



World Radiocommunication Seminar 2016

12-16 December, Geneva, Switzerland

BRINGING INTO USE

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Space Services Department

Radiocommunication Bureau

International Telecommunication Union



OBJECTIVES



GOALS

- Efficient use
- Equitable access

UNDERUSED SPECTRUM/ORBITAL POSITION

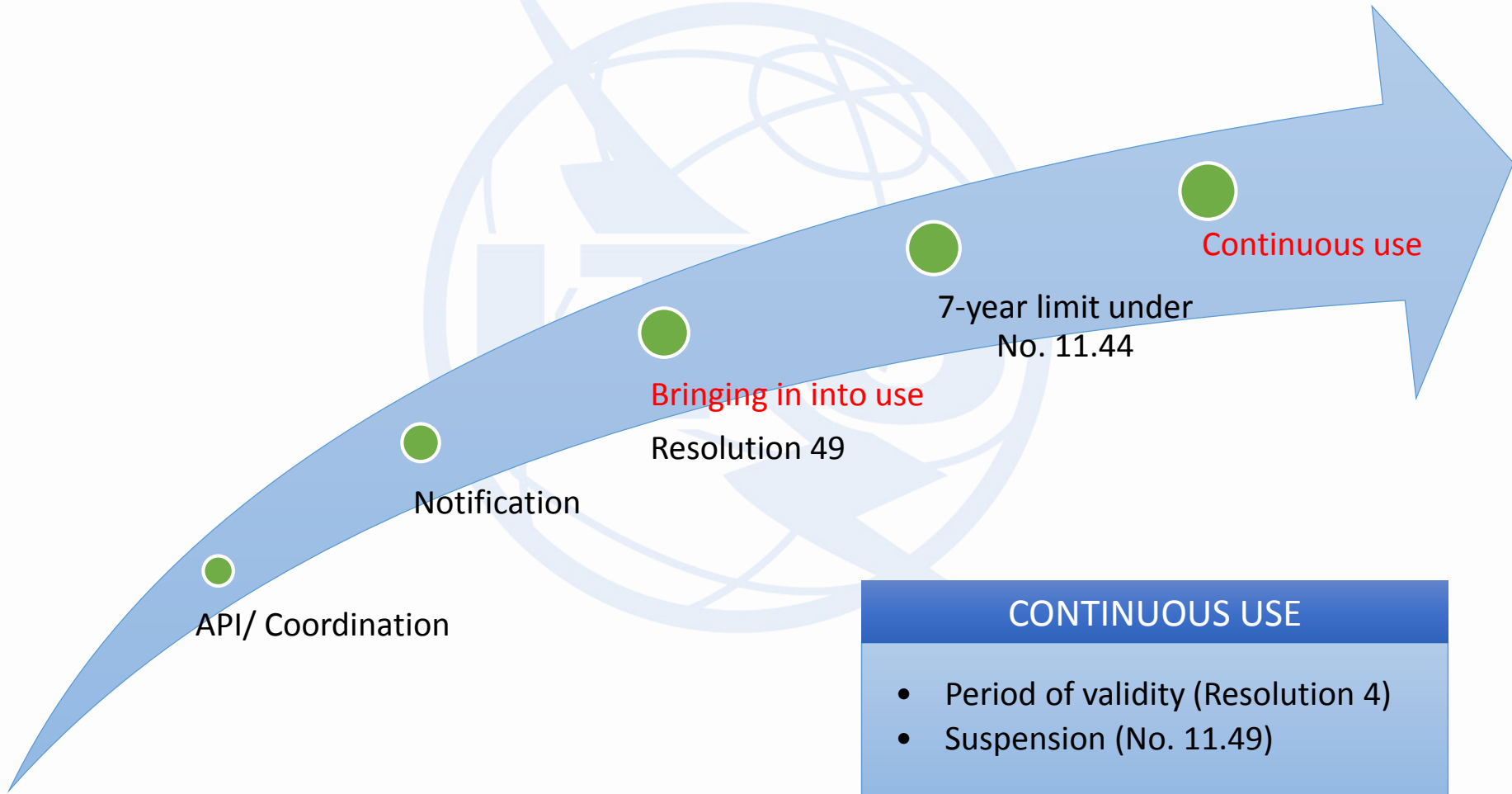
- Multiple filings submissions
- Fictitious recorded assignments

WRC-12 / WRC-15

- Definition of the bringing into use for GSO (**WRC-12**)
- Penalty for late suspension information (**WRC-15**)
- Resolution 40 (**WRC-15**)
- Request of clarification under No. 13.6 (**WRC-12, WRC-15**)

