Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 2 and 90 of the	)	
Commission's Rules to Provide for Narrowband	)	
Private Land Mobile Radio Channels in the	)	ET Docket No. 04-243
150.05-150.8 MHz, 162-174 MHz, and	)	
406.1-420 MHz Bands that are Allocated for	)	
Federal Government Use	)	

NOTICE OF PROPOSED RULEMAKING

Adopted: June 30, 2004 **Released: July 6, 2004**

Comment Date: 30 days after publication in the Federal Register.
Reply Comment Date: 45 days after publication in the Federal Register.

By the Commission:

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I. INTRODUCTION

1. We initiate this proceeding in order to revise the procedures by which certain Private Land Mobile Radio (PLMR) service operations on the Hydrological and Meteorological (Hydro),[1] Forest Fire-Fighting and Conservation, and Public Safety channels, as well as Medical Radiocommunication Systems, are to transition to narrower, more spectrally efficient channels in a process commonly known as "narrowbanding." These PLMR operations occupy spectrum in the 150.05-150.8 MHz, 162-174 MHz, and 406.1-420 MHz bands that is allocated for Federal Government (Federal) use and, in many cases, is shared on the condition that interference is not caused to Federal operations. The National Telecommunications and Information Administration (NTIA) is transitioning Federal operations in this spectrum to 12.5 kHz (so-called "narrowband") channels on a January 1, 2005 and January 1, 2008 timetable (depending on the band), whereas our rules currently permit non-Federal Government (non-Federal) licensees to operate channels in excess of 12.5 kHz (so-called "wideband" operations) in these bands for as long as 2018. Because NTIA has adopted a more rapid narrowbanding schedule in these Federal bands than the Commission has required for our licensees, this transition has the potential to impact non-Federal operations in these bands.[2]

2. Our proposals draw on the general principles embodied in the Commission's *Refarming Proceeding*, which set forth a plan to transition PLMR operations from 25 kHz channels to narrower channels.[3] In that proceeding, the Commission recognized that narrowbanding can promote efficient spectrum use and can help accommodate increasing PLMR demand. The instant proceeding is made necessary by NTIA's separate narrowbanding efforts, and is designed to allow for compatible use of Federal spectrum by both Federal and non-Federal users.

II. EXECUTIVE SUMMARY

3. By this action, we propose to amend Parts 2 and 90 of the Commission's Rules to revise our transition plan for PLMR licensees in the affected spectrum. We believe that such actions will provide for an orderly transition from wideband to narrowband operations, increase spectrum efficiency, maintain compatibility with Federal operations, permit PLMR licensees to operate using existing

[1]These operations consist of fixed stations in the 162-174 MHz and 406.1-420 MHz bands, the emissions of which are used for the automatic transmission of either hydrological or meteorological data, or both. 47 C.F.R. § 90.265(a).

[2]The Commission, which is an independent agency, administers spectrum allocated for non-Federal use and the NTIA, which is an operating unit of the Department of Commerce, administers spectrum allocated for Federal use. 47 C.F.R. § 2.105(a). Section 305(a) of the Communications Act as amended, 47 U.S.C. § 305(a), authorizes the President to assign frequencies to Federal stations. This authority has been delegated to the Assistant Secretary of Commerce for Communications and Information, who also serves as the Administrator of NTIA. Pub. Law 102-538, 106 Stat. 3533 (1992). NTIA also approves the spectrum needs of new systems for use by Federal departments and agencies and maintains the Federal Government Table of Frequency Allocations (Federal Government Table) in its *Manual of Regulations & Procedures for Federal Radio Frequency Management*.

[3]Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Service and Modify the Policies Governing Them, *Report and Order and Further Notice of Proposed Rulemaking*, PR Docket No. 92-235, 10 FCC Rcd 10076 (1995) (*Refarming Report and Order*); *Memorandum Opinion and Order*, 11 FCC Rcd 17676 (1997) (*Refarming MO&O*); Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 99-87, 15 FCC Rcd 22709 (1999); *Second Report and Order and Second Further Notice of Proposed Rule Making*, WT Docket No. 99-87, 18 FCC Rcd 3034 (2003) (*Narrowbanding Second Report and Order*); *Order*, 18 FCC Rcd 25491 (2003).

equipment with greater confidence that their critical operations will not be suddenly required to cease transmissions, and significantly reduce the probability that wideband PLMR operations will interfere with new Federal operations. Specifically, we propose to:

- Permit incumbent licensees on the Hydro, Forest Fire-Fighting and Conservation, Public Safety, and Medical Radiocommunication Systems channels to continue to operate on existing wideband channels until 2013 (for non-public safety entities) and 2018 (for public safety entities), but require licensees in the Hydro, Forest Fire-Fighting and Conservation, and Public Safety bands to modify or discontinue operations if, at any time after January 1, 2005 (for the 162-174 MHz band), and January 1, 2008 (for the 150.05-150.8 MHz and 406.1-420 MHz bands), they cause interference to new Federal operations;[4]
- Require that new Forest Fire-Fighting and Conservation and Public Safety stations in the 162-174 MHz band, as well as new Medical Radiocommunication systems at 163.25 MHz, operate using narrowband equipment no later than January 1, 2005; and that new Medical Radiocommunication systems operating at 150.775 MHz and 150.790 MHz begin using narrowband equipment no later than January 1, 2008;
- Cease licensing of Medical Radiocommunication Systems at 150.7825 MHz and 150.7975 MHz, and grandfather incumbent stations on these two channels indefinitely;
- Include Hydro operations in the 406.1-420 MHz band in our transition plan to 12.5 kHz channels and revise our Rules by adding 23 channels to our Hydro Channel Plan and by deleting 6 channels from our Hydro Channel Plan in order to make it consistent with NTIA's Hydro Channel Plan;
- Establish a timeline for new Hydro channels to begin operating on narrowband channels, and establish a transition procedure for incumbent operators on the six Hydro channels that we propose to remove;
- Seek comment regarding narrowbanding the channel used for Stolen Vehicle Recovery Systems (SVRS), which our rules authorize for wideband operations and which is used by only one operator, the LoJack Corporation (LoJack), to provide a mass-market service; and
- Revise the list of radio astronomy observatories and the associated areas where prior coordination for fixed operations is required and modify the power limit for stations in the fixed and mobile services in order to better protect the radio astronomy service (RAS) in the 406.1-410 MHz band.

The table, below, summarizes services potentially affected by this proceeding.

[4]To minimize the potential of harmful interference between stations, the FCC will work with NTIA under the auspices of the Frequency Assignment Subcommittee (FAS) of the Interdepartment Radio Advisory Committee (IRAC) to provide advanced notice to our licensees that a proposed Federal assignment has been filed with NTIA.

Footnote	Use	Center Frequencies (MHz)	Rule Section
US8	Forest Fire-Fighting and Conservation	170.425, 170.475, 170.575, 171.425, 171.475, 171.575, 172.225, 172.275, 172.375	90.20
US11	Public Safety	166.250, 170.150	90.20
US13	Hydro Channels	169.425, 169.450, 169.475, 169.500, 169.525 [169.575] 170.225, 170.250, 170.275, 170.300, 170.325 [170.375] 171.025, 171.050, 171.075, 171.100, 171.125, 171.825, 171.850, 171.875, 171.900, 171.925 [171.975] 406.125, 406.175 [409.675, 409.725, 412.625] 412.675, 412.725, 412.775 (Six channels proposed for deletion are denoted by brackets; 23 new Hydro channels are also proposed to be added.)	90.265
US216	Medical Radiocommunication Systems	150.775, 150.7825, 150.790, 150.7975, 163.250 (Federal bands); 152.0075 MHz (non-Federal band)	90.20
US312	Stolen Vehicle Recovery Systems (SVRS)	173.075 MHz	90.20

III. BACKGROUND

4. On January 25, 1993, NTIA informed the Commission that it had updated its *Manual of Regulations & Procedures for Federal Radio Frequency Management* (*NTIA Manual*) to provide a narrowband channel plan and technical standards for Federal operations in the 162-174 MHz band.[5] The new channel plan for Federal fixed and land mobile operations has center frequencies that are spaced 12.5 kHz apart, instead of 25 kHz spacing. NTIA noted that there are a number of non-Federal operations authorized in the band by way of United States footnotes in the Table of Frequency Allocations (Table), and stated that these users must modify their operations to fit within the new channel plan in order to provide for efficient use of this spectrum and to accommodate the expansion of land mobile systems in the band.[6]

5. On June 15, 1995, the Commission, in its *Refarming Report and Order*, adopted a new channel plan based on narrowband channels in those segments of the 150-174 MHz and 421-512 MHz bands that are available for PLMR use.[7] The Commission did not require licensees to modify their

[5]Memorandum from Bill Gamble, Associate Administrator, Office of Spectrum Management, NTIA to Bill Torak, IRAC Liaison, Office of Engineering and Technology (OET), FCC, dated January 25, 1993. *See NTIA Manual*, May 2003 Edition.

[6]47 C.F.R. § 2.106. The Table consists of the International Table (columns 1-3), the United States Table (columns 4 and 5), and FCC rule part cross references (column 6). The International Table is described at 47 C.F.R. § 2.104. The United States Table consists of the Federal Government Table (column 4) and the non-Federal Government Table (column 5) and is described at 47 C.F.R. § 2.105.

[7]In the *Refarming Report and Order*, the Commission adopted a narrowband channel plan based on existing channel center frequencies. The Commission listed channels every 7.5 kHz in the 150-174 MHz band (instead of 15 kHz) and every 6.25 kHz in the 421-512 MHz bands (instead of 25 kHz), but allowed a flexible approach whereby users can choose equipment which best fits their needs by aggregating up to the equivalent of four narrowband channels. This approach provides users with the option of utilizing equipment designed to operate with 5 kHz, 6.25 kHz, 12.5 kHz, or 25 kHz channel bandwidths. Channels designated for paging-only use were not narrowbanded as part of this process. For the one-way paging exemption, see the *Refarming Report and Order*, 10 FCC Rcd at 10108, para. 57, n. 116. *See also* 47 C.F.R. § 90.203(j)(7).

stations, but instead adopted dates after which it would not certify new equipment unless it met the narrowband standards.[8] Under these provisions, new type accepted equipment after August 1, 1996, was required to operate on 12.5 kHz or smaller channels.[9] The Commission's Rules also specify that after January 1, 2005, only equipment that meets an efficiency standard of one voice channel per 6.25 kHz of bandwidth will be certified. In the *Reframing MO&O*, the Commission, *inter alia*, clarified that because SVRS operating on the frequency 173.075 MHz operate under distinct technical rules, the general narrowbanding requirement did not apply to that frequency.[10]

6. On February 24, 2000, NTIA informed the Commission that it had completed its planning for narrowbanding and restructuring of the 406.1-420 MHz band.[11] The restructuring involves some changes in the frequencies identified in footnote US13, which addresses the transmission of hydrological and meteorological data by both Federal and non-Federal fixed stations. On March 23, 2000, NTIA requested that footnote US117 to the Table, which provides the method for protecting RAS reception in the 406.1-410 MHz band from fixed and mobile operations, be amended to revise the areas where prior coordination for fixed operations is required and to modify the power limit for stations in the fixed and mobile services.[12] NTIA has also adopted a plan to transition certain Federal operations in the 138-150.8 MHz band to narrowband technology by 2008. The upper portion of this band includes Medical Radiocommunications Systems frequencies that are available to non-Federal users.

7. In the February 12, 2003, *Narrowbanding Second Report and Order*, we amended our Rules to provide a schedule for the migration of PLMR systems to 12.5 kHz or narrower technology in the 150-174 MHz and 421-512 MHz bands. Beginning January 1, 2005, we will not certify equipment that incorporates capability to operate with one voice path per 25 kHz of spectrum, *i.e.* equipment that includes a 25 kHz mode. Beginning January 1, 2008, we will prohibit the manufacture and importation of any 150-174 MHz and 421-512 MHz band equipment that can operate on a 25 kHz bandwidth.[13] We established a January 1, 2013, deadline for systems operating in the Industrial/Business Pool and a January 1, 2018, deadline for systems operating in the Public Safety Pool to migrate to 12.5 kHz technology for PLMR systems operating in the 150-174 MHz and 421-512 MHz bands.[14] The *Narrowbanding Second Report and Order* set January 13, 2004, as the date by which we would begin rejecting license applications for 1) new operations using 25 kHz channels and 2) license modifications

[8] *Reframing Report and Order*, 10 FCC Rcd at 10099, para. 38.

[9] *Id.* Under the provisions that are currently in effect, equipment must meet a spectrum efficiency standard of one voice channel per 12.5 kHz of channel bandwidth. Additionally, for data transmissions, the equipment must be capable of supporting a minimum data rate of 9600 bits per second per 12.5 kHz of channel bandwidth. 47 C.F.R. § 90.203(j)(3). Operations using equipment designed to operate with a 12.5 kHz channel will be authorized a 11.25 kHz bandwidth. *See* 47 C.F.R. § 90.209(b)(5), note 3 to the table.

