<u>Agreement</u>

between the Administrations of France, Germany Luxembourg and Switzerland concerning the allotment of preferential frequency blocks in the band 406.100 – 410.000 MHz

Luxembourg

6th February 2014

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1 Introduction

The Administrations of France, Germany, Luxemburg and Switzerland concluded this Agreement in order to ensure equal spectrum access in the respective border areas.

This Agreement basically describes the allotment of preferential frequency blocks in the band 406.100 – 410.000 MHz.

In at least one of the countries, the frequency band 406.1-410 MHz is split up in two parts:

- the lower sub-band 406.1-408 MHz and
- the upper sub-band 408-410 MHz,

due to their national frequency assignments.

The relevant provisions of the latest version of the HCM-Agreement shall be applied unless otherwise laid down in this Agreement.

The frequency band 406.1-410 MHz is also allocated to the radio astronomy service on co-primary basis according to the RR. The protection should be ensured based on the recommendation ITU-R RA.769.

At least two of the signatory countries are affected by the protection requirements of the Effelsberg radioastronomy telescope in Germany, using the frequency range 407.0 – 409.1 MHz.

2 Usage of frequencies

The frequency band 406.100 – 410.000 MHz is used in simplex mode operation only.

3 Division into preferential frequency blocks

The division into preferential frequency blocks is given in the annex and for those channels not marked as red the repartition is applicable with the entry into force of this agreement.

This annex shall be reviewed and updated once per year.

For channels marked as red a coordination request should be send to the affected country(s).

The aim of the repartition is to offer all signatories the possibility to use the band as flexible as possible e.g. by giving the Administrations as much as possible contiguous channels.

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Frequencies may be used under the conditions of a preferential frequency if the bandwidth of the emission is within the band limits of the preferential frequency blocks.

The coordination zone is defined as the country case in which an administration is affected.

4 Usage of a country's own preferential frequencies

An Administration may use its own preferential frequencies without coordination if the field strength does not exceed a value of 20 dB μ V/m at a height of 10 m above the ground at a secondary line of 40 Km distance from the border inside the affected country.

For analogous emissions the propagation curves with a time probability of 10 % and for digital emissions the propagation curves with a time probability of 1 % shall be used.

5 Usage of non-preferential frequencies by a country

An Administration may use non-preferential frequencies without coordination if the field strength does not exceed a value of 20 dB μ V/m at a height of 10 m above the ground at the border line.

For analogous emissions the propagation curves with a time probability of 10 % and for digital emissions the propagation curves with a time probability of 1 % shall be used.

6 Calculation method

The calculations of the interfering field strength are based on the latest version of the HCM-Agreement and shall be carried out with the official version of the HCM program.

7 Administrative procedure

The procedure described in the HCM-Agreement shall be applied.

Responses to notifications of preferential frequency assignments are not required.

The assignment of a preferential frequency which meets all technical conditions shall be entered in the frequency register with coordination status P and frequency category 1.

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8 Status of existing stations

A list of assignments in use to be protected in the future, under the terms of this agreement, will be exchanged at the latest 3 months after the date of signature of this agreement.

The annex with the frequency repartition will be updated accordingly by deleting red inscriptions.

Administrations shall endeavour to refarm existing assignments in order to be in conformity with attached annex as soon as possible, but not later than 4 years after the date of entry into force of this agreement.

9 Status of existing agreements

The Agreement BONN 1993 describing the preferential repartition in zone H will be replaced at the date when this Agreement enters into force.

10 Review

This Agreement can be revised in light of administrative or technical developments at the proposal of any signing Administration with the consent of all other signing Administrations.

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

11 Withdrawal

Any signing Administration may withdraw from this Agreement by giving notice to all the other Administrations involved of its intention at least six month in advance.

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

12 Date of entry into force

The date of entry into force of this agreement is subject to individual confirmation within five months from the date of signature of this agreement, from all signing Administrations. This would allow the signatories to decide if the exchanged lists as mentioned under paragraph 9 (status of existing stations) is or not acceptable.

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If five months after the signature of this agreement not all signatories confirmed their agreement this agreement shall become obsolete.

13 Signature

This Agreement exists in four original editions which are kept by the signing Administrations.

