

EXHIBIT 12A: INTELSAT 14 C-BAND LINK BUDGETS

UPLINK BEAM INFORMATION				
Uplink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Uplink Frequency (MHz)	5925-6180	5925-6180	5925-6180	5925-6180
Uplink Beam Polarization	H/V	H/V	H/V	H/V
Uplink Relative Contour Level (dB)	-10.0	-10.0	-10.0	-10.0
Uplink Contour G/T (dB/K)	-6.5	-6.5	-6.5	-6.5
Uplink SFD (dBW/m ²)	-78.8	-89.8	-89.8	-89.8
DOWNLINK BEAM INFORMATION				
Downlink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Downlink Frequency (MHz)	3700-3955	3700-3955	3700-3955	3700-3955
Downlink Beam Polarization	V/H	V/H	V/H	V/H
Downlink Relative Contour EIRP (dBW)	-8.0	-8.0	-8.0	-8.0
ADJACENT SATELLITE 1				
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-38.7	-38.7	-38.7	-38.7
Uplink Polarization Advantage (dB)	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-37.7	-37.7	-37.7	-37.7
ADJACENT SATELLITE 2				
Satellite 1 Orbital Location	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-38.7	-38.7	-38.7	-38.7
Uplink Polarization Advantage (dB)	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-37.7	-37.7	-37.7	-37.7
CARRIER INFORMATION				
Carrier ID	1	3	4	5
Emission Designation	38MDF3F	38M0G7W	10M3G7W	10DKG7W
Information Rate (kbps)	n/a	27789.6	6240.0	70.4
Carrier Modulation	TWFM	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	4.0	n/a	n/a	n/a
Code Rate	n/a	0.5	0.5	0.5
Occupied Bandwidth (kHz)	36000	30133	6771	76
Allocated Bandwidth (kHz)	36000	36000	10300	100
Minimum C/N, Clear Sky (dB)	10.00	3.36	3.87	2.99
Minimum C/N, Rain (dB)	10.00	3.36	3.87	2.99
UPLINK EARTH STATION				
Earth Station Diameter (meters)	6.0	6.0	6.0	6.0
Earth Station Gain (dBi)	49.7	49.7	49.7	49.7
Earth Station Elevation Angle	26.4	26.4	26.4	26.4
DOWNLINK EARTH STATION				
Earth Station Diameter (meters)	3.74	2.77	3.03	2.83
Earth Station Gain (dBi)	41.6	39.0	39.8	39.2
Earth Station G/T (dB/K)	21.4	18.8	19.6	19.0
Earth Station Elevation Angle	26.4	26.4	26.4	26.4
UPLINK PERFORMANCE				
Uplink Earth Station EIRP (dBW)	73.2	73.0	64.5	45.0
Uplink Path Loss, Clear Sky (dB)	199.9	199.9	199.9	199.9
Satellite G/T (dB/K)	-6.5	-6.5	-6.5	-6.5
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-74.8	-68.3	-48.8
Uplink C/N (dB)	29.3	29.3	18.3	18.3
DOWNLINK PERFORMANCE				
Downlink EIRP per Carrier (dBW)	28.3	37.1	30.6	11.1
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	195.9	195.9	195.9	195.9
Earth Station G/T (dB/K)	21.4	18.8	19.6	19.0
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-74.8	-68.3	-48.8
Downlink C/N (dB)	15.9	13.3	14.0	13.4
COMPOSITE LINK PERFORMANCE				
C/N Uplink (dB)	29.3	29.3	18.3	18.3
C/N Downlink (dB)	15.9	13.3	14.0	13.4
C/I Other Links (Co-channel & IM)	17.0	17.0	14.0	14.0
C/I Uplink Adjacent Satellite 1 (dB)	24.4	15.4	13.4	13.4
C/I Downlink Adjacent Satellite 1 (dB)	18.3	8.9	11.1	9.4
C/I Uplink Adjacent Satellite 2 (dB)	24.4	15.4	13.4	13.4
C/I Downlink Adjacent Satellite 2 (dB)	20.8	10.1	12.5	10.7
C/(N+I) Composite (dB)	11.1	4.5	5.0	4.1
Required System Margin (dB)	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	10.0	3.4	3.9	3.9
Excess Link Margin (dB)	0.0	0.0	0.0	0.0
Number of Carriers	1	1	3	360
CARRIER DENSITY LEVELS				
Uplink Power Density (dBW/Hz)	-42.5	-51.5	-53.5	-53.5
Downlink EIRP Density at Beam Peak	-29.7	-29.7	-29.7	-29.7

EXHIBIT 12A: INTELSAT 14 C-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION				
Uplink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Uplink Frequency (MHz)	6180-6425	6180-6425	6180-6425	6180-6425
Uplink Beam Polarization	RHCP/LHCP	RHCP/LHCP	RHCP/LHCP	RHCP/LHCP
Uplink Relative Contour Level (dB)	-10.0	-10.0	-10.0	-10.0
Uplink Contour G/T (dB/K)	-5.5	-5.5	-5.5	-5.5
Uplink SFD (dBWm ²)	-78.4	-89.4	-89.4	-89.4
DOWNLINK BEAM INFORMATION				
Downlink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Downlink Frequency (MHz)	3955-4200	3955-4200	3855-4200	3955-4200
Downlink Beam Polarization	LHCP/RHCP	LHCP/RHCP	LHCP/RHCP	LHCP/RHCP
Downlink Relative Contour EIRP (dBW)	-10.0	-10.0	-10.0	-10.0
ADJACENT SATELLITE 1				
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-38.7	-38.7	-38.7	-38.7
Uplink Polarization Advantage (dB)	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-39.6	-39.6	-39.6	-39.6
ADJACENT SATELLITE 2				
Satellite 1 Orbital Location	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-38.7	-38.7	-38.7	-38.7
Uplink Polarization Advantage (dB)	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-39.6	-39.6	-39.6	-39.6
CARRIER INFORMATION				
Carrier ID	1	3	4	5
Emission Designation	38MDF3F	38MDG7W	10DM3G7W	10DKG7W
Information Rate (kbps)	n/a	27769.6	6240.0	70.4
Carrier Modulation	TV/FM	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	4.0	n/a	n/a	n/a
Code Rate	n/a	0.5	0.5	0.5
Occupied Bandwidth (kHz)	38000	30133	6771	75
Allocated Bandwidth (kHz)	38000	38000	10300	100
Minimum C/N, Clear Sky (dB)	10.00	3.36	3.87	2.99
Minimum C/N, Rain (dB)	10.00	3.36	3.87	2.99
UPLINK EARTH STATION				
Earth Station Diameter (meters)	6.0	6.0	6.0	6.0
Earth Station Gain (dBi)	50.1	50.1	50.1	50.1
Earth Station Elevation Angle	26.4	26.4	26.4	26.4
DOWNLINK EARTH STATION				
Earth Station Diameter (meters)	4.08	2.66	2.60	2.71
Earth Station Gain (dBi)	43.0	39.2	40.0	39.4
Earth Station G/T (dB/K)	22.7	19.0	19.8	19.2
Earth Station Elevation Angle	26.4	26.4	26.4	26.4
UPLINK PERFORMANCE				
Uplink Earth Station EIRP (dBW)	73.6	73.4	64.9	45.4
Uplink Path Loss, Clear Sky (dB)	200.2	200.2	200.2	200.2
Satellite G/T (dB/K)	-5.5	-5.5	-5.5	-5.5
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-86.0	-74.8	-68.3	-48.8
Uplink C/N (dB)	30.4	21.4	19.4	19.4
DOWNLINK PERFORMANCE				
Downlink EIRP per Carrier (dBW)	26.4	35.2	28.7	9.2
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	196.5	196.5	196.5	196.5
Earth Station G/T (dB/K)	22.7	19.0	19.8	19.2
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-86.0	-74.8	-68.3	-48.8
Downlink C/N (dB)	14.7	11.0	11.7	11.2
COMPOSITE LINK PERFORMANCE				
C/N Uplink (dB)	30.4	21.4	19.4	19.4
C/N Downlink (dB)	14.7	11.0	11.7	11.2
C/I Other links (Co-channel & IM)	17.0	17.0	14.0	14.0
C/I Uplink Adjacent Satellite 1 (dB)	24.8	15.8	13.8	13.8
C/I Downlink Adjacent Satellite 1 (dB)	20.6	9.4	11.6	9.9
C/I Uplink Adjacent Satellite 2 (dB)	24.8	15.8	13.8	13.8
C/I Downlink Adjacent Satellite 2 (dB)	21.2	10.7	13.2	11.2
C/(N+I) Composite (dB)	11.1	4.5	5.0	4.1
Required System Margin (dB)	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	10.0	3.4	3.9	3.0
Excess Link Margin (dB)	0.0	0.0	0.0	0.0
Number of Carriers	1	1	3	300
CARRIER DENSITY LEVELS				
Uplink Power Density (dBW/Hz)	-42.5	-51.5	-53.5	-53.5
Downlink EIRP Density at Beam Peak	-29.6	-29.6	-29.6	-29.6

