

29TH WORLD RADIOCOMMUNICATION SEMINAR

30 November - 11 December 2020

BR IFIC (Space Services) and **Preface**

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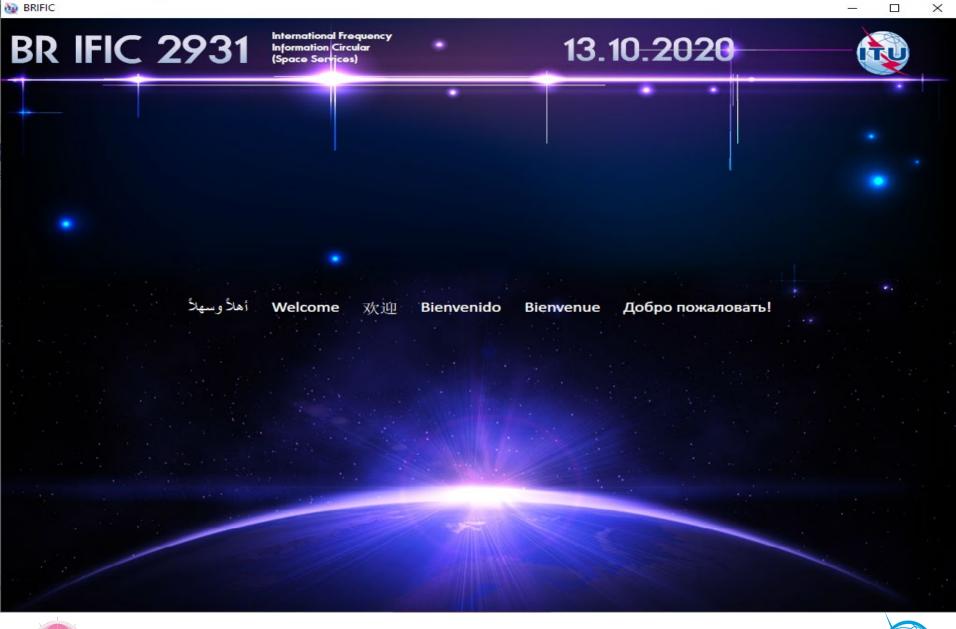
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BR Space Services Department

www.itu.int/go/wrs-20

#ITUWRS









Regulations relating to BR IFIC

- **9.1**shall send to the Bureau a g description of the network or systen publication in the International Freq Information Circular (BR IFIC)
- **9.1A** Upon receipt of the complete sent under No. 9.30, the Bureau sha the basic characteristics of the coord request, a general description of the system for advance publication in a: therefor. of the BR IFIC.
- **9.2B** On receipt of the complete inf under Nos. 9.1 and 9.2, the Bureau s in a Special Section of its BR IFIC witl months.
- 9.3 If, upon receipt of the BR IFIC col information published under No. 9.2 referring administration believes that interfer may be unacceptable may be caused or planned satellite networks or syst within four months of the date of pu BR IFIC communicate to the publishi administration its comments on the the anticipated interference to its ex planned systems.

Advance Publication Inform 9.38 *d)* publish22, as appropriate, th complete information in the BR IFIC

> months. Where the Bureau is not in position to comply with the time-lim referred to

above, it shall periodically so inform administrations, giving the reasons

9.40 *e*) inform the administrations concerned of its actions and commu the results of its calculations, drawir attention to the relevant BR IFIC.

Nos. 9.7 that it, α identifi€ the date IFIC, info the ider appropr

9.51 Following its action under No. 9.50, the administration with which coordination was sought under Nos. 9.7 to 9.7B shall, within for telecommunication or meetings, as months of the date of publication of the BR IFIC under No. 9.38, either inform the requesting administration and the Bureau of its agreement c to the Bureau, which shall publish them in under No. 9.52.

