



30TH WORLD RADIOCOMMUNICATION SEMINAR

24 – 28 October 2022

Geneva, Switzerland

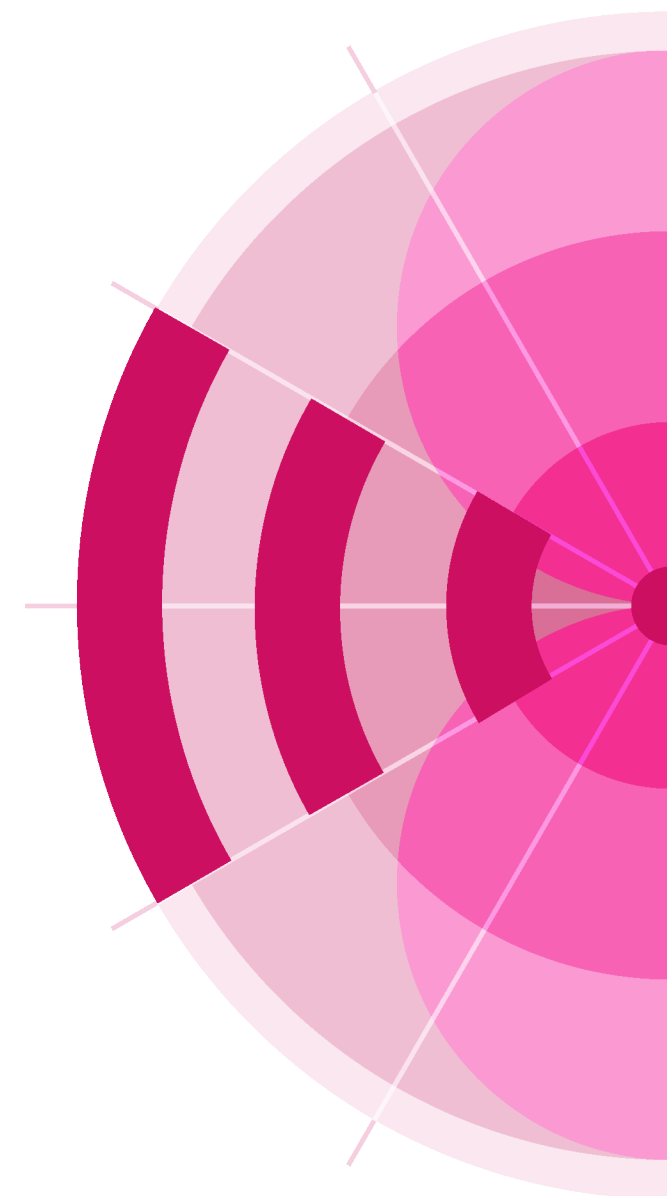
BRINGING INTO USE OF GSO AND NGSO SATELLITE NETWORKS

Diana MARÍN

Space Services Department, BR, ITU

www.itu.int/go/wrs-22

#ITUWRS



OBJECTIVES

KEY ROLE OF ITU

- Rational, equitable, efficient and economical use

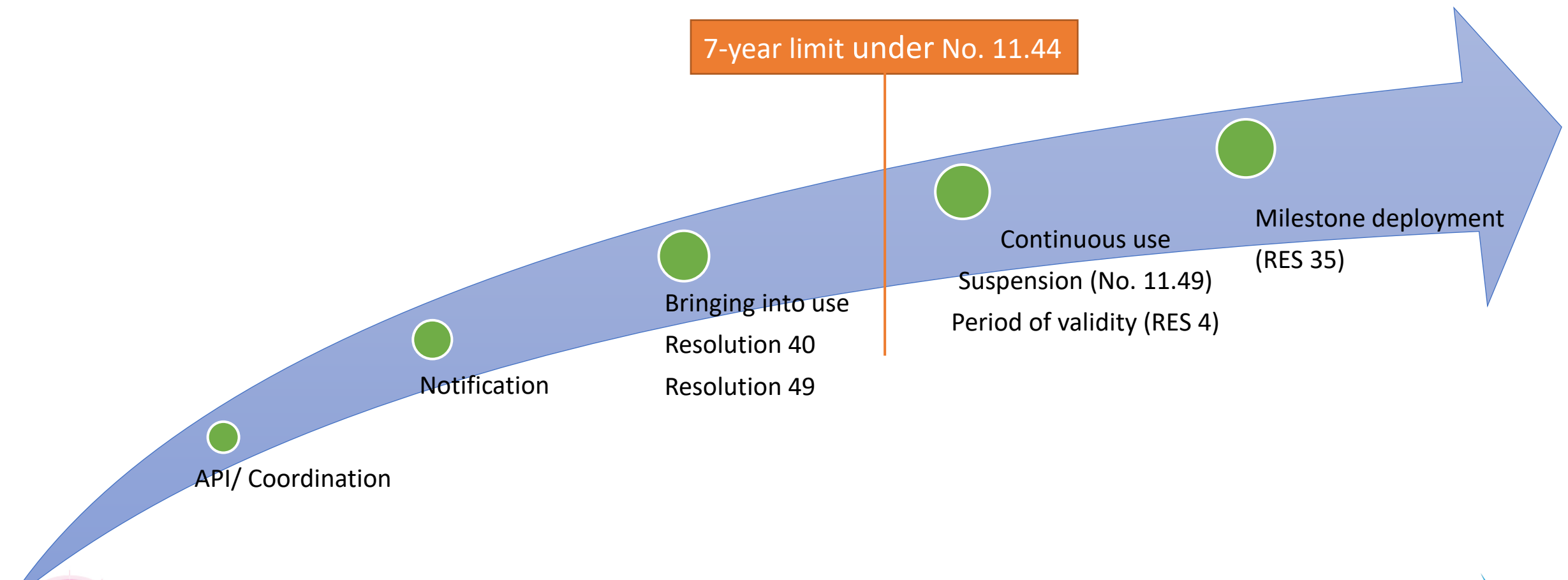
UNDERUSED SPECTRUM/ORBITAL POSITION

- Multiple filings submissions
- Fictitious recorded assignments

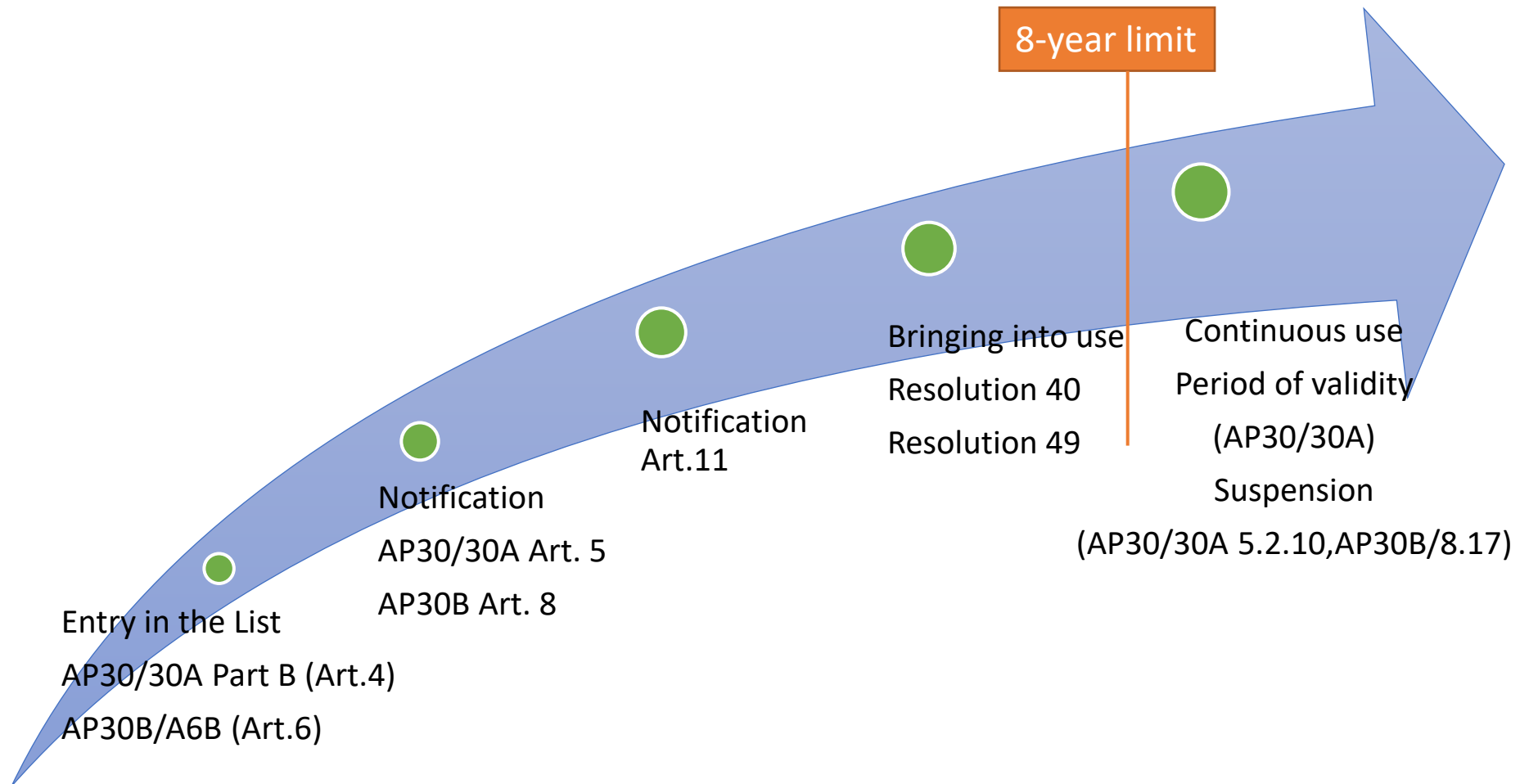
WRC-12 / WRC-15 / WRC-19 / WRC-23

- Definition of the bringing into use for GSO (**WRC-12**)
- Penalty for late suspension information (**WRC-15**)
- Satellite hopping - Resolution 40 (**WRC-15**)
- Request of clarification under No. 13.6 (**WRC-12, WRC-15**)
- Definition of the bringing into use for NGSO (**WRC-19**)
- Constellation deployment – Resolution 35 (**WRC-19**)
- Post –milestone procedure (**will be discussed at WRC-23**)
- Tolerance for NGSO orbital characteristics (**will be discussed at WRC-23**)

