

**S1. GENERAL INFORMATION** Complete for all satellite applications.

a. Space Station or Satellite Network Name: BSSNET119W		e. Estimated Date of Placement into Service: 12/30/2012		i. Will the space station(s) operate on a Common Carrier Basis: N	
b. Construction Commencement Date: 6/30/2009		f. Estimated Lifetime of Satellite(s): 15 Years		j. Number of transponders offered on a common carrier basis: 0	
c. Construction Completion Date: 10/30/2011		g. Total Number of Transponders: 154		k. Total Common Carrier Transponder Bandwidth: 0 MHz	
d1. Est Launch Date Begin: 12/30/2011	d2. Est Launch Date End: 12/30/2011	h. Total Transponder Bandwidth (no. transponders x Bandwidth) 3696 MHz		i. Orbit Type: Mark all boxes that apply: <input checked="" type="checkbox"/> GSO <input type="checkbox"/> NGSO	

**S2. OPERATING FREQUENCY BANDS** Identify the frequency range and transmit/receive mode for all frequency bands in which this station will oper  
Also indicate the nature of service(s) for each frequency band.

Frequency Band Limits				e. T/R Mode	f. Nature of Service(s): List all that apply to this band
Lower Frequency (.Hz)		Upper Frequency (.Hz)			
a. Numeric	b. Unit (K/M/G)	c. Numeric	d. Unit (K/M/G)		
17.3	G	17.7	G	T	Broadcasting Satellite Service - Data
17.3	G	17.7	G	T	Broadcasting Satellite Service - Sound
17.3	G	17.7	G	T	Broadcasting Satellite Service - Video
17.3	G	17.7	G	T	TTC
24.75	G	25.15	G	R	Broadcasting Satellite Service - Data
24.75	G	25.15	G	R	Broadcasting Satellite Service - Sound
24.75	G	25.15	G	R	Broadcasting Satellite Service - Video
24.75	G	25.15	G	R	TTC

**S3. ORBITAL INFORMATION FOR GEOSTATIONARY SATELLITES ONLY:**

a. Nominal Orbital Longitude (Degrees E/W): 119 W		b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection: Available Appendix F orbital location			
Longitudinal Tolerance or E/W Station-Keeping:		f. Inclination Excursion or N/S Station-Keeping Tolerance: 0.05 Degrees	Range of orbital are in which adequate service can be provided (Optional):				
d. Toward West: 0.05 Degrees	e. Toward East: 0.05 Degrees		g. Westernmost: h. Easternmost:				
i. Reason for service are selection (Optional):							

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S4. ORBITAL INFORMATION FOR NON-GEOSTATIONARY SATELLITES ONLY

S4a. Total Number of Satellites in Network or System:

S4c. Celestial Reference Body (Earth, Sun, Moon, etc.):

S4b. Total Number of Orbital Planes in Network or System:

S4d. Orbit Epoch Date:

For each Orbital Plane Provide:

(e) Orbital Plane No.	(f) No. of Satellites in Plane	(g) Inclination Angle (degrees)	(h) Orbital Period (Seconds)	(i) Apogee (km)	(j) Perigee (km)	(k) Right Ascension of the Ascending Node (Deg.)	(l) Argument of Perigee (Degrees)	Active Service Arc Range (Degrees)		
								(m) Begin Angle	(n) End Angle	(o) Other

S5. INITIAL SATELLITE PHASE ANGLE For each satellite in each orbital plane, provide the initial phase angle.

(a) Orbital Plane No.	(b) Satellite Number	(c) Initial Phase Angle (Degrees)

**NO NGSO DATA FILED**

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S6. SERVICE AREA CHARACTERISTICS for each service area provide:

(a) Service Area ID	(b) Type of Associated Station (Earth or Space)	(c) Service Area Diagram File Name (GXT File)	(d) Service Area Description. Provide list of geographic areas (state postal codes or ITU 3-ltr codes), satellites or Figure No. of Service Area Diagram.
CONUS+	S		USA, HWA, ALS
NESPOT	S		USA, North of 38N, East of 100WL
SESPOT	S		USA, South of 38N, East of 100WL
WSPOT	S		USA, West of 100 WL
HISPOT	S		HWA
LAUL	S	ULLA SA.gxt	Sample spot LA Uplink
CMD	S		USA



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S8. ANTENNA BEAM DIAGRAMS For each beam pattern provide the reference to the graphic image and numerical data:  
Also provide the power flux density levels in each beam that result from the emission with the highest power flux density.