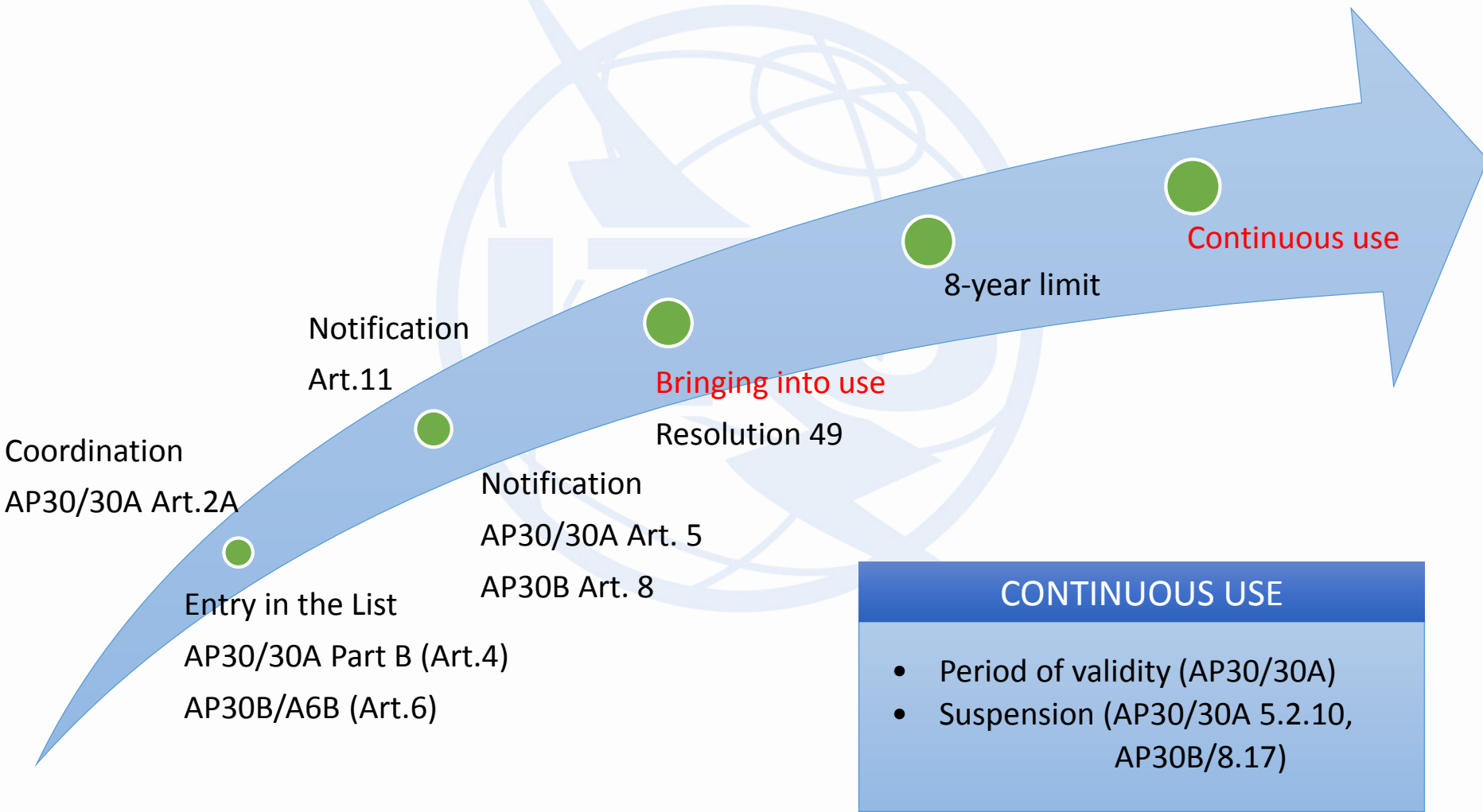


LIFE SPAN OF A SATELLITE NETWORK (Non-planned bands)





LIFE SPAN OF A SATELLITE NETWORK (Planned bands)





BRINGING INTO USE



NOTIFICATION OF THE BRINGING INTO USE

- **First DBIU has to be provided in the Notification submission**
- No more than 3 years from date of Notification (No. 11.25, AP30/30A/5.1.3, AP30A/5.1.7, AP30B/8.1)
- No later than 7 years from the date of receipt of the API (No. 11.44) / 8 years (*Plan*)

