SFCG-38

SFCG ACTION ITEM No. 38/19

SFCG Satellite Database

SUBJECT: SFCG Satellite Database

SUPPORTING MATERIAL: SF38-30R1/D, SFCG Res. A12-1R3, SFCG Res. A21-2R5

SFCG POSITION:
The SFCG satellite database uses a web-based interface for satellite data entry and retrieval and is available for members to populate (http://www.sfcgdatabase.org/). This database is maintained in order for SFCG member agencies to more easily select suitable frequencies for their missions in bands which they share with other SFCG member agencies and to provide the data needed to perform sharing analyses to facilitate pre-coordination.

At SFCG-38, many SFCG member agencies have provided contributions summarizing their future missions. SFCG reminds member agencies to enter or update their missions and non-member missions in the SFCG satellite database in accordance to SFCG Resolution A21-2R5, and to use the contents of the SFCG database as a data source for frequency selection and inter-system analyses.

SFCG encourages members to submit input papers summarizing future missions since these papers act as a convenient vehicle for identifying potential future conflicts and for alerting other members of a potential need for system pre-coordination. However, it is emphasized that submitting an input paper is not a substitute for entering missions into the SFCG satellite database, although this has been the practice of several member agencies. SFCG should allow pre-coordination of a system to begin before that system is entered in the SFCG satellite database. As per SFCG Resolution A12-1R3, SFCG should instruct each member agency to consider a final coordination request from another agency when that agency has entered necessary technical data in the SFCG database for coordination to proceed based on that technical data.

ACTIONS TO BE TAKEN:

1. All SFCG member agencies **to populate the database with their satellite mission data and supply current data on national non-SFCG member spacecraft in the bands used by SFCG members whenever possible, to keep the database up to date**, and to provide feedback. This is to be done on an on-going basis in advance of making a final coordination request. As a minimum, this information should be at least as up-to-date as the input paper version of the system: i.e., other agencies should not have to look through the paper versions of the data in order to find complete system information.

2. Following the entry of information to SFCG satellite database, all SFCG member agencies are to provide summaries of their missions including satellite name, frequencies, emissions, earth station locations, and date of bringing into use to SFCG-39 **by using the template provided in the Annex to this action item**. SFCG member agencies are encouraged to also provide information within their mission summaries on the active and passive RF sensors on-board their missions.

3. NASA to continue maintaining the database and to submit an updated database report to SFCG-39 including a list of enhancements and updated user documentation.

RESPONSIBLE PERSONS:

Actions 1 and 2: SFCG head of delegations and their designees
Actions 3: B. Zaki (NASA)

DUE DATES:

Action 1:	ongoing
Action 2:	2 weeks prior to SFCG-39
Action 3:	ongoing maintenance with report due 3 weeks prior to SFCG-39 and updated 3 days prior to SFCG-39.

Annex

Example of a SFCG input document with mission descriptions and summary frequency tables

Note #1: This annex is provided only as an example of the possible information structure. The actual satellite data are not necessarily representative of a specific SFCG member agency's missions.
Note #2: New or modified material from the previous year's SFCG contribution is in red font.

Future [SFCG Member Agency] missions

1
Mission name: MISSION #1
General objective: Automatic transfer of payload to ISS. Two launches per year planned on average.
ITU filing name: MISSIONA
Launch Date: October 2009
Orbit: Docked to ISS.
LTAN (if SSO):
Number of satellites: 1
Main ground station(s): Links via ARTEMIS and TDRS.

2
Mission name: MISSION #3
General objective: The mission will provide the wind-profile measurements to establish advancements in atmospheric modeling and analysis. Main instrument: atmospheric laser Doppler (lidar).
ITU filing name: MISSIONC
Launch Date: March 2011
Orbit: LEO 400 Km sun synchronous dawn-dusk
LTAN (if SSO):
Number of satellites: 1
Main ground station(s): Kiruna (Sweden) and Barrow (US-Alaska)

3
Mission name: MISSION #4
General objective: Earth observation. See-ice thickness measurement over the poles plus low latitude ice-fields measurements. Main instrument: altimeter.
ITU filing name: MISSIOND
Launch Date: 2014
Orbit: LEO polar
LTAN (if SSO):
Number of satellites: 1
Main ground station(s): Kiruna (Sweden)

[Agency Name] Satellites (Including Third-Party Support)

Note #1: Missions are listed in ascending order by center frequency
Note #2: Tables are divided by link type
Note #3: New or modified material from the previous year's SFCG contribution is in red font.

TABLE 1: *EARTH - SPACE & SPACE - SPACE (FWD)*

SATELLITE	FREQUENCY (MHz)	DIRECTION	EMISSION (or bandwidth)	D.B.I.U.	NOTES/ Comments	Entered in Database
MISSION #1	2029.45	E-S	3K00G1D	2009/10		Yes
MISSION #2	2034.2000	E-S	500KG7DAW	IN ORBIT		Yes
MISSION #3	2077.4000	E-S	600KG1D	2011/03		Yes
MISSION #4	2080.2917	E-S	6M00G7D	2014	New Mission	No

TABLE 2: *SPACE - EARTH & SPACE - SPACE (RTN)*

SATELLITE	FREQUENCY (MHz)	DIRECTION	EMISSION	MAX TX POWER	MAX ANTENNA GAIN	D.B.I.U.	NOTES/ Comments	Only active in view of associated earth station	Entered in Database
MISSION #1	2205.0000	S-E	600KG1D			2009/10			Yes
MISSION #2	2237.2732	S-E	1M00G1D			IN ORBIT			Yes
MISSION #3	2242.0000	S-E	2M40G2XXN			2011/03			Yes
MISSION #4	2265.5000	S-S (RTN)	2M40G2XXN			2014	New Mission		No