[10] *See Reframing MO&O*, 11 FCC Rcd at 17717. Transmitters used for SVRS on 173.075 MHz must comply with the requirements of § 90.20(e)(6), wherein the maximum authorized bandwidth is specified as 20 kHz. 47 C.F.R. §§ 90.203(j)(9), 90.20(e)(6).

[11] *See* Letter from Associate Administrator, Office of Spectrum Management, NTIA to Chief, OET, FCC, dated February 24, 2000. See also 47 C.F.R. § 2.106, footnote US13.

[12] *See* Letter from Associate Administrator, Office of Spectrum Management, NTIA to Chief, OET, FCC, dated March 23, 2000. See also 47 C.F.R. § 2.106, footnote US117.

[13] *Narrowbanding Second Report and Order*, 18 FCC Rcd at 3038, para. 12.

[14] The Commission has received eighteen petitions for reconsideration of the decisions of the *Narrowbanding Second Report and Order*.

that would expand the authorized contour of an existing station if the bandwidth for transmissions specified in the modification application is greater than 12.5 kHz.[15] On December 3, 2003, we issued an Order staying the January 13, 2004, requirements until after we have considered the still-pending petitions for reconsideration of the *Narrowbanding Second Report and Order.*[16] Currently, many Federal and non-Federal stations in the 150.05-150.8 MHz, 162-174 MHz, and 406.1-420 MHz bands are still authorized for 25 kHz channels.[17]

8. On October 31, 2003, we removed footnote US10 from Part 2 of the Commission's Rules.[18] We took this action in the *Above 28 MHz R&O* because the Commission has no formal relationship with the Civil Air Patrol, which is authorized by the U.S. Air Force and NTIA, and thus, there is no need for footnote US10, which stated that several frequencies in the 138-144 MHz band are available for use by the Civil Air Patrol.

IV. DISCUSSION

A. Federal Use of the Bands

9. The 150.05-150.8 MHz band is allocated to the fixed and mobile services on a primary basis for Federal use, and NTIA has primarily limited use of these allocations to the military services.[19] However, the upper two channels of the band were set aside for medical communications for both Federal and non-Federal use by a 1974 Commission decision that adopted an Interdepartment Radio Advisory Committee (IRAC) recommendation to establish a new medical radio service.[20] Since January 1, 1997, all new Federal systems in the 150.05-150.8 MHz band have been required to conform to the narrowband technical standards of 12.5 kHz-wide channels.[21] After January 1, 2008, all Federal systems in the 150.05-150.8 MHz band will be required to conform to the narrowband technical standards.

10. The 162-174 MHz and 406.1-420 MHz bands are allocated to the fixed and mobile services on a primary basis for Federal use, and NTIA has generally limited use of these allocations to

[15]47 C.F.R. § 90.209(b)(6). This section was added by the *Narrowbanding Second Report and Order.*

[16]Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Order*, 18 FCC Rcd 25491 (2003).

[17]Within these 25 kHz channels, non-Federal stations have been assigned an authorized bandwidth of up to 20 kHz, except for wireless microphones, which have an authorized bandwidth of 54 kHz. Within the 12.5 kHz channels, non-Federal stations may be assigned an authorized bandwidth of up to 11.25 kHz. *See* 47 C.F.R. § 90.210(b)(5), note 3 to the table. *See also NTIA Manual* at Section 4.3.7 and Section 4.3.9, Tables 1 & 2.

[18]Amendment of Parts 2, 25, and 87 of the Commission's Rules to Implement Decisions from World Radiocommunication Conferences Concerning Frequency Bands Between 28 MHz and 36 GHz and to Otherwise Update the Rules in this Frequency Range, ET Docket No. 02-305, *Report and Order* (*Above 28 MHz R&O*), 18 FCC Rcd 23426 (2003) at paras. 80 and 90.

[19]47 C.F.R. § 2.106, footnote G30; *see also* NTIA Federal Long-Range Spectrum Plan, September 2000, page 68.

[20]Amendment of Subpart P, Part 89 of the Commission's Rules (Eligibility of Comprehensive Health Services), *Report and Order*, Docket 19576, 30 Rad. Reg. 2d (P&F) 1389 (1974) (*1974 Medical Radiocommunications Systems Report and Order*). The frequencies set aside for low-power medical radiocommunications included 150.775 MHz and 150.790 MHz, both of which were formerly for military use.

[21]*See NTIA Manual* at Section 5.3.5.2 (Standards for Fixed and Mobile Analog or Digital FM/PM Narrowband Operations (138-150.8, 162-174 and 406.1-420 MHz)).

non-military agencies.[22] NTIA states that the 162-174 MHz band is the primary band for many Federal fixed and land mobile operations in support of safety in the air and at sea; protection of life, property, and natural resources; research; and other functions of the Federal Government.[23] The 406.1-410 MHz band is also allocated to the RAS on a primary basis for Federal and non-Federal use.[24] Further, as an exception to its general policy of prohibiting military use of the 406.1-410 MHz band, NTIA permits military tactical fixed and mobile operations to be conducted nationally on a secondary basis to the RAS.[25]

11. Since January 1, 1995, all new Federal systems in the 162-174 MHz band have been required to operate within a 12.5 kHz channel. After January 1, 2005, all Federal systems in the band must operate within a 12.5 kHz channel. For operations in the 406.1-420 MHz band, NTIA has required that, by January 1, 2008, all assignments and equipment must operate within to a 12.5 kHz channel.[26] In order to remain on a wideband channel in the 406.1-420 MHz band after that date, NTIA requires that a waiver request be recommended for approval by the IRAC's Frequency Assignment Subcommittee (FAS) and approved by NTIA.[27] Even if a waiver is approved, the assignment may be revoked within 180 days of a formal notice, under certain conditions.[28] Finally, we note that some Federal operations such as wireless microphones, military equipment used for tactical and/or training operations, and NOAA weather radio stations are exempt from the Federal narrowbanding requirements.

B. Non-Federal Use of the Bands

12. Although these bands are allocated for Federal Government use and are administered by NTIA, limited non-Federal use of these bands is authorized by virtue of seven United States footnotes: US8, US11, US13, US216, US223, US300, and US312.[29] We describe below the services the Commission has authorized to operate in these bands pursuant to these footnotes, as well as the relationship of non-Federal Government users in the bands to Federal Government users. In many cases,

[22]Footnote G5 limits the use of these fixed and mobile service allocations to non-military agencies of the Federal Government. 47 C.F.R. § 2.106, footnotes 5.226 and G5. Federal use of the 162-174 MHz band consists of the 162.0125-173.2 MHz and 173.4-174 MHz bands. International footnote 5.226, which states that any non-maritime mobile use of the segment 162.0125-162.05 MHz should be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radiocommunication service, has been adopted domestically.

[23]*See* NTIA Federal Long-Range Spectrum Plan, September 2000, pages 65-70. Agencies using these channels include, for example, the Federal Aviation Administration, the Coast Guard, and the Federal Bureau of Investigation.

[24]RAS reception in the 406.1-410 MHz band is protected from extraband radiation only to the extent that such radiation exceeds the level which would be present if the offending station were operating in compliance with the technical standards or criteria applicable to the service in which it operates. 47 C.F.R. § 2.106, footnote US74. Additionally, footnote US117 limits the transmitter power density for new authorizations in the 406.1-410 MHz band and requires prior coordination for fixed and base stations near RAS observatories.

[25]47 C.F.R. § 2.106, footnote G6.

[26]In the 406.1-420 MHz band, there are 391 pairs of frequencies that are used by Federal agencies for two-frequency simplex operations. In addition, there are 329 center frequencies that are used by Federal agencies for single frequency operations.

[27]*See NTIA Manual* at Section 4.3.9, Conditions and Limitations 1.c.

[28] Similar waiver procedures for the 162-174 MHz band are currently being considered by NTIA.

[29]47 C.F.R. § 2.106.

non-Federal Government users in these bands operate on a non-interference basis in conjunction with, or in support of, Federal functions. Moreover, many of the channels authorized by these footnotes are subject to the 12.5 kHz channel plan that the Commission adopted in the *Narrowbanding Second Report and Order*. Under the current schedule, as adopted in the *Second Report and Order*, non-Federal licensees operating on these channels are required to transition to narrowband equipment by January 1, 2013, for systems operating in the Industrial/Business Pool and by January 1, 2018, for systems operating in the Public Safety Pool.[30] Additionally, we address herein a separate United States footnote, US117, which sets forth coordination requirements on operations in the 406.1-410 MHz band in order to protect RAS. We describe each of the footnotes and our proposals below.

13. As an initial matter, we note that our current narrowbanding schedule, which sets a January 1, 2005, date by which all new certified equipment must be designed to operate on channels of 6.25 kHz or less, applies to PLMR operations and does not make an exception for the operations on Federal channels that we discuss herein. Because NTIA has not yet addressed if or when it will require Federal users on these bands to operate on 6.25 kHz-wide channels, we seek comment on whether we should exempt equipment designed for use in these Federal bands from our current 6.25 kHz certification requirement. Specifically, commenters should address whether such a policy would be either beneficial or detrimental to enabling sharing between PLMR licensees and Federal users.

1. Hydro Channels (US13)

14. *Background.* The National Oceanic and Atmospheric Administration (NOAA) and other Federal agencies use frequencies within the 169-172 MHz and 406-416 MHz bands for hydrological and meteorological data collection.[31] Footnote US13 states that, for the specific purpose of transmitting hydrological and meteorological data in cooperation with Federal agencies, 28 channels may be authorized to non-Federal fixed stations.[32] Three additional channels are grandfathered for licensees that were in operation as of June 11, 1962.[33] Because non-Federal use of the Hydro channels is on the condition that no harmful interference will be caused to Federal stations, a licensee operating on these channels may receive interference without recourse and must take immediate corrective action to eliminate any interference it causes to the Federal station including, if necessary, cessation of operation.[34] Non-Federal users of the Hydro channels, consisting of state and local governments and Industrial/Business Pool users, supplement NOAA's data collection activities. Many municipalities also maintain extensive operations in the band. Additionally, some power companies use these frequencies in conjunction with their operation of dams. The national data collection system is administered by the Hydrological Radio Frequency Coordination Group within the Department of Commerce, which is

[30] *Narrowbanding Second Report and Order*, 18 FCC Rcd at 3038, para. 12.

[31] One application of these systems is to measure rainfall and, in response to a certain level registered in a rain gauge, to provide an alert downstream that conditions exist that may cause flash flooding.

[32] 47 C.F.R. § 2.106, footnote US13. The current Hydro Channel Plan consists of the following frequencies: 169.425 MHz, 169.450 MHz, 169.475 MHz, 169.500 MHz, 169.525 MHz, 170.225 MHz, 170.250 MHz, 170.275 MHz, 170.300 MHz, 170.325 MHz, 171.025 MHz, 171.050 MHz, 171.075 MHz, 171.100 MHz, 171.125 MHz, 171.825 MHz, 171.850 MHz, 171.875 MHz, 171.900 MHz, 171.925 MHz, 406.125 MHz, 406.175 MHz, 409.675 MHz, 409.725 MHz, 412.625 MHz, 412.675 MHz, 412.725 MHz, and 412.775 MHz. In the 162-174 MHz band, the 20 channels consist of four blocks of five channels, which provides 125 kHz of contiguous spectrum in each block. In the 406.1-420 MHz band, the eight channels consist of three groups of non-contiguous spectrum.

[33] *Id.* These channels are 169.575 MHz, 170.375 MHz, and 171.975 MHz.

[34] *Id. See also* 47 C.F.R. § 90.265(a)(2) (conditioning assignment of these frequencies "on a secondary basis to Federal Government stations").

commonly known as the Hydro Committee. The Hydro Committee is responsible for coordinating all requests for the use of these channels and for providing comments on such requests to the FCC and the FAS Secretariat of the IRAC.

15. Non-Federal use of the Hydro channels is governed by Section 90.265 of our Rules.[35] Before submitting an authorization request to the Commission, non-Federal applicants are required to prior-coordinate their requests through the Hydro Committee.[36] A review of our licensing database shows that the Hydro fixed stations operating on the Hydro channels use mainly wideband channels, but that some of the newer systems use narrowband channels.[37] We note that the Hydro Committee has begun encouraging the use of narrowband equipment by non-Federal applicants.[38]

16. On February 24, 2000, NTIA updated the *NTIA Manual* to implement a revised channel plan that specifies new and modified narrowband channels for hydrologic and meteorological operations in the 162-174 and 406.1-420 MHz bands.[39] Specifically, in the 169-172 MHz band segment (in which 20 Hydro channels are currently located), 16 channels were added to the Hydro Channel Plan and the three previously grandfathered channels were removed. In the 406-416 MHz band segment (in which eight Hydro channels are currently located), seven channels were added to the Hydro Channel Plan and three channels were removed. NTIA has designated two of the existing channels – 406.125 MHz and 406.175 MHz – to be paired with two of the new channels – 415.125 MHz and 415.175 MHz – to allow for paired Hydro operations. A review of our databases indicates that the Commission has licensed 219 fixed stations on the six channels being removed from the Hydro Channel Plan and has issued 1053 licenses for those Hydro channels that are designated for narrowband operations.[40] NTIA requests that existing wideband Hydro systems in the 169-172 MHz and 406-416 MHz segments adhere to the new Hydro Channel Plan and convert to narrowband equipment before January 1, 2005 and January 1, 2008, respectively.

