

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 Technologies on ) RM-9332  
Certain Part 90 Frequencies )

**PETITION FOR RECONSIDERATION AND CLARIFICATION OF  
MOTOROLA, INC.**

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August 18, 2003

**TABLE OF CONTENTS**

SUMMARY..... i

I. Introduction..... 1

II. The Commission Should Continue to Allow Multi-Mode Equipment  
For Backwards Compatibility..... 5

III. The Commission Should Retain The Exemption From The Narrowband  
Requirements For Channels Reserved For One-Way Paging Operations. .... 9

IV. The Mandate For 6.25 kHz Equipment Authorizations Requires  
Additional Consideration..... 10

V. Conclusion. .... 15

## SUMMARY

Motorola supports the fundamental objective of the Commission's *Second Report and Order* to improve spectrum use in the 150-174 MHz and the 421-512 MHz private land mobile frequency bands through the adoption of a mandatory transition to more efficient technologies. Motorola believes, however, that the new rules require further adjustment to better accommodate user needs.

First and foremost, the rules must contain greater flexibility so that the diverse user community operating in these bands will suffer no loss of communications capability during the transition period. To this end, the FCC should reconsider its adoption of interim transition steps that impede the continued availability of multi-mode technologies containing a "one-voice path per 25 kHz mode" during the transition period. More specifically, the Commission should rescind its 2005 and 2008 prohibitions affecting the authorization, manufacture and importation of multi-mode equipment that offers backward compatibility with 25 kHz legacy systems. Likewise, the Commission should also reconsider its near-term prohibition on modifications to existing licenses that expand 25 kHz system footprints. Such flexibility will not negatively affect or delay the ultimate transition to 12.5 kHz in these frequency bands.

Motorola also recommends that the FCC reconsider its apparent decision to no longer exempt non-public safety one-way "paging only" channels from the efficiency standards.

Motorola believes that in light of its decision to adopt a mandatory transition to 12.5 kHz technologies, the FCC should reconsider its decision to retain the January 1, 2005, mandate for manufacturers to incorporate a 6.25 kHz mode into new radio designs. While the need for continued FCC involvement in the marketplace development of 6.25 kHz equipment is the subject of the *Second Further Notice* in this proceeding, Motorola believes that it is now clear

that the 2005 date – which will most likely occur before the FCC settles issues arising from the *Second Further Notice* – is premature.

Finally, Motorola also notes that the rules adopted in the *Second Report and Order* appear to call into question the option to use “equivalent efficiency” designs that provide two voice paths over 12.5 kHz channel widths. Motorola believes that the two-slot, 12.5 kHz equivalent efficiency option should be retained for any 6.25 kHz requirement that would be in force at the conclusion of this proceeding.

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**PETITION FOR RECONSIDERATION AND CLARIFICATION**

Motorola, Inc. (“Motorola”) seeks reconsideration and, to the extent necessary, clarification of the Commission’s *Second Report and Order* in the above-captioned proceeding.<sup>1</sup> While supportive of the FCC’s fundamental objective to improve spectrum use in the 150-174 MHz and 421-512 MHz private land mobile frequency bands through the adoption of a mandatory transition to more efficient technologies, Motorola believes that new rules require further adjustment to better accommodate user needs.

**I. Introduction**

Prior to the adoption of the *Second Report and Order*, the rules affecting the transition to more spectrally efficient equipment in the private land mobile frequency bands below 512 MHz were developed in the FCC’s *Refarming* proceeding.<sup>2</sup> Those rules attempted to influence the introduction of more efficient technology by imposing increasingly more stringent bandwidth

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<sup>1</sup> In the Matter of 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 Second Further Notice of Proposed Rule Making*, WT Docket No. 99-87, 68 Fed. Reg. 42296 (2003) [“*Second Report and Order*” or *Second Further Notice*”].

