## GUSA Licensee LLC Page 1 of 4

## Exhibit 2: Earth Station Technical Information for STA Request

GUSA Licensee LLC (together with its parent Globalstar, Inc., ("Globalstar")) is seeking a 60-day Special Temporary Authority ("STA"), in order to operate a second-generation feeder link antenna at Globalstar's new gateway earth station facility at Naalehu, Hawaii. Under the proposed STA, Globalstar will use this earth station antenna to test and validate a new waveform. Grant of this STA will allow Globalstar to operate this earth station antenna while the application for permanent authority for this antenna remains pending. This antenna has the following parameters:

File Numbers:	SES-LIC-20201211-01365
Call Sign:	E202198 (SPS-2)
Proposed STA term:	July 1, 2021 – August 29, 2021
Location:	Naalehu, Hawaii
Latitude:	19° 0' 52.9" N
Longitude:	155° 39' 48.9" W
Transmit frequency:	5091 – 5250 MHz
Receive frequency:	6875 – 7055 MHz
Polarization:	RHCP & LHCP
Antenna Size:	6 meters
Gain:	Tx: 47.5 dBi at 5.150 GHz Rx: 51.2 dBi at 6.975 GHz
Max. antenna height:	28.5 feet above ground level
Necessary bandwidth:	Transmit bandwidth is 159 MHz Receive bandwidth is 180 MHz Maximum carrier bandwidth is 2.5 MHz Maximum carrier bandwidth for test waveforms is 4.5 MHz for transmit and 200 kHz for receive
Carrier:	See table below:

GUSA Licensee LLC Page 2 of 4

Frequency	T/R Mode &	Emission	Maximum	Maximum	Modulation
Band (MHz)	Polarization	Designator	EIRP	<u>EIRP</u>	
			<u>(dBW)</u>	Density	
				<u>(dBW/4kHz)</u>	
5091 - 5092	Tx- LHCP	76K0F2D	68	55.2	FM subcarrier on
					telecommand carrier
6875.95 – 6877.15	Rx – LHCP	7K00G1D			Telemetry carrier
5096 - 5250	Tx – L/RHCP	1M23XXX	59	34.1	White noise modulated
6900 - 7055	$\mathbf{R}\mathbf{x} = \mathbf{I} / \mathbf{R} \mathbf{H} \mathbf{C} \mathbf{P}$	1M23XXX			White noise modulated
0700 - 7055	$\mathbf{K}\mathbf{X} = \mathbf{L}_{i}\mathbf{K}\mathbf{I}\mathbf{C}\mathbf{I}$	111237777			carrier for testing
5096 - 5250	$T_{x} - I/RHCP$	NON	59	59	Unmodulated CW for
5070 5250		11011	57	57	testing
6900 - 7055	Rx - L/RHCP	NON			Unmodulated CW for
0,000 ,000		1010			testing
5096 - 5250	Tx – L/RHCP	1M23G7W	55	30.1	CDMA/voice and data
(000 7055		1) (22 07)			
6900 - 7055	Rx - L/RHCP	1M23G/W			CDMA/voice and data
5096 - 5250	Tx – L/RHCP	1M23G2W	55	30.1	CDMA/for single-carrier
					AMSS
6900 - 7055	Rx – L/RHCP	1M23G2W			CDMA/for single-carrier
					AMSS
6900 - 7055	Rx – L/RHCP	2M50G2D			Direct sequence CDMA
					for single-carrier
					telemetry data
6900 - 7055	Rx – L/RHCP	2M50G7D			Direct sequence CDMA
					for single-carrier
					telemetry data
5096 - 5250	Tx – L/RHCP	2M46G7W	55	27.1	CDMA/voice and data
6900 - 7055	Rx – L/RHCP	2M46G7W			CDMA/voice and data
5006 5250			55	27.1	CDMA/fan ains 1.
3090 - 3230	1X - L/KHCP	21VI40G2W	55	27.1	UDIVIA/IOR SINgle-carrier
(000 7055					
6900 - 7055	KX - L/KHCP	21V146G2W			CDIVIA/IOR single-carrier
5001.29		4080020	60	50	Alvioo Tolocommond comica
5091.58 -	IX-LITUP	40K002D	00	50	relecommand carrier
5091.02	1	1	1		

GUSA Licensee LLC Page 3 of 4

6875.9 -	Rx – LHCP	70K0G7D			Telemetry carrier
6879.1					
5096 - 5250	Tx – L/RHCP	4M50G7D	72.2	41.5	Burst mode packet data
					with $\pi/2$ -BPSK
					modulation
6900 - 7055	Rx – L/RHCP	200KG7D			Burst mode packet data with BPSK modulation
6900 - 7055	Rx – L/RHCP	230KG7D			Burst mode packet data with BPSK modulation
6900 - 7055	Rx – L/RHCP	280KG7D			Burst mode packet data with BPSK modulation

Maximum EIRP: 72.2 dBW (for all carriers combined on the second s
--

Maximum EIRP Density: 59 dBW/MHz

Satellite: S2115 (U.S.-licensed Globalstar Big LEO MSS system)

Orbital Location: NGSO (1414 km altitude, 52 degree inclination)

- Elevation Angle (E/W): 5 degrees to 90 degrees
- Azimuth (E/W): 0 degrees to 360 degrees
- Satellite: HIBLEO-X GLOBALSTAR 2.0 (French-licensed Globalstar Big LEO MSS system)
- Orbital Location: NGSO (1414 km altitude, 52 degree inclination)

Elevation Angle (E/W): 5 degrees to 90 degrees

Azimuth (E/W): 0 degrees to 360 degrees

NOTE: The telecommand / telemetry carrier with designator 40K0G2D/70K0G7D are for GLOBALSTAR 2.0 satellites while the telecommand / telemetry carrier with designator 76K0F2D/7K00G1D are for current Globalstar satellites (Call Sign S2115).

GUSA Licensee LLC Page 4 of 4

## Information on MLS Sites

For the Naalehu, Hawaii, Globalstar gateway site, there are five potential MLS sites, i.e., Category III airports, within the 200 nautical mile coordination distance. The Naalehu, Hawaii site is located at 19° 0' 52.9986" N, 155° 39' 48.9996" W. The airports are:

ITO	Hilo International Airport ITO,
	approximately 56.9 nautical miles from Naalehu
KOA	Ellison Onizuka Kona International Airport,
	approximately 58.1 miles away
MUE	Waimea-Kohala Airport,
	approximately 83.4 nautical miles away
UPP	Upolu Airport,
	approximately 97.3 nautical miles away
BSF	Bradshaw Army Airfield,
	approximately 86.2 nautical miles away

This site falls outside the 39.8 nautical mile maximum trigger distance for MLS/MSS coordination. In addition, based on a directory used for MLS coordination purposes, and to the best of its knowledge, Globalstar believes that MLS is not active at any of these airport sites.