(a) Beam ID	(b) T/R Mode	(c) Co-or Cross Polar Mode ("C" or" X")	(d) GSO Ref. Orbital Longitude (Deg. E/W)	(e) NGSO Antenna Gain Contour Description (Figure/Table/ Exhibit)	(f) GSO Antenna Gain Contour Data (GXT File)	Max. Power Flux Density (dBW/M2/Hz)				
						At Angle of Arrival above horizontal (for emission with highest PFD)				
						(g) 5 Deg	(h) 10 Deg	(i) 15 Deg	(j) 20 Deg	(k) 25 Deg
USA	T	C	-119		119 Conus.gxt	-122.9	-122.9	-122.9	-124.9	-123.9
SP28	T	C	-119		SP28.gxt	-124.1	-124.1	-124.1	-126.1	-125.1
SP48	T	C	-119		SP48.gxt	-124.1	-124.1	-124.1	-126.1	-125.1
SP31	T	C	-119		SP31.gxt	-124.1	-124.1	-124.1	-126.1	-125.1
SP50	T	C	-119		SP50.gxt	-124.1	-124.1	-124.1	-126.1	-125.1
LAUL	R	C	-119		ULLA G.gxt					
CMD	R	C	-119		CMD2.gxt					

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S9. SPACE STATION CHANNELS For each frequency channel provide: S10. SPACE STATION TRANSPONDERS For each transponder provide:

(a) Channel No.	(B) Assigned Bandwidth (kHz)	(c) T/R Mode	(d) Center Frequency (MHz)	(e) Polarization (H, V, L, R)	(f) TTC or Comm Channel (T or C)
FA001	24000	T	17325	L	C
FA003	24000	T	17354.16	L	C
FA005	24000	T	17383.32	L	C
FA007	24000	T	17412.48	L	C
FA009	24000	T	17441.64	L	C
FA011	24000	T	17470.8	L	C
FA013	24000	T	17499.96	L	C
FA015	24000	T	17529.12	L	C
FA017	24000	T	17558.28	L	C
FA019	24000	T	17587.44	L	C
FA021	24000	T	17616.6	L	C
FA023	24000	T	17645.76	L	C
FA025	24000	T	17674.92	L	C
FB002	24000	T	17325	R	C
FB004	24000	T	17354.16	R	C
FB006	24000	T	17383.32	R	C
FB008	24000	T	17412.48	R	C
FB010	24000	T	17441.64	R	C
FB012	24000	T	17470.8	R	C
FB014	24000	T	17499.96	R	C
FB016	24000	T	17529.12	R	C
FB018	24000	T	17558.28	R	C
FB020	24000	T	17587.44	R	C
FB022	24000	T	17616.6	R	C
FB024	24000	T	17645.76	R	C
FB026	24000	T	17674.92	R	C
GA001	24000	R	24775	R	C
GA003	24000	R	24804.16	R	C
GA005	24000	R	24833.32	R	C
GA007	24000	R	24862.48	R	C

(a) Transponder ID	(b) Transponder Gain (dB)	Receive Band		Transmit Band	
		(c) Channel No.	(d) Beam ID	(e) Channel No.	(f) Beam ID
NA001	156	GA001	LAUL	FA001	USA
NA002	156	GA003	LAUL	FA003	USA
NA003	156	GA005	LAUL	FA005	USA
NA004	156	GA007	LAUL	FA007	USA
NA005	156	GA009	LAUL	FA009	USA
NB001	156	GB002	LAUL	FB002	USA
NB002	156	GB004	LAUL	FB004	USA
NB003	156	GB006	LAUL	FB006	USA
NB004	156	GB008	LAUL	FB008	USA
NB005	156	GB010	LAUL	FB010	USA
SA001	156	GA011	LAUL	FA011	SP28
SA002	156	GA013	LAUL	FA013	SP28
SA003	156	GA015	LAUL	FA015	SP28
SA004	156	GA017	LAUL	FA017	SP28
SA005	156	GA019	LAUL	FA019	SP28
SA006	156	GA021	LAUL	FA021	SP28
SA007	156	GA023	LAUL	FA023	SP28
SA008	156	GA025	LAUL	FA025	SP28
SA009	156	GA011	LAUL	FA011	SP48
SA010	156	GA013	LAUL	FA013	SP48
SA011	156	GA015	LAUL	FA015	SP48
SA012	156	GA017	LAUL	FA017	SP48
SA013	156	GA019	LAUL	FA019	SP48
SA014	156	GA021	LAUL	FA021	SP48
SA015	156	GA023	LAUL	FA023	SP48
SA016	156	GA025	LAUL	FA025	SP48
SA017	156	GA011	LAUL	FA011	SP31
SA018	156	GA013	LAUL	FA013	SP31
SA019	156	GA015	LAUL	FA015	SP31
SA020	156	GA017	LAUL	FA017	SP31

