incurred in reconfiguring the 800 MHz band and (c) Nextel's costs incurred in clearing the 1.9 GHz band.[747] In this regard, we recognize the importance of setting forth a procedural framework to determine whether Nextel must make a payment to the Treasury to cover any difference between the value of its credits and the value of spectrum rights in the 1.9 GHz band and to ensure that such payment flows to the Treasury in a timely and orderly manner. In this connection, we fashion certain procedural steps to afford certainty to this "true-up" process, while still providing Nextel with flexibility in the manner in which it effects any required payment. We also provide measures to ensure that funding is available for 800 MHz band reconfiguration throughout the nation, including the areas bordering Mexico and Canada. Overall we believe that the measures we detail below are reasonable and necessary to ensure that first responders and the public receive the full benefit of our realignment plan.

330. At the conclusion of the thirty-six month band reconfiguration process specified herein, but no later than six months thereafter—essentially no later than forty-two months after commencement of the band reconfiguration process—the following financial reconciliation will be made:

- Nextel will be allotted a $1.607 billion credit for relinquishing rights to an average of 4.5 megahertz of spectrum in the 800 MHz band.
- Nextel will provide the Transition Administrator an accounting of the funds spent:
  - to reconfigure its own systems in the 800 MHz band;[748] and
  - to clear the 1.9 GHz band of incumbents and to reimburse UTAM.
- Nextel will also provide the Transition Administrator an accounting of funds, if any, Nextel receives as reimbursement for clearing the 1.9 GHz band.
- The Transition Administrator shall provide an accounting of the funds spent to reconfigure the systems of incumbent operators in the 800 MHz band, including its own salary and expenses. This accounting shall include certifications from each relocated licensee that all necessary reconfiguration work has been completed and that Nextel and said licensee agree on the sum paid for such work.
- Upon compliance with the foregoing requirements, Nextel will be allotted appropriate credits.
- To the extent that those combined credits total less than the value of the 1.9 GHz spectrum, Nextel shall make a payment equal to the difference to the United States Treasury the conclusion of the relocation process.
- Should a payment to the Treasury prove necessary, we direct the Wireless Telecommunications Bureau to release a *Public Notice* announcing the amount to be paid to the Treasury. Thirty days following release of such Public Notice, Nextel shall make such payment to the Treasury.
- Nextel may use monies separate and apart from the letter of credit to make such payment. However, should a balance remain on any letter(s) of credit after band reconfiguration has been completed, Nextel may elect to apply such excess funds to the payment to the Treasury.

[747] *See* ¶¶ 12, 34-35, 212 *supra*.

[748] *See* ¶¶ 298-323 *supra*.

331. We remain vigilant to our central purpose in this proceeding—alleviating interference to public safety—and therefore take steps to ensure that the security for funding reconfiguration remains available until the conclusion on the relocation process. Thus, the letter of credit shall remain open until the true-up process has been completed. At no time during the life of the letter(s) of credit shall the balance fall below $850 million. Nextel may terminate the letter(s) of credit only after band reconfiguration is complete and after the financial reconciliation process is complete, including any payments to the Treasury.

332. In the event that reconfiguration of the 800 MHz border areas is not completed at the end of the thirty-six month reconfiguration process due to circumstances outside of Nextel's control, the Transition Administrator shall estimate how much completing the reconfiguration will cost. Within thirty days of the completion of this estimate Nextel shall elect to either extend the life of the letter(s) of credit or secure a separate letter of credit to cover the costs of border area reconfiguration. The estimated cost of reconfiguring the 800 MHz band in the border areas shall be included as a credit in the computations described in paragraph 330 *supra.*

VII. SERVICE POOL CONSOLIDATION – THE PCIA PETITION

333. In the *NPRM*, the Commission sought comment on PCIA's petition for rulemaking to consolidate the B/ILT Pools in the 800 MHz and 900 MHz band.[749] The majority of comments received in response to PCIA's petition for service pool consolidation in the 800 MHz and 900 MHz bands were from utilities and other CII entities[750] most of which opposed consolidation.[751] Some CII interests argued that consolidation would hinder their access to needed spectrum,[752] because business radio users—with eligibility rules less stringent than those applicable to Industrial/Land Transportation users—would dominate a consolidated band.[753] Cinergy, Entergy, and Scana also opposed, for the same reasons, lifting the freeze on intercategory sharing.[754] Boeing averred that the current service pool division in the band and the freeze on intercategory sharing protects against the incursions of CMRS operations into Private Land Mobile Radio spectrum.[755] However, a contrary view was expressed by parties who argued that allowing CMRS operations would be beneficial to the extent that it affords additional flexibility in

[749] *See NPRM*, 17 FCC Rcd at 4917-18 ¶¶ 84-85.

[750] *See, e.g.,* Ameren Comments at 6; API Comments at 16-17; Cinergy Comments at 58-60; Entergy Comments at 53; Exelon Comments at 9; FL P&L Comments at 5; Scana Comments at 42.

[751] *See, e.g.,* API Comments at 16-17; Cinergy Comments at 58-60; Entergy Comments at 53; FL P&L Comments at 5; Scana Comments at 42; *but see, e.g.,* Ameren Comments at 6; Exelon Comments at 9; API Comments at 16-17 (noting, for reasons explained below, that API is not "strictly opposed" to the proposed consolidation of the two frequency pools).

[752] API Comments at 16; Cinergy Comments at 58-60; Entergy Comments at 53; FL P&L Comments at 5; Scana Comments at 42.

[753] *Compare* 47 C.F.R. § 90.35(b) (Business Pool) *with* 47 C.F.R § 90.617(b) (Industrial//Land Transportation Pool).

[754] Cinergy Comments at 58-60; Entergy Comments at 53; Scana Comments at 42; *see also* API Comments at 16.

[755] "If the freeze were lifted, it is likely that history would repeat itself and SMR applicants will inundate the Commission with requests for intercategory sharing with a view towards converting increasingly scarce private radio spectrum to commercial services." Boeing Comments at 12.

spectrum use.[756] Others support consolidation, *inter alia* because they believe it would promote spectrum-sharing.[757] One commenting party urged that we prohibit cellularized operation in the consolidated 900 MHz band lest the interference problem currently encountered by 800 MHz systems be replicated at 900 MHz.[758]

334. We are consolidating the 800 MHz and 900 MHz B/ILT Pools. Any eligible Business or Industrial/Land Transportation entity will be eligible to be licensed on the consolidated channels.[759] We agree with the parties, *supra*, who note that our recent "refarming" efforts in consolidating the service pools in bands below 512 MHz have resulted in improved spectrum efficiency without undue burden on licensees.[760] Thus, we are not persuaded by the arguments from some CII interests that today's action will impair their access to spectrum.[761] Also, because consolidation makes intercategory sharing moot, licensees and the Commission will be spared the resource burdens associated with intercategory sharing requests.[762] Finally, although we note the concern expressed about the effects of cellularized operation in a consolidated 900 MHz band, we believe that proscribing cellularized operation in a band in which interference to public safety communications is not an issue could unnecessarily hinder realization of the efficiencies inherent in cellular-architecture and other advanced technologies.

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[756] Cascade Two Way Radio Comments at 4.

[757] Exelon Comments at 9. In addition to consolidating the 800 MHz and 900 MHz Business and Industrial/Land Transportation services into one pool, Exelon also recommends that we "permit new intercategory sharing." *Id.* Exelon contends that the only restriction on this new intercategory sharing should be a strict prohibition against the operation of cellularized systems in the expanded pools in order to protect them from the same interference problems currently being experienced by Business and Industrial/Land Transportation licensees. *Id.*

[758] *See* Exelon Comments at 9.

[759] *See* 47 C.F.R. § 90.35.

[760] *See generally* In The Matter Of Replacement Of Part 90 By Part 88 To Revise The Private Land Mobile Radio Services And Modify The Policies Governing Them And Examination Of Exclusivity And Frequency Assignments Policies Of The Private Land Mobile Services, PR Docket No. 92-235 (*Refarming*).

[761] API Comments at 16; Cinergy Comments at 58-60; Entergy Comments at 53; FL P&L Comments at 5; Scana Comments at 42.

