Information Notes Applicant: University of Illinois at Urbana-Champaign File Number: 0117-EX-CN-2017 In response to Correspondence Reference Number: 36030

THE TYPE OF SATELLITE, GEOSTATIONARY OR NONGEOSTATIONARY Nongeostationary

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: 85 Apogee: 500 km Perigee: 500 km Orbital Period: 1.577 hours Number of satellites: 1

## THE SATELLITE TRANSMITTER ANTENNA GAIN AND BEAMWIDTH

Gain: 2.97 dBi Beamwidth: 160 degrees

THE SATELLITE TRANSMITTER ANTENNA AZIMUT: NARROWBEAM (NB), EARTH COVERAGE (EC) EC

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

> Gain: 18.9 dBi Beamwidth: 20.5 degrees Azimuthal range: 0 to 360 degrees Site elevation: 222 m Antenna Height: 10 m

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

Antenna Azimuth: 0 to 360 degrees Minimum angle of elevation: 10 degrees

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.

XAP01 R, RAP01 R