17. *Proposal.* We propose to revise our Rules to reflect an updated Hydro Channel Plan that is consistent with the channel plan shown in the *NTIA Manual.* Our proposal would increase the number of Hydro channels from 28 single frequency channels (plus three grandfathered channels) to 44 single frequency channels and two sets of paired channels – for a total of 48 frequencies. Within the 162-174 MHz band, we propose to add 16 channels to the Hydro Channel Plan and to remove the three

[35] 47 C.F.R. § 90.265.

[36] *See NTIA Manual* at Section 8.3.6, paragraph 4.a; 47 C.F.R. § 90.265(a)(4).

[37] Historically, the Commission granted Hydro licenses with an authorized bandwidth of 20 kHz. However, the Commission has recently granted some Hydro licenses with narrower authorized bandwidths, such as 12.5 kHz, 11 kHz, 5.7 kHz, and 5.6 kHz.

[38] *See, e.g.*, call sign WPXX663 (a 169.425 MHz Hydro channel that was licensed July 26, 2003, with an authorized bandwidth of 11 kHz).

[39] *See NTIA Manual* at Section 4.3.3 (Plan for Hydrologic and Meteorological Operations in the Bands 162-174 and 406.1-420 MHz) and Section 8.3.6 (Coordination for the Use of Hydrologic Channels in the Bands 162-174 and 406.1-420 MHz).

[40] This study was conducted using the Commission's Universal Licensing System (ULS) database on June 24, 2004. See Appendix C at Table 1 for additional information.

grandfathered channels – 169.575 MHz, 170.375 MHz, and 171.975 MHz.[41] Within the 406-416 MHz band, we propose to add seven channels to the Hydro Channel Plan, pair two of the new channels with two existing channels in the band, and remove three channels – 409.675 MHz, 409.725 MHz, and 412.625 MHz.[42] By doing so, we would align non-Federal use of the Hydro channels with Federal use under NTIA's narrowbanding plan. Under the provisions of footnote US13, non-Federal stations operate in cooperation with Federal stations.[43] Consistency between Federal and non-Federal band plans furthers the public interest and safety by maintaining a ready flow of hydrologic and metrological data between non-Federal and Federal entities.

18. The Commission's previously adopted rules that require Hydro operations in the 169-172 MHz segment to transition to narrowband equipment well into the future (currently, January 1, 2013, for systems operating in the Industrial/Business Pool and by January 1, 2018, for systems operating in the Public Safety Pool). Thus, our narrowbanding schedule differs from NTIA's plan, which calls for Federal operations to use narrowband equipment by 2005. Because there could be extended periods during which existing non-Federal 25 kHz equipment may not be compatible with Federal operations using the new 12.5 kHz channels, we propose to establish the following procedure for incumbent licensees in the Hydro channels: First, existing stations (including those stations that expand existing operations) will be permitted to continue to operate with an authorized bandwidth in excess of 12.5 kHz until the 2013 and 2018 transition dates that are currently in effect, so long as no harmful interference is caused to a Federal assignment in the band. Second, because new Federal assignments may be authorized after January 1, 2005, it will be necessary for our licensees to work with the Hydro Committee to minimize the potential for interference between stations. The Hydro Committee coordinates all requests for use of hydrologic channels and provides comment on such request to the FCC and NTIA (*i.e.*, the FAS Secretariat), and thus is in the best position to promote the best cooperative use of these channels. Ultimately, because assignments are determined by the NTIA and the FCC, a non-Federal license in the 169-172 MHz band segment is subject to termination if interference is caused to the Federal assignment.[44]

19. We have not previously adopted narrowbanding requirements for the 406-416 MHz band. For existing non-Federal operations on the 406.125 MHz, 406.175 MHz, 412.725 MHz, and 412.775 MHz channels (*i.e.* the four Hydro channels currently authorized in footnote US13 that will remain in the revised Hydro Channel Plan), we propose to require narrowband operations by the same dates as the Hydro channels in the 169-172 MHz band segment.[45] Thus, these licensees would be permitted to use existing equipment until the Commission's overall narrowbanding requirements take

[41]The new center frequencies would be 169.4375 MHz, 169.4625 MHz, 169.4875 MHz, 169.5125 MHz, 170.2375 MHz, 170.2625 MHz, 170.2875 MHz, 170.3125 MHz, 171.0375 MHz, 171.0625 MHz, 171.0875 MHz, 171.1125 MHz, 171.8375 MHz, 171.8625 MHz, 171.8875 MHz, and 171.9125 MHz.

[42]The new center frequencies would be 412.6625 MHz, 412.6875 MHz, 412.7125 MHz, 412.7375 MHz, 412.7625 MHz, 415.125 MHz, and 415.175 MHz.

[43]*See, e.g.*, 47 C.F.R. § 90.265(a)(2) (requiring Hydro channel licensees to make available hydrologic and meteorological data to Federal agencies, upon request).

[44]Termination of operations would be required regardless of the length of advance notice, as well as in cases where advance notice is unable to be given.

[45]In order to implement this proposal, we would revise Section 90.203(j) by changing "421-512 MHz" to "406-512 MHz." See Appendix A, Section 90.203(j). To the extent that the January 1, 2013, and January 1, 2018, dates may be modified on reconsideration, our intent is for consistency between the final dates adopted in WT Docket No. 99-87 and the decisions ultimately adopted in this docket.

effect (again, currently January 1, 2013, for systems in the Industrial/Business Pool, and by January 1, 2018, for systems in the Public Safety Pool). Because new Federal assignments may be authorized after January 1, 2005, it will be necessary for our licensees to work with the Hydro Committee to minimize the potential for interference between stations. The Hydro Committee coordinates all requests for use of Hydro channels and provides comment on such request to the FCC and NTIA (*i.e.*, the FAS Secretariat), and thus is in the best position to promote the best cooperative use of these channels. Ultimately, because assignments are determined by the NTIA and the FCC, a non-Federal license in the 406-416 MHz band segment will be subject to termination if interference is caused to the Federal assignment.[46]

20. We tentatively conclude that we should implement a modified procedure for those Hydro channels that we propose to remove from the Hydro Channel Plan. In the 162-174 MHz band, one licensee – the State of California – has been authorized 15 fixed stations on the frequency 169.575 MHz under the 1962 grandfathering rules.[47] There are no non-Federal licensees operating on the other two channels in the band. A total of 13 non-Federal licensees are authorized to operate on the three 406-416 MHz band channels: (1) six licensees are authorized to operate 112 fixed stations at 409.675 MHz; (2) three licensees are authorized to operate ten fixed stations at 409.725 MHz; and (3) four licensees are authorized to operate 97 fixed stations at 412.625 MHz.[48] In each of these cases, we propose that licensees modify their equipment and station licenses and migrate to a center frequency under the new Hydro Channel Plan on a timetable as advised by the Hydro Committee and approved by the NTIA and the FCC.[49] As such, we note that Commission licensees should be prepared to cease or relocate operations by January 1, 2005, for stations on the frequency 169.575 MHz and by January 1, 2008, for stations on the frequencies 409.675 MHz, 409.725 MHz, and 412.625 MHz, in the event that they cause harmful interference to Federal facilities. Regardless of how long the Hydro Committee allows existing licensees to continue operations, we propose that in no case will licensees be permitted to operate on these channels after January 1, 2013 (for non-public safety systems) and January 1, 2018 (for public safety systems).[50]

21. For all new Hydro stations, we propose that a license issued on or after January 1, 2005 (for stations in the 162-174 MHz band) or January 1, 2008 (for stations in the 406-416 MHz band), limit operations to a channel no wider than 12.5 kHz, except that we could authorize wideband operations if the Hydro Committee recommends that an application be granted, and NTIA approves the request.[51] Because equipment meeting this channel bandwidth has been available for more than eight years, new licensees should be able to meet this requirement.

22. To implement these proposals, we anticipate revising Section 90.265(a) of our Rules to reflect the new Hydro Channel Plan and our proposal for transitioning to narrowband channels.[52]

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[46]We propose the January 1, 2008, date to be consistent with NTIA's narrowbanding timetable for the 406-416 MHz band.

[47]See Appendix C, Table 1.

[48]*Id.*

[49]We anticipate two situations where the Hydro Committee would advise a licensee to migrate to the new channels: for compatibility reasons so that all entities on a common system can successfully communicate, and if an interference situation occurs that cannot be resolved.

[50]See Appendix A, § 90.265(a)(5).

[51]For the purposes of this rule, expansion of existing systems would not be considered new stations.

[52]See Appendix A, Section 90.265(a).

Although Hydro channels are used by state and local government entities, they are not listed as being available to Public Safety Pool eligibles in Part 90 of our Rules.[53] Therefore, we also propose to amend Sections 90.20(c), 90.20(d)(48), and 90.265(a) of our Rules to correct this oversight.[54] We propose to amend the Industrial/Business Pool Frequency Table in Part 90 of our Rules by revising the entry for the 406-413 MHz band to read "406-416 MHz" to encompass the new Hydro frequencies at 415.125 MHz and 415.175 MHz.[55] Furthermore, we propose to revise footnote US13 of Section 2.106 to incorporate the new band plan. These revisions are included in the proposed rules listed in Appendix A.

23. Because non-Federal operations on these channels must not cause interference to Federal operations, we believe that the proposed modifications are necessary in light of the NTIA narrowbanding efforts. Due to the nature and use of the Hydro channels, we expect that the Hydro Committee will continue to promote effective non-Federal use of the band, and will work to foster an effective transition for all licensees. We seek comment on these proposals, including any difficulties that public safety licensees may have with complying with the proposed policy for transitioning existing operations to narrowband channels. We also request comment on how these proposals would affect Federal operations in the bands.

2. Forest Fire-fighting and Conservation Channels (US8)

24. *Background.* Footnote US8 states that the use of nine channels in the 162-174 MHz band may be authorized for stations in the fixed and land mobile services that are operated by non-Federal forest fire-fighting agencies on the condition that no harmful interference will be caused to Federal stations.[56] In addition, two of these channels may also be used by non-Federal conservation agencies for mobile relay operation only.[57] These nine channels are available to Public Safety Pool eligibles in Section 90.20 of our Rules and are reserved primarily for assignment to state licensees.[58] A review of our licensing database finds that the Commission has licensed thousands of mobile stations[59] and 751 base and fixed stations[60] on these frequencies.[61] Generally, because these frequencies are used

[53]47 C.F.R. § 90.20(c)(3).

[54]Specifically, we would add an entry for the 406-416 MHz band to the frequency table in Section 90.20(c)(3) and to limit the use of these frequencies by revised limitation 48, which would read as follows: Frequencies in this band will be assigned only for transmitting hydrological or meteorological data or for low power wireless microphones in accordance with the provisions of § 90.265. In Section 90.265(a), we would add the Public Safety Pool eligibility for Hydro channels. See Appendix A and 47 C.F.R. §§ 90.20(c)(3), 90.20(d)(48), 90.265(a).

[55]See Appendix A and 47 C.F.R. § 90.35(b)(3).

[56]47 C.F.R. § 2.106, footnote US8. Four frequencies (170.475, 171.425, 171.575, and 172.275 MHz) are designated for assignment east of the Mississippi River and five frequencies (170.425, 170.575, 171.475, 172.225 and 172.375 MHz) are designated for assignment west of the Mississippi River.

[57]*Id.* 172.275 MHz is designated for assignment east of the Mississippi River and 171.475 MHz is designated for assignment west of the Mississippi River.

[58]47 C.F.R. § 90.20(c)(3). There are 21 licensees authorized to use the forest fire-fighting/conservation channels, of which, 19 have been issued to states and state agencies. The other two licensees are the County of Los Angeles and a non-profit organization in Puerto Rico. See Appendix C at Table 2 for additional information.

[59]For the purposes of this proceeding, we will use the term mobile station to include mobile (MO) and mobile/vehicular repeater (MO3) stations. Paging receivers (pagers) are counted separately.

[60]For the purposes of this proceeding, we will use the term fixed station to include mobile relay (FB2), mobile relay-temporary (FB2T), operational fixed (FXO), operational fixed-temporary (FXOT), control (FX1), control-temporary (FX1T), and fixed relay (FX2) stations.

by state entities (or their designees) in cooperation with Federal forest fire-fighting operations and administered under the Department of Agriculture, the potential of interference conflict between Federal and non-Federal operations has been minimized by cooperative use between Federal, state, and local entities.

25. NTIA has required that all new Federal fixed and land mobile operations in the 162-174 MHz band use 12.5 kHz channels since 1995 and has established January 1, 2005, as the date by which all such Federal operations in this band must use narrowband equipment. Our rules permit existing licensees on these channels to use wideband equipment much longer – currently, until January 1, 2018.[62] Because additional Federal agencies will soon commence to operate on the new channels, there is an increased likelihood of interference between these Federal and non-Federal operations.