[762] Under the existing rules, there are provisions that allow entities establishing eligibility under one radio service to obtain a license for a frequency in another radio service under certain conditions (interservice sharing). Because we are consolidating the Business and Industrial/Land Transportation Pools into one pool and eliminating the individual radio service categories, interservice sharing rules will no longer be necessary with regard to applicants from either service seeking frequencies previously allotted to the other service. Under consolidation, applicants will have the opportunity to apply directly for in-pool frequencies that were previously allocated to either the Business or Industrial/Land Transportation service. We will modify the Commission's Rules accordingly. However, our action does not otherwise affect the current freeze on intercategory sharing with respect to applicants from the newly consolidated Business/Industrial Land Transportation Pool seeking intercategory sharing of those frequencies specifically allocated to Public Safety Pool. *See* Inter-Category Sharing of Private Mobile Radio Frequencies in the 806-821/851-866 MHz Bands, *Order*, 10 FCC Rcd 7350 (WTB 1995) (*Intercategory Freeze Order*).

VIII. OPERATIONAL FLEXIBILITY IN THE 900 MHZ BAND

335. In the Balanced Budget Act Proceeding[763] the Commission amended its rules to permit CMRS use of PLMR frequencies in the 800 MHz land mobile band and allowed PLMRS licensees to transfer their licenses to CMRS entities.[764] The Commission sought comment on whether, in the interest of regulatory symmetry, similar rules should apply in the 900 MHz land mobile spectrum.[765] In the *NPRM* in this proceeding, the Commission sought further comment on this issue in light of Nextel's White Paper proposal to accommodate displaced 800 MHz B/ILT licensees in the 900 MHz land mobile band.[766]

336. In general, parties supported the proposal to allow CMRS operations on 900 MHz PLMR spectrum.[767] Although the proposal to relocate all 800 MHz B/ILT and SMR licensees to the 900 MHz band is no longer germane, we find that other factors merit our making the 800 MHz and 900 MHz CMRS rules complementary. In particular, we note that Nextel will have to shift some of its operations from the 800 MHz band to 900 MHz in order to provide the "green space" necessary to effect reconfiguration of the 800 MHz band. Moreover, as noted above,[768] Nextel may have to share spectrum in the 816-824 MHz segment of the reconfigured band with other ESMR licensees. To the extent that such sharing may reduce the amount of 800 MHz spectrum available to Nextel, we believe we should provide the regulatory flexibility necessary for Nextel to make up the shortfall by using 900 MHz channels. We have less concern about unacceptable interference resulting from such 900 MHz ESMR use because there are no public safety channels allocated in the 900 MHz band. Moreover, because there currently is no extensive ESMR use of the 900 MHz band, ESMR licensees designing systems "from the ground up" in the 900 MHz band will be better able to take interference abatement into account when designing their systems. However, we will not hesitate to act should it appear that the interference environment in the 900 MHz band is becoming unfavorable.

337. We therefore will allow 900 MHz PLMR licensees to initiate CMRS operations on their currently authorized spectrum or to assign their authorizations to others for CMRS use. In the *BBA R&O and FNPRM*, the Commission inquired whether to impose a holding period requirement on all new 900 MHz applications, thereby to avoid trafficking in 900 MHz licenses.[769] Although the Commission, in the *BBA Proceeding,* put parties on notice that it might impose a holding period in the future we decline to do so since we observed no speculative runs on 900 MHz PLMR spectrum after the release of the *BBA R&O*

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[763] *See generally,* Implementation of Sections 309(j) and 337 of Communications Act of 1934 as Amended, WT Docket 99-87 (*BBA Proceeding*).

[764] *See* Implementation of Sections 309(j) and 337 of Communications Act of 1934 as Amended, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket 99-87, 15 FCC Rcd 22709, 22761 ¶¶ 110-111 (FCC 2000) (*BBA R&O and FNPRM*).

[765] *Id.*, 15 FCC Rcd at 22773-22774 ¶¶ 143-144.

[766] *NPRM*, 17 FCC Rcd 4918 at ¶ 86. This essentially transferred the issue from WT Docket 99-87 to the instant proceeding. *See* Implementation of Sections 309(j) and 337 of Communications Act of 1934 as Amended, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, 18 FCC Rcd 3034, 3047 n. 5.

[767] *See* Nextel Comments at 65. *See also* Ad Hoc Wireless Alliance Comments at 8-10.

[768] *See* ¶ 159 *supra.*

[769] *BBA R&O and FNPRM*, 15 FCC Rcd 22709, 22774 ¶ 144.

and FNPRM.[770]

IX. CONCLUSION

338. There may be no matter within our jurisdiction more crucial to Homeland Security and the overall general safety of life and property than assuring that public safety communications systems are free from unacceptable interference and have adequate capacity. Indeed, one of the express purposes of this agency's creation was for the "purpose of promoting safety of life and property through the use of wire and radio communications,"[771] and we thus would be derelict were we to ignore an opportunity—such as that represented by 800 MHz band reconfiguration—that allows us to increase the reliability and capacity of 800 MHz public safety communications systems.

339. We stress, however, that the actions we take today in response to a unique set of circumstances regarding interference to public safety communications in the 800 MHz band are consistent with our statutory obligations generally to use competitive bidding in the allocation of spectrum. Although our emphasis herein has been on public safety requirements, the far more favorable interference environment in the post-reconfiguration 800 MHz band will ensure other 800 MHz licensees will also benefit from the band reconfiguration plan and related policies that we have adopted. Underlying the policies we enunciate today is the tenet put forth by many of the commenting parties in this proceeding: parties must work together to abate interference and endure an occasional hardship as a necessary concession to the nation's overall Homeland Security obligations.

X. ORDERING CLAUSES

340. IT IS ORDERED that, pursuant to the authority of Sections 1, 4(i), 303(f) and (r), 309, 316, and 332 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 303(f) and (r), 309, 316, and 332, the rule changes specified in Appendix C are adopted.

341. IT IS FURTHER ORDERED that the rule changes set forth in Appendix C WILL BECOME EFFECTIVE sixty days after publication in the Federal Register. This action is taken pursuant to Sections 1, 4(i), 303(f) and (r), 309, 316 and 332 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 303(f) and (r), 309, 316, and 332.

342. IT IS FURTHER ORDERED that, pursuant to Section 309 and 316 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 309, and 316, the licenses of all 800 MHz band licensees (including, but not limited to, Nextel Communications, Inc.), are hereby modified as specified in this *Report and Order*; provided, however, that in the event Nextel rejects any of the conditions for modification required in this *Report and Order*, all the modifications of all the 800 MHz licenses specified in this *Report and Order* are suspended unless and until the Commission orders otherwise. Nextel will be deemed to have rejected such conditions (a) unless it files with the Commission a written acceptance of all such conditions within thirty days of the publication of this *Report and Order* in the Federal Register, or (b) if it files a judicial appeal of this *Report and Order* within thirty days of the publication of this *Report and Order* in the Federal Register. Pursuant to Section 316(a)(1) of the

[770] Moreover, we believe our existing rules also provide necessary safeguards. *See* 47 C.F.R. § 90.155 (requires licensees to have stations placed in operation within twelve months from the date of grant to avoid automatic cancellation; 47 C.F.R. § 90.609 (requires complete construction of a radio facility prior to any transfer or assignment) and 47 C.F.R. 90.157 (licenses will cancel automatically if there is a discontinuance of station operation for twelve months or more).

[771] *See* 47 U.S.C. § 151.

Communications Act of 1934, as amended, 47 U.S.C. § 316(a)(1), publication of this *Report and Order* in the Federal Register shall constitute notification in writing of our Order modifying Nextel's 800 MHz licenses and those of all other 800 MHz licenses, and of the grounds and reasons therefore, and Nextel and these other 800 MHz licensees shall have thirty days from the date of such publication to protest such Order.