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



LIFE SPAN OF A SATELLITE NETWORK (Planned bands)



NOTIFICATION OF DBIU

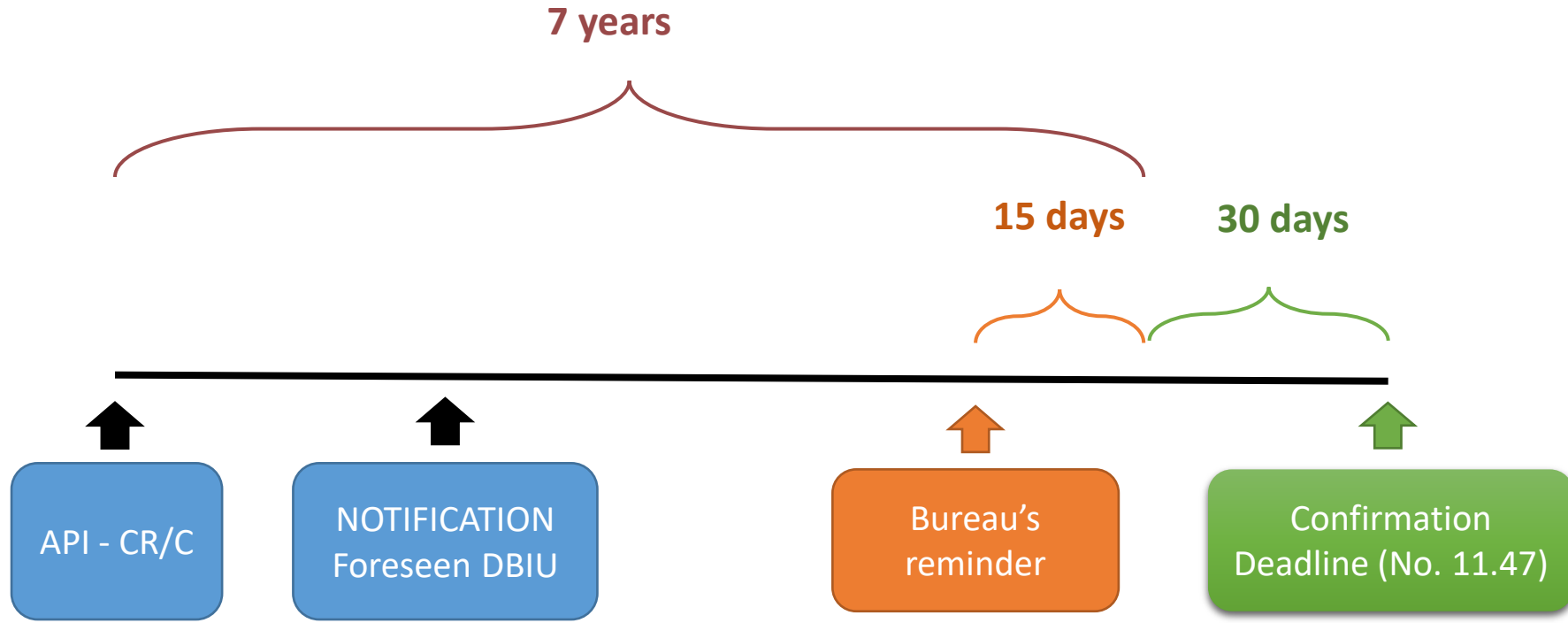
First notification of the DBIU

- To be provided in the Notification submission (appendix 4 information)
- 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/CR (No. **11.44**) / 8 years (Plan)
- DBIU is a foreseen date, if DBIU is later than the date of receipt of the notice
- Provisional entry in the Master Register (No. **11.47**)

Confirmation of the DBIU

- DBIU is a foreseen date, if DBIU is later than the date of receipt of the notice
- Provisional entry in the Master Register (No. **11.47**)
- Actual DBIU shall be communicated not later than 30 days after the 7-year regulatory deadline
- The confirmation of a DBIU should be provided by correspondence to the Bureau

PROVISIONAL RECORDING AND CONFIRMATION



NOTIFICATION OF DBIU – SPECIAL CASES

Short Duration mission (RES 32)

Submission of the Notification after the launch, but no later than 2 months after the BIU

DBIU = date of the launch

Q/V bands (RES 771)

Assignments subject to this Resolution and for which the notification was received before 23 November 2019 shall be brought into use before 23 November 2022 or end of regulatory period if earlier

