Ka-Band Earth Station – Douglasville, GA Frequency Coordination Report 28 GHz



Prepared on Behalf of ViaSat, Inc.

February 24, 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 Douglasville-GA, 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 23, 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 Douglasville, GA 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: GA
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 Douglasville, GA 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 KaBand.



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
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 Douglasville, GA. This data was circulated to all incumbent licensees in the shared 28 GHz frequency ranges.

Date: 11/23/2020 201123COMSNR10 Administrative Information Status ENGINEER PROPOSAL Call Sign Licensee Code VIASAT ViaSat, Inc ViaSat, Inc ViaSat, Inc Site Information DOUGLASVILLE, GA Venue Name Latitude (NAD 83) 33* 42* 08.6* N Longitude (NAD 83) 84* 46* 13.2* W Climate Zone A Rain Zone 1 Ground Elevation (AMSL) 366.13 m / 1201.2 ft Climate Zone 1 Ground Elevation (AMSL) 366.13 m / 1201.2 ft Climate Zone 1 Ground Elevation (AMSL) Satellite Arc 78* W to 91* West Longitude 167.9* to 191.1* Corresponding Elevation Angles 50.1* 50.2* Antenna Centerline (AGL) 12 m / 3.9 ft Antenna Information Antenna Information Antenna Centerline (AGL) 12 m / 3.9 ft Antenna Information Antenna Information Antenna Information Antenna Information Antenna Information Sale Beamwidth 0.40* / 0.80* A25 GBW/MHz) 33.5 A25 A35 A			
Administrative Information Status Call Sign Licensee Code Licensee Code Licensee Name ViaSat, Inc Site Information Venue Name Latitude (NAD 83) Sat * 42' 0.8.6" N Longitude (NAD 83) Latitude (NAD 83) Sat * 46' 13.2" W Climate Zone A	Date:	11/2	3/2020
Status			123COMSNR10
Call Sign			
Licensee Code		ENG	INEER PROPOSAL
Site Information	-	VIAS	AT
Venue Name	Licensee Name		·
Latitude (NAD 83)	one milenination	DOU	JGLASVILLE, GA
Climate Zone		33° 4	12' 08.6" N
Rain Zone 1 366.13 m / 1201.2 ft			46' 13.2" W
Content Cont			
Satellite Type		SL) 366.	13 m / 1201.2 ft
Mode			
Modulation Digital Satellite Arc 78° W to 91° West Longitude 167.9° to 191.1°	2.		•
Azimuth Range 167.9° to 191.1° Corresponding Elevation Angles Antenna Centerline (AGL) 1.2 m / 3.9 ft Antenna Information Transmit - VES000 Manufacturer VIASATINC. 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) -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	111000		
Corresponding Elevation Angles	Satellite Arc		
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Antenna Information Transmit - VE\$000 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) (dBW/MHz) 42.5 (dBW/MHz) Maximum EIRP (dBW/4 kHz) (dBW/4 kHz) (dBW/4 kHz) 9.5 (dBW/MHz) Interference Objectives: Long Term Short Term -141.0 dBW/4 kHz 20% (dBW/4 kHz) 0.0025% Frequency Information Emission / Frequency Range (MHz) Transmit 28.0 GHz 464MG7D / 27500.0 - 29500.0			
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3-dB / 15-dB Beamwidth	Model		
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(dBW/MHz) 33.5 Interference Objectives: Long Term		(dBW/MHz)	-18.5
Interference Objectives: Long Term	Maximum EIRP	(dBW/4 kHz)	9.5
Short Term		(dBW/MHz)	33.5
Short Term	Interference Objectives	Long Torm	444.0 dDW/4 kH= 200/
Emission / Fréquency Range (MHz) 464MG7D / 27500.0 - 29500.0	interierence Objectives:		
Coordination Distance 3 km / 1.86 mi	Emission / Frequency Rang	ge (MHz)	464MG/D / 2/500.0 - 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

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