

ITUEvents

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**Implementing your Plan or
Obtaining an additional
use/additional system
in Appendix
30/30A/30B**

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**ITU HQ Geneva,
6 December, 2018**

Frequency Allocation

- For the use of **Broadcasting-Satellite Service (GSO BSS)** in :
 - 11.7 - 12.5 GHz in Region 1
 - 11.7 - 12.2 GHz in Region 3
 - 12.2 - 12.7 GHz in Region 2

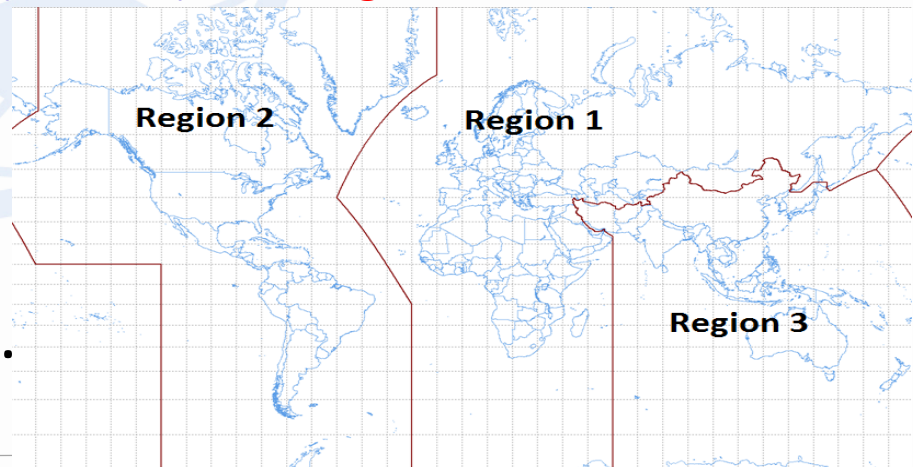
Shall apply provisions of **Appendix 30.**

- For the use of **feeder-link for BSS (GSO BSS Feeder-link)** in:
 - 17.3 - 18.1 GHz in Regions 1 and 3
 - 14.5 - 14.8 GHz in Regions 1 and 3 (except Europe)
 - 17.3 - 17.8 GHz in Region 2

Shall apply provisions of **Appendix 30A.**

- For the use of **Fixed-Satellite Service (GSO FSS)** in **all Regions** :
 - 6725 – 7025 MHz (Uplink)
 - 4500 – 4800 MHz (Downlink)
 - 12.75 – 13.25 GHz (Uplink)
 - 10.70 – 10.95 GHz (Downlink)
 - 11.20 – 11.45 GHz (Downlink)

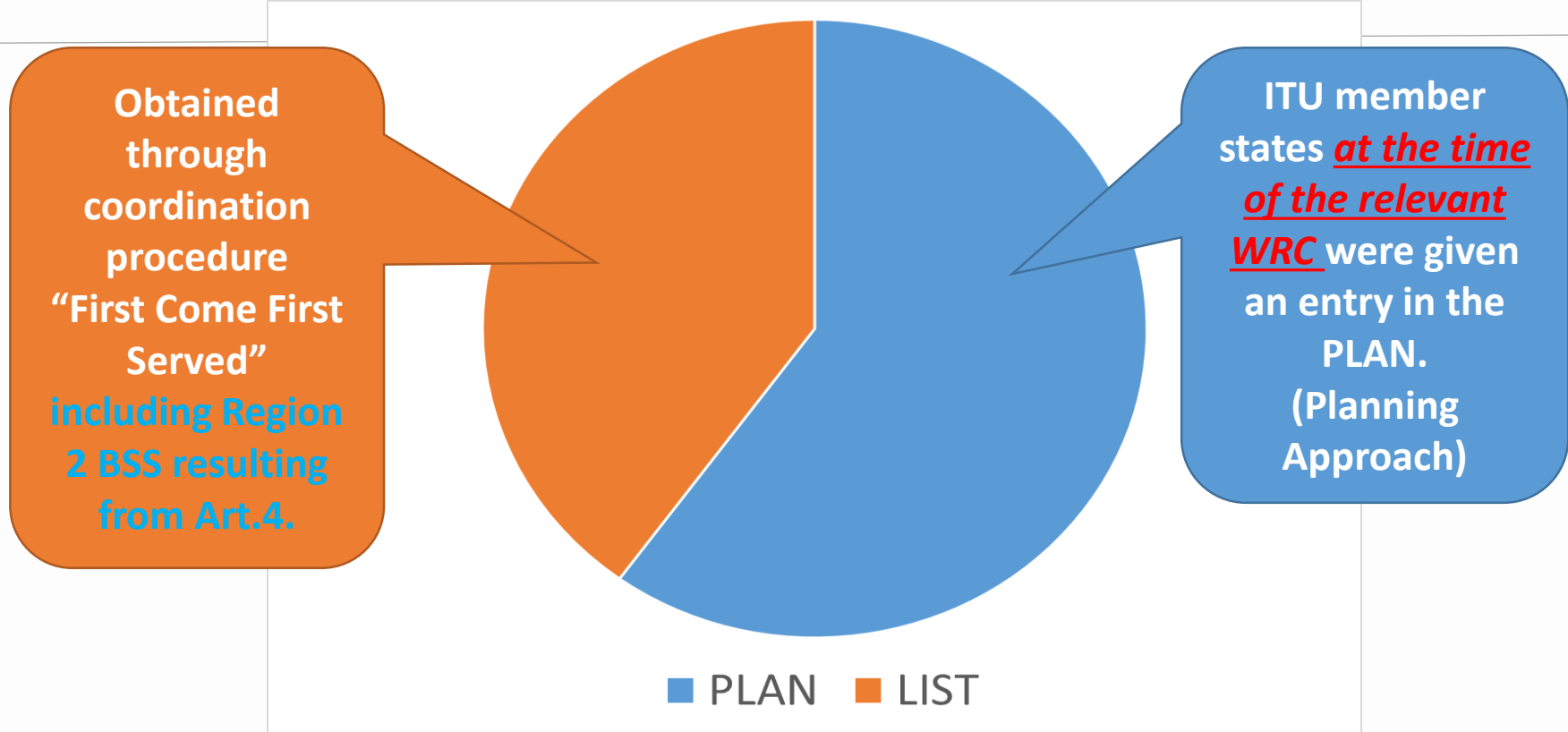
Shall apply provisions of **Appendix 30B.**