343. IT IS FURTHER ORDERED that, pursuant to Section 309 and 316 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 309 and 316, the Wireless Telecommunications Bureau shall further modify such licenses as are necessary in order to implement band reconfiguration in the manner specified in this *Report and Order*.[772]

344. IT IS FURTHER ORDERED that within sixty days of the publication of this *Report and Order* in the Federal Register, Nextel shall comply with the following conditions precedent to its operations on the 1.9 GHz band:

- Nextel shall certify that it has obtained an irrevocable letter of credit, in all material respects identical to that contained in Appendix E hereto, which provides assurances that $2.5 billion will be available for band reconfiguration, notwithstanding the financial condition of Nextel, or its successor(s).

- Nextel shall specify on the initial letter of credit and any subsequent letters of credit, a Trustee, acceptable to the Commission, which shall draw upon and disburse funds in accordance with the terms thereof and the Transition Administrator's instructions. Further, on the occasion of a material breach by Nextel of its obligations hereunder, as declared by the Commission, said trustee shall receive the remaining balance of the letter(s) of credit to hold in trust and disburse in accordance with the terms of this *Report and Order*. Said funds shall be devoted exclusively to reconfiguration of the 800 MHz band except as otherwise provided in this *Report and Order*.

- Nextel shall deliver an opinion letter from counsel clearly stating, subject only to customary assumptions, limitations and qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. Section 101 et seq. (the "Bankruptcy Code"), in which Nextel is the debtor, the bankruptcy court would not treat the Letter of Credit or proceeds of the Letter of Credit as property of Nextel's bankruptcy estate under Section 541 of the Bankruptcy Code. The scope of the opinion letter must also cover such other opinions as the Commission shall request. The opinion letter must contain detailed legal analysis of the basis of counsel's opinion. A draft opinion letter must be submitted for review and approval by the Commission's Office of General Counsel prior to issuance of the letter. Bankruptcy counsel, and, if applicable, counsel's firm, must have a Martindale-Hubbell rating of "A/V" and must satisfy the Commission in all other respects.

- Nextel shall provide a letter or letters, in content satisfactory to the Commission, from any and all parties having a financial or equitable interest in any existing or proposed 800 MHz system, whether in the United States, Mexico or Canada, and connected in any way to Nextel by way of being a subsidiary, partner, or otherwise; to the effect that such parties are bound to perform the obligations imposed on Nextel herein to the extent such obligations are necessary

[772] The expiration of each said further modified license shall be the date specified thereon. Provided, however, that if such a specified date is less than five years from the date this *Report and Order* is published in the Federal Register, then, notwithstanding the expiration date specified on the license, the license shall expire five years after the date this *Report and Order* is published in the Federal Register.

or desirable in the completion of reconfiguration of the 800 MHz band.

- Nextel shall obtain the Commission's approval of all documents it submits pursuant to this paragraph.

345. IT IS FURTHER ORDERED that Nextel's 1.9 GHz modified licenses do not authorize Nextel to begin operations in the band until Nextel files with the Commission an acknowledgement that meets the requirements of paragraph 87 *supra*.

346. IT IS FURTHER ORDERED that within thirty days of the publication of this *Report and Order* in the Federal Register, Nextel and Southern LINC shall deliver to the Commission an agreement for the channel distribution for all 800 MHz licensees in the areas shown in Appendix G.

347. IT IS FURTHER ORDERED that, in addition to the license conditions set forth above and below in this *Report and Order*, and also in addition to such other conditions as the Commission may, in its discretion, deem necessary to ensure reconfiguration of the 800 MHz band and timely clearance of the 1.9 GHz band, Nextel's modified licenses authorizing operations within the 1.9 GHz band are conditioned on the following:

- Nextel must complete, and the Transition Administrator must certify that Nextel has completed, the retuning of Channels 1-120 in twenty NPSPAC Regions within eighteen months after the release of a Public Notice announcing the start date of reconfiguration in the first NPSPAC region. If Nextel fails to meet this benchmark, for reasons that Nextel, with the exercise of due diligence could reasonably have avoided, the Commission may consider and exercise any appropriate enforcement action within its authority, including assessment of monetary forfeitures or, if warranted, license revocation.

- The 1.9 GHz licenses shall not be assigned to any person or entity who or which has not demonstrated to the satisfaction of the Commission that it will, and has the capacity to, assume all of Nextel's obligations hereunder.

- Nextel shall certify to the Commission that all BAS facilities have been relocated within thirty months after the effective date of this *Report and Order*. If Nextel fails to meet this benchmark, for reasons that Nextel could reasonably have avoided, the Commission will determine whether forfeitures should be imposed and/or whether Nextel licenses, including, but not limited to, its 1.9 GHz licenses, should be revoked.

- If 800 MHz band reconfiguration is not complete, in accordance with the certification of the Transition Administrator, thirty-six months following release of a Public Notice announcing the start date of reconfiguration in the first NPSPAC region, for reasons that Nextel could reasonably have avoided, the Commission will determine whether forfeitures should be imposed and/or whether Nextel licenses, including, but not limited to, its 1.9 GHz licenses, should be revoked.

- The 1.9 GHz licenses shall be for a ten-year term, subject, however to the foregoing termination provisions; and renewal will be conditioned on Nextel supplying substantial service[773] within the ten-year period.

[773] "Substantial service" is defined as service which is sound, favorable, and substantially above a level of mediocre service which just might minimally warrant renewal.

348. IT IS FURTHER ORDERED that Nextel, the Association of Public Safety Communications Officials-International, the Industrial Telecommunications Association, Southern LINC and the United Telecom Council, shall form a Transition Administrator search committee within fifteen days of the date of the release of this *Report and Order*, and shall recommend a Transition Administrator to the Chief of the Public Safety and Critical Infrastructure Division of the Wireless Telecommunications Bureau no later than forty-five days after the release of this *Report and Order*.

349. IT IS FURTHER ORDERED that the Transition Administrator, within ten days of a request from Nextel, will request funds necessary for band reconfiguration of a given NPSPAC Region as the need therefore arises, from the Letter of Credit Trustee which shall disburse such funds within five business days of receipt there of from the issuing bank, or at such later time as the Transition Administrator shall specify in writing.

350. IT IS FURTHER ORDERED that the Transition Administrator will provide to the Commission a monthly report, in form and substance satisfactory to the Commission, describing the progress of band reconfiguration. This report shall include a disclosure of the Transition Administrator's salary and reasonable expenses.

351. IT IS FURTHER ORDERED that Nextel shall keep accurate records of the labor and material reasonably expended or acquired in connection with clearance of the 1.9 GHz band. An annual audit of these expenses shall be made, at Nextel's expense, by an auditing firm satisfactory to the Commission. All Nextel claims for labor and equipment shall be at Nextel's actual cost, without markup.

352. IT IS FURTHER ORDERED that (a) as a condition of its 1.9 GHz modified licenses, Nextel shall reimburse UTAM twenty-five percent, on a *pro rata* basis, of UTAM's total relocation costs incurred as of the date that Nextel gains access to the band, (b) Nextel's 1.9 GHz modified licenses do not authorize Nextel to begin operations in the band until it pays this amount to UTAM, and (c) Nextel shall be entitled to seek reimbursement from UTAM for the actual proportional cost associated with Nextel's relocation of any remaining microwave links in the band.

353. IT IS FURTHER ORDERED that, as a condition on Nextel's 1.9 GHz licenses, Nextel SHALL, as described herein, relocate all BAS licensees in the 1990-2025 MHz band within thirty months after the effective date of this *Report and Order*, and in this connection, comply with the following requirements:

- Nextel shall file with the Commission and copy the MSS licensees within thirty days after the effective date of this *Report and Order* its plan for the relocation of BAS operations in the markets that will be relocated during stage one (*i.e.*, relocations made within eighteen months after the effective date of this *Report and Order*).

- Nextel shall follow a negotiation period for stage one relocations that ends May 31, 2005 and that ends March 31, 2006 for stage two relocations (*i.e.*, relocations made within thirty months after the effective date of this Report and Order).

- Nextel shall provide comparable facilities to BAS incumbents that are relocated.

- Nextel shall file progress reports within twelve months and twenty-four months after the effective date of this *Report and Order* on the status of the transition, including identifying the markets that will be relocated during stage one, and all remaining markets that will be relocated during stage two.