EXHIBIT 12A: INTELSAT 14 C-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION				
Uplink Beam Name	AMERICAS	AMERICAS	AMERICAS	AMERICAS
Uplink Frequency (MHz)	5925-6100	5925-6100	5925-6100	5925-6100
Uplink Beam Polarization	H/V	H/V	H/V	H/V
Uplink Relative Contour Level (dB)	-10.0	-10.0	-10.0	-10.0
Uplink Contour G/T (dB/K)	-9.4	-9.4	-9.4	-9.4
Uplink SFD (dBW/m ²)	-78.1	-89.1	-89.1	-89.1
DOWNLINK BEAM INFORMATION				
Downlink Beam Name	AMERICAS	AMERICAS	AMERICAS	AMERICAS
Downlink Frequency (MHz)	3700-3875	3700-3875	3700-3875	3700-3875
Downlink Beam Polarization	V/H	V/H	V/H	V/H
Downlink Relative Contour EIRP (dBW)	-10.0	-10.0	-10.0	-10.0
ADJACENT SATELLITE 1				
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-38.7	-38.7	-38.7	-38.7
Uplink Polarization Advantage (dB)	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-41.5	-41.5	-41.5	-41.5
ADJACENT SATELLITE 2				
Satellite 1 Orbital Location	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-38.7	-38.7	-38.7	-38.7
Uplink Polarization Advantage (dB)	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-41.5	-41.5	-41.5	-41.5
CARRIER INFORMATION				
Carrier ID	1	3	4	5
Emission Designation	30MDF3F	38MOG7W	10M3G7W	10DKG7W
Information Rate (kbps)	n/a	27700.6	6240.0	70.4
Carrier Modulation	TV/FM	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	4.0	n/a	n/a	n/a
Code Rate	n/a	0.5	0.5	0.5
Occupied Bandwidth (kHz)	36000	30133	6771	75
Allocated Bandwidth (kHz)	36000	36000	10300	100
Minimum C/N, Clear Sky (dB)	10.00	3.36	3.87	2.99
Minimum C/N, Rain (dB)	10.00	3.36	3.87	2.99
UPLINK EARTH STATION				
Earth Station Diameter (meters)	6.0	6.0	6.0	6.0
Earth Station Gain (dBi)	49.7	49.7	49.7	49.7
Earth Station Elevation Angle	40.6	40.6	40.6	40.6
DOWNLINK EARTH STATION				
Earth Station Diameter (meters)	4.76	2.92	3.22	2.99
Earth Station Gain (dBi)	43.7	39.4	40.2	39.6
Earth Station G/T (dB/K)	23.5	19.2	20.1	19.5
Earth Station Elevation Angle	40.6	40.6	40.6	40.6
UPLINK PERFORMANCE				
Uplink Earth Station EIRP (dBW)	73.6	73.4	64.9	45.4
Uplink Path Loss, Clear Sky (dB)	199.6	199.6	199.6	199.6
Satellite G/T (dB/K)	-9.4	-9.4	-9.4	-9.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-74.8	-68.3	-48.8
Uplink C/N (dB)	27.2	18.2	16.2	16.2
DOWNLINK PERFORMANCE				
Downlink EIRP per Carrier (dBW)	24.5	33.3	26.8	7.3
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	195.5	195.5	195.5	195.5
Earth Station G/T (dB/K)	23.5	19.2	20.1	19.5
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-74.8	-68.3	-48.8
Downlink C/N (dB)	14.5	10.3	11.1	10.5
COMPOSITE LINK PERFORMANCE				
C/N Uplink (dB)	27.2	18.2	16.2	16.2
C/N Downlink (dB)	14.5	10.3	11.1	10.5
C/I Other Links (Co-channel & IM)	17.0	17.0	14.0	14.0
C/I Uplink Adjacent Satellite 1 (dB)	24.9	15.9	13.9	13.9
C/I Downlink Adjacent Satellite 1 (dB)	21.4	9.9	12.5	10.5
C/I Uplink Adjacent Satellite 2 (dB)	24.9	15.9	13.9	13.9
C/I Downlink Adjacent Satellite 2 (dB)	22.0	11.2	14.2	11.0
C/(N+I) Composite (dB)	11.1	4.5	5.0	4.1
Required System Margin (dB)	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	10.0	3.4	3.0	3.0
Excess Link Margin (dB)	0.0	0.0	0.0	0.0
Number of Carriers	1	1	3	360
CARRIER DENSITY LEVELS				
Uplink Power Density (dBW/Hz)	-42.0	-51.0	-53.0	-53.0
Downlink EIRP Density at Beam Peak	-31.5	-31.5	-31.5	-31.5

EXHIBIT 12A: INTELSAT 14 C-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION				
Uplink Beam Name	AMERICAS	AMERICAS	AMERICAS	AMERICAS
Uplink Frequency (MHz)	6100-6425	6100-6425	6100-6425	6100-6425
Uplink Beam Polarization	H/V	H/V	H/V	H/V
Uplink Relative Contour Level (dB)	-10.0	-10.0	-10.0	-10.0
Uplink Contour G/T (dB/K)	-9.4	-9.4	-9.4	-9.4
Uplink SFD (dBW/m ²)	-75.1	-89.1	-89.1	-89.1
DOWNLINK BEAM INFORMATION				
Downlink Beam Name	AMERICAS	AMERICAS	AMERICAS	AMERICAS
Downlink Frequency (MHz)	3875-4200	3875-4200	3875-4200	3875-4200
Downlink Beam Polarization	V/H	V/H	V/H	V/H
Downlink Relative Contour EIRP (dBW)	-10.0	-10.0	-10.0	-10.0
ADJACENT SATELLITE 1				
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-38.7	-38.7	-38.7	-38.7
Uplink Polarization Advantage (dB)	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-44.5	-44.5	-44.5	-44.5
ADJACENT SATELLITE 2				
Satellite 1 Orbital Location	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-38.7	-38.7	-38.7	-38.7
Uplink Polarization Advantage (dB)	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-44.5	-44.5	-44.5	-44.5
CARRIER INFORMATION				
Carrier ID	1	3	4	5
Emission Designation	36MDF3F	72M0G7W	10M3G7W	10DKG7W
Information Rate (kbps)	n/a	55539.3	6240.0	70.4
Carrier Modulation	TV/FM	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	4.0	n/a	n/a	n/a
Code Rate	n/a	0.5	0.5	0.5
Occupied Bandwidth (kHz)	36000	60260	6771	75
Allocated Bandwidth (kHz)	36000	72000	10300	100
Minimum C/N, Clear Sky (dB)	10.00	3.36	3.87	2.99
Minimum C/N, Rain (dB)	10.00	3.36	3.87	2.99
UPLINK EARTH STATION				
Earth Station Diameter (meters)	6.0	6.0	6.0	6.0
Earth Station Gain (dBi)	50.0	50.0	50.0	50.0
Earth Station Elevation Angle	40.6	40.6	40.6	40.6
DOWNLINK EARTH STATION				
Earth Station Diameter (meters)	6.16	3.27	5.48	3.72
Earth Station Gain (dBi)	46.4	40.9	45.4	42.1
Earth Station G/T (dB/K)	26.3	20.6	25.3	21.9
Earth Station Elevation Angle	40.6	40.6	40.6	40.6
UPLINK PERFORMANCE				
Uplink Earth Station EIRP (dBW)	73.6	73.4	61.9	42.4
Uplink Path Loss, Clear Sky (dB)	199.9	199.9	199.9	199.9
Satellite G/T (dB/K)	-9.4	-9.4	-9.4	-9.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-77.8	-68.3	-48.8
Uplink C/N (dB)	26.8	14.8	12.8	12.8
DOWNLINK PERFORMANCE				
Downlink EIRP per Carrier (dBW)	21.5	33.3	23.8	4.3
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	196.1	196.1	196.1	196.1
Earth Station G/T (dB/K)	26.3	20.6	25.3	21.9
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-77.8	-68.3	-48.8
Downlink C/N (dB)	13.7	8.2	12.7	9.3
COMPOSITE LINK PERFORMANCE				
C/N Uplink (dB)	26.8	14.8	12.8	12.8
C/N Downlink (dB)	13.7	8.2	12.7	9.3
C/I Other links (Co-channel & IM)	17.0	17.0	14.0	14.0
C/I Uplink Adjacent Satellite 1 (dB)	24.9	12.9	10.9	10.9
C/I Downlink Adjacent Satellite 1 (dB)	24.5	15.1	23.4	20.5
C/I Uplink Adjacent Satellite 2 (dB)	24.9	12.9	10.9	10.9
C/I Downlink Adjacent Satellite 2 (dB)	25.1	17.0	24.0	20.6
C/(N+I) Composite (dB)	11.1	4.5	5.0	4.1
Required System Margin (dB)	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	10.0	3.4	3.9	3.0
Excess Link Margin (dB)	0.0	0.0	0.0	0.0
Number of Carriers	2	1	6	720
CARRIER DENSITY LEVELS				
Uplink Power Density (dBW/Hz)	-42.4	-54.4	-56.4	-56.4
Downlink EIRP Density at Beam Peak	-34.5	-34.5	-34.5	-34.5