Appendix 30/30A/30B

- **Plan/List**
- **Procedures**
- **Protection and Sharing
Criteria**

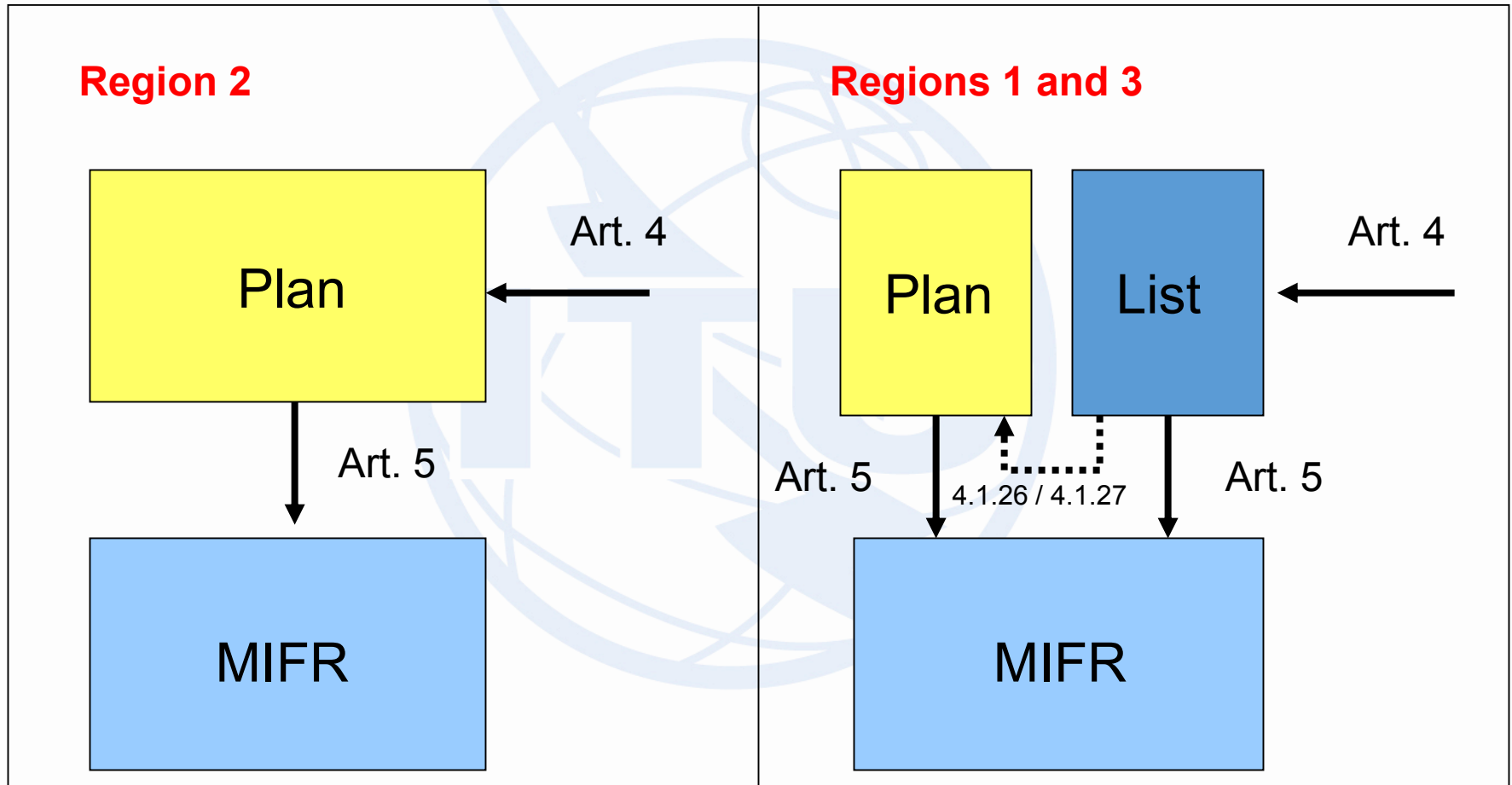
Appendix 30/30A/30B



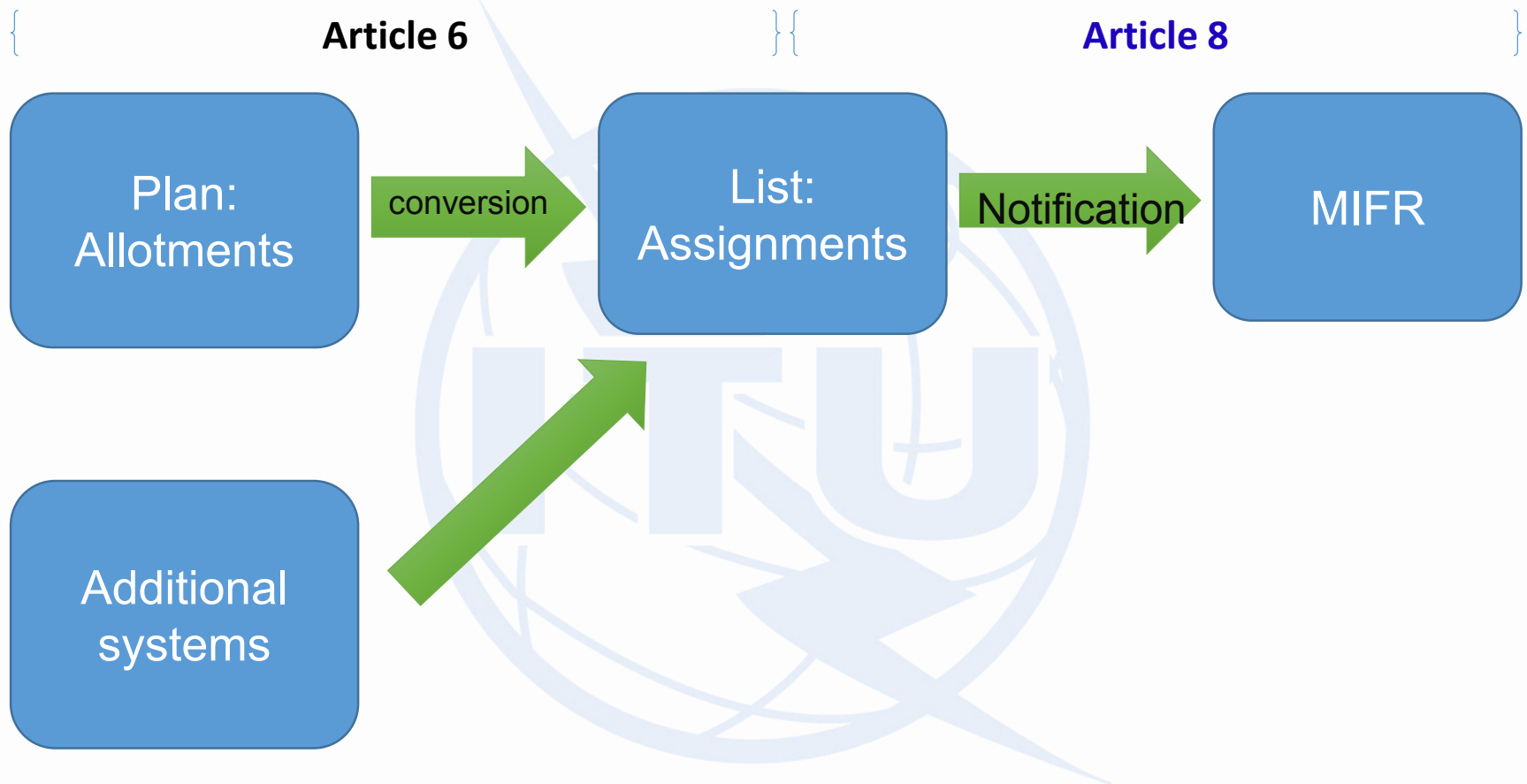
NOTE:

- For BSS and associated BSS feeder-link:
 - ✓ In Regions 1 and 3: There are "core" Plan and LIST of Additional uses
 - ✓ In Region 2: There are original Plan and Plan assignments obtained through successful application of Article 4 procedure. There is no LIST in Region 2.
- For FSS: There are Allotment Plan and LIST of assignments.

AP30/30A Procedure



AP30B Procedure



NOTE: For all ITU Regions.

Protection and Sharing Criteria

- **Regions 1 and 3 BSS (AP30 – Annexes 1 and 4):**
 - Coordination Arc, EPM (Equivalent Protection Margin), PFD (Power Flux Density), Delta T/T
- **Regions 1 and 3 Associated BSS Feeder-link (AP30A – Annexes 1 and 4):**
 - Coordination Arc, EPM, Delta T/T
- **Regions 2 BSS and Associated BSS Feeder-link (AP30/30A – Annexes 1 and 4):**
 - OEPM (Overall Equivalent Protection Margin), PFD, Delta T/T
- **FSS Plan (AP30B – Annex 4):**
