

Resolution 15-3

**PROPOSAL FOR REALIGNMENT OF FREQUENCY ALLOCATIONS
IN THE
32 GHz SPACE RESEARCH (DEEP SPACE) (SPACE-to-EARTH) BAND**

The SFCG,

CONSIDERING

- a) that the Space Research Service (deep space) use of the 31.8-32.3 GHz band is allocated on a Primary basis and the evolution and radio-technological improvements attendant to space research science in higher frequency bands is consistent with ITU-R principles;
- b) that, to satisfy requirements, present and future deep space science missions rely heavily on the 31.8-32.3 GHz band for space-to-Earth links with improved performances available in terms of increased data transmission rates and reduced effects of interplanetary charged particles;
- c) that signals received on Earth from spacecraft in deep space are inherently extremely weak and highly susceptible to interference of all kinds;
- d) that Space Research sharing with many radio Services has been documented as feasible;
- e) that Space Research sharing with the Inter-Satellite Service and with airborne elements of the Radionavigation Service has been documented as not feasible in ITU-R Recommendation SA.1016,

RESOLVES

1. that member agencies urge their administrations to review current allocations in the frequency range 31.8-32.3 GHz with a view to improving the sharing conditions between the Space Research Service (deep space) (space-to-Earth) and the other currently allocated Services;
2. that SFCG Recommendation 14-1 be used as the basis for calculating the interference effects to deep space Earth station receivers in this frequency range;
3. that member agencies encourage their administrations to consider revision of current allocations between 31.8-33.4 GHz for the Radionavigation Service and between 32.0-33.0 GHz for Inter-Satellite Service including the possibility of restricting *aeronautical* Radionavigation systems to the band 32.3-33.4 GHz and exclusion of the Inter-Satellite Service from the band 32.0-32.3 GHz.