

File Number: **DRAFT-SAT-AMD-20260408-00161**

Call Sign: **S3235**

S1. Satellite Information

a. Space Station or Satellite Network Name	b. Orbit Type	c. Estimated Operational Lifetime of Space Station(s) From Date of Launch (yrs)	d. Will the space station(s) operate on a Common Carrier basis?	e. Application Description
IM-3 NOVA-C	Non-Geostationary (NGSO)	1	No	Amendment to application for launch and operation authority for lunar lander, see attachment.

S2. Operating Frequency Bands

a. Type of Service	b. If a. is Other, provide a service description	c. Satellite Frequency Band (MHz)	d. Satellite Frequency (Lower Band Edge) (MHz)	e. Satellite Frequency (Upper Band Edge) (MHz)	f. Direction of Transmission	g. Non Conforming Indicator
SRS		2200 - 2290	2200	2290	Space-to-Earth (Transmit)	Yes
OTHER: Other Satellite Service	Operation under RR 4.4 and FN 5.150.	Other	2400	2500	Space-to-Space (Receive)	Yes
SOS		2025 - 2110	2025	2110	Earth-to-Space (Receive)	Yes
OTHER: Other Satellite Service	Lunar surface communications	Other	5150	5250	Space-to-Space (Transmit)	Yes
OTHER: Other Satellite Service	Operation under RR 4.4 and FN 5.150.	Other	2400	2500	Space-to-Space (Transmit)	Yes
OTHER: Other Satellite Service	Lunar surface communications	Other	5150	5250	Space-to-Space (Receive)	Yes
SRS		14500 - 14800	14500	14800	Space-to-Space (Receive)	No
SRS		14500 - 14800	14500	14800	Space-to-Space (Transmit)	No

S3. NGSO Orbital Information

a. Total Number of Simultaneously Operating Satellites in Constellation	b. Total Number of Satellites Deployed During the License Term	c. Orbit Epoch Date	d. Celestial Reference Body	e. If d. is "Other", provide the name of celestial body being referenced	f. Total Number of Orbital Planes
1	1	2026-11-25	Moon		1

g. Orbital Plane Information

(i) Orbital Plane No.	(ii) Number of Satellites in Plane	(iii) Inclination Angle (°)	(iv) Inclination Angle Tolerance (+/- °)	(v) Orbital Period (seconds)	(vi) Apogee (km)	(vii) Apogee Tolerance (+/- km)	(viii) Perigee (km)	(ix) Perigee Tolerance (+/- km)	(x) Argument of Perigee (°)	(xi) Right Ascension of Ascending Node (°)	(xii) Right Ascension of Ascending Node Tolerance (+/- °)	(xiii) Active Service Arc Begin Angle with Respect to Ascending	(xiv) Active Service Arc End Angle with Respect to Ascending	(xv) Is additional info on the active service arc provided in the	(xvi) Satellite Spacing	(xvii) Phase Angle Spacing (°)	(xviii) First Satellite Initial Phase Angle (°)	(xix) Maximum Orbital Eccentricity
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												Node (°)	Node (°)	applicatio n?				
1	1	1	1	0	1	1	1	1	0	0	1	0	0	No	Evenly- Spaced	360	1	

h. Initial Phase Angle Information

(i) Orbital Plane No.	(i) Satellite No.	(ii) Initial Phase Angle (°)
1	1	1

S4. Earth-to-Space (Receive) Beams

a. Beam ID:	RHGA	n. Beam Peak Flux Density at Command Threshold (dBW/m²):	
b. Beam Frequency (Lower Band Edge) (MHz):	2025	o. Peak Isotropic Antenna Gain (dBi):	14.8
c. Beam Frequency (Upper Band Edge) (MHz):	2110	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	
d. Polarization:	RHCP	q. Antenna Pointing Error (°):	0.5
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	1.5
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:	
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:	
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:	
j. Maximum G/T (dB/K):	-10.9	w. What information will be provided with the predicted antenna gain contours?:	
k. Minimum G/T (dB/K):			
l. Maximum Saturation Flux Density (dBW/m²):	-70		
m. Minimum Saturation Flux Density (dBW/m²):	-133		

x. Receive Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
RX01	0.03	2035.5941	2035.5791	2035.6091	TT&C	
RX03	0.202	2035.5941	2035.4931	2035.6951	TT&C	
RUM1	0.004	2035.5941	2035.5921	2035.5961	TT&C	
RX02	0.075	2035.5941	2035.5566	2035.6316	TT&C	