 - Coordination Arc, Uplink Single-Entry C/I, Downlink Single-Entry C/I and Overall Aggregate C/I, PFD, Elevation angle.

AP30/30A/30B PLAN

The background features a large, light blue watermark of the FNU logo. The logo consists of a globe with latitude and longitude lines, and the letters 'FNU' in a stylized font. The globe is tilted, and the letters are positioned in front of it. The entire logo is semi-transparent.

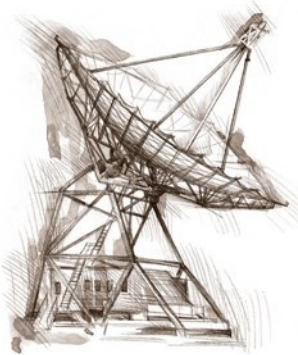
Your Entry in the PLAN

- Being associated with an orbital position in the GSO arc
 - Having an identified amount of spectrum (e.g. 10/12 channels in BSS or 800 MHz in FSS)
 - Having a set of predefined characteristics (e.g. National coverage, Space Station elliptical beam, Earth Station antenna, EIRP etc.)
 - **BSS Plan/BSS Feeder-link Plan:**
 - **Article 10/11 of Appendix 30/ Article 9/9A of Appendix 30A.**
 - **FSS Plan:**
 - **Article 10 of Appendix 30B.**
-

BSS/BSS Feeder-link PLANS: Example of a complete link

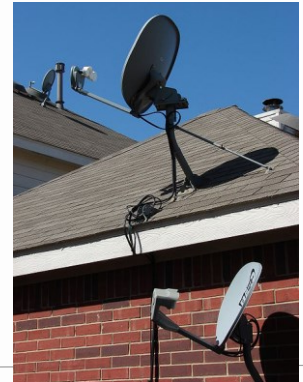


Transmitting:
EIRP: 58.4 dBW
10-12 channels
Bandwidth: 27 MHz



Transmitting:
5 m in 17 GHz
6 m in 14 GHz
EIRP: 84 dBW
10-12 channels
Bandwidth: 27 MHz

