

Guide to Capture of information for ESIMs Notification notice under Resolutions 123 (WRC-23)

Earth stations in motion (ESIMs) under Resolution **123 (WRC-23)** must be submitted as a modification to a previously notified non-GSO satellite network or system that has been successfully notified, brought into use and recorded in the Master International Frequency Register (MIFR).

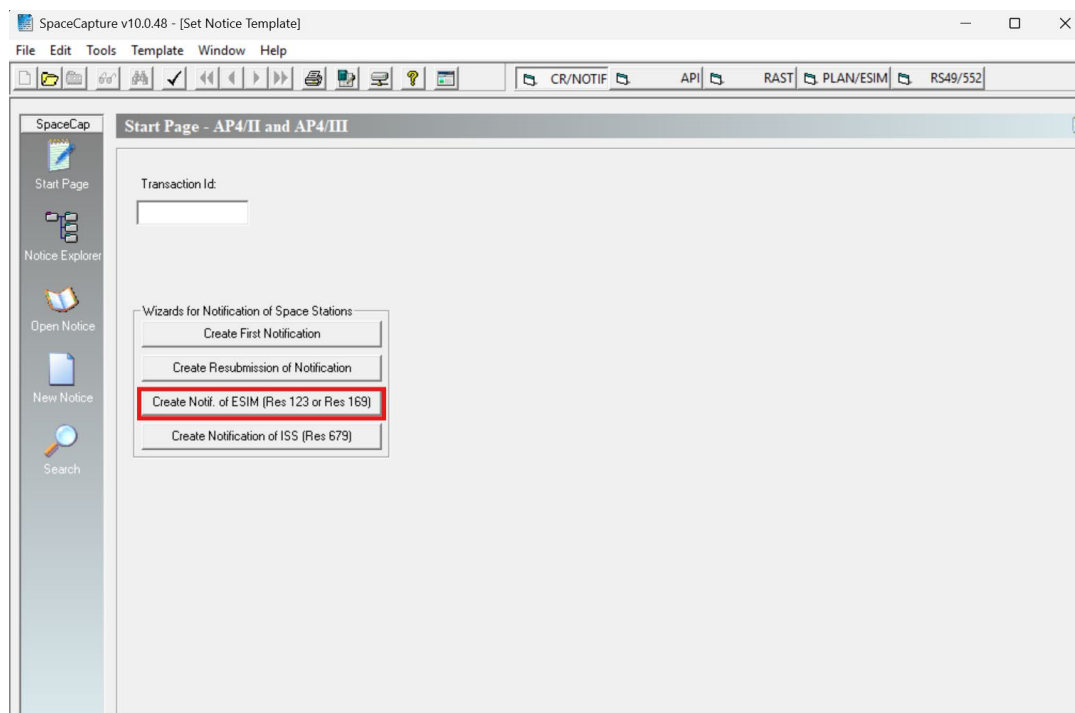
To create a MOD NGSO Notification for ESIMs under Resolution **123 (WRC-23)**, the Wizard allows users to select an existing NGSO Notification operating in the following fixed-satellite service (FSS) frequency bands:

- **17.7–18.6 GHz, 18.8–19.3 GHz, and 19.7–20.2 GHz** (space-to-Earth);
- **27.5–29.1 GHz and 29.5–30 GHz** (Earth-to-space).

Kindly note that all notices for submission under Resolution **123 (WRC-23)**, as required under *resolves 1*, should be created using the Wizard in Spacecap, so that the links for the groups of frequency assignments in the notice are well established with the notification recording in the MIFR, for the purpose of examination under *resolves 2* i.e. that the characteristics of non-GSO ESIMs shall remain within the envelope characteristics of typical earth stations associated with the non-GSO FSS system with which the ESIMs communicate.

The following are steps for using the Wizard:

1. On the Start Page, under “Wizards for Notification of Space Stations”, select “Create Notif. Of ESIM (Res123 or Res169)”;



2. Select the source database, then select the target notice from the list or search for it by Notice ID or satellite name;

ESIM Wizard — Resolution 123 (WRC-23, Non-Geostationary)

Step 1 of 3 — Source database and notice

Please select the latest SRS database, or download the space station's Notification notice database from the SNS Online site dedicated to this purpose (<https://www.itu.int/sns/notification.html>), to ensure the most up-to-date information is used to create the Notification notice for ESIM under Resolution 123 (WRC-23, Non-Geostationary).

Eligible FSS bands for NGSO (ntc_type = N):
 Space-to-Earth: 17.7-18.6 GHz, 18.8-19.3 GHz, 19.7-20.2 GHz
 Earth-to-space: 27.5-29.1 GHz, 29.5-30.0 GHz

Only groups with at least one srv_cls row stn_cls ∈ {EC, TC} inside these bands are valid candidates.

