

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: 11/17/2010
Job Number: 101117SKJTEL05

Administrative Information

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

Site Information SAN DIEGO, CA

Venue Name
Latitude (NAD 83) 32° 39' 14.4" N
Longitude (NAD 83) 117° 7' 19.2" W
Climate Zone B
Rain Zone 4
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 252.6° to 252.6°
Corresponding Elevation Angles 16.7° / 16.7°
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 / 6277.0 - 6283.0
102KG7D - 205KG7D / 6295.5 - 6298.0
102KG7D - 205KG7D / 6344.0 - 6350.0
102KG7D - 205KG7D / 6355.0 - 6371.5
102KG7D - 205KG7D / 6418.0 - 6423.0

Max Great Circle Coordination Distance 221.8 km / 137.8 mi
Precipitation Scatter Contour Radius 100.0 km / 62.1 mi

Coordination Values**SAN DIEGO, CA**

Licensee Name Vizada Satellite Inc -ESV In-Motion
Latitude (NAD 83) 32° 39' 14.4" N
Longitude (NAD 83) 117° 7' 19.2" 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	0.38	106.67	-10.00	137.59
5	0.31	111.43	-10.00	146.57
10	0.32	116.19	-10.00	144.21
15	0.35	120.93	-10.00	141.18
20	0.38	125.65	-10.00	137.75
25	0.31	130.30	-10.00	145.71
30	0.43	134.96	-10.00	131.87
35	0.41	139.51	-10.00	134.51
40	0.61	144.04	-10.00	119.25
45	0.67	148.40	-10.00	116.30
50	0.64	152.53	-10.00	117.64
55	0.78	156.45	-10.00	112.88
60	0.89	159.90	-10.00	107.47
65	0.87	162.51	-10.00	108.41
70	0.81	163.94	-10.00	111.41
75	0.42	163.59	-10.00	133.42
80	0.38	162.17	-10.00	137.19
85	0.29	159.57	-10.00	148.58
90	0.32	156.31	-10.00	144.73
95	0.60	152.69	-10.00	119.87
100	0.61	148.57	-10.00	119.10
105	0.63	144.26	-10.00	117.86
110	0.55	139.76	-10.00	122.14
115	0.47	135.18	-10.00	128.49
120	0.37	130.53	-10.00	139.30
125	0.27	125.84	-10.00	150.56
130	0.00	121.09	-10.00	160.62
135	0.00	116.36	-10.00	160.62
140	0.00	111.62	-10.00	160.62
145	0.00	106.85	-10.00	160.62
150	0.00	102.08	-10.00	160.62
155	0.00	97.29	-10.00	160.62
160	0.00	92.51	-10.00	160.62
165	0.00	87.72	-10.00	160.62
170	0.00	82.93	-10.00	160.62
175	0.00	78.14	-10.00	160.62
180	0.00	73.37	-10.00	160.62
185	0.00	68.60	-10.00	160.62

Coordination Values	SAN DIEGO, CA
Licensee Name	Vizada Satellite Inc -ESV In-Motion
Latitude (NAD 83)	32° 39' 14.4" N
Longitude (NAD 83)	117° 7' 19.2" 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	0.00	63.85	-10.00	160.62
195	0.00	59.13	-10.00	160.62
200	0.00	54.43	-10.00	160.62
205	0.00	49.77	-10.00	160.62
210	0.00	45.17	-9.37	163.47
215	0.00	40.64	-8.22	168.83
220	0.00	36.20	-6.97	174.93
225	0.00	31.91	-5.60	181.88
230	0.00	27.83	-4.11	189.75
235	0.00	24.06	-2.53	198.87
240	0.00	20.79	-0.95	208.02
245	0.00	18.28	0.45	216.35
250	0.00	16.86	1.33	221.69
255	0.00	16.83	1.35	221.82
260	0.00	18.18	0.51	216.69
265	0.00	20.66	-0.88	208.43
270	0.00	23.90	-2.46	199.29
275	0.00	27.65	-4.04	190.14
280	0.00	31.72	-5.53	182.22
285	0.00	36.00	-6.91	175.23
290	0.00	40.43	-8.17	169.09
295	0.00	44.96	-9.32	163.70
300	0.00	49.56	-10.00	160.62
305	0.00	54.22	-10.00	160.62
310	0.00	58.91	-10.00	160.62
315	0.00	63.64	-10.00	160.62
320	0.00	68.38	-10.00	160.62
325	0.00	73.15	-10.00	160.62
330	0.00	77.92	-10.00	160.62
335	0.00	82.71	-10.00	160.62
340	0.24	87.49	-10.00	155.59
345	0.35	92.29	-10.00	141.56
350	0.37	97.09	-10.00	139.29
355	0.46	101.89	-10.00	128.62

San Diego ESV Break Points

Name	Latitude	Longitude
NW	32.988	-117.425
BP1	32.789	-117.256
BP2	32.659	-117.261
BP3	32.665	-117.204
BP4	32.554	-117.129
SW	32.321	-117.285
BP4a	32.554	-117.129
BP4b	32.665	-117.204
BP5	32.695	-117.237
BP6	32.718	-117.214
Port	32.718	-117.176
BP8	32.712	-117.184
BP9	32.694	-117.155
BP10	32.669	-117.128
Port	32.654	-117.122
BP11	32.6	-117.115



