-915/925-960 MHz (the GSM 900 MHz band) and 1710-1785/1805-1880 MHz (the GSM 1800 MHz band).

The aim of this Technical Agreement is to lay down the principles, the technical provisions and administrative procedure necessary to regulate the common deployment of the GSM/DCS1800 networks in the GSM 900 MHz and GSM 1800 MHz bands in border areas between two countries.

2. Principles of coordination

On frequency coordination procedures shall be applied relevant provisions of the ECC/REC(05)08 and this Technical Agreement.

In order to enhance the efficiency of spectrum usage and to assure operations without harmful interference in border areas between two countries the principle of allotment of preferential frequencies in the GSM 900 MHz and GSM 1800 MHz bands for the GSM/DCS1800 networks in both countries shall be applied.

With respect to predicted traffic volume and to assure equitable access to the spectrum in border areas number of 54 (fifty-four) preferential frequency channels in the GSM 900 MHz band and 20 (twenty) preferential frequency channels in the GSM 1800 MHz band shall be defined for GSM and DCS1800 networks in each country.

Distribution of preferential frequency channels is given in Annex of this Technical Agreement.

All frequency channels which are not defined as a preferential should be treated as a non-preferential channels.

Frequencies on which the field strength exceeds the limits laid down in section 3 of this Technical Agreement shall be coordinated.

3. General technical provisions

Preferential frequencies may be used without coordination if the field strength of each carrier produced by the base station does not exceed a value of 19 dB μ V/m (10% of time, 50% of locations) in the GSM 900 MHz band and 25 dB μ V/m (10% of time, 50% of locations) in the GSM 1800 MHz band for GSM/DCS1800 systems at a height of 3 m above ground at a distance of 15 km inside the neighboring country.

Non-preferential frequencies may be used without coordination if the field strength of each carrier produced by the base station does not exceed a value of 19 dB μ V/m (10% of time, 50% of locations) in the GSM 900 MHz band and 25 dB μ V/m (10% of time, 50% of locations) in the GSM 1800 MHz band for GSM/DCS1800 systems at a height of 3 m above ground at the borderline.

4. Exchange of information

Notifications of base stations are not required in general. Signatory Authorities will exchange the lists of the GSM/DCS1800 base stations installed in the border areas between two countries on the explicit request of any of them.

In the case of harmful interference the data necessary to evaluate and treat harmful interference shall be exchanged between Signatory Authorities.

5. Revision of the Technical Agreement

This Technical Agreement can be revised in light of administrative, regulatory or technical developments, especially in order to comply with relevant amendments of CEPT ERC/ECC decisions, recommendations and reports at the proposal of any Signatory Authority with the agreement of the other one.

6. Withdrawal from the Technical Agreement

Any Signatory Authority may withdraw from this Technical Agreement by the end of a calendar month by giving notice of its intention at least six months in advance. A declaration to that effect shall be addressed to the other Signatory Authority.

Frequency assignments made within the framework of this Technical Agreement prior to the date of entry into force of the withdrawal shall remain valid and be protected according to their status.

7. Language of the Technical Agreement

The original text of this Technical Agreement exists in English in four originals.

8. Date of entry into force of the Technical Agreement

The provisions of this Technical Agreement shall be implemented by licensed operators in both countries not later than 6 (six) months after its signing.

Signed in Podgorica, 07. 02. 2014

For the Administration
of Montenegro

For the Administration
of The Republic of Albania



Official seals and signatures of the signatories. The seal on the left is for the Agency for Electronic Communications and Postal Services of Montenegro (AGENCIJA ZA ELEKTRONSKU KOMUNIKACIJU I POŠTANSKU DIJELU), Podgorica. The seal on the right is for the Albanian Agency for Electronic Communications (AGENCIJA SHQIPERE PER KOMUNIKIM ME ELEKTRONIKË), Tirane. Both seals are purple and circular, featuring the national coat of arms. Handwritten signatures in blue ink are placed over the seals. The signature for the Montenegrin representative is Dr. Šaleta Đurović, Council President, EKIIP. The signature for the Albanian representative is Mr. Piro Xhixho, Chairman, AKEP.

Dr. Šaleta Đurović
Council President, EKIIP

Mr. Piro Xhixho
Chairman, AKEP

Annex

DISTRIBUTION OF PREFERENTIAL FREQUENCY CHANNELS

Preferential frequency channels for GSM/DCS1800 networks in Montenegro

GSM 900 MHz band

UL frequency [MHz]	DL frequency [MHz]	ARFCN channel	Country
880.200	925.200	975	MNE
880.400	925.400	976	MNE
880.600	925.600	977	MNE
880.800	925.800	978	MNE
881.000	926.000	979	MNE
881.200	926.200	980	MNE
887.600	932.600	1012	MNE
887.800	932.800	1013	MNE
888.000	933.000	1014	MNE
888.200	933.200	1015	MNE
888.400	933.400	1016	MNE
888.600	933.600	1017	MNE
888.800	933.800	1018	MNE
889.000	934.000	1019	MNE
889.200	934.200	1020	MNE
889.400	934.400	1021	MNE
889.600	934.600	1022	MNE
889.800	934.800	1023	MNE
890.200	935.200	1	MNE
890.400	935.400	2	MNE
890.600	935.600	3	MNE
890.800	935.800	4	MNE
891.000	936.000	5	MNE
891.200	936.200	6	MNE
891.400	936.400	7	MNE
891.600	936.600	8	MNE
891.800	936.800	9	MNE

