

S1. GENERAL INFORMATION Complete for all satellite applications.

a. Space Station or Satellite Network Name: INTELSAT 601		e. Estimated Date of Placement into Service:		i. Will the space station(s) operate on a Common Carrier Basis:	
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:		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) 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)		
14000	M	14500	M	R	Fixed Satellite Service
10950	M	11200	M	T	Fixed Satellite Service
11450	M	11700	M	T	Fixed Satellite Service
5850	M	6425	M	R	Fixed Satellite Service
3625	M	4200	M	T	Fixed Satellite Service

S3. ORBITAL INFORMATION FOR GEOSTATIONARY SATELLITES ONLY:

a. Nominal Orbital Longitude (Degrees E/W): 63.65 E		b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection: Currently the satellite 601 is licensed to operate at 64.25E. The move of INTELSAT 601 to 63.65E is necessary to accommodate better the operations of the colocated INTELSAT 906 and INMARSAT 4			
Longitudinal Tolerance or E/W Station-Keeping:		f. Inclination Excursion or N/S Station-Keeping Tolerance:				Range of orbital arc in which adequate service can be provided (Optional): Degrees E/W	
d. Toward West: 0.05 Degrees	e. Toward East: 0.05 Degrees		1.9 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.
1	S		Global beam over Region 1 and 3
2	S		West hemi beam over Western Europe and Africa
3	S		Zone 1 beam over Western Europe
4	S		Zone 2 beam over Africa
5	S		East hemi over Thaliand, Indonesia, Australia, Mongolia, Northern China
6	S		Zone 4 beam over Thaliand, Indonesia, Australia
7	S		Zone 3 beam over Mongolia, Northern China
8	S		Ku spot beams steerable over Region 1 and 3

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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														
GA-R	R	19.2	14.4						1					-9.2			
GB-T	T	19.2	14.4						1			29.3					
GB-R	R	19.2	14.4						1					-9.2			
GA-T	T	19.2	14.4						1			29.3					
EHT	T	25.5	20.5						5			36					
EH-R	R	24.4	18.9						5					-3.7			
WH-T	T	24.9	20.6						2			35.3					
WH-	R	23.7	18.8						2					-4.3			
Z1-T	T	34.7	29						3			36.7					
Z1-R	R	33.5	26.7						3					4.8			
Z2-T	T	26.5	22.3						4			35.2					
Z2-R	R	26.1	21.1						4					-2			
Z3-T	T	33	26.7						7			37.3					
Z3-R	R	31.5	26.3						7					3.2			
Z4-T	T	27	22.2						6			35.8					
Z4-R	R	26.1	21.2						6					-2.1			
WS-T	T	37.6	30						8			52.3					
WS-	R	37.2	28.6						8					7.3			
ES-T	T	37.3	33.2						8			51.8					
ES-R	R	37.7	31.1						8					7.6			
O	R	-0.2	-2.2						1								
HTM	T	11.2	9.2						1			7					

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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
GA-R	R				601ga-up.gxt					
GA-T	T				601gb-dn.gxt					
GB-T	T				601gb-dn.gxt					
GB-R	R				601gb-up.gxt					
EH-T	T				601eh-dn.gxt					
EH-R	R				601eh-up.gxt					
WH-T	T				601wh-dn.gxt					
WH-	R				601wh-up.gxt					
Z1-T	T				601az1-e.gxt					
Z1-R	R				601az1-r.Gxt					
Z2-T	T				601az2-e.gxt					
Z2-R	R				601az2-r.gxt					
Z3-T	T				601az3-e.gxt					
Z3-R	R				601az3-r.gxt					
Z4-T	T				601az4-e.gxt					
Z4-R	R				601az4-r.gxt					
WS-T	T				601ws-dn.gxt					
WS-	R				601ws-up.gxt					
ES-T	T				601es-dn.gxt					
ES-R	R				601es-up.gxt					
O	R				O-up.gxt					
HTM	T				601-htm.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)

(a) Transponder ID	(b) Transponder Gain (dB)	Receive Band		Transmit Band	
		(c) Channel No.	(d) Beam ID	(e) Channel No.	(f) Beam ID

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

Associated Transponder ID Range		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)
(a) Start	(b) End						(j) Min.	(k) Max.	(l) Min.	(m) Max.			

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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): #Error

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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.								