Receiving:
60 cm
Availability: 99%
worst month



FSS PLAN: Example of a complete link in 6/4 GHz



Transmitting:
EIRP/36 MHz: 36 dBW
300 MHz Bandwidth

XX.XX°

6 GHz

4 GHz



Transmitting:
5.5 m in 6 GHz
EIRP/36MHz: 55 dBW



Receiving:
5.5 m in 4 GHz
Availability: 99.95%
of the year

FSS PLAN: Example of a complete link in 13/10-11 GHz



Transmitting:
EIRP/36 MHz: 48 dBW
500 MHz Bandwidth

XX.XX°

13 GHz

10-11 GHz



Transmitting:
2.7 m in 13 GHz
EIRP/36MHz: 65 dBW



Receiving:
2.7 m in 10-11 GHz
Availability: 99.9%
of the year

IMPLEMENTATION OF YOUR PLAN



BSS/BSS Feeder link PLAN: Implementation (1)



- ✓ **Notify to the Bureau not earlier than 3 years before the Planned Date of Bringing into use:**
 - If no change, send a letter to the Bureau indicating the Plan assignment and DBIU.
 - If changes (reduction), send a letter to the Bureau together with Appendix 4 Data (SpaceCap Database and GIMS data) through E-submission. Before submitting, use SpaceVal to validate.
- ✓ **Inform the Bureau of Bringing into use (11.44B & Res.40).**

R1&3 PLAN: Implementation (2)

On receipt of the notification, the Bureau will:

✓ **Use SpaceVal to validate:**

- Fatal Errors: Return the submission with the reason.

✓ **No Fatal Errors:**

- Acknowledge and inform of the date of receipt
- Seek clarifications if needed
- Examine the notification
 - *If favorable, provisionally record in the Master Register (publishing Part I-S and Part II-S)*
 - *If unfavorable, return to the notifying Administration (publishing Part I-S and Part III-S)*

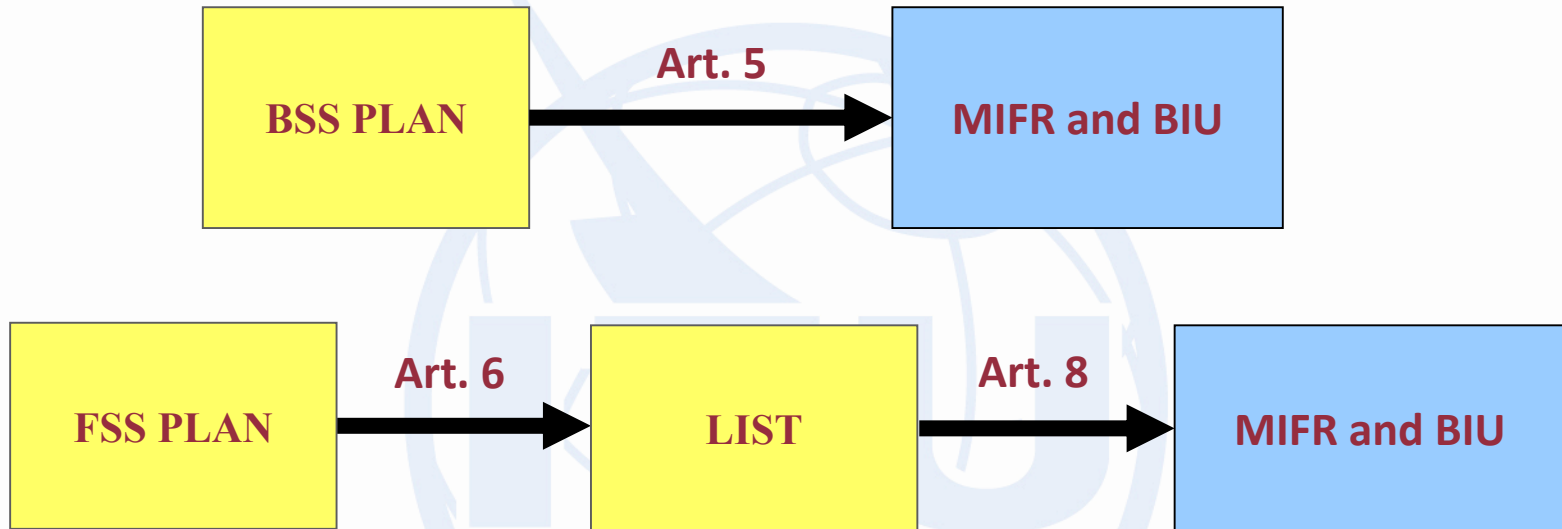
R1&3 PLAN: Implementation (3)

- On receipt of confirmation of BIU, the Bureau will remove the provisional remark and update the BIU information.
- If the Bureau does not receive the confirmation of BIU by the notified DBIU, the Bureau will cancel assignments in the Master Register. **Assignments in the Plan remain unchanged.**

Protecting your PLAN

- **Check BR publications on every BR IFIC (Space services).**
- **If your Administration is identified as affected, your Administration shall send comment, to the notifying Administration and the Bureau, within 4 months from the date of the relevant BR IFIC publication.**

FSS PLAN: Implementation (1)



1. Convert your Allotment into an Assignment to have it entered into the List
2. Notify Assignment in the List and Bring into use

FSS PLAN: Implementation (2)

1. Convert your Allotment into an Assignment to have it entered into the List (Article 6)

➤ Your Administration's responsibility:

- ✓ Submit the conversion (Letter + Appendix 4 Data (SpaceCap Database and GIMS data)) through E-submission. Before submitting, use SpaceVal to validate. (Part A)
- ✓ Carry out coordination with affected Administrations, if any, identified by the Bureau.
- ✓ Finalize the parameters and submit them to the Bureau for entering into the List (Part B)
- ✓ Reply on time to all clarifications requested by the Bureau

➤ The Bureau's responsibility:

- ✓ Check if the submission is receivable and then inform the notifying Administration (both Part A and Part B)
 - ✓ If the submission is not complete, send telefax to ask for any clarification and/or missing information (both Part A and Part B)
 - ✓ Carry-out regulatory and technical examination (both Part A and Part B)
 - ✓ Publish a Special Section (submitted information + identification etc.) and inform the notifying Administration (Part A)
 - ✓ Publish a Special Section to enter the assignment in the List or Return (Part B)
-

FSS PLAN: Implementation (3)

No coordination is required if:

- ✓ No change to the Allotment technical characteristics.
- ✓ Changes but within the envelop of the corresponding Allotment.