9.52 If an administration, following its action und 9.64 If the disagreement remains No. 9.50, does not agree to the request for coordination, it shall, within four mor communicated its conclusions to the of the date of publication of the BR IFIC under No. 9.38, or of the date of dispatch of the

coordination data under No 9.41 Following receipt of the BR IFIC requesting

> 11.28 Complete notices shall be marked by the Bureau with their date of receipt and shall be examined in the date order of their receipt. On receipt of a complete notice the Bureau shall, within no more than two months, publish its contents, with any diagrams and maps and the date

receipt, in the BR IFIC which shall constitute the acknowledgement to the notifying administration of receipt of its notice 12. When the Bureau is not in a position to comply with the time limit referred to above, it shall periodically so inform the administrations, giving the reasons therefor.

11.43 In every case when a new assignment is recorded in the Master Register it shall, in accordance with the provisions of Article 8 of this Chapter, include an indication of the finding reflecting the status of the assignment. This information shall also be published in the BR IFIC.

9.55 All administrations may use correspondence, any appropriate means of necessary, to assist in resolving the matter. The results thereof shall be communicated the BR IFIC, as appropriate.

unresolved after the Bureau has administrations involved, the administration which requested coordination shall,

11.44B A frequency assignment to a space station in the geostationary-satellite orbit shall be considered as having been brought into use when a space station in the geostationarysatellite 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. The notifying administration shall so inform the Bureau within 30 days from the end of the 90-day period26, 27. On receipt of the information sent under this provision, the Bureau shall make that information available on the ITU website as soon as possible and shall publish it in the BR IFIC. Resolution **40 (WRC-15)** shall apply.

11.49 Wherever the use of a recorded frequency assignment to a space station is suspended for a period exceeding six months, the notifying administration shall inform the Bureau of the date on which such use was suspended. When the recorded assignment is brought back into use, the notifying administration shall, subject to the provisions of No. 11.49.1 when applicable, so inform the Bureau, as soon as possible. On receipt of the information sent under this provision, the Bureau shall make that information available as soon as possible on the ITU website and shall publish it in the BR IFIC.



Regulatory requirements for information to be published in a BR IFIC







Characteristics of satellite networks, earth stations and radio astronomy stations required in Annex 2 of Appendix 4

List of administrations with which coordination may need to be effected

Findings







from
administrations in
response to a BR
IFIC

Bringing into use of assignments

Suspension of assignments





Main features of the BR IFIC (Space Services)

- All PARTs and special section publications are in 6 languages of the Union
 - originally from 10.01.2000 in English, French, Spanish and as of 01.01.2005 also in Arabic, Chinese and Russian language
- Format of the BR IFIC
 - From BR IFIC 2410/11.01.2000 CDROM
 - From BR IFIC 2710/10.01.2012 DVD-ROM
 - From BR IFIC 2833/22.11.2016 <u>DUAL Layer DVD-ROM</u>
- ISO image of the DVD-ROM is available for download from the ITU website
- Publications are distributed in PDF format with official ITU logo

Various database distributed in mdb format accompanying the publications





Contents of the BR IFIC



Regulatory publications

Special Sections
Part I-S, II-S, III-S



Database

IFIC, SRS, Gims, SPS



Preface



BR space software



Circular letters related to space services



Cost recovery invoices status



SpaceCOM Draft files







DIECAT 1

NCSO



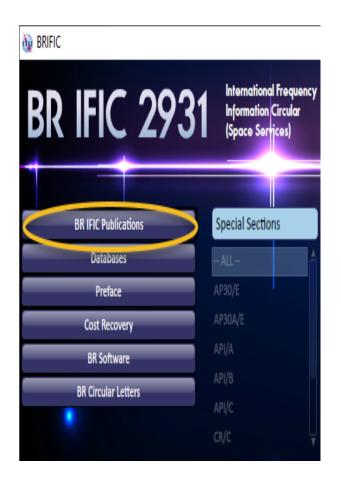
CHN

ADI/A/12641



120545100

Regulatory publications





Notification for recording in the MIFR:

Part I-S

 characteristics of the satellite network, earth station or radio astronomy station, also constitutes the acknowledgement of receipt of the notice

Part II-S

Frequency assignments recorded in the MIFR

Part III-S

Frequency assignments returned to the administrations



Special sections

API/A, API/B

CR/C, CR/F, CR/D, CR/E

AP30/E, AP30A/E,AP30-30A/E

AP30-30A/F/C, AP30-30A/F/D

AP30B/A6A, AP30B/A6B, AP30B/A7

RES4, RES49, RES552

Etc.





