



Agentschap Telecom  
Ministerie van Economische Zaken

**AGREEMENT BETWEEN THE ADMINISTRATIONS OF  
ANGUILLA, FRANCE, SINT MAARTEN AND THE STATE  
OF NETHERLANDS FOR SABA AND ST. EUSTATIUS  
CONCERNING THE SPECTRUM COORDINATION OF LAND  
MOBILE RADIOCOMMUNICATION NETWORKS IN THE  
FREQUENCY RANGE 694 MHz to 3600 MHz**

**Anguilla 10<sup>th</sup> of June 2016**

1	INTRODUCTION .....	3
2	Frequency bands and preferential frequency plan .....	5
3	Technical and operational requirements .....	5
3.1	Applicable for GSM systems .....	5
3.1.1	Use of preferential frequencies .....	5
3.1.2	Use of non-preferential frequencies .....	5
3.1.3	Network color codes coordination .....	6
3.2	Applicable for LTE/UMTS system .....	6
4	ARRANGEMENT FOR PLANNING AT AN OPERATIONAL LEVEL .....	6
5	SPECTRUM MONITORING .....	7
6	ADMINISTRATIVE PROCEDURE .....	7
7	HARMFUL INTERFERENCE .....	7
8	REVIEW AND FOLLOW UP OF THE AGREEMENT .....	8
9	WITHDRAWAL .....	8
10	LANGUAGE OF THE TECHNICAL AGREEMENT .....	8
11	DATE OF ENTRY INTO FORCE .....	8
	Annex 1: Frequency bands .....	9
	Annex 2: Preferential frequency plan .....	10
	Annex 3: Technical and operational requirements .....	11
	Annex 4: Allocation of preferential frequencies for GSM systems in 900 MHz and 1800 MHz bands .....	13
	Annex 5: Allocation of preferential codes for UMTS system and physical-layer cell-identity groups for LTE system .....	14
	Annex 6: Exchange of information for the frequency coordination procedure .....	17
	Annex 7: Global map .....	18

## 1 INTRODUCTION

The representatives of the Administrations of Anguilla (AIA), France (F), St Maarten (SXM) and the State of the Netherlands (HOL) for Saba and St. Eustatius (BES), taking into account the recommendations of the International Telecommunication Union, have concluded this actual Agreement, under Article 6 of the Radio Regulations, on the coordination of frequencies used by land mobile radio communication networks in the spectrum range 694 MHz to 3600 MHz.

This Agreement abrogates the previous one concluded in 2005 between Anguilla (AIA), France (F) and the Netherland Antilles (ATN) in the frequency bands 820 MHz to 2170 MHz.

The geographical area concerned includes the territories of St Maarten (SXM)/Saint-Martin (F), Anguilla (AIA), Saint-Barthélemy (F), Saba and St Eustatius (BES)<sup>1</sup>. A global map of the area is given in **Annex 7**.

This geographical area is part of ITU Region 2. Co-existence between ITU Region 2 frequency plans (especially North American frequency plans: 700 MHz, CDMA/GSM/UMTS/LTE 850 MHz and PCS 1900 MHz systems) and ITU Region 1 frequency plans (especially European frequency plans: 700, 800, 900 MHz, 1800 MHz, UMTS/IMT-2000 "core band" systems), 2.3 GHz and 2.6 GHz requires specific coordination efforts.

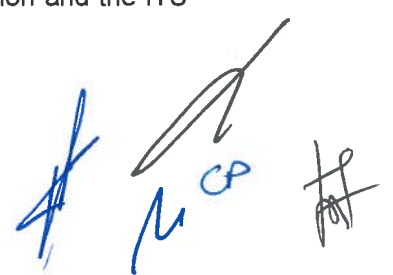
The provisions of this Agreement add to the mandatory requirements of the ITU Constitution and the ITU Radio Regulations, which have both the status of an International Treaty, and in particular:

- No.°197 of the ITU Constitution: "*All stations, whatever their purpose, must be established and operated in such a manner as not to cause harmful interference to the radio services or communications of other Member States or of recognized operating agencies, or of other duly authorized operating agencies which carry on a radio service, and which operate in accordance with the provisions of the Radio Regulations.*" (This exact disposition is repeated in Article°0.4 of the ITU Radio Regulations.)
- No.°198 of the ITU Constitution: "*Each Member State undertakes to require the operating agencies which it recognizes and the other operating agencies duly authorized for this purpose to observe the provisions of No. 197 above.*"
- No.°199 of the ITU Constitution: "*Further, the Member States recognize the necessity of taking all practicable steps to prevent the operation of electrical apparatus and installations of all kinds from causing harmful interference to the radio services or communications mentioned in No. 197 above.*"
- Article°15.2 of the ITU Radio Regulations: "*Transmitting stations shall radiate only as much power as is necessary to ensure a satisfactory service*"
- Articles°15.3, 15.4 & 15.5 of the ITU Radio Regulations: "*In order to avoid interference [...], a) locations of transmitting stations and, where the nature of the service permits, locations of receiving stations shall be selected with particular care; b) radiation in and reception from unnecessary directions shall be minimized by taking the maximum practical advantage of the properties of directional antennae whenever the nature of the service permits*"

In accordance with the above articles and dispositions of the ITU Constitution and the ITU Radio Regulations:

---

<sup>1</sup> Bonaire, also part of the geographical area BES, is not subject to this agreement



- Emissions aiming at Dutch St Maarten (SXM) from other territories must be reprovred;
- Emissions aiming at French Saint-Martin & Saint-Barthélemy (F) from other territories must be reprovred;
- Emissions aiming at Anguilla (AIA) from other territories must be reprovred;
- Emissions aiming at Saba and St. Eustatius (BES) from other territories must be reprovred;
- the location, the output power and the antenna height and pattern of all base stations in the network shall be selected in such a way that their range is confined, as far as possible, to the zone to be covered by the intended service within the national territory. For example, in border areas, directional antennas shall be used in order to minimise the potential interference in adjacent territories.

Taking into account the unique geographical situation of the area of St Maarten (SXM)/Saint-Martin (F), Anguilla (AIA), Saint-Barthélemy (F), Saba and St. Eustatius (BES), this actual frequency coordination Agreement has been established with a view to:

- reducing problems of harmful interference<sup>2</sup> between land mobile radiocommunication systems operating in neighbouring countries;
- optimising the use of spectrum resources in the border areas.

In particular, this Agreement has been established with a view to finding a balanced solution between:

- on the one hand, minimising harmful emissions coming from the neighbouring territories. These harmful emissions may cause harmful interference, harmful coverage (international roaming issues) or may prevent an Administration from utilising / allocating portions of its national spectrum.
- on the other hand, defining satisfactory frequency-usage conditions for land mobile operators to operate their networks while maintaining a good quality of service and good coverage upon the national territory.

This leads Administrations to accept and agree upon a certain level of interference (as defined in Article<sup>1</sup>1.168 of the ITU Radio Regulations<sup>3</sup>) and/or a certain level of coverage from neighbouring countries.

---

<sup>2</sup> Article<sup>1</sup>1.169 of the ITU Radio Regulations

<sup>3</sup> Accepted interference: Interference at a higher level than that defined as permissible interference and which has been agreed upon between two or more administrations without prejudice to other administrations.

Handwritten signatures and initials, including a large signature and the initials 'M CP' and another signature.

## 2 Frequency bands and preferential frequency plan

The detailed spectrum arrangements are given in **Annex 1**. Any additional frequency plan will require a contract valuation to be executed between parties

In order to alleviate the incompatibilities between the different frequency plans the signatory administrations agree on a preferential frequency plan which designates the primary type of uses. All other frequencies not listed in **Annex 1**, can be used on a non-preferential basis, under the conditions defined in section 3.

The agreed preferential plan is described in **Annex 2**.

## 3 Technical and operational requirements

### 3.1 Applicable for GSM systems

The coordination procedure shall be based on the concept of preferential frequencies. The Uplink and Downlink frequency bands shall be split into groups of frequencies which shall be assigned between the four countries as "preferential frequencies". The allocation of preferential frequencies for GSM systems in 900 MHz and 1800 MHz bands is given in **Annex 4**.

#### 3.1.1 Use of preferential frequencies

Base stations using preferential frequencies may be operated without coordination if the predicted mean field strength of each carrier produced by the base station does not exceed the values given in **Annex 3** at a height of 1.5 m above ground.

For St Maarten (SXM) vis-à-vis Saint-Martin (F) (and vice versa) :

- For the base stations with unobstructed propagation across a border, the antenna axis characterized by its azimuth and tilt shall not cut the border line;
- Macro omni-directional antennas shall not be used on the areas close to the border or having line of sight with adjacent territories;
- Optimisation of the radio planning to minimise emissions towards the neighbouring country.

