RESOLUTION 147 (WRC-07)

Power flux-density limits for certain systems in the fixed-satellite service using highly-inclined orbits having an apogee altitude greater than 18 000 km and an orbital inclination between 35° and 145° in the band 17.7-19.7 GHz

The World Radiocommunication Conference (Geneva, 2007),

considering

a) that the band 17.7-19.7 GHz is heavily used in many countries for fixed service (FS) applications including mobile communication network infrastructure;

b) that in the band 17.7-19.7 GHz, there are planned or existing non-geostationary (non-GSO) fixed-satellite service (FSS) systems using satellites with highly-inclined orbits having an apogee altitude greater than 18 000 km and an orbital inclination between 35° and 145°;

c) that in this frequency band, ITU-R has conducted studies of the impact on FS stations of the pfd produced or to be produced by non-GSO FSS systems of the types described in *considering b)*;

d) that one of the types of systems referred to in *considering b)* under the ITU filing name USCSID-P, was notified and brought into use under the applicable power flux-density (pfd) levels for the 17.7-19.7 GHz band in Table **21-4**:

−115	dB(W/(m^2 · MHz))	for	0°	≤	δ <	5°
−115 + 0.5(δ − 5)	dB(W/(m^2 · MHz))	for	5°	≤	δ ≤	25°
−105	dB(W/(m^2 · MHz))	for	25°	<	δ ≤	90°

where δ is the angle of arrival above the horizontal plane in degrees,

recognizing

1 that studies carried out in ITU-R of the systems described in *considering b)*, demonstrated that the system described in *considering d)* did not cause harmful interference to the fixed service in the 17.7-19.7 GHz band;

2 that one FSS system of the type described in *considering d)* has been operating since 1995 at the −115/−105 dB(W/(m^2 · MHz)) levels and there has been no complaint of harmful interference to any station in the fixed service of any administration,

resolves

that in the band 17.7-19.7 GHz, FSS space stations currently operating in a system of the type described in *considering d)* and for which advance publication information was received by the Radiocommunication Bureau before 5 July 2003, as well as space stations with the same parameters in a future notice for a replacement system, shall continue to be subject to the power flux-density limits:

−115	dB(W/(m^2 · MHz))	for	0°	≤	δ <	5°
−115 + 0.5(δ− 5)	dB(W/(m^2 · MHz))	for	5°	≤	δ ≤	25°
−105	dB(W/(m^2 · MHz))	for	25°	<	δ ≤	90°

where δ is the angle of arrival above the horizontal plane in degrees.