Note that these official publications in PDF format are available solely on the BR IFIC!



BR IFIC publication schedule

BR IFIC (Space services) - Schedule

YOU ARE HERE HOME > ITU-R > SPACE SERVICES

SHARE 🚹 🕚 🛅 🔯

The BR international frequency information circular (BR IFIC) is published every two weeks.



News

Space Support

BR IFIC

Preface

Cost Recovery

Space Plans

Databases and Services

SNI

Year 2020			
BRIFIC No.	Date of publication	BRIFIC No.	Date of publication
2911	07.01.2020	2924	07.07.2020
2912	21.01.2020	2925	21.07.2020
2913	04.02.2020	2926	04.08.2020
2914	18.02.2020	2927	18.08.2020
2915	03.03.2020	2928	01.09.2020
2916	17.03.2020	2929	15.09.2020
2917	31.03.2020	2930	29.09.2020

Year 2019			
BRIFIC No.	Date of publication	BRIFIC No.	Date of publication
2886	08.01.2019	2899	09.07.2019
2887	22.01.2019	2900	23.07.2019
2888	05.02.2019	2901	06.08.2019
2889	19.02.2019	2902	20.08.2019
2890	05.03.2019	2903	03.09.2019
2891	19.03.2019	2904	17.09.2019
2892	02.04.2019	2905	01.10.2019



Published *once* every two weeks by the Bureau



Publication date is always on Tuesday





Generally 25 issues per year



4 months time limit for regulatory comments of various provisions start from date of publication of BR **IFIC**



Schedule available for consultation at:

https://www.itu.int/en/ITU-R/space/Pages/brificSchedule .aspx





Databases distributed on the BR IFIC



- IFIC
- SRS
- AP30_30A
- AP30B
- GIMS
- SpaceCom (draft only for planned networks since WRC-19)







BR Space IFIC Database

The IFICxxxx.mdb database (MS Access format), published on the BR IFIC, is located in the Databases\IFIC_data directory.

- This file contains AP4 data of satellite networks, Earth stations or Radioastronomy stations and their corresponding regulatory findings and coordination requirements that are published in the current BR IFIC concerning the following publications:
 - PART-IS, PART-IIS and PART-IIIS;
 - Special Sections: API/A, CR/C, CR/F, RES49, RES 552, RES 553 etc.
- ▶ BR space software tools are required to correctly browse and query the data concerning the satellite networks
- An archive of all IFICxxxx databases for the current year up to the IFIC number of the current DVD-ROM is found in the folder: Databases\IFIC_Archive.
- IFICxxxx.mdb is <u>also</u> available on the BR website:

https://www.itu.int/sns/demowic.html





SRS Database

The *SRSxxxx.mdb* file is distributed <u>solely</u> on the BR IFICxxxx (Space services) DVD in: ..\<u>Databases\SRS_Data</u> directory

- This database contains information relating to all satellite networks, Earth stations or Radioastronomy stations recorded in the Master International Frequency Register (MIFR), published *in requests for coordination or* as advance publication of information, as well as Due Diligence (Resolution 49 and 552).
- The information in the SRSxxxx.mdb is a snapshot of the MIFR taken at the time the BR IFICxxxx DVD was produced
- The SRS database structure is described in detail in Section III, Chapter 1 of the *Preface*
- In order to properly view and query the srs.mdb file, you should install either BRSIS-SpaceQry, SpaceCap or SpacePub from the \BR_Soft\ folder located on this DVD.