26. *Proposal.* Because these nine frequencies were provided for cooperative forest fire-fighting and conservation operations between Federal, state, and local entities, we propose to maintain that relationship. Because our rules provide a much longer transition to narrowband channels than NTIA's plan, we propose to allow operations under existing licenses (and expansions under existing licenses) to continue with an authorized bandwidth in excess of 12.5 kHz until the Commission's general narrowband transition date (currently 2018) or until notified by the Commission that harmful interference is anticipated to or from a Federal assignment proposed on or after January 1, 2005, whichever comes first.[63] To minimize the potential of harmful interference between stations, the FCC will work with NTIA under the auspices of the FAS to provide advanced notice to our licensees that a proposed Federal assignment has been filed with NTIA. After the Federal entity begins operations, however, the non-Federal license will be subject to termination if interference is caused to Federal operations.[64]

27. We propose that, after January 1, 2005, all new non-Federal stations meet the narrowband standards, unless a waiver has been recommended by the sponsoring Federal agency and approved by NTIA.[65] Although the *Narrowbanding Second Report and Order* had established a January 13, 2004, cut-off date for filing wideband applications, it is unclear how long the current stay of those rules will remain in effect or whether the underlying rules will be changed upon reconsideration. Nevertheless, because the forest fire-fighting and conservation channels operate on a secondary basis to Federal operations, we believe that we must move forward with the narrowbanding of these channels in order to improve compatibility with Federal operators and minimize the potential for interference. Thus, if the general narrowbanding requirement for PLMR licenses in the 150-174 MHz band takes effect prior to January 1, 2005, we propose to apply that date instead.

(Continued from previous page)

[61]This study was conducted using the ULS database on June 24, 2004. See Appendix C at Table 2 for additional information.

[62]*Narrowbanding Second Report and Order*, 18 FCC Rcd at 3082, Appendix B, footnote 3 to the table in Section 90.209(b)(5).

[63]Although existing licensees must cease operation if they cause interference to new Federal stations, we note that it may be the case that new Federal stations cause interference to incumbent wideband non-Federal stations. Because incumbent operators must receive such interference without recourse, they may have no choice but to cease operation.

[64]Termination of operations will be required regardless of the length of advance notice, as well as in cases where advance notice is unable to be given.

[65]For the purposes of this rule, expansion of existing systems would not be considered new stations.

28. We observe that these channels are used sporadically and many are located in rural areas, and so we believe that there is a realistic possibility that some existing licensees will be able to continue to operate on their current channels beyond NTIA's January 1, 2005, schedule without causing harmful interference. Accordingly, we see no need to alter the Commission's previously adopted rules that allow incumbent forest firefighting and conservation operations in the 162-174 MHz band to transition to narrowband equipment by January 1, 2018. However, because there could be up to a 13-year period during which non-Federal forest firefighting/conservation operations using 25 kHz equipment may not be compatible with Federal operations using the new 12.5 kHz channels, the procedures described above will provide licensees with notice of anticipated interference to or from new Federal operations and an opportunity to prepare to cease operations. We believe these proposals balance the competing needs of all users, and seek comment on this plan. We also request comment on the compatibility of older 25 kHz channel equipment with narrowband equipment currently available.

29. We note that, under current practice, applications for use of these channels are accompanied by a letter of concurrence by the sponsoring Federal agency (*e.g.* the Department of Agriculture). We tentatively conclude that this practice aids the coordination of assignments between NTIA and the Commission, and we therefore propose to modify our rules to codify this procedure.

30. Finally, we propose to move the existing limitations that are contained in Section 90.20 of our Rules into a new subsection of Section 90.265, revise limitation 49 under Section 90.20 to provide a cross-reference to Section 90.265, and remove what will then be redundant statements of limitation for these channels in Section 90.20. Section 90.265 of our Rules already describes procedures by which we license two services permitted on Federal bands pursuant to United States footnotes – Hydro operations and wireless microphones. We believe it would be convenient and consistent to expand this section to include similarly situated services including, *inter alia*, the Forest Fire-Fighting and Conservation channels. We seek comment on these proposals, including any difficulties that public safety licensees may have with complying with the proposed policy for transitioning assignments to 12.5 kHz channels. We also request comment on how these proposals would affect Federal operations in the band.

3. Public Safety Channels (US11)

31. *Background.* Footnote US11 authorizes public safety radio services use of two channels on 166.25 MHz and 170.15 MHz for locations within 150 miles of New York City, on the condition that harmful interference is not caused to present or future Federal stations in the 162-174 MHz band.[66] A recent review of our licensing database shows that the Commission has authorized 30 fixed stations, 1295 mobile stations, and 95 pagers on the frequency 166.25 MHz, and 23 fixed stations, 640 mobile stations, and 160 pagers on the frequency 170.15 MHz.[67]

[66]47 C.F.R. § 2.106, footnote US11. These frequencies are available under Part 90 of our Rules to Public Safety Pool eligibles within 150 miles of New York City. 47 C.F.R. § 90.20(c)(3). Footnote US11 also authorizes remote pickup broadcast operations for certain locations within the continental United States. The transition plan for remote pickup broadcast stations is codified at 47 C.F.R. § 74.462(b), table note 4, and requires narrowband operations to be in place no later than January 1, 2005. *See also* Revisions to Broadcast Auxiliary Service Rules in Part 74 and Conforming Technical Rules for Broadcast Auxiliary Service, Cable Television Relay Service and Fixed Services in Parts 74, 78 and 101 of the Commission's Rules, ET Docket No. 01-75, *Report and Order*, 17 FCC Rcd 22979 (2003), paras. 116-120 and Appendix A, n. 26. Because the use of narrowband equipment by remote pickup broadcast stations has previously been addressed by the Commission, it is not further discussed in this proceeding.

[67]This study was conducted using the ULS database on July 23-24, 2004. See Appendix C at Tables 3 and 4 for additional information.

32. Consistent with NTIA's 12.5 kHz Plan for Federal fixed and land mobile operations in the 162-174 MHz band, we have required that non-Federal operations on the two public safety channels authorized in footnote US11 be narrowed to 12.5 kHz channels. However, the NTIA plan calls for Federal licensees to meet a January 1, 2005, deadline to operate on narrowband channels, whereas our rules require public safety licensees in the band to migrate to 12.5 kHz technology by January 1, 2018. The prospect that Federal agencies will soon commence to operate on the new channels increases the likelihood of interference between Federal and non-Federal operations in the band.

33. *Proposal.* Because the non-interference considerations we have discussed *supra* apply to these channels, we propose to allow operations under existing licenses (and expansions under existing licenses) to continue with an authorized bandwidth in excess of 12.5 kHz until the Commission's narrowband transition date (currently 2018) or until notified by the Commission that harmful interference is anticipated to or from a Federal assignment proposed on or after January 1, 2005, whichever comes first. To minimize the potential of harmful interference between stations, the FCC will work with NTIA under the auspices of the Frequency Assignment Subcommittee (FAS) of the Interdepartment Radio Advisory Committee (IRAC) to provide advanced notice to our licensees that a proposed Federal assignment has been filed with NTIA. After the Federal entity begins operations, however, the non-Federal license will be subject to termination if interference is caused to the Federal assignment.[68] We also propose that new stations meet the narrowband standards no later than January 1, 2005, unless a waiver has been granted by NTIA. However, if the general narrowbanding requirement for PLMR licenses in the 150-174 MHz band takes effect prior to January 1, 2005, we propose to apply that date instead.

34. We propose modifications to our rules to accurately reflect non-Federal licensees' role in this shared band. We propose to create a new paragraph in Section 90.265 of our Rules to describe these public safety channels, and to revise the limitation in Section 90.20(d)(47) of our Rules to serve as a cross-reference. We propose to state in our Rules that operations are on a secondary basis to any Federal station, in order to give effect to the restriction embodied in footnote US11 that non-Federal operations on 166.250 MHz and 170.150 MHz may operate on the condition that no harmful interference is caused to Government stations "present or future" in the Federal band. We also believe that footnote US11 can be modified to remove an outdated reference to wideband operations that are no longer permitted and to simplify the description of public safety and remote pickup broadcast operations in the band. The proposed revision is included in Appendix A. Finally, we ask whether new applications for use of these channels should be accompanied by a letter of concurrence by a sponsoring Federal agency, as we do with the Forest Fire-Fighting and Conservation channels, described *supra*. We note that similar coordination letters appear to have served non-Federal users well in ensuring smooth processing of license applications.

35. We believe that these proposed modifications will properly account for NTIA's scheduled narrowbanding of Federal operations in the band. We seek comment on these proposals, including any difficulties that public safety licensees may have with complying with the proposed policy for transitioning footnote US11 assignments to 12.5 kHz channels. We also request comment on how these proposals would affect Federal operations, which are scheduled to use only narrowband equipment after January 1, 2005. Further, we seek comment on the compatibility of older 25 kHz channel equipment with narrowband equipment currently available.

[68]Termination of operations would be required regardless of the length of advance notice, as well as in cases where advance notice is unable to be given.

4. Medical Radiocommunication Systems (US216)

36. *Background.* Footnote US216 makes several frequencies available to both Federal and non-Federal Medical Radiocommunication Systems on a primary basis.[69] Such use dates back to a 1974 *Report and Order*, in which the Commission established new medical radiocommunication frequencies pursuant to a NTIA report.[70] Medical Radiocommunication Systems operate in frequency bands that are designated for Federal use, as well as bands designated for non-Federal use.[71] Five medical radiocommunication frequencies specified in Part 90 of our Rules, 150.775 MHz, 150.7825 MHz, 150.790 MHz, 150.7975 MHz, and 163.250 MHz, operate in the Federal bands and are the subject of the discussion herein. Three of these frequencies, 150.775 MHz, 150.790 MHz, and 163.250 MHz, are listed in US216, while the other two, 150.7825 MHz and 150.7975 MHz, are not.[72]

37. Section 90.20 of our Rules states that the 150.775 MHz, 150.7825 MHz, 150.790 MHz and 150.7975 MHz frequencies are to be used only by mobile stations.[73] A review of our licensing database finds that 499 licenses have been granted for the frequency 150.775 MHz and 418 licenses have been granted for the frequency 150.790 MHz.[74] These operations must use narrowband equipment by January 1, 2018.[75] This schedule affords more transition time than does NTIA's plan, which has required

[69]Footnote US216 reads as follows: "The frequencies 150.775 and 150.790, and the bands 152-152.0150, 163.2375-163.2625, 462.9375-463.1875 and 467.9375-468.1875 MHz are authorized for Government/non-Government operations in medical radio communications systems." 47 C.F.R. § 2.106, footnote US216.

[70]*See 1974 Medical Radiocommunications Systems Report and Order.*

[71]The 150.05-150.8 MHz and 162.0125-173.2 MHz bands are allocated for primary Federal use. The 152-152.0150 MHz, 462.9375-463.1875 MHz, and 467.9375-468.1875 MHz bands are allocated for primary non-Federal use. Frequencies in the 462.9375-463.1875 MHz and 467.9375-468.1875 MHz bands already operate on narrowband channels or are subject to the narrowbanding timetable established in the *Narrowbanding Second R&O. See* 47 C.F.R. §90.20(c)(3) & 90.209(b)(5)-(6).

[72]The frequencies 150.7825 MHz and 150.7975 MHz were added to Part 90 of our Rules in 1995. *See Refarming Report and Order, supra*, at n.3.

[73]47 C.F.R. § 90.20(c)(3). In the *1974 Medical Radiocommunications Systems Report and Order*, the 150.775 MHz and 150.790 MHz channels were set aside for low-power use, and envisioned as suitable for communicating from a portable unit to an ambulance or other emergency vehicle for retransmission to a base station. *1974 Medical Radiocommunications Systems Report and Order* at para. 38. Upon reconsideration, such low-power use was limited to maximum 2.5 watts. Amendment of Parts 2 and 89 of the Commission's Rules and Regulations Relating to Communications for Emergency Medical Services, Docket No. 19880, *Memorandum Opinion and Order*, 49 F.C.C.2d 368 (1974) at para. 15. When the Commission established the Emergency Medical Radio Service in 1993, the power limitation and usage restrictions were removed. Amendment of Part 90 of the Commission's Rules to Create the Emergency Medical Radio Service, PR Docket No. 91-72, *Report and Order*, 8 FCC Rcd 1454 (1993) at paras. 18 & 26.

[74]This study was conducted using the ULS database on June 25, 2004. We note that a single license can authorize multiple fixed and mobile stations to operate on multiple frequencies. For example, the Commission has authorized the County of Ada, Idaho to operate six fixed stations and 200 mobile stations on the frequencies 150.775 MHz, 150.790 MHz, 155.385 MHz, and 155.4 MHz (call sign WPEQ655).