#### 3.1.2 Use of non-preferential frequencies

Country A base stations using non-preferential frequencies shall not cause harmful interference to the neighbouring country B to which these frequencies are preferential frequencies.

Country A base stations using non-preferential frequencies cannot claim protection from harmful interference from the neighbouring country B base stations to which these frequencies are preferential frequencies, if technical and operational requirements applicable

Any use of non-preferential frequencies must be officially coordinated in line with the procedure described section 6.

*Handwritten signature*  
15 June 2016



5/18



### 3.1.3 Network colour codes coordination

The Network Colour Code (NCC) allocation requires coordination to prevent operators from using the same frequency/colour code combination.

In this context the country numbers allow for the following distinction:

Country name	Network colour codes coordination
Saint Martin and Saint Barthélemy	0 and 4
St. Maarten	0 and 7
Anguilla	1 and 6
BES	0 and 7

### 3.2 Applicable for LTE/UMTS system

Base stations may be operated without coordination if the predicted mean field strength of each carrier produced by the base station does not exceed the values given in **Annex 3** at a height of 1.5 m above ground.

For St Maarten (SXM) vis-à-vis Saint-Martin (F) (and vice versa) :

- For the base stations with unobstructed propagation across a border, the antenna axis characterized by its azimuth and tilt shall not cut the border line;
- Macro omni-directional antennas shall not be used on the areas close to the border or having line of sight with adjacent territories;
- Optimisation of the radio planning to minimise emissions towards the neighbouring country.

In order to ensure the optimum network performance, the administrations shall encourage operators to coordinate the use of physical-layer cell-identity groups for LTE, scrambling code for UMTS and other radio parameters given in **Annex 5**.

## 4 ARRANGEMENT FOR PLANNING AT AN OPERATIONAL LEVEL

Further cooperation between the operators sharing overlapping frequency assignments should be encouraged to promote local solutions and coordination efforts. Given the size of St Maarten/St. Martin and the social structure resulting in a lot of interaction between the two sides of the island also further integration and cooperation between the operators on each side is encouraged as long as it stays with the legal framework of French, Dutch St. Martin/ St. Maarten and Anguilla laws.

Administrations should encourage and facilitate the establishment of arrangements between operators of different countries with the aim to enhance the efficient use of the spectrum and the national coverage in the border areas. Those arrangements will be subject to approval by the Administrations concerned.

It's recognised that TDD networks must be synchronized on each side of the border in order to maximize performance and improve compatibility. Operators are encouraged to conclude specific arrangements on this item between themselves.



## 5 SPECTRUM MONITORING

Subsequent monitoring and enforcement will be implemented by the Administrations of Anguilla (AIA), France (F), St Maarten (SXM) and the State of the Netherlands for Saba and St. Eustatius (BES). Joint measurements and site inspections are planned to optimize resources and to prevent double work. When needed St. Maarten can facilitate measurements with the measurement equipment available in its territory based on cost-related compensation between the Administrations.

Time schedule for enforcement:

- Regular monitoring: agreed upon monitoring executed by the administrations in line with the protocol executed in this regard;
- Infringement events: Whenever monitoring shows infringements on the agreed frequency coordination principles, within 6 weeks.
- Intentional emissions: Whenever monitoring shows intentional emissions aiming at providing coverage and mobile services on the neighbouring territory: immediately.

Administrations have executed a protocol in which the procedures relating to the monitoring, compilation and processing of data and sharing of data with each other will take place. The conditions in said protocol are deemed inserted and repeated herein and form an integral part of this agreement.

## 6 ADMINISTRATIVE PROCEDURE

In the instances in which the procedure set forth in the present section is required the requesting Administration must issue a notification in accordance with the stipulations set forth in **Annex 6**, to the Administration that may be affected by the use of the frequency.

In the event of harmful interference however the relevant data for evaluation and treatment of the interference must be exchanged between the Administrations (requesting- and to be affected Administration).

The notification issued by the requesting Administration shall in addition contain information on the projected date for commencement of the use/operation, the centre frequency of its system and the name of the operator to whom the frequency will be assigned.

## 7 HARMFUL INTERFERENCE

If an operator suffers from harmful interference and/or notices a degradation of the quality of service on its network – due to the rise of the field strength coming from a neighbouring Administration for example – it should immediately inform its Administration, which will contact its counterparts.

