



LAND MOBILE COMMUNICATIONS COUNCIL

June 9, 2010

Mr. Melvin Spann
Mobility Division
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: TSB-88 Studies for 4 kHz Occupied Bandwidth
FCC File Nos. 0003959495 and 0004042455

Dear Mr. Spann:

This responds to Mr. Scot Stone's letter of May 17, 2010, which sought confirmation of the position of the Land Mobile Communications Council ("LMCC") regarding the use of TSB-88 when coordinating 4 kHz bandwidth equipment that is offset from incumbent 25 kHz channel bandwidth equipment by 12.5 kHz in the 470-512 MHz band. We hereby confirm to you that LMCC has concluded that a TSB-88 analysis is not required for applications to use narrowband equipment with a 4 kHz occupied bandwidth on frequencies 12.5 kHz offset from a 25 kHz incumbent, because there is no spectral overlap under those circumstances.

It is LMCC's position that a licensee can only utilize the bandwidth authorized by the emission designator on the license. For a 25 kHz channel, the maximum authorized occupied bandwidth cannot exceed 20 kHz. For the current variety of very narrowband equipment, that is 4 kHz. Thus, as shown in the attached chart, there is no overlapping occupied bandwidth.

TSB-88 was developed on the assumption that there is some spectrum energy overlap, although for certain types of signals, the out of bandwidth emission will be very low compared to the peak levels. That is the case for the current variety of 4 kHz bandwidth equipment. Without spectrum overlap, interference can be assumed to be *de minimus*.

To confirm that assumption, LMCC conducted a number of simulations using TSB-88C. Four kilohertz equipment was placed at various geographic locations from incumbent stations. The 4 kHz station was placed at 12.5 kHz from the incumbent 20 kHz occupied bandwidth stations. In no case was a level of five percent interference even approached. From the tests, it can be inferred that if a TSB-88C analysis were applied in any situation, the results would be favorable.

LMCC's position on this matter is limited, however, to the current variety of 4 kHz equipment. Equipment that requires a wider bandwidth, *e.g.* 6.0 kHz, will required additional study, but that cannot be done until actual spectrum signatures are available.

On behalf of LMCC, we trust this fully responds to your concerns.

Sincerely,

Kenton Sturdevant

Kenton Sturdevant
President

Attachment

cc: Robert J. Keller, Esq.
Mr. Mark Lidikay
Mr. Vincent Perez
Mr. Scot Stone
LMCC Board of Directors