a. Beam ID:	RHEM	n. Beam Peak Flux Density at Command Threshold (dBW/m²):	
b. Beam Frequency (Lower Band Edge) (MHz):	2025	o. Peak Isotropic Antenna Gain (dBi):	6.5
c. Beam Frequency (Upper Band Edge) (MHz):	2110	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	
d. Polarization:	RHCP	q. Antenna Pointing Error (°):	0.5
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	1.5
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:	
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:	
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:	

j. Maximum G/T (dB/K):	-20	w. What information will be provided with the predicted antenna gain contours?:				
k. Minimum G/T (dB/K):						
l. Maximum Saturation Flux Density (dBW/m²):	-59					
m. Minimum Saturation Flux Density (dBW/m²):	-122					
x. Receive Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
RX02	0.075	2035.5941	2035.5566	2035.6316	TT&C	
RX01	0.03	2035.5941	2035.5791	2035.6091	TT&C	
RX03	0.202	2035.5941	2035.4931	2035.6951	TT&C	
RUM1	0.004	2035.5941	2035.5921	2035.5961	TT&C	

a. Beam ID:	RROV	n. Beam Peak Flux Density at Command Threshold (dBW/m²):				
b. Beam Frequency (Lower Band Edge) (MHz):	2025	o. Peak Isotropic Antenna Gain (dBi):	5.9			
c. Beam Frequency (Upper Band Edge) (MHz):	2026	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):				
d. Polarization:	V	q. Antenna Pointing Error (°):	2			
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	2			
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:				
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:				
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:				
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:				
j. Maximum G/T (dB/K):	-23	w. What information will be provided with the predicted antenna gain contours?:				
k. Minimum G/T (dB/K):						
l. Maximum Saturation Flux Density (dBW/m²):	-5					
m. Minimum Saturation Flux Density (dBW/m²):	-65					
x. Receive Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
RR02	4	2472	2470	2474	Service Link	
RR01	4	2411	2409	2413	Service Link	

S5. Space-to-Earth (Transmit) Beams

a. Beam ID:	THEM	n. Beam Peak Flux Density at Command Threshold (dBW/m²):	
b. Beam Frequency (Lower Band Edge) (MHz):	2200	o. Peak Isotropic Antenna Gain (dBi):	5.6
c. Beam Frequency (Upper Band Edge) (MHz):	2290	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	
d. Polarization:	RHCP	q. Antenna Pointing Error (°):	0.5
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	1.5
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:	
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:	
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:	

j. Maximum Transmit EIRP Density (dBW/Ref BW):		-22.9	w. What information will be provided with the predicted antenna gain contours?:			
k. Maximum Transmit EIRP (dBW):		14.1				
x. Transmit Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
TX04	0.125	2210.6	2210.5375	2210.6625	TT&C	
TX07	0.35	2250	2249.825	2250.175	Service Link	
TX11	2.6	2250	2248.7	2251.3	Service Link	
TX10	1.5	2250	2249.25	2250.75	Service Link	
TX14	10.7	2250	2244.65	2255.35	Service Link	
TX13	8	2250	2246	2254	Service Link	
TX03	0.075	2210.6	2210.5625	2210.6375	TT&C	
TX08	0.5	2250	2249.75	2250.25	Service Link	
TX09	0.625	2250	2249.6875	2250.3125	Service Link	
TX06	0.175	2250	2249.9125	2250.0875	Service Link	
TX12	5.5	2250	2247.25	2252.75	Service Link	
TX02	0.03	2210.6	2210.585	2210.615	TT&C	
TX05	0.275	2210.6	2210.4625	2210.7375	TT&C	
TX01	0.005	2210.6	2210.5975	2210.6025	TT&C	

y. Max. Power-Flux Densities													
			Angles of Arrival PFD						Geographic Region PFD				
(i) Beam Sub-Frequency (Lower Band Edge) (MHz)	(ii) Beam Sub-Frequency (Upper Band Edge) (MHz)	(iii) Reference Bandwidth (BW)	(iv) 0-2° (dBW/m²/BW)	(v) 2-5° (dBW/m²/BW)	(vi) 5-15° (dBW/m²/BW)	(vii) 15-20° (dBW/m²/BW)	(viii) 20-25° (dBW/m²/BW)	(ix) 25-90° (dBW/m²/BW)	(x) Southeastern Region (dBW/m²/BW)	(xi) Northeastern Region (dBW/m²/BW)	(xii) Western Region (dBW/m²/BW)	(xiii) Other Region (dBW/m²/BW)	(xiv) Energy Dispersal Bandwidth (kHz)
		4 kHz	-169.2	-169.2	-169.2	-169.2	-169.2	-169.1					

