

Subpart C—Digital Audio Broadcasting

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§ 73.401 Scope.

This subpart contains those rules which apply exclusively to the digital audio broadcasting (DAB) service, and are in addition to those rules in Subparts A, B, C, G and H which apply to AM and FM broadcast services, both commercial and noncommercial.

§ 73.402 Definitions.

(a) *DAB*. Digital audio broadcast stations are those radio stations licensed by the Commission and use the In-band On-channel ("IBOC") system for broadcasting purposes.

(b) *In Band On Channel DAB System*. A technical system in which a station's digital signal is broadcast in the same spectrum and on the same channel as its analog signal.

(c) *Hybrid DAB System*. A system which transmits both the digital and analog signals within the spectral emission mask of a single AM or FM channel.

(d) *Extended hybrid operation*. An enhanced mode of FM IBOC DAB operation which includes additional DAB subcarriers transmitted between the analog FM signal and the inner edges of the primary DAB sidebands.

(e) *Primary AM DAB Sidebands*. The two groups of hybrid AM IBOC DAB subcarriers which are transmitted 10 to 15 kHz above carrier frequency (the upper primary DAB sideband), and 10 to 15 kHz below carrier frequency (the lower primary DAB sideband).

(f) *Multicasting*. Subdividing the digital bitstream into multiple channels for additional audio programming uses.

(g) *Datacasting*. Subdividing the digital bitstream into multiple channels for additional data or information services uses.

§ 73.403 Digital audio broadcasting service requirements.

(a) Broadcast radio stations using IBOC must transmit at least one over-the-air digital audio programming stream at no direct charge to listeners. In addition, a broadcast radio station

must simulcast its analog audio programming on one of its digital audio programming streams. The DAB audio programming stream that is provided pursuant to this paragraph must be at least comparable in sound quality to the analog programming service currently provided to listeners.

(b) Emergency information. The emergency information requirements found in § 73.1250 shall apply to all free DAB programming streams.

§ 73.404 Interim hybrid IBOC DAB operation.

(a) The licensee of an AM or FM station, or the permittee of a new AM or FM station which has commenced program test operation pursuant to § 73.1620, may commence interim hybrid IBOC DAB operation with digital facilities which conform to the technical specifications specified for hybrid DAB operation in the First Report and Order in MM Docket No. 99-325. AM and FM stations may transmit IBOC signals during all hours for which the station is licensed to broadcast.

(b) In situations where interference to other stations is anticipated or actually occurs, AM licensees may, upon notification to the Commission, reduce the power of the primary DAB sidebands by up to 6 dB. Any greater reduction of sideband power requires prior authority from the Commission via the filing of a request for special temporary authority or an informal letter request for modification of license.

(c) Hybrid IBOC AM stations must use the same licensed main or auxiliary antenna to transmit the analog and digital signals.

(d) FM stations may transmit hybrid IBOC signals in combined mode; *i.e.*, using the same antenna for the analog and digital signals; or may employ separate analog and digital antennas. Where separate antennas are used, the digital antenna:

(1) Must be a licensed auxiliary antenna of the station;

(2) Must be located within 3 seconds latitude and longitude from the analog antenna;

(3) Must have a radiation center height above average terrain between