For a chart on the SRS database structure, please refer to the file SRSDiagramV9.pdf available at ...\BRIFIC2931_S\Databases\SRS_Data





SRS database – linked files

- As of BR IFIC 2841, in order to circumvent the 2GB limit of the Microsoft Access MDB file format, the srsXXXX.mdb database file has been split into two linked database files, named respectively srsXXXX_part1of2.mdb and srsXXXX_part2of2.mdb, where XXXX is the BR IFIC publication number.
- All BRSoft V9 desktop applications that commonly needed to use the srsXXXX.mdb file, such as SpaceCap or BRSIS-SpaceQry, have been updated to support the new linked files.
- The files srsXXXX_part1of2.mdb/srsXXXX_part2of2.mdb must always be moved/copied/renamed together, i.e. they must be in the same directory and they may only be renamed in a consistent manner, such as "somename_part1of2.mdb" and "somename_part2of2.mdb".
- The 2 files can be linked automatically using BRSoft V9 software. They can alternatively be linked manually using Microsoft Access.



Do not use the srsXXXX_part2of2.mdb database file by itself. Always use the srsXXXX_part1of2.mdb database file, after following one of the above two procedures



For more details, please refer to the file srsmdb_E.pdf available at ...\Databases\SRS Data





GREF (GIMs reference) database

Complete Graphical Interference Management System (GIMS) reference database (REFDB) - *GREFxxxx.mdb* data are published <u>solely</u> on the BR IFICxxxx (Space services) DVD-ROM in:

<u>Databases\GIMS Data</u> directory





Space Plan Data

Data for Planned Space Networks (Appendices 30, 30A & 30B)

- Technical characteristics and reference situation (EPM/OEPM AP30/30A or C/I AP30B) for Planned networks can be found in the:
 - ➤ \Databases\AP30_30A\SPS_ALL_IFICxxxx (AP30&30A)
 - ➤ \Databases\AP30B\30B_xxxx (AP30B)
- The MSPACEg output database and GIBC/PFD(terrestrial) technical examination results for each Appendix 30/30A Article 4 Part A network published in BR IFICxxxx can be found in the \databases\AP30_30A\TEX_results\ folder.
- The GIBC/AP30B output database for each Appendix 30B pending Article 6 network published in BR IFICxxxx can be found in the \databases\AP30B\TEX_results\ folder. This database contains the detailed GIBC/AP30B calculation results.
- All Space Plan data are <u>also</u> distributed at the SSD website:

https://www.itu.int/ITU-R/go/space-plans/en





BR IFIC (Space Services) – BRsoft

- SAM PC-based software package used to launch ITU-BR Space Software Applications;
- SIS (SpaceQry), which can be used to query into the database and retrieve and view the alphanumeric data;
- SpaceCap, which allows the capture and electronic notification of Appendix 4 notices;
- SpacePub, an interactive tool to print satellite networks and earth stations;
- SpaceVal, which can be used for validating electronic notices that are in the SNS electronic notice format;
- SpaceRefdb, an update tool that will update the reference tables used by BR software;
- SpaceCom, management of the comments on API/A (not subject of Coordination procedure), CR/C, AP30/E, AP30A/E, AP30-30A/F/C Special Sections;
- SRSConvert, to convert the data contained in an existing SRS-formatted database from a version 5 database (WRC-03) into a version 6 database (WRC-07);
- GIMS, allows the capture and modification of graphical data relating to the electronic notification of satellite networks;
- IDWM, the ITU Digitized World Map;
- SPS, determination of the coordination requirements for the Plans for space networks in AP 30, 30A and 30B;
- SRSFixdb, to remove processing data and correct default information in electronic notification databases that are sent to the BR.
- GIBC, which provides the user with the ability to carry out calculations on satellite networks relating to PFD examinations, Appendix 7 and 8 and Appendix 30B
- EPFD, the equivalent power flux-density validation software
 - BRsoft is distributed ALSO at the Bureau website: https://www.itu.int/ITU-R/go/space-software/en





NEWS and SNS Removal



Any relevant information concerning the publications or databases to be brought to the attention of administrations



For those assignments in coordination and API, where the notification has been recorded in the MIFR, and where the 7 years have passed (see CR/377 dated 27 January 2015)