The time limit to solve problems of established harmful interference shall be no longer than 6 weeks.

A list of contact points for each Administration, including the operators shall be exchanged regularly.

Handwritten signatures and initials in blue ink, including a large signature on the left, a signature with 'CP' below it in the center, and initials on the right.

## 8 REVIEW AND FOLLOW UP OF THE AGREEMENT

Any signatory Administration may request a review of this Agreement. Any part of this Agreement may be revised in the light of future developments, i.e. introduction of new technologies and experience in the operation of the networks covered by the Agreement.

## 9 WITHDRAWAL

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.

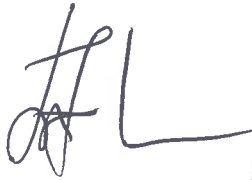
## 10 LANGUAGE OF THE TECHNICAL AGREEMENT

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

## 11 DATE OF ENTRY INTO FORCE

This Agreement will enter into force on the 10<sup>th</sup> of June 2016

For Anguilla



Mr. L. Franklin

For France



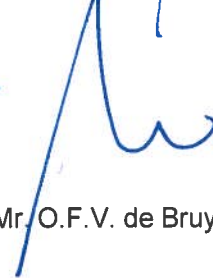
Mr. C. Perros

For Sint Maarten



Mr. A. Carty

For Saba and St Eustatius



Mr. O.F.V. de Bruyne



Mr. K. Banks



**Annex 1: Frequency bands**

<b>Frequency band</b>	<b>3GPP Band(s)</b>	<b>Base receive</b>	<b>Base transmit</b>
US 700	12, 13, 17	698-716 MHz	728-746 MHz
CEPT 700	28	703-733 MHz	758-788 MHz
800	20	832-862 MHz	791-821 MHz
850	5	824-845 MHz	869-894 MHz
900	8	880-915 MHz	925-960 MHz
1800	3	1710-1785 MHz	1805-1880 MHz
1900	2	1850-1910 MHz	1930-1990 MHz
FDD 2100	1	1920-1980 MHz	2110-2170 MHz
TDD 2100	33	1900-1920 MHz	1900-1920 MHz
TDD 2100	34	2010-2025 MHz	2010-2025 MHz
TDD 2300	40	2300-2400 MHz	2300-2400 MHz
LTE FDD 2600	7	2500-2570 MHz	2620-2690 MHz
LTE TDD 2600	38	2570-2620 MHz	2570-2620 MHz
TDD 3500	42	3400-3500 MHz	3500-3600 MHz
FDD 3500	22	3410-3490 MHz	3510-3590 MHz

**Reference documents:**

[Recommendation ITU-R M.1073](#): Digital cellular land mobile telecommunication systems  
[Recommendation ITU-R M.1036](#): Frequency arrangements for implementation of the terrestrial component of International Mobile Telecommunications-2000 (IMT-2000) in the bands 806-960 MHz, 1710-2025 MHz, 2110-2200 MHz and 2500-2690 MHz

**Annex 2: Preferential frequency plan**

Preferential Frequency plan	Base receive	Base transmit	System	Coordination rules
700 MHz band 12 & 17	698-716 MHz	728-746 MHz	LTE	Section 3.2
700 MHz band 13	778-787 MHz	746-756 MHz	LTE	Section 3.2
CEPT 700	703-723 MHz	758-778 MHz	LTE	Section 3.2
800	832-862 MHz	791-821 MHz	LTE	Section 3.2
850	824-840 MHz	869-885 MHz	CDMA/UMTS/GSM/LTE	Section 3.2
900	885-890 MHz	930-935 MHz	UMTS/LTE	Section 3.2
900	890-905 MHz	935-950 MHz	GSM/UMTS/LTE	Sections 3.1 and 3.2 Equitable distribution of preferential frequencies and possibility change to UMTS/LTE with an agreement between the operators
900	905-915 MHz	950-960 MHz	UMTS/LTE	Section 3.2
1800	1715-1725 MHz 1735-1745 MHz 1750-1760 MHz 1770-1780 MHz	1810-1820 MHz 1830-1840 MHz 1845-1855 MHz 1865-1875 MHz	LTE	Section 3.2
1800	1710-1715 MHz 1725-1735 MHz 1745-1750 MHz 1760-1770 MHz 1780-1785 MHz	1805-1810 MHz 1820-1830 MHz 1840-1845 MHz 1855-1865 MHz 1875-1880 MHz	LTE/GSM	Sections 3.1 and 3.2 Equitable distribution of preferential frequencies and possibility change to LTE with an agreement between the operators
1900	1900-1910 MHz	1980-1990 MHz	GSM/UMTS/LTE	Section 3.2
FDD 2100	1920-1980 MHz	2110-2170 MHz	UMTS/LTE	Section 3.2
TDD 2300	2300-2400 MHz	2300-2400 MHz	LTE	Section 3.2
LTE FDD 2600	2500-2570 MHz	2620-2690 MHz	LTE	Section 3.2
LTE TDD 2600	2570-2620 MHz	2570-2620 MHz	LTE	Section 3.2
TDD 3500	3400-3500 MHz	3500-3600 MHz	LTE	Section 3.2
FDD 3500	3410-3490 MHz	3510-3590 MHz	LTE	Section 3.2