UL frequency [MHz]	DL frequency [MHz]	ARFCN channel	Country
892.000	937.000	10	MNE
892.200	937.200	11	MNE
892.400	937.400	12	MNE
898.400	943.400	42	MNE
898.600	943.600	43	MNE
898.800	943.800	44	MNE
899.000	944.000	45	MNE
899.200	944.200	46	MNE
898.400	943.400	47	MNE
903.600	948.600	68	MNE
903.800	948.800	69	MNE
904.000	949.000	70	MNE
904.200	949.200	71	MNE
904.400	949.400	72	MNE
904.600	949.600	73	MNE
909.800	954.800	99	MNE
910.000	955.000	100	MNE
910.200	955.200	101	MNE
910.400	955.400	102	MNE
910.600	955.600	103	MNE
910.800	955.800	104	MNE
911.000	956.000	105	MNE
911.200	956.200	106	MNE
911.400	956.400	107	MNE
911.600	956.600	108	MNE
911.800	956.800	109	MNE
912.000	957.000	110	MNE

GSM 1800 MHz band

UL frequency [MHz]	DL frequency [MHz]	ARFCN channel	Country
1710.200	1805.200	512	MNE
1710.400	1805.400	513	MNE
1710.600	1805.600	514	MNE
1710.800	1805.800	515	MNE
1727.200	1822.200	597	MNE
1727.400	1822.400	598	MNE
1727.600	1822.600	599	MNE
1727.800	1822.800	600	MNE
1730.200	1825.200	612	MNE
1730.400	1825.400	613	MNE

UL frequency [MHz]	DL frequency [MHz]	ARFCN channel	Country
1730.600	1825.600	614	MNE
1730.800	1825.800	615	MNE
1740.000	1835.000	661	MNE
1740.200	1835.200	662	MNE
1740.400	1835.400	663	MNE
1740.600	1835.600	664	MNE
1768.800	1863.800	805	MNE
1769.000	1864.000	806	MNE
1769.200	1864.200	807	MNE
1769.400	1864.400	808	MNE

Preferential frequency channels for GSM/DCS1800 networks in Albania

GSM 900 MHz band

UL frequency [MHz]	DL frequency [MHz]	ARFCN channel	Country
882.000	927.000	984	ALB
882.200	927.200	985	ALB
882.400	927.400	986	ALB
882.600	927.600	987	ALB
882.800	927.800	988	ALB
883.000	928.000	989	ALB
883.200	928.200	990	ALB
883.400	928.400	991	ALB
883.600	928.600	992	ALB
883.800	928.800	993	ALB
884.000	929.000	994	ALB
884.200	929.200	995	ALB
884.400	929.400	996	ALB
884.600	929.600	997	ALB
884.800	929.800	998	ALB
885.000	930.000	999	ALB
885.200	930.200	1000	ALB
885.400	930.400	1001	ALB
895.800	940.800	29	ALB
896.000	941.000	30	ALB
896.200	941.200	31	ALB
896.400	941.400	32	ALB
896.600	941.600	33	ALB
896.800	941.800	34	ALB
897.000	942.000	35	ALB
897.200	942.200	36	ALB
897.400	942.400	37	ALB

UL frequency [MHz]	DL frequency [MHz]	ARFCN channel	Country
897.600	942.600	38	ALB
897.800	942.800	39	ALB
898.000	943.000	40	ALB
902.200	947.200	61	ALB
902.400	947.400	62	ALB
902.600	947.600	63	ALB
902.800	947.800	64	ALB
903.000	948.000	65	ALB
903.200	948.200	66	ALB
905.200	950.200	76	ALB
905.400	950.400	77	ALB
905.600	950.600	78	ALB
905.800	950.800	79	ALB
906.000	951.000	80	ALB
906.200	951.200	81	ALB
907.000	952.000	85	ALB
907.200	952.200	86	ALB
907.400	952.400	87	ALB
907.600	952.600	88	ALB
907.800	952.800	89	ALB
908.000	953.000	90	ALB
908.200	953.200	01	ALB
908.400	953.400	92	ALB
908.600	953.600	93	ALB
908.800	953.800	94	ALB
909.000	954.000	95	ALB
909.200	954.200	96	ALB

GSM 1800 MHz band

UL frequency [MHz]	DL frequency [MHz]	ARFCN channel	Country
1711.200	1806.200	517	ALB
1711.400	1806.400	518	ALB
1711.600	1806.600	519	ALB
1711.800	1806.800	520	ALB
1728.200	1823.200	602	ALB
1728.400	1823.400	603	ALB
1728.600	1823.600	604	ALB
1728.800	1823.800	605	ALB
1729.200	1824.200	607	ALB
1729.400	1824.400	608	ALB

UL frequency [MHz]	DL frequency [MHz]	ARFCN channel	Country
1729.600	1824.600	609	ALB
1729.800	1824.800	610	ALB
1751.200	1846.200	717	ALB
1751.400	1846.400	718	ALB
1751.600	1846.600	719	ALB
1751.800	1846.800	720	ALB
1767.600	1862.600	799	ALB
1767.800	1862.800	800	ALB
1768.000	1863.000	801	ALB
1768.200	1863.200	802	ALB