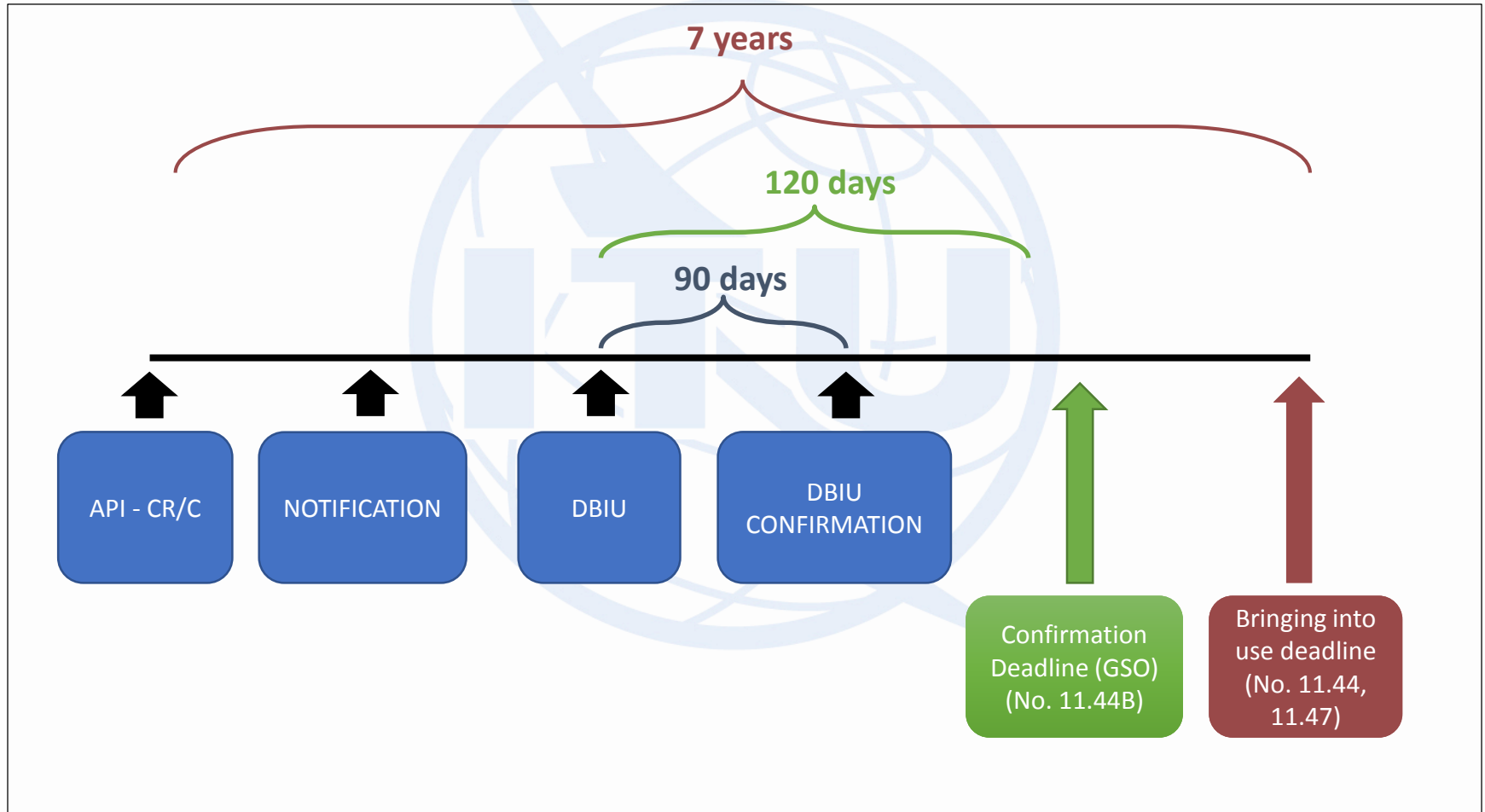
DEFINITION (GSO) – No. 11.44B

- when a space station in the geostationary-satellite orbit with the capability of transmitting or receiving that frequency assignment has been deployed and maintained at the notified orbital position for a continuous period of 90 days.

CONFIRMATION OF THE BRINGING INTO USE

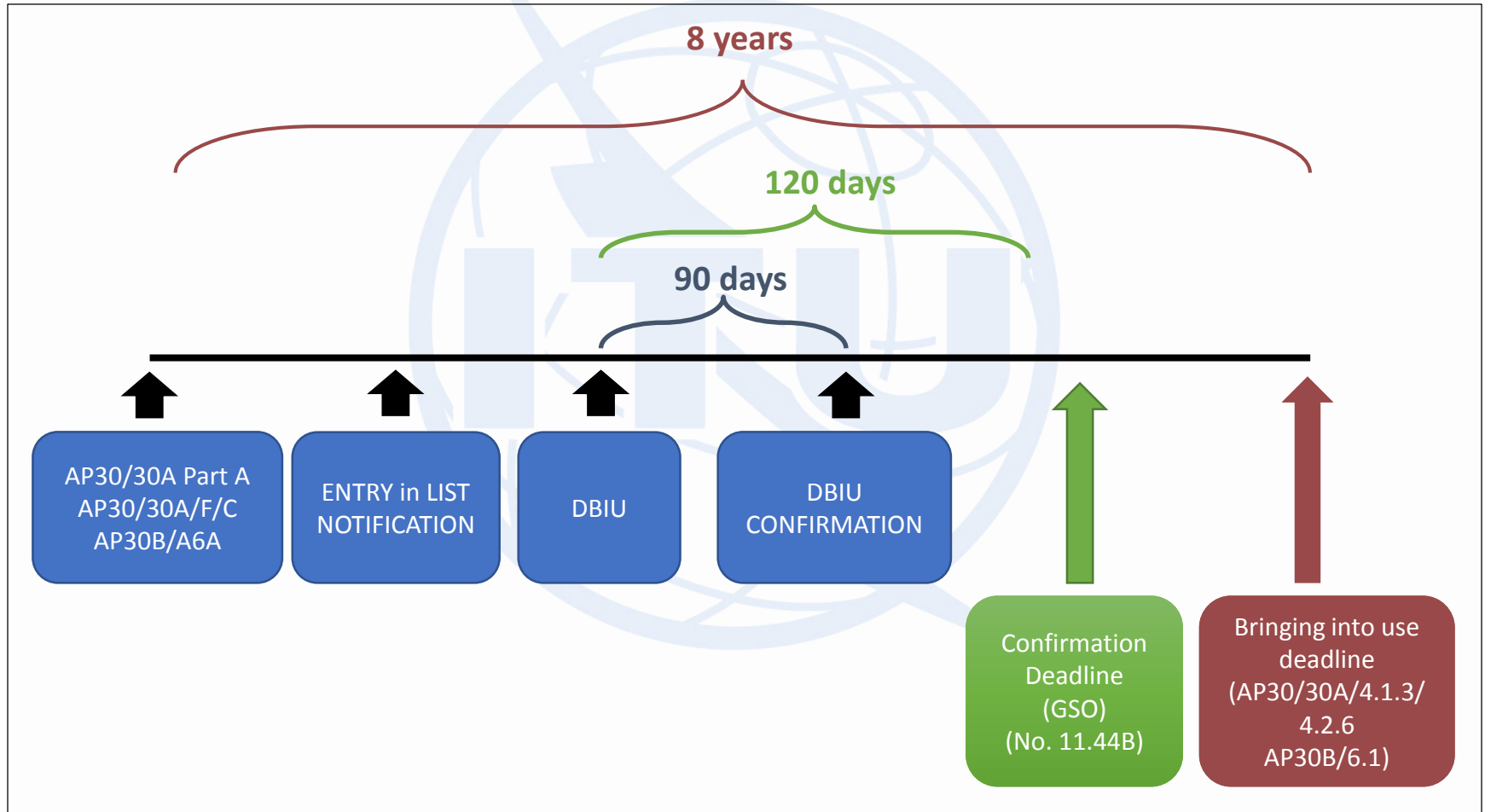
- Shall inform the BR of a continuous period of 90 days (GSO)
- Within 30 days from the end of the continuous period of 90 days (GSO)
- Advisable to provide information like the commercial name of the space station
- Information provided by correspondence to the Bureau

