Ka-Band Earth Station – Alto, MI

Frequency Coordination Report

28 GHz

Prepared on Behalf of
ViaSat, Inc.

February 25, 2021

COMSEARCH®
A CommScope Company

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1. Summary of Results

On behalf of ViaSat. Inc., Comsearch issued coordination notice under Section 25.203(c) and Section 25.136(a)(4) of the FCC's rules for all existing and proposed terrestrial licenses within the coordination contours of their proposed Ka-Band earth station in Alto-MI, which will transmit at 28 GHz[1]. Prior-notification emails were sent to the licensees and a copy of the notification data is provided in section four of this report. The earth station coordination was finalized on December 19, 2020.

No objections were received from any of the incumbent 28 GHz licensees.

2. 28 GHz Common Carrier and LTTS Coordination

In accordance with FCC Rules and Regulations, the Ka-Band earth station in Alto, MI was prior-coordinated by Comsearch. A notification email, datasheet and Google Earth file showing the area around the site outside which the -77.6 dBm/m2 per MHz threshold value is not exceeded for this earth station were sent to the following 28 GHz common carrier fixed microwave licensees. These licensees are authorized to operate temporary fixed operations from 27.5 – 29.5 GHz on a nationwide basis or local basis.

Licensee	Authorized Geographic Area
AT&T	Statewide: MI
Frontier	Nationwide

A notification email, datasheet and Google Earth file showing the area around the site outside which the -77.6 dBm/m2 per MHz threshold value is not exceeded for the Ka-Band earth station in Alto, MI were also sent to the following 28 GHz local television transmission licensee. This licensee is authorized to operate temporary fixed operations from 27.5 – 29.5 GHz on a nationwide basis.

Licensee	Authorized Geographic Area
Information Super Station, LLC	Continental US

No objections were received from the common carrier or local television transmission service incumbents.

[1] The proposed earth station will operate in the 27.5 – 29.1 GHz & 29.5 – 30.0 GHz portion of the Ka-Band.

3. 28 GHz UMFUS Coordination

Two 28 GHz UMFUS licensees were identified within the coordination distance of the proposed earth station. The proposed earth station will operate on frequencies that overlap Channel L1 & L2 of the UMFUS service. The total frequency allocation for Channels L1 & L2 of the UMFUS spectrum appears below.

Channel: **L1** 27.500 - 27.925 GHz
L2 27.925 - 28.350 GHz

Licensee	Authorized Geographic Area
Cellco Partnership	Market Based

No objections were received from the UMFUS incumbents within coordination distance.

4. Earth Station Coordination Data

This section presents the data pertinent to the proposed Ka-Band earth station in Alto, MI. This data was circulated to all incumbent licensees in the shared 28 GHz frequency ranges.

Date:		11/19/2020
Job Number:		201119COMSNR01
Administrative Information		
Status		ENGINEER PROPOSAL
Call Sign		
Licensee Code		VIASAT
Licensee Name		ViaSat, Inc
Site Information		**ALTO, MI**
Venue Name		
Latitude (NAD 83)		42° 50' 57.7" N
Longitude (NAD 83)		85° 23' 7.6" W
Climate Zone		A
Rain Zone		2
Ground Elevation (AMSL)		255.49 m / 838.2 ft
Link Information		
Satellite Type		Geostationary
Mode		TO - Transmit-Only
Modulation		Digital
Satellite Arc		78° W to 91° West Longitude
Azimuth Range		169.2° to 188.2°
Corresponding Elevation Angles		40.0° / 40.2°
Antenna Centerline (AGL)		1.2 m / 3.9 ft
Antenna Information		**Transmit - VES000**
Manufacturer		VIASAT INC.
Model		13138XX
Gain / Diameter		52.0 dBi / 1.8 m
3-dB / 15-dB Beamwidth		0.40° / 0.80°
Max Available RF Power	(dBW/4 kHz)	-42.5
	(dBW/MHz)	-18.5
Maximum EIRP	(dBW/4 kHz)	9.5
	(dBW/MHz)	33.5
Interference Objectives:	Long Term	-141.0 dBW/4 kHz 20%
	Short Term	-118.0 dBW/4 kHz 0.0025%
Frequency Information		**Transmit 28.0 GHz**
Emission / Frequency Range (MHz)		464MG7D / 27500.0 - 29500.0
Coordination Distance		3 km / 1.86 mi

5. Contact Information

For questions or information regarding the 28 GHz Frequency Coordination Report, please contact:

Contact person:	Naveen Raghavan
Title:	Engineering Manager
Company:	Comsearch
Address:	19700 Janelia Farm Blvd., Ashburn, VA 20147
Telephone:	703-726-5648
Email:	nraghavan@Comsearch.com
Web site:	www.comsearch.com