

ITUEvents

# ITU World Radiocommunication Seminar 2018

3-7 December 2018  
Geneva, Switzerland

[www.itu.int/go/ITU-R/WRS-18](http://www.itu.int/go/ITU-R/WRS-18)



## Receivability of space notices

**Chuen Chern Loo**  
Space Publication and Registration  
Division,  
Space Services Department  
Radiocommunication Bureau

**ITU HQ Geneva,  
4 December, 2018**

# Regulations relating to completeness



## Advance Publication Information (API)

**9.1A** Upon receipt of the **complete information** sent under No. 9.30, the Bureau shall publish, using the basic characteristics of the coordination request, a general description of the network or system for advance publication in a Special Section of the BR IFIC.

**9.2A** If the information is found to be **incomplete**, the Bureau shall immediately seek from the administration concerned any clarification required and information not provided.

**9.2B** On receipt of the **complete information** sent under Nos. 9.1 and 9.2, the Bureau shall publish it in a Special Section of its BR IFIC within three months.

## Request for Coordination

**9.34** On receipt of the **complete information** sent under No. 9.30 or No. 9.32 the Bureau shall promptly:  
No.9.35 a) examine that information with respect to its conformity with No. 11.31.....

**9.40A** If the information is found to be **incomplete**, the Bureau shall immediately seek from the administration concerned any clarification required and information not provided.

## Notification for recording

**11.27** **Notices not containing those characteristics** specified in Appendix 4 as mandatory or required shall be returned with comments to help the notifying administration to **complete** and resubmit them, unless the information not provided is immediately forthcoming in response to a inquiry by the Bureau.

**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 of receipt, in the BR IFIC which shall constitute the acknowledgement to the notifying administration of receipt of its notice.

**Information required is specified in Appendix 4!**

# Regulations relating to completeness



## Resolution 49

Resolves 3 ... if the due diligence information is found to be **incomplete**, the Bureau shall immediately request the administration to submit the missing information. In any case, the **complete** due diligence information shall be received by the Bureau before the expiry date..., and shall be published by the Bureau in the International Frequency Information Circular (BR IFIC);

## Resolution 552

§ 4 of Annex 1 - on receipt of the information ..., the Bureau shall promptly examine its completeness. If the information is found to be **complete**, the Bureau shall publish the **complete** information in a special section of the BR IFIC within two months. If the information is found to be **incomplete**, the Bureau shall request the notifying administration to submit the missing information within 30 days.

Information required is specified in the respective Resolutions!

# Annex 2 of Appendix 4

---

## ➤ 4 TABLES

- A - GENERAL CHARACTERISTICS OF THE SATELLITE NETWORK, EARTH STATION OR RADIO ASTRONOMY STATION
  - *B – CHARACTERISTICS TO BE PROVIDED FOR EACH SATELLITE ANTENNA BEAM OR EACH EARTH STATION OR RADIO ASTRONOMY ANTENNA*
  - *C – CHARACTERISTICS TO BE PROVIDED FOR EACH GROUP OF FREQUENCY ASSIGNMENTS FOR A SATELLITE ANTENNA BEAM OR AN EARTH STATION OR RADIO ASTRONOMY ANTENNA*
  - *D - OVERALL LINK CHARACTERISTICS*
-

TABLE B

**CHARACTERISTICS TO BE PROVIDED FOR EACH SATELLITE ANTENNA BEAM OR  
EACH EARTH STATION OR RADIO ASTRONOMY ANTENNA (Rev.WRC-15)**