*John Brant  
15 June 2016*



### Annex 3: Technical and operational requirements

Base stations may be operated without coordination if the predicted mean field strength of each carrier produced by the base station does not exceed the following values at a height of 1.5 m above ground at the border or coastline of the neighbouring country.

Preferential frequency plan	Base transmit (MHz)	System(s)	Maximum interfering field strength		
			GSM	GSM vs UMTS/LTE	UMTS/LTE using preferential codes/PCI
700 band 12	728-746 MHz	LTE	-	-	59 dBµV/m/5 MHz
700 band 13	778-787 MHz	LTE	-	-	59 dBµV/m/5 MHz
700 band 28	758-778 MHz	LTE	-	-	59 dBµV/m/5 MHz
800	791-831 MHz	LTE	-	-	59 dBµV/m/5 MHz
850	869-885 MHz	CDMA/GSM /UMTS/LTE	PF : 52,5 dBµV/m nPF : 19 dBµV/m	(1)	59 dBµV/m/5 MHz
900	930-960 MHz	GSM/UMTS /LTE (2)	PF : 52,5 dBµV/m nPF : 19 dBµV/m	(1)	59 dBµV/m/5 MHz
1800	1810-1820 MHz 1830-1840 MHz 1845-1855 MHz 1865-1875 MHz	LTE	(1)	-	59 dBµV/m/5 MHz
					59 dBµV/m/5 MHz
					59 dBµV/m/5 MHz
					59 dBµV/m/5 MHz
1800	1805-1810 MHz 1820-1830 MHz 1840-1845 MHz 1855-1865 MHz 1875-1880 MHz	GSM/LTE (2)	PF : 58 dBµV/m nPF : 25 dBµV/m	(1)	65 dBµV/m/5 MHz
1900	1980-1990 MHz	GSM/UMTS /LTE	58 dBµV/m	-	65 dBµV/m/5 MHz
FDD 2100	2110-2170 MHz	UMTS/LTE	-	-	65 dBµV/m/5 MHz
TDD 2100	1900-1920 MHz	UMTS/LTE	-	-	21 dBµV/m/5 MHz
	2010-2025 MHz	UMTS/LTE	-	-	21 dBµV/m/5 MHz
FDD 2600	2620-2690 MHz	LTE	-	-	65 dBµV/m/5 MHz
TDD 2600	2570-2620 MHz	LTE	-	-	32 dBµV/m/5 MHz
TDD 2300 (3)	2300-2400 MHz	LTE	-	-	32 dBµV/m/5 MHz
FDD 3500 (3)	3510-3590 MHz	LTE	-	-	65 dBµV/m/5 MHz
TDD 3500 (3)	3400-3600 MHz	LTE	-	-	32 dBµV/m/5 MHz

In cases of other frequency block sizes  $10 \times \text{Log}_{10}$  (frequency block size/5 MHz) should be added to the field strength values.

If TDD systems are synchronized across the border, FDD trigger values could be applied.

PF: using preferential frequency - nPF : using non-preferential frequency

(1) Requiring arrangements between operators in order to avoid harmful interference between GSM and UMTS/LTE networks

- (2) Equitable distribution of preferential GSM frequencies and possibility change to UMTS or LTE with an agreement between the operators (see Annex 4)
- (3) Administrations recognize existing different services in this band. A more detail coordination procedure must be developed between the Administrations

Handwritten signatures and initials in blue ink, including a large stylized signature, the letters 'CP', and other smaller initials.

