## XML format definition for the RES 35 submission

### A. Structure of the RES 35 submission

A RES 35 submission is built with the following tree structure:

- Satellite system information
  - Launch information (for each satellite system)
    - Space station characteristics (for each launch)
      - Frequency characteristics (for each space station)

A submission must contain at least one launch, with one space station and with one set of frequency band.

### B. Definition of the fields

**Res35_notice = RES 35 satellite system information**

- sat_name: name of the satellite system. A notification submission under Art. 11 for this satellite system should have already been sent to the Bureau.
- Ms_step: RES 35 milestone indicator:
  - M0 = initial deployment information under Resolve 2 and 3
  - M1= 1st milestone, deployment information under Resolve 7.a and 8.a
  - M2= 2nd milestone, deployment information under Resolve 7.b and 8.b
  - M3= 3rd milestone, deployment information under Resolve 7.c and 8.c

**Res35_launch = RES 35 launch information**

- Lsp_name: name of the launch vehicle provider
- Vehicle: name of the launch vehicle
- d_launch: date of the launch
- Facility: name of the launch facility

**Per launch: Res35_sp_stn = RES 35 space station characteristics**

- Orb_id: orbital plane number indicated in the latest notification information
- Sp_stn_name: name of the space station
- Apog_km: orbital characteristics of the space station (altitude of the apogee in kilometers)
- Perig_km: orbital characteristics of the space station (altitude of the perigee in kilometers)
- Incl_ang: orbital characteristics of the space station (inclination in degrees)
- Perig_arg: orbital characteristics of the space station (argument of the perigee in degrees)

**Per space station: Res35_freq = RES 35 space station frequency characteristics**

- Freq_min: lower bound of the frequency range for the space station transmit or receive frequency range
- Freq_max: upper bound of the frequency range for the space station transmit or receive frequency range

## C. RES 35 XML file

```
<res35_notice>
   <sat_name></sat_name>
   <ms_step></ms_step>
   <res35_launch>
      <lsp_name></lsp_name>
      <vehicle></vehicle>
      <d_launch></d_launch>
       <facility></facility>
      <res35_sp_stn>
         <orb_id></orb_id>
         <sp_stn_name></sp_stn_name>
         <apog_km></apog_km>
         <perig_km></perig_km>
         <incl_ang></incl_ang>
         <perig_arg></perig_arg>
         <res35_freq>
            <freq_min></freq_min>
            <freq_max></freq_max>
         </res35_freq>
      </res35_sp_stn>
   </res35_launch>
</res35_notice>
```