a. Beam ID:	QHGA	n. Beam Peak Flux Density at Command Threshold (dBW/m²):	
b. Beam Frequency (Lower Band Edge) (MHz):	2200	o. Peak Isotropic Antenna Gain (dBi):	15.6
c. Beam Frequency (Upper Band Edge) (MHz):	2290	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	
d. Polarization:	RHCP	q. Antenna Pointing Error (°):	0.5
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	1.5
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:	
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:	
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:	
j. Maximum Transmit EIRP Density (dBW/Ref BW):	-23.3	w. What information will be provided with the predicted antenna gain contours?:	
k. Maximum Transmit EIRP (dBW):	29.1		

x. Transmit Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
TX10	1.5	2250	2249.25	2250.75	Service Link	
TX13	8	2250	2246	2254	Service Link	

TX11	2.6	2250	2248.7	2251.3	Service Link	
TX04	0.125	2210.6	2210.5375	2210.6625	TT&C	
TX03	0.075	2210.6	2210.5625	2210.6375	TT&C	
TX02	0.03	2210.6	2210.585	2210.615	TT&C	
TX07	0.35	2250	2249.825	2250.175	Service Link	
TX06	0.175	2250	2249.9125	2250.0875	Service Link	
TX09	0.625	2250	2249.6875	2250.3125	Service Link	
TX14	10.7	2250	2244.65	2255.35	Service Link	
TX12	5.5	2250	2247.25	2252.75	Service Link	
TX01	0.005	2210.6	2210.5975	2210.6025	TT&C	
TX05	0.275	2210.6	2210.4625	2210.7375	TT&C	
TX08	0.5	2250	2249.75	2250.25	Service Link	

y. Max. Power-Flux Densities

			Angles of Arrival PFD						Geographic Region PFD				
(i) Beam Sub-Frequency (Lower Band Edge) (MHz)	(ii) Beam Sub-Frequency (Upper Band Edge) (MHz)	(iii) Reference Bandwidth (BW)	(iv) 0-2° (dBW/m²/BW)	(v) 2-5° (dBW/m²/BW)	(vi) 5-15° (dBW/m²/BW)	(vii) 15-20° (dBW/m²/BW)	(viii) 20-25° (dBW/m²/BW)	(ix) 25-90° (dBW/m²/BW)	(x) Southeastern Region (dBW/m²/BW)	(xi) Northeastern Region (dBW/m²/BW)	(xii) Western Region (dBW/m²/BW)	(xiii) Other Region (dBW/m²/BW)	(xiv) Energy Dispersal Bandwidth (kHz)
		4 kHz	-169.7	-169.7	-169.6	-169.6	-169.6	-169.5					

a. Beam ID:	QHEM	n. Beam Peak Flux Density at Command Threshold (dBW/m²):	
b. Beam Frequency (Lower Band Edge) (MHz):	2200	o. Peak Isotropic Antenna Gain (dBi):	5.6
c. Beam Frequency (Upper Band Edge) (MHz):	2290	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	
d. Polarization:	RHCP	q. Antenna Pointing Error (°):	0.5
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	1.5
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:	
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:	
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:	
j. Maximum Transmit EIRP Density (dBW/Ref BW):	-33.3	w. What information will be provided with the predicted antenna gain contours?:	
k. Maximum Transmit EIRP (dBW):	19.1		

x. Transmit Channels

(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
TX02	0.03	2210.6	2210.585	2210.615	TT&C	
TX09	0.625	2250	2249.6875	2250.3125	Service Link	
TX08	0.5	2250	2249.75	2250.25	Service Link	
TX12	5.5	2250	2247.25	2252.75	Service Link	
TX05	0.275	2210.6	2210.4625	2210.7375	TT&C	
TX13	8	2250	2246	2254	Service Link	
TX11	2.6	2250	2248.7	2251.3	Service Link	
TX01	0.005	2210.6	2210.5975	2210.6025	TT&C	
TX03	0.075	2210.6	2210.5625	2210.6375	TT&C	