TIME FRAME (Non-planned bands)





TIME FRAME (Planned bands)





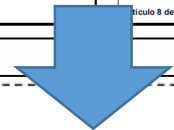
BRINGING INTO USE – PUBLICATION IN THE BRIFIC



- Publication in PART II-S
- At the group level

RESEAU A SATELLITE SATELLITE NETWORK RED DE SATELITE		CHINASAT-ROUTE8		PARTIE PART PARTE	II-S
STATION TERRESTRE EARTH STATION ESTACION TERRESTRE		---		BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	2832 / 08.11.2016
ADM. RESPONSABLE RESPONSABLE ADM. ADM. RESPONSABLE	CHN	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	125 E	NUMERO D'IDENTIFICATION IDENTIFICATION NUMBER NUMERO DE IDENTIFICACION	116500088 / 114500042
RENSEIGNEMENTS RECUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACION RECIBIDA POR LA OFICINA EL					05.01.2016

Assignations de fréquence inscrites dans le Fichier de référence au titre de	Frequency assignments recorded in the Master Register under	Asignaciones de frecuencia inscritas en el Registro con arreglo al título de
X Article 11 du Règlement des radiocommunications	X Article 11 of the Radio Regulations	X Artículo 11 del Reglamento de Radiocomunicaciones
Article 5 des Appendices 30 et/ou 30A	Article 5 of Appendices 30 and/or 30A	Artículo 5 de los Apéndices 30 y/o 30A
Article 8 de l'Appendice 30B	Article 8 of Appendix 30B	Artículo 8 del Apéndice 30B



BR7a/BR7b Group id. 116641119		BR1 Date of receipt 05.01.2016		C2c RR No. 4.4	
A2a Date of bringing into use 09.04.2013		A2b Period of valid. 30		A3a Op. agency 037 A3b Adm. resp. A BR16 Value of type C8b	
BR62 Expiry date for bringing into use 26.02.2014		BR63 Confirmed date of bringing into use 09.04.2013		BR64 Date of receipt of 1st Res49	
BR14 Special Section		C3a Assigned freq. band 40000		C5a Noise temperature 650	
C4a Class of station EC		C3a Assigned freq. band 40000		C5a Noise temperature 650	
C4b Nature of service CP		C6a Polarization type M		C6b Polarization angle	
C11a1 Service area no. 1		C11a2 Service area		C11a3 Service area diagram 1	
A5/A6 Coordinations/Agreements 11.41/9.7		INS J RUS		AUS G KOR PNG SNG THA TON USA VTN	
C2a1 Assigned frequency					
5870 MHz	5990 MHz	6110 MHz	6230 MHz	6350 MHz	6470 MHz
5910 MHz	6030 MHz	6150 MHz	6270 MHz	6390 MHz	6510 MHz
5950 MHz	6070 MHz	6190 MHz	6310 MHz	6430 MHz	6550 MHz
A13 Ref. to Special Sections		C7a Design. of emission		C8a1/C8b1 Max. peak pwr	
API/A /4516		1 2M00G7W--		20.2	
CR/C /2066				C8a2/C8b2 Max. pwr dens. -42.1	
				C8c1 Min. peak pwr 2.2	
				C8c2 Attch.	
				C8c3 Min. pwr dens. -60.1	
				C8c4 Attch.	
				C8e1 C/N ratio 10.8	
				C8e2 Attch.	
C10b1 Assoc. earth station id.		C10b2 Type		C10c1 Geographical coord.	
TYPICAL-5.3		T			
				C10c2 Ctry	
				1 TC CP	
				C10d1/C10d2 Cls. / Nat.	
				48.2 0.66	
				C10d3 Max. iso. gain	
				0.66	
				C10d4 Bmwdth	
				C10d7 Ant. diameter	
				C10d9 Ant. dim. (DGSO)	
				C8g1 Max. aggr. pwr.	
				C8g2 Aggr. bandwidth	
				C8g3 Transp. bandwidth = Aggr. bandwidth	
C10d5a Co-polar antenna pattern					
C10b1 Assoc. earth station id.		Co-polar ref. pattern		Coef. A	
TYPICAL-5.3		REC-580-6			
				Coef. B	
				Coef. C	
				Coef. D	
				Phi1	
				Co-polar rad. diag.	
Findings		2D Date of protection 26.08.2007		13A Conformity with RR A- N- N-	
				13B1 Provision 11.41	
				13B2 Remarks	
				13B3 Date of Review	
13C Remarks E/050116					



BRINGING INTO USE – PUBLICATION IN THE BRIFIC



UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS
BUREAU DES RADIOCOMMUNICATIONS

INTERNATIONAL TELECOMMUNICATION UNION
RADIOCOMMUNICATION BUREAU

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES
OFICINA DE RADIOCOMUNICACIONES

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RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATELITE		USASAT-550		PARTIE PART PARTE	II-S
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA		---		BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	2822 / 21.06.2016
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	USA	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	50 W	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	113500138
RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL					19.04.2016