EXHIBIT 12B: INTELSAT 14 Ku-BAND LINK BUDGETS

	EUR-AF 14000-14160	EUR-AF 14000-14160	EUR-AF 14000-14160	EUR-AF 14000-14160	EUR-AF 14000-14160	EUR-AF 14000-14160
UPLINK BEAM INFORMATION						
Uplink Beam Name						
Uplink Frequency (MHz)	14000-14160	14000-14160	14000-14160	14000-14160	14000-14160	14000-14160
Uplink Beam Polarization	HV	HV	HV	HV	HV	HV
Uplink Relative Contour Level (dB)	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
Uplink Contour G/T (dB/K)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Uplink SFD (dBW/m ²)	-75.0	-75.0	-75.0	-75.0	-75.0	-75.0
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0	42.0	42.0
DOWNLINK BEAM INFORMATION						
Downlink Beam Name						
Downlink Frequency (MHz)	11450-11610	11450-11610	11450-11610	11450-11610	11450-11610	11450-11610
Downlink Beam Polarization	VH	VH	VH	VH	VH	VH
Downlink Relative Contour EIRP (dBW)	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0	42.0	42.0
ADJACENT SATELLITE 1						
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
ADJACENT SATELLITE 2						
Satellite 2 Orbital Location	47°W	47°W	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
CARRIER INFORMATION						
Carrier ID	1	1	1	3	3	3
Emission Designation	36MDF3F	36MDF3F	36MDF3F	36MDG7W	36MDG7W	36MDG7W
Information Rate (ktps)	n/a	n/a	n/a	27769.6	27769.6	27769.6
Carrier Modulation	TVFM	TVFM	TVFM	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	4.0	4.0	4.0	n/a	n/a	n/a
Code Rate	n/a	n/a	n/a	0.5	0.5	0.5
Occupied Bandwidth (kHz)	36000	36000	36000	30133	30133	30133
Allocated Bandwidth (kHz)	36000	36000	36000	36000	36000	36000
Minimum C/N, Clear Sky (dB)	10.00	10.00	10.00	3.36	3.36	3.36
Minimum C/N, Rain (dB)	10.00	10.00	10.00	3.36	3.36	3.36
UPLINK EARTH STATION						
Earth Station Diameter (meters)	6.0	6.0	6.0	6.0	6.0	6.0
Earth Station Gain (dB)	57.1	57.1	57.1	57.1	57.1	57.1
Earth Station Elevation Angle	26.4	26.4	26.4	26.4	26.4	26.4
DOWNLINK EARTH STATION						
Earth Station Diameter (meters)	1.46	1.46	1.46	1.46	1.46	1.46
Earth Station Gain (dB)	43.0	43.0	43.0	43.0	43.0	43.0
Earth Station G/T (dB/K)	21.1	21.1	19.2	21.1	21.1	19.2
Earth Station Elevation Angle	26.4	26.4	26.4	26.4	26.4	26.4
LINK GRADE TYPE						
	Clear Sky	Up Fade	Down Fade	Clear Sky	Up Fade	Down Fade
UPLINK PERFORMANCE						
Uplink Earth Station EIRP (dBW)	78.9	78.9	78.9	60.7	60.7	60.7
Uplink Path Loss, Clear Sky (dB)	207.2	207.2	207.2	207.2	207.2	207.2
Uplink Rain Attenuation (dB)	0.0	2.3	0.0	0.0	2.3	0.0
Satellite G/T (dB/K)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-66.0	-66.0	-74.8	-74.8	-74.8
Uplink C/N (dB)	31.8	29.5	31.8	24.8	22.5	24.8
DOWNLINK PERFORMANCE						
Downlink EIRP per Carrier (dBW)	39.0	39.0	39.0	40.8	40.8	40.8
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	205.5	205.5	205.5	205.5	205.5	205.5
Downlink Rain Attenuation (dB)	0.0	0.0	1.6	0.0	0.0	1.6
Earth Station G/T (dB/K)	21.1	21.1	19.2	21.1	21.1	19.2
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-66.0	-66.0	-74.8	-74.8	-74.8
Downlink C/N (dB)	16.6	16.6	13.1	9.6	9.6	6.1
COMPOSITE LINK PERFORMANCE						
C/N Uplink (dB)	31.8	29.5	31.8	24.8	22.5	24.8
C/N Downlink (dB)	16.6	16.6	13.1	9.6	9.6	6.1
C/N Other Axes (Co-channel & IM)	21.0	21.0	21.0	21.0	21.0	21.0
C/N Uplink Adjacent Satellite 1 (dB)	41.4	41.4	41.4	34.4	34.4	34.4
C/N Downlink Adjacent Satellite 1 (dB)	19.6	19.6	19.6	12.6	12.6	12.6
C/N Uplink Adjacent Satellite 2 (dB)	41.4	41.4	41.4	34.4	34.4	34.4
C/N Downlink Adjacent Satellite 2 (dB)	20.3	20.3	20.3	13.3	13.3	13.3
C/(N+I) Composite (dB)	12.9	12.9	11.1	6.5	6.5	4.4
Required System Margin (dB)	1.1	1.1	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	10.0	10.0	10.0	3.4	3.4	3.4
Excess Link Margin (dB)	1.8	1.8	0.0	2.0	2.0	0.0
Number of Carriers	1	1	1	1	1	1
CARRIER DENSITY LEVELS						
Uplink Power Density (dBW/Hz)	-44.2	-44.2	-44.2	-51.2	-51.2	-51.2
Downlink EIRP Density at Beam Peak	-19.0	-19.0	-19.0	-26.0	-26.0	-26.0

EXHIBIT 12B: INTELSAT 14 Ku-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Uplink Beam Name	14000-14160	14000-14160	14000-14160	14000-14160	14000-14160	14000-14160
Uplink Frequency (MHz)	H/V	H/V	H/V	H/V	H/V	H/V
Uplink Beam Polarization	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
Uplink Relative Contour Level (dB)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Uplink Contour G/T (dB/K)	-75.0	-75.0	-75.0	-75.0	-75.0	-75.0
Uplink SFD (dBW/m ²)	42.0	42.0	42.0	42.0	42.0	42.0
Rain Rate (mm/hr)						
DOWNLINK BEAM INFORMATION						
Downlink Beam Name	11450-11610	11450-11610	11450-11610	11450-11610	11450-11610	11450-11610
Downlink Frequency (MHz)	V/H	V/H	V/H	V/H	V/H	V/H
Downlink Beam Polarization	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0
Downlink Relative Contour EIRP (dBW)	42.0	42.0	42.0	42.0	42.0	42.0
Rain Rate (mm/hr)						
ADJACENT SATELLITE						
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0
ADJACENT SATELLITE						
Satellite 1 Orbital Location	47°W	47°W	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0
CARRIER INFORMATION						
Carrier ID	4	4	4	5	5	5
Emission Designation	10M3G7W	10M3G7W	10M3G7W	100KG7W	100KG7W	100KG7W
Information Rate (kbps)	6240.0	6240.0	6240.0	70.4	70.4	70.4
Carrier Modulation	QPSK	QPSK	QPSK	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	n/a	n/a	n/a	n/a	n/a	n/a
Code Rate	0.5	0.5	0.5	0.5	0.5	0.5
Occupied Bandwidth (kHz)	6771	6771	6771	75	75	75
Allocated Bandwidth (kHz)	10300	10300	10300	100	100	100
Minimum C/N, Clear Sky (dB)	3.87	3.87	3.87	2.99	2.79	2.79
Minimum C/N, Rain (dB)	3.87	3.87	3.87	2.99	2.79	2.79
UPLINK EARTH STATION						
Earth Station Diameter (meters)	6.0	6.0	6.0	6.0	6.0	6.0
Earth Station Gain (dB)	57.1	57.1	57.1	57.1	57.1	57.1
Earth Station Elevation Angle	26.4	26.4	26.4	26.4	26.4	26.4
DOWNLINK EARTH STATION						
Earth Station Diameter (meters)	1.53	1.53	1.53	1.39	1.39	1.39
Earth Station Gain (dB)	43.5	43.5	43.5	42.6	42.6	42.6
Earth Station G/T (dB/K)	21.5	21.5	19.6	20.7	20.7	18.8
Earth Station Elevation Angle	26.4	26.4		26.4	26.4	26.4
LINK FADING	Clear Sky	Up Fade	Down Fade	Clear Sky	Up Fade	Down Fade
UPLINK PERFORMANCE						
Uplink Earth Station EIRP (dBW)	74.2	74.2	74.2	54.7	54.7	54.7
Uplink Path Loss, Clear Sky (dB)	207.2	207.2	207.2	207.2	207.2	207.2
Uplink Rain Attenuation (dB)	0.0	2.3	0.0	0.0	2.3	0.0
Satellite G/T (dB/K)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-68.3	-68.3	-68.3	-48.8	-48.8	-48.8
Uplink C/N (dB)	24.8	22.5	24.8	24.8	22.5	24.8
DOWNLINK PERFORMANCE						
Downlink EIRP per Carrier (dBW)	34.3	34.3	34.3	14.8	14.8	14.8
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	205.5	205.5	205.5	205.5	205.5	205.5
Downlink Rain Attenuation (dB)	0.0	0.0	1.6	0.0	0.0	1.6
Earth Station G/T (dB/K)	21.5	21.5	19.6	20.7	20.7	18.8
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-68.3	-68.3	-68.3	-48.8	-48.8	-48.8
Downlink C/N (dB)	10.0	10.0	6.5	9.2	9.2	5.7
COMPOSITE LINK PERFORMANCE						
C/N Uplink (dB)	24.8	22.5	24.8	24.8	22.5	24.8
C/N Downlink (dB)	10.0	10.0	6.5	9.2	9.2	5.7
C/N Other Links (Co-channel & IM)	16.0	16.0	16.0	16.0	16.0	16.0
C/N Uplink Adjacent Satellite 1 (dB)	34.4	34.4	34.4	34.4	34.4	34.4
C/N Downlink Adjacent Satellite 1 (dB)	13.1	13.1	13.1	12.4	12.4	12.4
C/N Uplink Adjacent Satellite 2 (dB)	34.4	34.4	34.4	34.4	34.4	34.4
C/N Downlink Adjacent Satellite 2 (dB)	13.8	13.8	13.8	12.8	12.8	12.8
C/(N+I) Composite (dB)	6.5	6.5	4.7	5.9	5.8	3.9
Required System Margin (dB)	1.1	1.1	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	3.9	3.6	3.6	3.0	2.8	2.8
Excess Link Margin (dB)	1.6	1.9	0.0	1.8	1.9	0.0
Number of Carriers	3	3	3	360	360	360
CARRIER DENSITY LEVELS						
Uplink Power Density (dBW/Hz)	-51.2	-51.2	-51.2	-51.2	-51.2	-51.2
Downlink EIRP Density at Beam Peak	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0