Items in Appendix	<p><i><b>B - CHARACTERISTICS TO BE PROVIDED FOR EACH SATELLITE ANTENNA BEAM OR EACH EARTH STATION OR RADIO ASTRONOMY ANTENNA</b></i></p>
<b>B.1</b>	<b>IDENTIFICATION AND DIRECTION OF THE SATELLITE ANTENNA BEAM</b>
B.1.a	the designation of the satellite antenna beam For an earth station, the designation of the satellite antenna beam of the associated space station
B.1.b	an indicator showing whether the antenna beam, under B.1.a, is fixed or whether it is steerable and / or reconfigurable
<b>B.2</b>	<b>TRANSMISSION / RECEPTION INDICATOR FOR THE BEAM OF THE SPACE STATION OR THE ASSOCIATED SPACE STATION</b>
<b>B.2bis</b>	<b>CONTINUOUS/NON-CONTINUOUS TRANSMISSION INDICATOR FOR THE BEAM OF THE SPACE STATION</b>
B.2bis.a	an indicator specifying whether the space station only transmits when visible from the notified service area  In the case of advance publication, required only for frequency assignments of a non-geostationary satellite transmitting beam  In the case of notification or coordination of a non-geostationary-satellite network, required only for frequency assignments of a non-geostationary satellite transmitting beam of a satellite network not subject to Nos. 22.5C, 22.5D or 22.5F
B.2bis.b	in case of non-continuous transmission in item B.2bis.a, the minimum elevation angle above which transmissions occur when the space station is visible from the notified service area  In the case of notification or coordination of a non-geostationary-satellite network, only for frequency assignments of a non-geostationary satellite transmitting beam of a satellite network not subject to Nos. 22.5C, 22.5D or 22.5F
<b>B.3</b>	<b>SPACE STATION ANTENNA CHARACTERISTICS</b>
B.3.a	<b>For each space station antenna:</b>
B.3.a.1	the maximum co-polar isotropic gain, in dBi Where a steerable beam (see No. 1.191) is used, if the effective boresight area (see No. 1.175) is identical with the global service area, the maximum antenna gain, in dBi, is applicable to all points on the Earth's visible surface
B.3.a.2	if a non-elliptical beam, the maximum cross-polar isotropic antenna gain, in dBi



Advance publication of a geostationary-satellite network	Advance publication of a non-geostationary-satellite network subject to coordination under Section II of Article 9	Advance publication of a non-geostationary-satellite network not subject to coordination under Section II of Article 9	Notification or coordination of a geostationary-satellite network (including space operation functions under Article 2A of Appendices 30 or 30A)	Notification or coordination of a non-geostationary-satellite network	Notification or coordination of an earth station (including notification under Appendices 30A or 30B)	Notice for a satellite network in the broadcasting-satellite service under Appendix 30 (Articles 4 and 5)	Notice for a satellite network (feeder-link) under Appendix 30A (Articles 4 and 5)	Notice for a satellite network in the fixed-satellite service under Appendix 30B (Articles 6 and 8)	Items in Appendix	Radio astronomy
									<b>B.1</b>	
		X	X	X	X	X	X	X	B.1.a	
		X	X	X		X	X	X	B.1.b	
		X	X	X	+ <sup>1</sup>			X	B.2	
									<b>B.2bis</b>	
		+		+					B.2bis.a	

# Revised Rules of Procedure (ROP) on Receivability



- Effective 1.8.2018
- All notices for satellite networks shall be submitted to the Bureau in electronic format which is compatible with the BR electronic notice form capture software (SpaceCap) and comments/objections software (SpaceCom), **using the ITU web interface “e-Submission of satellite network filings”** available at <https://www.itu.int/itu-r/go/space-submission>.
- Notices submitted using “e-Submission of satellite network filings” for space services shall be recorded as received on the actual date of receipt, irrespective of whether or not that is a working day at the ITU/BR’s offices in Geneva.
- Notices submitted using “e-Submission of satellite network filings” for space services do not require any separate confirmation by telefax or mail.
- Receipt of notices related to space services shall be acknowledged immediately by ITU/BR e mail.



Home

Submissions

As-Received

Users

Help

New

All Filings

Comments

Reports

Contains text



Submission of Satellite network filings captured in electronic format (mdb) and all relevant attachments. Please click on the icon corresponding to your submission.

