

FCC Narrowbanding Mandate

Frequently Asked Questions

What is Narrowbanding?

In an effort to promote more efficient use of spectrum, the FCC mandated all VHF and UHF Industrial/Business licensees using 25 kHz Land mobile radio (portables) migrate to narrowband 12.5 kHz efficiency technology by January 1, 2013.

What is spectrum efficiency?

Currently the UHF and VHF frequency bands are congested and often there is not enough spectrum available for licensees to expand their existing systems or implement new systems. This mandate requires licensees to operate more efficiently, either on narrower channel bandwidths or increased voice paths on existing channels. This will allow creation of additional channels within the same spectrum, thereby supporting more users.

What do I need to do before January 1, 2011 versus January 1, 2013?

After January 1, 2011, users who apply for a new license or modify their existing license must specify 12.5 kHz efficiency. Manufacturers can no longer certify, product or import equipment capable of operating at 25 kHz efficiency after January 1, 2011. However, per the FCC Order, released June 30, 2010, manufacturers can now manufacture, import, and market equipment capable of operating at 25 kHz until January 1, 2013. You should consider either purchasing additional 25 kHz radios before 2011, or accelerate your system migration to 12.5 kHz efficiency.

By January 1, 2013 all licensees must convert to and operate in at least 12.5 kHz efficiency. You must ensure that the 25 kHz is disabled on your dual mode 25/12.5 kHz radios. And you must replace all radios only capable of operating at 25 kHz efficiency.

How can I tell if my Motorola equipment is 12.5 kHz capable?

All Motorola radio equipment certified by the FCC since February 14, 1997 is 12.5 kHz efficiency capable. To review the list of Motorola 12.5 kHz capable products please visit www.Motorola.com/narrowbanding.

[Motorola.com/narrowbanding](http://www.Motorola.com/narrowbanding).

Quick List of Dual Mode (25/12.5 kHz):

RDX Series (RDV2020, RDV2080d, RDV5100, RDU2020, RDU2080d, RDU4100, RDU4160d)
XTN Series (XV1100, XV2100, XV2600, XU1100, XU2100, XU2600)
M-Series (MV11C, MV21CV, MV22CV, MV24CVS, MU21CV, MU22CV, MU24CVS)
AX Series (AXV5100, AXU4100)
Spirit GT (Spirit GT, Spirit GT+)

Quick List of 12.5 kHz Only:

CLS Series (CLS1110, CLS1410)
CLP (CLP1010, CLP1040)

Quick List of 25 kHz Only:

S-Series (SU or SV models)
Spirit Series (Spirit I, Spirit II, Spirit III)

How do I upgrade my existing 12.5 kHz capable equipment?

Depending on the model, reprogramming the radios to operate on 12.5 kHz can be accomplished via front radio programming or Customer Programming Software (CPS). Here is a quick list of how to reprogram radios:

CPS – RDX Series, CLP, AX Series

Front Programming – RDX Series, XTN Series, M-Series, CLS Series, GT Series

Does Narrowbanding require me to change frequencies?

This depends on which frequencies you are currently operating on. Below is a quick chart to assist you in determining if you need to reprogram your radios.

Model	Freq.	Action
RDV2020, RDV2080d, RDV5100	5,6,10,22,25,27	All set - no action required
	1-4, 7-9,11-21,23, 24,26	Need to change to Freq. 5,6,10,22,25 or 27
XV1100, XV2100, XV2600, MV11C, MV21CV, MV22CV, MV24CVS	5,6,7,8	Need to change bandwidth to 12.5
	1-4, 10-27	Freq 5 or 6 and bandwidth to 12.5
RDU2020, RDU2080d, RDU4100, RDU4160d, XU1100, XU2100, XU2600, MU21CV, MU22CV, MU24CVS Spirit GT, Spirit GT+	3,4,9-89	all set - no action required
	1,2,5,6,7,8	Need to change bandwidth to 12.5

What will happen if I fail to comply with the FCC Narrowbanding mandate? Can I continue to operate at 25 kHz efficiency after January 1, 2013?

No. The FCC will prohibit licensees from operating 25 kHz efficiency equipment. Non-compliance will be considered a violation subject to FCC Enforcement Bureau action, which may include admonishment, monetary fines and loss of license.

Will migration to 12.5 kHz change my system coverage area?

Maybe. Conduct tests during conversion to ensure your radios continue to provide similar coverage.

How can I determine if I have a valid FCC license?

Contact your preferred certified frequency coordinator. Refer to the FCC website for listing of frequency coordinators at: FCC Wireless Telecommunications Bureau.

Has the FCC established a schedule for mandatory migration to 6.25 kHz efficiency?

No. The FCC has not set any date by which licensees must operate in 6.25 kHz efficiency. The current mandate only requires users to migrate to 12.5 kHz efficiency by January 1, 2013. Based on the 12.5 kHz migration time line, we believe that any potential future FCC decision to require users to migrate to 6.25 kHz efficiency will take a considerable number of years.