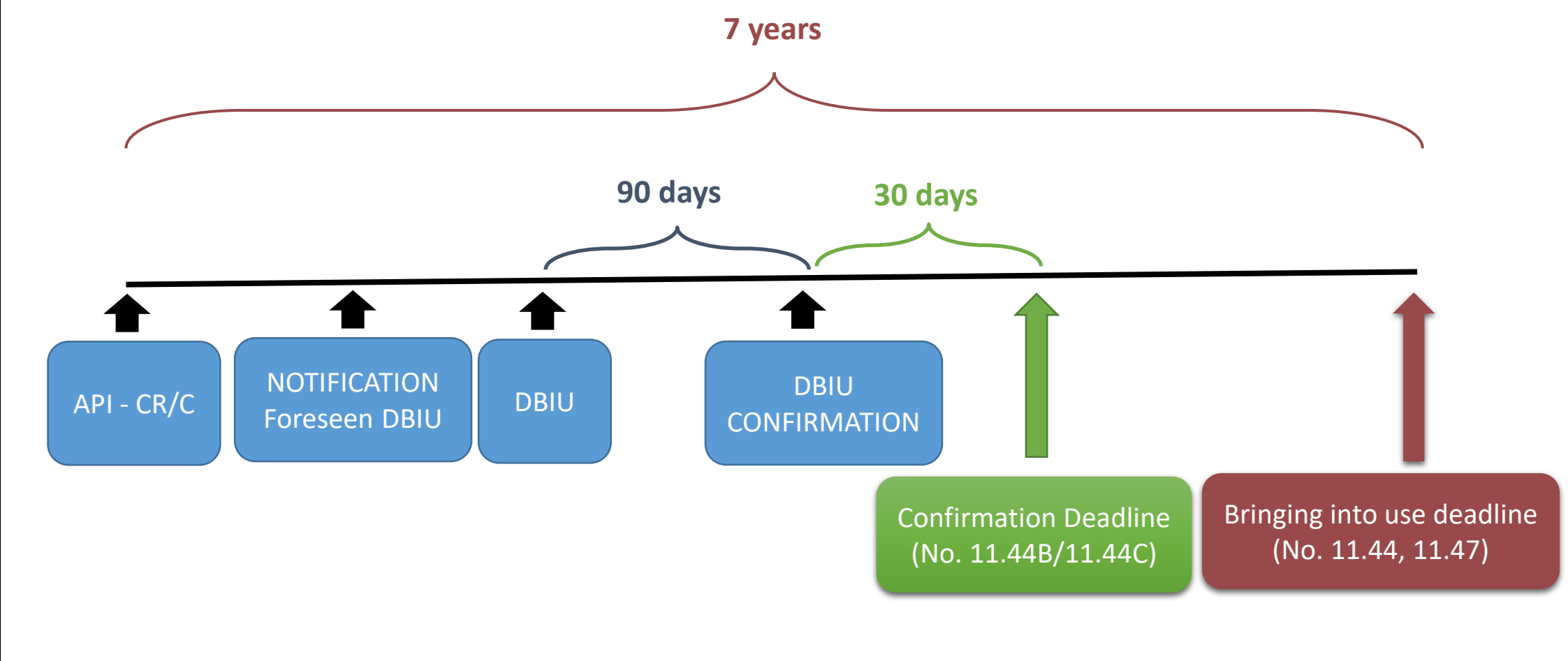
DEFINITION

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 (**No. 11.44B**)

PROCEDURE

- Shall confirm the **capability** of transmitting and receiving
- Shall confirm the continuous period of **90 days**
- Within 30 days from the end of the continuous period of 90 days
- Shall provide mandatory information of **Resolution 40**
- If DBIU more than 120 days prior to the date of receipt: continuous use from the DBIU until the date of receipt (**No. 11.44B.2**)

TIME FRAME (GSO - Non-planned bands)



NGSO NETWORKS IN FSS, MSS AND BSS

CONFIRMATION OF BIU

DEFINITION

a space station with the capability of transmitting or receiving that frequency assignment has been deployed and maintained on one of the orbital plane(s) of the non-geostationary satellite network or system for a continuous period of 90 days, irrespective of the notified number of orbital planes and satellites per orbital plane in the network or system (**No. 11.44C**)

PROCEDURE

- Shall confirm the **capability** of transmitting and receiving, on **one** of the notified orbital plane
- Shall confirm the continuous period of **90 days**
- Shall identify the **orbital plane number** (**No. 11.44C.4**)
- Within 30 days from the end of the continuous period of 90 days
- If DBIU more than 120 days prior to the date of receipt: continuous use from the DBIU until the date of receipt (**No. 11.44C.3**)

NGSO NETWORKS NOT IN FSS, MSS AND BSS EARTH AS REFERENCE BODY

CONFIRMATION OF BIU

DEFINITION

a space station with the capability of transmitting or receiving that frequency assignment has been deployed and maintained on one of the orbital plane(s) of the non-geostationary satellite network or system, irrespective of the notified number of orbital planes and satellites per orbital plane in the network or system (**No. 11.44D**)

PROCEDURE

- Shall confirm the **capability** of transmitting and receiving
- Shall identify the **orbital plane number** (**No. 11.44D.3**)