[75]*Narrowbanding Second Report and Order*, 18 FCC Rcd at 3082, Appendix B, footnote 3 to the table in Section 90.209(b)(5). We note that the frequency 150.7825 MHz already contains a limitation that restricts its use to a 11.25 kHz bandwidth. *See* 47 C.F.R. § 90.20(d)(27). In order to implement our decision to require 12.5 kHz channels, no new applications for the 150-174 MHz band would be acceptable for filing if the applicant utilizes channels with an authorized bandwidth exceeding 11.25 kHz beginning January 13, 2004. As discussed, *supra*, the effectiveness of this date has been stayed pending resolution of outstanding petitions for reconsideration.

that all new Federal fixed and land mobile operations in the 150.05-150.8 MHz band use 12.5 kHz channels since 1997, and has established January 1, 2008, as the date by which all such Federal operations in this band must use narrowband equipment. All of the stations licensed to operate on the frequencies 150.7825 MHz and 150.7975 MHz already use narrowband equipment.[76]

38. The 163.25 MHz frequency is available only for one-way paging communications to mobile receivers and it may be used for base or mobile stations with an authorized a channel bandwidth of 25 kHz.[77] NTIA has required that all new Federal fixed and land mobile operations in the 162-174 MHz band, including 163.25 MHz, use 12.5 kHz channels since 1995 and has established January 1, 2005, as the date by which all such Federal operations in this band must use narrowband equipment. Our records indicate that 520 licenses have been granted for non-Federal operations on the 163.25 MHz frequency channel.[78]

39. *Proposal.* We propose to require that non-Federal operations in the Federal bands as listed in footnote US216 (150.775 MHz, 150.790 MHz and 163.25 MHz) be narrowed to a 12.5 kHz channel to maintain their primary status as described below. The establishment of a narrowbanding plan for non-Federal users operating on these frequencies will complement NTIA's 12.5 kHz Plan to establish narrowband channels for Federal fixed and land mobile operations in the 150.05-150.8 MHz and 162-174 MHz bands. We further propose to cease licensing stations on the frequencies of 150.7825 MHz and 150.7975 MHz. These frequencies, which were never incorporated into footnote US216, lie within the Federal military band, and additional authorizations would limit the operational deployment of vital military systems. We propose to permit existing stations that are authorized as of effective date of the Report and Order in this proceeding to use the frequencies 150.7825 MHz and 150.7975 MHz indefinitely. We seek comment on these proposals.

40. We propose to retain the same narrowbanding timetable we previously established in the *Narrowbanding Second R&O* with respect to stations operating on the Federal frequencies: 150.775 MHz, 150.790 MHz, and 163.250 MHz. Under this plan, existing public safety operations using these frequencies, including expansions of existing systems, must use narrowband equipment no later than January 1, 2018.[79] With respect to use of the Federal frequencies in the Medical Radiocommunciation Systems bands, we recognize that our plan differs from that of NTIA, and that existing non-Federal entities will be able to operate on wideband channels both throughout and after NTIA's transition period for Federal users in the band. We tentatively conclude that such a timetable is warranted because the application of our general narrowbanding dates to these channels will allow us to provide a migration period that is sufficiently long in duration to meet the unique funding and planning needs of public safety entities.[80] We further note that these three frequencies are shared by Federal and non-Federal entities on a co-primary basis. Thus, use of these three frequencies differs from the other frequency bands discussed herein, in which non-Federal licensees operate on a secondary basis to Federal users and must be

[76]This study was conducted using the ULS database on June 25, 2004.

[77]Transmissions for purpose of activating or controlling remote objects is not permitted. *See* 47 C.F.R. § 90.20(d)(13) and (30).

[78]This study was conducted using the ULS database on June 25, 2004. As an example of how the medical paging frequency 163.25 MHz is used, we note that the Bothwell Regional Health Center, Missouri is authorized to operate a fixed station with 250 paging receivers (call sign KAG246).

[79]To the extent that the January 1, 2018 date may be modified on reconsideration, our intent is for consistency between the final dates adopted in WT Docket No. 99-87 and the decisions ultimately adopted in this docket.

[80]*See Narrowbanding Second Report and Order*, 18 FCC Rcd at 3042, para. 19.

prepared to migrate or cease operations once Federal licensees begin using narrowband equipment. Because of this distinction, we believe that these non-Federal licensees should be treated in a similar manner to all other primary land mobile licensees under the Commission's jurisdiction. By doing so, we will be able to provide valuable migration time to existing non-Federal Medical Radiocommunication Systems licensees. In addition, this approach will preserve our traditional first-in-time policy by which the first licensed entity does not have to modify its operations but instead maintains a primary status in relation to subsequently licensed entities. Under this policy, an existing wideband non-Federal licensee will be entitled to protection from interference from new Federal entities and non-Federal licensees that subsequently begin operations in the band, and will not need to modify existing operations to prevent interference to these new entrants. For all of these reasons, we tentatively conclude that existing licensees be permitted to use their existing equipment until January 1, 2018, and that such operations be protected from interference from new or modified Federal and non-Government operations in the band until that date.

41. With respect to new stations operating on the frequencies 150.775 MHz, 150.790 MHz, and 163.250 MHz, we propose to adopt a narrowbanding timetable that is aligned with NTIA's narrowbanding plan. New stations operating at 163.250 MHz must meet the narrowband standards no later than January 1, 2005, and new stations operating at 150.775 MHz and 150.790 MHz must meet the narrowband standards no later than January 1, 2008. However, if the general narrowbanding requirement for PLMR licenses in the 150-174 MHz band takes effect prior to January 1, 2008, we propose to apply that date instead for new operations at 150.775 MHz, 150.790 MHz, and 163.25 MHz. Because equipment meeting this channel bandwidth has been available for more than eight years, we anticipate that new licensees should be able to meet these requirements.[81] We further note that, unlike existing licensees, new licensees will not have the burden of planning for, budgeting, and transitioning from legacy wideband systems. These requirements support the longer transition period we are affording existing licensees herein.

42. We also take this opportunity to propose several clarifications to our Part 90 Rules relating to Medical Radiocommunication Systems. In Section 90.20 of our Rules, we propose to add a new limitation on the use of the frequencies 150.775 MHz, 150.790 MHz, and 163.250 MHz that would implement, on a going-forward basis, the footnote US216 requirement that the use of these channels be limited to medical radio communications systems, as well as to remove existing limitation 19 for these channels. In addition, and in order to give effect to the medical use limitation, we propose that the coordinator for the frequencies 152.0075 MHz and 163.250 MHz (as listed in the fourth column of the Public Safety Pool Frequency Table) be changed from Special Emergency Coordinator (PS) to Emergency Medical Coordinator (PM). We note that the coordinator for the frequencies 150.775 MHz and 150.790 MHz is specified as PM in the current Rules, and tentatively conclude that we should follow the same approach for the frequencies 152.0075 MHz and 163.250 MHz.[82] We seek comment on this proposal. We also propose to modify footnote US216 to list the available frequencies in lieu of the 152-152.0150 MHz and 163.2375-163.2625 MHz bands.[83] We note that our proposal would result in a

[81]Narrowband medical paging equipment has only become available from multiple vendors in the last few years. Nonetheless, the Department of Veteran's Affairs (VA), the largest Federal user of Medical Radiocommunication Systems, recently reported to NTIA that it is currently moving to complete the mandated narrowbanding project on time.

[82]*See* 47 C.F.R. § 90.20(c).

[83]Although these frequencies are currently listed in Part 90 of our Rules, they heretofore have not been incorporated into the Table of Frequency Allocations, footnote US216. We note that the 7.5 kHz channel spacing in the 150 MHz band will require operational separation, such as a greater distance between adjacent-channel facilities.

single medical paging frequency, 152.0075 MHz, operating in the primary non-Federal band. We seek comment as to how we should treat this frequency, and whether it should be limited to narrowband operations in the same manner and time frame we require for medical paging operations at 163.25 MHz. Finally, we note that the use of frequencies 150.775 MHz and 150.790 MHz are limited to mobile use only and that no power restrictions are currently specified for these channels in Part 90 of our Rules, despite NTIA's provisions that these channels are to be used for hand-held units restricted to 2.5 watts of power.[84] We seek comment on the practical effect of this discrepancy and what actions, if any, we should take to reconcile the difference between our Rules and NTIA's provisions for these channels.

43. The modifications we propose herein are designed to balance the needs of incumbent non-Federal users in light of proposed new Federal narrowband operations in the band, and we seek comment on these proposals. We especially solicit information from the medical, the emergency medical, and the special emergency radiocommunication services community regarding the use of the two mobile frequencies (150.775 MHz and 150.790 MHz), the two "offset" frequencies (150.7825 MHz and 150.7975 MHz), and the two paging-only frequencies (152.0075 MHz and 163.25 MHz) in order to develop a full record regarding both the current use of and any future needs for these frequencies – including any related use by non-medical, public safety entities. We also seek information about the need for these frequencies in relation to other frequencies available under Part 90 of the Commission's Rules.

5. Other Users (US117, US223, US300, and US312)

44. *Stolen Vehicle Recovery Systems (US312).* Footnote US312 states that the frequency 173.075 MHz may be authorized on a primary basis to non-Federal stations in the Police Radio Service for Stolen Vehicle Recovery Systems (SVRS) and limits the maximum authorized bandwidth for SVRS to 20 kHz.[85] This frequency is listed in the Public Safety Pool Frequency Table and its use is limited to SVRS as prescribed in Section 90.20(e)(6) of our Rules.[86] This Part 90 rule also states that the SVRS frequency is available on a shared basis with Federal operations.[87] LoJack, currently the only SVRS operator on this frequency in the United States, operates its network in cooperation with federal, state and local law enforcement agencies in 20 states and the District of Columbia.[88] A review of our licensing database finds that public safety licensees are authorized to operate 125 fixed stations as part of the SVRS network.[89]

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[84] *See supra* note 73.

[85] Footnote US312 reads as follows: The frequency 173.075 MHz may also be authorized on a primary basis to non-Government stations in the Police Radio Service (with a maximum authorized bandwidth of 20 kHz) for stolen vehicle recovery systems. 47 C.F.R. § 2.106, footnote US312.

[86] 47 C.F.R. §§ 90.20(c)(3), 90.20(e)(6).

[87] Applications for base stations are coordinated with NTIA.

[88] LoJack Corporation 2002 Annual Report at 2. LoJack states that its transponder units have been installed in more than 1.25 million vehicles. *See* Amendment of Section 90.20(e)(6) of the Commission's Rules to revise the Authorized Duty Cycle on 173.075 MHz, WT Docket No 01-97, *Report and Order*, 17 FCC Rcd 16938, 16939 n.14 (2002) (citing LoJack's comments in the proceeding).

[89] The SVRS fixed stations are licensed to 18 states and state agencies, as well as the District of Columbia Metropolitan Police Department, Policia de Puerto Rico, and the City of Los Angeles. This study was conducted using the ULS database on June 24, 2004. Our licensing information does not indicate how many patrol cars are outfitted with SVRS tracking equipment.

45. NTIA's 12.5 kHz plan for the 162-174 MHz band calls for Federal agencies to be licensed on the adjacent frequencies 173.0625 MHz and 173.0875 MHz. We note that these frequencies are only 12.5 kHz away from the SVRS center frequency, and therefore it is possible that because new federal entities will be operating much closer in frequency to the SVRS channel than Federal entities have in the past, wideband SVRS operations could encounter interference situations that could prove burdensome to identify and resolve. However, we also note that there has been significant investment in SVRS by the general public and that SVRS equipment has been deployed by numerous law enforcement agencies. Taking these facts into account, we seek comment as to whether it would be advisable to establish a narrowband transition plan for SVRS users at 173.075 MHz. Specifically, we ask that commenters provide detailed information regarding the availability of narrowband SVRS equipment. In addition, we seek information that would allow us to determine whether we could craft an effective process that would both preserve the utility of the LoJack system and account for new Federal entrants in the band. For example, how readily could narrowband SVRS technology be made available to operate on the 173.075 MHz frequency? What is the expected life cycle of existing SVRS equipment? Taking into account the availability of equipment and the installed base, what is a reasonable transition plan by which the LoJack network could move to narrowband equipment? For example, would the January 1, 2018 transition date already adopted for the Public Safety Radio Pool be appropriate?

46. Because rules for a separate Police Radio Service were removed when the Commission created the Public Safety Radio Pool, we propose to update footnote US312, as reflected in Appendix A, to account for this fact. We also note that some Federal frequencies will continue to operate on wideband channels for the indefinite future.[90] We seek comment on this matter.

47. *Ship and Public Coast (US223) and Wireless Microphones (US300).* Footnote US223 makes a channel available for public coast station use in limited areas near the Canadian border. Because Ship and Public Coast operations do not fall under the same rules as PLMR, operations under footnote US223 do not need to be modified to support NTIA's narrowbanding timetable, as discussed above, and therefore we propose no changes to these frequencies as part of this proceeding. Footnote US300 specifies eight frequencies that are available for wireless microphone operations on a secondary basis to Federal and non-Federal operations. Because wireless microphones operate at very low power (50 mW output power), there is a minimal likelihood that they will cause interference to high-power land mobile operations. Thus, we propose no changes to the frequencies allocated for wireless microphones as part of footnote US300.

