

4. EARTH STATION COORDINATION DATA

This section presents the data pertinent to frequency coordination of the proposed earth station that was circulated to all carriers within its coordination contours. The coordination contours include all the area within this route as well as all of the area seaward of this route within 200 km of the baseline of the United States or 200 km from any fixed service offshore installations.

Date: 11/10/2010
Job Number: 101110SKJTEL09

Administrative Information

Status ENGINEER PROPOSAL
Call Sign
Licensee Code TELESV
Licensee Name Vizada Satellite Inc -ESV In-Motion

Site Information **PORTLAND, OR**

Venue Name
Latitude (NAD 83) 45° 33' 55.4" N
Longitude (NAD 83) 122° 43' 33.6" W
Climate Zone B
Rain Zone 3
Ground Elevation (AMSL) 0.0 m / 0.0 ft

Link Information

Satellite Type Geostationary
Mode TO - Transmit-Only
Modulation Digital
Satellite Arc 177° W to 177° West Longitude
Azimuth Range 242.8° to 242.8°
Corresponding Elevation Angles 15.8° / 15.8°
Antenna Centerline (AGL) 15.54 m / 51.0 ft

Antenna Information **Transmit - FCC32**

Manufacturer FCC REFERENCE
Model 32-25LOG(THETA)
Gain / Diameter 42.1 dBi / 2.4 m
3-dB / 15-dB Beamwidth 0.66° / 1.40°

Max Available RF Power (dBW/4 kHz) -10.5
(dBW/MHz) 13.5

Maximum EIRP (dBW/4 kHz) 31.6
(dBW/MHz) 55.6
(dBW)

Interference Objectives: Long Term -154.0 dBW/4 kHz 20%
Short Term -131.0 dBW/4 kHz 0.0025%

Frequency Information **Transmit 6.1 GHz**

Emission / Frequency Range (MHz) 102KG7D - 205KG7D / 6420.8 - 6423.0
102KG7D - 205KG7D / 6277.0 - 6283.0
102KG7D - 205KG7D / 6295.5 - 6298.0
102KG7D - 205KG7D / 6344.0 - 6350.0
102KG7D - 205KG7D / 6355.0 - 6371.5
102KG7D - 205KG7D / 6420.8 - 6423.0

Max Great Circle Coordination Distance 160.6 km / 99.8 mi
Precipitation Scatter Contour Radius 100.0 km / 62.1 mi

Coordination Values	PORTLAND, OR
Licensee Name	Vizada Satellite Inc -ESV In-Motion
Latitude (NAD 83)	45° 33' 55.4" N
Longitude (NAD 83)	122° 43' 33.6" W
Ground Elevation (AMSL)	0.0 m / 0.0 ft
Antenna Centerline (AGL)	15.54 m / 51.0 ft
Antenna Model	FCC Reference 32-25LOG(THETA)
Antenna Mode	Transmit 6.1 GHz
Interference Objectives: Long Term	-154.0 dBW/4 kHz 20%
Short Term	-131.0 dBW/4 kHz 0.0025%
Max Available RF Power	-10.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	3.40	116.51	-10.00	100.00
5	3.08	121.31	-10.00	100.00
10	3.10	126.14	-10.00	100.00
15	2.51	130.82	-10.00	100.00
20	1.98	135.44	-10.00	100.00
25	1.73	140.04	-10.00	100.00
30	1.64	144.59	-10.00	100.00
35	1.43	148.98	-10.00	100.00
40	1.19	153.14	-10.00	100.00
45	1.07	157.06	-10.00	100.54
50	1.11	160.63	-10.00	100.00
55	1.05	163.39	-10.00	100.96
60	0.99	164.98	-10.00	102.49
65	0.94	165.03	-10.00	104.92
70	1.01	163.63	-10.00	101.97
75	1.09	161.02	-10.00	100.03
80	1.18	157.60	-10.00	100.00
85	1.18	153.66	-10.00	100.00
90	1.12	149.39	-10.00	100.00
95	1.16	144.98	-10.00	100.00
100	1.04	140.40	-10.00	101.20
105	0.90	135.74	-10.00	106.79
110	0.89	131.06	-10.00	107.47
115	0.72	126.31	-10.00	115.58
120	0.49	121.52	-10.00	126.17
125	0.24	116.72	-10.00	155.58
130	0.00	111.91	-10.00	160.62
135	0.00	107.12	-10.00	160.62
140	0.00	102.32	-10.00	160.62
145	0.00	97.52	-10.00	160.62
150	0.22	92.71	-10.00	157.26
155	0.95	87.89	-10.00	104.64
160	1.85	83.03	-10.00	100.00
165	2.40	78.15	-10.00	100.00
170	3.37	73.23	-10.00	100.00
175	3.62	68.33	-10.00	100.00
180	3.47	63.49	-10.00	100.00
185	4.11	58.55	-10.00	100.00