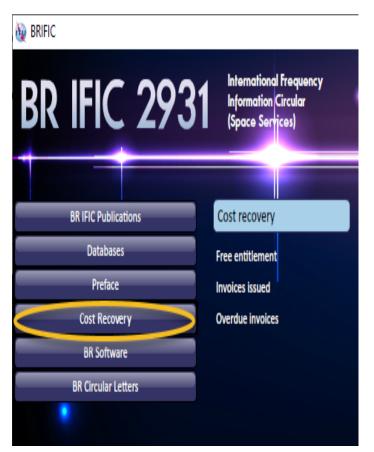
 http://www.itu.int/snl/sn s-removal.html







Cost recovery invoices status





Free entitlement

List of nomination of free entitlement

Administrations should check this list if they wish to know if a request for free entitlement has been accepted



Invoices Issued

List of invoices issued

Administrations should check this list if they wish to know if an invoice has been issued for the network that they have submitted and to note the payment due date



Overdue Invoices

List of invoices that are overdue

Administrations should check this to be sure that there are no overdue invoices for their administrations





Circular letters relating to space services







BR Space Services WIC/IFIC - Annual Collection

- The collection of BR WICs (Weekly Information Circulars) and BR IFICs (International Frequency Information Circulars) for Space Services contains Parts and Special Section publications with information on the frequency assignments for space stations, Earth stations or radioastronomy stations submitted to the Radiocommunication Bureau by ITU Member State administrations.
- The collection is distributed on multiple DVD-ROMs and contains archived BR WICs compiled by time series (1965-1995) and from 1996 by year (1996-1999), and archived BR IFICs (from 2000 onwards) by year.
- https://www.itu.int/pub/R-SP-LN.IW-2020





Arrangements due to COVID-19

Suspension of publication of BR-IFIC on DVD-ROM

Due to the limitations caused by the <u>COVID-19 outbreak</u> and the limited distribution of letters and parcels from Switzerland by Swiss post, the delivery of physical DVDs containing BR IFIC was suspended as from the edition No. 2917 of 31 March 2020 till the edition No. 2930 of 29 September 2020.

Acceptance of late comments

Late comments on publications issued between BR IFIC No. 2917 of 31 March 2020 and BR IFIC No. 2925 of 21 July 2020 are accepted till 30 November 2020.

Resumption of Postal delivery of the BR IFIC on DVD-ROM

The Radiocommunications Bureau informed administrations though its circular letter CR/469 dated 12 October 2020 that the postal delivery of physical DVDs containing the BR IFIC has been restarted from that date.

BR IFIC Nos. 2917 to 2930 issued during the suspension of DVD delivery were sent as a batch and usual fortnightly delivery of BR IFIC has started again with BR IFIC No. 2931 of 13 October 2020.

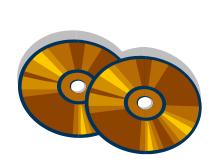
Please Consult Circular Letters CR/457, CR/456 and CR/469 and BR IFIC web page (https://www.itu.int/en/ITU-R/space/Pages/brificMain.aspx) for more detailed information





How to understand?

- The content of the BR IFIC (Space services) DVD-ROM?
- The SNS data
- Special section or PART Findings
- Symbols of Intergovernmental satellite organizations
- Symbols Class of station/services
- Antenna patterns code
- Operating Agency number
- Remarks code







Distributed in the BR IFIC DVD-ROM in **six** languages (English, French, Spanish, Arabic, Chinese and Russian) or download it from the SSD website:

https://www.itu.int/ITU-R/go/spacepreface/en



Radiocommunication Sector (ITU-R)

RADIOCOMMUNICATION BUREAU

PREFACE

TO THE BR INTERNATIONAL FREQUENCY INFORMATION CIRCULAR BR IFIC (Space Services)

Always look for Edition and New Changes

NEW CHANGES

This section contains the list of any changes made to this version, except those concerning the regularly updated Table 12A/12B.

