

S1. GENERAL INFORMATION Complete for all satellite applications.

a. Space Station or Satellite Network Name: GALAXY 25		e. Estimated Date of Placement into Service:		i. Will the space station(s) operate on a Common Carrier Basis: N	
b. Construction Commencement Date:		f. Estimated Lifetime of Satellite(s): Years		j. Number of transponders offered on a common carrier basis:	
c. Construction Completion Date:		g. Total Number of Transponders: 52		k. Total Common Carrier Transponder Bandwidth: MHz	
d1. Est Launch Date Begin:	d2. Est Launch Date End:	h. Total Transponder Bandwidth (no. transponders x Bandwidth) 1728 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)		
5925	M	6425	M	R	Fixed Satellite Service
3700	M	4200	M	T	Fixed Satellite Service
14000	M	14500	M	R	Fixed Satellite Service
11700	M	12200	M	T	Fixed Satellite Service

S3. ORBITAL INFORMATION FOR GEOSTATIONARY SATELLITES ONLY:

a. Nominal Orbital Longitude (Degrees E/W): 93.1 W		b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection: PROVIDE ADDITIONAL AND BACK-UP CAPACITY TO GALAXY 26	
Longitudinal Tolerance or E/W Station-Keeping:		f. Inclination Excursion or N/S Station-Keeping Tolerance:		Range of orbital are in which adequate service can be provided (Optional): Degrees E/W	
d. Toward West:	0.05 Degrees	e. Toward East:		g. Westernmost:	
	0.05 Degrees			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.
1	S		CONTINENTAL UNITED STATES, ALASKA, HAWAII, PUERTO RICO
2	S		GLOBAL

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S7. SPACE STATION ANTENNA BEAM CHARACTERISTICS For each antenna beam provide:

(a) Beam ID	(b) T/R Mode	Isotropic Antenna Gain		(e) Pointing Error (Degrees)	(f) Rotational Error (Degrees)	(g) Min. Cross- Polar Iso- lation (dB)	(h) Polar- ization Switch- able? (Y/N)	(i) Polarization Alignment Rel. Equatorial Plane (Degrees)	(j) Service Area ID	Transmit			Receive				
										(k) Input Losses (dB)	(l) Effective Output Power (W)	(m) Max. EIRP (dBW)	(n) System Noise Temp (k)	(o) G/T Max. Gain Pt. (db/K)	(p) Min. Saturation Flux Density (dBW/m2)	Input Attenuator (dB)	
		(q) Max. Value	(r) Step Size														
CHU	R	30.4	26.4						1					2.6	-95.3	21	1
CVU	R	30.4	26.4						1					2.6	-95.3	21	1
KHU	R	30.1	26.1						1					2.7	-98	21	1
KVU	R	30.1	26.1						1					2.7	-98	21	1
CHD	T	28.3	24.3						1			39.3					
CVD	T	28.3	24.3						1			39.3					
KHD	T	31.4	27.4						1			47.7					
KVD	T	31.4	27.4						1			47.7					
CMW	R	2	-4.5						2					-34.1	-97.9		
CMW	R	2	-4.5						2					-34.1	-97.9		
CMM	R	4	-2.5						2					-31.2	-100.8		
CMM	R	4	-2.5						2					-31.2	-100.8		
TMO	T	29	19						1			24.5					
TMW	T	2	-4.5						2			8.8					
TMM	T	2	-4.5						2			5.2					
BCN	T	31.3	27.3						1			26					
BCN	T	31.3	27.3						1			26					