FSS PLAN: Implementation (4)

2. Notify Assignment in the List and Bring into use (Article 8)

➤ Your Administration's responsibility:

- ✓ Submit the Notification (Letter + Appendix 4 Data (SpaceCap Database and GIMS data)) through E-submission. Before submitting, use SpaceVal to validate.
- ✓ Inform the Bureau of bringing into use

➤ The Bureau's responsibility:

- ✓ Check if the submission is receivable and then inform the notifying Administration
- ✓ If the submission is not complete, send telefax to ask for any clarification and/or missing information
- ✓ Carry-out regulatory and technical examination
- ✓ Publish Part I-S and Part II-S if favorable; Part I-S and Part III-S if unfavorable
- ✓ Update the information on BIU

Protecting your PLAN

- **Check BR publications on every BR IFIC (Space services).**
- **If your Administration is identified as affected, your Administration shall send comment, to the notifying Administration and the Bureau, within 4 months from the date of BR IFIC publication.**

The background features a large, light blue watermark of the TUU logo, which consists of a globe with a stylized bird or wing shape overlaid on it.

Obtaining an Additional use / Additional system

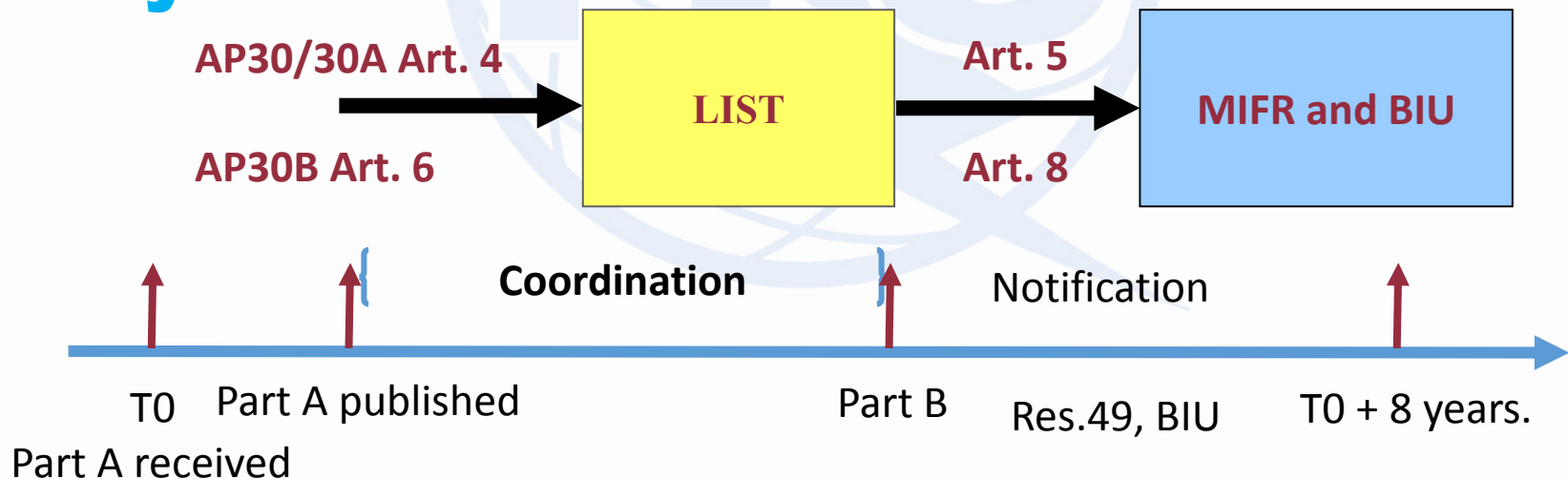
Additional uses/ Additional systems

Shall apply:

- **Articles 4 and 5 of AP30/30A
for Additional Uses**
- **Articles 6 and 8 of AP30B for
Additional Systems**

Procedures

- **Your Administration starts the procedure by submitting Part A to the BR.**
- **A deadline is set by RRs and the BR will monitor if all required steps are finished by the deadline.**



Submission of Notices

➤ **Your Administration's responsibility:**

- ✓ Prepare and submit the notice (Letter + Appendix 4 Data (SpaceCap Database and GIMS data)) through E-submission. Before submitting, use SpaceVal to validate. (Part A)
- ✓ Reply on time to all clarifications requested by the Bureau

➤ **The Bureau's responsibility:**

- ✓ Check if the submission is receivable and then inform the notifying Administration
- ✓ If the submission is incomplete, send telefax to ask for any clarification and/or missing information

Exam and Publish the Notice

- **The Bureau's responsibility: Once the Notice is complete, the Bureau will:**
 - ✓ Examine it in Order of Date of Receipt.
 - ✓ Identify Affected Administrations/Networks. In case of AP30B, the Bureau also identify Territories included in a Service Area.
 - ✓ Publish in a Part A Special Section and Inform the Notifying Administration as well as Affected Administrations.

Part A Special Section



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		NB-SAT-109.65-HE		SECTION SPÉCIALE N° SPECIAL SECTION No. SECCIÓN ESPECIAL N.º	AP30/E/772
ADM. RESPONSABLE RESPONSABLE ADM. ADM. RESPONSABLE	J	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	109.65 E	BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	2863 / 06.02.2018
NOTIFIÉ AU NOM DE NOTIFIED ON BEHALF OF NOTIFICADA EN NOMBRE DE				NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	117552001
RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL					31.01.2017

Caractéristiques des assignations de fréquence publiées en application de l'Article 4 de l'Appendice 30 du Règlement des radiocommunications

Characteristics of frequency assignments published in application of Article 4 of Appendix 30 to the Radio Regulations

Características de asignaciones de frecuencias publicadas conforme al Artículo 4 del Apéndice 30 del Reglamento de Radiocomunicaciones

La présente Section spéciale concerne des propositions d'assignations nouvelles ou modifiées dans la Liste des liaisons descendantes pour les Régions 1 et 3 dans les bandes de fréquences 11,7-12,5 GHz en Région 1 et/ou 11,7-12,2 GHz en Région 3.