### API and Coordination



### Broadcasting Satellite Service (AP30/30A)



### Notification



### Space Operation Functions supporting BSS (AP30/30A)



### Due Diligence



### Fixed Satellite Service (AP30B)







# ROP: Correspondence related to submission of notices

---

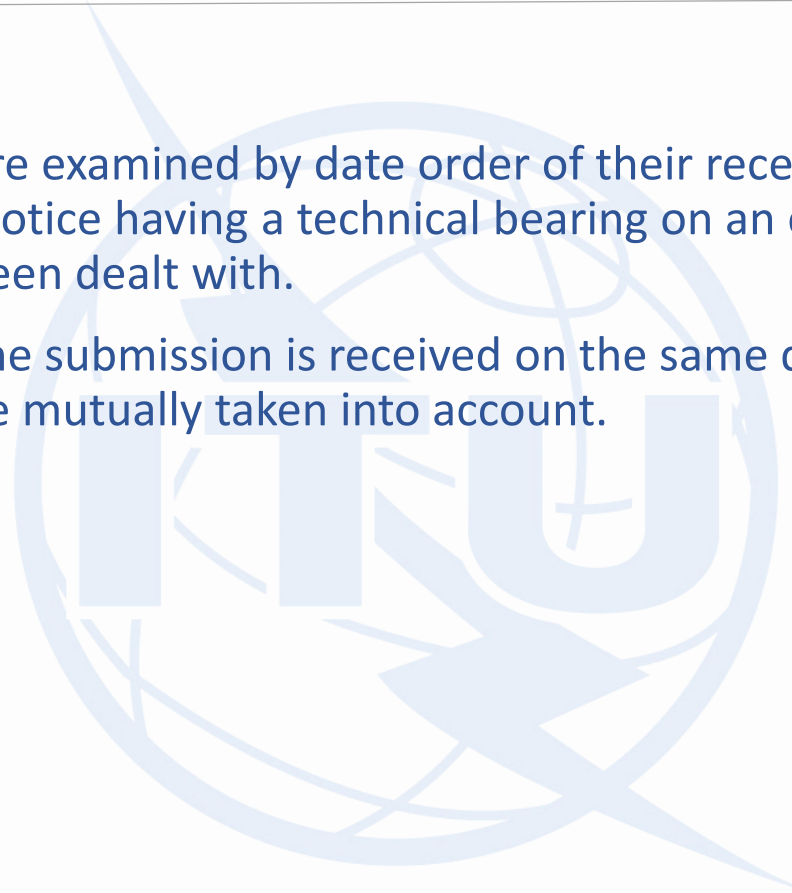
- Mail received through the postal service (Includes courier, messenger or other services) shall be recorded as received on the first working day on which it is delivered to the ITU/BR's offices in Geneva. Where the mail is subject to a regulatory time limit that occurs on a date on which the ITU is closed, the mail should be accepted if it has been recorded as received on the first working day following the period of closure.
  - E-mail and telefax documents shall be recorded as received on the actual date of receipt, irrespective of whether or not that is a working day at the ITU/BR's offices in Geneva.
  - All mail must be sent to the following address:
    - Radiocommunication Bureau
    - International Telecommunication Union
    - Place des Nations
    - CH-1211 Geneva 20
    - Switzerland
  - All telefaxes must be sent to: +41 22 730 57 85 (several lines)
  - All e-mails must be sent to: [brmail@itu.int](mailto:brmail@itu.int)
  - Information received in the ITU/BR by e-mail shall be acknowledged immediately by e-mail by the ITU/BR.
-



# ROP: Establishment of a formal date of receipt of information

---

- Complete notices are examined by date order of their receipt and the Bureau cannot act upon a notice having a technical bearing on an earlier notice until the earlier notice has been dealt with.
- When more than one submission is received on the same date, all those submissions shall be mutually taken into account.



