Ka-Band Earth Station – South Vienna, OH Frequency Coordination Report 28 GHz



Prepared on Behalf of ViaSat, Inc.

February 27, 2021





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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 South Vienna-OH, which will transmit at 28 GHz¹. 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 17, 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 South Vienna, OH 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: OH
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 South Vienna, OH 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.

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 $^{^{1}}$ 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
T-Mobile License LLC	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 South Vienna, OH. This data was circulated to all incumbent licensees in the shared 28 GHz frequency ranges.

Date:				
Administrative Information Status ENGINEER PROPOSAL	Date:	11/1	7/2020	
Status	Job Number: 2011		117COMSNR48	
Call Sign Licensee Code Licensee Name ViaSaT Inc	Administrative Info	rmation		
Licensee Name VIASAT ViaSat, Inc Site Information Venue Name SOUTH VIENNA, OH Latitude (NAD 83) 39° 55′ 39.0" N Longitude (NAD 83) 83° 38′ 90.6" W Climate Zone A Rain Zone 2 Ground Elevation (AMSL) 353.13 m / 1158.6 ft Link Information Satellite Type Satellite Type Geostationary Mode TO - Transmit-Only Modulation Digital Satellite Arc 78° W to 91° West Longitude Azimuth Range 171.3° to 191.4° Corresponding Elevation Angles 43.4° / 43.2° Antenna Centerline (AGL) 1.5 m / 4.9 ft Antenna Information Transmit - VES001 Manufacturer VIASAT INC. Model 13001XX Gain / Diameter 52.6 dBi / 2.4 m 3-dB / 15-dB Beamwidth 0.40° / 0.80° Max Available RF Power (dBW/MHz) (dBW/M kHz) (dBW/M kH		ENG	INEER PROPOSAL	
Site Information		VIAS	AT	
Venue Name 1 39° 55' 39.0" N Longitude (NAD 83) 83° 38' 00.6" W Climate Zone A Rain Zone 2 Ground Elevation (AMSL) 353.13 m / 1158.6 ft Link Information Satellite Type Satellite Type Geostationary Mode TO - Transmit-Only Modulation Digital Satellite Arc 78° W to 91° West Longitude Azimuth Range 171.3° to 191.4° Corresponding Elevation Angles 43.4° / 43.2° Antenna Centerline (AGL) 1.5 m / 4.9 ft Antenna Information Transmit - VES001 Manufacturer VASATINC. Model 13001XX Gain / Diameter 52.6 dBi / 2.4 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) 0.40° / 0.80° Interference Objectives: Long Term -141.0 dBW/4 kHz 20% Frequency Information Transmit 28.0 GHz	Licensee Name	ViaS	at, Inc	
Latitude (NAD 83)	Site Information	SOU	ITH VIENNA, OH	
Longitude (NAD 83)			751 00 01 N	
Climate Zone				
Rain Zone 2			00 UU.0 W	
Control Elevation (AMSL) 353.13 m / 1158.6 ft				
Satellite Type		SL) 353.1	13 m / 1158.6 ft	
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Corresponding Elevation Angles				
Antenna Centerline (AGL) 1.5 m / 4.9 ft Antenna Information				
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Model		n		
Gain / Diameter 52.6 dBi / 2.4 m 0.40° / 0.80°				
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Interference Objectives: Long Term -141.0 dBW/4 kHz 20%	Maximum EIRP	(dBW/4 kHz)	9.5	
Short Term -118.0 dBW/4 kHz 0.0025% Frequency Information Transmit 28.0 GHz			33.5	
Short Term -118.0 dBW/4 kHz 0.0025% Frequency Information Transmit 28.0 GHz				
Frequency Information Transmit 28.0 GHz	Interference Objectives:			
		Short Term	-118.0 dBW/4 kHz 0.0025%	
Emission / Frequency Range (MHz) 464MG7D / 27500.0 - 29500.0				
	Emission / Frequency Range (MHz)		464MG7D / 27500.0 - 29500.0	
Coordination Distance 0.4 km / 0.25 mi	Coordination Distance		0.4 km / 0.25 mi	
CONTRIBUTION DISEASE U.4 KIT / U.25 ITII	Coordination Distance		0.4 Kili / 0.25 IIII	



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

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