EXHIBIT 12B: INTELSAT 14 Ku-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION						
Uplink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Uplink Frequency (MHz)	14000-14160	14000-14160	14000-14160	14000-14160	14000-14160	14000-14160
Uplink Beam Polarization	H/V	H/V	H/V	H/V	H/V	H/V
Uplink Relative Contour Level (dB)	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
Uplink Contour GT (dB/K)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Uplink SFD (dBW/m ²)	-75.0	-75.0	-75.0	-75.0	-75.0	-75.0
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0	42.0	42.0
DOWNLINK BEAM INFORMATION						
Downlink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Downlink Frequency (MHz)	11450-11610	11450-11610	11450-11610	11450-11610	11450-11610	11450-11610
Downlink Beam Polarization	V/H	V/H	V/H	V/H	V/H	V/H
Downlink Relative Contour EIRP (dBW)	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0	42.0	42.0
ADJACENT SATELLITE 1						
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
ADJACENT SATELLITE 2						
Satellite 1 Orbital Location	47°W	47°W	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
CARRIER INFORMATION						
Carrier ID	6	6	6	7	7	7
Emission Designation	1M45G7W	1M45G7W	1M45G7W	400KG7W	400KG7W	400KG7W
Information Rate (kbps)	614.5	614.5	614.5	153.5	153.5	153.5
Carrier Modulation	BPSK	BPSK	BPSK	BPSK	BPSK	BPSK
Peak to Peak Bandwidth of EDS (MHz)	n/a	n/a	n/a	n/a	n/a	n/a
Code Rate	0.5	0.5	0.5	0.5	0.5	0.5
Occupied Bandwidth (kHz)	1229	1229	1229	307	307	307
Allocated Bandwidth (kHz)	1450	1450	1450	400	400	400
Minimum C/N, Clear Sky (dB)	3.40	2.70	2.70	3.40	2.70	2.70
Minimum C/N, Rain (dB)	3.40	2.70	2.70	3.40	2.70	2.70
UPLINK EARTH STATION						
Earth Station Diameter (meters)	6.0	6.0	6.0	1.41	1.41	1.41
Earth Station Gain (dB)	57.1	57.1	57.1	44.5	44.5	44.5
Earth Station Elevation Angle	26.4	26.4	26.4	26.4	26.4	26.4
DOWNLINK EARTH STATION						
Earth Station Diameter (meters)	1.41	1.41	1.41	6.00	6.00	6.00
Earth Station Gain (dB)	42.7	42.7	42.7	55.3	55.3	55.3
Earth Station GT (dB/K)	20.8	20.8	18.9	33.4	33.4	31.5
Earth Station Elevation Angle	26.4	26.4	26.4	26.4	26.4	26.4
LINK FADE TYPE						
	Clear Sky	Up Fade	Down Fade	Clear Sky	Up Fade	Down Fade
UPLINK PERFORMANCE						
Uplink Earth Station EIRP (dBW)	66.6	66.6	66.6	48.5	48.5	48.5
Uplink Path Loss, Clear Sky (dB)	207.2	207.2	207.2	207.2	207.2	207.2
Uplink Rain Attenuation (dB)	0.0	2.3	0.0	0.0	2.3	0.0
Satellite GT (dB/K)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-60.9	-60.9	-60.9	-54.9	-54.9	-54.9
Uplink C/N (dB)	24.6	22.3	24.6	12.5	10.2	12.5
DOWNLINK PERFORMANCE						
Downlink EIRP per Carrier (dBW)	26.7	26.7	26.7	8.6	8.6	8.6
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	205.5	205.5	205.5	205.5	205.5	205.5
Downlink Rain Attenuation (dB)	0.0	0.0	1.6	0.0	0.0	1.6
Earth Station GT (dB/K)	20.8	20.8	18.9	33.4	33.4	31.5
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-60.9	-60.9	-60.9	-54.9	-54.9	-54.9
Downlink C/N (dB)	9.1	9.1	5.6	9.6	9.6	6.1
COMPOSITE LINK PERFORMANCE						
C/N Uplink (dB)	24.6	22.3	24.6	12.5	10.2	12.5
C/N Downlink (dB)	9.1	9.1	5.6	9.6	9.6	6.1
C/N Other Links (Co-channel & IM)	16.0	16.0	16.0	16.0	16.0	16.0
C/N Uplink Adjacent Satellite 1 (dB)	34.2	34.2	34.2	22.2	22.2	22.2
C/N Downlink Adjacent Satellite 1 (dB)	12.2	12.2	12.2	13.7	13.7	13.7
C/N Uplink Adjacent Satellite 2 (dB)	34.2	34.2	34.2	22.2	22.2	22.2
C/N Downlink Adjacent Satellite 2 (dB)	12.7	12.7	12.7	14.3	14.3	14.3
C/(N+I) Composite (dB)	5.8	5.7	3.8	5.5	4.9	3.6
Required System Margin (dB)	1.1	1.1	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	3.4	2.7	2.7	3.4	2.7	2.7
Excess Link Margin (dB)	1.3	1.9	0.0	1.0	1.1	0.0
Number of Carriers	24	24	24	90	90	90
CARRIER DENSITY LEVELS						
Uplink Power Density (dBW/Hz)	-51.4	-51.4	-51.4	-50.8	-50.8	-50.8
Downlink EIRP Density at Beam Peak	-26.2	-26.2	-26.2	-38.3	-38.3	-38.3