<sup>2</sup> See, e.g., *In the Matter of Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them And Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Services*, PR Docket No. 92-235, *Report and Order and Further Notice of Proposed Rule Making*, 10 FCC Rcd 10076 (1995).

restrictions on new equipment designs. For example, beginning on February 14, 1997, applications for new equipment authorizations would be granted only if the equipment were capable of operating within 12.5 kHz channel bandwidths.<sup>3</sup> Also permissible were “equivalent efficiency” designs that operated over 25 kHz bandwidths provided that the equipment offered at least one-voice path per 12.5 kHz.<sup>4</sup> Finally, the FCC’s rules also permitted multi-mode designs to allow for backward compatibility with legacy analog equipment operating with one voice path per 25 kHz, provided that the equipment were also capable of 12.5 kHz operation or equivalent efficiency.<sup>5</sup>

The 1997 standards are to be tightened beginning January 1, 2005, when new applications for equipment authorizations would be granted only if the equipment were capable of operating within 6.25 kHz channel bandwidths.<sup>6</sup> Prior to the adoption of the *Second Report and Order*, these provisions mirrored the 1997 requirements in that they permitted equivalent efficiency designs provided that the equipment offered one voice path per 6.25 kHz<sup>7</sup> while also allowing multi-mode designs offering 25 kHz analog modes provided that the equipment were capable of 6.25 kHz operation or equivalent efficiency.<sup>8</sup>

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<sup>3</sup> 47 C.F.R. § 90.203(j)(2)(i).

<sup>4</sup> 47 C.F.R. § 90.203(j)(3). This rule also provided that equipment capable of transmitting data over channel widths greater than 6.25 kHz were required to support a minimum data rate of 4800 bits per second per 6.25 kHz of channel bandwidth.

<sup>5</sup> 47 C.F.R. § 90.203(j)(2)(ii).

<sup>6</sup> 47 C.F.R. § 90.203(j)(4)(i).

<sup>7</sup> 47 C.F.R. § 90.203(j)(5) (2002).

<sup>8</sup> 47 C.F.R. § 90.203(j)(4)(iii).

This instant proceeding's examination of these *Refarming* provisions was initiated by a petition for rule making filed by the American Mobile Telecommunications Association (AMTA) that urged the Commission to take more aggressive steps to encourage spectrum efficiency in nearly all private land mobile frequency bands.<sup>9</sup> AMTA had urged that non-public safety Part 90 users operating in the bands between 222 MHz and 896 MHz be mandated to either deploy technology that achieves the equivalent of two times the capacity of most current systems, *i.e.*, one voice path per 12.5 kHz of spectrum when using a 25 kHz wide channel, or accept secondary status.<sup>10</sup> The *Further NPRM* in this proceeding sought comment on AMTA's petition with respect to the 150-174 MHz and the 421-512 MHz bands as well as the overall effectiveness of the *Refarming* process.<sup>11</sup>

In response to the *Further Notice*, the Commission received broad industry support to adopt a date-certain for existing users to deploy 12.5 kHz, or equivalent efficiency, equipment. Agreeing with the majority of the commenters, the *Second Report and Order* determined that the Commission's "current approach to encourage spectral efficiency in the [private land mobile] bands, based on the equipment certification process, is not by itself sufficient to bring about a timely transition to narrowband technology."<sup>12</sup> Therefore, the Commission adopted the following multi-step, 10-year schedule for the migration to more efficient technology:

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<sup>9</sup> *Second Report and Order* at ¶5.

<sup>10</sup> *Id.*

<sup>11</sup> See 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; Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz; Petition for Rule Making of the American Mobile Telecommunications Association, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 99-87, RM-9332, RM-9405, RM-9705, 15 FCC Rcd 22709 (1999) ("*R&O and Further NPRM*").

<sup>12</sup> *Second Report and Order* at ¶12.

- **Six Months After Federal Register Publication of the *Second Report and Order*:** Any applications for new operations using 25 kHz channels for any system operating in the 150-174 MHz or 421-512 MHz bands are prohibited. Incumbent 25 kHz licensees in these same bands are permitted to make system modifications only if their respective authorized interference contours are not expanded.
- **January 1, 2005:** The Commission will not certify any equipment capable of operating at one voice path per 25 kHz of spectrum, including multi-mode equipment that includes a 25 kHz mode.
- **January 1, 2008:** The manufacture and importation of any 25 kHz equipment (including multi-mode equipment that can operate on a 25 kHz bandwidth) will be prohibited.
- **January 1, 2013:** Non-public safety licensees using channels in these bands will be required to deploy technology that achieves the equivalent of one voice path per 12.5 kHz of spectrum.
- **January 1, 2018:** Public safety licensees using channels in these bands are required to deploy technology that achieves the equivalent of one voice path per 12.5 kHz of spectrum.