**Annex 4: Allocation of preferential frequencies for GSM systems in 900 MHz and 1800 MHz bands**

**1) Preferential frequencies for GSM and UMTS systems in 900 MHz band**

The allocation of preferential frequencies shall be as followed:

Channels	System	Country
1000-1024	UMTS	AIA/SXM/BES/F
1-12	GSM	AIA/SXM/BES
13-24	GSM	F
25-39	GSM	AIA/SXM/BES
40-54	GSM	F
55-64	GSM	AIA/SXM/BES
65-75	GSM	F
76-124	UMTS	AIA/SXM/BES/F

For GSM 900, the formula for center frequency is: Frequency (Uplink) = 890 + 0,2\*n and Frequency (Downlink) = 935 + 0,2\*n, where n = 1 to 124.

**2) Preferential frequencies for GSM and LTE systems in 1800 MHz band**

The allocation of preferential frequencies shall be as followed:

Base receive	Base transmit	System	Country
1710-1715 MHz	1805-1810 MHz	GSM	AIA/SXM/BES
1715-1725 MHz	1810-1820 MHz	LTE	AIA/F/SXM/BES
1725-1730 MHz	1820-1825 MHz	GSM	F
1730-1735 MHz	1825-1830 MHz	GSM	AIA/SXM/BES
1735-1745 MHz	1830-1840 MHz	LTE	AIA/F/SXM/BES
1745-1750 MHz	1840-1845 MHz	GSM	F
1750-1760 MHz	1845-1855 MHz	LTE	AIA/F/SXM/BES
1760-1762,5 MHz	1855-1857,5 MHz	GSM	F
1762,5-1765 MHz	1857,5-1860 MHz	GSM	AIA/SXM/BES
1765-1770 MHz	1860-1865 MHz	GSM	F
1770-1780 MHz	1865-1875 MHz	LTE	AIA/F/SXM/BES
1780-1785 MHz	1875-1880 MHz	GSM	AIA/SXM/BES

DL (MHz)	1805	1810	1820	1825	1830	1840	1845	1855	1858	1860	1865	1875	1880
UL (MHz)	1710	1715	1725	1730	1735	1745	1750	1760	1763	1765	1770	1780	1785
	20 MHz		20 MHz			15 MHz			20 MHz				
Step 1	AIA SXM	LTE	F	AIA SXM	LTE	F	LTE	F	AIA SXM	F	LTE	AIA SXM	
Step 2	LTE		GSM	LTE		GSM	LTE	GSM	GSM	LTE			
Final	LTE												

**Annex 5: Allocation of preferential codes for UMTS system and physical-layer cell-identity groups for LTE system**

In order to ensure the optimum network performance for UMTS and LTE systems deployed in Sint-Maarten (SXM), Saint-Martin (F), Anguilla (AIA), Saint-Barthélemy (F), Saba and Sint-Eustatius (BES), the administrations shall encourage operators to coordinate the use of scrambling code groups for UMTS, physical-layer cell-identity groups for LTE and other radio parameters, in accordance with CEPT Recommendation ECC (01)01, (08)02, 11(04) and (11)05 for UMTS and LTE signals **using the same centre frequency in border areas**.

The country numbers allocated are:

- F: code group of Country 3
- SXM: code group of Country 2
- AIA: code group of Country 1
- BES: Code group of Country 4

**UMTS system**

For the FDD mode; 3GPP TS 25.213 defines 64 "scrambling code groups" in § 5.2.2, numbered {0 to 63}.

	Set A	Set B	Set C	Set D	Set E	Set F
<b>Country 1</b>	0..10	11..20	21..31	32..42	43..52	53..63
Border 1-2						
Zone 1-2-3						
Border 1-3						
Zone 1-2-4						
Border 1-4						
Zone 1-3-4						

	Set A	Set B	Set C	Set D	Set E	Set F
<b>Country 2</b>	0..10	11..21	21..32	32..43	43..53	53..63
Border 2-1						
Zone 2-3-1						
Border 2-3						
Zone 2-1-4						
Border 2-4						
Zone 2-3-4						

	Set A	Set B	Set C	Set D	Set E	Set F
<b>Country 3</b>	0..10	11..21	21..31	32..42	43..52	53..63
Border 3-2						
Zone 3-1-2						
Border 3-1						
Zone 3-1-4						
Border 3-4						
Zone 3-2-4						

	Set A	Set B	Set C	Set D	Set E	Set F
<b>Country 4</b>	0..10	11..21	21..31	32..42	43..52	53..63
Border 4-1						
Zone 4-1-2						
Border 4-2						
Zone 4-2-3						
Border 4-3						
Zone 4-3-1						

	Preferential code
	non-preferential code

Source: ECC Recommendation (08)02, 27 April 2012).

