EXHIBIT 12: INTELSAT 31 LINK BUDGETS

UPLINK BEAM INFORMATION				
Uplink Beam Name	Global	Global	Global	Global
Uplink Frequency (GHz)	6.575	6.575	6.575	6.575
Uplink Beam Polarization	Linear	Linear	Linear	Linear
Uplink Relative Contour Level (dB)	-7.0	-7.0	-7.0	-7.0
Uplink Contour G/T (dB/K)	-14.8	-14.8	-14.8	-14.8
Uplink SFD (dBW/m2)	-72	-83	-79	-79
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0
DOWNLINK BEAM INFORMATION				
Downlink Beam Name	Global	Global	Global	Global
Downlink Frequency (GHz)	3.550	3.550	3.550	3.550
Downlink Beam Polarization	Linear	Linear	Linear	Linear
Downlink Relative Contour Level (dB)	-7.0	-7.0	-7.0	-7.0
Downlink Contour EIRP (dBW)	30.0	30.0	30.0	30.0
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0
ADJACENT SATELLITE 1				
Satellite 1 Orbital Location	93.05W	93.05W	93.05W	93.05W
Uplink Power Density (dBW/Hz)	-38.7	-38.7	-38.7	-38.7
Uplink Polarization Advantage (dB)	0.0	0.0	0.0	0.0
Downlink EIRP Density (dBW/Hz)	-39.0	-39.0	-39.0	-39.0
Downlink Polarization Advantage (dB)	0.0	0.0	0.0	0.0
ADJACENT SATELLITE 2				
Satellite 1 Orbital Location	97.05W	97.05W	97.05W	97.05W
Uplink Power Density (dBW/Hz)	-38.7	-38.7	-38.7	-38.7
Uplink Polarization Advantage (dB)	0.0	0.0	0.0	0.0
Downlink EIRP Density (dBW/Hz)	-39.0	-39.0	-39.0	-39.0
Downlink Polarization Advantage (dB)	0.0	0.0	0.0	0.0
CARRIER INFORMATION				
Carrier ID	30M0F3F	69M6G7W	10M3G7W	100KG7W
Carrier Modulation	TV/FM	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	4	N/A	N/A	N/A
Information Rate(kbps)	N/A	47511	6000	64
Code Rate	N/A	1/2x188/204	1/2x188/204	1/2x239/256
Occupied Bandwidth(kHz)	30000	58257	6771.1	75.4
Allocated Bandwidth(kHz)	30000	69600	10300	100
Minimum C/N, Clear Sky (dB)	10.0	3.36	3.87	2.99
Minimum C/N, Rain (dB)	10.0	3.36	3.57	2.79
UPLINK EARTH STATION				
Earth Station Diameter (meters)	15.2	11.0	6.1	6.1
Earth Station Gain (dBi)	58.9	55.9	49.9	49.9
Earth Station Elevation Angle	20	20	20	20
DOWNLINK EARTH STATION				
Earth Station Diameter (meters)	11.0	4.5	6.1	6.1
Earth Station Gain (dBi)	51.0	43.0	45.6	45.6
Earth Station G/T (dB/K)	30.1	22.7	25.3	25.3
Earth Station Elevation Angle	20	20	20	20
LINK FADE TYPE	Clear Sky	Clear Sky	Clear Sky	Clear Sky
UPLINK PERFORMANCE				
Uplink Earth Station EIRP (dBW)	82.7	79.9	68.8	48.4
Uplink Path Loss, Clear Sky (dB)	-200.8	-200.8	-200.8	-200.8
Uplink Rain Attenuation	0.0	0.0	0.0	0.0
Satellite G/T(dB/K)	-14.8	-14.8	-14.8	-14.8
Boltzman Constant(dBW/K-Hz)	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-74.8	-77.7	-68.3	-48.8
Uplink C/N(dB)	21.0	15.3	13.6	12.7
DOWNLINK PERFORMANCE				
Downlink EIRP per Carrier (dBW)	26.5	30.0	19.6	-.8
Antenna Pointing Error (dB)	-.5	-.5	-.5	-.5