NGSO NETWORKS

NOT IN FSS, MSS AND BSS

NOT EARTH AS REFERENCE BODY

CONFIRMATION OF BIU

DEFINITION

a space station with the capability of transmitting or receiving that frequency assignment has been deployed in accordance with the notification information (**No. 11.44E**)

PROCEDURE

- Shall confirm the **capability** of transmitting and receiving

EARTH STATIONS

CONFIRMATION OF DBIU

First notification of the DBIU

- To be provided in the Notification submission (appendix 4 information)
- DBIU is considered as actual, if DBIU is before the date of receipt of the notice
- DBIU is a foreseen date, if DBIU is later than the date of receipt of the notice
- Provisional entry in the Master Register (No. **11.47**)

Confirmation of the DBIU

- Actual/modified DBIU shall be communicate not later than 30 days after the notified DBIU
- The confirmation of a DBIU should be provided by correspondence to the Bureau
- Not earlier than the corresponding DBIU for the associated space station

AVAILABILITY OF THE INFORMATION

PUBLICATION (BRIFIC)

- In PART II-S of the BRIFIC
- The only official information

UNION INTERNATIONALE DES TELECOMMUNICATIONS BUREAU DES RADIOCOMMUNICATIONS		INTERNATIONAL TELECOMMUNICATION UNION RADIOCOMMUNICATION BUREAU		UNIÓN INTERNACIONAL DE TELECOMUNICACIONES OFICINA DE RADIOCOMUNICACIONES	
RESEAU A SATELLITE SATELLITE NETWORK RED DE SATELITE		CHINASAT-ROUTE8		PARTIE PART PARTE	
STATION TERRESTRE EARTH STATION ESTACION TERRESTRE		---		BRIFIC / DATE BRIFIC / DATE BRIFIC / FECHA	
ADM. RESPONSABLE RESPONSABLE ADM. ADM. RESPONSABLE		CHN		116500088 / 114500042	
LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL		125 E		NUMERO D'IDENTIFICATION IDENTIFICATION NUMBER NUMERO DE IDENTIFICACION	
RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN 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	

SPACE SERVICES WEBPAGE

- List of frequency assignments brought into use
- For information only
- Some information not yet verified by the Bureau

Notice ID (SRS)	Satellite Name (SRS Part II)	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
111500243	CSDRN-M	RUS		95	06.02.2019	N	06.02.2019	11.2
118500194	DFH-5-01A	CHN		94.2	01.09.2018	I	16.09.2018	11.2
118500200	INMARSAT-KA 83.5E	G		83.5	08.08.2017	C		11.2
118560006	MEASAT-91.5E-BSS	MLA		91.5	08.03.2019	N	08.03.2019	5.1.2
117500301	NEW DAWN 34	PNG		85	29.10.2017	C		11.2
118500072	N-SAT2-93E	J		93	15.12.2018	N	15.12.2018	11.2
118560010	NSS-BSS 100E	HOL		100	03.08.2018	C		5.1.2
118560011	NSS-BSS 100E	HOL		100	03.08.2018	C		5.1.6
118500185	SE-KA-83.5E	NOR		83.5	08.08.2017	C		11.2
118500045	USLL-PAC3	USA		92	20.11.2017	C		11.2
118500046	USLL-PAC4	USA		100	17.01.2018	C		11.2

SRS DATABASE (BRIFIC)

- Information for each group: table grp
- Fields d_inuse and f_biu

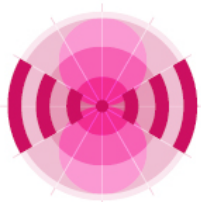
BIU – PUBLICATION IN THE BRIFIC - 1

- Publication in PART II-S
- For each group

UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS BUREAU DES RADIOCOMMUNICATIONS		INTERNATIONAL TELECOMMUNICATION UNION RADIOCOMMUNICATION BUREAU		UNIÓN INTERNACIONAL DE TELECOMUNICACIONES OFICINA DE RADIOCOMUNICACIONES	
RESEAU SATELLITE SATELLITE NETWORK RED DE SATELITE			CHINASAT-ROUTE8		II-S
STATION TERRENE EARTH STATION ESTACION TERRENA			---		BRIFIC / DATE BRIFIC / 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 REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN 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															
A2 Date of bringing into use		09.04.2013		A2b Period of valid.		30		A3a Op. agency		037													
BR62 Expiry date for bringing into use		26.02.2014		BR6 Confirmed date of bringing into use		09.04.2013		BR16 Value of type C8b															
BR14 Special Section				BR64 Date of receipt of 1st Res49																			
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 9.7		X O		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	6590	MHz	6705	MHz								
5910	MHz	6030	MHz	6150	MHz	6270	MHz	6390	MHz	6510	MHz	6630	MHz										
5950	MHz	6070	MHz	6190	MHz	6310	MHz	6430	MHz	6550	MHz	6670	MHz										
A13 Ref. to Special Sections				C7a Design. of emission		C8a1/C8b1 Max. peak pwr		C8a2/C8b2 Max. pwr dens.		C8c1 Min. peak pwr		C8c2 Attch.		C8c3 Min. pwr dens.		C8c4 Attch.		C8e1 C/N ratio		C8e2 Attch.			
API/A		/4516		1		2M00G7W--		20.2		-42.1		2.2		-60.1				10.8					
CR/C		/2066																					
C10b1 Assoc. earth station id.		C10b2 Type		C10c1 Geographical coord.		C10c2 Ctry		C10d1/C10d2 Cls. / Nat.		C10d3 Max. iso. gain		C10d4 Bmwidth		C10d7 Ant. diameter		C10d9 Ant. dim. (DGSO)		C8g1 Max. aggr. pwr.		C8g2 Aggr. bandwidth		C8g3 Transp. bandwidth = Aggr. bandwidth	
TYPICAL-5.3		T						1 TC CP		48.2		0.66											
C10d5a Co-polar antenna pattern																							
C10b1 Assoc. earth station id.		Co-polar ref. pattern		Coef. A		Coef. B		Coef. C		Coef. D		Phi1		Co-polar rad. diag.									
TYPICAL-5.3		REC-580-6																					
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																					