GA009	24000	R	24891.64	R	C
GA011	24000	R	24920.8	R	C
GA013	24000	R	24949.96	R	C
GA015	24000	R	24979.12	R	C
GA017	24000	R	25008.28	R	C
GA019	24000	R	25037.44	R	C
GA021	24000	R	25066.6	R	C
GA023	24000	R	25095.76	R	C
GA025	24000	R	25124.92	R	C
GB002	24000	R	24775	L	C
GB004	24000	R	24804.16	L	C
GB006	24000	R	24833.32	L	C
GB008	24000	R	24862.48	L	C
GB010	24000	R	24891.64	L	C
GB012	24000	R	24920.8	L	C
GB014	24000	R	24949.96	L	C
GB016	24000	R	24979.12	L	C
GB018	24000	R	25008.28	L	C
GB020	24000	R	25037.44	L	C
GB022	24000	R	25066.6	L	C
GB024	24000	R	25095.76	L	C
GB026	24000	R	25124.92	L	C
CMD1	1000	R	24765	L	T
TLM1	1000	T	17695	L	T
BEA1	10	T	17693	L	T

SA021	156	GA019	LAUL	FA019	SP31
SA022	156	GA021	LAUL	FA021	SP31
SA023	156	GA023	LAUL	FA023	SP31
SA024	156	GA025	LAUL	FA025	SP31
SA025	156	GA011	LAUL	FA011	SP50
SA026	156	GA013	LAUL	FA013	SP50
SA027	156	GA015	LAUL	FA015	SP50
SA028	156	GA017	LAUL	FA017	SP50
SA029	156	GA019	LAUL	FA019	SP50
SA030	156	GA021	LAUL	FA021	SP50
SA031	156	GA023	LAUL	FA023	SP50
SA032	156	GA025	LAUL	FA025	SP50
SB001	156	GB012	LAUL	FB012	SP28
SB002	156	GB014	LAUL	FB014	SP28
SB003	156	GB016	LAUL	FB016	SP28
SB004	156	GB018	LAUL	FB018	SP28
SB005	156	GB020	LAUL	FB020	SP28
SB006	156	GB022	LAUL	FB022	SP28
SB007	156	GB024	LAUL	FB024	SP28
SB008	156	GB026	LAUL	FB026	SP28
SB009	156	GB012	LAUL	FB012	SP48
SB010	156	GB014	LAUL	FB014	SP48
SB011	156	GB016	LAUL	FB016	SP48
SB012	156	GB018	LAUL	FB018	SP48
SB013	156	GB020	LAUL	FB020	SP48
SB014	156	GB022	LAUL	FB022	SP48
SB015	156	GB024	LAUL	FB024	SP48
SB016	156	GB026	LAUL	FB026	SP48
SB017	156	GB012	LAUL	FB012	SP31
SB018	156	GB014	LAUL	FB014	SP31
SB019	156	GB016	LAUL	FB016	SP31
SB020	156	GB018	LAUL	FB018	SP31
SB021	156	GB020	LAUL	FB020	SP31
SB022	156	GB022	LAUL	FB022	SP31
SB023	156	GB024	LAUL	FB024	SP31
SB024	156	GB026	LAUL	FB026	SP31
SB025	156	GB012	LAUL	FB012	SP50
SB026	156	GB014	LAUL	FB014	SP50
SB027	156	GB016	LAUL	FB016	SP50

SB028	156	GB018	LAUL	FB018	SP50
SB029	156	GB020	LAUL	FB020	SP50
SB030	156	GB022	LAUL	FB022	SP50
SB031	156	GB024	LAUL	FB024	SP50
SB032	156	GB026	LAUL	FB026	SP50
C1		CMD1	CMD		
B1				BEA1	SP28



