NTIA Space Record Data Form

NTIA requires the following data for space related experiments using government shared spectrum. For each transmit frequency, please provide the data for both ends of the transmit-receive link. Use Part A to describe the satellite to ground information. Part B is for all ground to space transmit links.

Part A: Space to Earth Downlink Data

Satellite Transmitter Data

Transmit Frequency: 2270.2 MHz		
Satellite Name: Orbital Test Bed 3 (OTB-3)		
Data Field	**Data Answer**	**Description/Comments**
Polarization (XAP)	Antenna 1: XAP01 = J Antenna 2: XAP02 = R	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Orientation (XAZ)	XAZ = EC	NB= NARROWBEAM EC = EARTH COVERAGE
Antenna Dimension (XAD)	Antenna 1: ANTENNA GAIN: 0dBi BEAMWIDTH: 360° XAD01 00G360B Antenna 2: ANTENNA GAIN: 3dBi BEAMWIDTH: 70° XAD02 03G070B	(NTIA format (XAD), EXAMPLE, XAD01 16G030B)
Type of satellite (State = SP) (City = geo or non)	Type = Non-geostationary	Choose either: Geostationary or Nongeostationary
For Geostationary	Longitude = N/A	IF ANY SATELLITES ARE GEOSTATIONARY, REPORT ITS LATITUDE AS 000000N (XLA AND/OR RLA) AND REPORT ITS LONGITUDE (XLG AND/OR RLG).
For Nongeostationary (Orbital Data)	INCLINATION ANGLE 98.32° APOGEE IN KILOMETERS 750 PERIGEE IN KILOMETERS 750 ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 0.6637	IF ANY SATELLITES ARE NONGEOSTATIONARY, REPORT ITS INCLINATION ANGLE, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS, ORBITAL PERIOD IN HOURS AND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM, THEN T01, EXAMPLE, REM04 *ORB,98.0IN00510AP00510PE001.58H01NRT01, AND FOR SPACE-TO-SPACE

	THE NUMBER OF SATELLITES IN THE SYSTEM 1 ORB,98.3IN00750AP00750PE1.6637H01N RT01	COMMUNICATIONS WITH ANOTHER NONGEOSTATIONARY SATELLITE ADD AN ADDITIONAL *ORB FOR IT ENDING IN R01, EXAMPLE, REM05 *ORB,72.9IN03209AP00655PE013.46H01NRR01

Earth Station Data (Receiver)

State (RSC)	RSC = Norway	
City Name (RAL)	RAL = Svalbard	
Latitude (DDMMSS)	Lat = 78 14 00 N	78° 14' N
Longitude (DDDMMSS)	Lon = 15 24 00 E	15° 24' E
Antenna Polarization (RAP)	RAP = R	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (RAZ)	RAZ = V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN 42dBi, BEAMWIDTH 1.5°, AZIMUTHAL RANGE 000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 450 THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 7.3 RAD01 42G002B000-360A00450H007	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes: 1.		

Part B: Ground Stations, Earth to Space link data:

Earth Station Transmitter Data

Transmit Frequency: 2080.25 MHz		
State (XSC)	XSC = Norway	
City Name (XAL)	XAL = Svalbard	
Latitude (DDMMSS)	Lat = 78 14 00 N	78° 14' N
Longitude (DDDMMSS)	Lon = 15 24 00 E	15° 24' E
Antenna Polarization (XAP)	XAP = R	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	XAZ = V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN 41dBi, BEAMWIDTH 1.6°, AZIMUTHAL RANGE 000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 450 THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 7.3 XAD01 41G002B000-360A00450H007	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
Satellite Receive Specifications		
Polarization (RAP)	RAP = R	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Azimuth (RAZ)	RAZ = EC	NB= NARROWBEAM EC = EARTH COVERAGE
Dimension (RAD)	ANTENNA GAIN: 3dBi BEAMWIDTH: 70° RAD01 03G070B	(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
Type of satellite (State = SP) City = G/No	Type = Non Geostationary	Choose either: Geostationary or Nongeostationary

For Geostationary	Longitude = N/A	IF ANY SATELLITES ARE GEOSTATIONARY, REPORT ITS LATITUDE AS 000000N (XLA AND/OR RLA) AND REPORT ITS LONGITUDE (XLG AND/OR RLG).
For Nongeostationary (Orbital Data)	INCLINATION ANGLE 98.3° APOGEE IN KILOMETERS 750 PERIGEE IN KILOMETERS 750 ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 0.6637 THE NUMBER OF SATELLITES IN THE SYSTEM 1 ORB,98.3IN00750AP00750PE1.6637H01NRR01	IF ANY SATELLITES ARE NONGEOSTATIONARY, REPORT ITS INCLINATION ANGLE, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS, ORBITAL PERIOD IN HOURS AND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM, THEN T01, EXAMPLE, REM04 *ORB,98.0IN00510AP00510PE001.58H01NRT01, AND FOR SPACE-TO-SPACE COMMUNICATIONS WITH ANOTHER NONGEOSTATIONARY SATELLITE ADD AN ADDITIONAL *ORB FOR IT ENDING IN R01, EXAMPLE, REM05 *ORB,72.9IN03209AP00655PE013.46H01NRR01