48. *Radio Astronomy Protection (US117).* Footnote US117 states that, in the 406.1-410 MHz band, all new authorizations are limited to a transmitter output power of 7 watts per kHz of necessary bandwidth[91] and that new fixed station authorizations near four RAS observatories are subject to prior coordination.[92] NTIA has reviewed footnote US117 and recommends that it be revised.[93]

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[90]These include, for example, nine channels used by NOAA in the 162.3625-162.5825 MHz band and Coast Guard Channel 88, a 25 kHz channel at 162.0250 MHz.

[91]In 1970, the secondary RAS allocation at 404-406 MHz was shifted up in frequency to 406-410 MHz and given primary status. At that time, Federal operations that exceeded this power density limit were grandfathered.

[92]Footnote US117 reads as follows: In the band 406.1-410 MHz, all new authorizations will be limited to a maximum 7 watts per kHz of necessary bandwidth; existing authorizations as of November 30, 1970 exceeding this power are permitted to continue in use. New authorizations in this band for stations, other than mobile stations, within the following areas are subject to prior coordination by the applicant through the Electromagnetic Spectrum Management Unit, National Science Foundation, Washington, D.C. 20550, (202-357-9696):

Arecibo Observatory: Rectangle between latitudes 17° 30' N. and 19° 00' N. and between longitudes 65° 10' W. and 68° 00' W.

(continued....)

Specifically, NTIA proposes that footnote US117 be revised to limit transmitter output power of stations in the fixed and mobile services operating in the 406.1-410 MHz band to 125 watts and to update the RAS site coordination information.

49. With regards to stations in the fixed and mobile services that operate in the 406.1-410 MHz band, we note that non-Federal use is currently limited to four Hydro channels (406.125 MHz, 406.175 MHz, 409.675 MHz, and 409.725 MHz). A staff review of our licensing records found that most of the non-Federal fixed stations operating on these four Hydro channels have a transmitter output power of 50 watts or less and that the maximum output power that the Commission has authorized is 100 watts.[94] Moreover, we note that, in the proposed Hydro Channel Plan, non-Federal use of the 406.1-410 MHz band would be limited to two Hydro channels (406.125 MHz and 406.175 MHz).

50. We propose to revise footnote US117, as requested by NTIA, in order to promote more effective protection of RAS reception in the 406.1-410 MHz band. Specifically, in the 406.1-410 MHz band, the proposed revision of footnote US117 would limit the transmitter output power of stations in the fixed and mobile services to 125 watts; would revise the list of RAS sites to include the National Radio Astronomy Observatory at Socorro, New Mexico and to delete two RAS sites no longer observing in this band; and would revise the coordination areas for the Arecibo and Table Mountain Observatories.[95] Our proposed revised footnote US117 is set forth in Appendix A. We request comment on this proposal.

V. PROCEDURAL MATTERS

A. Initial Regulatory Flexibility Analysis

51. As required by Section 603 of the Regulatory Flexibility Act, 5 U.S.C. § 603, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the proposals suggested in this document. The IRFA is set forth in Appendix B. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in this Notice of Proposed Rulemaking

(Continued from previous page)

Owens Valley Radio Observatory: Two contiguous rectangles, one between latitudes 36° N. and 37° N. and longitudes 117° 40' W. and 118° 30' W. and the second between latitudes 37° N. and 38° N. and longitudes 118° W. and 118° 50' W.

Sagamore Hill Radio Observatory: Rectangle between latitudes 42° 10' N. and 43° 00' N. and longitudes 70° 31' W. and 71° 31' W.

Table Mountain Solar Observatory (NOAA), Boulder, Colorado (407–409 MHz only): Rectangle between latitudes 39° 30' N. and 40° 30' N. and longitudes 104° 30' W. and 106° 00' W. or the Continental Divide whichever is farther east.

The non-Government use of this band is limited to the radio astronomy service and as provided by footnote US13. 47 C.F.R. §2.106, footnote US13.

[93] *See* Letter from Associate Administrator, Office of Spectrum Management, NTIA, to Chief, OET, received March 23, 2000, at 1.

[94] For the frequency 406.125 MHz, 38 licenses authorize transmitter output powers between 4 and 100 watts. For the frequency 406.175 MHz, 14 licenses authorize transmitter output powers between 2 and 50 watts. For the frequency 409.695 MHz, 19 licenses authorize transmitter output powers between 8 and 100 watts. For the frequency 409.725 MHz, three licenses authorize transmitter output powers between 1 and 10 watts. This study was conducted using the ULS database on June 24, 2004.

[95] There are not any non-Federal Hydro channels in the 407-409 MHz band, and thus, the prior coordination area for the Table Mountain Observatory is applicable only to Federal agencies.

(NPRM). Comments must have a separate and distinct heading designating them as responses to the IRFA.

B. *Ex Parte* Rules – Permit-But-Disclose Proceeding

52. This is a permit-but-disclose notice and comment rulemaking proceeding. *Ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in the Commission's rules. *See generally* 47 C.F.R. §§ 1.1202, 1.1203, and 1.2306(a).

C. Comments

53. Pursuant to Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before **30 days after publication in the Federal Register**, and reply comments on or before **45 days after publication in the Federal Register**. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (1998).

54. Comments filed through the ECFS can be sent as an electronic file via the Internet to http://www.fcc.gov/e-file/ecfs.html. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply. Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number.

55. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). The Commission's contractor, Natex, Inc., will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743. U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, SW, Washington, D.C. 20554. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

D. Contact Person

56. For further information concerning this Notice of Proposed Rulemaking, contact Tom Mooring in the Office of Engineering and Technology at (202) 418-2450, or via e-mail at Tom.Mooring@fcc.gov.

VI. ORDERING CLAUSES

57. Accordingly, IT IS ORDERED that pursuant to Sections 1, 4(i), 7(a), 301, 302(a), 303(f), 303(g), 303(r), 307, 308, 309(j), 316, 332, 334, and 336 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 151, 154(i), 157(a), 301, 302(a), 303(f), 303(g), 303(r), 307, 308, 309(j), 316, 332, 334, and 336, the NOTICE OF PROPOSED RULEMAKING is hereby ADOPTED.

58. IT IS FURTHER ORDERED that the Commission's Consumer Information and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this NOTICE OF PROPOSED RULEMAKING, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

Appendix A: Proposed Rules

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 C.F.R. parts 2 and 90 as follows:

PART 2 -- FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

1. The authority citation for Part 2 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

2. Section 2.106 is amended by revising footnotes US11, US13, US117, US216, and US312 to read as follows:

§ 2.106 Table of Frequency Allocations.

* * * * *

UNITED STATES (US) FOOTNOTES

* * * * *

US11 On the condition that harmful interference is not caused to present or future Federal Government stations in the band 162-174 MHz, the frequencies 166.25 MHz and 170.15 MHz may be authorized to non-Federal Government stations, as follows: (1) eligibles in the Public Safety Radio Pool may be authorized to operate in the fixed and land mobile services for locations within 150 miles (241.4 km) of New York City; and (2) remote pickup broadcast stations may be authorized to operate in the land mobile service for locations within the continental United States, excluding Alaska, locations within 150 miles of New York City, and the Tennessee Valley Authority Area (TVA Area). The TVA Area is bounded on the west by the Mississippi River, on the north by the parallel of latitude 37° 30' N., and on the east and south by that arc of the circle with center at Springfield, Illinois, and radius equal to the airline distance between Springfield, Illinois, and Montgomery, Alabama, subtended between the foregoing west and north boundaries.

US13 The following center frequencies, each with a channel bandwidth not greater than 12.5 kHz, are available for assignment to non-Federal Government fixed stations for the specific purpose of transmitting hydrological and meteorological data in cooperation with Federal agencies, subject to the condition that harmful interference will not be caused to Federal Government stations:

Hydro Channels (MHz)			
169.425	170.2625	171.100	406.1250
169.4375	170.275	171.1125	406.1750
169.450	170.2875	171.125	412.6625
169.4625	170.300	171.825	412.6750
169.475	170.3125	171.8375	412.6875
169.4875	170.325	171.850	412.7125
169.500	171.025	171.8625	412.7250
169.5125	171.0375	171.875	412.7375
169.525	171.050	171.8875	412.7625
170.225	171.0625	171.900	412.7750
170.2375	171.075	171.9125	415.1250
170.250	171.0875	171.925	415.1750

New assignments on the frequencies 406.125 MHz and 406.175 MHz are to be primarily for paired operations with the frequencies 415.125 MHz and 415.175 MHz, respectively.

* * * * *

US117 In the band 406.1-410 MHz: (a) stations in the fixed and mobile services shall be limited to a transmitter output power of 125 watts; (b) non-Federal Government use shall be limited to the radio astronomy service and to the fixed service, as provided by footnote US13; and (c) new authorizations for stations, other than mobile stations, shall be subject to prior coordination by the applicant in the following areas:

(1) Arecibo Observatory of the National Astronomy and Ionosphere Center. Within Puerto Rico and the U.S. Virgin Islands, contact:

Spectrum Manager
Arecibo Observatory
P.O. Box 995
Arecibo, Puerto Rico 00613
Phone: 787-878-2612
Fax: 787-878-1816

(2) Very Large Array (VLA) of the National Radio Astronomy Observatory (NRAO). Within a 350 kilometer radius that is centered on 34° 04' 44" North Latitude, 107° 37' 04" West Longitude, contact:

Spectrum Manager
National Radio Astronomy Observatory
P.O. Box O
1003 Lopezville Road
Socorro, New Mexico 87801
Phone: 505-835-7000
Fax: 505-835-7027

(3) Table Mountain Observatory of the Department of Commerce (407-409 MHz only). Within a 10 kilometer radius that is centered on 40° 07' 50" North Latitude, 105° 14' 40" West Longitude, contact:

Radio Frequency Coordinator
Department of Commerce
325 Broadway
Boulder, Colorado 80303
Phone: 303-497-6548
Fax: 303-497-3384

* * * * *

US216 The use of the frequencies 150.775 MHz, 150.79 MHz, 152.0075 MHz, and 163.25 MHz, and the bands 462.9375-463.1875 MHz and 467.9375-468.1875 MHz may be authorized for both Federal and non-Federal Government Medical Radiocommunication Systems on a primary basis.

* * * * *

US312 The frequency 173.075 MHz may be authorized on a primary basis to non-Federal Government stations in the Public Safety Radio Pool, limited to police licensees, for stolen vehicle recovery systems (SVRS). SVRS may operate with an authorized bandwidth not to exceed 20 kHz.

* * * * *

PART 90 -- PRIVATE LAND MOBILE RADIO SERVICES

3. The authority citation for Part 90 continues to read as follows:

Authority: Sections 4(I), 11, 303(g), 303(r), and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(I), 161, 303(g), 303(r), 332(c)(7).

4. Section 90.20 is amended by revising paragraphs (c)(3) and (d)(47), (d)(48), and (d)(49), removing and reserving paragraphs (d)(50), and (d)(51), and by adding paragraphs (d)(86) and (d)(87) to read as follows:

§ 90.20 Public Safety Pool.

* * * * *

(c) * * *

(3) Frequencies.

PUBLIC SAFETY POOL FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations	Coordinator
*	*	*	*
Megahertz			
*	*	*	*
150.775	Mobile	86	PM
150.7825	....do	87	PM
150.790	....do	86	PM
150.7975	....do	87	PM
*	*	*	*
152.0075	Base	13, 30, 86	PM
*	*	*	*
163.250	....do	13, 86	PM
166.250	....do	47	PF
169-172	Mobile or operational fixed	48	
170.150	Base or mobile	47	PF
170.425	....do	9, 49	PO
170.475	....do	9, 49	PO
170.575	....do	9, 49	PO
171.425	....do	9, 49	PO
171.475	....do	9, 49	PO
171.575	....do	9, 49	PO
172.225	....do	9, 49	PO
172.275	....do	9, 49	PO
172.375	....do	9, 49	PO
*	*	*	*
406-416	Operational fixed	48	
*	*	*	*

(d) * * *

* * * * *

(47) This frequency may be assigned to stations in the Public Safety Pool in accordance with the provisions of § 90.265 of this chapter.

(48) Frequencies in this band will be assigned only for transmitting hydrological or meteorological data or for low power wireless microphones in accordance with the provisions of § 90.265 of this chapter.

(49) This frequency may be assigned only for forest fire-fighting and conservation activities in accordance with the provisions of § 90.265 of this chapter.

(50) [Reserved]

(51) [Reserved]

* * * * *

(86) This frequency will be assigned only for Medical Radiocommunication Systems in accordance with the provisions of § 90.265 of this chapter.

(87) Use of this frequency shall be limited to stations licensed as of **[effective date of the Report and Order in this proceeding]**.

5. Section 90.35 is amended by revising paragraph (b)(3) to remove the entry for "406-413" and to replace it with "406-416" to read as follows:

§ 90.35 Industrial/Business Pool.

* * * * *

(b) * * *

(3) Frequencies.