Confirmation de la date de mise en service des assignations de fréquence inscrites provisoirement dans le Fichier de référence, au titre du		Confirmation of the date of bringing into use of frequency assignments provisionally recorded in the Master Register, under		Confirmación de la fecha de puesta en servicio de las asignaciones de frecuencia inscritas con carácter provisional en el Registro Internacional de Frecuencias, con arreglo al	
X	Numéro 11.47 du Règlement des radiocommunications	X	No.11.47 of the Radio Regulations	X	No.11.47 del Reglamento de Radiocomunicaciones
	§ 5.2.8 de l'Article 5 des Appendices 30 et/ou 30A		§ 5.2.8 of Article 5 of Appendices 30 and/or 30A		§ 5.2.8 del Artículo 5 de los Apéndices 30 y/o 30A
	§ 8.16 de l'Article 8 de l'Appendice 30B		§ 8.16 of Article 8 of Appendix 30B		§ 8.16 del Artículo 8 del Apéndice 30B

Assignations de fréquence inscrites dans le Fichier de référence		Frequency assignments recorded in the Master Register		Asignaciones de frecuencia inscritas en el Registro	
Suspension de l'utilisation au titre du		Suspension of use under		Suspensión de la utilización con arreglo al	
	Numéro 11.49 du Règlement des radiocommunications		No.11.49 of the Radio Regulations		No.11.49 del Reglamento de Radiocomunicaciones
	§ 5.2.10 de l'Article 5 des Appendices 30 et/ou 30A		§ 5.2.10 of Article 5 of Appendices 30 and/or 30A		§ 5.
	§ 8.17 de l'Article 8 de l'Appendice 30B		§ 8.17 of Article 8 of Appendix 30B		§ 8.

Remise en service au titre du		Resumption of use under		Reanudaci	
	Numéro 11.49 du Règlement des radiocommunications		No.11.49 of the Radio Regulations		No.
	§ 5.2.10 de l'Article 5 des Appendices 30 et/ou 30A		§ 5.2.10 of Article 5 of Appendices 30 and/or 30A		§ 5.
	§ 8.17 de l'Article 8 de l'Appendice 30B		§ 8.17 of Article 8 of Appendix 30B		§ 8.

<p>Pour plus d'informations sur les dispositions réglementaires et l'explication des codes ou symboles utilisés dans cette publication, veuillez consulter la Préface.</p>	<p>For more details on the regulatory provisions and the explanation of the codes or symbols used in this publication, please consult the Preface.</p>	<p>Para más explicaci publicaci</p>
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Example of a publication under No. 11.47:
confirmation of the BIU of provisional recorded assignments

B1a Beam designation	B2 Emi-Rcp	BR7a Group id.	BR47 Frequency band (MHz)			A2a Date of bringing into use
CMD	R	113683268	13750	-	14000	20.01.2016
		113683269	13750	-	14000	20.01.2016
		113683270	13750	-	14000	20.01.2016
KR2R	R	113683271	13780	-	14000	20.01.2016
		113683272	13780	-	14000	20.01.2016
		113683273	13780	-	14000	20.01.2016
		113683274	13780	-	14000	20.01.2016
		113683275	13750	-	13770	20.01.2016
		113683276	13750	-	13770	20.01.2016
		113683277	13750	-	13770	20.01.2016
		113683278	13750	-	13770	20.01.2016
		113683279	13757	-	13793	20.01.2016
		113683280	13757	-	13793	20.01.2016
		113683281	13757	-	13793	20.01.2016
		113683282	13757	-	13793	20.01.2016
		113683283	13780	-	14000	20.01.2016
		113683284	13780	-	14000	20.01.2016
		113683285	13780	-	14000	20.01.2016
		113683286	13780	-	14000	20.01.2016
		113683287	13750	-	13770	20.01.2016
		113683288	13750	-	13770	20.01.2016
		113683289	13750	-	13770	20.01.2016
		113683290	13750	-	13770	20.01.2016
113683291	13757	-	13793	20.01.2016		



BRINGING INTO USE - WEB



<http://www.itu.int/net/ITU-R/space/sn1/listinuse/index.asp>

- Status of the bringing into use
- Planned and non-planned bands

Information provided by Administrations
Official publications only in the BRIFIC

Notice ID (SNS)	Satellite Name (SNL Part B)	ADM	ORG	Long_nom	Date of bringing into use	Status	Expiry Date for Bringing Into Use	Provision
up down	up down	up down		up down	up down	up down	up down	up down
103500278	AFRIBSS	USA		21	01.10.1998	C		11.2
103500278	AFRIBSS	USA		21	07.01.1999	C		11.2
102500474	ARABSAT 2-C	ARS	ARB	20	12.12.2003	C		11.2
111500210	ARABSAT 5C-20E	ARS	ARB	20	06.07.2010	C		11.2
115500064	ARABSAT 7C-20E	ARS	ARB	20	20.10.2015	C		11.2
115500064	ARABSAT 7C-20E	ARS	ARB	20	10.03.2019	N	10.03.2019	11.2
102500435	ARTEMIS-21.5E-DR	G		21.5	31.12.1997	C		11.2
102500435	ARTEMIS-21.5E-DR	G		21.5	12.07.2001	C		11.2
102500435	ARTEMIS-21.5E-DR	G		21.5	31.12.2010	C		11.2
106500361	ARTEMIS-21.5E-LM	G		21.5	12.07.2001	C		11.2



SUSPENSION OF USE (Non-planned bands)



SUSPENSION

- For a period of 3 years under No. 11.49
- Inform the BR no later than **6 months** from the date of suspension
- **Publication in a PART II-S and on the web**

RESUMPTION

- No later than 3 years from date of suspension, under No. 11.49
- Considered brought back into use only if conditions of No. 11.49.1 are met
- **Publication in a PART II-S and on the web**

Penalty for late submission (No. 11.49- WRC-15) = Reduction of the 3-year suspension period by the delay of notification of the suspension (day to day reduction after 6 months)