EXHIBIT 12B: INTELSAT 14 Ku-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION			
Uplink Beam Name	EUR-AF	EUR-AF	EUR-AF
Uplink Frequency (MHz)	14160-14250	14160-14250	14160-14250
Uplink Beam Polarization	HV	HV	HV
Uplink Relative Contour Level (dB)	-10.0	-10.0	-10.0
Uplink Contour G/T (dB/K)	-2.4	-2.4	-2.4
Uplink SFD (dBW/m ²)	-78.0	-78.0	-78.0
Rain Rate (mm/hr)	42.0	42.0	42.0
DOWNLINK BEAM INFORMATION			
Downlink Beam Name	EUR-AF	EUR-AF	EUR-AF
Downlink Frequency (MHz)	11610-11700	11610-11700	11610-11700
Downlink Beam Polarization	VH	VH	VH
Downlink Relative Contour EIRP (dBW)	-8.0	-8.0	-8.0
Rain Rate (mm/hr)	42.0	42.0	42.0
ADJACENT SATELLITE 1			
Satellite 1 Orbital Location	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0
ADJACENT SATELLITE 2			
Satellite 1 Orbital Location	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0
CARRIER INFORMATION			
Carrier ID	1	1	1
Emission Designation	36MDF3F	36MDF3F	36MDF3F
Information Rate (kbps)	N/A	N/A	N/A
Carrier Modulation	TW/FM	TW/FM	TW/FM
Peak to Peak Bandwidth of EDS (MHz)	4.0	4.0	4.0
Code Rate	N/A	N/A	N/A
Occupied Bandwidth (kHz)	36000	36000	36000
Allocated Bandwidth (kHz)	36000	36000	36000
Minimum C/N, Clear Sky (dB)	10.00	10.00	10.00
Minimum C/N, Rain (dB)	10.00	10.00	10.00
UPLINK EARTH STATION			
Earth Station Diameter (meters)	6.0	6.0	6.0
Earth Station Gain (dB)	57.1	57.1	57.1
Earth Station Elevation Angle	26.4	26.4	26.4
DOWNLINK EARTH STATION			
Earth Station Diameter (meters)	1.47	1.47	1.47
Earth Station Gain (dB)	43.2	43.2	43.2
Earth Station G/T (dB/K)	21.3	21.3	19.3
Earth Station Elevation Angle	26.4	26.4	26.4
LINK FADE TYPE			
	Clear Sky	Up Fade	Down Fade
UPLINK PERFORMANCE			
Uplink Earth Station EIRP (dBW)	75.9	75.9	75.9
Uplink Path Loss, Clear Sky (dB)	207.3	207.3	207.3
Uplink Rain Attenuation (dB)	0.0	2.3	0.0
Satellite G/T (dB/K)	-2.4	-2.4	-2.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-66.0	-66.0
Uplink C/N (dB)	28.7	26.3	23.7
DOWNLINK PERFORMANCE			
Downlink EIRP per Carrier (dBW)	39.0	39.0	39.0
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	205.6	205.6	205.6
Downlink Rain Attenuation (dB)	0.0	0.0	1.6
Earth Station G/T (dB/K)	21.3	21.3	19.3
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-66.0	-66.0
Downlink C/N (dB)	16.7	16.7	13.1
COMPOSITE LINK PERFORMANCE			
C/N Uplink (dB)	28.7	26.3	23.7
C/N Downlink (dB)	16.7	16.7	13.1
C/N Other Links (Co-channel & IM)	21.0	21.0	21.0
C/N Uplink Adjacent Satellite 1 (dB)	38.4	38.4	38.4
C/N Downlink Adjacent Satellite 1 (dB)	19.9	19.9	19.9
C/N Uplink Adjacent Satellite 2 (dB)	38.4	38.4	38.4
C/N Downlink Adjacent Satellite 2 (dB)	20.5	20.5	20.5
C/(N+I) Composite (dB)	13.0	12.9	11.1
Required System Margin (dB)	1.1	1.1	1.1
Minimum Required C/N (dB)	10.0	10.0	10.0
Excess Link Margin (dB)	1.9	1.8	0.0
Number of Carriers	2	2	2
CARRIER DENSITY LEVELS			
Uplink Power Density (dBW/Hz)	-47.2	-47.2	-47.2
Downlink EIRP Density at Beam Peak	-19.0	-19.0	-19.0

EXHIBIT 12B: INTELSAT 14 Ku-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION						
Uplink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Uplink Frequency (MHz)	14160-14250	14160-14250	14160-14250	14160-14250	14160-14250	14160-14250
Uplink Beam Polarization	H/V	H/V	H/V	H/V	H/V	H/V
Uplink Relative Contour Level (dB)	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
Uplink Contour G/T (dB/K)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Uplink SFD (dBW/Hz)	-78.0	-78.0	-78.0	-78.0	-78.0	-78.0
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0	42.0	42.0
DOWNLINK BEAM INFORMATION						
Downlink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Downlink Frequency (MHz)	11610-11700	11610-11700	11610-11700	11610-11700	11610-11700	11610-11700
Downlink Beam Polarization	V/H	V/H	V/H	V/H	V/H	V/H
Downlink Relative Contour EIRP (dBW)	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0	42.0	42.0
ADJACENT SATELLITE 1						
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
ADJACENT SATELLITE 2						
Satellite 2 Orbital Location	47°W	47°W	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
CARRIER INFORMATION						
Carrier ID	2	2	2	3	3	3
Emission Designation	72M0G7W	72M0G7W	72M0G7W	36M0G7W	36M0G7W	36M0G7W
Information Rate (kbps)	55539.3	55539.3	55539.3	27769.6	27769.6	27769.6
Carrier Modulation	QPSK	QPSK	QPSK	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	n/a	n/a	n/a	n/a	n/a	n/a
Code Rate	0.5	0.5	0.5	0.5	0.5	0.5
Occupied Bandwidth (kHz)	60266	60266	60266	30133	30133	30133
Allocated Bandwidth (kHz)	72000	72000	72000	36000	36000	36000
Minimum C/N, Clear Sky (dB)	3.36	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	3.36
UPLINK EARTH STATION						
Earth Station Diameter (meters)	6.0	6.0	6.0	6.0	6.0	6.0
Earth Station Gain (dB)	57.1	57.1	57.1	57.1	57.1	57.1
Earth Station Elevation Angle	26.4	26.4	26.4	26.4	26.4	26.4
DOWNLINK EARTH STATION						
Earth Station Diameter (meters)	1.47	1.47	1.47	1.51	1.51	1.51
Earth Station Gain (dB)	43.2	43.2	43.2	43.4	43.4	43.4
Earth Station G/T (dB/K)	21.3	21.3	19.3	21.5	21.5	19.5
Earth Station Elevation Angle	26.4	26.4	26.4	26.4	26.4	26.4
LINK FADE TYPE						
	Clear Sky	Up Fade	Down Fade	Clear Sky	Up Fade	Down Fade
UPLINK PERFORMANCE						
Uplink Earth Station EIRP (dBW)	80.7	80.7	80.7	77.7	77.7	77.7
Uplink Path Loss, Clear Sky (dB)	207.3	207.3	207.3	207.3	207.3	207.3
Uplink Rain Attenuation (dB)	0.0	2.3	0.0	0.0	2.3	0.0
Satellite G/T (dB/K)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-77.8	-77.8	-77.8	-74.8	-74.8	-74.8
Uplink C/N (dB)	21.7	19.3	21.7	21.7	19.3	21.7
DOWNLINK PERFORMANCE						
Downlink EIRP per Carrier (dBW)	43.8	43.8	43.8	40.8	40.8	40.8
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	205.6	205.6	205.6	205.6	205.6	205.6
Downlink Rain Attenuation (dB)	0.0	0.0	1.6	0.0	0.0	1.6
Earth Station G/T (dB/K)	21.3	21.3	19.3	21.5	21.5	19.5
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-77.8	-77.8	-77.8	-74.8	-74.8	-74.8
Downlink C/N (dB)	9.7	9.7	6.1	9.9	9.9	6.3
COMPOSITE LINK PERFORMANCE						
C/N Uplink (dB)	21.7	19.3	21.7	21.7	19.3	21.7
C/N Downlink (dB)	9.7	9.7	6.1	9.9	9.9	6.3
C/N Other Links (Co-channel & IM)	21.0	21.0	21.0	16.0	16.0	16.0
C/N Uplink Adjacent Satellite 1 (dB)	31.4	31.4	31.4	31.4	31.4	31.4
C/N Downlink Adjacent Satellite 1 (dB)	12.8	12.8	12.8	13.1	13.1	13.1
C/N Uplink Adjacent Satellite 2 (dB)	31.4	31.4	31.4	31.4	31.4	31.4
C/N Downlink Adjacent Satellite 2 (dB)	13.5	13.5	13.5	13.7	13.7	13.7
C/(N+I) Composite (dB)	6.6	6.5	4.5	6.4	6.3	4.5
Required System Margin (dB)	1.1	1.1	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	3.4	3.4	3.4	3.4	3.4	3.4
Excess Link Margin (dB)	2.1	2.0	0.0	2.0	1.9	0.0
Number of Carriers	1	1	1	2	2	2
CARRIER DENSITY LEVELS						
Uplink Power Density (dBW/Hz)	-54.2	-54.2	-54.2	-54.2	-54.2	-54.2
Downlink EIRP Density at Beam Peak	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0