- Nextel shall certify to the Commission that all BAS facilities have been relocated within thirty months after the effective date of this *Report and Order*. If Nextel fails to meet this

benchmark, for reasons that Nextel could reasonably have avoided, the Commission will determine whether forfeitures should be imposed and/or whether Nextel licenses, including, but not limited to, its 1.9 GHz licenses, should be revoked.

- Nextel shall be entitled to seek reimbursement from MSS licensees that have entered the band for the MSS licensee's pro rata share of Nextel's costs to clear the top thirty markets and relocate all fixed BAS facilities, regardless of market size, incurred during the thirty-six month reconfiguration process. Nextel shall be required to inform the Commission and MSS licensees on whether it will or will not seek reimbursement from MSS licensees within twelve months after the effective date of this *Report and Order*.

- Nextel shall have an obligation to reimburse MSS licensees for Nextel's pro rata share of the actual costs associated with the relocation of BAS incumbents in the band incurred by MSS licensees during the thirty-six month reconfiguration period.

- Nextel shall conform to the technical criteria specified in TSB 10-F or generally acceptable good engineering practices for determining interference potential between BAS and Nextel operations.

354. IT IS FURTHER ORDERED that, at the conclusion of band reconfiguration, Nextel will provide to the Transition Administrator an accounting of the funds:

- Spent to reconfigure its own systems in the 800 MHz band;

- Spent to clear the 1.9 GHz band of incumbents and to reimburse UTAM; and

- Received as reimbursement, if any, for clearing the 1.9 GHz band.

355. IT IS FURTHER ORDERED that, at the conclusion of band reconfiguration, the Transition Administrator shall provide an accounting of the funds spent to reconfigure the systems of incumbent operators in the 800 MHz band. This accounting shall include certifications from each relocated licensee that all necessary reconfiguration work has been completed and that Nextel and said licensee agree on the sum paid for such work.

356. IT IS FURTHER ORDERED that, as a condition of its 800 MHz and 1.9 GHz modified licenses, Nextel shall, within thirty days of the completion of the thirty-six month band reconfiguration process, as certified by the Transition Administrator and if band reconfiguration has not been completed in the border areas, elect to extend the life of the letter of credit or elect to secure a separate letter of credit, in an amount sufficient to ensure the reconfiguration of the 800 MHz licensees operating in the border area, as detailed herein.

357. IT IS FURTHER ORDERED that, as a condition of its 800 MHz and 1.9 GHz modified licenses, in the event that the computations described in paragraphs ¶ 329-332 *supra* disclose that the credits afforded Nextel thereunder are less than the value of the 1.9 GHz spectrum rights that Nextel is receiving hereunder, Nextel SHALL DEPOSIT the difference in the United States Treasury; and Nextel SHALL NOT discontinue the letter(s) of credit it is required to maintain hereunder until such deposit has been received and acknowledged.

358. IT IS FURTHER ORDERED that, within thirty days of Commission approval of the Transition Administrator, the Transition Administrator will provide the Commission with a schedule detailing when band reconfiguration shall commence for each NPSPAC-Region. The plan should also detail—by NPSPAC Region—which relocation option each non-Nextel ESMR licensees has chosen

359. IT IS FURTHER ORDERED that the Petition for Rulemakings filed by the Wireless Information Networks Forum and UTStarcom Inc., and the Petition for Waivers filed by Lucent Technologies Inc., Ascom Wireless Solutions Inc., Alaska Power & Telephone Company Inc., and UTStarcom Inc. and Drew University ARE DENIED IN PART.

360. IT IS Further ORDERED that the PCIA Petition for Rulemaking IS GRANTED to the extent stated herein and denied in all other respects. This action is taken pursuant to Sections 4(i), 303(f) and (r), and 332 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(f) and (r), and 332.

361. IT IS FURTHER ORDERED that the Petitions for Reconsideration and Clarification filed by the Association for Maximum Service Television and the National Association of Broadcasters, and the Society of Broadcast Engineers ARE GRANTED to the extent described herein.

362. IT IS FURTHER ORDERED that the Petition for Reconsideration and Clarification filed by the Boeing Company IS DENIED to the extent described herein.

363. IT IS FURTHER ORDERED that the Final Regulatory Flexibility Analysis, required by Section 604 of the Regulatory Flexibility Act, 5 U.S.C. 604, and as set forth in Appendix B is ADOPTED.

364. IT IS FURTHER ORDERED that the Commission's Consumer Information and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch,
Secretary

XI. PROCEDURAL MATTERS

A. Regulatory Flexibility Act

365. As required by the Regulatory Flexibility Act (RFA), the Commission has prepared a Final Regulatory Flexibility Analysis (Supplemental FRFA) of the possible impact on small entities of the changes in its rules adopted in this Report and Order. The FRFA is set forth in Appendix B. The Office of Public Affairs will send a copy of the *Report and Order*, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the RFA.

B. Paperwork Reduction Act

366. This *Report and Order* contains a new information collection, which has been submitted to the Office of Management and Budget (OMB) for approval. As part of our continuing effort to reduce paperwork burdens, we invite the general public to take this opportunity to comment on the information collection contained in this *Report and Order*, as required by the Paperwork Reduction Act of 1995, Pub. L. No. 104-13. Public comments should be submitted to OMB and the Commission, and are due thirty days from date of publication of this *Report and Order* in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

APPENDIX A: FINAL REGULATORY FLEXIBILITY ANALYSIS

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[774] an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Notice of Proposed Rule Making* (*NPRM*).[775] The Commission sought written public comment on the proposals in the *NPRM*, including comment on the IRFA.[776] Three commenting parties specifically addressed the IRFA.[777] We discuss those comments below. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.[778]

A. Need for, and Objectives of, the *Report and Order*:

2. In this *Report and Order*, we have concluded that reconfiguration of the 800 MHz band is essential, over the long term, to assure that critical public safety communications may be accommodated without unacceptable interference, as that term is defined in the *Report and Order*. Because increasing instances of interference to 800 MHz public safety communications systems made it imperative that we act to stem such interference without delay, we adopted rules that hold the involved ESMR and cellular telephone licensees strictly responsible for abating interference by application of a variety of technical remedies which have been subsumed in this proceeding under the rubric of *Enhanced Best Practices*. Specifically, the Commission took the following actions:

- adopted a new 800 MHz band plan that, after a transition period, will separate high-density ESMR systems in the band, principally those operated by Nextel, from public safety and other non-cellular 800 MHz operations.
- require Nextel to relinquish all of its 800 MHz spectrum holdings below 817 MHz/862 MHz resulting in an additional average of 4.5 megahertz of 800 MHz band spectrum becoming available to the public safety community, particularly in the major markets where the shortage of public safety spectrum is most acute;
- established a transition mechanism for band reconfiguration with minimal disruption to the operations of all affected 800 MHz incumbents during the transition period;
- required Nextel to pay all band reconfiguration costs of public safety and other 800 MHz incumbents that result from transition to the new band plan;
- defined unacceptable interference as a function of threshold received power levels of desired signals;

[774] *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).

[775] *See* Improving Public Safety Communications in the 800 MHz Band; Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, *Notice of Proposed Rulemaking*, 17 FCC Rcd 4873, 4927 (2002) (*NPRM*).

[776] *See id.* at 4920 ¶ 93.

[777] Business Autophones, Inc., Comments on IRFA (May 6, 2002) Skitronics, LLC, Comments on IRFA (May 6, 2002); Small Business in Telecommunications, Comments on IRFA (May 6, 2002).

[778] *See* 5 U.S.C. § 604.

- placed strict responsibility for abatement of unacceptable interference on the licensees whose systems are the source of such interference;
- required prior notification, upon request, of the activation or modification of ESMR and cellular telephone cells;
- established firm rules—including response times of twenty-four hours and abatement initiation time of forty-eight—for procedures to be used to identify, report and remedy instances of unacceptable interference;
- modified certain Nextel licenses to accommodate a nationwide allocation in the 1910-1915 MHz/1990-1995 MHz paired spectrum block, in exchange for Nextel's surrendering spectrum, and bearing the financial burden and risk of reconfiguring the 800 MHz band;
- consolidated the Business and Industrial/Land Transportation Pools in the 800 MHz and 900 MHz bands, and
- allowed 900 MHz Private Land Mobile Radio (PLMR) licensees to initiate CMRS operations on their currently authorized spectrum or to assign their authorizations to others for CMRS use.