Example: Date of suspension is 01.01.2016, Date of notification of suspension = 01.07.2017
Penalty = 1 year

The date limit of resumption is 01.01.2018 instead of 01.01.2019



SUSPENSION OF USE (Planned bands)



SUSPENSION

- For a period of 3 years under AP30/30A/5.2.10 , AP30B/8.17
- Inform the BR no later than **6 months** from the date of suspension
- **Publication in a PART II-S and on the web**

RESUMPTION

- No later than 3 years from date of suspension, under AP30/30A/5.2.10, AP30B/8.17
- Considered brought back into use only if conditions of AP30/30A footnote 20*bis* or AP30B footnote 14*bis* are met
- **Publication in a PART II-S and on the web**

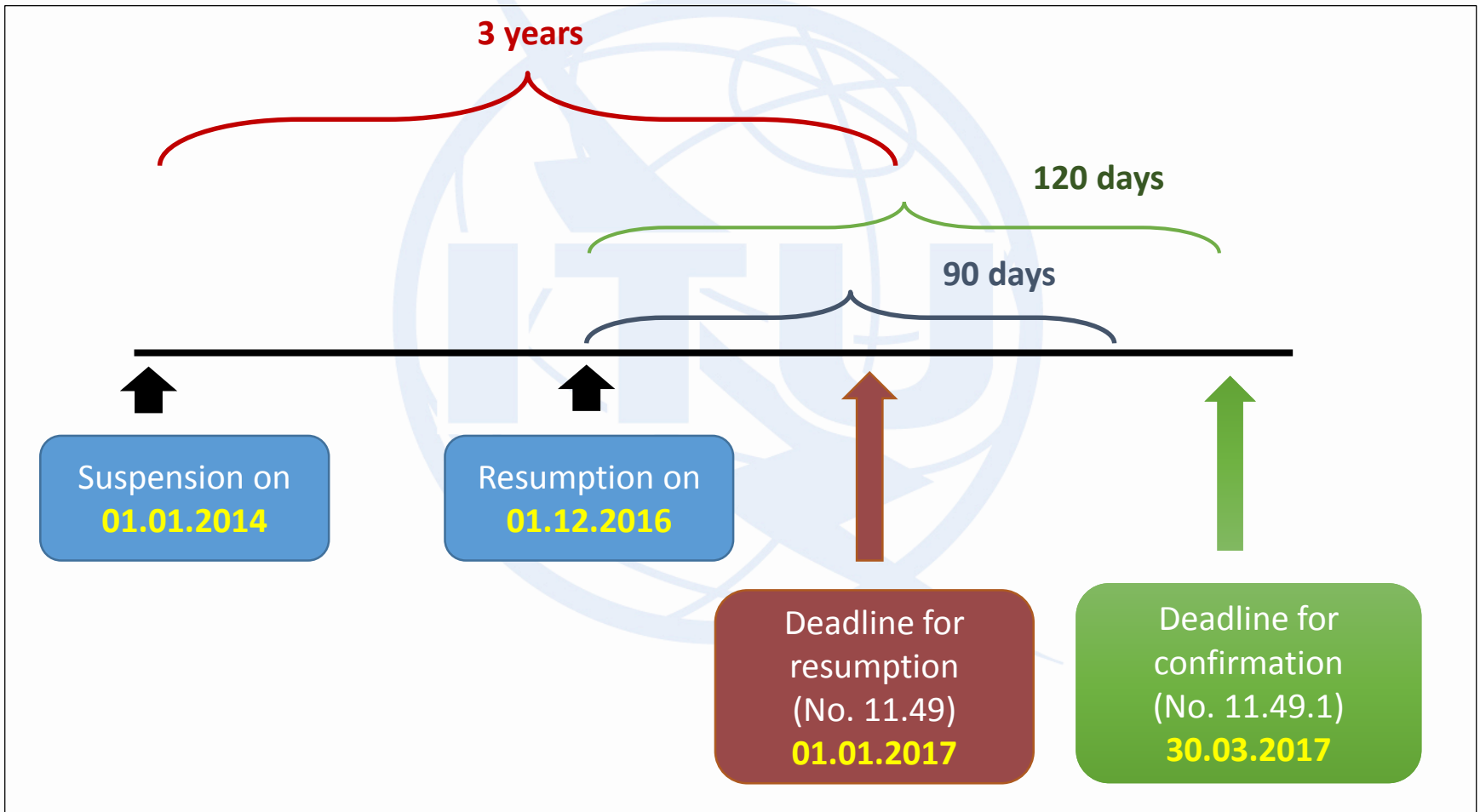
Penalty for late submission (AP30/30A/5.2.10, AP30B/8.17- WRC-15) = Reduction of the 3-year suspension period by the delay of notification of the suspension (day to day reduction after 6 months)

Example: Date of suspension is 01.01.2016, Date of notification of suspension = 01.07.2017
Penalty = 1 year

The date limit of resumption is 01.01.2018 instead of 01.01.2019



EXAMPLE: SUSPENSION (GSO)





