

Broadcasters' Desktop Resource

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... edited by Barry Mishkind - the Eclectic Engineer

Focus on Regulation

A Timely Plan for Channels 5 & 6

The Broadcast Maximization Committee

[September 2014] With AM Improvement on the minds of many, this is a good time to revisit a proposal which would accomplish many desirable goals toward helping AM operators.

With the move from analog to digital television, the FCC has a once in a lifetime opportunity to allocate valuable broadcast spectrum to respond to the enormous demand for new radio service.

DTV MAY BENEFIT RADIO

TV Channels 5 and 6 (76 to 88 MHz) have become available due to the migration of nearly all TV stations away from the low VHF band as part of the DTV transition.

In response to a request to allow this spectrum to be used for FM broadcasting, the FCC solicited comments in July 2008. The Broadcast Maximization Committee (BMC) was formed to develop a comprehensive plan for this spectrum and was the only party to offer such a plan which is detailed below.

The benefits to all segments of the radio industry are monumental. AM service can be rescued and modernized. The FM service will include more and improved space for LPFM stations. In addition, the NCEFM service can expand in response to the large demand for additional stations.

The FCC's most basic regulatory obligation is to allocate frequencies fairly, efficiently and equitably in response to the demand for its use. BMC has made a major contribution to this cause by demonstrating this broadcast spectrum could be utilized in a manner that truly maximize benefits to all sectors of the radio industry.

THE PROPOSAL

The BMC's technical proposal consists of several aspects.

First of all, it is a framework to develop a specific long-term plan to eliminate the sharing arrangement within the existing FM band between full service and low power FM stations and the potential for interference affecting both services.

Secondly, the plan provides an allocation scheme to allow the migration of most if not all AM stations to FM, and allows these stations to operate digitally. Third, the plan creates numerous new digital quality noncommercial educational voices in local communities.

Options also exist to form national emergency or informational channels or other uses.

A BETTER PATH TO DIGITAL

The newly created channels would be all-digital from the outset. By starting fresh with all-digital, the allocation efficiencies inherent in digital broadcasting are maximized.

Furthermore, it incentivizes consumers to buy new digital receivers so they can pick up the new channels. Since these new digital receivers would also decode the current HD FM stations, it serves the existing FM broadcasters as well.

COMPATIBLE WITH DRM

Channel bandwidth is proposed at 100 kHz (instead of the analog FM bandwidth of 200 kHz).

Currently, Digital Radio Mondiale is building a system called DRM+ which incorporates exactly the requirements necessary to operate within the parameters the BMC proposes. We also believe that iBiquity could modify their digital-only mode to operate in this fashion.

The new digital channels would be able to accommodate up to four LPFM's per authorized 100 kHz channel (so NCEFM encoder costs could be shared) and, of course, this would also allow up to three sub-channels for primary class stations to offer additional programming.

In its initial filing with the FCC, it was proposed to divide up the TV 5/6 spectrum into 117 distinct 100 kHz channels. The eight channels immediately below the current NCEFM band (87.0 to 87.7 MHz) would be used for an expansion of the noncommercial educational service. The next 100 channels (below 87.0 MHz) are suggested for the AM migration. Eight channels would be created for a protected LPFM service.

BMC has conducted a feasibility study and allocation plan which proves that all existing AM stations could migrate (if they chose to do so) into this newly allotted radio spectrum while replicating their current 2 mV/m footprint. BMC further recommends a nationwide channel for use by NOAA and Homeland Security.

WHAT ABOUT TV LICENSEES?

There is also the issue of the last few remaining TV Channel 5 and 6 full service and LPTV stations.

BMC has suggested alternate channels. There is another possibility: which is a somewhat new development – the potential of "sharing" spectrum with the few TV stations left on channels 5 or 6 by utilization of "Smart Radios" which can scan the band and determine if there are radio signals present and then decode whichever system is being transmitted (e.g. iBiquity Digital-only or DRM+).

Currently, the proposal advanced by BMC in MB Docket No. 07-294, et al., is under consideration at the FCC. The comment and reply comment periods closed in Oct, 2008. There is no time frame set for the FCC to act. It is expected that further proceedings and additional opportunities will be needed to explore details of the proposal in the future.

The priority for this proceeding will be up to the Commission Chairman, Tom Wheeler.

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Additional information on The Broadcast Maximization Committee can be found on the committee's website, www.broadmax.org

Questions and/or comments can be directed to: info@broadmax.org



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