Source kind :

☒ MDB
☐ SNS

MDB file :

C:\BR_SOFT\SRS_DB\srs_all.mdb

ESIM resolution :

☒ RES123 (Non-Geostationary)
☐ RES169 (Geostationary)

Source notice :

O3B

114500125 [O3B-A][G][F][50]
 116500032 [O3B-B][G][F][50]
 325500082 [O3B-B][G][F][20]

- Upon successful notice selection, a list of all beams/groups in the above-mentioned frequency bands that meet the condition `srv_cls.stn_cls = "EC"` will be displayed for selection.

ESIM Wizard — Resolution 123 (WRC-23, Non-Geostationary)

Step 2 of 3 — Select groups

Source: C:\BR_SOFT\SRS_DB\srs_all.mdb · notice #114500125

Tick the beams/groups to include in the ESIM MOD notice. Every eligible group (30, stn_cls ∈ {EC, TC}) is selected by default.

> ☒

Beam / Group	Frequency
Beam T2R [E ↓ downlink]	
☒ 114696413	17828–17925 MHz
☐ 114696415	17828–17925 MHz
☐ 114696417	17828–17925 MHz
☐ 114696419	17925–18600 MHz
☐ 114696420	17925–18600 MHz
☐ 114696421	17925–18600 MHz
☐ 116634308	18800–19275 MHz
☐ 116634309	18800–19275 MHz
☐ 116634310	18800–19275 MHz
Beam R1R [R ↑ uplink]	
☒ 114696422	27628–28400 MHz
☐ 114696424	27628–28400 MHz
☐ 114696426	27628–28400 MHz
☐ 116634311	28600–29075 MHz
☐ 116634312	28600–29075 MHz

Back Next Cancel

- After selecting the desired beams/groups from the list and specifying the direction for the new ESIM Notification notice, click “Generate ESIM Notice”.

ESIM Wizard — Resolution 123 (WRC-23, Non-Geostationary)

Step 3 of 3 — Output MDB
Source: C:\BR_SOFT\SRS_DB\srs_all.mdb · notice #114500125
Selected groups: 114696413, 114696422
Choose where the new ESIM MOD notice MDB will be written.

C:\testing mdb\O3B-A_ESIM_RES123.mdb

Back Generate ESIM notice Cancel

5. The generated MOD Notification notice is shown below:

SpaceCapture v10.0.48 - [Set Notice Template]

File Edit Tools Template Window Help

CR/NOTIF API RAST PLAN/ESIM RS49/552

Notice Explorer - AP4/II and AP4/III

Notice id	Type	Adm./Org	Orb. Pos.	Station name	Date rcv.	Status
000000001	[M]	N G /		O3B-A	09.10.26	01
- Beam id: R1R[M] - Group id: 2[A] - Group id: 4[A] - Beam id: T2R[M] - Group id: 1[A] - Group id: 3[A]						

Control Box:
Show
Clone
Export
Delete
To SNS
CFEX
Validation
Esub
RS49/552

SpaceCapture v10.0.48

File Edit Tools View Window Help

CR/NOTIF API RAST PLAN/ESIM RS49/552

NonGeoStationary Notice:1

Notice	Station	Beam
Notice Id: 1	AP4/II and AP4/III (Appendix 4 - Annex 2A)	09.10.2026 Status 01

Notice submitted under for:

☐ No. 9.6 Coordination ☒ No. 11.2 Notification RES123

☒ No. 9.11A Applies ☐ Bands 21.4 to 22 GHz Special Procedure

☐ Specific Earth Station Coordination under No. 9.7A ☐ Earth Station Coordination under No. 9.21

☐ Earth Station Coordination between Administrations under No. 9.17

Date: DD.MM.YY 09.10.2026 Administration Serial Nbr

A111. Notifying Administration G A112. Notice submitted on behalf of these administrations: + x

A113. Intergovernmental Satellite System

Notice intended for:
☒ Modification
☐ Suppression
BR Identification No. of Station to be modified/suppressed: 114500125

Type of Satellite Network or Earth Station:
☐ GeoStationary Satellite Network ☒ NonGeoStationary Satellite Network

A5./A6. Coordination Agreements:
Group Level Agreement

More...