Done at Luxembourg, date February 6th 2014

For France (A. Ferry)

For Germany (T. Schnetzer)

For the Institut Luxembourgeois de Régulation (R. Thurmes)

For OFCOM Switzerland (K. Vonlanthen)

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FREQUENCY	FREQUENCY		н			(3			F				A		
CENTER (MHz)	CENTER (MHz)		F/SUI			D/F	/ SUI			D/F		D/F/LUX				
12.5 kHz Raster	25 kHz Raster	Pref.	F	SUI	Pref.	D	F	SUI	Pref.	D	F	Pref.	D	F	LUX	
406.10625	406.1125	SUI			D				D			D				
406.11875	400.1120	SUI			D				D			D				
406.13125	406.1375	SUI			D				D			D				
406.14375		SUI			D				D			LUX				
406.15625	406.1625	SUI			D				D			LUX				
406.16875		SUI			D				D			LUX				
406.18125	406.1875	SUI			D				D			LUX				
406.19375		SUI SUI			D				D			LUX LUX				
406.20625	406.2125	SUI			D				D			LUX				
406.21875 406.23125		SUI			SUI				D			LUX				
406.23125	406.2375	SUI			SUI				D			LUX				
406.24375		SUI			SUI				D			LUX				
406.26875	406.2625	SUI			SUI				D			LUX				
406.28125		SUI			SUI				D			LUX				
406.29375	406.2875	SUI			SUI				D			LUX				
406.29375		SUI			SUI				D			LUX				
406.30825	406.3125	SUI			SUI				D			LUX				
406.33125		SUI			SUI				D			LUX				
406.34375	406.3375	SUI			SUI				D			LUX				
406.35625		SUI			SUI				D			LUX				
406.36875	406.3625	F			F				F			LUX				
406.38125		F			F				F			LUX				
406.39375	406.3875	F			F				F			LUX				
406.40625		F			F				F			LUX				
406.41875	406.4125	F			F				F			LUX				
406.43125		F			F				F			LUX				
406.44375	406.4375	F			F				F			LUX				
406.45625		F			F				F			LUX				
406.46875	406.4625	F			F				F			LUX				
406.48125		F			F				F			LUX				
406.49375	406.4875	F			F				F			LUX				
406.50625		F			F				F			LUX				
406.51875	406.5125	F			F				F			LUX				
406.53125		F			F				F			LUX				
406.54375	406.5375	F			F			1	F		1	LUX				
406.55625	400 50	F			F				F			LUX				
406.56875	406.5625	SUI			SUI				F			LUX				
406.58125	400 5075	SUI			SUI	·			F			LUX				
406.59375	406.5875	SUI			SUI				F		1	LUX				
406.60625	406 6405	SUI			SUI				F			LUX				
406.61875	406.6125	SUI			SUI				F			LUX				
406.63125	406 6275	SUI			SUI				F			LUX				
406.64375	406.6375	SUI			SUI				F			LUX				
406.65625	406.6625	SUI			SUI				F			LUX				
406.66875	400.0020	SUI			SUI				F			LUX				
406.68125	406.6875	SUI			SUI				F			LUX				
406.69375	+00.0073	SUI			SUI				F			LUX				
406.70625	406.7125	SUI			SUI				F			LUX				
406.71875		SUI			SUI				F			LUX				
406.73125	406.7375	SUI			SUI				F			LUX				
406.74375		SUI			SUI				F			LUX				
406.75625	406.7625	SUI			SUI				F			LUX				
406.76875		SUI			SUI				F			LUX				
406.78125	406.7875	SUI			SUI				F			LUX				
406.79375	400.1010	F			F				F			F				