TX04	0.125	2210.6	2210.5375	2210.6625	TT&C	
TX10	1.5	2250	2249.25	2250.75	Service Link	
TX06	0.175	2250	2249.9125	2250.0875	Service Link	
TX07	0.35	2250	2249.825	2250.175	Service Link	
TX14	10.7	2250	2244.65	2255.35	Service Link	

y. Max. Power-Flux Densities													
			Angles of Arrival PFD						Geographic Region PFD				
(i) Beam Sub-Frequency (Lower Band Edge) (MHz)	(ii) Beam Sub-Frequency (Upper Band Edge) (MHz)	(iii) Reference Bandwidth (BW)	(iv) 0-2° (dBW/m²/BW)	(v) 2-5° (dBW/m²/BW)	(vi) 5-15° (dBW/m²/BW)	(vii) 15-20° (dBW/m²/BW)	(viii) 20-25° (dBW/m²/BW)	(ix) 25-90° (dBW/m²/BW)	(x) Southeastern Region (dBW/m²/BW)	(xi) Northeastern Region (dBW/m²/BW)	(xii) Western Region (dBW/m²/BW)	(xiii) Other Region (dBW/m²/BW)	(xiv) Energy Dispersal Bandwidth (kHz)
		4 kHz	-179.7	-179.7	-179.6	-179.6	-179.6	-179.5					

a. Beam ID:	THGA	n. Beam Peak Flux Density at Command Threshold (dBW/m²):	
b. Beam Frequency (Lower Band Edge) (MHz):	2200	o. Peak Isotropic Antenna Gain (dBi):	15.6
c. Beam Frequency (Upper Band Edge) (MHz):	2290	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	
d. Polarization:	RHCP	q. Antenna Pointing Error (°):	0.5
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	1.5
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:	
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:	
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:	
j. Maximum Transmit EIRP Density (dBW/Ref BW):	-12.9	w. What information will be provided with the predicted antenna gain contours?:	
k. Maximum Transmit EIRP (dBW):	24.1		

x. Transmit Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
TX02	0.03	2210.6	2210.585	2210.615	TT&C	
TX14	10.7	2250	2244.65	2255.35	Service Link	
TX04	0.125	2210.6	2210.5375	2210.6625	TT&C	
TX09	0.625	2250	2249.6875	2250.3125	Service Link	
TX05	0.275	2210.6	2210.4625	2210.7375	TT&C	
TX08	0.5	2250	2249.75	2250.25	Service Link	
TX12	5.5	2250	2247.25	2252.75	Service Link	
TX01	0.005	2210.6	2210.5975	2210.6025	TT&C	
TX13	8	2250	2246	2254	Service Link	
TX10	1.5	2250	2249.25	2250.75	Service Link	
TX06	0.175	2250	2249.9125	2250.0875	Service Link	
TX03	0.075	2210.6	2210.5625	2210.6375	TT&C	
TX07	0.35	2250	2249.825	2250.175	Service Link	
TX11	2.6	2250	2248.7	2251.3	Service Link	

y. Max. Power-Flux Densities													
			Angles of Arrival PFD						Geographic Region PFD				

(i) Beam Sub-Frequency (Lower Band Edge) (MHz)	(ii) Beam Sub-Frequency (Upper Band Edge) (MHz)	(iii) Reference Bandwidth (BW)	(iv) 0-2° (dBW/m²/BW)	(v) 2-5° (dBW/m²/BW)	(vi) 5-15° (dBW/m²/BW)	(vii) 15-20° (dBW/m²/BW)	(viii) 20-25° (dBW/m²/BW)	(ix) 25-90° (dBW/m²/BW)	(x) Southeastern Region (dBW/m²/BW)	(xi) Northeastern Region (dBW/m²/BW)	(xii) Western Region (dBW/m²/BW)	(xiii) Other Region (dBW/m²/BW)	(xiv) Energy Dispersal Bandwidth (kHz)
		4 kHz	-159.2	-159.2	-159.2	-159.2	-159.2	-159.1					

a. Beam ID:	TROV	n. Beam Peak Flux Density at Command Threshold (dBW/m²):	
b. Beam Frequency (Lower Band Edge) (MHz):	2200	o. Peak Isotropic Antenna Gain (dBi):	5.9
c. Beam Frequency (Upper Band Edge) (MHz):	2201	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	
d. Polarization:	V	q. Antenna Pointing Error (°):	
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	Yes
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:	
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:	
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:	
j. Maximum Transmit EIRP Density (dBW/Ref BW):	-60.1	w. What information will be provided with the predicted antenna gain contours?:	
k. Maximum Transmit EIRP (dBW):	5.9		