3. The Commission has taken these actions to immediately stem increasing instances of interference to 800 MHz public safety communications systems. The Commission has long recognized that the nation's public safety community requires effective radio communications systems free of unacceptable interference if public safety agencies are to adequately protect the safety of lives and property. The actions taken by the Commission in this *Report and Order* create a suitable spectrum environment for public safety and Critical Infrastructure Industries systems operating in the 800 MHz band.

4. In the *Fourth Memorandum Opinion and Order,* we both grant and deny petitions for reconsideration and clarification of the *Third Report and Order and Third Memorandum Opinion and Order*. We grant petitions to the extent described herein and clarify several points relating to BAS operations by licensees operating on different channel plans during the transition to the new BAS channel plan at 2025-2110 MHz. We otherwise deny the petitions relating to BAS relocation issues in the 1990-2025 MHz band. We also no longer require BAS licensees in TV markets 31-210 to cease operation on channels 1 and 2 (1990-2008 MHz and 2008-2025 MHz, respectively) until they have been relocated to their final channel plan in the 2025-2110 MHz band, but otherwise retain our previously adopted relocation rules for MSS licensees. The changes we adopt are necessary to allow Nextel, as a new entrant in the 1990-2025 MHz band, to participate in the relocation process we had previously established for BAS incumbents.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA:

5. Three parties submitted comments specifically in response to the IRFA: Business Autophones, Inc. (Business Autophones), Small Business in Telecommunications (SBT), and Skitronics, LLC (Skitronics).[779] Business Autophones opines that the Nextel Plan, which contemplated relocating B/ILT licensees from the 800 MHz band to the 700 MHz and 900 MHz at their own expense, would be financially devastating to small business B/ILT licensees and urges the Commission to either abate

[779] Business Autophones, Inc., Comments on IRFA (May 6, 2002) Skitronics, LLC, Comments on IRFA (May 6, 2002); Small Business in Telecommunications, Comments on IRFA (May 6, 2002).

interference on a case-by-case basis or adopt the plan proposed by NAM/MRFAC which reconfigured the band but did not relocate B/ILT licensees.[780] For the reasons described *infra* we have adopted a band plan that does not relocate B/ILT licensees to the 700 MHz and 900 MHz band and requires Nextel to finance any necessary relocation of B/ILT licensees.

6. Skitronics posits on the impact of four separate alternatives set forth in the *NPRM* on small businesses.

- Skitronics echoes Business Autophones concerns about the effect of the proposal to relocate B/ILT licensees from the 800 MHz band to the 700 MHz and 900 MHz at their own expense.[781] As we discuss at ¶ 27 *infra*, we did not choose this alternative.

- Skitronics argues that Nextel's alternative proposal, one that would allow incumbent 800 MHz operators to remain in the band on a secondary status, would deleteriously affect small business SMR operators by impacting these business' growth prospects as well as their ability to guarantee continuous service to their customers.[782] We note that although Nextel offered this alternative in its original *White Paper* proposal, Nextel removed it as part of the plan it submitted as a member of the Consensus Parties. Therefore, we ceased to consider this alternative at that time and we have not chosen to enact that alternative as a rule.

- Skitronics argues that the Commission's consideration of moving 800 MHz incumbents to the 2.1 GHz imposes significant costs on small business SMR licensees since the propagation qualities of the 2.1 GHz spectrum make it unsuitable for SMR use and there is a lack of available equipment suitable for SMR operations in this band.[783] As in the case of the alternative of allowing SMR licensees to remain in the 800 MHz band on a secondary basis, this alternative was superseded by the alternative set forth by the Consensus Parties in the Consensus Plan and we have not chosen to move 800 MHz incumbents to the 2.1 GHz band.

- Skitronics contends that the alternative mentioned in the *NPRM* that has the least impact on small business is enforcement of existing rules against those licensees responsible for causing interference to public safety on a case-by-case basis.[784] For the reasons discussed at ¶ 29 *infra*, we declined to adopt this alternative.

7. Unlike the two other comments received in response to the IRFA, SBT focuses its comments on the adequacy of the IRFA in terms of its compliance with the RFA. Specifically, SBT makes the following arguments:

- the IRFA does not describe the significant or potential economic impact of the *NPRM* on small entities as required by the RFA;[785]

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[780] *See* Business Autophones Comments on IRFA at 2-3.

[781] Skitronics Comments on IRFA at 6-10.

[782] *Id.* at 10-11.

[783] *Id.* at 11-13.

[784] *Id.* at 4, 16.

[785] SBT Comments at 3-4 (*citing* 5 U.S.C. § 603(a)).

- the IRFA omits any description of the problem to be rectified by the regulation to be promulgated or an objective for any proposed rule as required by the RFA;[786]

- the Commission either relied on outdated statistical sources in calculating the number of affected small licensees or failed to cite to the source(s) entirely;[787]

- SBT agrees with the IRFA's conclusion that the *NPRM* does not propose a rule that will entail additional reporting, record-keeping, and other compliance requirements because the *NPRM* does not, in fact, propose any rules.[788] However, in Section D *infra* we add new reporting and other requirements.

- SBT urges the Commission to amend the *NPRM*'s IRFA in any subsequent IRFA or FRFA if a substantive rule emerges from this proceeding.[789]

- SBT contends that the Commission should convert the *NPRM* to a Notice of Inquiry (NOI) and issue a second NPRM to propose specific rules.[790]

8. With regard to SBT's comments, as an initial matter we believe that we do not need to issue a NOI in this proceeding because the IRFA's description of the problem of interference to public safety systems in the 800 MHz band is a sufficient description of the problem to be rectified in this proceeding.[791] Moreover, we believe our description of the two plans under consideration in the *NPRM* adequately described the rules under consideration.[792] We also note that the Consensus Parties filed a plan superseding one of the plans discussed in the *NPRM* on September 23, 2002 and the major revision of that new plan on December 24, 2002. Both of these plans, as well as the comments received in response to these plans, proposed substantive rules. Moreover, in the interest of ensuring a complete record, the Commission opened two additional notice and comment rounds to obtain public comment on these two plans. Our position, therefore, is that the Commission clearly stated its proposals either in the *NPRM* and IRFA or fully clarified them in the two subsequent notice and comment rounds that permitted full comment on subsequently proposed plans. Indeed, the Commission received the bulk of all comments in

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[786] *Id.* at 4. According to SBT, the Commission's tentative conclusion that spectrum reallocation serves the public interest because it would resolve harmful interference to 800 MHz public safety licensees "falls far short" of satisfying the requirements of 5 U.S.C. § 603(b)(1). *See id.*

[787] *Id.* at 5-10.

[788] *Id* at 10-11. For the same reason, SBT concurs with the IRFA's conclusion that the *NPRM* does not propose any rule that duplicates, overlaps, or conflicts with other federal rules. *See id.* at 12.

[789] *Id* at 11, 12. In addition, SBT recommends that the Commission amend the IRFA to comply with 5 U.S.C. § 603(c)(3) by discussing alternatives to rules proposed by the Commission. *See id.* at 11. Once again, SBT reiterates that the Commission has not proposed any rules and therefore could not have discussed alternatives to such rules. *Id.* To the extent that the IRFA discusses alternative proposals for rule changes that were *submitted to* the Commission, SBT contends that such "alternatives" do not qualify as alternatives *proposed by* the Commission *Id.*

[790] *Id.* at 12-13. SBT believes that the Commission should use a NOI "whenever it lacks information about the industry to be regulated or the exact nature of the problem to be addressed." *Id.* at 13.

[791] *See NPRM* at 4927.

[792] *Id.*

this proceeding subsequent to the comment period initiated in the *NPRM*. Finally, we note that in Section C, *infra,* we are using updated statistical sources to assess the impact of the rules we adopt today on small businesses.

C. Description and Estimate of the Number of Small Entities To Which the Rules Will Apply:

9. 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.[793] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[794] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[795] A "small business concern" is one that is: (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).[796] Below, we further describe and estimate the number of small entity licensees and regulatees that may be affected by the rule changes adopted herein.

