



(DRAFT COPY - Not for submission) Schedule S

312 File Number:

Filing Description

Question	Response
Description	Spectrum Five LLC seeks authority to serve the US market with a Netherlands-authorized satellite from the 95.15WL orbital location using the 17/24 GHz Broadcast-Satellite Service band

**Satellite
Information**

Question	Response
Select Orbit Type	GSO
Space Station or Satellite Network Name	BSSNET2A-95W
Estimated Lifetime of Satellite(s) From Date of Launch	15 Years
Will the space station(s) operate on a Common Carrier basis?	No

Operating Frequency Bands (4)

Nature of service	Description	Frequency Band (s)	Mode Type
17/24 GHz Broadcasting-Satellite Service		17300.0 MHz -17700.0 MHz	Transmit
Other Satellite Service (please specify)	TTC	17300.0 MHz -17700.0 MHz	Transmit
17/24 GHz Broadcasting-Satellite Service		24750.0 MHz -25250.0 MHz	Receive
Other Satellite Service (please specify)	TTC	24750.0 MHz -25250.0 MHz	Receive

Orbital Information For Geostationary Satellites

Section	Question	Response
Orbital Longitude Information	Orbital Longitude	95.0 degrees
	Hemisphere of Orbital Longitude	W
Longitudinal Tolerance or East /West Station-Keeping	Toward West	0.05 degrees
	Toward East	0.05 degrees
Inclination Excursion or North /South Station-Keeping Tolerance	Inclination Excursion or North /South Station-Keeping Tolerance	0.05 degrees
Eccentricity	Max. Eccentricity	3.14
Antenna Axis Attitude Accuracy	Roll	0.1 degrees
	Pitch	0.1 degrees
	Yaw	0.1 degrees

Receiving Beams 1:

Question	Response
Beam ID	SWRL
Receive Beam Frequency	24750.0 MHz -25250.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	47.0 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Min. Cross-Polar Isolation within Service Area	30.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	17.5 dB/K
Min. Saturation Flux Density	-104.0 dBW/m2
Max. Saturation Flux Density	-84.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	gxt file

Receiving Beams 2:

Question	Response
Beam ID	SWRR
Receive Beam Frequency	24750.0 MHz -25250.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	47.0 dBi
Antenna Pointing Error	0.1 degrees

Antenna Rotational Error	0.1 degrees
Min. Cross-Polar Isolation within Service Area	30.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	17.5 dB/K
Min. Saturation Flux Density	-104.0 dBW/m2
Max. Saturation Flux Density	-84.0 dBW/m2
Co- or Cross Polar Mode	C
Service Area Description	gxt file

**Receiving
Beams 3:**

Question	Response
Beam ID	CRBR
Receive Beam Frequency	24752.0 MHz -24756.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	45.5 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Min. Cross-Polar Isolation within Service Area	30.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
G/T at Max. Gain Point	16.5 dB/K
Min. Saturation Flux Density	-104.0 dBW/m2
Max. Saturation Flux Density	-84.0 dBW/m2
Co- or Cross Polar Mode	C

Service Area Description

Receiving Channels (15)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
CMD1	1.0	24753.0	TT&C
CMD2	1.0	24755.0	TT&C
CU25	26.0	25124.92	Feeder Link
CU23	26.0	25095.76	Feeder Link
CU21	26.0	25066.6	Feeder Link
CU19	26.0	25037.44	Feeder Link
CU17	26.0	25008.28	Feeder Link
CU15	26.0	24979.12	Feeder Link
CU13	26.0	24949.96	Feeder Link
CU11	26.0	24920.8	Feeder Link
CU09	26.0	24891.64	Feeder Link
CU07	26.0	24862.48	Feeder Link
CU05	26.0	24833.32	Feeder Link
CU03	26.0	24804.16	Feeder Link
CU01	26.0	24775.0	Feeder Link

Transmitting Beams 1:

Question	Response
Beam ID	CONR
Transmit Beam Frequency	17300.0 MHz -17700.0 MHz
Beam Type	Fixed
Polarization	RHCP
Peak Gain	37.1 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Min. Cross-Polar Isolation within Service Area	30.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-13.9 dBW/Hz
Max. Transmit EIRP	60.2 dBW
Co- or Cross Polar Mode	C
Service Area Description	ITU codes: USA, HWA, ALS, PTR

Max. Power Flux Density

* BW:	* Southeastern Region (dbW/m ² /BW):	* Northeastern Region (dbW/m ² /BW):	* Western Region (dbW/m ² /BW):	* Other Regions (dbW/m ² /BW):
1.0 MHz	-116.3	-120.3	-122.3	-120.3

Transmitting Beams 2:

Question	Response
Beam ID	CONL

Transmit Beam Frequency	17300.0 MHz -17700.0 MHz
Beam Type	Fixed
Polarization	LHCP
Peak Gain	37.1 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Min. Cross-Polar Isolation within Service Area	30.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-13.9 dBW/Hz
Max. Transmit EIRP	60.2 dBW
Co- or Cross Polar Mode	C
Service Area Description	ITU CODES: USA, HWA, ALS, PTR

Max. Power Flux Density

* BW:	* Southeastern Region (dBW/m ² /BW):	* Northeastern Region (dBW/m ² /BW):	* Western Region (dBW/m ² /BW):	* Other Regions (dBW/m ² /BW):
1.0 MHz	-116.3	-120.3	-122.3	-120.3

Transmitting Beams 3:

Question	Response
Beam ID	CRBT
Transmit Beam Frequency	17302.0 MHz -17307.0 MHz
Beam Type	Fixed
Polarization	RHCP

Peak Gain	45.5 dBi
Antenna Pointing Error	0.1 degrees
Antenna Rotational Error	0.1 degrees
Min. Cross-Polar Isolation within Service Area	30.0 dB
Polarization Switchable	
Polarization Alignment Relative to the Equatorial Plane	45.0 degrees
Max. Transmit EIRP Density	-16.5 dBW/Hz
Max. Transmit EIRP	43.5 dBW
Co- or Cross Polar Mode	C
Service Area Description	

Max. Power Flux Density

* BW:	* Southeastern Region (dBW/m ² /BW):	* Northeastern Region (dBW/m ² /BW):	* Western Region (dBW/m ² /BW):	* Other Regions (dBW/m ² /BW):
1.0 MHz	-138.9	-138.9	-138.9	-118.9

Transmitting Channels (15)

Channel ID	Channel Bandwidth (MHz)	Center Frequency s (MHz)	Feeder Link, Service Link or TT&C
TEL1	1.0	17303.0	TT&C
CD25	26.0	17674.92	Service Link
CD23	26.0	17645.76	Service Link
CD21	26.0	17616.6	Service Link
CD19	26.0	17587.44	Service Link
CD17	26.0	17558.28	Service Link
CD15	26.0	17529.12	Service Link
CD13	26.0	17499.96	Service Link
CD11	26.0	17470.8	Service Link
CD09	26.0	17441.64	Service Link
CD07	26.0	17412.48	Service Link
CD05	26.0	17383.32	Service Link
CD03	26.0	17354.16	Service Link
CD01	26.0	17325.0	Service Link
TEL2	1.0	17306.0	TT&C

Certification Questions

Question	Response
Are the applicable service area coverage requirements of 25.143(b)(2) (ii) and (iii), or 25.144(a)(3)(i), or 25.145 (c)(1) and (2), or 25.146(i)(1) and (2), or 25.148(c), or 25.225 met?	Yes
Are the applicable frequency tolerances of 25.202(e) and out-of-band emission limits of 25.202(f)(1),(2), and (3) met?	Yes
Are the cessation of emissions requirements of 25.207 met?	Yes
Are the applicable power-flux-density limits of 25.208 met, and is the appropriate technical showing provided within the application?	Yes
For NGSO applications, are the applicable equivalent-power-flux-density limits of 25.208 met, and is the appropriate technical showing provided within the application?	N/A
Are the applicable full-frequency-reuse requirements of 25.210 met?	Yes
If the application is for a 17/24 GHz BSS space station, will it be operated at an offset location with full power and interference protection in accordance with 25.262(b)?	Yes

Attachments

File Name	Beam	Field	Attachment Type	Description
<u>SWRL.gxt</u>	SWRL	GSO Antenna Gain Contour Data	GXT file (*.gxt)	Southwest Region spot beam
<u>SWRR_SA.gxt</u>	SWRL	Service Area Diagram	GXT file (*.gxt)	-2 dB contour of Southwest Region spot beam
<u>SWRR.gxt</u>	SWRR	GSO Antenna Gain Contour Data	GXT file (*.gxt)	Southwest Region spot beam
<u>SWRR_SA.gxt</u>	SWRR	Service Area Diagram	GXT file (*.gxt)	-2 dB contour of Southwest Region spot beam
<u>CRBR.gxt</u>	CRBR	GSO Antenna Gain Contour Data	GXT file (*.gxt)	Caribbean TTC
<u>CRBRSA.gxt</u>	CRBR	Service Area Diagram	GXT file (*.gxt)	-4 dB of Caribbean contour
<u>CONTR.gxt</u>	CONR	GSO Antenna Gain Contour Data	GXT file (*.gxt)	CONUS+
<u>CONTL.gxt</u>	CONL	GSO Antenna Gain Contour Data	GXT file (*.gxt)	CONUS +
<u>CRBT.gxt</u>	CRBT	GSO Antenna Gain Contour Data	GXT file (*.gxt)	Caribbean TTC
<u>CRBTSA.gxt</u>	CRBT	Service Area Diagram	GXT file (*.gxt)	