

## FCC Summary

# Technical Rules for Coordinating Interstitial Channel Applications

MAY 15, 2020

The following provides a summary of the FCC Order on Reconsideration<sup>1</sup> which adopted technical rules for coordination of applications for interstitial 12.5 kHz channels in the 800 MHz band between 809-817/854-862 MHz. The *Order on Reconsideration* addresses the petition for reconsideration filed by the Land Mobile Communications Council (LMCC)<sup>2</sup> seeking modification and clarification of the technical rules for coordination of interstitial channel applications. The specific technical rules, as adopted by the FCC are:

- Contour analysis is not required when proposed stations meet the distance separation rule for co-channel stations
- The coverage contour calculation of an incumbent station, must assume the incumbent station operates at maximum effective radiated power at the licensed antenna height for both co-channel and adjacent channel stations
- For reciprocal analysis (interference to a proposed station from an incumbent station), a proposed station's coverage contour should be based on the proposed effective radiated power.
- Interference contours for a proposed station are to be determined using the appropriate levels from the contour matrix tables (attached).

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<sup>1</sup> Order on Reconsideration, WP Docket No. 15-32 (Adopted May 11, 2020).

<sup>2</sup> Petition for Reconsideration of the Land Mobile Communications Council, WP Docket No. 15-32 (filed December 27, 2018) (Petition).

**Table 1 – Interference Contour Level for Fixed Station Operating on 12.5 kilohertz Bandwidth Channel**

Interference Contour (12.5 kilohertz into 25 kilohertz channel)		12.5 kilohertz Bandwidth Technology of 12.5 kilohertz Bandwidth Channel				
		Transmitter Emission				
25 kilohertz Technology on 25 kilohertz Bandwidth Channel		11K3F3E or less	8K10F1E 8K10F1D 8K70D1W 9K80D7W	7K60FXE 7K60FXD 7K60F7E 7K60F7D 7K60F7W 8K30F1E 8K30F1D	4K00F1E 4K00F1D	11K0F7E 11K0F7D 11K0F7W
		Transmitter	Transmitter	Transmitter	Transmitter	Transmitter
Transmitter Emission		Interference Contour [dBu F (50,10)]				
16K0F3E or 20K0F3E	Receiver	28	25	28	NA	23
10K0F1E or 10K0F1D	Receiver	40	36	40	NA	28
12K5F9W	Receiver	40	36	40	NA	32
16K0F1E or 16K0F1D	Receiver	70	65	65	NA	NA
18K3D7W or 17K7D7D	Receiver	28	25	28	NA	20
12.5 kilohertz Bandwidth Technology on 25 kilohertz Bandwidth Channel		Interference Contour [dBu F (50,10)]				
Transmitter Emission		Interference Contour [dBu F (50,10)]				
11K3F3E or less	Receiver	65	65	65	NA	70
8K10F1E, 8K10F1D, 8K70D1W, 9K80D7W, 9K80D1E or 9K80D1D	Receiver	NA	75	75	NA	NA
7K60FXE, 7K60FXD, 7K60F7E, 7K60F7D, 7K60F7W, 8K30F1E or 8K30F1D	Receiver	NA	75	75	NA	NA
4K00F1E or 4K00F1D	Receiver	NA	NA	NA	NA	NA
11K0F7E, 11K0F7D or 11K0F7W	Receiver	60	55	60	NA	NA
Section 90.221 Technology on 25 kilohertz Bandwidth Channels		Interference Contour [dBu F (50,10)]				
Transmitter Emission		Interference Contour [dBu F (50,10)]				
22K0D7E, 22K0D7D, 22K0D7W, 22K0DXW or 22K0G1W	Receiver	28	25	28	45	20
21K0D1E, 21K0D1D or 21K0D1W	Receiver	28	25	28	NA	20
21K7D7E, 21K7D7D or 21K0D1W	Receiver	28	25	28	NA	20

**Table 2 – Interference Contour Level for Fixed Station Operating on 25 kilohertz Bandwidth Channel**

Interference Contour (25 kilohertz into 12.5 kilohertz channel)		12.5 kilohertz Bandwidth Technology of 12.5 kilohertz Bandwidth Channel				
		Transmitter Emission				
25 kilohertz Technology on 25 kilohertz Bandwidth Channel		11K3F3E or less	8K10F1E 8K10F1D 8K70D1W 9K80D7W	7K60FXE 7K60FXD 7K60F7E 7K60F7D 7K60F7W 8K30F1E 8K30F1D	4K00F1E 4K00F1D	11K0F7E 11K0F7D 11K0F7W
		Receiver	Receiver	Receiver	Receiver	Receiver
Transmitter Emission		Interference Contour [dBu F (50, 10)]				
16K0F3E or 20K0F3E	Transmitter	40	50	45	NA	36
10K0F1E or 10K0F1D	Transmitter	50	50	50	NA	50
12K5F9W	Transmitter	40	50	45	NA	36
16K0F1E or 16K0F1D	Transmitter	36	40	40	NA	36
18K3D7W or 17K7D7D	Transmitter	25	45	32	NA	23
12.5 kilohertz Bandwidth Technology on 25 kilohertz Bandwidth Channel						
Transmitter Emission		Interference Contour [dBu F (50,10)]				
11K3F3E or less	Transmitter	65	NA	75	NA	60
8K10F1E, 8K10F1D, 8K70D1W, 9K80D7W, 9K80D1E or 9K80D1D	Transmitter	65	75	70	NA	55
7K60FXE, 7K60FXD, 7K60F7E, 7K60F7D, 7K60F7W, 8K30F1E or 8K30F1D	Transmitter	65	75	75	NA	60
4K00F1E or 4K00F1D	Transmitter	NA	NA	NA	NA	NA
11K0F7E, 11K0F7D or 11K0F7W	Transmitter	70	NA	NA	NA	NA
Section 90.221 Technology on 25 kilohertz Bandwidth Channels						
Transmitter Emission		Interference Contour [dBu F (50,10)]				
22K0D7E, 22K0D7D, 22K0D7W, 22K0DXW or 22K0G1W	Transmitter	25	28	25	32	23
21K0D1E, 21K0D1D or 21K0D1W	Transmitter	25	28	25	NA	23
21K7D7E, 21K7D7D or 21K0D1W	Transmitter	23	25	23	NA	20