Motorola has consistently supported the adoption of a date-certain for the transition to 12.5 kHz, or equivalent efficiency, technologies and congratulates the FCC for taking this fundamental step to improving the spectrum environment for public safety, business, and industrial private wireless users. However, Motorola disagrees with the Commission's decision to restrict user flexibility during the transition by prohibiting the continued authorization, manufacture and importation of multi-mode equipment offering compatibility with 25 kHz radios. Also, existing 25 kHz licensees should also be permitted to expand existing service areas during the transition period. Such flexibility will not negatively influence or delay the ultimate transition to 12.5 kHz in these frequency bands. At the same time, Motorola also urges the FCC to reconsider its decision to no longer exempt non-public safety one-way "paging only" channels from the efficiency standards.

Motorola believes that in light of its decision to adopt a mandatory transition to 12.5 kHz technologies, the FCC should reconsider its decision to retain the January 1, 2005, mandate for manufacturers to incorporate 6.25 kHz modes into new radio designs. While the need for continued FCC involvement in the marketplace development of 6.25 kHz equipment is the subject of the *Second Further Notice* in this proceeding, Motorola believes that it is now clear that the 2005 date – which will most likely occur before the FCC settles issues arising in the *Second Further Notice* – is premature.

Finally, Motorola notes that the rules adopted in the *Second Report and Order* appear to call into question the option to use “equivalent efficiency” designs that provide two voice paths over 12.5 kHz channel widths. Motorola believes that the two-slot, 12.5 kHz equivalent efficiency option must be retained for any 6.25 kHz requirement that would be in force at the conclusion of this proceeding.

## **II. The Commission Should Continue to Allow Multi-Mode Equipment For Backwards Compatibility**

While adopting a date-certain for the mandatory migration to 12.5 kHz equipment, the *Second Report and Order* concludes that the Commission should adopt “other steps to increase spectrum efficiency . . . prior to the mandatory migration dates.”<sup>13</sup> In support of this position, the FCC states that:

[T]he continued approval of new equipment that operates on a 25 kHz bandwidth impedes our goal of encouraging more efficient spectrum use, by encouraging the continued use of 25 kHz equipment with which the new equipment is backward-compatible. Such an approach is appropriate in a regulatory framework where equipment certification represents the limit of inducement to migrate to narrowband technology. However, in light of our decision to establish a firm migration date, we are concerned that allowing backward compatibility might

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<sup>13</sup> *Second Report and Order* at ¶21.

frustrate the underlying purpose -- to ensure efficient use of spectrum by promoting expeditious migration to narrowband technology.<sup>14</sup>

This resulted in the FCC adopting two interim bans affecting equipment availability in these frequency bands – the January 1, 2005, prohibition on the filing of new applications for equipment authorization for devices containing a one voice path per 25 kHz mode and the January 1, 2008, prohibition on importation and manufacture for these same types of devices. As another disincentive to 25 kHz operations, the FCC also adopted a prohibition on system modifications that expand existing wideband service contours beginning six months after the publication of the *Second Report and Order* in the Federal Register.

Motorola believes that the FCC's analysis, as articulated above, is without foundation. It has become abundantly clear that under *Refarming's* equipment authorization approach, the decision to allow for backward compatibility with legacy equipment extended the transition to new technology because many users could continue to defer wholesale replacement of existing infrastructure as long as it remained operational – and a base station's useful operational life can long exceed any reasonable amortization schedule. However, under the new regulatory environment, the FCC has ensured that all users will *operate* in a manner consistent with the new guidelines by the 2013/2018 deadlines regardless of whether the equipment is capable of operating in the 25 kHz mode or not.<sup>15</sup> In Motorola's view, further regulatory inducements from the FCC are not needed to achieve the end result that the technology transition will be completed at the appropriate deadline.

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<sup>14</sup> *Id.* at ¶22.

<sup>15</sup> Motorola is aware that public safety organizations and associations will be petitioning for reconsideration of the 2018 deadline and urge the Commission to accelerate the public safety transition to the year 2013.

More importantly, the FCC's decision to control and, ultimately prohibit, the availability of dual-mode technologies offering backward compatibility threatens the communications capabilities of users as well as interoperability during the transition. The FCC has already heard from a number of affected licensees that have expressed the need for this flexibility. For example, the Association of American Railroads (AAR) has detailed to the Commission their continued need for compatibility with its existing nationwide 25 kHz infrastructure throughout the transition.<sup>16</sup> Transitioning the railroads' network to more efficient technologies by 2013 will clearly be a monumental and costly task. It does not serve the public interest to complicate that transition by limiting their communications options prior to the 2013 deadline.