		ZONE															
FREQUENCY	FREQUENCY		н			(3			F		А					
CENTER (MHz)	CENTER (MHz)	F / SUI			D/F/SUI					D/F		D/F/LUX					
12.5 kHz Raster	25 kHz Raster	Pref.	F	SUI	Pref.	D	F	SUI	Pref.	D	F	Pref.	D	F	LUX		
406.80625	406.8125	F			F				F			F					
406.81875	100.0120	F			F				F			F					
406.83125	406.8375	F			F				F			F					
406.84375		F			F				F			F			<u> </u>		
406.85625	406.8625	F			D				D			D					
406.86875		F			D				D			D					
406.88125	406.8875	F			D				D			D					
406.89375		F			D				D			D					
406.90625	406.9125	F			D				D			D			L		
406.91875		F			D				D			D					
406.93125	406.9375	F			D				D			D					
406.94375		F		<u> </u>	D			<u> </u>	D			D			I		
406.95625	406.9625	F			D				D			D					
406.96875		F			D				D			D			<u> </u>		
406.98125	406.9875	F		<u> </u>	D				D			D			I		
406.99375		F			D				D			D					
407.00625	407.0125	F			D				D			D					
407.01875		F			D				D			D					
407.03125	407.0375	F			D				D			D					
407.04375		F			D				D			D					
407.05625	407.0625	F			D				D			D					
407.06875		F			D				D			D					
407.08125	407.0875	F			D				D			D					
407.09375		F			D				D			D					
407.10625	407.1125	F			D				D			D					
407.11875		F			D				D			D			<u> </u>		
407.13125	407.1375	F			D				D			D					
407.14375		F			D				D			D					
407.15625	407.1625	SUI			SUI				D			D					
407.16875		SUI			SUI				D			D					
407.18125	407.1875	SUI			SUI				D			D					
407.19375		SUI			SUI				D			D					
407.20625	407.2125	SUI			SUI				D			D			<u> </u>		
407.21875		SUI			SUI				D			D			 		
407.23125	407.2375	SUI			SUI				D			D					
407.24375		SUI			F				F			F					
407.25625	407.2625	SUI			F				F			F			+		
407.26875		F			F				F			F			+		
407.28125	407.2875	F			F				F			F			+		
407.29375		F			F				F			F			+		
407.30625	407.3125														 		
407.31875 407.33125		F			F				F			F			┼──		
407.33125	407.3375	F			F				F			F			 		
407.35625		F			F				F			F			+		
407.36875	407.3625	F			F				F			F			+		
407.36875	L	F			F				F			F			 		
	407.3875	F			F				F			F			<u> </u>		
407.39375		F			F				F			F			 		
407.40625	407.4125	F			F				F			F			 		
407.41875		F			F				F			F			┼──		
407.43125 407.44375	407.4375	F			F				F			F			┼──		
		F			F				F			F			┼──		
407.45625 407.46875	407.4625	F			F				F			F					
407.46875		F			F				F			F			┼──		
407.48125	407.4875	F			F				F			F					

		ZONE														
FREQUENCY	FREQUENCY		н			(G			F		A D/F/LUX				
CENTER (MHz)	CENTER (MHz)		F / SUI			D/F	/ SUI			D/F						
12.5 kHz Raster	25 kHz Raster	Pref.	F	SUI	Pref.	D	F	SUI	Pref.	D	F	Pref.	D	F	LUX	
407.50625	407.5125	F			F				F			F				
407.51875	407.5125	F			F				F			F				
407.53125	407.5375	F			F				F			F				
407.54375	407.0070	F			F				F			F				
407.55625	407.5625	F			F				F			F				
407.56875	10110020	F			F				F			F				
407.58125	407.5875	F			F				F			F				
407.59375		F			F				F			F				
407.60625	407.6125	F			D				F			D				
407.61875		F			D				F			D				
407.63125	407.6375	F			D				F			D				
407.64375		F			D				F			D				
407.65625	407.6625	SUI			SUI				F			F				
407.66875		SUI			SUI				F			F				
407.68125	407.6875	SUI			SUI				F			F				
407.69375		SUI			SUI				F			F			_	
407.70625	407.7125	SUI			SUI				D			F				
407.71875		SUI			SUI				D			F				
407.73125	407.7375	SUI			SUI				D			F				
407.74375		SUI			SUI				D			F				
407.75625	407.7625	SUI			SUI				D			F				
407.76875		SUI			SUI				D			F				
407.78125	407.7875	SUI			SUI				D			F				
407.79375		SUI			SUI				D			F				
407.80625	407.8125	SUI			SUI				D			F				
407.81875		SUI			SUI				D			F				
407.83125	407.8375	SUI			SUI				D			F			_	
407.84375		SUI			SUI				D			F			_	
407.85625	407.8625	SUI			D				D			D				
407.86875		SUI			D				D			D				
407.88125	407.8875	SUI			D				D			D				
407.89375		SUI			D				D			D				
407.90625	407.9125	SUI			D				D			D				
407.91875		SUI			D				D			D				
407.93125	407.9375	SUI			D				D			D			-	
407.94375		SUI			D				D			D			──	
407.95625	407.9625	SUI			D				D			D			──	
407.96875		SUI			D				D			D			_	
407.98125	407.9875	SUI			D				D			D			+	
407.99375		SUI F			D				D			D			╉────	
408.00625	408.0125														+	
408.01875		F			F				F			F			+	
408.03125 408.04375	408.0375	F			F				F			F			+	
408.04375		SUI			SUI				F			LUX			+	
408.06875	408.0625	SUI			SUI				F			LUX			+	
408.08125		SUI			SUI				F			LUX			+	
408.08125	408.0875	SUI			SUI				F			LUX			+	
		SUI			SUI				F			LUX			+	
408.10625	408.1125	SUI			SUI				F			LUX			+	
408.11875		SUI			SUI				F			LUX			+	
408.13125 408.14375	408.1375	SUI			SUI				F			LUX			+	
408.15625		SUI			SUI				F			LUX			+	
408.15625	408.1625	SUI			SUI				F			LUX			+	
408.16875		SUI			SUI				F			LUX			+	
408.19375	408.1875	SUI			SUI				F			LUX			+	

