



COMSEARCH[®]

A CommScope Company

September 17, 2014

Re: Orange Business Services U.S.A., Inc.
SOUTH HILL, VA
C-Band Transmit-Receive Earth Station
Job Number: 140917COMSGE04

***** Coordination Extension *****

Dear Frequency Coordinator:

This notice is being provided in accordance with Section 25.203(c) of the FCC Rules and Regulations. We are forwarding the attached coordination extension on behalf of Orange Business Services U.S.A., Inc. for their proposed C-Band Transmit-Receive Earth Station in SOUTH HILL, VA.

We respectfully request that you keep this proposed earth station in your database for an additional six months as our client has not yet filed this site with the FCC. In the event that your analysis identifies potential interference cases that were not previously reported, please contact us by October 22, 2014.

If there are any questions concerning this coordination notice, please contact Comsearch.

Sincerely,

COMSEARCH

Gary K. Edwards
Senior Manager
gedwards@comsearch.com

Enclosure(s)

Date: 09/17/2014
Job Number: <PCNJobCode>

Administrative Information

Status ENGINEER PROPOSAL
Call Sign <PCNCallSign>
Licensee Code OBSINC
Licensee Name Orange Business Services U.S.A., Inc.

Site Information

SOUTH HILL, VA
Venue Name
Latitude (NAD 83) 36° 42' 18.4" N
Longitude (NAD 83) 78° 7' 15.8" W
Climate Zone A
Rain Zone 1
Ground Elevation (AMSL) 121.21 m / 397.7 ft

Link Information

Satellite Type Geostationary
Mode TR - Transmit-Receive
Modulation Digital
Satellite Arc 40° W to 41° West Longitude
Azimuth Range 127.3° to 128.3°
Corresponding Elevation Angles 31.7° / 32.4°
Antenna Centerline (AGL) 5.18 m / 17.0 ft

Antenna Information

Manufacturer
Model
Gain / Diameter
3-dB / 15-dB Beamwidth

Receive - FCC32

Prodelin
1244
38.0 dBi / 2.4 m
2.20° / 4.90°

Transmit - FCC32

Prodelin
1244
42.0 dBi / 2.4 m
1.40° / 3.10°

Max Available RF Power (dBW/4 kHz)
(dBW/MHz)

-17.0
7.0

Maximum EIRP (dBW/4 kHz)
(dBW/MHz)

25.0
49.0

Interference Objectives: Long Term
Short Term

-156.0 dBW/MHz 20%
-146.0 dBW/MHz 0.01%

-154.0 dBW/4 kHz 20%
-131.0 dBW/4 kHz 0.0025%

Frequency Information

Emission / Frequency Range (MHz)

