

Notification and Recording Assignments

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ITSO/ITU WORKSHOP

on Satellite Communications

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Overview

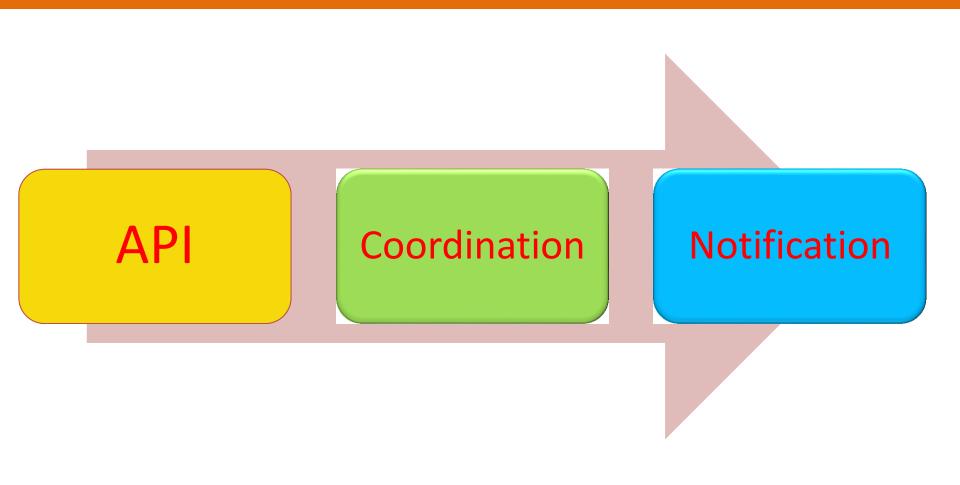
- Which frequency assignments shall be notified
- When to notify:
 - Space stations
 - > Earth stations
- Notification Tools and Aids:
 - What are they
 - Where can they be found
- Examinations carried out at Notification
- Where findings are published



WHICH FREQUENCY ASSIGNMENTS SHALL BE NOTIFIED?

- Frequency assignments of transmitting and receiving earth and space stations
 - Capable of causing harmful interference
 - Used for international radiocommunication
 - Subject to a world or regional frequency plan which does not have its own notification procedure
 - Subject to coordination procedure of Article 9
 - Seeking international recognition
 - Non conforming assignment under No. 8.4 seeking to be recorded into MIFR for information purposes only

PRIOR TO NOTIFICATION PROCEDURE



Notification Procedure



Article 11 of the Radio
Regulations

WHEN TO INITIATE THE NOTIFICATION PROCEDURE (1)

SPACE STATIONS

- Assignments that do not require coordination under Sect II of Article 9
 - -Generally upon the completion of the Advance Publication procedure
- Assignments that require coordination under Sect II of Article 9
 - -Generally upon the completion of the Coordination procedure

No.11.44.1

The first notice for recording the space station frequency assignments must be carried out before the end of 7 years from the date of receipt of (API) information under No. 9.1.

WHEN TO INITIATE THE NOTIFICATION PROCEDURE (3)

When notification information is communicated the same time as the advance publication procedure, the date of having received this information by the BR (No. 9.1) is established as follows:

•For Assignments that do not require coordination under Sect II of Article 9

6 months after the date of publication of API

•For Assignments that require coordination under Sect II of Article 9

6 months after the date of receipt of API

BEFORE NOTIFICATION PROCEDURE OF EARTH STATIONS

EARTH STATIONS

- Associated space station must already be recorded into the MIFR
- Thereafter, notification of earth station should be initiated

ARTICLE 11 NOTIFICATION PROCEDURE

•SECTION I — Notification

Description of procedures related to initiating the notification procedure

•SECTION II — Examination and recording of frequency assignments

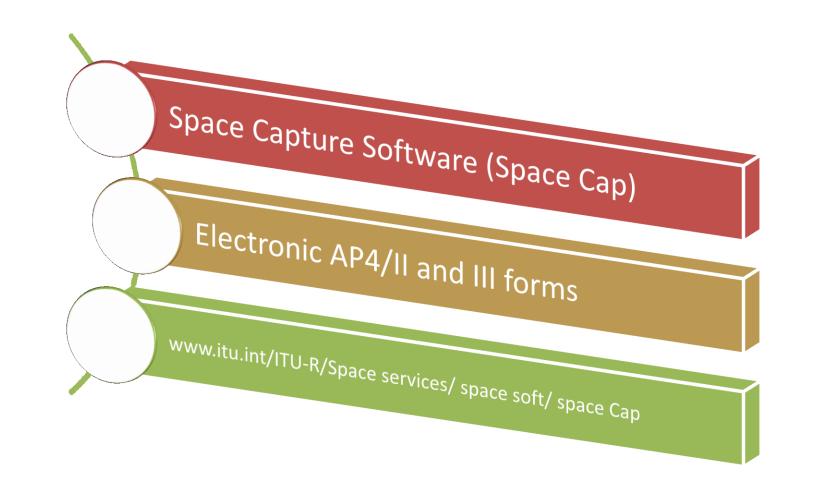
Description of procedures related to the processing and recording/or returning of the notification information