Downlink Path Loss, Clear Sky (dB)	-195.4	-195.4	-195.4	-195.4
Downlink Rain Attenuation	0.0	0.0	0.0	0.0
Earth Station G/T (dB/K)	30.1	22.7	25.3	25.3
Boltzman Constant(dBW / K - Hz)	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-74.8	-77.7	-68.3	-48.8
Downlink C / N(dB)	14.5	7.7	9.3	8.4
COMPOSITE LINK PERFORMANCE				
C/N Uplink (dB)	21.0	15.3	13.6	12.7
C/N Downlink (dB)	14.5	7.7	9.3	8.4
C/I Intermodulation (dB)	N/A	N/A	19.9	19.0
C/I Uplink Co-Channel (dB)*	30.7	27.0	28.4	28.1
C/I Downlink Co-Channel (dB)*	30.7	27.0	28.4	28.1
C/I Uplink Adjacent Satellite 1 (dB)	21.6	15.9	14.2	13.3
C/I Downlink Adjacent Satellite 1 (dB)	19.6	11.3	13.3	12.4
C/I Uplink Adjacent Satellite 2 (dB)	21.6	15.9	14.2	13.3
C/I Downlink Adjacent Satellite 2 (dB)	20.7	14.1	15.4	14.5
C/(N+I) Composite (dB)	11.1	4.4	4.9	4.0
Required System Margin (dB)	-1.0	-1.0	-1.0	-1.0
Net C/(N+I) Composite (dB)	10.1	3.4	3.9	3.0
Minimum Required C/N (dB)	-10.0	-3.4	-3.9	-3.0
Excess Link Margin (dB)	.1	0.0	0.0	0.0
Number of Carriers	1.0	1.0	4.9	534.4
CARRIER DENSITY LEVELS				
Uplink Power Density (dBW/Hz)	-42.3	-53.7	-49.4	-50.3
Downlink EIRP Density At Beam Peak (dBW/Hz)	-32.5	-40.7	-41.7	-42.6

EXHIBIT 12: INTELSAT 31 LINK BUDGETS (continued)

UPLINK BEAM INFORMATION					
Uplink Beam Name	Composite	Composite	Composite	TCN	TCN
Uplink Frequency (GHz)	14.125	14.125	14.125	14.495	14.495
Uplink Beam Polarization	Linear	Linear	Linear	Linear	Linear
Uplink Relative Contour Level (dB)	-6.0	-6.0	-6.0	-2.6	-2.6
Uplink Contour G/T (dB/K)	9.3	9.3	9.3	-7.4	-7.4
Uplink SFD (dBW/m2)	-77.3	-77.3	-77.3	-78	-78.0
Rain Rate (mm/hr)	95.0	95.0	95.0	95.0	95.0
DOWNLINK BEAM INFORMATION					
Downlink Beam Name	Composite	Pan Regional	Pan Regional	CBC	Pan Regional
Downlink Frequency (GHz)	11.575	11.575	11.575	11.460	11.460
Downlink Beam Polarization	Circular	Circular	Circular	Circular	Circular
Downlink Relative Contour Level (dB)	-6.0	-6.0	-6.0	-6.0	-6.0
Downlink Contour EIRP (dBW)	48.8	51.8	51.8	41.2	48.3
Rain Rate (mm/hr)	95.0	95.0	95.0	42.0	95.0
ADJACENT SATELLITE 1					
Satellite 1 Orbital Location	93.05W	93.05W	93.05W	93.05W	93.05W
Uplink Power Density (dBW/Hz)	-45.0	-45.0	-45.0	-45.0	-45.0
Uplink Polarization Advantage (dB)	0.0	0.0	0.0	0.0	0.0
Downlink EIRP Density (dBW/Hz)	-16.5	-19.8	-21.2	-27.0	-20.0
Downlink Polarization Advantage (dB)	0.0	0.0	0.0	0.0	0.0
ADJACENT SATELLITE 2					
Satellite 1 Orbital Location	97.05W	97.05W	97.05W	97.05W	97.05W
Uplink Power Density (dBW/Hz)	-45.0	-45.0	-45.0	-45.0	-45.0
Uplink Polarization Advantage (dB)	0.0	0.0	0.0	0.0	0.0
Downlink EIRP Density (dBW/Hz)	-16.5	-19.8	-21.2	-27.0	-20.0
Downlink Polarization Advantage (dB)	0.0	0.0	0.0	0.0	0.0
CARRIER INFORMATION					
Carrier ID	36M0G7W	24M0G7W	24M0G7W	8M00G7W	8M00G7W