INDUSTRIAL/BUSINESS POOL FREQEUNCY TABLE

Frequency or band	Class of station(s)	Limitations	Coordinator
*	*	*	*
Megahertz			
*	*	*	*
406-416.....	Operational fixed	53	
*	*	*	*

* * * * *

6. Section 90.203 is amended by revising paragraphs (j), (j)(3), (j)(5), and (j)(7) to read as follows:

§ 90.203 Certification required.

* * * * *

(j) Except where otherwise specially provided for, transmitters operating on frequencies in the 150-174 MHz and 406-512 MHz bands must comply with the following:

* * * * *

(3) Applications for part 90 certification of transmitters designed to operate on frequencies in the 150-174 MHz and/or 406-512 MHz bands * * *

* * * * *

(5) Applications for part 90 certification of transmitters designed to operate on frequencies in the 150-174 MHz and/or 406-512 MHz bands * * *

* * * * *

(7) All transmitters that are designed for one-way paging operations, except those operating on the frequency 163.25 MHz, will be certified with a 25 kHz channel bandwidth and are exempt from the spectrum efficiency requirements of paragraphs (j)(3) and (j)(5) of this section.

* * * * *

7. Section 90.209 is amended by revising paragraph (b)(5) to remove the entry for "421-512" and to replace it with "406-512" to read as follows:

§ 90.209 Bandwidth limitations.

* * * * *

(b) * * *

(5) * * *

STANDARD CHANNEL SPACING BANDWIDTH

Frequency band (MHz)	Channel Spacing (kHz)	Authorized bandwidth (kHz)
*	*	*
406-512 [2].....	[1] 6.25	[13] 20/11.25/6
*	*	*

8. Section 90.217 is amended by adding paragraph (e) to read as follows:

§ 90.217 Exemption from technical standards.

* * * * *

(e) Transmitters used for wireless microphone operations and operating on frequencies allocated for Federal Government use must comply with the requirements of § 90.265(b).

9. Section 90.265 is amended by revising the section heading and paragraph (a) and by adding paragraphs (a)(5)-(a)(9), (c), (d), and (e) to read as follows:

§ 90.265 Assignment and use of frequencies in the bands allocated to Federal Government use.

(a) The following center frequencies are available for assignment to fixed stations in the Public Safety Pool or the Industrial/Business Pool, subject to the provisions of this section:

Hydro Channels (MHz)			
169.4250	170.2625	171.1000	406.1250
169.4375	170.2750	171.1125	406.1750
169.4500	170.2875	171.1250	412.6625
169.4625	170.3000	171.8250	412.6750
169.4750	170.3125	171.8375	412.6875
169.4875	170.3250	171.8500	412.7125
169.5000	171.0250	171.8625	412.7250
169.5125	171.0375	171.8750	412.7375
169.5250	171.0500	171.8875	412.7625
170.2250	171.0625	171.9000	412.7750
170.2375	171.0750	171.9125	415.1250
170.2500	171.0875	171.9250	415.1750

(1) * * *

* * * * *

(5) After January 1, 2005 for the 169-172 MHz band and January 1, 2008 for the 406-416 MHz band, channels for new operations are limited to an authorized bandwidth not to exceed 11.25 kHz. After those dates, existing systems with an authorized bandwidth of greater than 11.25 kHz (including those systems that expand existing operations) may continue to operate with a bandwidth greater than 11.25 kHz until January 1, 2013 (for Business/Industrial Pool licensees), and until January 1, 2018 (for Public

Safety Pool licensees). Such operations are limited by § 90.265(a)(6) and (a)(7), below.

(6) After January 1, 2005, if a licensee of a channel in the band 169-172 MHz which uses equipment with an authorized bandwidth greater than 11.25 kHz cannot resolve an interference complaint to the satisfaction of an impacted Federal agency or is advised to do so by the Hydro Committee as approved by the FCC, then the licensee must cease operation on the frequency upon notification by the Commission.

(7) After January 1, 2008, if a licensee of a channel in the band 169-172 MHz which uses equipment with an authorized bandwidth greater than 11.25 kHz cannot resolve an interference complaint to the satisfaction of an impacted Federal agency or is advised to do so by the Hydro Committee as approved by the FCC, then the licensee must cease operation on the frequency upon notification by the Commission.

(8) After [**effective date of the Report and Order in this proceeding**], new assignments on the frequencies 406.125 MHz and 406.175 MHz are to be primarily for paired operations with the frequencies 415.125 MHz and 415.175 MHz, respectively and limited to an authorized bandwidth not to exceed 11.25 kHz when paired.

(9) Existing stations may continue to use the center frequencies 169.575 MHz, 409.675 MHz, 409.725 MHz, and 412.625 MHz until January 1, 2013 for Business/Industrial Pool licensees and until January 1, 2018 for Public Safety Pool licensees, subject to the requirements of § 90.265(a)(6) and (a)(7), above.

(b) * * *

(c) The following center frequencies are available for assignment to licensees engaged in forest fire-fighting and conservation activities, subject to the provisions of this section:

Forest Fire-Fighting and Conservation Channels (MHz)		
170.425	171.425	172.225
170.475	171.475	172.275
170.575	171.575	172.375

(1) These frequencies will be assigned on a secondary basis to any U.S. Government station.

(2) The frequencies 170.425 MHz, 170.475 MHz, 170.575 MHz, 171.425 MHz, 171.575 MHz, 172.225 MHz, and 172.275 MHz will be assigned only to licensees directly responsible for the prevention, detection, and suppression of forest fires.

(3) The frequencies 171.475 MHz and 172.275 MHz will be assigned to licensees directly responsible for the prevention, detection, and suppression of forest fires; or to licensees engaged in forest conservation activities for mobile relay operation only.

(4) The frequencies 170.425 MHz, 170.575 MHz, 171.475 MHz, 172.225 MHz, and 172.375 MHz will be assigned for use only in areas west of the Mississippi River.

(5) The frequencies 170.475 MHz, 171.425 MHz, 171.575 MHz, and 172.275 MHz will be assigned for use only in areas east of the Mississippi River.

(6) All applications for use of these frequencies must be accompanied by a letter of concurrence by the Federal Government, Department of Agriculture.

(7) After January 1, 2005, channels for new operations are limited to an authorized bandwidth not to exceed 11.25 kHz. Between January 1, 2005, and January 1, 2018, existing systems with an authorized bandwidth of greater than 11.25 kHz (including those systems that expand existing operations) may continue to operate with a bandwidth greater than 11.25 kHz, subject to the limitations set forth in § 90.265(c)(8), below.

(8) After January 1, 2005, if a licensee that uses equipment with an authorized bandwidth greater than 11.25 kHz cannot resolve an interference complaint from an impacted Federal agency, then the licensee must cease operation on the frequency upon notification by the Commission.

(d) The frequencies 166.250 MHz and 170.150 MHz are available for assignment to licensees engaged in public safety activities, subject to the provisions of this section:

(1) These frequencies are available for assignment to stations in the Public Safety Pool, only at

points within 241.4 km. (150 mi.) of New York, N.Y.;

(2) Operations on these channels is on a secondary basis to any Federal Government station; and

(3) After January 1, 2005, if a licensee that uses equipment with an authorized bandwidth greater than 11.25 kHz cannot resolve an interference complaint from an impacted Federal agency, then the licensee must cease operation on the frequency upon notification by the Commission..

(4) After January 1, 2005, channels for new operations are limited to an authorized bandwidth not to exceed 11.25 kHz. Between January 1, 2005, and January 1, 2018, existing systems with an authorized bandwidth of greater than 11.25 kHz (including those systems that expand existing operations) may continue to operate with a bandwidth greater than 11.25 kHz, subject to the limitations set forth in § 90.265(d)(3), above.

(e) The following frequencies are available for use by Medical Radiocommunication Systems:

(1) The frequencies 150.775 MHz, 150.790 MHz, and 163.250 MHz, subject to following provisions:

(i) After **[effective date of the Report and Order in this proceeding]**, new assignments for these frequencies shall be authorized only for Medical Radiocommunication Systems.

(ii) After January 1, 2005, new operations on the frequency 163.25 MHz are limited to an authorized bandwidth not to exceed 11.25 kHz.

(iii) After January 1, 2008, new operations on the frequencies 150.775 MHz and 150.790 MHz are limited to an authorized bandwidth not to exceed 11.25 kHz.

(iv) Existing systems with an authorized bandwidth of greater than 11.25 kHz (including those systems that expand existing operations) may continue to operate on a primary basis with a bandwidth greater than 11.25 kHz until January 1, 2018. After January 1, 2018, stations that use the frequencies 150.775 MHz, 150.790 MHz, or 163.25 MHz shall be limited to an authorized bandwidth not to exceed 11.25 kHz.

(2) The frequency 152.0075 MHz and frequencies within the bands 462.9375-463.1875 MHz and 467.9375 MHz-468.1875 MHz, subject to the limitations specified in Section 90.20 of this chapter.

Appendix B: Initial Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[96] the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Notice of Proposed Rulemaking (NPRM). Written public comments are requested on this IRFA and must be filed by the deadlines for comments on the NPRM provided above in paragraph 58. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.[97] In addition, the NPRM (or summaries thereof), including the IRFA, will be published in the Federal Register.[98]

A. Need for, and Objectives of, the Proposed Rules

In the 150.05-150.8 MHz, 162-174 MHz, and 406.1-420 MHz bands, the National Telecommunications and Information Administration (NTIA) is transitioning Federal Government (Federal) operations in the fixed and land mobile services from wideband (25 kHz) to narrowband (12.5 kHz) channels at a more rapid schedule than the Commission has adopted for Private Land Mobile Radio (PLMR) operations in these bands. Because there could be extended periods during which existing PLMR wideband operations may not be compatible with narrowband Federal operations, the Commission is proposing to revise its current narrowbanding plan for these bands to take into account that many PLMR operations in the above Federal bands are authorized on the condition that they not cause interference to Federal operations.

The Commission's objectives in making the PLMR proposals contained in this NPRM are to provide for a more orderly transition from wideband to narrowband operations, increase spectrum efficiency, maintain compatibility with Federal operations, permit licensees to operate using existing equipment for the maximum amount of time possible, and significantly reduce the probability that wideband operations will interfere with new Federal operations.

B. Legal Basis

This action is authorized under Sections 1, 4(i), 302, 303(f) and (r), 332, and 337 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 1, 4(i), 154(i), 302, 303(f) and (r), 332, 337.

C. Description and Estimate of the number of Small Entities to Which the Proposed Rule Will Apply

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.[99] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under Section 3 of the Small Business Act, unless

[96] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[97] 5 U.S.C. § 603(a).

[98] *Id.*

[99] *Id.* at § 603(b)(3).

the Commission has developed one or more definitions that are appropriate for its activities.[100] Under the Small Business Act, a "small business concern" is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[101]

A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[102] Nationwide, as of 1992, there were approximately 275,801 small organizations.[103] The definition of "small governmental entity" is one with populations of fewer than 50,000.[104] There are approximately 85,006 governmental entities in the nation.[105] This number includes such entities as states, counties, cities, utility districts and school districts. There are no figures available on what portion of this number have populations of fewer than 50,000. However, this number includes 38,978 counties, cities and towns, and of those, 37,556, or ninety-six percent, have populations of fewer than 50,000.[106] The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that ninety-six percent, or about 81,600, are small entities that may be affected by our rules.

PLMR systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories, and are often used in support of the licensee's primary (non-telecommunications) business operations. For the purpose of determining whether a licensee of a PLMR system is a small business as defined by the SBA, we could use the definition for "Cellular and Other Wireless Telecommunications." This definition provides that a small entity is any such entity employing no more than 1,500 persons.[107] The Commission does not require PLMR licensees to disclose information about number of employees, so the Commission does not have information that could be used to determine how many PLMR licensees constitute small entities under this definition. Moreover, because PMLR licensees generally are not in the business of providing cellular or other wireless telecommunications services but instead use the licensed facilities in support of other business activities, we are not certain that the Cellular and Other Wireless Telecommunications category is appropriate for determining how many PLMR licensees are small entities for this analysis. Rather, it may be more appropriate to assess PLMR licensees under the standards applied to the particular industry subsector to which the licensee belongs.[108]

The proposals in this NPRM would affect the following PLMR licensees: (1) Industrial/Business Pool and state and local government licensees that are authorized to make hydrological and meteorological (Hydro) measurements under footnote US13; (2) forest firefighting agencies, which are

[100] *Id.* at § 601(3).

[101] *Id.* at § 632.

[102] *Id.* at § 601(4).

[103] Department of Commerce, U.S. Bureau of the Census, 1992 Economic Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

[104] 5 U.S.C. § 601(5).

[105] 1992 Census of Governments, U.S. Bureau of the Census, U.S. Department of Commerce.

[106] *Id.*

[107] *See* 13 C.F.R. § 121.201, NAICS code 517212.

[108] *See generally* 13 C.F.R. § 121.201.

primarily state government licensees, and forest conservation agencies that are authorized under footnote US8; (3) Public Safety Pool licensees that are authorized under footnote US11; and (4) hospital, medical centers, nursing homes, *etc.* that operate Medical Radiocommunication Systems, which are authorized under footnote US216. These United States footnotes are fully discussed in the NPRM.