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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
CHU	R	C	-93.1		chup.gxt					
CVU	R	C	-93.1		cvup.gxt					
KHU	R	C	-93.1		khup.gxt					
KVU	R	C	-93.1		kvup.gxt					
CHD	T	C	-93.1		chdn.gxt	-154	-153.9	-153.7	-153.6	-153.5
CVD	T	C	-93.1		cvdn.gxt	-154	-153.9	-153.7	-153.6	-153.5
KHD	T	C	-93.1		khdn.gxt					
KVD	T	C	-93.1		kvdn.gxt					
CMW	R	C	-93.1	cmwh.pdf						
CMW	R	C	-93.1	cmwv.pdf						
CMM	R	C	-93.1	cmmh.pdf						
CMM	R	C	-93.1	cmmv.pdf						
TMO	T	C	-93.1		tmov.gxt	-156.7	-156.6	-156.5	-156.4	-156.3
TMW	T	C	-93.1	tmwv.pdf		-172.4	-172.3	-172.2	-172.1	-172
TMM	T	C	-93.1	tmmv.pdf		-176	-175.9	-175.8	-175.7	-175.6
BCN	T	C	-93.1		bcnh.gxt					
BCN	T	C	-93.1		bcnv.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)
CU001	36000	R	5945	H	C
CU002	36000	R	5965	V	C
CU003	36000	R	5985	H	C
CU004	36000	R	6005	V	C
CU005	36000	R	6025	H	C
CU006	36000	R	6045	V	C
CU007	36000	R	6065	H	C
CU008	36000	R	6085	V	C
CU009	36000	R	6105	H	C
CU010	36000	R	6125	V	C
CU011	36000	R	6145	H	C
CU012	36000	R	6165	V	C
CU013	36000	R	6185	H	C
CU014	36000	R	6205	V	C
CU015	36000	R	6225	H	C
CU016	36000	R	6245	V	C
CU017	36000	R	6265	H	C
CU018	36000	R	6285	V	C
CU019	36000	R	6305	H	C
CU020	36000	R	6325	V	C
CU021	36000	R	6345	H	C
CU022	36000	R	6365	V	C
CU023	36000	R	6385	H	C
CU024	36000	R	6405	V	C
CD001	36000	T	3720	V	C
CD002	36000	T	3740	H	C
CD003	36000	T	3760	V	C
CD004	36000	T	3780	H	C
CD005	36000	T	3800	V	C
CD006	36000	T	3820	H	C

(a) Transponder ID	(b) Transponder Gain (dB)	Receive Band		Transmit Band	
		(c) Channel No.	(d) Beam ID	(e) Channel No.	(f) Beam ID
C0001	114.9	CU001	CHUP	CD001	CVDN
C0003	114.9	CU003	CHUP	CD003	CVDN
C0005	114.9	CU005	CHUP	CD005	CVDN
C0007	114.9	CU007	CHUP	CD007	CVDN
C0009	114.9	CU009	CHUP	CD009	CVDN
C0011	114.9	CU011	CHUP	CD011	CVDN
C0013	114.9	CU013	CHUP	CD013	CVDN
C0015	114.9	CU015	CHUP	CD015	CVDN
C0017	114.9	CU017	CHUP	CD017	CVDN
C0019	114.9	CU019	CHUP	CD019	CVDN
C0021	114.9	CU021	CHUP	CD021	CVDN
C0023	114.9	CU023	CHUP	CD023	CVDN
C0002	114.9	CU002	CVUP	CD002	CHDN
C0004	114.9	CU004	CVUP	CD004	CHDN
C0006	114.9	CU006	CVUP	CD006	CHDN
C0008	114.9	CU008	CVUP	CD008	CHDN
C0010	114.9	CU010	CVUP	CD010	CHDN
C0012	114.9	CU012	CVUP	CD012	CHDN
C0014	114.9	CU014	CVUP	CD014	CHDN
C0016	114.9	CU016	CVUP	CD016	CHDN
C0018	114.9	CU018	CVUP	CD018	CHDN
C0020	114.9	CU020	CVUP	CD020	CHDN
C0022	114.9	CU022	CVUP	CD022	CHDN
C0024	114.9	CU024	CVUP	CD024	CHDN
K0001	127.8	KU001	KHUP	KD001	KVDN
K0003	127.8	KU003	KHUP	KD003	KVDN
K0005	127.8	KU005	KHUP	KD005	KVDN
K0007	127.8	KU007	KHUP	KD007	KVDN
K0009	127.8	KU009	KHUP	KD009	KVDN
K0011	127.8	KU011	KHUP	KD011	KVDN

