



FCC Releases Rules for Distributed Transmission Systems

On Friday November 7, 2008, the FCC published a *Report and Order* (R&O) containing the text of its Rules regulating the licensing and operation of Digital Television Distributed Transmission System Technologies (DTS). The Commission voted to adopt the Rules by circulation earlier in the week. (See *TV TechCheck* from November 3, 2009 for additional background information). Below is a summary of those Rules.

The Commission stated in the Introduction:

“We find that these rules will improve some DTV stations’ ability to serve more of their viewers within their service areas. We expect that DTS will be especially useful in mountainous areas where single transmitters have been unable to reach viewers in valleys or those blocked by elevated terrain. Furthermore, DTS may be a useful tool for stations to prevent some loss of service to existing analog viewers resulting from changes to the station’s service area in the transition to digital service.”

The FCC took the following actions:

- Defined a DTS service area as being comparable to that of a station’s single transmitter facility. That is, a DTS broadcaster will be allowed to apply to provide service to a distance comparable to the hypothetically maximized service distance that could be reached by a single-transmitter as defined in the “Table of Distances” shown below:

Channel	Zone (see 47 C.F.R. § 73.609)	F(50,90) field strength	Distance from reference point
2-6	1	28 dBu	108 km. (67 mi.)
2-6	2 and 3	28 dBu	128 km. (80 mi.)
7-13	1	36 dBu	101 km. (63 mi.)
7-13	2 and 3	36 dBu	123 km. (77 mi.)
14-51	1, 2 and 3	41 dBu	103 km. (64 mi.)

- The coverage for each DTS transmitter is determined based on the F(50,90) field strength given in the Table of Distances.
- Adopted a waiver policy to permit a station to use DTS if doing so will enable it to continue to serve its existing analog viewers who would otherwise lose service as a result of its transition to digital service.
- Afford primary regulatory status to the multiple transmitters used in a DTS network within the areas that such DTS transmitters are authorized to serve.
- Require that each transmitter facility in a DTS system conform to the maximum power, antenna HAAT and emission mask requirements applicable to single-transmitter DTV stations.
- Evaluate DTS applications using the same interference standard used for DTV stations’ post-transition operations.

- DTS transmitters will not be separately licensed, but will be part of a linked group covered by one construction permit and license.
- Permit a licensee of multiple digital Class A TV, digital LPTV, and/or digital TV translator stations to operate through interconnected single-frequency DTS networks, but will continue to separately license each station in this interconnected single-channel network.
- Approved on an experimental basis the use of DTS technologies by a single digital Class A TV, digital LPTV or digital TV translator station to provide service within its authorized service area.

The R&O is available on the FCC's Web site at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-256A1.pdf.