		ZONE														
FREQUENCY	FREQUENCY	İ	н			(3			F		A D/F/LUX				
CENTER (MHz)	CENTER (MHz)		F / SUI			D/F	/ SUI			D/F						
12.5 kHz Raster	25 kHz Raster	Pref.	F	SUI	Pref.	D	F	SUI	Pref.	D	F	Pref.	D	F	LUX	
408.20625	408.2125	SUI			SUI				F			LUX				
408.21875	406.2125	SUI			SUI				F			LUX				
408.23125	408.2375	SUI			SUI				F			LUX				
408.24375	406.2375	SUI			SUI				F			LUX				
408.25625	408.2625	SUI			SUI				F			LUX				
408.26875	400.2025	SUI			SUI				F			LUX				
408.28125	408.2875	SUI			SUI				F			LUX				
408.29375	400.2075	SUI			SUI				F			LUX				
408.30625	408.3125	F			F				F			F				
408.31875	400.3123	F			F				F			F				
408.33125	408.3375	F			F				F			F				
408.34375	400.3373	F			F				F			F				
408.35625	408.3625	F			F				F			F				
408.36875	400.3025	F			F				F			F				
408.38125	408.3875	F			F				F			F				
408.39375	400.3073	F			F				F			F				
408.40625	408.4125	F			F				F			F				
408.41875	406.4125	F			F				F			F				
408.43125	408.4375	F			F				F			F				
408.44375	406.4375	F			F				F			F				
408.45625	408.4625	F			F				F			F				
408.46875	406.4625	F			F				F			F				
408.48125	408.4875	F			F				F			F				
408.49375	406.4675	F			F				F			F				
408.50625	408.5125	SUI			SUI				D			LUX				
408.51875	406.5125	SUI			SUI				D			LUX				
408.53125	408.5375	SUI			SUI				D			LUX				
408.54375	406.5375	SUI			SUI				D			LUX				
408.55625	408.5625	SUI			SUI				D			LUX				
408.56875	406.3623	SUI			SUI				D			LUX				
408.58125	400 5075	SUI			SUI				D			LUX				
408.59375	408.5875	SUI			SUI				D			LUX				
408.60625	409 6425	SUI			SUI				D			LUX				
408.61875	408.6125	SUI			SUI				D			LUX				
408.63125	408.6375	SUI			SUI				D			LUX				
408.64375	408.6375	SUI			SUI				D			LUX				
408.65625	408.6625	SUI			SUI				D			LUX				
408.66875	406.0025	SUI			SUI				D			LUX				
408.68125	400 6075	SUI			SUI				D			LUX				
408.69375	408.6875	SUI			SUI				D			LUX				
408.70625	408 7125	SUI			SUI				D			LUX				
408.71875	408.7125	SUI			SUI				D			LUX				
408.73125	109 7075	SUI			SUI				D			LUX				
408.74375	408.7375	SUI			SUI				D			LUX				
408.75625	109 7005	SUI			SUI				D			LUX				
408.76875	408.7625	SUI			SUI				D			LUX				
408.78125	100 7075	SUI			SUI				D			LUX				
408.79375	408.7875	SUI			SUI				D			LUX				
408.80625	408.8125	SUI			SUI				F			LUX				
408.81875	400.0120	SUI			SUI				F			LUX				
408.83125	108 0275	SUI			SUI				F			LUX				
408.84375	408.8375	SUI			SUI				F			LUX				
408.85625	408 8005	SUI			SUI				F			LUX				
408.86875	408.8625	SUI			SUI				F			LUX				
408.88125	108 0075	SUI			SUI				D			LUX				
408.89375	408.8875	SUI			SUI				D			LUX			Γ	

