

Before the

Federal Communications Commission

Washington, D.C. 20554

In the Matter of)
)
Implementation of Sections 309(j) and 337) WT Docket No. 99-87
of the Communications Act of 1934)
as Amended)
)
Promotion of Spectrum Efficient) RM-9332
Technologies on Certain Part 90)
Frequencies)

REQUESTS FOR CLARIFICATION AND RECONSIDERATION

AND COMMENTS ON THE SECOND FURTHER NOTICE

OF PROPOSED RULEMAKING

OF THE

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

The National Telecommunications and Information Administration (NTIA)[1] hereby submits its views regarding the Commission’s above-captioned Narrowbanding Order to promote spectrum efficient technology in certain public safety frequency bands.[2] The Narrowbanding Order establishes rules that govern transition dates for type acceptance and licensing of 25 kHz bandwidth (wideband) equipment in the bands below 512 MHz. NTIA applauds the Commission’s efforts to improve spectrum efficiency and increase availability of new channels for public safety services. In particular, NTIA supports setting transition dates because they are necessary to ensure a deliberate and rapid transition toward more efficient and effective technologies. Transition dates also provide certainty that there will be increased channel availability allowing the growth of current public safety services. Without these dates, users and manufacturers have little incentive to move toward narrowband channels.

Nevertheless, NTIA is concerned that some of the rules adopted in the Order could inadvertently have adverse consequences, severely impacting the implementation of interoperability standards within the federal government and among state and local public safety entities. Accordingly, NTIA requests clarification of one aspect of the Commission’s Narrowbanding Order with respect to Federal operations in the affected bands, requests reconsideration of the equipment certification, manufacture, and importation prohibitions, and offers these comments regarding migration to the 6.25 kHz bandwidth.

I. Request for Clarification

The Narrowbanding Order prohibits the certification of any equipment capable of operating one voice path per 25 kHz of spectrum in the 150-174 MHz and 421-512 MHz bands beginning January 1, 2005.[3] The Report and Order also prohibits the manufacture and importation of any 150-174 MHz band equipment that can operate on a 25 kHz bandwidth beginning January 1, 2008.[4] NTIA's concern is that the 162-174 MHz band, a band allocated for federal government use,[5] is within the 150-174 MHz band identified in the Narrowbanding Order. While section 303 of Communications Act of 1934 authorizes the Commission to *inter alia* "[r]egulate the kind of apparatus to be used with respect to its external effects and the purity and sharpness of the emissions from each station and from the apparatus therein,"[6] radio stations belonging to or operated by the federal government do not fall within this authority.[7] Accordingly, the Commission must clarify that these prohibitions do not apply to federal government stations and equipment operating in the 162-174 MHz band, a band authorized for federal government use.

II. Request for Reconsideration

NTIA is also concerned that the equipment certification, importation and manufacturing prohibitions adopted in the Order could negatively impact the ability of federal, state and local public safety agencies to implement interoperable telecommunications systems across all levels of government. As the Commission is well aware, achieving a more integrated communications solution for our federal, state, and local first responders is an essential part of our nation's homeland security efforts.

As stated above, the Narrowbanding Order prohibits the certification of any equipment capable of operating one voice path per 25 kHz of spectrum beginning January 1, 2005, and prohibits the manufacturing and importation of such equipment beginning January 1, 2008.[8] However, the Narrowbanding Order does not require public safety systems to migrate to 12.5 kHz technology until January 1, 2018.[9] Given the substantial time remaining before this implementation deadline and the fact these systems are generally amortized over many years and enjoy a relatively long life-cycle, it is likely that many public safety systems will not transition to narrowband equipment for a decade or more.

The inability to obtain 25 kHz equipment during this timeframe will have several serious adverse effects. First, public safety systems will not be able to obtain replacement parts or to modify their equipment during the transition period. Thus, a part failure on a 25 kHz public safety system may render the entire system useless. Such part failure could also trigger the need for a system replacement prior to the end of its useful life if the replacement part is not available as a result of the Commission's prohibitions.

Second, prohibiting the certification, manufacture and importation of equipment that is capable of a 25 kHz mode, the Commission is limiting, and eventually eliminating, the ability to interoperate with legacy systems during the transition period. Today's standards-based architecture, requires this backward compatibility for a practical, graceful migration to new technologies. The primary public safety standard, the TIA/EIA 102/P25 standard, includes a 25 kHz mode for interoperability and backward compatibility with legacy systems.[10] The P25 Phase I (narrowband with wideband mode for backward

compatibility) standard has become the *de facto* interoperability standard among much of the nation's public safety community and has strong international support.[11] Dual modality, that is the ability of systems to operate in both the 25 kHz bandwidth as well as the 12kHz bandwidth, is critical for interoperability because it permits public safety systems to operate on different bandwidths during the transition to the Commission imposed deadline of January 2018 for public safety systems. Thus, to the extent that a federal system is operating on the 25kHz bandwidth until 2018, dual modality will permit it to interoperate with other federal public safety systems as well as other state and local government public safety systems that have made the transition to 12.5 kHz.