BIU – PUBLICATION IN THE BRIFIC - 2

UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS BUREAU DES RADIOCOMMUNICATIONS		INTERNATIONAL TELECOMMUNICATION UNION RADIOCOMMUNICATION BUREAU		UNIÓN INTERNACIONAL DE TELECOMUNICACIONES OFICINA DE RADIOCOMUNICACIONES	
RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATELITE		USASAT-550		PARTIE PART PARTE	
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA		---		BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE		LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL		NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	
USA		50 W		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		X			
Numéro 11.47 du Règlement des radiocommunications		No.11.47 of the Radio Regulations			
§ 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			
§ 8.16 de l'Article 8 de l'Appendice 30B		§ 8.16 of Article 8 of Appendix 30B			
Assignations de fréquence inscrites dans le Fichier de référence		Frequency assignments recorded in the Master Register			
Suspension de l'utilisation au titre du		Suspension of use under			
Numéro 11.49 du Règlement des radiocommunications		No.11.49 of the Radio Regulations			
§ 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			
§ 8.17 de l'Article 8 de l'Appendice 30B		§ 8.17 of Article 8 of Appendix 30B			
Remise en service au titre du		Resumption of use under			
Numéro 11.49 du Règlement des radiocommunications		No.11.49 of the Radio Regulations			
§ 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			
§ 8.17 de l'Article 8 de l'Appendice 30B		§ 8.17 of Article 8 of Appendix 30B			
Pour plus d'informations sur les dispositions réglementaires et l'explication des codes ou symboles utilisés dans cette publication, veuillez consulter la Préface .		For more details on the regulatory provisions and the explanation of the codes or symbols used in this publication, please consult the Preface .			

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		



BIU - INFORMATION ON THE WEB

- Status of the bringing into use
- Planned and non-planned bands
- <http://www.itu.int/net/ITU-R/space/snl/listinuse/index.asp>

Information provided by Administrations
Official publications only in the BRIFIC
Display from PART I-S

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
111500243	CSDRN-M	RUS		95	06.02.2019	N	06.02.2019	11.2
118500194	DFH-5-01A	CHN		94.2	01.09.2018	I	16.09.2018	11.2
118500200	INMARSAT-KA 83.5E	G		83.5	08.08.2017	C		11.2
118560006	MEASAT-91.5E-BSS	MLA		91.5	08.03.2019	N	08.03.2019	5.1.2
117500301	NEW DAWN 34	PNG		85	29.10.2017	C		11.2
118500072	N-SAT2-93E	J		93	15.12.2018	N	15.12.2018	11.2
118560010	NSS-BSS 100E	HOL		100	03.08.2018	C		5.1.2
118560011	NSS-BSS 100E	HOL		100	03.08.2018	C		5.1.6
118500185	SE-KA-83.5E	NOR		83.5	08.08.2017	C		11.2
118500045	USLL-PAC3	USA		92	20.11.2017	C		11.2
118500046	USLL-PAC4	USA		100	17.01.2018	C		11.2

SUSPENSION OF USE

(No. 11.49, AP30/30A/5.2.10, AP30B/8.17)

SUSPENSION

- For a period of 3 years
- Inform the BR no later than **6 months** from the date of suspension
- Penalty for late suspension
- **Publication in a PART II-S and on the web**

RESUMPTION

- Information shall be communicated not later than 30 days after the end of suspension
- BBIU procedure like BIU procedure
- Resolution 40 for GSO
- **Publication in a PART II-S and on the web**

Penalty for late submission = 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 01.01.2022

Date of notification of suspension = 01.07.2023

Penalty = 1 year

The date limit of resumption is 01.01.2024 instead of 01.01.2025

SUSPENSION OF USE INFORMATION ON THE WEB

- Status of the suspension
- Planned and non-planned bands
- History with date of resumption
- <https://www.itu.int/net/ITU-R/space/snl/list1149/index.asp>