6. The mandatory commitments **A.34.a**, **A.35.a**, **A.37.a**, and **A.38.a** shall be selected as follows:

SpaceCapture v10.0.48

File Edit Tools View Window Help

CR/NOTIF API RAST PLAN/ESIM RS49/552

NonGeoStationary Notice1

Notice Station Beam

Notice Id: 1 Administration: 6 Status: 01 Date: 09.10.2026

A1a. Identity of the Satellite Network: O3B-A

A1c. A4b2. Number of Orbital Planes: 1 A4b1. Reference body: (T) Earth A4b3a. Constellation:

A1g. Short Duration Mission: N

A4b3e1. Nbr of Satellites to NH: 24 A4b3e2. Nbr of Satellites to SH: 24

Orbital information Additional orbital information

A4b. Orbital Information for each Orbital Plane, where the Earth is the reference body

Action code	Orbital Plane Id	4a. Incl. Angle	4b. Satellites in the plane	4c. Period ddd	4c. Period hh	4c. Period mm	4d. Apogee	4d. apog exp	4e. Perigee	4e. perig exp	4f. Minimum Altitude	4f. Min Alt exp	4i. Argument of the Perigee (degrees)	4m. space station uses sun-synchronous orbit
	1	0.00	24	0	4	48	8062.000	0	8062.000	0	8062.000	0	0	

A17b.d.e Compliance with PFD or EPFD limits: Enter PFD or EPFD values

A26. For satellite networks with freq. assign. (not subject to coord. under Sec. II Art. 9) in the bands 7250-7750 MHz (s-to-E), 7900-8025 MHz (E-to-s), 20.2-21.2 GHz (s-to-E), and 30-31 GHz (E-to-s).

A26. Parameters

Commitments: Manage Commitments

(Please use this function only after all frequency assignments are captured in the notice.)

Notice Commitments for Notice #1 | O3B-A

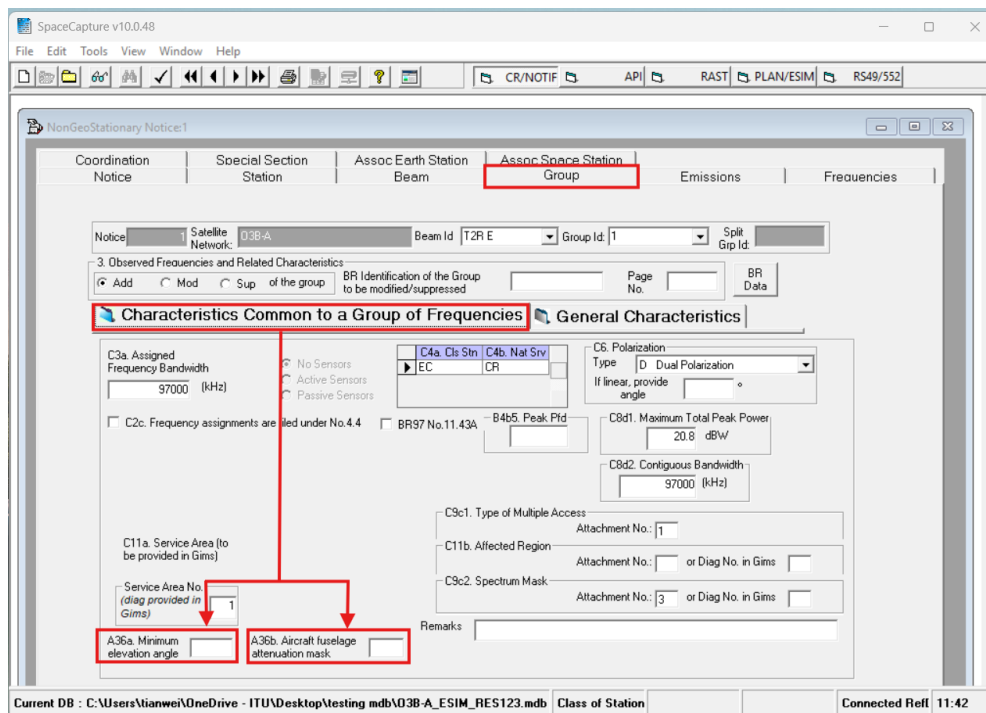
Save

The list of commitments below is prepared based on the frequency assignments provided in the notice!
Please use this function only after all frequency assignments are captured in the notice.

