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:	10/13/2010
Job Number:	101013SKJTEL01

Administrative Information

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

Site Information — SEATAC, WA

Venue Name	
Latitude (NAD 83)	48° 52' 9.6" N
Longitude (NAD 83)	122° 45' 25.2" 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	241.5° to 241.5°
Corresponding Elevation Angles	14.2° / 14.2°
Antenna Centerline (AGL)	15.54 m / 51.0 ft

Antenna Information — Transmit - FCC32

Manufacturer		FCC REFERENCE
Model		32-25LOG(THETA)
Gain / Diameter		41.7 dBi / 2.4 m
3-dB / 15-dB Beamwidth		0.66° / 1.18°
Max Available RF Power	(dBW/4 kHz)	-10.5
	(dBW/MHz)	13.5
Maximum EIRP	(dBW/4 kHz)	31.2
	(dBW/MHz)	55.2
	(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	160.6 km / 99.8 mi
Precipitation Scatter Contour Radius	100.0 km / 62.1 mi

Coordination Values	**SEATAC, WA**
Licensee Name	Vizada Satellite Inc -ESV In-Motion
Latitude (NAD 83)	48° 52' 9.6" N
Longitude (NAD 83)	122° 45' 25.2" 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)

			Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)
0	1.83	143.35	-10.00	100.00
5	1.92	147.87	-10.00	100.00
10	5.71	153.85	-10.00	100.00
15	8.39	159.43	-10.00	100.00
20	8.22	163.85	-10.00	100.00
25	6.78	166.92	-10.00	100.00
30	6.13	169.12	-10.00	100.00
35	3.99	167.72	-10.00	100.00
40	2.19	164.79	-10.00	100.00
45	0.00	160.52	-10.00	160.62
50	0.00	157.41	-10.00	160.62
55	0.00	153.74	-10.00	160.62
60	0.00	149.71	-10.00	160.62
65	0.00	145.45	-10.00	160.62
70	0.00	141.03	-10.00	160.62
75	0.00	136.51	-10.00	160.62
80	0.00	131.90	-10.00	160.62
85	0.00	127.24	-10.00	160.62
90	0.00	122.54	-10.00	160.62
95	0.00	117.81	-10.00	160.62
100	1.04	113.18	-10.00	101.25
105	3.37	108.58	-10.00	100.00
110	5.31	103.81	-10.00	100.00
115	7.88	98.98	-10.00	100.00
120	9.79	94.05	-10.00	100.00
125	8.42	89.08	-10.00	100.00
130	6.15	84.17	-10.00	100.00
135	6.36	79.24	-10.00	100.00
140	7.72	74.25	-10.00	100.00
145	10.70	69.18	-10.00	100.00
150	11.01	64.19	-10.00	100.00
155	10.24	59.26	-10.00	100.00
160	11.32	54.23	-10.00	100.00
165	7.81	49.61	-10.00	100.00
170	8.38	44.63	-9.24	100.00
175	11.03	39.36	-7.88	100.00
180	14.44	34.12	-6.32	100.00
185	18.69	29.17	-4.62	100.00

Coordination Values	**SEATAC, WA**
Licensee Name	Vizada Satellite Inc -ESV In-Motion
Latitude (NAD 83)	48° 52' 9.6" N
Longitude (NAD 83)	122° 45' 25.2" 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)

			Transmit 6.1 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)
190	19.46	24.28	-2.63	100.00
195	18.15	19.17	-0.06	100.00
200	16.37	14.08	3.29	100.00
205	14.99	9.16	7.95	100.00
210	13.01	5.19	14.12	100.00
215	12.18	4.15	16.55	100.00
220	12.76	6.86	11.08	100.00
225	11.82	11.77	5.23	100.00
230	10.49	16.90	1.30	100.00
235	8.90	22.12	-1.62	100.00
240	6.81	27.47	-3.97	100.00
245	4.88	32.75	-5.88	100.00
250	3.51	37.82	-7.44	100.00
255	1.92	42.93	-8.82	100.00
260	0.41	47.99	-10.00	134.12
265	0.00	52.76	-10.00	160.62
270	0.00	57.46	-10.00	160.62
275	0.00	62.19	-10.00	160.62
280	0.00	66.94	-10.00	160.62
285	0.00	71.71	-10.00	160.62
290	0.00	76.50	-10.00	160.62
295	0.00	81.29	-10.00	160.62
300	0.00	86.09	-10.00	160.62
305	0.00	90.89	-10.00	160.62
310	1.60	95.73	-10.00	100.00
315	3.51	100.65	-10.00	100.00
320	6.30	105.68	-10.00	100.00
325	7.24	110.66	-10.00	100.00
330	7.99	115.64	-10.00	100.00
335	9.12	120.66	-10.00	100.00
340	8.56	125.55	-10.00	100.00
345	7.66	130.37	-10.00	100.00
350	7.67	135.27	-10.00	100.00
355	5.31	139.66	-10.00	100.00

Name	Latitude	Longitude
Bp1	48.715	125.573
Bp2	48.555	124.759
Bp3	48.332	123.933
Bp4	48.291	123.59
Bp5	48.418	123.276
Bp6	48.995	123.465
Bp7	49.261	123.269
Bp8	49.002	123.15
Bp9	48.947	123.037
Bp10	49.071	122.956
Bp11	48.999	122.824
Bp11a	48.902	122.822
PORT1	48.86933	122.757
Bp13	48.86933	122.709
Bp14	48.689	122.684
Bp15	48.654	122.595
Bp16	48.782	122.608
PORT2	48.746	122.494
Bp18	48.761	122.482
Bp19	48.568	122.472
BP19a	48.464	122.52
Bp20	48.589	122.642
Bp21	48.444	122.675
Bp22	48.375	122.662
Bp23	48.218	122.765
Bp24	48.153	122.601
Bp25	48.023	122.594
Bp26	47.973	122.534
bp27	47.998	122.479
bp28	47.857	122.327
bp29	47.804	122.391
bp30	47.731	122.368
bp31	47.654	122.417
bp32	47.606	122.335
PORT3	47.5875	122.356
bp34	47.554	122.338
bp35	47.582	122.404
bp36	47.351	122.311
bp37	47.308	122.436
bp38	47.261	122.351
PORT4	47.26331	122.39
bp40	47.234	122.424
bp41	47.325	122.539
bp42	47.389	122.375
bp43	47.407	122.439
bp44	47.468	122.44
bp45	47.51	122.476

bp46	47.573	122.501
bp47	47.707	122.51
bp48	47.746	122.556
bp49	47.747	122.477
bp50	47.798	122.509
bp51	47.911	122.526
bp52	47.919	122.588
bp53	48.143	122.765
bp54	48.137	122.84
bp55	48.173	123.115
bp56	48.115	123.244
bp57	48.11	123.418
PORT5	48.125	123.442
bp59	48.185	123.597
bp60	48.183	123.933
bp61	48.411	124.677
bp62	48	124.862

The coordination contours include all 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.