Edition	Changes	
November 2020	NOC	
October 2020	NOC	
September 2020 NOC		
August 2020	Update of Note 2 in Section III Chapter 1 Addition of Note 7 in Section III Chapter 1 Update of Section III Chapter 2 related to NGSO service area diagrams Modification of Section II Chapter 3 and Section III Chapter 1 to reflect the implementation of the Version 9 of software and databases. Update of Table 11C1.	
July 2020	NOC	



Edition: November 2020 1/358



Contains 4 Sections

- Section I General
- ➤ Section II Description of the BR IFIC and the Space Radiocommunication Stations (SRS) database info
- Section III Description of the Space Networks System (SNS)
- > Section IV Reference Tables





SECTION II - Description of the BR IFIC and the Space Radiocommunication Stations (SRS) on DVD-ROM

- Chapter 1 BR IFIC (Space Services)
 - Definition of the BR IFIC
 - PART I-S, PART II-S and PART III-S
 - Appendix and Annex to the BR IFIC
 - The Special Sections currently in use
 - The Special Sections discontinued
- Chapter 2 Cover pages of the PART I-S, II-S, III-S and the Special Sections currently in use
- Chapter 3 SRS database information





SECTION III - Space Networks System (SNS)

- Chapter 1 Details relating to the contents of the SNS data items published in Part I-S, II-S, III-S and the Special Sections of the BR IFIC
- Chapter 2 Description of the format for electronic submission of graphical data related to satellite networks

SECTION IV - Reference Tables

- Table 1A Codes Designating Notifying Administrations
- Table 1B Codes Designating Countries or Geographical Areas
- Table 2 Intergovernmental satellite organizations
- Table 3 Class of Station (data item C4a)
- Table 4 Nature of Service (data item C4b)
- Table 5 Symbols used to indicate the polarization (data item C6a)
- Table 6 Radio astronomy station antenna characteristics (data item *B6*)



SECTION IV - Reference Tables

- Table 7 Antenna radiation reference pattern (data item B3e/B4a/B4b or B5c2 or C10c4a)
- Tables 8 10 Numbers not used
- Table 11A Symbols used for coordination and agreement (data item *A5/A6*) (coordination phase)
- Table 11B Symbols used for coordination and agreement (data item A5/A6) (notification phase)
- Table 12A/12B Responsible administrations (data item A3b), operating agencies (data item A3a) and postal and telegraphic addresses of the administrations responsible for the stations
- Table 13A1 Finding reference Conformity with the Radio Regulations symbols used in column 13A1
- Table 13A2 Finding reference Conformity with the procedures relating to coordination with other administrations or conformity with a Plan (world or regional) symbols used in column 13A2
- Table 13A3 Finding reference Technical examination symbols used in column 13A3
- Table 13A4 Finding reference Conformity with RES-49 symbols used in column 13A4





SECTION IV - Reference Tables

- Table 13B1 Reference to a provision of the Radio Regulations or an Appendix thereto, or a Resolution of a World Radio Conference or a Regional Agreement - symbols used in column 13B1
- Table 13B2 Remarks concerning Findings symbols used in column 13B2
- Table 13B3 Date relating to a review to be made symbols used in column 13B3
- Table 13C Remarks symbols used in column 13C





SECTION IV - Tables 1A/1B

TABLE 1A

Codes designating Notifying Administrations

Note: The presence of any given code designating a country with respect to a frequency assignment to a station is without prejudice to any question of territorial status which may be involved.

Code	Name of the administration (ITU Member State)		
AFG	Afghanistan		
AFS	South Africa (Republic of)		
AGL	Angola (Republic of)		
ALB	Albania (Republic of)		
ALG	Algeria (People's Democratic Republic of)		
AND	Andorra (Principality of)		
ARG	Argentine Republic		
ARM	Armenia (Republic of)		
ARS	Saudi Arabia (Kingdom of)		
ATG	Antigua and Barbuda		
AUS	Australia		
AUT	Austria		
AZE	Azerbaijan (Republic of)		
В	Brazil (Federative Republic of)		
BAH	Bahamas (Commonwealth of the)		
BDI	Burundi (Republic of)		
BEL	Belgium		
BEN	Benin (Republic of)		
BFA	Burkina Faso		
BGD	Bangladesh (People's Republic of)		
BHR	Bahrain (Kingdom of)		
BIH	Bosnia and Herzegovina		
BLR	Belarus (Republic of)		

TABLE 1B

Codes designating Countries or Geographical Areas

Note: The codes have a geographical significance only. The presence of any given code designating a country or a geographical area with respect to a frequency assignment to a station is without president to any question of tarritorial status which may be involved.