Likewise, the Public Safety Wireless Network (PSWN) has already filed its petition for reconsideration of the Commission's ruling stating that "by limiting manufacturers to building only narrowband equipment, opportunities for system sharing and interoperability between public safety and domestic security agencies at the local, state, and federal government levels will be undercut until the transition to a 12.5 kHz path is completed by *all* users."<sup>17</sup> The *PSWN Petition* further warns that wideband public safety users that defer migration until the end of the transition for budgetary reasons will be unable to communicate and interoperate with licensees that are only compatible with a 12.5 kHz or narrower path because multimode equipment would not be available.<sup>18</sup>

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<sup>16</sup> *Letter from Thomas J. Keller to Ms. Marlene H. Dortch*, WT Docket No. 99-87, (June 26, 2003).

<sup>17</sup> *Petition for Reconsideration*, Public Safety Wireless Network, WT Docket No. 99-87 (August 1, 2003) at 7 [*"PSWN Petition"*].

<sup>18</sup> *Id* at 5.

Motorola shares the concerns of these and other user organizations. To better serve our customers, Motorola will need continued flexibility to provide multimode 12.5/25 kHz products that help bridge the transition, pending full conversion to 12.5 kHz by the relevant deadline. This issue is not dissimilar from the FCC's action in the 700 MHz public safety band where the Commission, upon imposing a deadline for the use of 6.25 kHz technologies on the general use channels, also imposed an interim deadline for the continued marketing and manufacture of 12.5 kHz systems.<sup>19</sup> In that proceeding, Motorola has asked for reconsideration arguing that the user community, which has a direct economic interest in minimizing their migration costs consistent with their operational needs, will make appropriate purchasing decisions in the face of a clear and final migration deadline rendering any interim bans as unnecessary government mandates.<sup>20</sup>

Provided that the FCC remains firm in its implementation of the transition deadline, it should provide flexibility for users to accommodate the myriad of diverse communications requirements satisfied by these frequency bands. Each licensee must ensure that the right capabilities are in place so employees can communicate, regardless of when a specific radio operating in its system is designed or purchased or when a site to improve coverage and reliability is added. The specifics of how best to meet this need will vary across different licensees in the VHF and UHF bands. Licensees are in the best position to determine the schedule by which they make purchase decisions and implement equipment changes needed to meet the 2013 conversion date to 12.5 kHz. Accordingly, Motorola recommends that the 2005

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<sup>19</sup> The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket No. 96-86, *Fifth Report and Order*, 17 FCC Rcd 14999 (2002).

<sup>20</sup> *Petition for Reconsideration of Motorola*, WT Docket No. 96-86, (January 13, 2003) at 9.

equipment authorization prohibition on 25 kHz designs and the 2008 manufacturing and importation ban on 25 kHz equipment capability should be eliminated.

In the same vein, the FCC should also allow existing wideband licensees to modify system coverage throughout the transition period even if such modifications expand existing 25 kHz contours. As noted by PSWN, existing public safety systems include coverage gaps that will result in steadily diminishing communication quality until all agencies in these bands have completed implementation of narrowband technology.<sup>21</sup> The Commission should remove rules that inadvertently diminish the communications capabilities of a user community that has willingly accepted its obligation to fund a transition to more spectrally efficient technology.

**III. The Commission Should Retain The Exemption From The Narrowband Requirements For Channels Reserved For One-Way Paging Operations.**

The provisions of Section 90.35(c)(29) apply to certain channels in the Industrial/Business pool of frequencies that have been reserved for one-way paging operations. Without any direct discussion, the *Second Report and Order* modified this section to delete the provision that channels falling under the scope of this rule will be assigned 25 kHz channel bandwidths. For commercial paging carriers – as well as private paging systems – operating on the handful of paging-only frequencies allocated to the Industrial/Business pool of frequencies, this rule modification apparently overturns the policies adopted in the *Refarming* proceeding to allow paging operations to remain wideband. Again, there was no discussion in either the *Second Report and Order* or its associated regulatory flexibility analysis that suggests that the FCC had considered the impact of this change in policy to paging operators.

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<sup>21</sup> *PSWN Petition* at 8.