EXHIBIT 12B: INTELSAT 14 Ku-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION						
Uplink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Uplink Frequency (MHz)	14160-14250	14160-14250	14160-14250	14160-14250	14160-14250	14160-14250
Uplink Beam Polarization	H/V	H/V	H/V	H/V	H/V	H/V
Uplink Relative Contour Level (dB)	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
Uplink Contour G/T (dB/K)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Uplink SFD (dBW/m ²)	-78.0	-78.0	-78.0	-78.0	-78.0	-78.0
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0	42.0	42.0
DOWNLINK BEAM INFORMATION						
Downlink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Downlink Frequency (MHz)	11610-11700	11610-11700	11610-11700	11610-11700	11610-11700	11610-11700
Downlink Beam Polarization	V/H	V/H	V/H	V/H	V/H	V/H
Downlink Relative Contour EIRP (dBW)	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0	42.0	42.0
ADJACENT SATELLITE 1						
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
ADJACENT SATELLITE 2						
Satellite 2 Orbital Location	47°W	47°W	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
CARRIER INFORMATION						
Carrier ID	4	4	4	5	5	5
Emission Designation	10M3G7W	10M3G7W	10M3G7W	100K67W	100K67W	100K67W
Information Rate (kbits)	6240.0	6240.0	6240.0	70.4	70.4	70.4
Carrier Modulation	QPSK	QPSK	QPSK	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	n/a	n/a	n/a	n/a	n/a	n/a
Code Rate	0.5	0.5	0.5	0.5	0.5	0.5
Occupied Bandwidth (kHz)	6771	6771	6771	75	75	75
Allocated Bandwidth (kHz)	10300	10300	10300	100	100	100
Minimum C/N, Clear Sky (dB)	3.87	3.57	3.57	2.99	2.79	2.79
Minimum C/N, Rain (dB)	3.87	3.57	3.57	2.99	2.79	2.79
UPLINK EARTH STATION						
Earth Station Diameter (meters)	6.0	6.0	6.0	6.0	6.0	6.0
Earth Station Gain (dB)	57.1	57.1	57.1	57.1	57.1	57.1
Earth Station Elevation Angle	26.4	26.4	26.4	26.4	26.4	26.4
DOWNLINK EARTH STATION						
Earth Station Diameter (meters)	1.55	1.55	1.55	1.41	1.41	1.41
Earth Station Gain (dB)	43.6	43.6	43.6	42.8	42.8	42.8
Earth Station G/T (dB/K)	21.7	21.7	19.8	20.9	20.9	18.9
Earth Station Elevation Angle	26.4	26.4	26.4	26.4	26.4	26.4
LINK FADE TYPE						
Uplink Fade Type	Clear Sky	Up Fade	Down Fade	Clear Sky	Up Fade	Down Fade
UPLINK PERFORMANCE						
Uplink Earth Station EIRP (dBW)	71.2	71.2	71.2	51.7	51.7	51.7
Uplink Path Loss, Clear Sky (dB)	207.3	207.3	207.3	207.3	207.3	207.3
Uplink Rain Attenuation (dB)	0.0	2.3	0.0	0.0	2.3	0.0
Satellite G/T (dB/K)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-68.3	-68.3	-68.3	-48.8	-48.8	-48.8
Uplink C/N (dB)	21.7	19.3	21.7	21.7	19.3	21.7
DOWNLINK PERFORMANCE						
Downlink EIRP per Carrier (dBW)	34.3	34.3	34.3	14.8	14.8	14.8
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	205.6	205.6	205.6	205.6	205.6	205.6
Downlink Rain Attenuation (dB)	0.0	0.0	1.6	0.0	0.0	1.6
Earth Station G/T (dB/K)	21.7	21.7	19.8	20.9	20.9	18.9
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-68.3	-68.3	-68.3	-48.8	-48.8	-48.8
Downlink C/N (dB)	10.1	10.1	6.5	9.3	9.3	5.7
COMPOSITE LINK PERFORMANCE						
C/N Uplink (dB)	21.7	19.3	21.7	21.7	19.3	21.7
C/N Downlink (dB)	10.1	10.1	6.5	9.3	9.3	5.7
C/I Other Links (Co-channel & IM)	16.0	16.0	16.0	16.0	16.0	16.0
C/I Uplink Adjacent Satellite 1 (dB)	31.4	31.4	31.4	31.4	31.4	31.4
C/I Downlink Adjacent Satellite 1 (dB)	13.4	13.4	13.4	12.4	12.4	12.4
C/I Uplink Adjacent Satellite 2 (dB)	31.4	31.4	31.4	31.4	31.4	31.4
C/I Downlink Adjacent Satellite 2 (dB)	14.0	14.0	14.0	13.0	13.0	13.0
C/(N+I) Composite (dB)	6.6	6.5	4.7	5.9	5.8	3.9
Required System Margin (dB)	1.1	1.1	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	3.9	3.6	3.6	3.0	2.8	2.8
Excess Link Margin (dB)	1.7	1.9	0.0	1.8	1.9	0.0
Number of Carriers	6	6	6	720	720	720
CARRIER DENSITY LEVELS						
Uplink Power Density (dBW/Hz)	-54.2	-54.2	-54.2	-54.2	-54.2	-54.2
Downlink EIRP Density at Beam Peak	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0

EXHIBIT 12B: INTELSAT 14 Ku-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION						
Uplink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Uplink Frequency (MHz)	14160-14250	14160-14250	14160-14250	14160-14250	14160-14250	14160-14250
Uplink Beam Polarization	H/V	H/V	H/V	H/V	H/V	H/V
Uplink Relative Contour Level (dB)	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
Uplink Contour G/T (dB/K)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Uplink SFD (dBW/m ²)	-78.0	-78.0	-78.0	-78.0	-78.0	-78.0
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0	42.0	42.0
DOWNLINK BEAM INFORMATION						
Downlink Beam Name	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF	EUR-AF
Downlink Frequency (MHz)	11610-11700	11610-11700	11610-11700	11610-11700	11610-11700	11610-11700
Downlink Beam Polarization	V/H	V/H	V/H	V/H	V/H	V/H
Downlink Relative Contour EIRP (dBW)	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0
Rain Rate (mm/hr)	42.0	42.0	42.0	42.0	42.0	42.0
ADJACENT SATELLITE 1						
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
ADJACENT SATELLITE 2						
Satellite 1 Orbital Location	47°W	47°W	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
CARRIER INFORMATION						
Carrier ID	6	6	6	7	7	7
Emission Designation	1M45G7W	1M45G7W	1M45G7W	400KG7W	400KG7W	400KG7W
Information Rate (kbps)	614.5	614.5	614.5	153.5	153.5	153.5
Carrier Modulation	BPSK	BPSK	BPSK	BPSK	BPSK	BPSK
Peak to Peak Bandwidth of EDS (MHz)	n/a	n/a	n/a	n/a	n/a	n/a
Code Rate	0.5	0.5	0.5	0.5	0.5	0.5
Occupied Bandwidth (kHz)	1229	1229	1229	307	307	307
Allocated Bandwidth (kHz)	1450	1450	1450	400	400	400
Minimum C/N, Clear Sky (dB)	3.40	2.70	2.70	3.40	2.70	2.70
Minimum C/N, Rain (dB)	3.40	2.70	2.70	3.40	2.70	2.70
UPLINK EARTH STATION						
Earth Station Diameter (meters)	6.0	6.0	6.0	1.41	1.41	1.41
Earth Station Gain (dB)	57.1	57.1	57.1	44.5	44.5	44.5
Earth Station Elevation Angle	26.4	26.4	26.4	26.4	26.4	26.4
DOWNLINK EARTH STATION						
Earth Station Diameter (meters)	1.41	1.41	1.41	6.00	6.00	6.00
Earth Station Gain (dB)	42.8	42.8	42.8	55.4	55.4	55.4
Earth Station G/T (dB/K)	20.9	20.9	18.9	33.5	33.5	31.5
Earth Station Elevation Angle	26.4	26.4	26.4	26.4	26.4	26.4
LINK FADE TYPE						
	Clear Sky	Up Fade	Down Fade	Clear Sky	Up Fade	Down Fade
UPLINK PERFORMANCE						
Uplink Earth Station EIRP (dBW)	63.7	63.7	63.7	46.2	46.2	46.2
Uplink Path Loss, Clear Sky (dB)	207.3	207.3	207.3	207.3	207.3	207.3
Uplink Rain Attenuation (dB)	0.0	2.3	0.0	0.0	2.3	0.0
Satellite G/T (dB/K)	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-60.9	-60.9	-60.9	-54.9	-54.9	-54.9
Uplink C/N (dB)	21.5	19.2	21.5	10.1	7.8	10.1
DOWNLINK PERFORMANCE						
Downlink EIRP per Carrier (dBW)	26.8	26.8	26.8	9.3	9.3	9.3
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	205.6	205.6	205.6	205.6	205.6	205.6
Downlink Rain Attenuation (dB)	0.0	0.0	1.6	0.0	0.0	1.6
Earth Station G/T (dB/K)	20.9	20.9	18.9	33.5	33.5	31.5
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-60.9	-60.9	-60.9	-54.9	-54.9	-54.9
Downlink C/N (dB)	9.2	9.2	5.6	10.4	10.4	6.8
COMPOSITE LINK PERFORMANCE						
C/N Uplink (dB)	21.5	19.2	21.5	10.1	7.8	10.1
C/N Downlink (dB)	9.2	9.2	5.6	10.4	10.4	6.8
C/N Other Links (Co-channel & IM)	16.0	16.0	16.0	16.0	16.0	16.0
C/N Uplink Adjacent Satellite 1 (dB)	31.3	31.3	31.3	19.9	19.9	19.9
C/N Downlink Adjacent Satellite 1 (dB)	12.3	12.3	12.3	14.6	14.6	14.6
C/N Uplink Adjacent Satellite 2 (dB)	31.3	31.3	31.3	19.9	19.9	19.9
C/N Downlink Adjacent Satellite 2 (dB)	12.9	12.9	12.9	15.1	15.1	15.1
C/(N+I) Composite (dB)	5.8	5.7	3.8	5.2	4.3	3.8
Required System Margin (dB)	1.1	1.1	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	3.4	2.7	2.7	3.4	2.7	2.7
Excess Link Margin (dB)	1.3	1.9	0.0	0.7	0.5	0.0
Number of Carriers	49	49	49	180	180	180
CARRIER DENSITY LEVELS						
Uplink Power Density (dBW/Hz)	-54.3	-54.3	-54.3	-53.2	-53.2	-53.2
Downlink EIRP Density at Beam Peak	-26.1	-26.1	-26.1	-37.5	-37.5	-37.5

