FCC Begins Process of Reallocating Television Spectrum for Broadband Use

On November 30, 2010, the Federal Communications Commission (FCC or Commission) released a Notice of Proposed Rulemaking (Notice) proposing the first steps toward reallocating a portion of the spectrum currently used by broadcast television stations for “flexible” use, including fixed and mobile broadband services.¹ The FCC’s overall plan, set forth in the Notice and the National Broadband Plan,² is to encourage television broadcasters to consolidate their spectrum usage by sharing channels and transmission facilities, and to repack the remaining stations into the very high frequency (VHF) and lower ultra high frequency (UHF) portion of the current television broadcast spectrum.

Broadcast Television and the FCC’s Broadband Initiative

294 megahertz (MHz) of spectrum in five VHF and UHF bands (referred to in the Notice as the U/V Bands) are currently allocated principally for use by television broadcasting services.³ Some or all of these frequencies also are used by a number of other services on a co-primary, secondary, or unlicensed basis.

As part of its National Broadband Plan, the FCC announced its intent “to repurpose up to 120 megahertz from the broadcast television bands for new wireless uses through, in part, voluntary contributions of spectrum to an incentive auction.”⁴ The proposals in the Notice, if adopted, would not by themselves fulfill this goal. Rather, they would facilitate further actions by the FCC to realize it. Congressional action will be required to implement these plans fully—specifically, legislation authorizing the FCC to conduct “incentive auctions” in which broadcasters could voluntarily relinquish spectrum and receive part of the proceeds realized from the auctioned spectrum.⁵

³ The television VHF Band includes 54-72 MHz (Channels 2-4), 76-88 MHz (Channels 5-6), and 174-216 MHz (Channels 7-13). The UHF Band consists of 470 -698 MHz (Channels 14-51, except for Channel 37 (608-614 MHz)). TV channel 37 is reserved for radio astronomy and is not part of the reallocation proposal.
⁴ Notice ¶ 1; see also National Broadband Plan at 75-76. The Plan’s overall goal is to provide 300 MHz of new broadband spectrum within five years, and 500 MHz within 10 years. Id. at 75.
⁵ Several bills are pending that would authorize such auctions. See 111th Congress, H.R.5947 (Boucher/Stearns); S.3756 (Rockefeller); S.6310 (Kerry/Snowe).
Proposals in the Notice

In the Notice, the FCC proposes the following first steps toward its goals:

- Adding fixed and mobile allocations for the current broadcast television spectrum on a co-primary basis;
- Permitting TV channel sharing; and
- Improving VHF television reception.

Adding Fixed and Mobile Allocations. The FCC proposes to add allocations for fixed and mobile services to the Frequency Allocation Table for the U/V Bands (all existing broadcast television frequencies except channel 37) on a co-primary basis. Actual fixed and mobile operations would require further Commission action to adopt technical and other rules for the new services, followed by the license application process, which could include an auction, unless existing broadcast licensees were permitted to provide mobile services on a broader basis than currently allowed.

Permitting TV Channel Sharing. The FCC believes that two or more television stations could share a 6-MHz channel and associated transmission facilities, just as some stations currently broadcast multiple video (multicast) and non-video “subchannel” data streams.6 By reducing the total amount of spectrum required for television broadcasting, the proposal will make available spectrum for mobile and other uses. The FCC envisions that “two stations could generally broadcast one primary [high definition “(HD)’] video stream each over a shared six-megahertz channel or more than two stations broadcasting in SD (not HD) could share a six-megahertz channel.”7 The Commission anticipates that the spectrum would be shared dynamically by the stations, rather than giving each station a specific amount of spectrum, in order to accommodate programming with higher or lower transmission rates. According to the Notice, such choices would be left to the sharing licensees and “[t]he only requirement would be that all stations utilizing a shared channel be required to retain at least enough spectrum to operate one SD channel.”8 The FCC proposes to apply the following principles to guide its future actions:

Channel Sharing Will Be Voluntary. The Notice makes clear that the FCC intends channel sharing to be voluntary. The FCC proposes to encourage participation by offering broadcast licensees the opportunity to participate in incentive auctions, in which they would receive some of the proceeds realized in the auctions. The Commission believes that such a system will benefit not only broadband users but broadcast licensees as well — particularly those “serving minority, foreign language and niche interests that might have smaller audiences and lower income.”9 It believes that the shared channels will reduce operating costs because the stations will be sharing transmission equipment and staff.