## D. XSD schema

```xml
<?xml version="1.0" encoding="utf-8"?>
<xs:schema id="res35_notice_schema" xmlns=""
xmlns:xs="http://www.w3.org/2001/XMLSchema"
          xmlns:msdata="urn:schemas-microsoft-com:xml-msdata"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <xsd:annotation>
        <xs:documentation xml:lang="en">
            RES35 Notice schema for RES908 Application
        </xs:documentation>
    </xsd:annotation>

    <xs:simpleType name="ItuDateType">
        <xs:restriction base="xs:string">
            <xs:pattern value="(0[1-9]|[12][0-9]|3[01]).(0[1-
9]|1[012]).\d{4}"/>
        </xs:restriction>
    </xs:simpleType>

    <xs:simpleType name="Milestone">
        <xs:restriction base="xs:string">
            <xs:pattern value="\s*|[M][0-3]"/>
        </xs:restriction>
    </xs:simpleType>

    <xs:simpleType name="LimitedStringTo30">
```

```xml
                    <xs:restriction base="xs:string">
                        <xs:maxLength value="30"/>
                    </xs:restriction>
                </xs:simpleType>

                <xs:simpleType name="LimitedStringTo20">
                    <xs:restriction base="xs:string">
                        <xs:maxLength value="20"/>
                    </xs:restriction>
                </xs:simpleType>

                <xs:simpleType name="LimitedStringTo3">
                    <xs:restriction base="xs:string">
                        <xs:maxLength value="3"/>
                    </xs:restriction>
                </xs:simpleType>

                <xs:element name="res35_notice">
                    <xs:complexType>
                        <xs:sequence>
                            <xs:element name="sat_name" type="LimitedStringTo30"/>
                            <xs:element name="adm" type="LimitedStringTo3" minOccurs="0"/>
                            <xs:element name="ntwk_org" type="LimitedStringTo3"
minOccurs="0"/>
                            <xs:element name="ms_step" type="Milestone"/>
                            <xs:element name="res35_launch" minOccurs="0"
maxOccurs="unbounded">
                                <xs:complexType>
                                    <xs:sequence>
                                        <xs:element name="lsp_name"
type="LimitedStringTo20"/>
                                        <xs:element name="vehicle"
type="LimitedStringTo20"/>
                                        <xs:element name="d_launch" type="ItuDateType"/>
                                        <xs:element name="facility"
type="LimitedStringTo20"/>
                                        <xs:element name="res35_sp_stn" minOccurs="0"
maxOccurs="unbounded">
                                            <xs:complexType>
                                                <xs:sequence>
                                                    <xs:element name="orb_id"
type="xs:integer"/>
                                                    <xs:element name="sp_stn_name"
type="LimitedStringTo30"/>
                                                    <xs:element name="apog_km"
type="xs:decimal"/>
                                                    <xs:element name="perig_km"
type="xs:decimal"/>
                                                    <xs:element name="incl_ang"
type="xs:decimal"/>
                                                    <xs:element name="perig_arg"
type="xs:decimal"/>
```

```xml
                                          <xs:element name="res35_freq"
minOccurs="0" maxOccurs="unbounded">
                                            <xs:complexType>
                                                <xs:sequence>
                                                    <xs:element
name="freq_min" type="xs:decimal" minOccurs="0"/>
                                                    <xs:element
name="freq_max" type="xs:decimal" minOccurs="0"/>
                                                </xs:sequence>
                                            </xs:complexType>
                                          </xs:element>
                                      </xs:sequence>
                                  </xs:complexType>
                              </xs:element>
                          </xs:sequence>
                      </xs:complexType>
                  </xs:element>
              </xs:sequence>
          </xs:complexType>
      </xs:element>
      <xs:element name="res35_notice_schema" msdata:IsDataSet="true"
msdata:UseCurrentLocale="true">
          <xs:complexType>
              <xs:choice>
                  <xs:element ref="res35_notice"/>
              </xs:choice>
          </xs:complexType>
      </xs:element>
</xs:schema>
```

## E.  Example of a completed RES 35 XML file

```xml
<res35_notice>
  <sat_name>OSCAR-8</sat_name>
  <ms_step>M0</ms_step>
  <res35_launch>
    <lsp_name>Provider</lsp_name>
    <vehicle>Vehicle#1</vehicle>
    <d_launch>12.04.2020</d_launch>
      <facility>CAPE CANAVERAL</facility>
    <res35_sp_stn>
      <orb_id>23</orb_id>
      <sp_stn_name>Station #1</sp_stn_name>
      <apog_km>800</apog_km>
      <perig_km>12000</perig_km>
      <incl_ang>54</incl_ang>
      <perig_arg>23</perig_arg>
      <res35_freq>
        <freq_min>11700</freq_min>
        <freq_max>12500</freq_max>
      </res35_freq>
    </res35_sp_stn>
```

```xml
      <res35_sp_stn>
        <orb_id>23</orb_id>
        <sp_stn_name>Station #2</sp_stn_name>
        <apog_km>800</apog_km>
        <perig_km>12000</perig_km>
        <incl_ang>54</incl_ang>
        <perig_arg>23</perig_arg>
        <res35_freq>
           <freq_min>11700</freq_min>
           <freq_max>12500</freq_max>
        </res35_freq>
      </res35_sp_stn>
    </res35_launch>
    <res35_launch>
      <lsp_name>Provider #2</lsp_name>
      <vehicle>Vehicle #2</vehicle>
      <d_launch>12.05.2020</d_launch>
       <facility>EDWARDS</facility>
      <res35_sp_stn>
        <orb_id>21</orb_id>
        <sp_stn_name>Station #3</sp_stn_name>
        <apog_km>234</apog_km>
        <perig_km>127</perig_km>
        <incl_ang>23</incl_ang>
        <perig_arg>63</perig_arg>
        <res35_freq>
           <freq_min>11700</freq_min>
           <freq_max>12500</freq_max>
        </res35_freq>
      </res35_sp_stn>
      <res35_sp_stn>
        <orb_id>21</orb_id>
        <sp_stn_name>Station #4</sp_stn_name>
        <apog_km>234</apog_km>
        <perig_km>127</perig_km>
        <incl_ang>23</incl_ang>
        <perig_arg>63</perig_arg>
        <res35_freq>
           <freq_min>11700</freq_min>
           <freq_max>12500</freq_max>
        </res35_freq>
      </res35_sp_stn>
    </res35_launch>
</res35_notice>
```