This Special Section concerns proposed new or modified assignments in the Regions 1 and 3 downlink List in the frequency bands 11.7-12.5 GHz in Region 1 and/or 11.7-12.2 GHz in Region 3.

Esta Sección Especial trata de las asignaciones propuestas nuevas o modificadas en la Lista de enlaces descendentes de las Regiones 1 y 3 en las bandas de frecuencias 11,7-12,5 GHz en la Región 1 y/o 11,7-12,2 GHz en la Región 3.

Elle comprend les Parties indiquées ci-dessous par une croix (X) dans la case appropriée.	It is composed of the Parts indicated below by an (X) in the relevant box	Se compone de las Partes indicadas a continuación con una (X) en la casilla pertinente.
<input checked="" type="checkbox"/> <i>Partie A</i> - Projets d'assignations nouvelles ou modifiées dans la Liste pour les Régions 1 et 3.	<input checked="" type="checkbox"/> <i>Part A</i> - Proposed new or modified assignments in the Regions 1 and 3 List.	<input checked="" type="checkbox"/> <i>Parte A</i> - Asignaciones propuestas nuevas o modificadas en la Lista de las Regiones 1 y 3.
<input type="checkbox"/> <i>Partie B</i> - Assignations nouvelles ou modifiées ajoutées à la Liste pour les Régions 1 et 3 en conséquence de l'application avec succès des dispositions de l'Article 4 de l'Appendice 30.	<input type="checkbox"/> <i>Part B</i> - New or modified assignments entered in the Regions 1 and 3 List as a result of the successful application of the provisions of Article 4 of Appendix 30.	<input type="checkbox"/> <i>Parte B</i> - Asignaciones nuevas o modificadas introducidas en la Lista de las Regiones 1 y 3 como resultado de la aplicación satisfactoria de las disposiciones del Artículo 4 del Apéndice 30.
<input type="checkbox"/> <i>Partie C</i> - Annulation d'une Section spéciale Partie A publiée et/ou assignations de fréquence annulées de la Liste pour les Régions 1 et 3 conformément au § 4.1.3, à la note de bas de page 7 du § 4.1.5, à la note de bas de page 8 du § 4.1.15 et/ou § 4.1.23 de l'Article 4 de l'Appendice 30 ou Résolution 49 ou Résolution 548.	<input type="checkbox"/> <i>Part C</i> - Cancellation of a previously published Part A Special Section and/or frequency assignments cancelled from the Regions 1 and 3 List in accordance with § 4.1.3, footnote 7 to § 4.1.5, footnote 8 to § 4.1.15 and/or § 4.1.23 of Article 4 of Appendix 30 or Resolution 49 or Resolution 548.	<input type="checkbox"/> <i>Parte C</i> - Cancelación de una Parte A de la Sección Especial previamente publicada y/o de las asignaciones de frecuencia canceladas de la Lista de las Regiones 1 y 3, de conformidad con el § 4.1.3, la nota 7 del § 4.1.5, la nota 8 del § 4.1.15 y/o § 4.1.23 del Artículo 4 del Apéndice 30 ó Resolución 49 ó Resolución 548.

SOU MIS AU TITRE DE SUBMITTED UNDER SOMETIDO CON ARREGLO A	§ 4.1.3	DATE LIMITE POUR LA RÉCEPTION DES COMMENTAIRES : EXPIRY DATE FOR THE RECEIPT OF COMMENTS : FECHA LIMITE PARA LA RECEPCIÓN DE LOS COMENTARIOS :	06.06.2018
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A6A Special Section



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 SATÉLITE		NSS-FSS-137W		SECTION SPÉCIALE N° SPECIAL SECTION No. SECCIÓN ESPECIAL N.º	AP30B/A6A/542
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	HOL	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	137 W	BR IFIC / DATE BR IFIC / DATE BR IFIC/ FECHA	2881 / 16.10.2018
NOTIFIÉ AU NOM DE NOTIFIED ON BEHALF OF NOTIFICADA EN NOMBRE DE			NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN		
RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL					117559058
					12.12.2017

Publication au titre des dispositions de l'Article 6 de l'Appendice 30B du Règlement des radiocommunications	Publication under provisions of Article 6 of Appendix 30B to the Radio Regulations	Publicación con arreglo a las disposiciones del Artículo 6 del Apéndice 30B del Reglamento de Radiocomunicaciones
Renseignements concernant: [X] une fiche de notification reçue au titre du § 6.1, ou [] une fiche de notification considérée comme une soumission au titre du § 6.1 conformément au § 7.7 de l'Article 7.	Information regarding: [X] Notice received under § 6.1, or [] Notice treated as a submission under § 6.1 in accordance with § 7.7 of Article 7.	Información relativa a: [X] Notificación recibida con arreglo al § 6.1, o [] Notificación tramitada como una presentación con arreglo al § 6.1 de conformidad con el § 7.7 del Artículo 7.
Examinés et publiés conformément aux dispositions suivantes de l'Article 6: [X] Assignations examinées au titre des § 6.3, 6.5 et 6.6 et publiées au titre du § 6.7. [] Assignations examinées au titre du § 6.3 et retournées à l'administration notificatrice au titre du § 6.4.	Examined and published in accordance with the following provisions of Article 6: [X] Assignments examined under § 6.3, § 6.5 and § 6.6, and published under § 6.7. [] Assignments examined under § 6.3 and returned to the notifying administration under § 6.4.	Examinada y publicada de conformidad con las siguientes disposiciones del Artículo 6: [X] Asignaciones examinadas con arreglo al § 6.3, § 6.5 y § 6.6 y publicadas con arreglo al § 6.7. [] Asignaciones examinadas con arreglo al § 6.3 y devueltas a la administración notificante con arreglo al § 6.4.