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FREQUENCY	FREQUENCY		н			(3			F		А						
CENTER (MHz)	CENTER (MHz)		F / SUI			D/F	/ SUI			D/F		D/F/LUX						
12.5 kHz Raster	25 kHz Raster	Pref.	F	SUI	Pref.	D	F	SUI	Pref.	D	F	Pref.	D	F	LUX			
408.90625	408.9125	SUI			D				D			D						
408.91875		SUI			D				D			D						
408.93125	408.9375	SUI			D				D			D						
408.94375		SUI			D				D			D						
408.95625	408.9625	SUI			D				D			D						
408.96875		SUI			D				D			D						
408.98125	408.9875	SUI			D				D			D						
408.99375		SUI			D				D			D						
409.00625	409.0125	SUI			D				D			D						
409.01875		SUI			D				D			D						
409.03125	409.0375	SUI			D				D			D						
409.04375		SUI			D				D			D						
409.05625	409.0625	SUI			D		ļ		D			D						
409.06875		SUI			D		ļ		D			D						
409.08125	409.0875	SUI			D		ļ		D			D						
409.09375		SUI			D		ļ		D			D						
409.10625	409.1125	SUI			D		ļ		D			D						
409.11875		SUI			D				D			D						
409.13125	409.1375	SUI			D				D			D						
409.14375		SUI			D				D			D						
409.15625	409.1625	SUI			D				D			D						
409.16875		SUI			D				D			D						
409.18125	409.1875	SUI			D				D			D						
409.19375		SUI			D				D			D						
409.20625	409.2125	SUI			D				D			D						
409.21875		SUI			D				D			D						
409.23125	409.2375	SUI			D				D			D						
409.24375		SUI			D				D			D						
409.25625	409.2625	F			F				F			F						
409.26875		F			F				F			F						
409.28125	409.2875	F			F				F			F						
409.29375																		
409.30625	409.3125	F			F				F			F						
409.31875		F			F				F			F						
409.33125	409.3375	F			F				F			F						
409.34375		F			F				F			F						
409.35625 409.36875	409.3625	F			F				F			F			┼───			
409.38125		F			F				F	-		F			<u> </u>			
409.38125	409.3875	F			F				F			F						
409.39375		F			F				F			F						
409.40825	409.4125	F			F				F			F			<u> </u>			
409.43125		F			F				F			F			<u> </u>			
409.44375	409.4375	F			F				F			F						
409.45625	<u> </u>	F			F				F			F			<u> </u>			
409.46875	409.4625	F			F				F			F			<u> </u>			
409.48125		F			F				F			F						
409.49375	409.4875	F			F		1		F			F			<u> </u>			
409.50625		F			F		1		F			F			<u> </u>			
409.51875	409.5125	F			F				F			F			1			
409.53125	<u> </u>	F			F				F			F			<u> </u>			
409.54375	409.5375	F			F				F			F			<u> </u>			
409.55625	<u> </u>	F			D				D			D			<u> </u>			
409.56875	409.5625	F			D				D			D			<u> </u>			
409.58125	<u> </u>	F			D				D			D			<u> </u>			
409.59375	409.5875	F			D				D			D	<u> </u>					

to the Agreement between the Administrations of France, Germany, Luxembourg and Switzerland concerning the allotment of preferential frequency blocks in the band 406.1 - 410 MHz

		ZONE													
FREQUENCY	FREQUENCY		н			(G			F				A	
CENTER (MHz)	CENTER (MHz)		F / SUI		D/F/SUI					D/F		D/F/LUX			
12.5 kHz Raster	25 kHz Raster	Pref.	F	SUI	Pref.	D	F	SUI	Pref.	D	F	Pref.	D	F	LUX
409.60625	409.6125	F			D				D			D			
409.61875	409.6125	F			D				D			D			
409.63125	409.6375	F			D				D			D			
409.64375	409.6375	F			D				D			D			
409.65625	400.0005	F			D				D			D			
409.66875	409.6625	F			D				D			D			
409.68125	400.0075	F			D				D			D			
409.69375	409.6875	F			D				D			D			
409.70625		F			D				D			D			
409.71875	409.7125	F			D				D			D			
409.73125		F			D				D			D			
409.74375	409.7375	F			D				D			D			
409.75625	409.7625	F			D				D			D			
409.76875		F			D				D			D			
409.78125		F			D				D			D			
409.79375	409.7875	F			D				D			D			
409.80625	100 0105	F			D				D			D			
409.81875	409.8125	F			D				D			D			
409.83125	400.0075	F			D				D			D			
409.84375	409.8375	F			D				D			D			
409.85625	400.0005	F			D				D			D			
409.86875	409.8625	F			D				D			D			
409.88125	400.0075	F			F				F			F			
409.89375	409.8875	F			F				F			F			
409.90625	100.0105	F			F				F			F			
409.91875	409.9125	F			F				F			F			
409.93125		F			F				F			F			
409.94375	409.9375	F			F				F			F			
409.95625	100.0005	F			F				F			F		1	
409.96875	409.9625	F			F				F			F		1	
409.98125	100.0075	F			F				F			F		1	
409.99375	409.9875	F			F				F			F			

Existing assignements to protect