If the territory of an Administration consists of several geographical areas, which may be distributed in different Regions, the entire territory of that Administration is represented by several geographical codes.

Explanation of a code of the type XXX/YYY (where XXX or YYY is a code designating an administration, country or a geographical area):

XXX indicates the code designating the notifying administration and YYY indicates the code desginating the country or the geographical area, in which the station is located.

See: RES-1 (Rev. WRC-97), resolves

that, unless specifically stipulated otherwise by special arrangements communicated to the Union by administrations, any notification of a frequency assignment to a station shall be made by the administration of the country on whose territory the station is located.

Code	Region	Notifying Administration	Name of the geographical area
ABW	XR2	HOL	Aruba
AFG	XR3	AFG	Afghanistan
AFS	XR1	AFS	South Africa
AGL	XR1	AGL	Angola
AIA	XR2	G	Anguilla
ALB	XR1	ALB	Albania
ALG	XR1	ALG	Algeria
ALS	XR2	USA	Alaska (State of)

Example-1-: The entire-territory of the

Administration·of·AUS·will·be·represented·by·multiple·codes:·AUS,·CHR,·HMD,·ICO,·NFK¶





SECTION IV - Table 3 Class of Station (data item C4a)

Class of Station

1			
Symbol	Space Station Class of Station		
E1	Space research (active sensor) space		
E2	Space research (passive sensor) space station		
E3	Space station in the Earth exploration-satellite service (active sensor)		
E4	Space station in the Earth exploration-satellite (passive sensor)		
E5	Space station in the aeronautical mobile-satellite (R) service		
E6	Space station in the aeronautical mobile-satellite (OR) service		
EA	Space station in the amateur-satellite service		
EB	Space station in the broadcasting-satellite service (sound broadcasting)		
EC	Space station in the fixed-satellite service		
ED	Space telecommand space station		
EE	Space station in the standard frequency-satellite service		
EF	Space station in the radiodetermination-satellite service		
EG	Space station in the maritime mobile-satellite service		
EH	Space research space station		
EI	Space station in the mobile-satellite service		
EJ	Space station in the aeronautical mobile-satellite service		
EK	Space tracking space station		
EM	Space station in the meteorological-satellite service		
EN	Space station in the radionavigation-satellite service		
EO	Space station in the aeronautical radionavigation-satellite service		
EQ	Space station in the maritime radionavigation-satellite service		
ER	Space telemetering space station		
ES	Station in the inter-satellite service		
ET	Space station in the space operation service		
EU	Space station in the land mobile-satellite service		
EV	Space station in the broadcasting-satellite service (television)		
EW	Space station in the earth exploration-satellite service		
EY	Space station in the time signal-satellite service		

1.5	Affectant earth station in the aeronautical mobile-satellite (K) service		
T6	Aircraft earth station in the aeronautical mobile-satellite (OR) service		
TA	Earth station in the amateur-satellite service		
TB	Aeronautical earth station		
TC	Earth station in the fixed-satellite service		
TD	Space telecommand earth station		
TE	Satellite EPIRB in the mobile-satellite service		
TF	Fixed earth station in the radiodetermination-satellite service		
TG	Ship earth station		
TH	Earth station in the space research service		
TI	Coast earth station		
TJ	Aircraft earth station		
TK	Space tracking earth station		
TL	Mobile earth station in the radiodetermination-satellite service		
TM	Earth station in the meteorological-satellite service		
TN	Fixed earth station in the radionavigation-satellite service		
ТО	Mobile earth station in the aeronautical radionavigation-satellite service		
TQ	Mobile earth station in the maritime radionavigation-satellite service		
TR	Space telemetering earth station		
TT	Earth station in the space operation service		
TU	Land mobile earth station		
TW	Earth station in the earth exploration-satellite service		
TX	Fixed earth station in the maritime radionavigation-satellite service		
TY	Base earth station		
TZ	Fixed earth station in the aeronautical radionavigation-satellite service		
UA	Mobile earth station		
UB	Earth station in the broadcasting-satellite service (sound broadcasting)		
UD	Space telecommand mobile earth station		
UE	Earth station in the standard frequency-satellite service		
UF	Earth station in motion communicating with a geostationary satellite orbit station in the fixed-satellite		
	service in the frequency bands referred to under No. 5.527A [5.5X]		
UG	Earth station on board unmanned aircraft communicating with a space station of a geostationary-satellite		