CD007	36000	T	3840	V	C
CD008	36000	T	3860	H	C
CD009	36000	T	3880	V	C
CD010	36000	T	3900	H	C
CD011	36000	T	3920	V	C
CD012	36000	T	3940	H	C
CD013	36000	T	3960	V	C
CD014	36000	T	3980	H	C
CD015	36000	T	4000	V	C
CD016	36000	T	4020	H	C
CD017	36000	T	4040	V	C
CD018	36000	T	4060	H	C
CD019	36000	T	4080	V	C
CD020	36000	T	4100	H	C
CD021	36000	T	4120	V	C
CD022	36000	T	4140	H	C
CD023	36000	T	4160	V	C
CD024	36000	T	4180	H	C
KU001	54000	R	14028.5	H	C
KU002	54000	R	14035.0	V	C
KU003	54000	R	14089.5	H	C
KU004	54000	R	14096.0	V	C
KU005	27000	R	14136	H	C
KU007	27000	R	14167	H	C
KU009	27000	R	14198	H	C
KU011	27000	R	14229	H	C
KU013	27000	R	14260	H	C
KU015	27000	R	14291	H	C
KU017	27000	R	14322	H	C
KU019	27000	R	14353	H	C
KU021	27000	R	14384	H	C
KU023	27000	R	14415	H	C
KU025	27000	R	14446	H	C
KU027	27000	R	14477	H	C
KU006	27000	R	14142.5	V	C
KU008	27000	R	14173.5	V	C
KU010	27000	R	14204.5	V	C
KU012	27000	R	14235.5	V	C
KU014	27000	R	14266.5	V	C

K0013	127.8	KU013	KHUP	KD013	KVDN
K0015	127.8	KU015	KHUP	KD015	KVDN
K0017	127.8	KU017	KHUP	KD017	KVDN
K0019	127.8	KU019	KHUP	KD019	KVDN
K0021	127.8	KU021	KHUP	KD021	KVDN
K0023	127.8	KU023	KHUP	KD023	KVDN
K0025	127.8	KU025	KHUP	KD025	KVDN
K0027	127.8	KU027	KHUP	KD027	KVDN
K0002	127.8	KU002	KVUP	KD002	KHDN
K0004	127.8	KU004	KVUP	KD004	KHDN
K0006	127.8	KU006	KVUP	KD006	KHDN
K0008	127.8	KU008	KVUP	KD008	KHDN
K0010	127.8	KU010	KVUP	KD010	KHDN
K0012	127.8	KU012	KVUP	KD012	KHDN
K0014	127.8	KU014	KVUP	KD014	KHDN
K0016	127.8	KU016	KVUP	KD016	KHDN
K0018	127.8	KU018	KVUP	KD018	KHDN
K0020	127.8	KU020	KVUP	KD020	KHDN
K0022	127.8	KU022	KVUP	KD022	KHDN
K0024	127.8	KU024	KVUP	KD024	KHDN
K0026	127.8	KU026	KVUP	KD026	KHDN
K0028	127.8	KU028	KVUP	KD028	KHDN

KU016	27000	R	14297.5	V	C
KU018	27000	R	14328.5	V	C
KU020	27000	R	14359.5	V	C
KU022	27000	R	14390.5	V	C
KU024	27000	R	14421.5	V	C
KU026	27000	R	14452.5	V	C
KU028	27000	R	14483.5	V	C
KD001	54000	T	11728.5	V	C
KD002	54000	T	11735	H	C
KD003	54000	T	11789.5	V	C
KD004	54000	T	11796	H	C
KD005	27000	T	11836	V	C
KD007	27000	T	11867	V	C
KD009	27000	T	11898	V	C
KD011	27000	T	11929	V	C
KD013	27000	T	11960	V	C
KD015	27000	T	11991	V	C
KD017	27000	T	12022	V	C
KD019	27000	T	12053	V	C
KD021	27000	T	12084	V	C
KD023	27000	T	12115	V	C
KD025	27000	T	12146	V	C
KD027	27000	T	12177	V	C
KD006	27000	T	11842.5	H	C
KD008	27000	T	11873.5	H	C
KD010	27000	T	11904.5	H	C
KD012	27000	T	11935.5	H	C
KD014	27000	T	11966.5	H	C
KD016	27000	T	11997.5	H	C
KD018	27000	T	12028.5	H	C
KD020	27000	T	12059.5	H	C
KD022	27000	T	12090.5	H	C
KD024	27000	T	12121.5	H	C
KD026	27000	T	12152.5	H	C
KD028	27000	T	12183.5	H	C
CMD1	1000	R	5926.5	V	T
CMD2	1000	R	6423.5	H	T
CMD3	1000	R	5926.5	V	T
CMD4	1000	R	6423.5	H	T

TLM1	500	T	4195.5	V	T
TLM2	500	T	4199.5	V	T
TLM3	500	T	4195.5	V	T
TLM4	500	T	4199.5	V	T
TLM5	500	T	4195.5	V	T
TLM6	500	T	4199.5	V	T
UPC1	25	T	11702	H	T
UPC2	25	T	12198	V	T