10. A "small organization" is generally any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.[797] Nationwide, there are approximately 1.6 million small organizations.[798] We note that, according to SBA data, there are approximately 22.4 million small businesses nationwide.[799] We describe and estimate, below, the number of small entities—applicants, licensees, and radio equipment manufacturers—that may be affected by this *Report and Order*.

11. *Governmental Entities*. The term "small governmental jurisdiction" is defined as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."[800] As of 1997, there were approximately 87,453 governmental jurisdictions in the United States.[801] This number includes 39,044 county governments, municipalities, and townships, of which 37,546 (approximately 96.2%) have populations of fewer than 50,000, and of which 1,498 have populations of 50,000 or more. Thus, we estimate the number of small governmental jurisdictions overall to be 84,098 or fewer.

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[793] 5 U.S.C. § 603(b)(3).

[794] 5 U.S.C. § 601(6).

[795] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

[796] 15 U.S.C. § 632.

[797] 5 U.S.C. § 601(4).

[798] Independent Sector, The New Nonprofit Almanac & Desk Reference (2002).

[799] See SBA, Programs and Services, SBA Pamphlet No. CO-0028, at page 40 (July 2002).

[800] 5 U.S.C. § 601(5).

[801] U.S. Census Bureau, Statistical Abstract of the United States: 2000, Section 9, pages 299-300, Tables 490 and 492.

12. *Wireless Telecommunications.* The SBA has developed a small business size standard for wireless firms within the broad economic census category "Cellular and Other Wireless Telecommunications."[802] Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. For the census category Cellular and Other Wireless Telecommunications firms, Census Bureau data for 1997 show that there were 977 firms in this category, total, that operated for the entire year.[803] Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.[804] Thus, under this category and size standard, the majority of firms can be considered small.

13. *Public Safety Radio Licensees.* As a general matter, Public Safety Radio Pool licensees include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services.[805] The SBA rules contain a definition for cellular and other wireless telecommunications companies which encompasses business entities engaged in radiotelephone communications employing no more that 1,500 persons.[806] There are a total of approximately 127,540 licensees within these services.[807] With respect to local governments, in particular, since many governmental entities as well as private businesses comprise the licensees for these services, we include under public safety services the number of government entities affected.

14. *Business, Industrial and Land Transportation Licensees.* At present, there are 3239 Business and Industrial/Land Transportation (I/LT) licensees that may be affected by this Report and Order.[808] The Commission does not require B/ILT licensees to disclose information about number of employees, so the

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802 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

803 U.S. Census Bureau, 1997 Economic Census, Subject Series: "Information," Table 5, *Employment Size of Firms Subject to Federal Income Tax:* 1997, NAICS code 513322 (issued October 2000).

804 U.S. Census Bureau, 1997 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms Subject to Federal Income Tax: 1997, NAICS code 513322 (issued October 2000). The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1000 employees or more."

805 *See* subparts A and B of Part 90 of the Commission's Rules, 47 C.F.R. §§ 90.1-90.22. Police licensees include 26,608 licensees that serve state, county, and municipal enforcement through telephony (voice), telegraphy (code), and teletype and facsimile (printed material). Fire licensees include 22,677 licensees comprised of private volunteer or professional fire companies, as well as units under governmental control. Public Safety Radio Pool licensees also include 40,512 licensees that are state, county, or municipal entities that use radio for official purposes. There are also 7,325 forestry service licensees comprised of licensees from state departments of conservation and private forest organizations that set up communications networks among fire lookout towers and ground crews. The 9,480 state and local governments are highway maintenance licensees that provide emergency and routine communications to aid other public safety services to keep main roads safe for vehicular traffic. Emergency medical licensees (1,460) use these channels for emergency medical service communications related to the delivery of emergency medical treatment. Another 19,478 licensees include medical services, rescue organizations, veterinarians, persons with disabilities, disaster relief organizations, school buses, beach patrols, establishments in isolated areas, communications standby facilities, and emergency repair of public communications facilities.

806 *See* 13 C.F.R. § 121.201 (NAICS Code 517212).

807 There is no information currently available about the number within the 127,540 that have less than 1500 employees.

808 This number is based on the Commission's licensing database.

Commission does not have information that could be used to determine how many B/ILT licensees constitute small entities under this definition. Moreover, we note that B/ILT 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.

15. *Specialized Mobile Radio Licenses.* The Commission awards "small entity" and "very small entity" bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than $15 million in each of the three previous calendar years, or that had revenues of no more than $3 million in each of the previous calendar years, respectively.[809] In the context of both the 800 MHz and 900 MHz service, the SBA has approved the definitions of "small entity" and "very small entity."[810] These bidding credits apply to SMR providers in the 800 MHz and 900 MHz bands that either hold geographic area licenses or have obtained extended implementation authorizations. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than $15 million. One firm has over $15 million in revenues. The Commission assumes, for purposes here, that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the SBA. The Commission has held auctions for geographic area licenses in the 800 MHz SMR band. In the 800 MHz auction, 38 of the 524 licenses won were won by small and very small entities.

16. *Wireless Communications Equipment Manufacturers.* The SBA has established a small business size standard for radio and television broadcasting and wireless communications equipment manufacturing. Under the standard, firms are considered small if they have 1000 or fewer employees.[811] Census Bureau data for 1997 indicates that, for that year, there were a total of 1,215 establishments[812] in this category.[813] Of those, there were 1,150 that had employment under 500, and an additional 37 that had employment of 500 to 999. The Commission estimates that the majority of wireless communications equipment manufacturers are small businesses.[814]

17. *Broadcast Auxiliary Service (BAS).* BAS involves a variety of transmitters, generally used to relay broadcast programming to the public (through translator and booster stations) or within the program

[809] 47 C.F.R. § 90.814(b)(1).

[810] *See* Letter, dated Aug. 10, 1999, from A. Alvarez, Administrator, Small Business Administration to Tom Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission.

[811] 13 C.F.R. § 121.201, NAICS code 334220.

[812] The number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the number given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census break-out data for firms or companies only gives the total number of such entities for 1997, which was 1,089.

[813] U.S. Census Bureau, *1997 Economic Census*, Industry Series: Manufacturing, "Industry Statistics by Employment Size," Table 4, (issued August 1999) NAICS code 334220. We note, however that the predominant manufacturers of 800 MHz equipment, Motorola and M/A COM Private Radio Systems, Inc. are not considered small businesses.

[814] We note, however that the predominant manufacturers of 800 MHz equipment, Motorola and M/A COM Private Radio Systems, Inc. are not considered small businesses.

distribution chain (from a remote news gathering unit back to the stations). The Commission has not developed a definition of small entities specific to broadcast auxiliary licensees. The U.S. Small Business Administration (SBA) has developed small business size standards, as follows: 1) For TV BAS, we will use the size standard for Television Broadcasting, which consists of all such companies having annual receipts of no more than $12.0 million;[815] 2) For Aural BAS, we will use the size standard for Radio Stations, which consists of all such companies having annual receipts of no more than $6 million;[816] 3) For Remote Pickup BAS we will use the small business size standard for Television Broadcasting when used by a TV station and that for Radio Stations when used by such a station.

18. According to Commission staff review of BIA Publications, Inc. Master Access Television Analyzer Database as of May 16, 2003, about 814 of the 1,220 commercial television stations in the United States had revenues of $12 million or less. We note, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations[817] must be included.[818] Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. There are also 2,127 low power television stations (LPTV).[819] Given the nature of this serv[illegible] we will presume that all LPTV licensees qualify as small entities under the SBA size standard. According to Commission staff review of BIA Publications, Inc., Master Access Radio Analyzer Database, as of May 16, 2003, about 10,427 of the 10,945 commercial radio stations in the United States had revenue of $6 million or less. We note, however, that many radio stations are affiliated with much larger corporations with much higher revenue, and, that in assessing whether a business concern qualifies as small under the above definition, such business (control) affiliations[820] are included.[821] Our estimate, therefore, likely overstates the number of small businesses that might be affected by our action.