Third, after consulting with the federal agencies, TIA, and several key manufacturers, it has become apparent that these rules will not only impact competition within the U.S. communications sector, but the global community as well. One of the principal reasons for developing the P25 suite of standards was to encourage competition among manufacturers, domestically and abroad. Without standards, true competitive procurement is difficult to achieve and public safety agencies are often forced to settle for proprietary technologies.

Finally, the Commission's prohibitions in this regard will also adversely affect the federal government's ability to procure commercial off-the-shelf equipment compatible with their state and local government public safety counterparts. The federal public safety agencies represent only a small portion of this equipment market and there will be little financial incentive for a commercial vendor to continue to manufacture or import such equipment for the federal government market only.

Accordingly, NTIA requests that the Commission reconsider these rules and defer their effective date until the impact on public safety interoperability can be further reviewed.[12] More specifically, NTIA requests the Commission to delay the effective dates of the equipment, certification, importation and manufacturing prohibition to coincide with the effective date of migration to 12.5 kHz technology, January 1, 2018 for public safety systems.

III. Comments on the Second Further Notice of Proposed Rulemaking

The Commission seeks comment on whether the current equipment certification rules are sufficient to promote migration to one voice path per 6.25 kHz bandwidth, or whether migration to 6.25 kHz bandwidth should be mandatory.[13] With respect to federal government users, NTIA has concluded that the 6.25 kHz technology is not mature enough at this time to force its introduction on a date certain. There are currently no widely accepted standards available for 6.25 kHz Frequency Division Multiple Access systems, the most common system design in the federal government. Additionally, encryption of voice and data channels in such a narrow bandwidth has not developed to the point of being commonly available or affordable. For similar reasons, NTIA believes it would be premature to impose new certification requirements or to require mandatory migration on non-federal government public safety spectrum users.

IV. Conclusion

In conclusion, NTIA commends the Commission for taking steps to promote more efficient utilization of scarce spectrum resources. Nevertheless, NTIA urges the Commission to reconsider and clarify certain aspects of these rulings in light of the detrimental effect on federal government land mobile users and on efforts to achieve interoperability among federal, state, and local public safety agencies. As currently written, the equipment certification, importation and manufacturing prohibitions could impede an efficient migration to the next generation of technology, adversely affect interoperability efforts currently underway, and make it difficult for federal government users to procure equipment compatible with their public safety counterparts. NTIA stands ready to work with the Commission to resolve these critical issues.

Respectfully submitted,

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[\[1\]](#) NTIA, an Executive Branch agency within the Department of Commerce, is the President's principal adviser on domestic and international telecommunications policy, including policies relating to the Nation's economic and technological advancement in telecommunications, homeland security, and public safety. Accordingly, NTIA makes recommendations regarding telecommunications policies and presents Executive Branch views on telecommunications matters to the Congress, the Federal Communications Commission (Commission), and the public. NTIA also manages and authorizes the federal government's use of the radio spectrum and, as such, examines how Commission rulings affect

the federal agencies' use of the spectrum and related technology. See 47 U.S.C. § 902(b)(2)(A); see also 47 U.S.C. § 305.

[2] *Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies*, Second Report and Order and Further Notice of Proposed Rulemaking, WT Docket No. 99-87, RM-9332, FCC 03-34 (rel. February 25, 2003) (Narrowbanding Order); see also 68 Fed. Reg. 42296 (July 17, 2003).

[3] Narrowbanding Order at ¶¶ 1, 22.

[4] *Id.* at ¶¶ 1, 25.

[5] See *NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management* (NTIA Manual), at Section 4.1.3 (revised May 2003); see also 47 C.F.R. § 2.106, n. G5 (stating “[i]n the bands 162.1025-173.2, 173.4-174, 406.1-410 and 410-420 MHz, the fixed and mobile services are all allocated on a primary basis to the Government non-military agencies.”).

[6] 47 U.S.C. § 303(e).

[7] See 47 U.S.C. § 305(a).

[8] Narrowbanding Order at ¶¶ 1.25.

[9] *Id.* at ¶ 2.

[10] As the Commission is aware, NTIA, in coordination with the two prominent federal public safety organizations, the Federal Law Enforcement Wireless Users Group (FLEWUG) and the Public Safety Wireless Network Program (PSWN), has been actively involved in developing public safety interoperability standards within the Telecommunications Industry Association (TIA) TR8 and Project 25 Committees. These ANSI-approved standards, commonly referred to as P25, have been adopted by many federal agencies, including the departments of Homeland Security, Justice, Treasury, Defense, and Interior, as their standard for the implementation of 12.5 kHz (narrowband) technology and their solution for interoperability among the federal agencies. In addition, many State and local agencies have adopted these standards as their choice for refarming (narrowbanding) and interoperability. The Commission has also adopted this standard for the interoperability channels within the 700 MHz band, a move recommended by the Commission's National Coordinating Committee (NCC) and supported by industry and users alike.

[11] The importance of this standard is highlighted by the fact that grants recently made available from the Department of Homeland Security encourages the use of these funds for interoperable communications equipment that are compliant with the TIA/EIA 102/P25 standards.

[12] See 47 C.F.R. §1.429 (Petition for Reconsideration).

[13] Narrowbanding Order at ¶ 27; see also 68 Fed. Reg. 42337 (July 17, 2003).