### **REQUEST FOR CUBESAT INFORMATION PER 03/26/18 EMAIL**

### a. THE TYPE OF SATELLITE, GEOSTATIONARY OR NONGEOSTATIONARY

Nongeostationary

# B. IF ANY SATELLITES ARE NONGEOSTATIONARY, REPORT ITS INCLINATION ANGLE, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS, ORBITAL PERIOD IN HOURS AND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM

- Inclination Angle: 98°
- Apogee: 500 (-50/+100)\* km
- Perigee: 500 (-50/+100)\* km
- Orbital Period: 1.574 hours (assuming 500-km circular orbit)
- Number of Satellites in the System: 1

\*Orbital altitude uncertainty per launch services coordinator

#### b. THE SATELLITE TRANSMITTER ANTENNA GAIN AND BEAMWIDTH

- Satellite Transmitter Antenna Gain: 1.36 dBi
- Satellite Transmitter Beamwidth: 80°

# c. THE SATELLITE TRANSMITTER ANTENNA AZIMUTH: NARROWBEAM (NB), EARTH COVERAGE (EC)

• Narrowbeam (NB)

## d. THE EARTH STATION RECEIVER ANTENNA GAIN, BEAMWIDTH, AZIMUTHAL RANGE, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS AND THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS

- Earth Station Receiver Antenna Gain: 11.5 dBi
- Earth Station Receiver Beamwidth: 60°
- Earth Station Receiver Azimuthal Range: 0 to 360°
- Earth Station Receiver Site Elevation Above Mean Sea Level: 222 m
- Earth Station Receiver Antenna Height Above Terrain: 17 m

## e. THE EARTH STATION RECEIVER ANTENNA AZIMUTH, THE MINIMUM ANGLE OF ELEVATION (V00 TO V90)

- Earth Station Receiver Antenna Azimuth: 0 to 360°
- Earth Station Minimum Angle of Elevation: V10

## f. THE TRANSMITTER ANTENNA ORIENTATION (XAP), EXAMPLE XAP01 J, AND THE RECEIVER ANTENNA ORIENTATION (RAP), EXAMPLE RAP01 J, WHERE J

REPRESENTS LINEAR POLARIZATION. OTHER POLARIZATIONS INCLUDE H FOR HORIZONTAL, V FOR VERTICAL, S FOR HORIZONTAL AND VERTICAL, L FOR LEFT HAND CIRCULAR, R FOR RIGHT HAND CIRCULAR, T FOR RIGHT AND LEFT HAND CIRCULAR, E FOR ELLIPTICAL AND O FOR OBLIQUE ANGLED CROSSED

- Satellite:
  - Transmitter Antenna Orientation: XAP01 J
  - o Receiver Antenna Orientation: RAP01 J
- Earth Station:
  - Transmitter Antenna Orientation: XAP01 R
  - Receiver Antenna Orientation: RAP01 R