19. *Cable Antenna Relay Service (CARS).* CARS includes transmitters generally used to relay cable programming within cable television system distribution systems. The SBA has developed a small business size standard for Cable and other Program Distribution, which consists of all such companies having annual receipts of no more than $12.5 million. According to Census Bureau data for 1997, there were 1,311 firms within the industry category Cable and Other Program Distribution, total, that operated for the entire year.[822] Of this total, 1,180 firms had annual receipts of under $10 million, and an additional

[815] 13 C.F.R. § 121.201, NAICS code 515120.

[816] *Id.* NAICS code 515112.

[817] "Concerns are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has to power to control both." 13 C.F.R. § 121.103(a)(1).

[818] "SBA counts the receipts or employees of the concern whose size is at issue and those of all i[illegible] domestic concern's size." 13 C.F.R. § 121.103(a)(4).

[819] FCC News Release, "Broadcast Station Totals as of September 30, 2002" (Nov. 6, 2002).

[820] "Concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both." 13 C.F.R. § 121.103(a)(1).

[821] "SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining the concern's size." 13 C.F.R. § 121.103(a)(4).

[822] 13 C.F.R. § 121.201, NAICS code 517510 (changed from 513220 in October 2002).

fifty-two firms had receipts of $10 million to $24,999,999.00.[823] Thus, under this standard, the majority of firms can be considered small.

20. *Geostationary, Non-Geostationary Orbit, Fixed Satellite, or Mobile Satellite Service Operators (including 2 GHz MSS systems).* The Commission has not developed a definition of small entities applicable to geostationary or non-geostationary orbit, fixed-satellite or mobile-satellite service operators. The SBA has developed a small business size standard for Satellite Telecommunications Carriers, which consists of all such companies having $12.5 million or less in annual receipts.[824] According to Census Bureau data for 1997, there were 324 firms that operated for the entire year.[825] Of this total, 273 firms had annual receipts under $10 million, and an additional twenty-four firms had annual receipts of $10 million to $24,999,990.[826] Thus, under this size standard, the majority of firms can be considered small.

21. *Fixed Microwave Services.* Microwave services include common carrier,[827] private-operational fixed,[828] and broadcast auxiliary radio services.[829] At present, there are approximately 36,708 common carrier fixed licensees and 59,291 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of the FRFA, we will use the SBA's definition applicable to wireless and other telecommunications companies—*i.e.*, an entity with no more than 1,500 persons.[830] According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.[831] Of this total, 965 firms had employment of 999 or fewer employees, and an additional twelve firms had employment of 1,000 employees or more.[832] Thus, under this size standard, majority of firms can be considered small.

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[823] *Id.*

[824] 13 C.F.R. § 121.201, NAICS code 517410 (changed from 513340 in October 2002).

[825] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Receipt Size of Firms Subject to Federal Income Tax: 1997," Table 4, NAICS code 513340 (issued October 2000).

[826] *Id.*

[827] 47 CFR Part 101 *et seq.* (formerly, part 21 of the Commission's Rules).

[828] Persons eligible under Parts 80 and 90 of the Commission's rules can use Private-Operational Fixed Microwave services. *See* 47 CFR parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

[829] Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's Rules. *See* 47 CFR Part 74 *et seq.* Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

[830] 13 C.F.R. § 121.201, NAICS code 517212 (formerly 213322).

[831] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Employment Size of Firms Subject to Federal Income Tax: 1997," Table 5, NAICS code 217212 (issues Oct. 2000).

[832] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

22. We note that the number of firms does not necessarily track the number of licensees. We estimate that all of the Fixed Microwave licensees (excluding broadcast auxiliary licensees) would qualify as small entities under the SBA definition. Of these licenses, approximately fourteen are issued for frequencies in the Emerging Technology bands affected by this proceeding. This, assuming that these entities also qualify as small businesses, as many as fourteen small business licensees could be affected by the rules we adopt. We note that these entities have been subject to relocation by UTAM under rules originally adopted in the Commission's *Emerging Technologies* proceeding. UTAM is the Commission's frequency coordinator for UPCS devices in the 1910-1930 MHz band. The *Fifth Report and Order* anticipates that these general relocation rules will continue to apply to FS microwave licensees and does not propose to modify the class of licensees that are subject to these relocation provisions.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

23. We expect that, at most, the rules adopted herein will result in nominal new reporting, recordkeeping, or other compliance requirements imposed on entities affected in this proceeding, as discussed Appendix B and ¶¶ 355-356, *infra*. The rules we adopt herein require that any Cellular Radiotelephone and/or ESMR licensee that receives an interference complaint from a public safety/CII licensee shall promptly respond to such complaint. Cellular Radiotelephone licensees, in conjunction ESMR licensees, shall establish an electronic means of receiving the initial complaint and shall respond on an "as soon as possible" basis and no later than twenty-four hours after receipt of initial notification. The purpose of this notification rule is to provide public safety/CII licensees a means to communicate to Cellular Radio Telephone and/or ESMR licensees instances of interference and for Cellular Radiotelephone and/or ESMR licensees to immediately initiate corrective action.

24. Additionally, the rules we adopt today provide that, upon request by a public safety/CII licensee, Cellular Radiotelephone and/or ESMR licensees must provide to the public safety/CII licensee the following information before any new cell sites are constructed or any existing cells are modified: (1) location; (2) effective radiated power; (3) antenna height; and (4) channels in use. The purpose of this rule is for informational purposes only and does not entitle the public safety/CII licensee to approve or disapprove the activation of a proposed cell site or to demand changes to the proposed technical parameters. The principal purpose of this rule is to facilitate a dialogue between Cellular Radiotelephone licensees and public safety/CII licensees regarding potential interference, identification of interference, and voluntary corrective measures.

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

25. 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.[833]

26. Our decision to reconfigure the 800 MHz band is generally size-neutral, but some aspects are beneficial to small entities for the following reasons:

- Although there are significant short-term costs associated with band reconfiguration, it is the

[833] *See* 5 U.S.C. § 603(c)(1-4).

solution most likely to yield maximum interference protection benefits for the least cost over the long run. This cost savings are significant for small entities with limited resources.

- Once implemented, a reconfigured band will reduce both the upfront amount of coordinated engineering work necessary to prevent interference and the burden of troubleshooting interference incidents on a case-by-case basis. This will allow small entities to utilize their scarce engineering resources more effectively.

27. We also considered proposals to reallocate (1) Nextel's 700 MHz Guard Band Block B spectrum, and the Upper 700 MHz band to public safety use; and (2) provide private radio licensees 2:1 access to 900 MHz spectrum. Our decision to decline to adopt these proposals was generally size-neutral but has the following impact on small entities:

- Since the Upper 700 MHz band is designated for auction, our decision not to utilize this band will allow small entities to bid on it in the future.

- Because we contemplate a future rulemaking proceeding to determine the ultimate disposition of Nextel's 700 MHz Guard Band spectrum, we afford small businesses an opportunity to comment on the future use of this spectrum.

28. We have considered the costs of realignment and the limited resources of small entities, including public safety, in effectuating band realignment. We believe that our decision will not have a significant economic impact on small entities in this regard because the cost of 800 MHz realignment will be borne by Nextel (*i.e.*, Nextel will pay relocation costs). We reject the alternative of deferring final action on band reconfiguration, because deferral would increase the potential for increased interference to public safety systems because ESMR and Cellular telephone licensees would remain in close proximity to such systems while expanding their operations.

29. Although we have not codified the *Best Practices Guide*, we endorse the interference abatement strategies therein. However, when we considered the sole use of Enhanced Best Practices as an alternative to reconfiguring the 800 MHz band in its entirety, we found this alternative less effective and more costly over the long term than band reconfiguration, and therefore more likely to be harmful to smaller entities. Our finding in that regard rests on the following facts:

- Addressing interference on a case-by-case basis is both labor-intensive and expensive, which puts smaller entities at risk due to their more limited resources.

- The transactional cost of applying Enhanced Best Practices as an exclusive remedy would increase as new public safety and other non-cellular systems came on line and ESMR and cellular telephone licensees increased the capacity of their systems by adding more cells.

- The increased cost and labor burden disproportionately affects public safety agencies, many of which are small entities operating with very limited human, technical and financial resources.