# ROP: Establishment of a formal date of receipt of information

---



- In order to establish a formal date of receipt for the purpose of treatment of the submissions, the Bureau shall examine inter alia the completeness and correctness of the information submitted by administrations.
  - It shall also take account of the requirements of No. 9.1 when establishing the formal date of receipt of notification information with respect to the date of publication (when coordination is not required by Section II of Article 9) of advance information.
  - Where a notice received by the Bureau does not contain all of the mandatory information as defined in Annex 2 of Appendix 4 or appropriate reason for any omissions, the Bureau shall regard the notice as incomplete. The Bureau shall immediately inform the administration and seek the information not provided.
  - Further processing of the notice by the Bureau will remain in abeyance and a formal date of receipt will not be established until the missing information is received. The formal date of receipt will be the date of receipt of the missing information.
-



# ROP: Validation with SpaceVal

---

- **The latest version of the validation software available to administrations, as advised by Circular Letter, is used by the Bureau when assessing the completeness of Appendix 4 Forms of Notice.**
- **Administrations are encouraged to run the validation software themselves in order to overcome any difficulties in the notices before they are submitted to the Bureau.**

In e-submissions for satellite network filings, when the notice is submitted to bureau, Spaceval will be executed on the notice.

If any fatal error is found, user will have to enter the reason why they think they would submit despite the fatal error

---



## ROP: Further clarifications on a notice

---

- If the Bureau finds that further clarification is required concerning the correctness of the mandatory data submitted, it shall request the administration responsible for the station or network to provide the clarification within 30 days, otherwise it shall establish the formal date of receipt.
  - If the information or clarification is provided within that period of 30 days, the date of receipt will be retained.
  - If the information or clarification is not provided within the above period of 30 days, the submission shall be considered incomplete and the Bureau will establish no formal date of receipt. A new formal date of receipt will be established when the complete information is received.
  - Nevertheless, for replies received within the above period of 30 days, a new formal date of receipt is established in those cases where the information submitted subsequently is outside the scope and beyond the objective of the Bureau's enquiry, if the new or modified data has impact on the regulatory and technical examination, irrespective of whether the newly provided information adds new affected administrations or not.
-



# ROP: Request for deletion of an assignment

---

- In case of the request for deletion of an assignment, a group of assignments, an emission, beams or other characteristics of a satellite network or satellite system, two situations may arise:
  - a) The satellite network or satellite system in question has not yet been examined and published by the Bureau. In that case, the initial formal date of receipt will be maintained for the remaining part of the satellite network or system, if any.
  - b) The satellite network or satellite system in question has already been examined and published by the Bureau. In that case, the request for deletion shall be published in a modification to the previously published relevant Special Section and the technical bearing of the deletion will be examined by the Bureau in the date order of receipt of the request.
-



# ROP: Application of multiple procedures



- The Radio Regulations prescribe, in some cases, the application of multiple procedures, which have to be applied, for the same stations or satellite network, one after another. In such cases, a notice for a particular procedure is receivable only if the previously applicable procedure has been effected.
- 4.3.1 A notification under Article 11 is not receivable if the coordination request, where applicable, was not received for the satellite network (No. 9.6 refers) and shall be returned to the notifying administration.
- 4.3.2 A notification under Article 11 is not receivable if the advance publication information under Sub-Section IA of Article 9, where applicable, was not received for the satellite network and shall be returned to the notifying administration.



# ROP: Frequency assignments of an earth station under Article 11

---

- A notification of frequency assignments of an earth station under Article 11 is not receivable if the advance publication information or coordination request, as appropriate, was not received for the associated space station.
  - If the frequency assignments notified under Article 11 for the associated space station are not received nor recorded in the MIFR within the regulatory time-limit, the frequency assignments notified for the earth station shall be suppressed from the MIFR.
-



# Receivability for API and CR

- **API (advance publication information)**
  - API is required generally for NGSOs
    - *For GSOs, only for those with the use of inter-satellite links communicating with a non-geostationary space station which are not subject to the coordination procedure*
  - Frequency bands/services must be not subject to coordination
  - Frequency bands must not be not subject to plans
  - Complete AP4 information must be submitted
    - *Common error of administration is missing antenna pattern*
- **CR (coordination request)**
  - Frequency bands must be subject to coordination
  - Frequency bands must not be not subject to plans
  - Complete AP4 information must be submitted, in addition, note that
    - *For GSO satellite networks: antenna contour diagrams, service area diagrams, and for bidirectional bands: AGGSO diagrams must be provided*
    - *For NGSO satellite networks,*
      - additional data requirements if bands are subject to 9.11A or EPFD
      - indication of simultaneous operation or mutually exclusive configurations
    - *For Earth stations, only those under No.9.7A or No.9.21 are receivable*