EXHIBIT 12B: INTELSAT 14 Ku-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION						
Uplink Beam Name	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS
Uplink Frequency (MHz)	14250-14500	14250-14500	14250-14500	14250-14500	14250-14500	14250-14500
Uplink Beam Polarization	H/V	H/V	H/V	H/V	H/V	H/V
Uplink Relative Contour Level (dB)	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0
Uplink Contour G/T (dB/K)	-5.2	-2.4	-2.4	-5.2	-2.4	-2.4
Uplink SFD (dBW/m ²)	-79.2	-79.2	-79.2	-79.2	-79.2	-79.2
Rain Rate (mm/hr)	95.0	95.0	95.0	95.0	95.0	95.0
DOWNLINK BEAM INFORMATION						
Downlink Beam Name	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS
Downlink Frequency (MHz)	11700-11950	11700-11950	11700-11950	11700-11950	11700-11950	11700-11950
Downlink Beam Polarization	V/H	V/H	V/H	V/H	V/H	V/H
Downlink Relative Contour EIRP (dBW)	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0
Rain Rate (mm/hr)	95.0	95.0	95.0	95.0	95.0	95.0
ADJACENT SATELLITE 1						
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
ADJACENT SATELLITE 2						
Satellite 1 Orbital Location	47°W	47°W	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
CARRIER INFORMATION						
Carrier ID	1	1	1	3	3	3
Emission Designation	36MDF3F	36MDF3F	36MDF3F	36M0G7W	36M0G7W	36M0G7W
Information Rate (kbps)	n/a	n/a	n/a	27769.6	27769.6	27769.6
Carrier Modulation	TV/FM	TV/FM	TV/FM	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	4.0	4.0	4.0	n/a	n/a	n/a
Code Rate	n/a	n/a	n/a	0.5	0.5	0.5
Occupied Bandwidth (kHz)	36000	36000	36000	30133	30133	30133
Allocated Bandwidth (kHz)	36000	36000	36000	36000	36000	36000
Minimum C/N, Clear Sky (dB)	10.00	10.00	10.00	3.36	3.36	3.36
Minimum C/N, Rain (dB)	10.00	10.00	10.00	3.36	3.36	3.36
UPLINK EARTH STATION						
Earth Station Diameter (meters)	6.0	6.0	6.0	6.0	6.0	6.0
Earth Station Gain (dB)	57.2	57.2	57.2	57.2	57.2	57.2
Earth Station Elevation Angle	40.6	40.6	40.6	40.6	40.6	40.6
DOWNLINK EARTH STATION						
Earth Station Diameter (meters)	1.21	1.21	1.21	1.21	1.21	1.21
Earth Station Gain (dB)	41.6	41.6	41.6	41.6	41.6	41.6
Earth Station G/T (dB/K)	19.6	19.6	17.5	19.6	19.6	17.5
Earth Station Elevation Angle	40.6	40.6	40.6	40.6	40.6	40.6
LINK FADE TYPE						
	Clear Sky	Up Fade	Down Fade	Clear Sky	Up Fade	Down Fade
UPLINK PERFORMANCE						
Uplink Earth Station EIRP (dBW)	79.0	79.0	79.0	60.6	60.6	60.6
Uplink Path Loss, Clear Sky (dB)	207.1	207.1	207.1	207.1	207.1	207.1
Uplink Rain Attenuation (dB)	0.0	2.9	0.0	0.0	2.9	0.0
Satellite G/T (dB/K)	-5.2	-2.4	-2.4	-5.2	-2.4	-2.4
Soltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-66.0	-66.0	-74.6	-74.6	-74.6
Uplink C/N (dB)	29.1	31.0	33.9	22.1	24.0	26.9
DOWNLINK PERFORMANCE						
Downlink EIRP per Carrier (dBW)	41.0	41.0	41.0	42.6	42.6	42.6
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	205.4	205.4	205.4	205.4	205.4	205.4
Downlink Rain Attenuation (dB)	0.0	0.0	1.9	0.0	1.9	0.0
Earth Station G/T (dB/K)	19.6	19.6	17.5	19.6	19.6	17.5
Soltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-66.0	-66.0	-66.0	-74.6	-74.6	-74.6
Downlink C/N (dB)	17.2	17.2	13.1	10.1	10.1	6.0
COMPOSITE LINK PERFORMANCE						
C/N Uplink (dB)	29.1	31.0	33.9	22.1	24.0	26.9
C/N Downlink (dB)	17.2	17.2	13.1	10.1	10.1	6.0
C/I Other links (Co-channel & IM)	21.0	21.0	21.0	21.0	21.0	21.0
C/I Uplink Adjacent Satellite 1 (dB)	41.6	41.6	41.6	34.6	34.6	34.6
C/I Downlink Adjacent Satellite 1 (dB)	19.2	19.2	19.2	12.1	12.1	12.1
C/I Uplink Adjacent Satellite 2 (dB)	41.6	41.6	41.6	34.6	34.6	34.6
C/I Downlink Adjacent Satellite 2 (dB)	21.5	21.5	21.5	14.4	14.4	14.4
C/(N+I) Composite (dB)	13.2	13.2	11.1	6.8	6.8	4.5
Required System Margin (dB)	1.1	1.1	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	10.0	10.0	10.0	3.4	3.4	3.4
Excess Link Margin (dB)	2.1	2.1	0.0	2.3	2.4	0.0
Number of Carriers	1	1	1	1	1	1
CARRIER DENSITY LEVELS						
Uplink Power Density (dBW/Hz)	-44.2	-44.2	-44.2	-51.2	-51.2	-51.2
Downlink EIRP Density at Beam Peak	-19.0	-19.0	-19.0	-26.0	-26.0	-26.0

EXHIBIT 12B: INTELSAT 14 Ku-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION						
Uplink Beam Name	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS
Uplink Frequency (MHz)	14250-14500	14250-14500	14250-14500	14250-14500	14250-14500	14250-14500
Uplink Beam Polarization	H/V	H/V	H/V	H/V	H/V	H/V
Uplink Relative Contour Level (dB)	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0
Uplink Contour G/T (dB/K)	-5.2	-2.4	-2.4	-5.2	-2.4	-2.4
Uplink SFD (dBW/M ²)	-79.2	-79.2	-79.2	-79.2	-79.2	-79.2
Rain Rate (mm/hr)	95.0	95.0	95.0	95.0	95.0	95.0
DOWNLINK BEAM INFORMATION						
Downlink Beam Name	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS
Downlink Frequency (MHz)	11700-11950	11700-11950	11700-11950	11700-11950	11700-11950	11700-11950
Downlink Beam Polarization	V/H	V/H	V/H	V/H	V/H	V/H
Downlink Relative Contour ERP (dBW)	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0
Rain Rate (mm/hr)	95.0	95.0	95.0	95.0	95.0	95.0
ADJACENT SATELLITE 1						
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
ADJACENT SATELLITE 2						
Satellite 1 Orbital Location	47°W	47°W	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
CARRIER INFORMATION						
Carrier ID	4	4	4	5	5	5
Emission Designation	10M3G7W	10M2G7W	10M3G7W	100KG7W	100KG7W	100KG7W
Information Rate (kbps)	6240.0	6240.0	6240.0	70.4	70.4	70.4
Carrier Modulation	QPSK	QPSK	QPSK	QPSK	QPSK	QPSK
Peak to Peak Bandwidth of EDS (MHz)	n/a	n/a	n/a	n/a	n/a	n/a
Code Rate	0.5	0.5	0.5	0.5	0.5	0.5
Occupied Bandwidth (kHz)	6771	6771	6771	75	75	75
Allocated Bandwidth (kHz)	10300	10300	10300	100	100	100
Minimum CN, Clear Sky (dB)	3.87	3.57	3.57	2.99	2.79	2.79
Minimum CN, Rain (dB)	3.87	3.57	3.57	2.99	2.79	2.79
UPLINK EARTH STATION						
Earth Station Diameter (meters)	6.0	6.0	6.0	6.0	6.0	6.0
Earth Station Gain (dBi)	57.2	57.2	57.2	57.2	57.2	57.2
Earth Station Elevation Angle	40.6	40.6	40.6	40.6	40.6	40.6
DOWNLINK EARTH STATION						
Earth Station Diameter (meters)	1.24	1.24	1.24	1.16	1.16	1.16
Earth Station Gain (dBi)	41.9	41.9	41.9	41.4	41.4	41.4
Earth Station G/T (dB/K)	19.9	19.9	17.7	19.4	19.4	17.3
Earth Station Elevation Angle	40.6	40.6	40.6	40.6	40.6	40.6
LINK FADE TYPE						
	Clear Sky	Up Fade	Down Fade	Clear Sky	Up Fade	Down Fade
UPLINK PERFORMANCE						
Uplink Earth Station EIRP (dBW)	74.3	74.3	74.3	54.8	54.8	54.8
Uplink Path Loss, Clear Sky (dB)	207.1	207.1	207.1	207.1	207.1	207.1
Uplink Rain Attenuation (dB)	0.0	2.9	0.0	0.0	2.9	0.0
Satellite G/T (dB/K)	-5.2	-2.4	-2.4	-5.2	-2.4	-2.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-68.3	-68.3	-68.3	-48.8	-48.8	-48.8
Uplink C/N (dB)	22.1	24.0	26.9	22.1	24.0	26.9
DOWNLINK PERFORMANCE						
Downlink EIRP per Carrier (dBW)	36.3	36.3	36.3	16.8	16.8	16.8
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	205.4	205.4	205.4	205.4	205.4	205.4
Downlink Rain Attenuation (dB)	0.0	0.0	1.9	0.0	0.0	1.9
Earth Station G/T (dB/K)	19.9	19.9	17.7	19.4	19.4	17.3
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-68.3	-68.3	-68.3	-48.8	-48.8	-48.8
Downlink C/N (dB)	10.4	10.4	6.3	10.0	10.0	5.9
COMPOSITE LINK PERFORMANCE						
C/N Uplink (dB)	22.1	24.0	26.9	22.1	24.0	26.9
C/N Downlink (dB)	10.4	10.4	6.3	10.0	10.0	5.9
C/N Other Links (Co-channel & IM)	16.0	16.0	16.0	16.0	16.0	16.0
C/N Uplink Adjacent Satellite 1 (dB)	34.6	34.6	34.6	34.6	34.6	34.6
C/N Downlink Adjacent Satellite 1 (dB)	13.5	13.5	13.5	11.3	11.3	11.3
C/N Uplink Adjacent Satellite 2 (dB)	34.6	34.6	34.6	34.6	34.6	34.6
C/N Downlink Adjacent Satellite 2 (dB)	14.6	14.6	14.6	13.5	13.5	13.5
C/(N+I) Composite (dB)	7.0	7.0	4.7	6.0	6.0	3.9
Required System Margin (dB)	1.1	1.1	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	3.9	3.6	3.6	3.0	2.8	2.8
Excess Link Margin (dB)	2.0	2.3	0.0	1.9	2.1	0.0
Number of Carriers	3	3	3	360	360	360
CARRIER DENSITY LEVELS						
Uplink Power Density (dBW/Hz)	-51.2	-51.2	-51.2	-51.2	-51.2	-51.2
Downlink EIRP Density at Beam Peak	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0