30. We have determined not to require public safety licensees to increase their signal strength. Such a requirement would impose a substantial burden on public safety licensees, including small entities, which would often continue to suffer from interference until the causes could be identified and until appropriate channels and sites for the construction of new base station facilities could be obtained.

31. Regarding our decision to permit negotiated agreements to swap or exchange channels as a means to resolve interference to public safety systems, we do not foresee any adverse impact on small entities. The channel swapping proposals to date have specified that Nextel will bear the costs thereof.

To the extent that small entities bear channel swap expenses not assumed by Nextel, we believe, for the reasons discussed at ¶ 29 *supra*, the financial burden of these small-scale band reconfigurations should be less than the cost of reliance on Enhanced Best Practices for the long term abatement of unacceptable interference.

32. Regarding our decision to hold Cellular Radio Telephone and ESMR licensees strictly responsible for effectively abating actual or potential unacceptable interference to 800 MHz public safety systems in the shortest practicable time, we do not anticipate a significant burden on small entities. We recognize that our rule does not exempt small entities from its ambit. However, in eliminating the interference we afford licensees the flexibility to determine which system—ESMR, Cellular Telephone or CII/public safety—to modify and what particular technical parameters to change on these systems; and impose on the interfering licensee(s), the obligation to promptly implement such changes. Moreover, we note that small entities were generally not among the interfering parties in those instances of interference that were brought to our attention by parties in this proceeding. We considered the alternative of imposing system-wide, stringent technical limitations on ESMR and Cellular Telephone licensees; however, we found selection of that alternative unwarranted at this time. Such rules would have imposed a burden on all licensees, including small entities, which were not among those causing interference to 800 MHz public safety systems. In particular, we have heeded the filings of rural cellular telephone carriers who opposed imposition of out-of-band emission standards that would require them to add expensive equipment to their cell sites.

33. Regarding our adoption of rules establishing general standards and procedures to govern the abatement of interference to public safety systems, we recognize that they will apply equally to all licensees, including small entities, which cause interference to 800 MHz public safety systems. However, we do not anticipate any significant adverse impact on small entities. We adopted rules that were intentionally general in nature to confer considerable discretion on the parties involved in abating instances of interference to public safety systems. Moreover, as noted above, small entities were generally not among the interfering parties in those instances of interference that were brought to our attention by parties in this proceeding. To the extent that they can demonstrate that they are not contributing to the interference to the public safety systems, they will not be responsible for abating the interference. Therefore, the burden should be minimal for those small entities not contributing to the public safety interference problem in the 800 MHz band. The minimal burden imposed by these rules is necessary to ensure that critical public safety communications may be accommodated without unacceptable interference.

34. In this respect, we are mindful that a number of the public safety systems that are experiencing interference are small entities. We believe that the rules will impose a minimal burden on small public safety entities. First, because we will only require them to furnish certain necessary information to all licensees that may be responsible for causing the interference. Second, because this provision will assure them of timely responses to and analyses of their interference complaints. Ultimately, the burden of supplying this information will be significantly less than that associated with identifying each source of unacceptable interference and contacting such sources individually.

35. Regarding our decision to require notification of the activation of new or modified ESMR or cellular radiotelephone cells, we do not perceive any adverse impact on small entities. Indeed, the prior notification requirement will enable small entities, such as public safety/CII licensees, to take proactive, anticipatory steps to address potential interference. Without this requirement, public safety/CII licensees would first have to experience interference before taking recourse. Similarly, the requirement that Cellular Radiotelephone and/or ESMR licensees promptly initiate corrective actions after having been notified of interference by public safety/CII licensees minimizes the burden on small entities of having to endure prolonged periods of interference. Moreover, as noted above, small entities were generally not among the interfering parties in those instances of interference that were brought to our attention by

parties in this proceeding.

36. Regarding our decision to consolidate the 800 MHz and 900 MHz Business and Industrial/Land Transportation Pools, we perceive no adverse impact on small entities. This decision will allow any eligible Business or Industrial/Land Transportation entity to be licensed on the consolidated channels. This consolidation will improve spectrum efficiency, promote the use of advanced technologies by affording licensees more contiguous spectrum, and reduce regulatory burdens on all licensees, including small entities. The alternative of retaining separate pools for each service would subject licensees to the unnecessary burden of seeking waivers to permit intercategory sharing, which may have been comparatively more onerous for smaller entities to prepare and file.

37. Regarding our decision to allow 900 MHz PLMR licensees to initiate CMRS operations on their currently authorized spectrum or to assign their authorizations to others for CMRS use, we perceive no adverse impact on small entities. This decision will improve spectrum efficiency, promote the use of advanced technologies by affording licensees access to addition spectrum.

38. Regarding our decision to allocate the 1910-1915 MHz/1990-1995 MHz paired spectrum blocks to Nextel, we perceive no adverse impact on small entities. Redesignating this spectrum for Nextel's use, for example, will facilitate 800 MHz realignment, by, among other things, introducing an additional entity that can participate in funding the relocation costs of public safety, critical infrastructure, and private wireless entities, including small entities. Alternatively, maintaining this spectrum without applying our relocation principles will expose such entities to continued interference without sufficient spectrum and funding to achieve realignment. Further, we are satisfied that our decision will not adversely impact BAS, UPCS, MSS, and microwave interests on account of expenditures in this spectrum. As noted in the *Report and Order*, Nextel has agreed to reimburse these interests or pay the upfront costs to relocate incumbents in the manner provided by our Rules, and we will hold Nextel to that agreement.

39. **Report to Congress:** The Commission will send a copy of the *Report and Order, Fifth Report and Order, Memorandum Opinion and Order, and Order,* including this FRFA, in a report to be sent to Congress and the General Accounting Office pursuant to the Congressional Review Act.[834] In addition, the Commission will send a copy of the *Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Report and Order* and FRFA (or summaries thereof) will also be published in the Federal Register.[835]

[834] *See* 5 U.S.C. § 801(a)(1)(A).

[835] *See* 5 U.S.C. § 604(b).

APPENDIX B: PAPERWORK REDUCTION ANALYSIS

1. This document contains new information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the information collection requirements contained in this document. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might "further reduce the information collection burden for small business concerns with fewer than 25 employees." This *Report and Order* contains several new information collections. We describe our new information collections as follows:

2. In this *Report and Order* we require that any Cellular Radiotelephone and/or ESMR licensee that receives an interference complaint from a public safety/CII licensee shall respond to such complaint. To facilitate receipt of complaints, Cellular Radiotelephone licensees, in conjunction with Part 90 ESMR licensees, must establish an electronic means of receiving the initial notification and shall respond to such notification on an "as soon as possible" basis and no later than 24 hours after receipt of initial notification. The purpose of this notification rule is to provide prompt notification to ESMR and Cellular Radiotelephone licensees that their transmissions are interfering with public safety/CII transmissions, some of which are crucial to protection of life and property. These requirements constitute new "collections of information" within the meaning of the Paperwork Reduction Act of 1995, 44 U.S.C. §§ 3501-3520. Implementation of this requirement is subject to approval by the Office of Management and Budget as prescribed by the Paperwork Reduction Act.

3. Additionally, the rules we adopt today provide that upon request by a public safety/CII licensee, Cellular Radiotelephone and/or ESMR licensees must provide to the public safety/CII licensee the following information before any new cell sites are constructed or any existing cells are modified: (1) location; (2) effective radiated power; (3) antenna height; (4) channels in use. The purpose of this rule is for informational purposes only and does not entitle the public safety/CII licensee to approve or disapprove the activation of a proposed cell site or to demand changes to the proposed technical parameters. The principal purpose of this rule is to forestall activation of facilities that have the potential to cause interference to communications, some of which may be crucial to the safety of life and property. These requirements constitute new "collections of information" within the meaning of the Paperwork Reduction Act of 1995, 44 U.S.C. §§ 3501-3520. Implementation of this requirement is subject to approval by the Office of Management and Budget as prescribed by the Paperwork Reduction Act.

4. In this present document, we have assessed the effects of the above-mentioned information collection requirements on small business concerns, and find that these information collection requirements will not adversely affect businesses with fewer than twenty-five employees.