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

Data Field		**Data Answer**
Polarization (XAP)		XAP =R
Orientation (XAZ)		XAZ = EC
Antenna Dimension (XAD)		ANTENNA GAIN= 5.0 dBi BEAMWIDTH= 360 Degrees XAD = 5G360B
Type of satellite		Type = Nongeostationary
For Geostationary		Longitude = N/A
For Nongeostationary	C50-Possible Injection Orbit	INCLINATION ANGLE 97.6 dregrees, APOGEE IN KILOMETERS 530, PERIGEE IN KILOMETERS 530, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 59, THE NUMBER OF SATELLITES IN THE SYSTEM 1, ORB = 97.6IN00530AP00530PE0001.59H01NRT01
	C49- Possible Injection Orbit	INCLINATION ANGLE 37.0 Degrees, APOGEE IN KILOMETERS 555, PERIGEE IN KILOMETERS 555, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 60, THE NUMBER OF SATELLITES IN THE SYSTEM 1, ORB = 37.0IN00555AP00555PE001.60H01NRT01
	C53-Possible Injection Orbit	INCLINATION ANGLE 98.4 Degrees, APOGEE IN KILOMETERS 730, PERIGEE IN KILOMETERS 730, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 66, THE NUMBER OF SATELLITES IN THE SYSTEM 1, ORB = 98.4IN00730AP00730PE001.66H01NRT01
	Nominal Operational Orbit	INCLINATION ANGLE 98.0 degrees , APOGEE IN KILOMETERS 650, PERIGEE IN KILOMETERS 650, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 63, THE NUMBER OF SATELLITES IN THE SYSTEM 1,

		ORB = 98.0IN00650AP00650PE001.63H01NRT01
State (RSC)		RSC = Guam
City Name (RAL)		RAL = Harmon
Latitude (DDMMSS)		Lat = 13.5125 N
Longitude (DDDMMSS)		Lon = 144.8247 E
Antenna Polarization (RAP)		RAP = R
Antenna Azimuth (RAZ)		RAZ = V05
Antenna Dimensions (RAD)		ANTENNA GAIN 46.5 dBi, BEAMWIDTH 0.7 degrees, AZIMUTHAL RANGE 0-360 degrees, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 45 THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 4.5 RAD = 47G001B000-360A00045H005

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

Earth Station Transmitter Data

Transmit Frequency: 2081		
State (XSC)	XSC =Guam	
City Name (XAL)	XAL = Harmon	
Latitude (DDMMSS)	Lat =13.5125 N	
Longitude (DDDMMSS)	Lon = 144.8247	
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 35dBi, BEAMWIDTH .5 degrees, AZIMUTHAL RANGE 0 to 360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 72 THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 4 XAD = 35G005B000-360A00072H004	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 5 dBic_____ BEAMWIDTH 90 degrees RAD =	(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
Type of satellite (State = SP) City = G/No	Type = No (nongeostationary)	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	C50-Possible Injection Orbit	INCLINATION ANGLE 97.6 dregrees, APOGEE IN KILOMETERS 530, PERIGEE IN KILOMETERS 530, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 59, THE NUMBER OF SATELLITES IN THE SYSTEM 1, ORB = 97.6IN00530AP00530PE0001.59H01NRT01	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
	C49- Possible Injection Orbit	INCLINATION ANGLE 37.0 Degrees, APOGEE IN KILOMETERS 555, PERIGEE IN KILOMETERS 555, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 60, THE NUMBER OF SATELLITES IN THE SYSTEM 1, ORB = 37.0IN00555AP00555PE001.60H01NRT01	
	C53-Possible Injection Orbit	INCLINATION ANGLE 98.4 Degrees, APOGEE IN KILOMETERS 730, PERIGEE IN KILOMETERS 730, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 66, THE NUMBER OF SATELLITES IN THE SYSTEM 1, ORB = 98.4IN00730AP00730PE001.66H01NRT01	
	Nominal Operational Orbit	INCLINATION ANGLE 98.0 degrees , APOGEE IN KILOMETERS 650, PERIGEE IN KILOMETERS 650, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 63, THE NUMBER OF SATELLITES IN THE SYSTEM 1, ORB = 98.0IN00650AP00650PE001.63H01NRT01	