Broadcast Stations Will Be Protected. Under the proposals in the Notice, broadcast stations will receive protection with respect to both interference and other interests such as cable carriage. Specifically, each station sharing a channel will be entitled to the same carriage rights on cable and direct broadcast satellite systems as they currently enjoy. The Notice states that the FCC intends:

> to provide for an orderly transition of a portion of the U/V Bands to flexible use, in a manner that will minimize any impact on over-the-air television broadcasting and the consumers it serves, both off-the-air and through multichannel video program distributors. In this regard, broadcast television stations and other primary services operating on the spectrum to be recovered will be co-primary with and be protected from interference...

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6 Only current licensees, holders of construction permits, and applicants will be eligible for sharing spectrum. However, the Commission may allow Class A and low power stations to share channels with full power stations as well as with each other.
7 Notice ¶ 19. The FCC recognizes that some engineers question whether sharing a 6-MHz channel will permit both stations to “offer the highest quality HD programming simultaneously” and could limit future DTV services “such as expansion of high-definition programming and deployment of mobile television service.” It proposes to consider those issues. Id. ¶ 19.
8 Id. ¶ 20.
9 Id. ¶ 15.
from new broadband services for as long as they remain on channels in that spectrum.\textsuperscript{10}

Notwithstanding this statement, previous studies prepared by the Commission staff indicate that achieving the Commission’s goal of repurposing 120 MHz of U/V spectrum for flexible use will require a large number of stations to share spectrum or require a reduction in service area if all current users of the spectrum are to continue to operate.

\textbf{Broadcast Rule Changes.} The FCC intends to change its broadcast rules as little as possible to accommodate the change to flexible spectrum usage in the U/V Bands:

In designing a channel sharing plan that will result in the more efficient use of television spectrum and free channels for flexible use, our goal will be to retain as much of our existing policy framework for allocating, licensing, and operating television stations as possible. . . . [O]nly where necessary to implement a shared channel licensing scheme will we seek to change our existing policies and rules.\textsuperscript{11}

Stations sharing a single channel will each “continue to be licensed and operated separately, have its own call sign and be separately subject to all of the Commission’s obligations, rules, and policies. . . .,”\textsuperscript{12} including requirements relating to children’s programming, closed captioning, political broadcast requirements, the Emergency Alert System, and indecency rules. The Notice is silent, however, as to how responsibility for the technical rules will be shared by the sharing stations.

\textbf{Television Channel Repacking.} In order to obtain the maximum benefit for future broadband services, the FCC recognizes the need to free blocks of spectrum nationwide for flexible use. Looking forward, the National Broadband Plan contemplates a new band plan for the U/V Bands that would concentrate television broadcasting into the VHF bands and the lower UHF frequencies, leaving the higher UHF frequencies available for flexible use. While the precise repacking plan would be the subject of future Commission actions, the Commission recognizes that sharing could result in the loss of service when a station moves its transmitter site in order to share with another station. It seeks comment on whether it should allow stations to use on-channel digital transmission systems or other technologies to reach service areas that might be lost in those circumstances.

\textbf{Improving VHF Television Reception.} The FCC recognizes that UHF spectrum, in particular, is “highly desirable for flexible use” and also that broadcasters have “had some difficulty in ensuring consistent reception of VHF signals.”\textsuperscript{13} The Commission appears to be anticipating resistance from broadcasters to its apparent intention to repack television broadcasters into the VHF and lower UHF spectrum. In the Notice, the FCC proposes to mitigate VHF reception problems by (i) allowing broadcasters on VHF frequencies in Zone I to increase their radiated power,\textsuperscript{14} and (ii) imposing improved performance standards on indoor television antennas. Stations proposing to increase power, however, would be required to protect existing stations. The FCC also seeks comments regarding other possible means to improve VHF television reception.

\textbf{Comments Sought on Additional Issues}

The FCC seeks comment on several other issues potentially raised by the channel-sharing proposal:

- **Noncommercial educational (NCE) stations.** Should NCE stations and commercial stations be allowed to share channels, particularly where the channel is currently reserved for NCE operation?
- **Media ownership rules.** What are the implications of channel sharing for the local TV ownership rule, the

\textsuperscript{10} Id. ¶¶ 14-15, 30-34.
\textsuperscript{11} Id. ¶ 21.
\textsuperscript{12} Id.
\textsuperscript{13} Id. ¶ 42.
\textsuperscript{14} Id. ¶¶ 48-53. Zone I comprises essentially the Northeast population centers of the country. Raising the power of stations near the Canadian and Mexican borders would also require re-negotiating existing agreements with those countries concerning the operation of television stations near the border.
radio/TV cross-ownership rule, and the newspaper/broadcast cross-ownership rule?

Comments will be due 45 days after publication of the Notice in the Federal Register, and reply comments will be due 75 days after publication.

We will be following these developments in future advisories. If you have any questions, please contact any of the attorneys named below or your principal contact within Arnold & Porter LLP.

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