Motorola notes that a similar provision applicable to public safety paging channels was not modified.<sup>22</sup> Nor did the FCC delete Section 90.203(j)(7) which provides that “transmitters designed for one-way paging operations will be certificated with a 25 kHz channel bandwidth and are exempt from the spectrum efficiency requirements of paragraphs (j)(3) and (j)(5) of this section.” Motorola thus believes that the modification of Section 90.35(c)(29) was inadvertent and should therefore be corrected. The FCC did not attempt to articulate any rationale for distinguishing between public safety and non-public safety paging systems nor did it indicate that it had considered the costs that would be imposed on paging carriers needing to change over hundreds of transmitters that are part of state-wide and multi-state wide systems. Since this significant rule change was neither “noticed” in the *Further Notice* nor discussed in the *Second Report and Order*, Motorola urges the Commission to correct its error and allow Industrial/Business pool paging frequencies to continue to be licensed for 25 kHz bandwidths.

#### **IV. The Mandate For 6.25 kHz Equipment Authorizations Requires Additional Consideration**

In conjunction with the adoption of the *Second Report and Order*, the Commission issued a Second Further Notice of Proposed Rule Making seeking comment on its tentative conclusion that “similar actions are warranted to facilitate migration to 6.25 kHz technology.”<sup>23</sup> In addition, the *Second Further Notice* seeks comment on the date or dates by which licensees would be required to migrate to 6.25 kHz technology if required, and on any other compliance dates for other provisions facilitating migration to 6.25 kHz technology.<sup>24</sup>

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<sup>22</sup> See Section 90.20(d)(30).

<sup>23</sup> *Second Further Notice* at 27.

<sup>24</sup> *Id.*

Motorola notes that this issue will be further addressed in its comments to the *Second Further Notice*. The Commission should be aware, however, that Motorola strongly disagrees with its tentative conclusion on the need for further actions to facilitate migration to 6.25 kHz technologies. In Motorola's view, it is not logical for the FCC to conclude that it will need to adopt a date-certain for the 6.25 kHz transition at the same time that it imposes a multi-year schedule for the transition to 12.5 kHz. Assuming that the FCC would provide users with a similar schedule to amortize their new 12.5 kHz systems, the likely timeframe for a 6.25 kHz transition is well beyond Motorola's – and the Commission's – ability to forecast or envision the relevant market and regulatory forces that will be imposed on private wireless services.

In the *Second Report and Order*, the FCC retained the substantive provisions of Section 90.203(j)(4)(i) that requires applications for equipment authorizations filed on or after January 1, 2005, to specify 6.25 kHz operation. Motorola urges the FCC to reconsider its decision to retain this requirement and, instead, delete paragraph (j)(4) and its subparts in their entirety. The *Second Report and Order*, in essence, concluded that the FCC's previous approach to induce users to upgrade equipment by mandating availability through the equipment authorization process failed to spur the transition to 12.5 kHz technology. Retaining that same provision for 6.25 kHz technologies is therefore illogical as there is not evidence to suggest that such a requirement will now prove effective.

In any event, the 2005 mandate is premature given the continually evolving nature of the standards setting process. Achieving a four – to – one spectral efficiency improvement is a defining goal of Project 25.<sup>25</sup> Project 25 participants are only now drafting modifications to existing standards documents, and creating new standards documents, that will together comprise the complete set of Project 25 standards for 6.25 kHz and equivalent technologies. Upwards of forty documents defining two-slot TDMA in a 12.5 kHz bandwidth will result from this action, but it is highly unlikely that any meaningful standard will be completed before the onset of the January 1, 2005, equipment authorization requirement.

While Motorola strongly objects to the continued applicability of the 2005 deadline for the filing of 6.25 kHz designs, it also notes that the revision of Section 90.203(j)(4) contained in the *Second Report and Order* creates conflict with previously adopted policies without full discussion. As revised by the Commission, paragraph (j)(4) now requires applications submitted on or after January 1, 2005, to meet the following requirements: 1) specify a maximum channel bandwidth of 6.25 kHz for single mode equipment, or 2) specify a maximum channel bandwidth of 12.5 kHz for dual mode equipment provided that it is capable of operating on 6.25 kHz channel bandwidths.