Receive 4.0 GHz

205KG7D - 819KG7D / 3700.0 - 4200.0

Transmit 6.1 GHz

205KG7D - 819KG7D / 6368.0 - 6412.0

Max Great Circle Coordination Distance
Precipitation Scatter Contour Radius

315.7 km / 196.1 mi
559.0 km / 347.3 mi

135.5 km / 84.2 mi
100.0 km / 62.1 mi

Coordination Values**SOUTH HILL, VA**

Licensee Name Orange Business Services U.S.A., Inc.
 Latitude (NAD 83) 36° 42' 18.4" N
 Longitude (NAD 83) 78° 7' 15.8" W
 Ground Elevation (AMSL) 121.21 m / 397.7 ft
 Antenna Centerline (AGL) 5.18 m / 17.0 ft
 Antenna Model Prodelin 2.4 Meter
 Antenna Mode Receive 4.0 GHz Transmit 6.1 GHz
 Interference Objectives: Long Term -156.0 dBW/MHz 20% -154.0 dBW/4 kHz 20%
 Short Term -146.0 dBW/MHz 0.01% -131.0 dBW/4 kHz 0.0025%
 Max Available RF Power -17.0 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz		Coordination Distance (km)
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)	
0	0.30	121.14	-10.00	273.07	-10.00	116.86	
5	0.32	117.14	-10.00	270.75	-10.00	115.31	
10	0.30	113.04	-10.00	272.55	-10.00	116.52	
15	0.39	108.91	-10.00	262.60	-10.00	109.82	
20	0.38	104.71	-10.00	263.49	-10.00	110.42	
25	0.44	100.49	-10.00	256.67	-10.00	105.73	
30	0.38	96.23	-10.00	262.81	-10.00	109.95	
35	0.47	91.97	-10.00	253.50	-10.00	103.53	
40	0.38	87.69	-10.00	263.08	-10.00	110.14	
45	0.39	83.43	-10.00	262.62	-10.00	109.82	
50	0.32	79.18	-10.00	269.94	-10.00	114.78	
55	0.25	74.97	-10.00	279.59	-10.00	121.16	
60	0.20	70.79	-10.00	284.65	-10.00	124.46	
65	0.00	66.71	-10.00	285.28	-10.00	124.87	
70	0.00	62.64	-10.00	285.28	-10.00	124.87	
75	0.00	58.65	-10.00	285.28	-10.00	124.87	
80	0.00	54.77	-10.00	285.28	-10.00	124.87	
85	0.32	50.85	-10.00	270.81	-10.00	115.35	
90	0.30	47.24	-9.86	273.32	-9.86	116.81	
95	0.33	43.81	-9.04	274.98	-9.04	116.66	
100	0.43	40.59	-8.21	268.80	-8.21	111.21	
105	0.40	37.77	-7.43	277.29	-7.43	115.63	
110	0.30	35.43	-6.73	294.38	-6.73	125.62	
115	0.24	33.56	-6.14	305.45	-6.14	131.68	
120	0.26	32.20	-5.70	306.43	-5.70	131.55	
125	0.22	31.57	-5.48	313.56	-5.48	134.02	
130	0.00	31.81	-5.57	315.67	-5.57	135.51	
135	0.22	32.32	-5.74	310.76	-5.74	133.08	
140	0.00	33.91	-6.26	310.19	-6.26	133.59	
145	0.00	35.86	-6.87	306.00	-6.87	133.20	
150	0.00	38.30	-7.58	301.14	-7.58	131.29	
155	0.00	41.04	-8.33	296.13	-8.33	129.29	
160	0.00	44.08	-9.11	291.03	-9.11	127.22	
165	0.00	47.39	-9.89	285.96	-9.89	125.15	
170	0.00	50.92	-10.00	285.28	-10.00	124.87	
175	0.00	54.62	-10.00	285.28	-10.00	124.87	
180	0.00	58.45	-10.00	285.28	-10.00	124.87	
185	0.00	62.38	-10.00	285.28	-10.00	124.87	

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 Short Term -146.0 dBW/MHz 0.01% -131.0 dBW/4 kHz 0.0025%
 Max Available RF Power -17.0 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	66.40	-10.00	285.28	-10.00	124.87
195	0.00	70.49	-10.00	285.28	-10.00	124.87
200	0.00	74.63	-10.00	285.28	-10.00	124.87
205	0.00	78.80	-10.00	285.28	-10.00	124.87
210	0.00	83.00	-10.00	285.28	-10.00	124.87
215	0.00	87.21	-10.00	285.28	-10.00	124.87
220	0.00	91.44	-10.00	285.28	-10.00	124.87
225	0.00	95.65	-10.00	285.28	-10.00	124.87
230	0.00	99.86	-10.00	285.28	-10.00	124.87
235	0.00	104.04	-10.00	285.28	-10.00	124.87
240	0.00	108.19	-10.00	285.28	-10.00	124.87
245	0.00	112.29	-10.00	285.28	-10.00	124.87
250	0.00	116.34	-10.00	285.28	-10.00	124.87
255	0.00	120.30	-10.00	285.28	-10.00	124.87
260	0.00	124.17	-10.00	285.28	-10.00	124.87
265	0.00	127.91	-10.00	285.28	-10.00	124.87
270	0.00	131.50	-10.00	285.28	-10.00	124.87
275	0.00	134.88	-10.00	285.28	-10.00	124.87
280	0.00	138.02	-10.00	285.28	-10.00	124.87
285	0.00	140.85	-10.00	285.28	-10.00	124.87
290	0.00	143.28	-10.00	285.28	-10.00	124.87
295	0.00	145.25	-10.00	285.28	-10.00	124.87
300	0.00	146.66	-10.00	285.28	-10.00	124.87
305	0.00	147.45	-10.00	285.28	-10.00	124.87
310	0.00	147.56	-10.00	285.28	-10.00	124.87
315	0.00	146.99	-10.00	285.28	-10.00	124.87
320	0.22	145.98	-10.00	282.31	-10.00	122.94
325	0.22	144.16	-10.00	282.89	-10.00	123.31
330	0.31	141.92	-10.00	271.10	-10.00	115.55
335	0.24	139.04	-10.00	280.66	-10.00	121.86
340	0.21	135.85	-10.00	284.27	-10.00	124.21
345	0.28	132.46	-10.00	275.63	-10.00	118.56
350	0.25	128.82	-10.00	279.54	-10.00	121.13
355	0.28	125.05	-10.00	275.59	-10.00	118.53