x. Transmit Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
TR01	4	2411	2409	2413	Service Link	
TR02	4	2472	2470	2474	Service Link	

y. Max. Power-Flux Densities													
		Angles of Arrival PFD							Geographic Region PFD				
(i) Beam Sub-Frequency (Lower Band Edge) (MHz)	(ii) Beam Sub-Frequency (Upper Band Edge) (MHz)	(iii) Reference Bandwidth (BW)	(iv) 0-2° (dBW/m²/BW)	(v) 2-5° (dBW/m²/BW)	(vi) 5-15° (dBW/m²/BW)	(vii) 15-20° (dBW/m²/BW)	(viii) 20-25° (dBW/m²/BW)	(ix) 25-90° (dBW/m²/BW)	(x) Southeastern Region (dBW/m²/BW)	(xi) Northeastern Region (dBW/m²/BW)	(xii) Western Region (dBW/m²/BW)	(xiii) Other Region (dBW/m²/BW)	(xiv) Energy Dispersal Bandwidth (kHz)
		4 kHz	-200	-200	-200	-200	-200	-200					

S6. Space-to-Space (Receive) Beams

a. Beam ID:	REC2	n. Beam Peak Flux Density at Command Threshold (dBW/m²):	
b. Beam Frequency (Lower Band Edge) (MHz):	5150	o. Peak Isotropic Antenna Gain (dBi):	6.5
c. Beam Frequency (Upper Band Edge) (MHz):	5250	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	
d. Polarization:	RHCP	q. Antenna Pointing Error (°):	
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	Yes
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:	
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:	
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:	
j. Maximum G/T (dB/K):	-17.8	w. What information will be provided with the predicted antenna gain contours?:	
k. Minimum G/T (dB/K):			

l. Maximum Saturation Flux Density (dBW/m ²):						
m. Minimum Saturation Flux Density (dBW/m ²):						
x. Receive Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
REC2	80	5210	5170	5250	Service Link	

a. Beam ID:	RROV	n. Beam Peak Flux Density at Command Threshold (dBW/m²):				
b. Beam Frequency (Lower Band Edge) (MHz):	2400	o. Peak Isotropic Antenna Gain (dBi):	5.9			
c. Beam Frequency (Upper Band Edge) (MHz):	2500	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):				
d. Polarization:	V	q. Antenna Pointing Error (°):				
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):				
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	Yes			
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:				
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:				
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:				
j. Maximum G/T (dB/K):	-23	w. What information will be provided with the predicted antenna gain contours?:				
k. Minimum G/T (dB/K):						
l. Maximum Saturation Flux Density (dBW/m²):						
m. Minimum Saturation Flux Density (dBW/m²):						
x. Receive Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
RR01	4	2411	2409	2413	Service Link	
RR02	4	2472	2470	2474	Service Link	

a. Beam ID:	RSST	n. Beam Peak Flux Density at Command Threshold (dBW/m²):				
b. Beam Frequency (Lower Band Edge) (MHz):	14500	o. Peak Isotropic Antenna Gain (dBi):	8			
c. Beam Frequency (Upper Band Edge) (MHz):	14800	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):				
d. Polarization:	V	q. Antenna Pointing Error (°):				
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):				
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:				
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:				
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:				
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:				
j. Maximum G/T (dB/K):	-22.6	w. What information will be provided with the predicted antenna gain contours?:				
k. Minimum G/T (dB/K):						
l. Maximum Saturation Flux Density (dBW/m²):						
m. Minimum Saturation Flux Density (dBW/m²):						
x. Receive Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
RSST	0.004	14700	14699.998	14700.002	Service Link	

