

From: Ken Oyadomari

To: Behnam Ghaffari

Date: February 21, 2018

Subject: FCC File No. 0066-EX-CN-2018

Message:

Behnam,

I've made a small amendment to our application based on your previous comments. I've also added Exhibit 2, which describes the ground station performance and locations. Finally, please remove [7 Capella Space Corp List of Appendix Exhibits].

With respect to first item on my previous email, we are going to process those frequency bands entered on the application (Form 442). Please disregard this item.
Understood

As for second item, if these 2 bands are being used only to receive then there is no need to put them on the application. Our licenses are being authorized only for transmission. However, I noticed for 9400-9900 MHz band, you have entered 8222.4 kW and 0 ERP. Please clarify this.
The 9400-9900 MHz band with the 0 ERP is also a receive frequency. I have amended our application to remove the receive frequencies.

Now, is there ground station(s) associated with your operation? If yes, you would need to go back to your application and open new location(s) and enter the required parameters for the intended location(s) (i.e. coordinates, freq bands, ERP, emission designator(s)).
All of the ground station locations are outside of the US and utilize pedestal antennas. To simplify this submission I've added Exhibit 2 to our application. This Exhibit describes the ground station parameters

Provide the following information with respect to the satellite(s):

1. Satellite coverage (Narrow Beam(NB) or Earth Coverage(EC))

Narrow Beam

2. Receiver antenna gain

Gain: 4.2dBi

3. Beamwidth of the receiver antenna at the half power points

Beamwidth 3dB: 102degs

6. The number of satellites in the system

Satellites covered in conventional experimental license: 2

4. Apogee and Perigee in kilometers

5. Orbital period in hours

7. Inclination angle

Two launches:

- SSO-A: SSO 10:30 575km

- PSLV 9: SSO 10:00 630km

Please provide the following information with respect the transceiver ground-station antenna(s):

1. Transmitter antenna gain (dbi)

EIRP: 44.8 dBW

Gain: 35.7dBi

2. Beamwidth of transmitter antenna at the half-power points
~ 2.8 degs

3. Transmitter antenna azimuth

4. Elevation of transmitter antenna MSL (in meters)

5. Elevation of transmitter antenna AGL (in meters)

The ground station antenna is on a pedestal and does not have a set azimuth or elevation. These parameters change as the ground station antenna tracks the satellite.