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S11. DIGITAL MODULATION PARAMETERS For each digital emission provide:

(a) Digital Mod. ID	(b) Emission Designator	(c) Assigned Bandwidth (kHz)	(d) No. of Phases	(e) Uncoded Data Rate (kbps)	(f) FEC Error Correction Coding Rate	(g) CDMA Processing Gain (dB)	(h) Total C/N Performance Objective (dB)	(i) Single Entry C/I Objective (dB)
D1	24M0G7W	24000	8	42800	0.66		6.6	20
C1	1M00F2D	1000					37.4	49.6
B1	H001N0N	10					20.5	32.7



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S13. TYPICAL EMISSIONS For each planned type of emission provide:

Associated Transponder ID Range (a) Start    (b) End		Modulation ID		(e) Carriers per Transponder	(f) Carrier Spacing (kHz)	(g) Noise Budget Reference (Table No.)	(h) Energy Dispersal Bandwidth (kHz)	Receive Band (Assoc. Transmit Stn)			Transmit Band (This Space Station)			
		(c) Digital (Table S11)	(d) Analog (Table S12)					(i) Assoc. Stn. Max. Antenna Gain (dBi)	Assoc. Station Transmit Power (dBW) (j) Min.    (k) Max.		EIRP (dBW) (l) Min.    (m) Max.		(n) Max. Power Flux Density (dBW/m <sup>2</sup> /Hz)	(o) Assoc. Stn Rec. G/T (dB/K)
NA001	NB005	D1		1		Comm Link.doc		67.6	0	8	52.6	61.4	-115	17.2
SA001	SB032	D1		1		Comm Link.doc		67.6	0	8	51.2	61.4	-115	17.2
C1	C1	C1		1		TTC Link.doc		63.4	17	27				
B1	B1	B1		1		TTC Link.doc		45.4	-20	-20	25.4	25.4	-137	16.3

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S14. Is the space station(s) controlled and monitored remotely? If Yes, provide the location and telephone number of the TT and C control point(s): Yes

**Remote Control (TT C) Location(s):**

S14a: Street Address:			
S14b. City: Curacao	S14c. County:	S14d. State/Country	S14e. Zip Code:
S14f. Telephone Number:		S14g. Call Sign of Control Station (if appropriate):	

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S15. SPACECRAFT PHYSICAL CHARACTERISTICS:

S15a. Mass of spacecraft without fuel (kg): 3905	Spacecraft Dimensions (meters)	Probability of Survival to End of Life (0.0 - 1.0)
S15b. Mass of fuel and disposables at launch (kg): 2684		
S15c. Mass of spacecraft and fuel at launch (kg): 6595	S15f. Length (m): 50	S15i. Payload: 0.6
S15d. Mass of fuel, in orbit, at beginning of life (kg): 293	S15g. Width (m): 8.2	S15j. Bus: 0.85
S15e. Deployed Area of Solar Array (square meters): 85	S15h. Height (m): 7.3	S15k. Total: 0.51

S16. SPACECRAFT ELECTRICAL CHARACTERISTICS:

Spacecraft Subsystem	Electrical Power (Watts) At Beginning of Life		Electrical Power (Watts) At End of Life	
	At Equinox	At Solstice	At Equinox	At Solstice
Payload (Watts):	(a): 15860	(f): 15860	(k): 15860	(p): 15860
Bus (Watts):	(b): 1800	(g): 700	(l): 1800	(q): 700
Total (Watts):	(c): 17856	(h): 16533	(m): 17856	(r): 16533
Solar Array (Watts):	(d): 21653	(i): 19690	(n): 18590	(s): 17279
Depth of Battery Discharge (%):	(e) 79.5 %	(j) 0 %	(o) 79.5 %	(t) 0 %

S17. CERTIFICATIONS:

a. Are the power flux density limits of § 25.208 met?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
b. Are the appropriate service area coverage requirements of § 25.143(b)(ii) and (iii), or § 25.145(c)(1) and (2) met?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
c. Are the frequency tolerances of § 25.202(e) and the out-of-band emission limits of § 25.202(f)(1), (2) and (3) met?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A

**In addition to the information required in this Form, the space station applicant is required to provide all the information specified in Section 25.114 of the Commission's rules, 47 C.F.R § 25.114.**