DATE LIMITE POUR LA RÉCEPTION DES COMMENTAIRES :
EXPIRY DATE FOR THE RECEIPT OF COMMENTS :
FECHA LÍMITE PARA LA RECEPCIÓN DE LOS COMENTARIOS :

16.02.2019

Coordination (1)

➤ Find the list of Affected ADMs/Networks

✓ In the corresponding Part A Special Section

Administrations et/ou réseaux à satellite affectés / Affected administrations and/or satellite networks / Administraciones y/o redes de satélite afectadas
 受影响的主管部门和/或卫星网络 / Затронутые администрации и/или спутниковые сети / أو الشبكات الساتلية المتأثرة/الإدارات و

A1f1 Notif. adm.	A1f3 Inter. sat. org.	A1a Sat. Network / A1b Plan beam identification	BR6a Id. no.	A4a1 Orbital long.	BR45 Max. EPM/OEPM degradation	BR46 Max. PFD excess
App.30 Art.4, §§4.1.1 a) & 4.1.1 b) - Annexe 1, §1 App.30 Art.4, §§4.1.1 a) & 4.1.1 b) - Annex 1, §1 Ap.30 Art.4, §§4.1.1 a) & 4.1.1 b) - Anexo 1, §1 附录30第4条, 第4.1.1 a)段和 4.1.1 b)段 - 附件1, 第1段 Пр. 30 Ст. 4, пп. 4.1.1 а) и 4.1.1 б) – Дополнение 1, п. 1 الفقرتان 1.1.4 (أ) و 1.1.4 (ب) من المادة 4 من التذييل 30 - الفقرة 1 من الملحق 1						
CHN		ASIASAT-BSS-C2	113552028	105.5 E	4.733	10.41
		ASIASAT-BSS-E2	113552027	100.5 E	0.452	1.44
		CHNBSAT-101.4E	112552011	101.4 E	6.342	2.41
G		USAT-108.2E	116552014	108.2 E	22.425	30.14
		USAT-108.4E	114552014	108.4 E	23.221	31.49
HOL		NSS-BSS 104E	111552004	104 E	3.339	6.93
		NSS-BSS 108.2E	108552010	108.2 E	13.323	24.30
		NSS-BSS 113.5E	108552013	113.5 E	4.552	10.35
		NSS-BSS 113E	111552018	113 E	2.457	16.36
		NSS-BSS-G2 108.2E	111552034	108.2 E	22.163	30.14
		NSS-BSS-G2 113E	114552024	113 E	1.215	16.39
IND		INSAT-KUP-BSS(111.5)	113552008	111.5 E	13.321	27.88
ISR		AMS-BSS-C1-113E	116552001	113 E	1.042	15.67
KOR		KOR11200	100550123	116 E	1.225	5.68
		KOREASAT-116E BSS	111552013	116 E	0.668	5.61
		KOREASAT-2	100551014	113 E	0.660	15.90
		KOREASAT-3	96552029	116 E	1.807	5.59
RUS		RST-4	94552001	110 E	26.891	43.01
		RUS-4	100550171	110 E	20.040	43.01
UAE		YAHSAT-BSS-110.8E	109552036	110.8 E	2.609	12.00
VTN		VTN32500	100550218	107 E	2.408	9.05

✓ SPS_ALL_XXXX database (AP30/30A) or A30B_XXXX
 database (AP30B) published on BR IFIC. [SpaceQry]

Coordination (2)

If no Comment or no reply from Affected Administrations,

- The notifying Administration can request the assistance of the Bureau after the end of 4 months commenting period to obtain the decision of an affected Administration.
- (only for Regions 1 and 3 and AP30B)

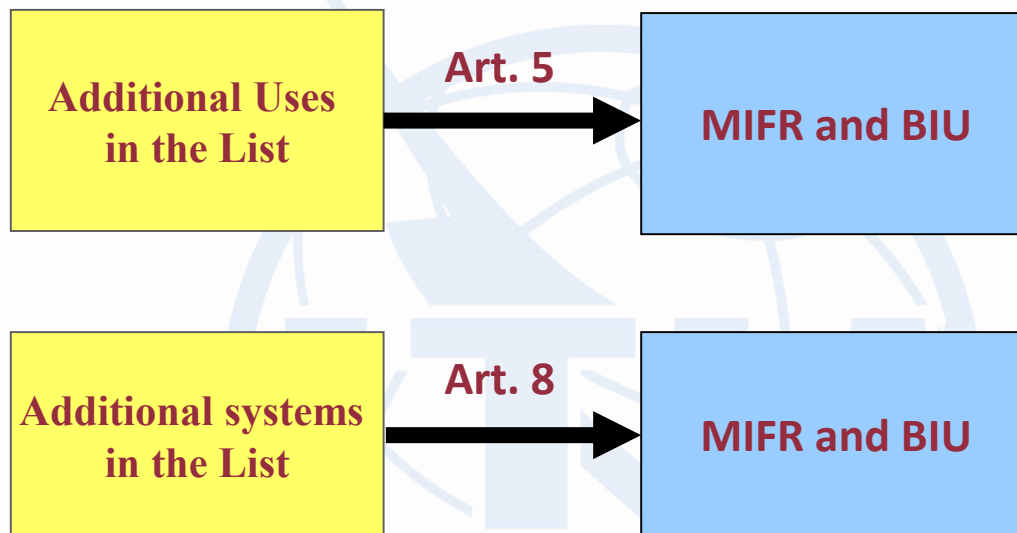
Coordination (3)

- Evaluate the remaining impact after changing parameters, use BR Software application:
 - ✓ AP30/30A: Mspace, GIBC/PFD and GIBC/Appendix 8
 - ✓ AP30B: GIBC/Appendix 30B

Coordination (4)

- If no coordination reached after negotiation and the affected assignments is not in PLAN, the Notifying Administration can request to apply 4.1.18 (AP30/30A Regions 1 and 3) or 6.25 (AP30B) to have the assignment entered provisionally in the List.
- **Obligation: Immediately eliminate the harmful/unacceptable interference if occurs.**

Notification and BIU



1. Procedures are similar to those when you notify and bring into use your Plan.
2. Submit Res. 49 information
3. If Assignments belonging to Additional uses or Additional systems have not been brought into use within the regulatory time-limit (i.e. 8 years), the notification and assignments in the List will be cancelled by the Bureau.