SUSPENSION OF USE - WEB



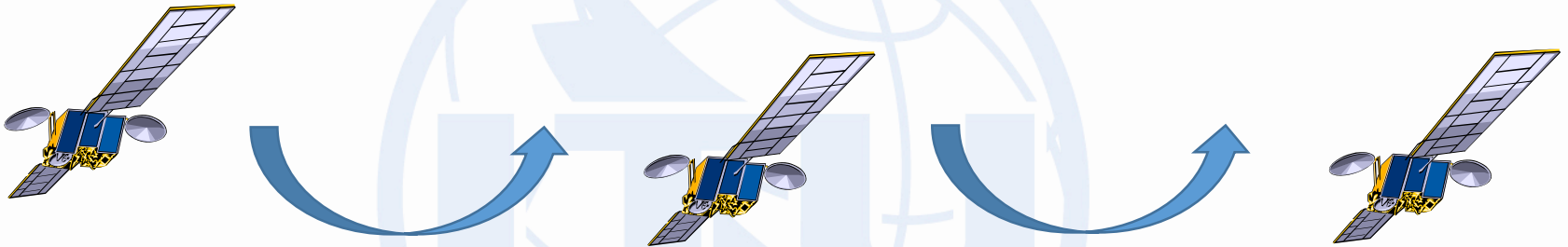
<http://www.itu.int/net/ITU-R/space/snl/list1149/index.asp>

- Status of the suspension
- Planned and non-planned bands
- History with date of resumption

Information provided by Administrations
Official publications only in the BRIFIC

Notice ID (SNS)	Satellite Name (Link to SNL)	ADM	ORG	Long_nom	Status	Type	Date of receipt of the suspension	Date of suspension	Date limit for the resumption	Date of resumption of operation	Provision
up down	up down	up down		up down	up down			up down	up down		up down
113500187	F-SAT-KU-E-7W	F		-7	S	P	27.05.2016	01.10.2015	01.10.2018		11.49
107500250	F-SAT-KU-E-8W	F		-8	S	P	30.03.2016	01.10.2015	01.10.2018		11.49
115500070	YAHSAT-N-20W	UAE		-20	S	T	27.08.2015	28.07.2015	28.07.2018		11.49
114500146	F-SAT-N-E-8W	F		-8	R	P	20.04.2015	02.11.2014		01.10.2015	11.49
92500046	TELECOM-2A	F		-8	R	P	20.04.2015	02.11.2014		01.10.2015	11.49
106500317	TELECOM-3A	F		-8	R	T	20.04.2015	02.11.2014		01.10.2015	11.49
107500300	TELECOM-4A	F		-8	R	P	20.04.2015	02.11.2014		01.10.2015	11.49
92500046	TELECOM-2A	F		-8	R	P	25.04.2013	18.11.2012		28.07.2014	11.49
106500317	TELECOM-3A	F		-8	R	T	25.04.2013	18.11.2012		28.07.2014	11.49
107500300	TELECOM-4A	F		-8	R	P	25.04.2013	18.11.2012		28.07.2014	11.49
90501090	ZSSRD-2	RUS		-16	R	T	27.07.2011	20.01.2011		12.12.2012	11.49

Bringing (back) into use of satellite networks at different orbital locations using one space station



In the case of a space station already used within the last 3 years, to provide:

- Last orbital location used for BIU
- Satellite network previously associated at the previous position
- The date on which it was no longer at the previous position

From 1 January 2018 - Bringing (back) into use will be accepted only if Resolution 40 is completed



RESOLUTION 40

INFORMATION ON THE WEB



http://www.itu.int/net/ITU-R/space/snl/sat_relocation/index.asp

- Information on use of already in-orbit satellite
- Planned and non-planned bands
- Form available on-line

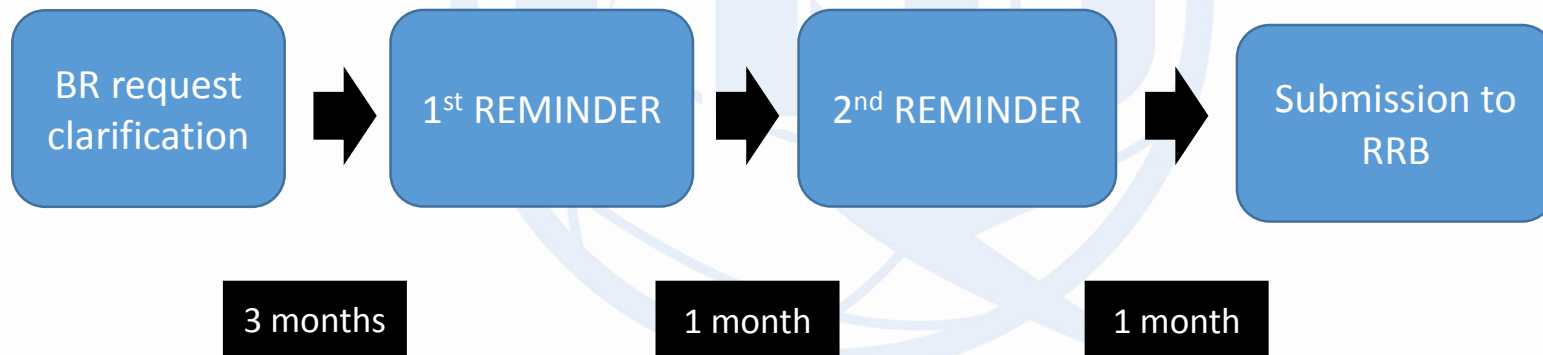
Satellite name	ADM	ORG	Orbital position	DBIU	Provisions	satellite relocation	Previous orbital position	Previous associated satellite network	Date relocated
<u>up down</u>	<u>up down</u>		<u>up down</u>	<u>up down</u>					
USGAE-6M	USA		-120	01.11.2015	11.2	NO			
USABSS-30	USA		-110	30.12.2015	5.1.2/5.1.6	NO			
MEXSAT113 L-CEXT-X	MEX		-113	02.10.2015	11.2	NO			
GIBSAT-129W	G		-129	19.08.2015	11.2	YES	-103	USASAT-24F, USASAT-35H	08.07.2015
CANSAT(107.3W)-XKA	CAN		-107,3	28.06.2015	11.2	NO			
CANSAT(107.3W)-L	CAN		-107,3	10.01.2016	11.2	YES	-106,5	MSAT	04.10.2015



