ANNEX 5

AGREEMENT

between Administrations of
Bosnia and Herzegovina and Croatia

on the frequency coordination for
fixed wireless systems
in the bands
27940.5 – 28444.5 MHz and 28948.5 – 29452.5 MHz

Sarajevo, 04 November 2009

1 Introduction

In the framework of the bilateral agreement dealing with frequency coordination in general, the Communication Administrations of Bosnia and Herzegovina and Croatia concluded this Agreement for the purpose of the frequency coordination for the fixed wireless systems in the frequency bands 27940.5 - 28444.5 MHz paired with 28948.5 - 29452.5 MHz. The relevant provisions of the general bilateral agreement dealing with frequency coordination in general shall apply unless otherwise laid down in this Agreement.

2 Principles - Background

2.1 The Administrations mentioned above deemed it necessary to conclude an agreement on the division of preferential frequencies for fixed wireless systems using FDD technology only. The channel arrangement used in the agreement is in conformity with CEPT Recommendation T/R 13-02 Annex C. The band 27940.5 - 28444.5 MHz paired with 28948.5 - 29452.5 MHz is designated for fixed service by the ECC/DEC/(05)01. The use of the frequency bands shall be in accordance with ERC Recommendation (01)03 for FDD systems. These frequency bands may also be used for point-to-point systems as deemed appropriate by each Administration.

2.2 Preferential frequencies are frequencies which can be assigned by Administrations concerned without any coordination, provided that the provisions laid down in Paragraph 3.2 or 3.3 of this Agreement are fulfilled.

2.3 Non-preferential frequencies are frequencies which can be assigned by Administrations concerned without any coordination, provided that the provisions laid down in Paragraph 3.4 or 3.5 of this Agreement are fulfilled.

2.4 All other cases shall be coordinated in line with the relevant international regulation.

2.5 Notifications for assignments are not necessary unless required by the procedure mentioned in Paragraph 4 of this Agreement.

2.6 The entire band 27940.5 - 28444.5 MHz paired with 28948.5 - 29452.5 MHz is divided into blocks of preferential frequencies in a way that equal access to the spectrum is ensured for each Administration. The frequency partitioning as outlined in this Agreement may, however, be subject to bi- or multilateral accommodations negotiated on a case by case basis in the event that the actual frequency demand in particular border areas of the countries concerned requires modification of the frequency partitioning.

3 Technical provisions

3.1 The preferential frequency division is described in the Annex of this Agreement.

3.2 Transmitters of point-to-multipoint* systems using preferential frequencies may produce a spectral power flux density (pfd) not exceeding -105 dBW/(MHz·m^2) at a distance of 15 km inside the neighbouring country.

3.3 Transmitters in point-to-point links using preferential frequencies may produce a spectral power flux density (pfd) not exceeding -115 dBW/(MHz·m^2) at a distance of 25 km inside the neighbouring country.

3.4 Transmitters of point-to-multipoint* systems using non-preferential frequencies may produce a spectral power flux density (pfd) not exceeding -105 dBW/(MHz·m^2) at the border line.

3.5 Transmitters in point-to-point links using non-preferential frequencies may produce a spectral power flux density (pfd) not exceeding -115 dBW/(MHz·m^2) at the border line .

3.6 The calculation of the interfering spectral pfd shall be based on the Recommendation ITU-R P.452-13 on the basis of free space propagation and an atmospheric attenuation of 0.21 dB/km.

3.7 The above mentioned pfd values and the calculation of interference are provisional, and should be revised in accordance with relevant ECC documents to be developed or on the basis of practical experiences of the signatory administrations.

3.8 In case of multiple interferers at any point of the interference contour the resulting interfering signal shall be derived by summing up the contributing pfd values.

4 Procedure in case of harmful interference

4.1 In cases of harmful interference the Administrations affected shall inform each other and endeavour to achieve a mutually satisfactory solution.

4.2 In cases of harmful interference all necessary technical parameters shall be exchanged between Administrations.

5 Revision of this Agreement

5.1 The text of this Agreement can be revised in light of administrative, regulatory or technical developments at the proposal of any Signatory Administration with the agreement of the other Signatory Administration required.

5.2 The revision of the preferential distribution annexed to this Agreement may be done with the agreement of the Signatory Administrations.

6 Language of the Agreement

This Agreement has been concluded in English language in two originals.

* Point-to-multipoint systems do not refer to a set of point-to-point links concentrating in the same node.

7 Date of entry into force

This agreement enters into force at the date of its signature.

On behalf of the Administration of Bosnia and Herzegovina

Kemal Huseinović, Director General

On behalf of the Administration of Croatia

Dražen Lučić, Executive Director

28 MHz channels			
Channel number	Center Frequency		BIH / HRV
	lower band [MHz]	upper band [MHz]	
15	27954,5	28962,5	BIH
16	27982,5	28990,5	BIH
17	28010,5	29018,5	HRV
18	28038,5	29046,5	HRV
19	28066,5	29074,5	BIH
20	28094,5	29102,5	HRV
21	28122,5	29130,5	BIH
22	28150,5	29158,5	HRV
23	28178,5	29186,5	HRV
24	28206,5	29214,5	BIH
25	28234,5	29242,5	BIH
26	28262,5	29270,5	HRV
27	28290,5	29298,5	BIH
28	28318,5	29326,5	HRV
29	28346,5	29354,5	HRV
30	28374,5	29382,5	BIH
31	28402,5	29410,5	BIH
32	28430,5	29438,5	HRV