Commit (Y/N)	Description of Commitment
☐	11.41.2 An indication 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, in accordance with No.11.41.2.
☐	AP4, A23.a A RES 35 commitment stating that the characteristics as modified will not cause more interference or require more protection than the characteristics provided in the latest notification information published in Part I-S for the frequency assignments to the non-geostationary-satellite system
☒	AP4, A34.a A commitment that the notifying administration will operate the non-GSO ESIMs in conformity with the Radio Regulations, including Resolution 123 (WRC-23)
☒	AP4, A35.a A commitment that the notifying administration will operate the non-GSO ESIMs in conformity with resolves 3.5 and further resolves 1, 2, 3 and 4 of Resolution 123 (WRC-23)
☒	AP4, A37.a A commitment that the notifying administration will operate the non-GSO ESIMs in conformity with resolves 3.7 and further resolves 1, 2, 3 and 4 of Resolution 123 (WRC-23), see resolves 3.7.1 of Resolution 123 (WRC-23)
☒	AP4, A38.a A firm, objective, actionable, measurable and enforceable commitment that in case of reported unacceptable interference, the notifying administration undertakes to immediately eliminate the interference or reduce it to an acceptable level. Required only for the notification of earth stations in motion submitted in accordance with Resolution 123 (WRC-23)
☐	AP4, A39.a A RES 8 commitment stating that the characteristics as modified will not cause more interference or require more protection than the characteristics provided in the latest notification information published in Part I-S of the BR IFIC for the frequency assignments to the non-geostationary-satellite system
☐	BR109 (PARA 1.6 ROP 4.4) A confirmation that the administration has determined that the frequency assignments under No.4.4 meet the conditions referred to in para 1.6 of ROP and that it has identified measures to avoid harmful interference and to immediately eliminate such in case of a complaint

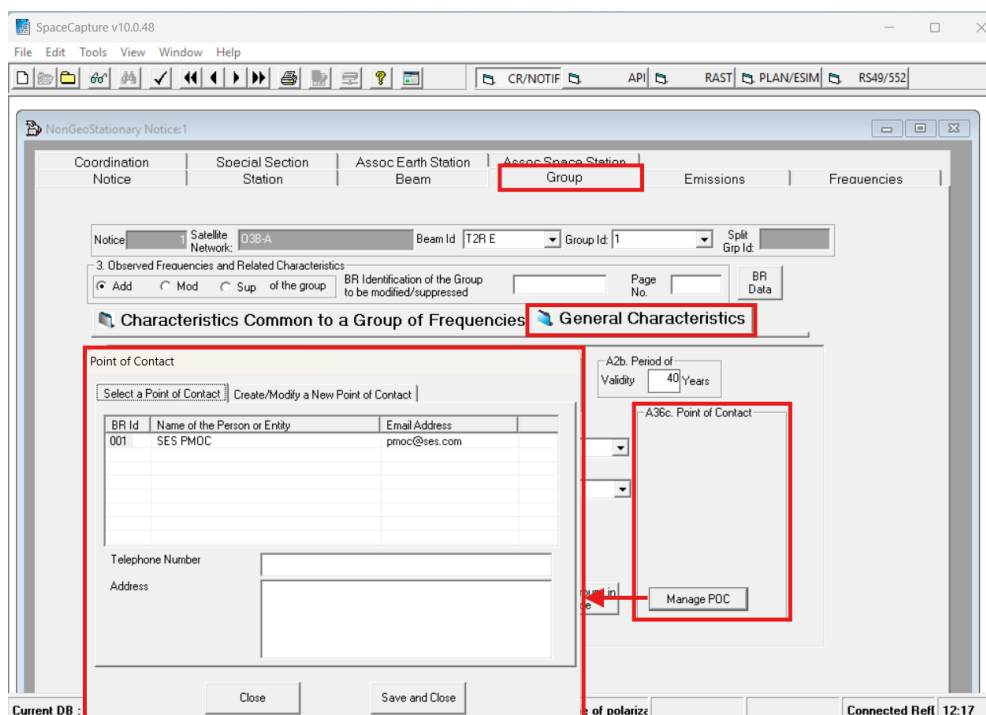
7. The following information shall be provided: the minimum elevation angle (item **A.36.a** of Appendix 4), the aircraft fuselage attenuation mask (item **A.36.b** of Appendix 4, required for A-ESIM only), and the point of contact (item **A.36.c** of Appendix 4).

For the aircraft fuselage attenuation mask, a mask ID should be captured as "1". Currently, the only possible mask to be submitted is the fuselage attenuation mask in Table 4 of Annex 2 to Resolution 123. Therefore, it doesn't matter what mask ID you will provide, the Bureau will consider it as only one possible option.



The point-of-contact (POC) information required to trace cases of unacceptable interference from non-GSO ESIMs and to respond promptly to requests from the focal point of the affected administration shall be provided in SpaceCap v.10 by following these steps:

- Under the **Group** tab, select the **General Characteristics** sub-tab and click **Manage POC**.
- In the window that appears, either select an existing Point of Contact (POC) or choose the **Create/Modify a New Point of Contact** tab and enter all the required information (see the screenshot below).



- Finally, if you wish to make any further changes to the newly generated MOD Notification notice, you may make the necessary changes using Spacecap, taking care to ensure that the ESIM characteristics remain within the envelope of the target typical earth stations.