

Anthony Serafini

From: Anthony Serafini
Sent: Thursday, May 25, 2017 7:28 PM
To: 'david.wolter@att.com'
Subject: Questions for 0085-EX-CN-2017

Hello David

Our International Bureau has the following questions and comments concerning your application. Please respond to the following.

IB/SD has reviewed the subject request and has performed a worst-case analysis to assess the potential impact to license FSS received earth stations operating in the 3700-4200 MHz band.

3700 – 4200 MHz band

Our analysis in the **3700 – 4200 MHz band** indicates a high **potential of harmful interference to in-band** license FSS received earth stations from the experimental fixed and mobile stations operations.

We will need additional information to determine the degree of potential of harmful interference in the 3700-4200 MHz band. We will need to know the exact antenna configuration/pointing directions, antenna altitudes, specific antenna gains & beamwidth and if antenna tilt-downwards.

- What is the maximum antenna height above ground level for each fixed stations and each mobile stations?
- Please provide an antenna pattern or a representative antenna pattern for the fixed and mobile stations.
- What is the direction of each antenna pointing (azimuth and elevation angle)? Are they configure to provide a 360 degrees' coverage?
- Will the fixed antenna be down tilted? If yes, what is the tilt angle?
- Are mitigation methods being used to preclude interference to incumbent license FSS receive earth stations?

27.5 – 28.35 GHz, 37-40 GHz bands

New NGSO satellite operators will be using the 27.5-28.35 GHz, 37-40 GHz and 64-71 GHz bands at a lower altitude and which will be susceptible to potential interference.

- Please provide antenna patterns or representative antenna pattern in the horizontal and vertical plane for each frequency band.
- Please indicate if antennas will be pointing towards the south, south-west, south-east, east or west.
- Indicate if the antenna will be pointing towards the ground or at the horizon. Is there any antenna that will be pointing above the horizon?

Regards
Tony Serafini