Example: applying this to the area involving AIA, SXM and F results in:

SCRAMBLING CODE GROUPS	0-20	21-42	43-63
AIA	PREFERENTIAL	NON PREFERENTIAL	PREFERENTIAL
SXM	NON PREFERENTIAL	PREFERENTIAL	NON PREFERENTIAL
F	NON PREFERENTIAL	NON PREFERENTIAL	PREFERENTIAL

A similar table can be derived for the area Saint-Barthélemy (F), Sint Maarten (SXM) and Saba and Sint Eustatius (BES) by applying the border 2-3-4.

For the TDD mode, 3GPP TS 25.223 defines 32 "scrambling code groups" in § 7.2, numbered {0 to 31}.

	Set A	Set B	Set C	Set D	Set E	Set F
<b>Country 1</b>	0..4	5..10	11..15	16..20	21..26	27..31
Border 1-2	■	■				■
Zone 1-2-3						
Border 1-3	■	■	■			
Zone 1-2-4		■	■			■
Border 1-4	■		■			■
Zone 1-3-4			■			

	Set A	Set B	Set C	Set D	Set E	Set F
<b>Country 2</b>	0..4	5..10	11..15	16..20	21..26	27..31
Border 2-1			■	■	■	
Zone 2-3-1						
Border 2-3		■				
Zone 2-1-4						■
Border 2-4						■
Zone 2-3-4			■			

	Set A	Set B	Set C	Set D	Set E	Set F
<b>Country 3</b>	0..4	5..10	11..15	16..20	21..26	27..31
Border 3-2	■				■	■
Zone 3-1-2						
Border 3-1				■	■	■
Zone 3-1-4						■
Border 3-4			■			
Zone 3-2-4						

	Set A	Set B	Set C	Set D	Set E	Set F
<b>Country 4</b>	0..4	5..10	11..15	16..20	21..26	27..31
Border 4-1		■		■	■	
Zone 4-1-2						
Border 4-2	■	■			■	
Zone 4-2-3						
Border 4-3				■		
Zone 4-3-1						

Source: Revised ERC Recommendation 01-01

Example: applying this to the area involving AIA, SXM and F results in:

SCRAMBLING CODE GROUPS	0-10	11-20	21-31
AIA	PREFERENTIAL	NON PREFERENTIAL	PREFERENTIAL
SXM	NON PREFERENTIAL	PREFERENTIAL	NON PREFERENTIAL
F	NON PREFERENTIAL	NON PREFERENTIAL	PREFERENTIAL

A similar table can be derived for the area Saint-Barthélemy (F), Sint Maarten (SXM) and Saba and Sint Eustatius (BES) by applying the border 2-3-4.

**LTE system**

3GPP TS 36.211 defines 168 “unique physical-layer cell-identity groups” in § 6.11, numbered 0...167, hereafter called “PCI groups”. Within each PCI group there are three separate PCIs giving 504 PCIs in total. Each country can use all PCI groups away from the border areas.

PCI	Set A	Set B	Set C	Set D	Set E	Set F	PCI	Set A	Set B	Set C	Set D	Set E	Set F
Country 1	0..83	84..167	168..251	252..335	336..419	420..503	Country 2	0..83	84..167	168..251	252..335	336..419	420..503
Border 1-2							Border 2-1						
Zone 1-2-3							Zone 2-3-1						
Border 1-3							Border 2-3						
Zone 1-2-4							Zone 2-1-4						
Border 1-4							Border 2-4						
Zone 1-3-4							Zone 2-3-4						

PCI	Set A	Set B	Set C	Set D	Set E	Set F	PCI	Set A	Set B	Set C	Set D	Set E	Set F
Country 3	0..83	84..167	168..251	252..335	336..419	420..503	Country 4	0..83	84..167	168..251	252..335	336..419	420..503
Border 3-2							Border 4-1						
Zone 3-1-2							Zone 4-1-2						
Border 3-1							Border 4-2						
Zone 3-1-4							Zone 4-2-3						
Border 3-4							Border 4-3						
Zone 3-2-4							Zone 4-3-1						