Thank you



R1 & 3 PLAN: Characteristics

Table 6A in [Article 11](#) of AP30 and Tables 3A1 and 3A2 in Article 9A of AP30A

1	2	3	4		5			6	7	8		9		10		11	12	13	14	15	16		
			Boresight		Space station antenna characteristics					Space station antenna code	Shaped beam	Space station antenna gain		Earth station antenna								Polarization	
			Long.	Lat.	Major axis	Minor axis	Orientation					Co-polar	Cross-polar	Code	Gain							Type	Angle
POR	POR_100	-37.00	-15.92	37.65				CB_TSS_PORA		47.17		MODRES	35.50	CR		58.4	27M0G7W			P	5, 7		
PSE	YYY00000	-13.20	34.99	31.86	0.60	0.60	90.00	R13TSS		48.88		MODRES	35.50	CL		58.9	27M0G7W			P	3		
QAT	QAT24700	20.00	51.38	25.26	0.60	0.60	90.00	R13TSS		48.88		MODRES	35.50	CL		54.5	27M0G7W			P			
ROU	ROU13600	50.00	25.12	45.75	1.17	0.73	9.52	R13TSS		45.15		MODRES	35.50	CR		58.9	27M0G7W			P			
RRW	RRW31000	11.00	30.00	-2.10	0.66	0.60	42.00	R13TSS		48.47		MODRES	35.50	CL		59.8	27M0G7W			P			
RUS	RSTREA11	36.00	38.00	53.00	2.20	2.20	0.00	R13TSS		37.70		MODRES	35.50	CL		53.0	27M0F8W	RST-1	05	PE			
RUS	RSTREA12	36.00	38.00	53.00	2.20	2.20	0.00	R13TSS		37.70		MODRES	35.50	CR		53.0	27M0F8W	RST-1	05	PE			
RUS	RSTRED11	36.00	38.00	53.00	2.20	2.20	0.00	R13TSS		37.70		MODRES	35.50	CL		53.0	27M0G7W	RST-1	05	PE			
RUS	RSTRED12	36.00	38.00	53.00	2.20	2.20	0.00	R13TSS		37.70		MODRES	35.50	CR		53.0	27M0G7W	RST-1	05	PE			
RUS	RSTRSD11	36.00	38.00	53.00	2.20	2.20	0.00	R13TSS		37.70		MODRES	35.50	CL		53.0	27M0G7W	RST-1	05	P			
RUS	RSTRSD12	36.00	38.00	53.00	2.20	2.20	0.00	R13TSS		37.70		MODRES	35.50	CR		53.0	27M0G7W	RST-1	05	P			
RUS	RSTRSD13	36.00	38.00	53.00	2.20	2.20	0.00	R13TSS		37.70		MODRES	39.02	CL		53.0	27M0G7W	RST-1	05	P			
RUS	RSTRSD14	36.00	38.00	53.00	2.20	2.20	0.00	R13TSS		37.70		MODRES	39.02	CR		53.0	27M0G7W	RST-1	05	P			
RUS	RSTRSD21	56.00	65.00	63.00	2.20	2.20	0.00	R123FR		37.70		MODRES	35.50	CL		55.0	27M0G7W	RST-2	14	P			
RUS	RSTRSD22	56.00	65.00	63.00	2.20	2.20	0.00	R123FR		37.70		MODRES	35.50	CR		55.0	27M0G7W	RST-2	14	P			

- Orbital position, Elliptical beam characteristics, Polarization, Earth station antenna, Emission, EIRP...
- Each Administration in Region 1 has 10 channels; in Region 3 has 12 channels.

FSS PLAN: Characteristics

[Article 10](#) of AP30B

4 500-4 800 MHz, 6 725-7 025 MHz

1	2	3	4	5	6	7	8	9	10
MDR00000	-10.60	-16.20	31.60	1.60	1.60	90.00	-9.6	-41.7	*/MB7
MDW00000	-159.00	-177.40	28.20	1.60	1.60	90.00	-9.6	-42.0	*/MB2
MEX00000	-113.00	-103.60	23.30	5.80	2.40	161.00	-4.7	-38.8	
MHL00000	-159.00	175.30	8.70	2.30	1.60	94.00	-8.6	-38.8	*/MB2
MLA00000	78.50	108.20	4.70	3.20	1.60	0.00	-6.3	-38.5	
MLD00000	117.60	73.40	2.50	2.20	1.60	88.00	-9.6	-38.7	
MLI00000	-6.00	-3.90	17.60	3.30	2.50	21.00	-7.6	-39.2	
MLT00000	-3.00	14.40	35.90	1.60	1.60	90.00	-9.6	-41.8	
MNG00000	113.60	103.80	46.80	3.60	1.60	3.00	-9.6	-38.9	
MOZ00000	90.60	35.60	-17.20	3.10	1.60	98.00	-7.7	-38.3	
MRC00000	32.86	-8.90	27.90	3.40	1.60	45.00	-9.6	-38.8	
MTN00000	-21.10	-10.30	19.80	2.50	2.40	76.00	-9.6	-39.4	
MWI00000	28.00	34.10	-13.30	1.60	1.60	90.00	-9.6	-40.0	

- **Orbital position, Elliptical beam characteristics, Earth station and Satellite e.i.r.p densities.**
- **Each Allotment has 300 MHz in 6/4 GHz and 500 MHz in 13/10-11 GHz.**