Section

(Notification)

- Provide the relevant characteristics as specified in Appendix 4 (No. 11.15)
- •Res 55 requires all notice forms to be submitted in electronic format after 3 June 2000
- •Graphical data can be submitted either in electronic format or paper form
- Tools available from BR IFIC on DVD-ROM and ITU Website

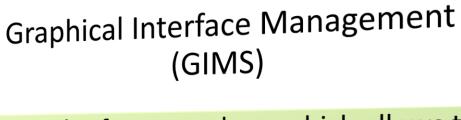
Notification Softwares



Notification Softwares (2)



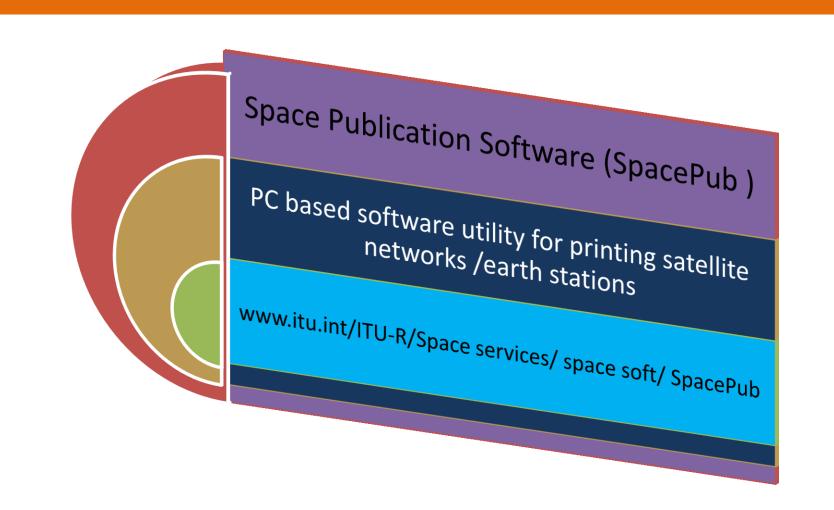
Notification Softwares (3)



PC based software package which allows the capture, modification and validation of graphical data

www.itu.int/ITU-R/Space services/ space soft/ GIMS

Notification Softwares (4)



Notification "As Received"

Notifications "as received" are made available by the BR within 30 days (Res 55)

- International Frequency Information Circular(IFIC)DVD-ROM
- This information can also be monitored through the ITU website

www.itu.int → Radiocommunication(ITU-R) → Space Services → BR IFIC → List of information "as received"

Useful Reminders During Notification Submissions

- •Ensure forms are filled up accurately and correctly use SpaceCap, GIMS and SpaceVal software for preparation of submissions in electronic format
- •Submit forms in electronic format Access files with .mdb extension, and NOT the Acrobat (.PDF) or Word (.doc) files, should be submitted to the BR
- •Ensure most up-to-date coordination information has been provided
- •Ensure the relevant Advance Publication and Coordination Special Sections exist for the assignments being notified
- •Take note of the regulatory time constraints (Nos. 11.44, 11.44.1, No.11.43A, RES49 and 11.25)



Upon receiving the notices, the Bureau as specified in No. 11.27, shall check for the completeness of the notice.

Incomplete Notices & Non-Receivables

- Mandatory data has not been provided or incorrect
- •A notification received by the BR earlier than the prescribed date limit in No. 11.25
- •A notice for a particular procedure is receivable only if the previously applicable procedures have been effected. If not, the notice will be deemed not receivable.

Examples

A notification relating to a satellite network, or an earth station whose associated space station, is not supported by an advance publication

A notification relating to a satellite network which is not supported by a publication of request for coordination

Establishment of Date of Receipt of Notifications

- •Formal date of receipt is established when the Bureau confirms that the information submitted is complete and correct
- •Accordingly, where a notice does not contain all of the mandatory information as defined in the AP4 of the Radio Regulations, further processing of the notice will remain in abeyance and a date of receipt will not be established until the missing information is received.

Establishment of Date of Receipt of Notifications (2)

If upon establishment that all mandatory data have been submitted and there are further clarification required, the Bureau shall request the administration to provide the clarification within 30 days.

If the information is received within the 30 days period, the original date of receipt is retained, otherwise, a new date of receipt will be established.

After one year, any pending submission containing incomplete information or clarification shall be returned to the notifying administration.

Publication of Complete Information



- Complete notices are published in part I-S of the BR IFIC DVD-ROM
- •Complete notices will be used for further examination and may differ from those published "as received"

Section

(Examination and Recording of Frequency Assignments)

Examination and recording of frequency assignments

- •Regulatory deadlines Nos. 11.25, 11.44, 11.44.1, 11.43A, RES 49
- •No. 11.31- conformity with the Table of Frequency Allocations and other provisions of the Radio Regulations
- No. 11.32- conformity with the coordination procedures
- Nos. 11.32A & 11.33 probability of harmful interference

Regulatory Deadline Check

•No. 11.44.1

The first notice for recording of the assignments must be within 7 years

•No. 11.44

Notified date of bringing into use should be within 7 years

•No. 11.25

Date of bringing into use cannot be more than 3 years from date of notification

Date of Bringing into Use

No. 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 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 ninety days.