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<sup>25</sup> Project 25 is a cooperative effort among the Telecommunications Industry Association (TIA), the Association of Public Safety Communications Officials-International, Inc. (APCO), and the National Association of State Telecommunication Officials (NASTD), and numerous Federal agencies including the National Communications System (NCS), the Department of Treasury, the Department of Justice, the National Security Agency (NSA) and the National Telecommunication and Information Administration (NTIA). Voluntary standards for two-slot TDMA in 12.5 kHz channels are being developed under the terms of the Joint Memorandum of Agreement between the Project 25 Steering Committee and Committee TR-8 (Mobile and Personal Private Radio Standards) of the TIA.

Thus, in both instances, new radio designs would be required to have at least one mode for operation on discrete 6.25 kHz channel bandwidths. By deleting subparagraph (j)(4)(iv), the *Second Report and Order* removed the ability of manufacturers to submit “equivalent efficiency” designs that offer two voice paths over a 12.5 kHz channel width without having a discrete 6.25 kHz mode. This is a monumental change in policy that, if affirmed, will invalidate all relevant technical standards work that has occurred over the past decade.

Indeed, less than 2 years from the deadline, the FCC has apparently outlawed the use of two-slot, 12.5 kHz technologies such as Project 25, Phase II, from operating in these bands and has dictated that the technology standard shall be based on 6.25 kHz discrete operation. To the best of Motorola’s knowledge, there is no significant product development occurring anywhere in the world by any major manufacturer for land mobile technologies designed to operate within channel bandwidths as small as 6.25 kHz. Since the adoption of the *Refarming* provisions, product development has focused entirely on designs satisfying the one-voice path per 6.25 kHz efficiency standard spread over larger channel widths.<sup>26</sup>

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<sup>26</sup> Even the FCC’s test bed for “very narrowband” land mobile equipment designed to operate within 5 kHz channel bandwidths – the 220-222 MHz band – has now been made available for 12.5 kHz technologies. *See* 47 C.F.R. § 90.733(d) of the Commission’s Rules.

The text of the *Second Report and Order*, does not provide any indication that the FCC intended to eliminate the option of submitting equivalent efficiency designs. In fact, the FCC appears to have misstated the provisions of its own rules. In describing the former provisions of Section 90.203(j)(4), the FCC stated (footnotes omitted):

[U]nder the current rules, after January 1, 2005, only new equipment that is capable of operating on 6.25 kHz channel bandwidths will be certified. That is, the Commission's rules provide that new equipment that operates on 25 and/or 12.5 kHz channels will be authorized after January 1, 2005 only if it is also capable of operating on 6.25 kHz or narrower channels.<sup>27</sup>

This is an incorrect reading of the former provisions of paragraph (j)(4) and is contradicted by the FCC's own definition of narrowband equipment as articulated in the *Second Report and Order*: “[narrowband] equipment will include all advanced technologies designed to operate with channel bandwidths of 6.25 kHz or less or equipment with 6.25 kHz equivalent efficiency such as TDMA (2 channels in 12.5 kHz or 4 channels in 25 kHz).”<sup>28</sup> Simply put, the FCC has never required designs submitted after January 1, 2005, to be capable of operating on discrete 6.25 kHz channel bandwidths and offers no discussion in the *Second Report and Order* for changing that policy now.

Motorola suspects that this revision is actually a rules drafting error driven by the FCC's decision to eliminate equipment designed to operate over 25 kHz channel bandwidths. Indeed, the *Second Report and Order* retains paragraph (j)(5), which defines the equivalent efficiency standard of one voice path per 6.25 kHz. Unfortunately, the deletion of paragraph (j)(4)(iii) leaves no avenue available for two-slot, 12.5 kHz technologies such as Project 25, Phase II, after January 1, 2005. This must be corrected.

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<sup>27</sup> *Second Report and Order* at 6.

<sup>28</sup> *Id.* at n. 6.

**V. Conclusion.**

In agreeing to a mandatory migration to more spectrally efficient technology, the vast majority of the private wireless user community have agreed to bear costs totaling hundreds of millions– perhaps billions – of dollars in large part to make room for other users. Few, if any, other radio services volunteer to such upheavals solely in the name of spectrum efficiency. In exchange for this unique industry response, the FCC should provide licensees with the flexibility needed to address their needs individually rather than applying a one-size-fits-all approach. Motorola therefore urges the FCC to once again promote backward compatibility with legacy systems through the transition. Further, the FCC needs to review certain of its rule changes to ensure that the end effect was intended.

Respectfully submitted,

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