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
117500252	KYPROS-APHRODITE-2	CYP		90	S	T	02.04.2018	28.12.2017	28.12.2020		11.49
105500223	DRTS-90.75E	J		90.75	S	T	26.01.2018	31.07.2017	31.07.2020		11.49
112500244	N-SAT-90.75E	J		90.75	S	T	26.01.2018	31.07.2017	31.07.2020		11.49
115500060	FYGEOSAT-99.5E	CHN		99.5	R	T	19.06.2017	18.05.2017		13.05.2018	11.49
316500227	MEASAT-1A	MLA		91.5	S	P	14.04.2017	15.03.2017	15.03.2020		11.49
115500060	FYGEOSAT-99.5E	CHN		99.5	R	T	16.11.2015	22.05.2015		11.12.2016	11.49
113500084	JMCS-93E	J		93	R	T	14.05.2015	19.11.2014		25.02.2017	11.49
113500113	N-SAT-93E	J		93	R	T	14.05.2015	19.11.2014		25.02.2017	11.49
111500243	CSDRN-M	RUS		95	R	P	24.12.2012	29.11.2012		28.04.2014	11.49

RESOLUTION 40 (WRC-15)

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



Inform if the space station has previously been used within the last 3 years.
In case previously used, to provide:


- Last orbital location used for BIU
- Satellite network associated at the previous position
- The date on which it was not longer at the previous position

Bringing (back) into use will be accepted only if information requested by the Resolution 40 are provided

RESOLUTION 40

INFORMATION ON THE WEB

- Information on use of already in-orbit satellite
- Planned and non-planned bands
- http://www.itu.int/net/ITU-R/space/snl/sat_relocation/index.asp
- Form available on-line


RESOLUTION 40 (WRC-15)

Use of one space station to bring frequency assignments to geostationary-satellite networks at different orbital locations into use within a short period of time

Satellite networks for which frequency assignments have been brought into use, or brought back into use after suspension:

AP4 items		
Identity of the Satellite Network	A.1.a	
Notifying Administration	A.1.f.1	
Nominal Orbital Position	A.4.a.1	
Date of bringing into use (or bringing back into use after suspension)	A.2.a	

The bringing into use, or bringing back into use after suspension has been accomplished with a space station that has previously been used to bring into use, or resume the use of, frequency assignments at a different orbital location within the three years prior to the date of submission of this information:

	YES	NO
a) Last orbital location where the space station was used to bring into use, or resume the use of, frequency assignments	<input type="radio"/>	<input type="radio"/>
b) Satellite network(s) with which the frequency assignments in a) above were associated		
c) The date on which the space station was no longer maintained at the orbital location in a) above		

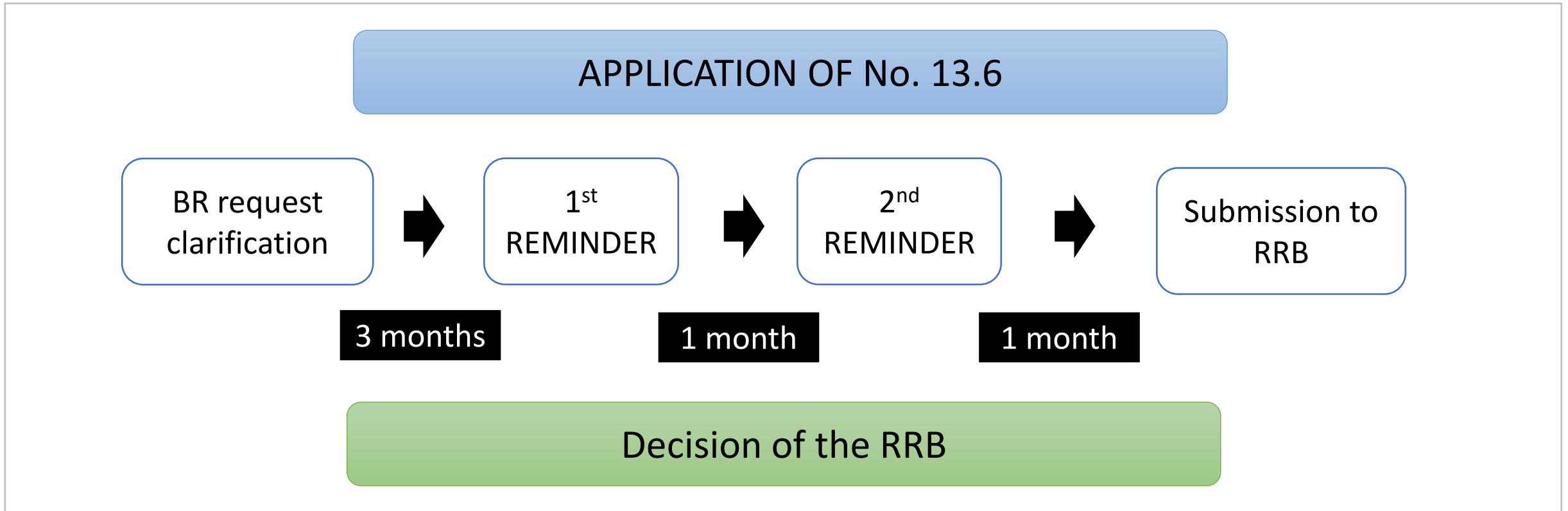
Form to be sent by the Administration to bmail@itu.int.

