

2. In a pending DTV proceeding, the Commission has asked whether the rules should permit TV translators to down-convert to analog format a signal originally broadcast by the parent station in digital format. The Commission seeks comment here on how these issues relate to the appropriate definition of a "digital TV translator" and what, if any, limitations should be imposed on the ability of a translator to alter the signal of the main station.

3. The Commission seeks comment on two transmission modes for digital TV translator rebroadcasts: (1) Heterodyne frequency conversion that simply shifts the signal information on the translator input channel onto a different TV output channel and (2) a "regenerative" mode that also processes the input signal to correct errors in the digital bit stream and mitigate signal distortion.

4. The *NPRM* seeks comment on the merits of local message insertion and the permissible nature and duration of such messages. Should digitally transmitted local messages be limited to the types of messages permitted for analog TV translators? The Commission also seeks comment on available technical means for local message insertion and transmission and related costs.

5. The *NPRM* requests comment on whether a digital translator operator should be permitted some flexibility to alter the content or video format of a DTV broadcast signal prior to retransmission, provided it has been given the consent of its primary DTV station. As one means, the *NPRM* explains permitting DTV translators to rebroadcast in the same output channel multiple video program streams of different broadcast stations, pursuant to arrangements with the involved TV station licensees, and seeks comment on the technical and economic feasibility of this concept.

6. The Commission also proposes to allow digital TV translators to receive DTV broadcast signals using any of the signal delivery means available to analog TV translators (e.g., a TV translator relay or other suitable terrestrial microwave source).

7. The *NPRM* seeks comment on how to distinguish between digital LPTV and TV translator stations. The Commission questions whether it is likely that digital LPTV and TV translator stations will serve different purposes. The Commission asks if a digital LPTV station be defined as a station that may originate programming more than 30 seconds per hour. How should this benchmark and the term "program origination" be interpreted given the

differences between analog TV and DTV signals?

8. The Commission tentatively concludes that digital LPTV stations should be subject to the same minimum video program service requirement applicable to DTV broadcast and digital Class A stations. Accordingly, digital LPTV stations would be required to use some of their channel capacity to provide a free video programming service of at least NTSC technical quality, intended for reception by the general public.

9. The Commission also tentatively concludes that digital LPTV stations should be permitted to use their bit stream dynamically to transmit one or more digital programs in any DTV video format. Upon meeting the minimum video service requirement, the Commission believes that digital LPTV stations should be permitted to offer all of the ancillary and supplemental services, including subscription services, allowed for DTV and digital Class A TV broadcasters. They should also be permitted to enter into arrangements with outside parties with regard to ancillary and supplementary service operations in the manner permitted for DTV broadcasters. The Commission also asks: what circumstances, if any, would justify exclusion of a minimum free over-the-air digital video program service requirement?

10. The *NPRM* proposes to apply to digital LPTV stations the public interest related obligations to analog LPTV stations (e.g., certain provisions for broadcast by candidates for political office).

11. To facilitate digital service opportunities, the *NPRM* proposes to make available for digital LPTV and translator stations VHF channels 2–13, inclusive, and UHF channels 14–59, inclusive (except channel 37 reserved for radio astronomy). The Commission proposes the use of these channels for both on-channel analog to digital station conversions and for new digital LPTV and TV translator stations and alternatively seeks comment on whether these channels should be made available only when applicants can demonstrate the unavailability of lower TV channels. These stations will be required to operate on a non-interfering basis to primary users of these channels and also protect earlier-authorized secondary users. Thus, digital LPTV and TV translator operations would not preclude or impede service from DTV stations or new primary services.

12. The Commission seeks comment on whether TV channels 60–69 (746 MHz to 806 MHz) should be made

available during the DTV transition for new digital LPTV and translator stations and/or digital conversions of existing analog stations possibly excluding the channels reallocated for use by public safety entities.

13. The *NPRM* proposes the following protected signal contour values for digital LPTV and TV translator stations, as calculated from the F(50,90) propagation method in Section 73.625(b)(1) of the Commission's rules: 43 dBu for stations on channels 2–6, 48 dBu for stations on channels 7–13, and 51 dBu for stations on channels 14–69.

14. The *NPRM* proposes to base standards for accepting digital LPTV and TV translator station application proposals on D/U protection ratios for analysis of predicted interference. The Commission proposes to apply to digital LPTV and translator interference analysis the co-channel D/U ratios for "DTV-into-analog TV," "Analog TV-into-DTV" and "DTV-into-DTV" given in Section 73.623(c)(2) and the DTV-to-DTV co-channel adjustment formula and analog-to-DTV co-channel adjustment table given in 47 CFR Section 73.623(c)(3). The Commission proposes that analog LPTV and TV translator station proposals protect 1st adjacent channel digital LPTV and TV translator stations based on the following D/U ratios, the values given in our DTV rules: "Lower analog TV-into-DTV" -48 dB and "Upper analog TV-into-DTV" -49 dB. The *NPRM* seeks comment on D/U ratios for first adjacent channel protection from digital LPTV and translator stations.

15. In this proceeding, the Commission will adopt a methodology for interference analysis to be used in the application process for accepting digital LPTV and TV translator applications. One possible choice would be the contour protection approach now used to evaluate analog LPTV and TV translator station proposals. As an alternative to the contour overlap approach, the Commission contemplates basing application acceptance on its more flexible DTV interference prediction methodology possibly tailored to reflect the characteristics of transmitting antennas typically used by LPTV and translator stations.

16. The *NPRM* seeks comments on proposals and on issues related to co-located adjacent channel operations involving digital LPTV and TV translator stations. The Commission also seeks comment on any other technical means for demonstrating interference avoidance that could facilitate channel availability for digital LPTV and TV translator service without compromising