

RM-11339: Additional Spectrum for MSS ATC

SBE White Paper

RM-11339 is in response to a request by Globalstar, Inc., to almost triple its useable Mobile Satellite Service (MSS) Ancillary Terrestrial Component (ATC) spectrum. Globalstar deploys MSS ATC base stations for cellular-like Commercial Mobile Radio Service (CMRS) and is currently authorized for 2,487.5–2,493 MHz. They have asked the FCC to allow it to use the entire internationally allocated MSS ATC band, which is 2,483.5–2,500 MHz better known by our members as grandfathered TV BAS Channel A10.

Whether using 5.5 MHz of spectrum, or 16.5 MHz of spectrum, doesn't matter much insofar as its impact on TV BAS Channel A10; either way, it would be a spectrum allocations "train wreck." The FCC's International Bureau in IB Docket 02-364, and its predecessor rulemaking, IB Docket 01-185 seemed to think that this cellular-like CMRS operation and TV Pickup operations can simultaneously use the same frequencies in the same area.

SBE filed detailed comments and reply comments to both proceedings to no avail. SBE currently has a pending Petition for Reconsideration to the IB 02-364 rulemaking. So while the ET Docket 95-18 and ET Docket 00-258 found that TV (BAS) operations were mutually exclusive with similar CMRS operations at 1,990–2,110 MHz. Somehow, the opposite conclusion has been reached by IB.

The other MSS ATC conflict is with Broadband Radio Service (BRS) Channel 1, at 2,496–2,502 MHz. BRS1 was created by the WT Docket 03-66 rulemaking, as a new home for MDS Channel 1. With MSS ATC limited to 2,487.5–2,493 MHz there is a 3 MHz guard band between the two services (BRS1 will also likely be a cellular-like, high-density application). However, should the FCC grant the Globalstar petition, actual spectrum overlap between MSS ATC and BRS1 would be created. As you might expect, the industry association representing BRS licensees, the Wireless Cable Association International, or WCAI, has indicated in its FCC filings that it is opposed to an expansion of MSS ATC spectrum.

In the IB 02-364 rulemaking, SBE proposed re-farming the three 2.5 GHz TV BAS channels, A8, A9 and A10, 12 MHz wide digital channels, and then repacking those channels beginning at 2,450 MHz (the current lower edge of Channel A8). Doing so would then place the top of re-farmed TV BAS Channel A10d at 2,486 MHz. Thus, the SBE RM-11339 comments indicated that an expanded MSS ATC band could be made to work, but just to 2,486–2,496 MHz, so as to not cause spectrum overlap with MSS ATC, and only after the three 2.5 GHz TV BAS channels have been re-farmed to A8d (2,450–2,462 MHz), A9d (2,462–2,474 MHz), and A10d (2,474–2,486 MHz). Although this will create adjacent-band problems, an adjacent-band problem is far less problematic than a co-channel problem. Finally, a re-farmed A10d could be made available to all TV BAS eligible parties, and not just to grandfathered licensees.

