

**Results of theoretical compatibility studies**

▪ Aggregate interference

Calculation 1: **maximum tolerable density/or number of active UWB transmitters**

	FCC limits (-41.3 dBm/MHz)	
Maximum active UWB transmitters	34 Millions in a area covered by a zonal beam	For FSS, GSO-satellite based methodologies
Maximum active UWB transmitters	400 Millions in a area covered by a global beam	For FSS, NTIA methodologies
Maximum density of active UWB transmitters	885 /km <sup>2</sup>	For MSS feeder links, GSO-satellite based methodologies
Maximum density of active UWB transmitters	1686/km <sup>2</sup>	For MSS feeder links, NTIA methodologies

**7.11.2.2 Conclusions**

Preliminary results indicate that the aggregate interference into the satellite receiver is unlikely to be problematic and no changes to UWB e.i.r.p limits are proposed.

**7.12 Amateur/Amateur Satellite Services**

**7.12.1 Summary table**

Victim Service	Radiocommunication
	Amateur ( Satellite) service

- Application  
System description      Receiver stations in the Amateur (Satellite) Service
- Frequency band  
A. 5650-5850 MHz (taken as main example)  
B. 3400-3500 MHz  
C. 2300-2450 MHz  
D. 1260-1300 Mhz  
X. 10000-10500 MHz
- Receiver station  
Station description      Low noise narrow band receiver
- Receiver characteristics  
Bandwidth                      3 kHz or 500 Hz  
Noise figure / Noise temperature                      1 dB  
Signal model                      Signals to be received are SSB-Telephony and/or morse telegraphy
- Receiver antenna  
Type                              Parabolic dish  
Gain                              A. 30 dBi boresight/ 0 dBi off boresight  
                                        B. 27 dBi boresight/ 0 dBi off boresight  
                                        C. 25 dBi boresight/ 0 dBi off boresight  
                                        D. 22 dBi boresight/ 0 dBi off boresight  
                                        X. 33 dBi boresight/ 0 dBi off boresight
- Model                              -