# Receivability for Notifications

## ➤ Notification for recording for Space Stations

- Prior procedures must be completed
  - *For bands not subject to coordination, prior API must have been published for that band*
  - *For bands subject to coordination, prior CR/C must have been submitted for that band*
- Checking of the date of bringing into use
  - *Date of receipt of the notification should not be earlier than 3 years before the date of bringing into use indicated in the notice (No.11.25)*
  - *Notified date of bringing into use shall not be later than the 7-year regulatory limit (No.11.44)*
- Notification must be received by the Bureau by the end of the 7-year regulatory limit (No.11.44.1)
- Complete AP4 information must be submitted
  - *If GIMs diagrams are the same as in CR/C, just request BR to use the same diagrams*
  - *Any additional notes must be provided separately in the notification submission*

# Resubmissions

## ➤ Resubmissions under No.11.46

- *If a notice is returned to the administration due to non-completion of coordination (unfavourable findings under Nos.11.32, 11.32A or 11.33)*
  - The notice can be resubmitted within 6 months from the date of return of notice from the Bureau and still retain the original date of receipt of the notification, and it will be treated under the cost recovery framework of the original notification.
  - If only update of coordination requirements, may simply resubmit with a simple telefax
  - Please pay attention to the 6 months deadline for resubmission. If the notice is received by the Bureau after this deadline, it will be treated with a new date of receipt, and if the 7-year limit has already passed, the network will be suppressed under No.11.48.
- *If a notice is returned due to other reasons (e.g. unfavourable findings under No.11.31), then the resubmission procedure under No.11.46 is not applicable*
  - a new date of receipt will be given when the notice is submitted again to the Bureau, and a new cost recovery invoice will be issued.

## ➤ When submitting notices in application of No. 11.41, the notifying administration shall indicate to the Bureau that

*efforts have been made to effect coordination with those administrations whose assignments were the basis of the unfavourable findings under No. 11.38, without success.(No.11.41.2 )*



# Format of electronic notice

---

- **All notices must be submitted in electronic format, using the SNS v8 database structure**
    - To verify conformity of the structure of the database, run Spaceval/SRSFix
    - Definition of database format can be found in chapter 3 of Preface
    - For a chart on the SRS database structure, please refer to the file SRSDiagramV8.pdf available at...\[BRIFIC2884\\_S\Databases\SRS\\_Data](#)
    - Administrations are strongly encouraged to use SpaceCap to capture a notice, and to avoid changing data directly in the mdb file using Microsoft Access.
  
  - **For GSO satellite networks, graphical information should be provided in GIMS v8 format**
    - GXT format is no longer accepted, kindly import all GXT diagrams for a network into a single mdb file before submitting to the Bureau
    - Run Spaceval with cross validation option selected to cross check the SNS and GIMs mdb files
-



# BR's acknowledgements to submissions



## ➤ **Submission done through E-Submissions**

- Automatic acknowledgements at time of submission by Administration/receipt by Bureau

## ➤ **Submission done through Email**

- No longer acceptable except in exceptional circumstances
- Automatic acknowledgements when email is processed by Bureau registry

## ➤ **Coordination requests**

- An separate acknowledgement by fax will be sent to the notifying administration, with an indication of the official date of receipt

## ➤ **Notifications**

- No separate fax acknowledgement
- According to No.11.28, publication of the information (in Part I-S) constitute the acknowledgement