► [Form to submit Resolution 40 data to the Bureau](#)

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

VERIFICATION OF THE BIU AND CONTINUOUS USE (No. 13.6)

From reliable available information: Not brought into use (**11.44.3, 11.44B.1, 11.44C.2, 11.44D.2** and **11.44E.1**), no longer in use



VERIFICATION BY THE BUREAU

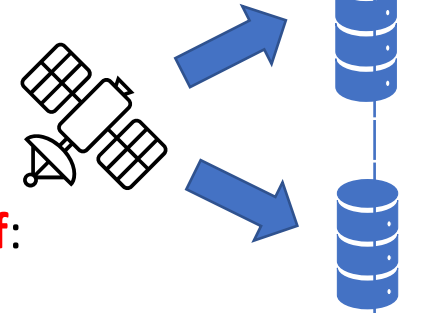
GSO

Position: +/- 0.5 degree

Frequency bands: capability of receiving/transmitting the notified assignments

Extend to all filings of the ADM at the same orbital position

Single satellite not used simultaneously at different orbital positions



Note: A single satellite can be used for several networks at different orbital positions **only if:**

- Position: +/- 0.5 degree
- No overlapping bandwidth

See RoP concerning the simultaneous bringing into use of multiple geostationary satellite networks with a single satellite (approved in the 89th meeting of the RRB)

NGSO

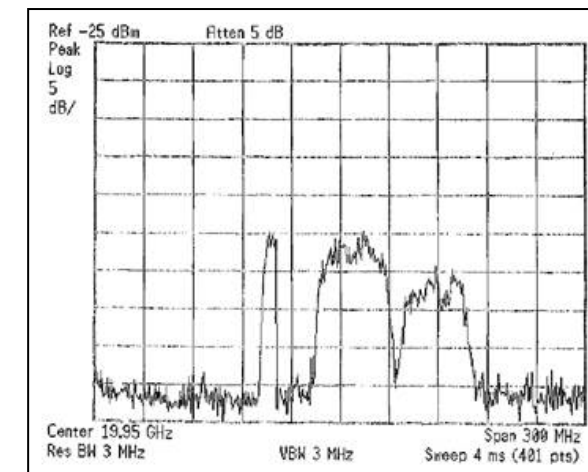
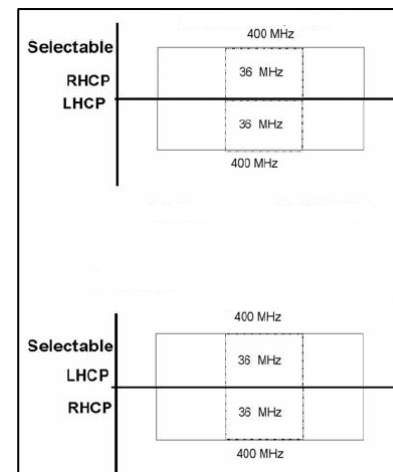
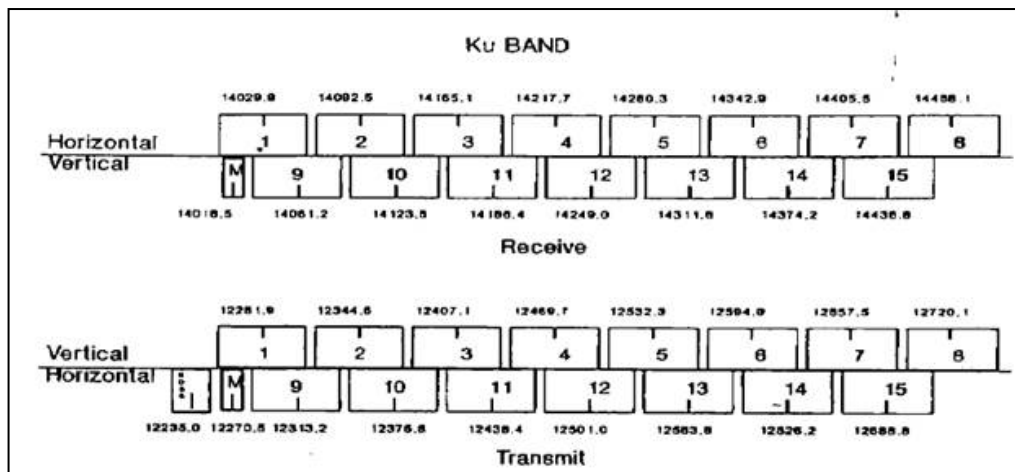
Orbital parameters

Frequency bands: capability of receiving/transmitting the notified assignments

Single satellite not used simultaneously for several satellite systems with different orbital parameters

ANSWER TO A REQUEST UNDER ARTICLE 13.6

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



Thank you!

ITU – Radiocommunication Bureau

Questions to brmail@itu.int or diana.marin@itu.int

