API

Steps to modify the sample Cubesat-1 database

ITU-BR-SSD
2018-9
Notice and station information

- Satellite name
- Adm
- Orbital parameters
Receiving (i.e. uplink) Beam

• Beam
  • Beam name
  • Antenna gain
  • Antenna pattern

• Group
  • Class of station
  • Service area
  • Polarization
  • Receiving system noise temperature
  • General characteristics
    • Operating administration and operating agency
    • Period of validity
Receiving (i.e. uplink) Beam

• Emissions
  • Designation of emission (refer to Appendix 1)
  • Max/min peak power and power density
  • C/N objective
  • Carrier frequencies

• Frequencies
  • Frequency band

• Associated Earth Station
  • Name
  • Typical or specific
  • If typical: Country, geographical coordinates
  • Max gain, beam width
  • Antenna pattern

• Associated space station
  • Only if there is a space to space link!
Transmitting (i.e. downlink) Beam

• Beam
  • Beam name
  • Antenna gain
  • Antenna pattern
  • Transmit only when visible over notified service area
    • If yes, what is the minimum elevation angle

• Group
  • Class of station
  • Service area
  • Polarization
  • Receiving system noise temperature
  • General characteristics
    • Operating administration and operating agency
    • Period of validity
Transmitting (i.e. downlink) Beam

• Emissions
  • Designation of emission (refer to Appendix 1)
  • Max/min peak power and power density
  • C/N objective
  • Carrier frequencies

• Frequencies
  • Frequency band

• Associated Earth Station
  • Name
  • Typical or specific
  • If typical: Country, geographical coordinates
  • Max gain, beam width
  • Antenna pattern
  • Receiving system noise temperature

• Associated space station
  • Only if there is a space to space link!
### Notice Advance Publication

**Notice Id:** 1  |  **Beem:** Advance Publication  |  **Remarks:** 31.10.2013  |  **Status:** 01

**Date:** 01.08.2018  |  **Administration Serial No:**

- **A11.1 Notifying Administration:**
  - **A11.2 Notice submitted on behalf of these administrations:**
    - **National:**
      - **International:**

- **Intergovernmental Satellite System:**
  - GeoStationary Satellite Network  |  Non GeoStationary Satellite Network

**Notice intended for:**
- [ ] Add
- [ ] Mod
- [ ] Sup

**BRI Identification No. of the Satellite Network to be Modified:**

**Identity of the Satellite:**

<table>
<thead>
<tr>
<th>Orbital Plane Id</th>
<th>Inclination Angle</th>
<th>Satellites in the plane</th>
<th>4c. Period (days)</th>
<th>4c. Period (months)</th>
<th>4d. Apogee</th>
<th>4d. Apogee (km)</th>
<th>4e. Perigee</th>
<th>4e. Perigee (km)</th>
<th>4t. Minimum Altitude (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>97.0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>35</td>
<td>550.00</td>
<td>0</td>
<td>550.00</td>
<td>550.00</td>
</tr>
</tbody>
</table>

[Close]
**Forms of Notice Advance Publication**

**Beam**

**Notice**
- Notice ID: 1
- Administration: SUI
- Satellite Network: CUBESAT-1

**Characteristics of the Beam**

- **B1a. Beam Designation:** UPLINK
- **B1b. Steerable Boom:**
- **Add or Mod Sup:**
- **Beam Has Sensors:**

**Antenna Characteristics**
- **E3a1. Maximum Isotropic Gain:** 3 dB

**Antenna Radiation Pattern**
- **E3c1. Computer Radiation Pattern Id:** 610
- **ND-SPACE --> APSND_495V01**
- **or E3c1 Pattern in the form of equations/data. See Attach no.:**

**List of Available Groups**
- **Group 1**

Current DB: C:\SAMPLE_CUBESAT\cubesat-1.mdb

6:36 PM 21.08.2018
### Characteristics Common to a Group of Frequencies

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C4a.</td>
<td>Direct Satellites</td>
</tr>
<tr>
<td>C4b.</td>
<td>Natural Satellites</td>
</tr>
</tbody>
</table>

### General Characteristics

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C6.</td>
<td>Polarization Type</td>
</tr>
<tr>
<td>C6a.</td>
<td>Linear/Direct Polarization</td>
</tr>
<tr>
<td>C6b.</td>
<td>Circular/Direct Polarization</td>
</tr>
</tbody>
</table>

### Emissions

- **C4a. Direct Satellites**
  - EA: Earth Station
  - CP: Space Station

### Frequencies

- **C8a. Assoc Space Station EIRP**
  - dBi

### Attachments

- **C4b. Natural Satellites**
  - Group ID

### Observed Frequencies and Related Characteristics

- **Add**, **Mod**, **Sup**
- **ID**
- **Group ID**
- **Frequency ID**
- **Group ID**
- **Split Group**

### Class of Station and Nature of Service

- **Service Area**
  - Number
  - Diagram
  - Size
  - Attachment No.
### Emissions of the Associated Transmitting Stations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SK011012</td>
<td>20.0</td>
<td>-23.0</td>
<td></td>
<td>20.0</td>
<td></td>
<td>23.0</td>
<td></td>
<td>15.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Select the Designation of Emission from the list below for which you wish to add Carrier Frequencies.

<table>
<thead>
<tr>
<th>Designation of Emission</th>
<th>Seq no</th>
</tr>
</thead>
<tbody>
<tr>
<td>150CF1D...</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carrier Frequency MHz</th>
<th>Seq emss</th>
</tr>
</thead>
<tbody>
<tr>
<td>145 50000</td>
<td>1</td>
</tr>
</tbody>
</table>

- Apply these characteristics to all emissions in this group
- Apply these characteristics to the current emission

Save  Close
Please note that as of version 7 you are limited to one frequency range per group. You may now specify specific carrier frequencies for each emission on the main panel. You may also clone the group to add additional frequency bands.
Reminders before submission

• Standard **antenna patterns**
  • APL library

▪ Always run validation tools _SpaceVal_ before submission, make sure no fatal error

▪ Reminder to change the file extension from `.mdb` to `.ITU` before sending them to the BR

▪ As far as possible, submit **one notice** in one mdb file