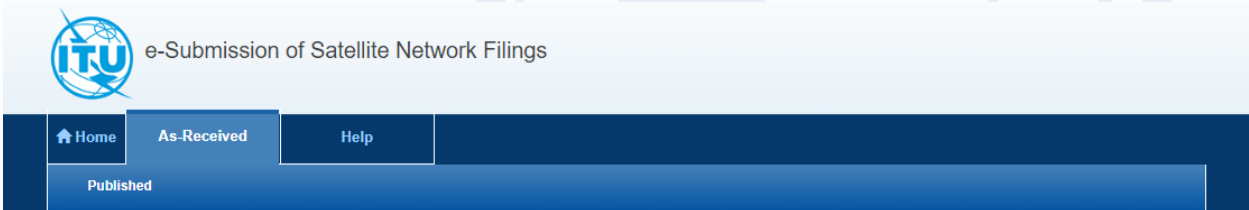


# As-received

RES-55 (rev. WRC-15) *instructs the Bureau 1*

*to make available coordination requests and notifications, "as received", within 30 days of receipt on its website*

<https://www.itu.int/ITU-R/space/asreceived/Publication/AsReceived>



## Information "As Received"

List of satellite notices received (but not yet published) by the Bureau in accordance with Res 55 (Rev. WRC-15).

1. Space station coordination requests, including those request for coordination received between 01.07.2016 and 31.12.2016 for which there are no corresponding APIs.
2. Notification of space station.
3. Submissions received under § 4.1.3 or § 4.2.6 of Article 4 of Appendices 30 and 30A.
4. Submissions received under Article 2A of Appendices 30 and 30A.
5. Submissions received under § 6.1 and § 7.2 of Appendix 30B.

In addition, the information "as-received" for API and Notification of Earth Stations are also made available in this list.

The "as received" information has no regulatory status and therefore is not recommended for examination purposes.

## Publications list

Contains text   Select administration...  Select submission type...

« 1 2 3 »»

NTC ID	Adm.	Network Org.	Station/Satellite Name	Long. Nom.	▼ BR Registry Date	Type of submission	Reg	Act. Code
118520338	F		EG-SAT-38W	38 W	22.11.2018	Coordination Request		A
118520339	F		EG-SAT-22W	22 W	22.11.2018	Coordination Request		A



- **Refers to the 7-year limit defined in No.11.44**
  - In SNS database structure: Table `grp`, field `d_reg_limit`
  - Set for each unique frequency band, the date is set to the date of **first receipt** of the band for **7 years**.
  - Any further modifications to frequency assignments contained within this band will not change the regulatory date limit.
  - For modifications, any **new frequency bands** contained in the modification notice as compared to earlier API/A or CR/Cs will be given **new regulatory dates**
  - Modifications to a coordination request under the procedure of **No.11.43** (i.e. modifications of assignments already recorded and **past the regulatory date limit**) will be given **new** regulatory dates of 7 years from the date of receipt of the modification even if the band has been previously published.



# Other issues concerning e-Submissions

- **Confirmation fax/letter from the administration is not required for notices submitted through e-Submissions**
- **However, it can still be useful to provide a cover letter to address issues such as**
  - Specific addresses for cost recovery invoices
  - Request for a new operating agency
  - For modification, what is being modified?
  - Any other important information
- **Such cover letter can be submitted as other document with the notice in one submission**
- **Some administrations send such letters by fax to BR**
  - In some instances, this has enabled the Bureau to find that the administration has forgot to submit the filing by esubmissions e.g. it was uploaded but not submitted to Bureau



# E-Submissions – replies to request for clarifications from Bureau

---

- For replies to the BR's request for clarifications or information, administrations sometimes need to send revised mdb files.
  - To avoid these being treated as a modification with a new date of receipt, do not upload them like a new submission.
  - Administrations can submit in e-Submissions using "others" category, and attach a letter to explain that it is a reply to the Bureau's enquiry.
  - It is also possible to send the replies by telefax/emails to the Bureau.
  - BR is currently working on the communications feature in e-Submissions to enable exchange of correspondence and other information within the system.
-



---

Thank you for your attention!