Source: ECC/REC/(11)04

Example: applying this to the area involving AIA, SXM and F results in:

PCI GROUPS	0-167	168-335	336-503
AIA	PREFERENTIAL	NON PREFERENTIAL	NON PREFERENTIAL
SXM	NON PREFERENTIAL	PREFERENTIAL	NON PREFERENTIAL
F	NON PREFERENTIAL	NON PREFERENTIAL	PREFERENTIAL

A similar table can be derived for the area Saint-Barthélemy (F), Sint Maarten (SXM) and Saba and Sint Eustatius (BES) by applying the border 2-3-4.



## Annex 6: Exchange of information for the frequency coordination procedure

When requesting coordination, at least the following characteristics of base stations shall be forwarded to the Administration to be affected, unless otherwise laid down in bi/multi-lateral agreements:

- a) carrier frequency [MHz]
- b) name of transmitter station
- c) country of location of transmitter station
- d) geographical coordinates [latitude, longitude]
- e) effective antenna height [m]
- f) antenna polarization
- g) antenna azimuth [deg]
- h) directivity in antenna systems or antenna gain [dBi]
- i) effective radiated power [dBW]
- j) expected coverage zone or radius [km]
- k) date of entry into service [month, year]
- l) antenna tilt (deg / Electric and mechanic tilt)
- m) antenna pattern or envelop.

The Administration to be affected shall evaluate the request for coordination and shall within 30 days notify the result of its evaluation to the Administration requesting coordination.

If in the course of the coordination procedure the Administration to be affected requires additional information, it may request such information.

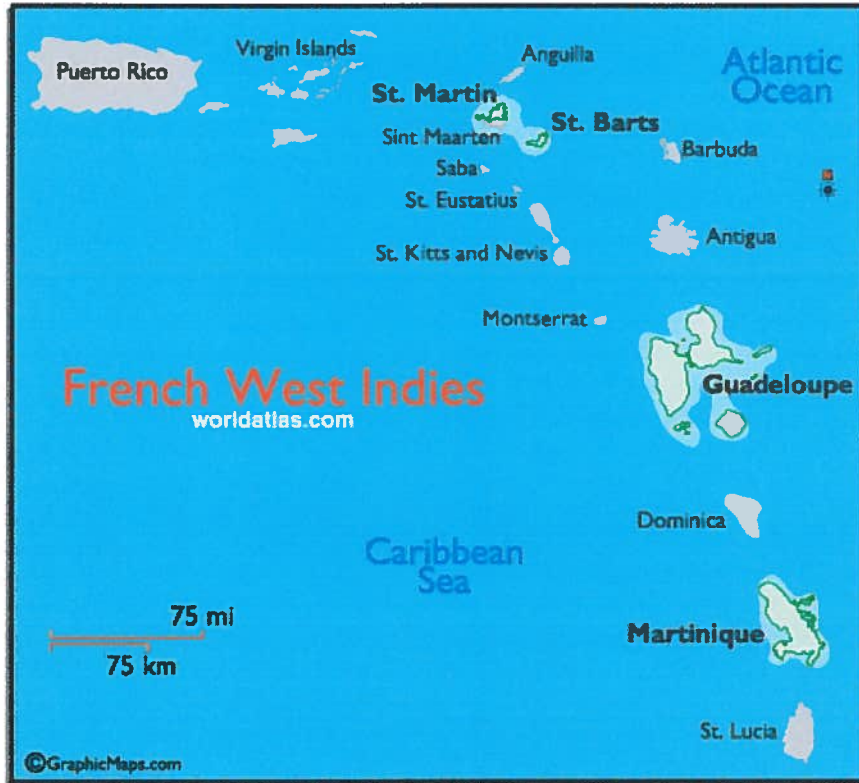
If no reply is received by the Administration requesting coordination within 30 days it may send a reminder to the Administration to be affected. An Administration not having responded within 30 days following communication of the reminder shall be deemed to have given its consent and the code coordination may be put into use solely with the characteristics given in the request for coordination.

The periods mentioned above may be extended by common consent.

In general, Administrations may diverge from the technical parameters, calculation method and procedures described in this Technical Agreement subject to multi-lateral agreements.



Annex 7: Global map



*[Handwritten signature]*  
KCP