

S1. GENERAL INFORMATION Complete for all satellite applications.

| | | | | | |
|--|--------------------------|---|--|--|--|
| a. Space Station or Satellite Network Name: GALAXY-3R | | 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: 48 | | 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) | | |
| 5900 | M | 6425 | M | R | Fixed Satellite Service |
| 14000 | M | 14500 | M | R | Fixed Satellite Service |
| 3700 | M | 4200 | M | T | 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): 73.95 W | | b. Alternate Orbital Longitude (Degrees E/W): | | c. Reason for orbital location selection: PROVIDE C AND KU BAND SERVICE TO US FOR NEW CUSTOMERS | | | |
| 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: 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. |
|---------------------|---|---|---|
| CHUL | S | | US AND CARIBBEAN AND PUERTO RICO |
| CVUL | S | | US AND CARIBBEAN AND PUERTO RICO |
| CHDL | S | | US AND CARIBBEAN AND PUERTO RICO |
| CVDL | S | | US AND CARIBBEAN AND PUERTO RICO |
| KHUL | S | | US AND CARIBBEAN AND PUERTO RICO |
| KVUL | S | | US AND CARIBBEAN |
| KHDL | S | | US AND CARIBBEAN |
| KVDL | S | | US AND CARIBBEAN |
| OVDL | S | | US AND CARIBBEAN AND PUERTO RICO |

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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 | | | | | | | | | | | | 5.7 | -100.2 | | |
| CVU | R | | | | | | | | | | | | 3.7 | -98.2 | | |
| KHU | R | | | | | | | | | | | | 5.3 | -99.3 | | |
| KVUL | R | | | | | | | | | | | | 6.6 | -100.6 | | |
| CHD | T | | | | | | | | | | 41 | | | | | |
| CVD | T | | | | | | | | | | 40.5 | | | | | |
| KHD | T | | | | | | | | | | 48.3 | | | | | |
| KVDL | T | | | | | | | | | | 47.9 | | | | | |
| OVD | T | | | | | | | | | | 47.2 | | | | | |

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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 | | | | CHUL.gxt | | | | | |
| CVU | R | | | | CVUL.gxt | | | | | |
| KHU | R | | | | KHUL.gxt | | | | | |
| KVUL | R | | | | KVUL.gxt | | | | | |
| CHD | T | | | | CHDL.gxt | -152.4 | -152.1 | -152 | -151.9 | -151.8 |
| CVD | T | | | | CVDL.gxt | -152.4 | -152.1 | -152 | -151.9 | -151.8 |
| KHD | T | | | | KHDL.gxt | | | | | |
| KVDL | T | | | | KVDL.gxt | | | | | |
| OVD | T | | | | OVDL.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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Characteristics and
Certifications**

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. | | | | | | | | |