Carrier Modulation	QPSK	QPSK	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	N/A	N/A	N/A	N/A	N/A
Information Rate(kbps)	24575	16383	16383	5461	5461
Code Rate	1/2x188/204	1/2x188/204	1/2x188/204	1/2x188/204	1/2x188/204
Occupied Bandwidth(kHz)	30133	20089	20089	6696	6696
Allocated Bandwidth(kHz)	36000	24000	24000	8000	8000
Minimum C/N, Clear Sky (dB)	3.36	3.36	3.36	3.36	3.36
Minimum C/N, Rain (dB)	3.36	3.36	3.36	3.36	3.36
UPLINK EARTH STATION					
Earth Station Diameter (meters)	6.1	6.1	6.1	6.1	6.1
Earth Station Gain (dBi)	56.8	56.8	56.8	57.0	57.0
Earth Station Elevation Angle	20	20	20	20	20
DOWNLINK EARTH STATION					
Earth Station Diameter (meters)	3.7	3.0	2.4	1.8	2.4
Earth Station Gain (dBi)	50.8	48.9	47.2	44.4	47.1
Earth Station G/T (dB/K)	28.3	26.4	24.7	21.9	24.6
Earth Station Elevation Angle	20	20	20	20	20
LINK FADE TYPE	Clear Sky	Clear Sky	Clear Sky	Clear Sky	Clear Sky
UPLINK PERFORMANCE					
Uplink Earth Station EIRP (dBW)	73.7	69.0	69.0	74.1	67.0
Uplink Path Loss, Clear Sky (dB)	-207.4	-207.4	-207.4	-207.6	-207.6
Uplink Rain Attenuation	0.0	0.0	0.0	0.0	0.0
Satellite G/T(dB/K)	9.3	9.3	9.3	-7.4	-7.4
Boltzman Constant(dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-74.8	-73.0	-73.0	-68.3	-68.3
Uplink C/N(dB)	29.4	26.5	26.5	19.4	12.3
DOWNLINK PERFORMANCE					
Downlink EIRP per Carrier (dBW)	42.8	41.0	41.0	36.3	36.2
Antenna Pointing Error (dB)	-.5	-.5	-.5	-.5	-.5
Downlink Path Loss, Clear Sky (dB)	-205.7	-205.7	-205.7	-205.6	-205.6
Downlink Rain Attenuation	0.0	0.0	0.0	0.0	0.0
Earth Station G/T (dB/K)	28.3	26.4	24.7	21.9	24.6
Boltzman Constant(dBW / K - Hz)	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-74.8	-73.0	-73.0	-68.3	-68.3
Downlink C / N(dB)	18.7	16.8	15.1	12.5	15.1
COMPOSITE LINK PERFORMANCE					
C/N Uplink (dB)	29.4	26.5	26.5	19.4	12.3
C/N Downlink (dB)	18.7	16.8	15.1	12.5	15.1
C/I Intermodulation (dB)	N/A	N/A	N/A	N/A	N/A
C/I Uplink Co-Channel (dB)*	27.0	27.0	27.0	27.0	27.0
C/I Downlink Co-Channel (dB)*	27.0	27.0	27.0	27.0	27.0
C/I Uplink Adjacent Satellite 1 (dB)	19.9	17.0	17.0	30.2	23.1
C/I Downlink Adjacent Satellite 1 (dB)	13.3	14.6	14.1	16.8	12.8
C/I Uplink Adjacent Satellite 2 (dB)	19.3	16.4	16.4	29.7	22.6
C/I Downlink Adjacent Satellite 2 (dB)	13.8	15.3	15.1	18.5	13.8
C/(N+I) Composite (dB)	8.9	8.7	8.3	9.6	7.0
Required System Margin (dB)	-1.0	-1.0	-1.0	-1.0	-1.0
Net C/(N+I) Composite (dB)	7.9	7.7	7.3	8.6	6.0
Minimum Required C/N (dB)	-3.4	-3.4	-3.4	-3.4	-3.4
Excess Link Margin (dB)	4.5	4.4	3.9	5.3	2.7
Number of Carriers	1.0	1.0	1.0	1.0	1.0
CARRIER DENSITY LEVELS					
Uplink Power Density (dBW/Hz)	-57.9	-60.9	-60.9	-51.2	-58.3
Downlink EIRP Density At Beam Peak (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0