Hydro Channel Users. The Commission has authorized 9 licensees to operate 219 fixed stations on the six channels that would be removed from the Hydro Channel Plan: (1) one licensee (the State of California) is authorized to operate 15 fixed stations on the frequency 169.575 MHz; (2) six licensees are authorized to operate 112 fixed stations at 409.675 MHz; (3) three licensees are authorized to operate ten fixed stations at 409.725 MHz; (4) four licensees are authorized to operate 97 fixed stations at 412.625 MHz; and (5) there are no licensees authorized to operate on the frequencies 170.375 MHz and 171.975 MHz. The Commission has issued 1053 licenses (there is at least one station per license) for the remaining Hydro channels that are being narrowbanded. We believe that some of the Hydro channel licensees are small businesses or small governmental entities.

Forest Firefighting and Conservation Agencies. The Commission has authorized 21 licensees to operate 414 fixed stations and 45,630 mobile stations on the nine channels that are available to forest firefighting agencies; two of these frequencies are also available for use by conservation agencies. By Commission Rule, these frequencies are reserved primarily for assignment to state licensees. Assignments to other licensees may be made only where the frequencies are required for coordinated operation with the state system to which the frequency is assigned. The 21 licensees consist of 19 states and state agencies, the County of Los Angeles, and a non-profit organization. This small organization may be impacted by our proposals.

Public Safety Licensees. The Commission has granted 27 licensees authorization to operate wideband equipment on the frequencies 166.25 MHz and 170.15 MHz. By Commission Rule, these frequencies are to be assigned to stations in the Public Safety Pool that are at points within 240 kilometers of New York City. Specifically, the Commission has granted 15 licensees authorization to operate 1295 mobile stations, 95 pagers, and 30 fixed stations using the frequency 166.25 MHz. The Commission has granted 12 licensees authorization to operate 899 mobile stations, 165 pagers, and 22 fixed stations on the frequency 170.15 MHz. We believe that many of these public safety licensees are small governmental entities.

Medical Radiocommunication Systems. The Commission has issued 499 licenses for the frequency 150.775 MHz and 418 licenses for the frequency 150.79 MHz. By Commission Rule, these 150 MHz channels are used only by mobile stations. For example, these frequencies may be used for voice transmissions from a portable (hand-held) unit to an ambulance. The Commission has issued 520 licenses for the frequency 163.25 MHz. By Commission Rule, the frequency 163.25 MHz can be assigned only for one-way paging. We believe that most of the hospitals, medical centers, and nursing homes that operate medical radiocommunication systems are small businesses or small governmental entities.

We seek comment on this analysis. In providing such comment, commenters are requested to provide information regarding how many total and small business entities would be affected.

D. Description of projected reporting, recordkeeping, and other compliance requirements

If adopted, the proposed rules would require that:

- PLMR licensees employing wideband channels for Hydro, forest fire-fighting, conservation, and public safety operations modify or discontinue operations if, after January 1, 2005, these wideband operations cause interference to new Federal operations in the 162-174 MHz band, or if, after

January 1, 2008, these wideband operations cause interference to new Federal operations in the 150.05-150.8 MHz and 406.1-420 MHz bands;

- Hydro channel licensees operating on the center frequencies 169.575 MHz, 409.675 MHz, 409.725 MHz, and 412.625 MHz cease operations not later than January 1, 2013 for Industrial/Business Pool licensees and not later than January 1, 2018 for Public Safety Pool licensees;
- PLMR applicants requesting authority to operate Hydro, forest fire-fighting, conservation, public safety, and medical radiocommunication stations in the 162-174 MHz band use narrowband channels after January 1, 2005; and that these applicants use narrowband channels after January 1, 2008 in the 150.05-150.8 MHz and 406-416 MHz bands; and
- New Hydro stations that would operate on the center frequencies 406.125 MHz and 406.175 MHz be limited to a transmitter output power of 125 watts and required to coordinate with the Radio Astronomy Observatory at Socorro, New Mexico.

If a licensee is required to modify its operations, we believe that the licensee would either buy new narrowband equipment or that the licensee would hire a vendor to modify some or all of its wideband equipment. We are uncertain of the exact costs relating to the narrowbanding requirements. We request comment on the costs related to narrowbanding and whether these costs would be borne as part of the licensee's normal depreciation and replacement cycle. We are especially interested in comments dealing with whether small entities would be affected disproportionately.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered.

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.[109]

So long as incompatibilities are not created with Federal narrowband operations, we propose to allow incumbent Public Safety Pool licensees to use existing equipment until January 1, 2018, and to allow incumbent Industrial/Business Pool licensees to use existing equipment until January 1, 2013. We propose that the 14 licensees of the six Hydro channels being deleted from the Hydro Channel Plan modify their equipment and station licenses and migrate to a center frequency listed in the new Hydro Channel Plan on a timetable as advised by the Hydro Committee and approved by NTIA and the Commission. We propose to grandfather indefinitely those incumbent stations that operate on the frequencies 150.7825 MHz and 150.7975 MHz.

We request comment on whether we should exempt equipment designed for use in these Federal bands from our current 6.25 kHz equipment certification requirement, which is scheduled to commence on January 1, 2005. Our purpose in providing this alternative is to determine whether such a policy would be beneficial or detrimental to enabling sharing between PLMR licensees and Federal users.

F. Federal Rules that May Duplicate, Overlap, or Conflict With the Proposed Rules.

None.

[109] 5 U.S.C. § 603(c).

Appendix C: Current Authorizations

Table 1: Authorized Use of the 28 Hydro (US13) Channels
(of June 24, 2004)

9 licensees operate 219 fixed stations on channels that are being deleted from the Hydro Channel Plan:

Frequency	Licensee	Number and class of stations
169.575 MHz	California, State of	13 FXO, 1 FXOT, 1 FX2
170.375 MHz	None	N/A
171.975 MHz	None	N/A
409.675 MHz	Anne Arundel, County of (MD).....	1 FX1, 1FX2
	Colorado River Municipal Water District.....	1 FXO
	Los Angeles, County of.....	65 FX, 10 FX1T
	New York State – Emergency Management Office.....	1 FXO, 2 FX2
	Salt River Project Agricultural Improvement & Power District	2 FXO
	Weather Computation System LLC.....	29 FXO
	Total.....	65 FX, 1 FX1, 10 FX1T, 3 FX2, 33 FXO
409.725 MHz	Duke Energy Corporation.....	2 FXO
	New York State – Emergency Management Office.....	1 FX2
	Orange, County of (CA).....	5 FX1, 1 FX1T, 1 FX2
	Total.....	5 FX1, 1 FX1T, 2 FX2, 2 FXO
412.625 MHz	Anchorage, Municipality of.....	7 FXO
	Anne Arundel, County of (MD).....	1 FX1, 1 FX2
	Los Angeles, County of.....	75 FX, 10 FX1T
	New York State – Emergency Management Office.....	3 FXO
	Total.....	75 FX, 1FX1, 10 FX1T, 1 FX2, 10 FXO

There are 1053 call signs (there is at least one station per call sign) for those Hydro channels that are being narrowbanded:

Frequency	Call Sign	Frequency	Call Sign	Frequency	Call Sign
169.425	171	171.025	24	406.125	38
169.450	3	171.050	20	406.175	14
169.475	117	171.075	5	412.675	11
169.500	126	171.100	48	412.725	18
169.525	56	171.125	33	412.775	11
170.225	58	171.825	43		
170.250	19	171.850	15		
170.275	49	171.875	41		
170.300	65	171.900	11		
170.325	21	171.925	36		

Table 2: Authorized Use of the Nine Forest Firefighting/Conservation (US8) Frequencies (21 licensees as of June 24, 2004)			
Frequency (MHz)	Number of:		Number of Units for each class of station
	Licensees	Call Signs	
Four Frequencies are Available East of the Mississippi:			
170.475	7 (MI, MN, TN, VA, VT, WA, WI)	32	12,080 Mobile (MO) and 600 Mobile/Vehicular Repeater (MO3), 4 Fixed Base (FB), 1 Mobile Relay (FB2), 7 Mobile Relay-Temporary (FB2T), 80 Base-Temporary (FBT), 18 Control (FX1), and 2 Control-Temporary (FX1T)
171.425	3 (GA, MI, VA)	41	1585 MO, 27 FB, 9 FB2, 2 FB2T, 75 FBT, and 5 FX1
171.575	4 (AR, County of LA, MI, WA)	9	3425 MO and 5 FB
172.275	11 (AR, CT, GA, IL, MD, MI, NY, TN, VA, WI, WV)	31	3165 MO, 1070 MO3, 21 FB, 4 FB2, 2 FB2T, and 75 FBT
East Total:	15	113	21,925 mobile stations (20, 255 MO and 1670 MO3) and 337 fixed stations (57 FB, 14 FB2, 11 FB2T, 230 FBT, 23 FX1 and 2 FX1T)
Five Frequencies are Available West of the Mississippi:			
170.425	3 (MN, MO, OR)	6	2030 MO, 1 FB2, 1 FX1, and 10 FX1T
170.575	4 (MO, OR, WA, WY)	4	5010 MO, 100 MO3, 4 FB2T, and 4 FBT
171.475	2 (MT, WA)	5	6060 MO, 4 FB, and 10 FBT
172.225	5 (AK, MO, OR, PR (Maranatha Civil Emergency LIF),* WA)	5	5350 MO
172.375	5 (AR, County of Los Angeles, MN, MO, WA)	12	5155 MO, 10 FB, 3 FB2, 15 FB2T, and 15 FBT
West Total:	10	32	23,705 mobile stations (23,605 MO and 100 MO3) and 77 fixed stations (14 FB, 4 FB2, 19 FB2T, 29 FBT, 1 FX1, and 10 FX1T)
Grand Total	21 (19 of which are state and state agencies)	145	45,630 mobile stations and 414 fixed stations
Note: Maranatha Civil Emergency LIF is a non-profit organization and it is an Industrial/Business Pool licensee.			

Table 3: Authorized Public Safety (US11) Use of the Frequency 166.25 MHz (15 Licensees as of June 24, 2004)		
Licensee	Station class and number of units	Call Sign
Connecticut:		
Westport, Town of	20 Mobile (MO), 20 paging receivers (pagers), and 2 Fixed Base (FB)	WNMM476
Massachusetts:		
Dukes, County of	25 MO and 1 FB	WPZH553
New Jersey:		
Bayonne, City of	45 MO and 1 Mobile Relay (FB2)	KEJ693
Cumberland, County of	40 MO	KNAA943
Franklin Township Fire District 3	100 MO, 75 pagers, 1 FB, and 1 FB2	KSZ507
Hillsdale, Borough of	15 MO, 1 FB, and 1 FB2	KDR772
North Wildwood Volunteer Fire Company	65 MO	WPDM642
Parsippany Troy Hills Fire District 1	25 MO	WPLR978
Pascack Valley Firemen's Association	160 MO, 1 FB, and 16 Base-Temporary (FBT)	WPAA293
Sea Girt, Borough of	35 MO, 1 FB, and 1 FB2	WPJL356
New York:		
Kingston, City of	50 MO	KEF383
Newburgh, City of	35 MO	WNSG278
North Merrick Fire District	30 MO, and 1 FB2	WPGM278
Pennsylvania:		
Philadelphia, City of	600 MO and 1 Control (FX1)	KF9481, WDB361
Whitehall, Township of	50 MO and 1 FX1	KFB881
Total:	1295 MO, 95 pagers, 7 FB, 5 FB2, 16 FBT and 2 FX1	
Note: Call sign WNNU947 authorizes the County of Hartford, CN to operate 60 MO and 1 FB. However, because this is narrowband equipment, it is not included in the total.		

Table 4: Authorized Public Safety (US11) Use of the Frequency 170.15 MHz (12 Licensees as of June 23, 2004)		
Licensee	Station class and number of units	Call Sign
Connecticut:		
Norwich Fire Department	50 MO, 35 pagers, and 5 FB	WPXH563
Windsor Locks, Town of	100 MO, 1 FB and 2 FB2	WNVH510
New Hampshire:		
Goffstown, Town of	320 MO and 1 FB8	WPKN959
New Jersey:		
Guttenberg, Township of	24 MO and 1 FB	WPQA826
Hoboken, City of	60 MO and 6 FB	WPEN949
Union City, City of	40 MO, 5 pagers, and 1 FB	KAQ911
N. Hudson Regional Communications Auth.	200 MO and 2 FB	KNBY464
Saddle River, Borough of	20 MO	KEH513
Secaucus, Town of	45 MO, 125 pagers, and 2 FB	WPPF378
New York:		
Brewster Southeast Joint Fire District	10 MO	KJD401
North Merrick Fire District	1 FB2	WPGM278
Pennsylvania:		
Wescosville Fire Company	30 MO	WNXJ532
Total:	899 MO, 165 pagers, 18 FB, 3 FB2, 1 FB8	
Note: Call sign WQAJ628 authorizes the Harriman Engine Company #1 to operate 100 MO and 5 FX1 in Harriman, NY. However, because this is narrowband equipment, it is not included in the total.		