Coordination Values	PORTLAND, OR
Licensee Name	Vizada Satellite Inc -ESV In-Motion
Latitude (NAD 83)	45° 33' 55.4" N
Longitude (NAD 83)	122° 43' 33.6" W
Ground Elevation (AMSL)	0.0 m / 0.0 ft
Antenna Centerline (AGL)	15.54 m / 51.0 ft
Antenna Model	FCC Reference 32-25LOG(THETA)
Antenna Mode	Transmit 6.1 GHz
Interference Objectives: Long Term	-154.0 dBW/4 kHz 20%
Short Term	-131.0 dBW/4 kHz 0.0025%
Max Available RF Power	-10.5 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	5.21	53.54	-10.00	100.00
195	4.70	48.77	-10.00	100.00
200	5.36	43.82	-9.04	100.00
205	6.13	38.84	-7.73	100.00
210	6.26	34.01	-6.29	100.00
215	7.06	29.04	-4.57	100.00
220	7.37	24.23	-2.61	100.00
225	7.57	19.55	-0.28	100.00
230	7.05	15.45	2.28	100.00
235	6.38	12.18	4.85	100.00
240	5.57	10.57	6.40	100.00
245	4.79	11.19	5.78	100.00
250	4.71	13.16	4.02	100.00
255	4.50	16.53	1.54	100.00
260	4.67	20.36	-0.72	100.00
265	4.76	24.64	-2.79	100.00
270	4.44	29.28	-4.66	100.00
275	4.28	33.97	-6.28	100.00
280	3.83	38.79	-7.72	100.00
285	3.72	43.56	-8.98	100.00
290	3.62	48.36	-10.00	100.00
295	2.49	53.36	-10.00	100.00
300	2.11	58.22	-10.00	100.00
305	1.77	63.08	-10.00	100.00
310	0.98	67.98	-10.00	103.05
315	0.44	72.84	-10.00	131.12
320	0.66	77.64	-10.00	116.49
325	0.74	82.46	-10.00	114.74
330	1.93	87.27	-10.00	100.00
335	2.35	92.13	-10.00	100.00
340	2.72	97.00	-10.00	100.00
345	2.90	101.88	-10.00	100.00
350	3.42	106.78	-10.00	100.00
355	3.58	111.66	-10.00	100.00

ESV Break Points

Name	Latitude	Longitude
NW	46.6660	-124.3590
BP1	46.4340	-124.1060
BP2	46.2520	-124.0740
BP3	46.2510	-124.0090
SW	45.8240	-124.2310
BP3a	46.2510	-124.0090
BP4	46.2910	-124.0490
BP5	46.3020	-124.0010
BP6	46.2330	-123.8970
BP7	46.2960	-123.6830
BP8	46.2680	-123.6810
BP9	46.2140	-123.8980
BP10	46.2370	-123.9990
BP11	46.1620	-123.8400
BP12	46.1920	-123.8740
Port1	46.1896	-123.8620
BP14	46.2170	-123.7660
BP15	46.1790	-123.6620
BP16	46.1930	-123.6330
BP17	46.2260	-123.6170
BP18	46.2430	-123.5610
BP19	46.2230	-123.6820
BP20	46.2490	-123.6900
BP21	46.2600	-123.6460
BP22	46.2590	-123.5470
BP23	46.2530	-123.4890
BP24	46.2740	-123.4870
BP25	46.1880	-123.3760
BP26	46.2230	-123.4310
BP27	46.1790	-123.4310
BP28	46.1490	-123.3880
BP29	46.1400	-123.2920
BP30	46.1550	-123.3110
Port 2	46.1470	-123.2780
BP32	46.1920	-123.1580
BP33	46.1350	-123.0060
BP34	46.1050	-122.9630
BP35	46.0820	-122.8990
BP36	46.0080	-122.8580

BP37	45.9480	-122.8080
BP38	45.8880	-122.8040
BP39	45.8650	-122.7830
BP40	45.8080	-122.7950
BP41	45.7630	-122.7620
BP42	45.6622	-122.7710
BP43	45.6330	-122.7150
BP44	45.5880	-122.5620
BP45	45.6270	-122.6950
Port3	45.6340	-122.7016
BP47	45.6550	-122.7650
BP48	45.6190	-122.7970
Port4	45.5970	-122.7743
BP50	45.5870	-122.7650
Port5	45.5654	-122.7260
Port6	45.5470	-122.6970
BP53	45.5280	-122.6690
BP54	45.4600	-122.6650