The notifying administration shall so inform the Bureau within thirty days from the end of the ninety-day period.

After seven years period

- •No. 11.48
 - ✓ Frequency assignments are not brought into use or
 - ✓ first notice has not been submitted or
 - ✓ due diligence information has not been submitted
- Information published under Nos. 9.2B and 9.38, as appropriate, shall be cancelled

Suspension of Assignments

•No. 11.49

- Recorded frequency assignment is suspended more than six months
- Bureau will be informed not later than six months
- When the recorded assignments brought back into use not later than three years from the date of suspension

Examination under No. 11.31(1)

- Article 5 Table of Frequency Allocations
- •Articles 21 & 22
- Agreement under No. 9.21
- Other relevant provisions

Examination under No. 11.31(2)

Provisions	General Description of the Examination
Art 5	Checks if frequency is in compliance with table of frequency allocation including footnotes
Art 21 Sect III	Checks that power limits of earth stations are complied
Art 21 Sect IV	Checks that minimum elevation angles of earth stations are complied
Art 21 Sect V	Checks that limits of power flux density (PFD) from space stations are complied
Article 22 Sect II	Checks the PFD limits on NGSO networks are complied
Article 22 Sect III	Checks that station keeping of space stations are complied
Article 22 Sect IV	Checks that pointing accuracies of antennae on geostationary satellites are complied
Article 22 Sect VI	Checks that earth station off-axis power limitations in the fixed satellite service are complied
Article 23 Sect II	Checks the condition "a space station in the BSS shall reduce to the maximum the radiation over the territory of other countries unless an agreement has been previously reached with such countries" is complied
9.21	Checks if agreement has been achieved when applicable

Examination under No. 11.31(3)

When No. 11.31 finding is favourable, the assignment shall be recorded in the Master Register, or examined further to Nos. 11.32 to 11.33, as appropriate

Examination under No. 11.32(1)

- Basically, to determine the appropriate coordination procedure has been completed
- •Findings will be based on information available on the A5/A6 boxes



Examination under No. 11.32(2)

Should the result of coordination during notification differs from coordination requirement, administration are requested to make specific reference to the relevant regulatory provisions provide explanation on cover letters

Examination under No. 11.32(3)

Space Stations

- Check if notified and coordination characteristics are similar
 - •If changes are within the envelope of those published in Special Section(s), the result of calculations already made for these Special Section(s) is used.

Examination under No. 11.32(4)

- If the notified characteristics are not within the envelope of coordination characteristics, relevant interference calculations are carried out on the basis of AP5
- Modification required to the related coordination Special Section

Resubmission (1)

<u>Unfavourable finding under No. 11.32</u>

- No. 11.46 is applicable
- •The resubmission will retain the original date of submission, unless the resubmission is received more than 6 months after the date of which the original submission was returned
- •In other words, important to resubmit within 6 months to retain the original date of submission

Resubmission (2)

Unfavourable finding under No. 11.31

- No. 11.46 is not applicable
- •Will have a <u>new date of receipt</u> <u>upon resubmission</u>

Examination under No. 11.32(5)

Earth Stations

- •Establishment that the corresponding assignments of associated space station has been recorded into the MIFR
- Establishment that the earth station has completed coordination
- •Establishment that the earth station is located in the service area of the associated space station

NOS. 11.32A & 11.33 EXAMINATION

The examination of the probability of harmful interference under Nos. 11.32A & 11.33 is carried out when the notifying administration states that the coordination procedure could not be successfully completed for the assignments being notified

RESUBMISSION RECORDING UNDER NO: 11.41

Unfavourable finding under Nos. 11.32A & 11.33

- Possible to be resubmitted under No. 11.41
- All efforts have been made to effect coordination however no success
- •Bureau enters the assignment in Master Register with an indication
- Upon completion of coordination relevant remark or indications will be removed

INTERFERENCE FROM ASSIGNMENTS RECORDED UNDER NO: 11.41 (1)

- Upon receipt of a report providing the particulars relating to the harmful interference immediately eliminate this harmful interference
- The format prescribed in Appendix 10, when providing the particulars relating to the harmful interference

INTERFERENCE FROM ASSIGNMENTS RECORDED UNDER NO: 11.41 (2)

- administrations shall cooperate in elimination of harmful interference
- assistance from Bureau may be requested to resolve the issue
- The Bureau will prepare a report for the next meeting of Board for its consideration and any required action (including the possible cancellation of the assignment recorded under No.11.41)

ASSIGNMENT LEVELS(1)

- •Finding is established at assignment levels
- Different frequency assignments may be notified at different times

ASSIGNMENT LEVELS(2)

Split findings (Group I.D. No. 99999991)

Example 1 (Class of Station : TC)



Publication of Findings

Favourable Findings

Published in Part II-S of the BR-IFIC CD-ROM

Unfavourable findings

Published in Part III-S of the BR-IFIC CD-ROM

•BRIFIC publications also available on the ITU website

www.itu.int → Radiocommunication(ITU-R) → Space Services → BR IFIC → BR IFIC data