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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	54M0G7W	54000	4	45801	0.667		5.1	17.8
D2	36M0G7W	36000	4	36863	0.75		6.1	13.6
D3	27M0G7W	27000	4	24575	0.667		5.1	18.6
D4	10M3G7W	10300	4	6000	0.5		3.9	16.7
D5	100KG7W	100	4	64	0.5		3	15.8
D6	1M45G7W	1450	2	512	0.5		3.4	15.7
D7	400KG7W	400	2	128	0.5		3.4	17.6

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S12. ANALOG MODULATION PARAMETERS For each analog emission provide:

(a) Analog Mod. ID	(b) Emission Designator	(c) Assigned Bandwidth (kHz)	(d) Signal Type	(e) Channels per Carrier	Multi-channel Telephony				(j) Video Standard NTSC, PAL, etc.	(k) Video Noise- Weighting (dB)	(l) Video and SCPC/FM Modulation Index	(m) SCPC/FM Compander, Preemphasis, and Noise Weighting (dB)	(n) Total C/N Performance Objective (dB)	(o) Single Entry C/I Objective (dB)
					(f) Ave. Companded Talker Level (dBm0)	(g) Bottom Baseband Freq. (MHz)	(h) Top Baseband Freq. (MHz)	(i) RMS Modulation Index						
A1	36M0F3F	36000	TV/FM	1					NTSC	12.8	2.6		10	16.1
A2	24M0F3F	24000	TV/FM	1					NTSC	12.8	2.6		10	23

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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)		EIRP (dBW)		(n) Max. Power Flux Density (dBW/m ² /Hz)	(o) Assoc. Stn Rec. G/T (dB/K)
									(j) Min.	(k) Max.	(l) Min.	(m) Max.		
C0001	C0024		A1	1		LINK BUDGET	4000	51	20.6	24.6	35.3	39.3	-152.8	26.2
C0001	C0024	D2		1		LINK BUDGET		49.4	19.2	23.2	35.3	39.3	-161.5	21
C0001	C0024	D4		2		LINK BUDGET		49.4	10.5	14.5	28	32	-162.4	19.2
C0001	C0024	D5		257		LINK BUDGET		49.4	-9.9	-5.9	7.6	11.6	-163.3	19.2
K0005	K0028		A2	1		LINK BUDGET	4000	56.9	18	22	38.2	42.2	-149.9	31
K0005	K0028	D3		1		LINK BUDGET		56.9	19.5	23.5	39.5	43.5	-156.1	25
K0005	K0028	D4		2		LINK BUDGET		56.9	3.9	7.9	33	37	-157.4	25
K0005	K0028	D5		267		LINK BUDGET		56.9	-14.3	-10.3	14.8	18.8	-156.1	22.3
K0005	K0028	D6		16		LINK BUDGET		56.9	-2.3	1.7	26.8	30.8	-156.2	22.3
K0005	K0028	D7		67		LINK BUDGET		46.4	-3.1	0.9	15.4	19.4	-161.6	33.1
K0001	K0004		A2	2		LINK BUDGET	4000	56.9	18	22	36.9	40.9	-151.2	33.1
K0001	K0004	D1		1		LINK BUDGET		58.1	21	25	41.4	45.4	-156.9	25
K0001	K0004	D4		3		LINK BUDGET		56.9	1.1	5.1	33.2	37.2	-157.2	25
K0001	K0004	D5		403		LINK BUDGET		56.9	-19.1	-15.1	13	17	-157.9	25
K0001	K0004	D6		25		LINK BUDGET		56.9	-7.1	-3.1	25	29	-158	25
K0001	K0004	D7		135		LINK BUDGET		49	-8.4	-4.4	15.8	19.8	-161.2	33.1

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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: 3400 INTERNATIONAL DRIVE, N.W.			
S14b. City: WASHINGTON, D.C.	S14c. County:	S14d. State/Country DC	S14e. Zip Code: 20008
S14f. Telephone Number: 202-944-7701		S14g. Call Sign of Control Station (if appropriate):	

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S15. SPACECRAFT PHYSICAL CHARACTERISTICS:

S16. SPACECRAFT ELECTRICAL CHARACTERISTICS:

S17. CERTIFICATIONS:

a. Are the power flux density limits of § 25.208 met?	<input 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 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 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.								