EXHIBIT 12B: INTELSAT 14 Ku-BAND LINK BUDGETS (continued)

UPLINK BEAM INFORMATION						
Uplink Beam Name	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS
Uplink Frequency (MHz)	14250-14500	14250-14500	14250-14500	14250-14500	14250-14500	14250-14500
Uplink Beam Polarization	H/V	H/V	H/V	H/V	H/V	H/V
Uplink Relative Contour Level (dB)	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0
Uplink Contour G/T (dBK)	-5.2	-2.4	-2.4	-5.2	-2.4	-2.4
Uplink SFD (dBW/m ²)	-79.2	-79.2	-79.2	-79.2	-79.2	-79.2
Rain Rate (mm/hr)	95.0	95.0	95.0	95.0	95.0	95.0
DOWNLINK BEAM INFORMATION						
Downlink Beam Name	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS	AMERICAS
Downlink Frequency (MHz)	11700-11950	11700-11950	11700-11950	11700-11950	11700-11950	11700-11950
Downlink Beam Polarization	V/H	V/H	V/H	V/H	V/H	V/H
Downlink Relative Contour EIRP (dBW)	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0
Rain Rate (mm/hr)	95.0	95.0	95.0	95.0	95.0	95.0
ADJACENT SATELLITE 1						
Satellite 1 Orbital Location	43°W	43°W	43°W	43°W	43°W	43°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
ADJACENT SATELLITE 2						
Satellite 2 Orbital Location	47°W	47°W	47°W	47°W	47°W	47°W
Uplink Power Density (dBW/Hz)	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0
Uplink Polarization Advantage (dB)	0	0	0	0	0	0
Downlink EIRP Density (dBW/Hz)	-26.0	-26.0	-26.0	-26.0	-26.0	-26.0
CARRIER INFORMATION						
Carrier ID	6	6	6	7	7	7
Emission Designation	1M45G7W	1M45G7W	1M45G7W	400KG7W	400KG7W	400KG7W
Information Rate (ktps)	614.5	614.5	614.5	153.5	153.5	153.5
Carrier Modulation	BPSK	BPSK	BPSK	BPSK	BPSK	BPSK
Peak to Peak Bandwidth of EDS (MHz)	n/a	n/a	n/a	n/a	n/a	n/a
Code Rate	0.5	0.5	0.5	0.5	0.5	0.5
Occupied Bandwidth (kHz)	1229	1229	1229	307	307	307
Allocated Bandwidth (kHz)	1450	1450	1450	400	400	400
Minimum CN, Clear Sky (dB)	3.40	2.70	2.70	3.40	2.70	2.70
Minimum CN, Rain (dB)	3.40	2.70	2.70	3.40	2.70	2.70
UPLINK EARTH STATION						
Earth Station Diameter (meters)	6.0	6.0	6.0	1.17	1.17	1.17
Earth Station Gain (dB)	57.2	57.2	57.2	43.1	43.1	43.1
Earth Station Elevation Angle	40.6	40.6	40.6	40.6	40.6	40.6
DOWNLINK EARTH STATION						
Earth Station Diameter (meters)	1.17	1.17	1.17	6.00	6.00	6.00
Earth Station Gain (dB)	41.4	41.4	41.4	55.5	55.5	55.5
Earth Station G/T (dBK)	19.4	19.4	17.2	33.5	33.5	31.4
Earth Station Elevation Angle	40.6	40.6	40.6	40.6	40.6	40.6
LINK FADE TYPE						
	Clear Sky	Up Fade	Down Fade	Clear Sky	Up Fade	Down Fade
UPLINK PERFORMANCE						
Uplink Earth Station EIRP (dBW)	66.9	66.9	66.9	47.0	47.0	47.0
Uplink Path Loss, Clear Sky (dB)	207.1	207.1	207.1	207.1	207.1	207.1
Uplink Rain Attenuation (dB)	0.0	2.9	0.0	0.0	2.9	0.0
Satellite G/T (dBK)	-5.2	-2.4	-2.4	-5.2	-2.4	-2.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-60.9	-60.9	-60.9	-54.9	-54.9	-54.9
Uplink C/N (dB)	22.1	24.0	26.9	8.3	10.2	13.1
DOWNLINK PERFORMANCE						
Downlink EIRP per Carrier (dBW)	26.9	26.9	26.9	9.0	9.0	9.0
Antenna Pointing Error (dB)	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Downlink Path Loss, Clear Sky (dB)	205.4	205.4	205.4	205.4	205.4	205.4
Downlink Rain Attenuation (dB)	0.0	0.0	1.9	0.0	0.0	1.9
Earth Station G/T (dBK)	19.4	19.4	17.2	33.5	33.5	31.4
Boltzman Constant (dBW/K-Hz)	228.6	228.6	228.6	228.6	228.6	228.6
Carrier Noise Bandwidth (dB-Hz)	-60.9	-60.9	-60.9	-54.9	-54.9	-54.9
Downlink C/N (dB)	9.9	9.9	5.8	10.2	10.2	6.1
COMPOSITE LINK PERFORMANCE						
C/N Uplink (dB)	22.1	24.0	26.9	8.3	10.2	13.1
C/N Downlink (dB)	9.9	9.9	5.8	10.2	10.2	6.1
C/N Other Axes (Co-channel & IM)	16.0	16.0	16.0	16.0	16.0	16.0
C/I Uplink Adjacent Satellite 1 (dB)	34.6	34.6	34.6	20.7	20.7	20.7
C/I Downlink Adjacent Satellite 1 (dB)	11.1	11.1	11.1	14.4	14.4	14.4
C/I Uplink Adjacent Satellite 2 (dB)	34.6	34.6	34.6	20.7	20.7	20.7
C/I Downlink Adjacent Satellite 2 (dB)	13.2	13.2	13.2	15.0	15.0	15.0
C/(N+I) Composite (dB)	5.9	5.9	3.8	4.5	5.2	3.9
Required System Margin (dB)	1.1	1.1	1.1	1.1	1.1	1.1
Minimum Required C/N (dB)	3.4	2.7	2.7	3.4	2.7	2.7
Excess Link Margin (dB)	1.4	2.1	0.0	0.0	1.4	0.1
Number of Carriers	24	24	24	90	90	90
CARRIER DENSITY LEVELS						
Uplink Power Density (dBW/Hz)	-51.2	-51.2	-51.2	-50.9	-50.9	-50.9
Downlink EIRP Density at Beam Peak	-26.0	-26.0	-26.0	-39.9	-39.9	-39.9

program poweradd

C program to take two value in dB and do a power add
C if a and b are the numbers then $sum=1/(1/a+1/b)$

```
10     write(6,5)
5      format(' Enter 2 dBw values ')
      read(5,*) dbw1,dbw2
      a=10.**(dbw1/10.)
      b=10.**(dbw2/10.)
      denom=(1/a)+(1/b)
      sum=1/denom
      ans=10*log10(sum)
      write(6,15) dbw1,dbw2,ans
15     format(f12.6,' dBw',f12.6,' dBw',f12.6,' dBw/')
      write(6,25) dbw1,dbw2,ans
25     format(f12.6,' dBw',f12.6,' dBw',E15.7,' dBw')

      go to 10

      stop
      end
```