



Recommendation WG3.21.008

Replaces WG3.90.026

Coordination Contours for Terrestrial Microwave Systems

Subject Area: Coordination Contours for terrestrial microwave systems.

Background: A 125-mile circle has been used for many years as the coordination contour around a terrestrial microwave station with respect to other terrestrial microwave stations. For higher frequency bands, this distance seems too large. For boresight-to-boresight geometries, significant cases have been discovered beyond 125 miles. Establishing new coordination contours is necessary.

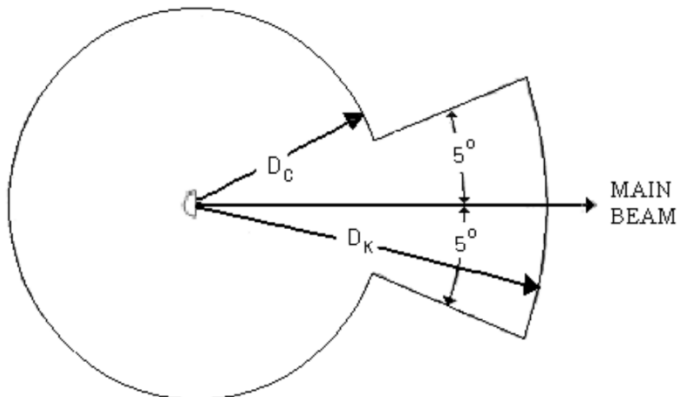
A theoretical study clearly demonstrates the variation in required analysis distances with frequency band and angle from boresight and, to a lesser extent, with antenna centerline. The theoretical mileages, however, were deemed too large to be practical for everyday usage. By group consensus, a simple set of four coordination distances was developed.

An earlier draft recommendation used one contour for analysis and a larger contour for notification. That recommendation was rejected in favor of a single contour to be used for both notification and analysis.

Recommendation: For distribution of prior coordination notifications, use a circular coordination contour with a larger-radius sector extending 5 degrees on either side of the antenna main beam azimuth. These radii are referred to as the circular coordination distance (D_c) and the keyhole coordination distance (D_k).

Below 15 GHz, $D_c = 201.2$ Km (125 miles) and $D_k = 402.3$ Km (250 miles)

Above 15 GHz, $D_c = 128.7$ Km (80 miles) and $D_k = 241.4$ Km (150 miles)



Approved by WG3: 5/25/2021

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To Membership for Comment: 12/8/2021

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