RECOMMENDATION 608 (REV.WRC-07)

Guidelines for consultation meetings established in Resolution 609 (Rev.WRC-07)

The World Radiocommunication Conference (Geneva, 2007),

considering

a) that in accordance with the Radio Regulations (RR), the band 960-1 215 MHz is allocated on a primary basis to the aeronautical radionavigation service (ARNS) in all the ITU Regions;

b) that WRC-2000 introduced a co-primary allocation for the radionavigation-satellite service (RNSS) in the frequency band 1 164-1 215 MHz (subject to the conditions specified under No. **5.328A**), with a provisional limit on the aggregate power flux-density (pfd) produced by all the space stations within all radionavigation-satellite systems at the Earth's surface of −115 dB(W/m^2) in any 1 MHz band for all angles of arrival;

c) that WRC-03 revised this provisional limit and decided that the level of −121.5 dB(W/m^2) in any 1 MHz for the aggregate equivalent pfd (epfd) applying for all the space stations within all RNSS systems, taking into account the reference worst-case ARNS system antenna characteristics described in Annex 2 of Recommendation ITU-R M.1642-2, is adequate to ensure the protection of the ARNS in the band 1 164-1 215 MHz;

d) that WRC-03 decided that to achieve the objectives in *resolves* 1 and 2 of Resolution **609 (Rev.WRC-07)**, administrations operating or planning to operate RNSS systems will need to agree cooperatively through consultation meetings to achieve the level of protection for ARNS systems, and shall establish mechanisms to ensure that all potential RNSS system operators are given full visibility of the process but that only real systems are taken into account in the calculation of the aggregate epfd,

recommends

1 that in the implementation of *resolves* 5 of Resolution **609 (Rev.WRC-07)**, in the frequency band 1 164-1 215 MHz, the maximum pfd produced at the surface of the Earth by emissions from a space station in the RNSS, for all angles of arrival, should not exceed −129 dB(W/m^2) in any 1 MHz band under free space propagation conditions;

2 that the RNSS characteristics listed in the Annex 1, used when applying the methodology contained in Recommendation ITU-R M.1642-2, as well as the calculated aggregate epfd in dB(W/m^2) in each 1 MHz in the range 1 164-1 215 MHz, should be made available in electronic format by the consultation meetings.

ANNEX 1 TO RECOMMENDATION 608 (REV.WRC-07)

List of RNSS system characteristics and format of the result of the aggregate epfd calculation to be provided to the Radiocommunication Bureau for publication for information

I RNSS systems characteristics

I-1 RNSS ITU publication reference

RNSS network name	Network ID	ITU Publication reference	IFIC
		AR11/A/....	
		API/A/....	
		AR11/C/....	
		CR/C/....	

I-2 Non-GSO satellite system constellation parameters

For each non-GSO satellite system, the following constellation parameters should be provided to the Bureau for publication for information:

N: number of space stations of the non-GSO system

K: number of orbital planes

h: satellite altitude above the Earth (km)

I: inclination angle of the orbital plane above the Equator (degrees).

Satellite index *I*	RAAN $\Omega_{i,0}$ (degrees)	Argument of latitude $E_{i,0}$ (degrees)
1	...	...
2	...	...
...	...	...
N	...	...

I-3 GSO satellite system longitude

For each GSO satellite network, the satellite longitude should be provided to the Bureau for publication for information, as follows:

$LonGSO_i$: longitude of each of the GSO satellites (degrees).

I-4 Maximum non-GSO space station pfd versus the elevation angle at the Earth's surface (worst 1 MHz)

For the non-GSO satellite system space stations, the maximum pfd in the worst 1 MHz versus elevation angle should be provided to the Bureau for publication for information in a table format as follows:

Elevation angle (each 1°)	pfd (dB(W/(m^2 · MHz)))
−4	pfd (−4°)
−3	pfd (−3°)
…	…
…	…
90	pfd (−90°)

I-5 Maximum GSO space station pfd versus latitude and longitude at the Earth's surface (worst 1 MHz)

For each GSO satellite network space station, the maximum pfd in the worst 1 MHz, defined as the 1 MHz in which the pfd of the signal is maximum versus latitude and longitude should be provided to the Bureau for publication for information in a table format as follows:

Longitude (each 1°)	0	1	…	360
Latitude (each 1°)	Maximum pfd dB(W/m^2) in worst 1 MHz			
−90	pfd (0, −90)	…	…	…
−89	…	…	…	…
…	…	…	…	…
…	…	…	…	…
90	…	…	…	pfd (360, 90)

I-6 Spectrum for GSO satellite networks or non-GSO satellite systems

For each GSO satellite network or non-GSO satellite system, the level of spectrum emission in each 1 MHz relative to the spectrum value at the worst 1 MHz of the whole band (1 164-1 215 MHz) should also be provided to the Bureau for publication for information.

II Results of the aggregate epfd calculation in the worst 1 MHz of the 1 164-1 215 MHz band

Maximum aggregate epfd in dB(W/m^2) in the worst-case megahertz in the range 1 164-1 215 MHz.