APPLICATION OF ARTICLE 13.6



From reliable information: No bringing into use, no longer or partially in use



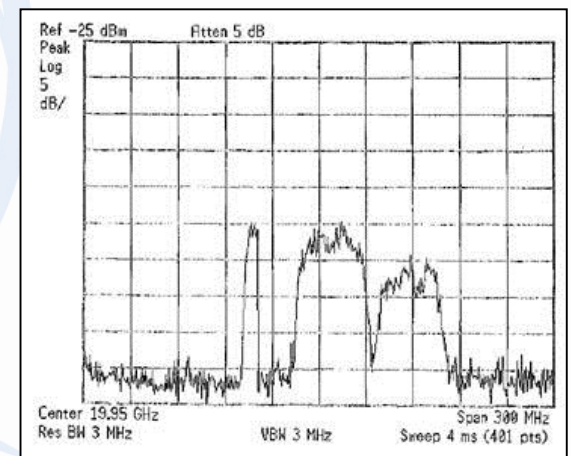
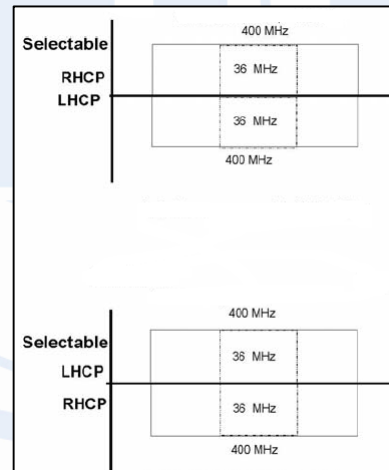
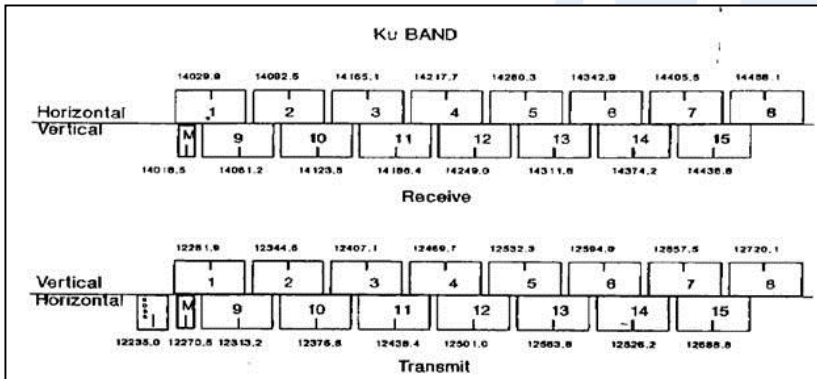
Decision of the RRB



APPLICATION OF ARTICLE 13.6



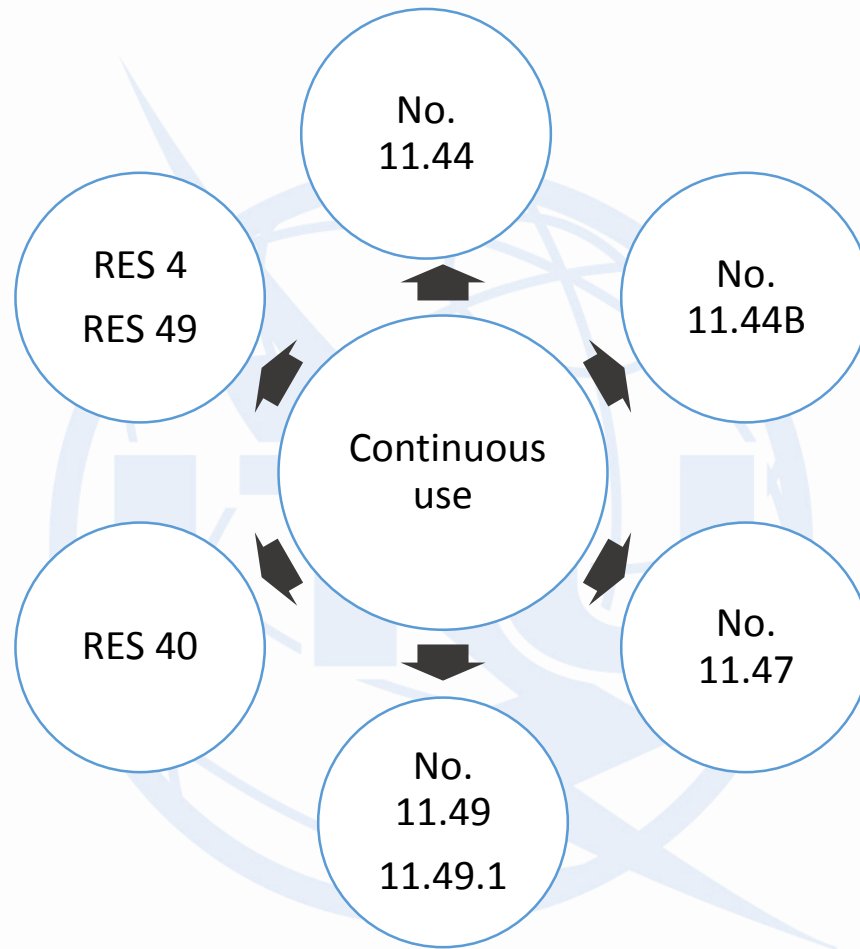
Administration should respond as completely as practicable (Minutes of WRC-15)
Evidence for the whole frequency range



In case of disagreement: Decision of the RRB



SUMMARY



Contact/ Question: spr@itu.int