S7. Space-to-Space (Transmit) Beams

a. Beam ID:	TROV	m. Beam Peak Flux Density at Command Threshold (dBW/m ²):				
b. Beam Frequency (Lower Band Edge) (MHz):	2400	o. Peak Isotropic Antenna Gain (dBi):	5.9			
c. Beam Frequency (Upper Band Edge) (MHz):	2500	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	5.9			
d. Polarization:	V	q. Antenna Pointing Error (°):				
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):				
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	Yes			
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:				
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:				
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:				
j. Maximum Transmit EIRP Density (dBW/Ref BW):	-60.1	w. What information will be provided with the predicted antenna gain contours?:				
k. Maximum Transmit EIRP (dBW):	5.9					
x. Transmit Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
TR01	4	2411	2409	2413	Service Link	
TR02	4	2472	2470	2474	Service Link	

a. Beam ID:	TEC2	m. Beam Peak Flux Density at Command Threshold (dBW/m ²):				
b. Beam Frequency (Lower Band Edge) (MHz):	5150	o. Peak Isotropic Antenna Gain (dBi):	6.5			
c. Beam Frequency (Upper Band Edge) (MHz):	5250	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	6.5			
d. Polarization:	RHCP	q. Antenna Pointing Error (°):				
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):				
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	Yes			
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:				
h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:				
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:				
j. Maximum Transmit EIRP Density (dBW/Ref BW):	-79	w. What information will be provided with the predicted antenna gain contours?:				
k. Maximum Transmit EIRP (dBW):	1					
x. Transmit Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
TEC2	80	5210	5170	5250	Service Link	

a. Beam ID:	TSST	m. Beam Peak Flux Density at Command Threshold (dBW/m ²):	
b. Beam Frequency (Lower Band Edge) (MHz):	14500	o. Peak Isotropic Antenna Gain (dBi):	9
c. Beam Frequency (Upper Band Edge) (MHz):	14800	p. Isotropic Antenna Gain at 3 dB Beamwidth (dBi):	5
d. Polarization:	V	q. Antenna Pointing Error (°):	
e. Can the space station vary the channel bandwidth with on-board processing?:	No	r. Antenna Rotational Error (°):	
f. Is this a command beam? (Check box if Yes):	No	s. Will a GIMS container file containing all antenna contour data be provided?:	
g. Is the beam shapeable? (Check box if Yes):	No	t. Under what rules will the associated antenna contours be submitted?:	

h. Is the beam steerable? (Check box if Yes):	No	u. Provide a list of each orbital plane in which this antenna beam is used.:
i. Is the beam fed into transponders? (Check box if Yes):	No	v. Are all space stations in the NGSO constellation identical?:
j. Maximum Transmit EIRP Density (dBW/Ref BW):	-50	w. What information will be provided with the predicted antenna gain contours?:
k. Maximum Transmit EIRP (dBW):	-10	

x. Transmit Channels						
(i) Channel ID	(ii) Channel Bandwidth (MHz)	(iii) Center Frequency (MHz)	(iv) Channel Frequency (Lower Band Edge) (MHz)	(v) Channel Frequency (Upper Band Edge) (MHz)	(vi) Channel Type	(vii) Point of Communication
TSST	0.004	14700	14699.998	14700.002	Service Link	

S8. Attachments

Beam ID	Direction of Transmission	(i) Document Type	(ii) If Document Type is "Other", provide short description	(iii) File Name
QHEM	Space-to-Earth (Transmit)	Transmit Antenna Gain Contour Diagram	NGSO Antenna Gain Data	QHEM.gxt
QHGA	Space-to-Earth (Transmit)	Transmit Antenna Gain Contour Diagram	NGSO Antenna Gain Data	QHGA.gxt
REC2	Space-to-Space (Receive)	Receive Antenna Gain Contour Diagram		REC2.gxt
RHEM	Earth-to-Space (Receive)	Receive Antenna Gain Contour Diagram	NGSO Antenna Gain Data	RHEM.gxt
RHGA	Earth-to-Space (Receive)	Receive Antenna Gain Contour Diagram	NGSO Antenna Gain Data	RHGA.gxt
RROV	Earth-to-Space (Receive)	Receive Antenna Gain Contour Diagram	NGSO Antenna Gain Data	RROV.gxt
TEC2	Space-to-Space (Transmit)	Transmit Antenna Gain Contour Diagram		TEC2.gxt
THEM	Space-to-Earth (Transmit)	Transmit Antenna Gain Contour Diagram	NGSO Antenna Gain Data	THEM.gxt
THGA	Space-to-Earth (Transmit)	Transmit Antenna Gain Contour Diagram	NGSO Antenna Gain Data	THGA.gxt
TROV	Space-to-Space (Transmit)	Transmit Antenna Gain Contour Diagram		TROV.gxt
TROV	Space-to-Earth (Transmit)	Transmit Antenna Gain Contour Diagram	NGSO Antenna Gain Data	TROV.gxt