network in the fixed-satellite service for UAS CNPC links in accordance with resolves 1 of RES-155

Mobile earth station in the space research service Space tracking mobile earth station

Space telemetering mobile earth station

Mobile earth station in the meteorological-satellite service Mobile earth station in the radionavigation-satellite service

SECTION IV - Table 3: Class of Station

Earth Station Class of Station

Correspondence between Earth Station Class of Station and Space Station Class of Station

Earth Station Class of Station	Corresponding Space Station Class of Station
T5	E5
T6	E6
TA	EA
TB	EJ
TC	EC
TD	ED
TE	(EI)
TF	EF
TG	EG
TH	EH

TI	EG
TJ	EJ
TJ	EC ¹
TK	EK
TL	EF
TM	EM
TN	EN
TO	EO
TQ	EQ
TR	ER
TT	ET
TU	EU
TW	EW
TX	EQ
TY	EU
TZ	EO
UA	EI
UB	EB
UD	ED
UE	EE
UF	EC
UG	EC
UH	EH
UK	EK
UM	EM
UN	EN
UR	ER
UT	ET
UV	EV
UW	EW
UY	EY
VA	EI





RA

Radio astronomy station
Aircraft earth station in the

<u>SECTION IV – Tables 7A/7B Antenna radiation reference</u> pattern

Antenna Radiation Reference pattern can be consulted from the Antenna Pattern Library at:

https://www.itu.int/en/ITU-R/software/Pages/ant-pattern.aspx





<u>SECTION IV – Tables 12A/12B Responsible</u> <u>Administrations/Operating agencies</u>

- -You are invited to update this information by sending a letter indicating the correct address or contact of the existing responsible Administrations or Operating Agencies or by adding a new responsible Administration or Operating agency with its full address (postal, telephone, email)
- -Table 12A/12B is also used for creating operator users in e-submission

sui	Switzerland		
А	FEDERAL OFFICE OF COMMUNICATION ZUKUNFTSTRASSE 44 CH-2501 BIEL-BIENNE SUISSE EMAIL: info@bakom.admin.ch TELEFAX: +41 58 463 18 24		
В	UNITED NATIONS FOR THE ATTENTION OF THE CHIEF OF TELECOMMUNICATIONS OPERATIONS SECTION ROOM \$2035 NEW YORK NY10017 UNITED STATES TELEX: 023289696		
С	OFFICE DES NATIONS UNIES A GENEVE PALAIS DES NATIONS CH - 1211 GENEVE 10 TELEX: 289696 UNO CH		
D	BUNDESNETZAGENTUR FUR ELEKTRIZITAT, GAS, TELEKOMMUNIKATION, POST UND EISENBAHNEN CENTRALIZING OFFICE OF THE RADIO MONITORIN SERVICE P.O. BOS 80 01 D - 55003 MAINS TELEX: 04187404 MONI D	G	
001 003 005 010 012 014 016	RADIO-SUISSE S.A. OFFICE FEDERAL DE L'AIR UNITED NATIONS MISSION DES ETATS-UNIS EPFL - ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE SPACEPHARMA SA ASTROCAST SA	002 004 009 011 013	OFFICE FEDERAL DE LA COMMUNICATION SERVICE RADIOPOLICE SUEDWESTFUNK, BADEN-BADEN INSTITUTE OF ASTRONOMY UNIVERSITY OF APPLIED SCIENCES OF SOUTHERN SWITZERLAND (SUPSI) INMARSAT SA



