

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

In the Matter of)
The Development of Operational,)
Technical and Spectrum Requirements)
For Meeting Federal, State and Local) WTB Docket No. 96-86
Public Safety Agency Communication)
Requirements Through the Year 2010)
)
Establishment of Rules and Requirements)
For Priority Access Service)

FEDERAL LAW ENFORCEMENT WIRELESS USERS GROUP'S
COMMENTS IN RESPONSE TO THE THIRD NOTICE OF PROPOSED RULEMAKING

1. The Federal Law Enforcement Wireless Users Group (FLEWUG)¹ respectfully submits the following comments in response to the Commission's Third Notice of Proposed Rulemaking *In the Matter of The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010* (Third Notice).²

Background

¹ The FLEWUG comprises law enforcement and public safety officials from the Department of the Treasury, Department of Justice, Department of the Interior, Department of Agriculture, Department of Defense, Department of Health and Human Services, United States Postal Service, United States Postal Inspection Service, National Telecommunications and Information Administration, Federal Emergency Management Agency, Internal Revenue Service, Federal Bureau of Investigation, United States Secret Service, United States Coast Guard, United States Capitol Police, Drug Enforcement Administration, United States Park Police, Immigration and Naturalization Service, United States Customs Service, Bureau of Alcohol, Tobacco, and Firearms, United States Mint, National Communications System, Defense Information Systems Agency, National Security Agency, Federal Law Enforcement Training Center, Bureau of Engraving and Printing, United States Marshals Service, National Institute of Standards and Technology, United States Forest Service, United States Fish and Wildlife Service, and Federal Bureau of Prisons.

2. In 1993, the Office of the Vice President issued a National Performance Review (NPR) report recognizing the need to improve public safety communications. The NPR, and a subsequent Memorandum of Understanding between the Department of Justice and the Department of the Treasury, formally established the FLEWUG. The membership of the FLEWUG consists of more than 30 federal departments and agencies with law enforcement and other public safety responsibilities. Key among the FLEWUG's objectives is to plan and coordinate future, shared-use, wireless communications systems and resources. Toward this end, the FLEWUG supports: the development of shared-resource, shared-use wireless communications systems; the efficient use of spectrum; and interoperability, as needed, among federal, state, and local public safety agencies.

3. Given the FLEWUG's charter, we have a clear interest in the proceedings related to the Third Notice, particularly with respect to: the disposition of the 8.8 MHz of reserve spectrum in the newly-allocated public safety spectrum at 764-776 MHz and 794-806 MHz (hereinafter "the 700 MHz band"); the administrative decisions taken with respect to the 2.6 MHz of interoperability spectrum in the 700 MHz band designated in the First Report and Order; and the provision of interoperability spectrum for public safety below 512 MHz.³ The FLEWUG provides comments on each of these matters as well as on the protection against interference with the Global Navigation Satellite System (GNSS) and on the Year 2000 problem as it pertains to public safety radio systems.

² See *In the Matter of The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010*, WTB Docket No. 96-86, FCC 98-191 (rel. September 29, 1998).

³ The FLEWUG, to date, has been actively engaged in this proceeding. The FLEWUG filed Comments and Reply Comments to the Second NPRM for Public Safety. The FLEWUG filed a Petition for Reconsideration and Clarification to the First Report and Order. The FLEWUG has entered six ex parte filings to the record, including a filing delivered on July 17, 1998, by Associate Attorney General Raymond Fisher.

Use and Licensing of Reserve Spectrum

A. General Comments Regarding the Reserve Spectrum

4. The Commission requests comments on the use and licensing of the 8.8 MHz of spectrum in the 700 MHz band designated as "reserve" in the Commission's First Report and Order.⁴ The FLEWUG commends the Commission for having so designated some of the newly allocated 24 MHz of public safety spectrum. In its ex parte filings, the FLEWUG urged the Commission that, in adopting a 700 MHz band plan to meet immediate needs, it should consider the use of future technologies and reserve some spectrum to enable the public safety community to benefit from the use of future technologies.⁵ By designating 8.8 MHz of reserve spectrum, and by requesting comments on its use and licensing, the Commission has afforded an opportunity to suggest and have considered other uses and licensing approaches that may best serve other significant public safety purposes, such as the incorporation of future technologies.

5. The FLEWUG believes that the specific uses of the reserve spectrum should be determined by the National Coordination Committee (NCC) proposed by the Commission in the First Report and Order⁶ assuming the NCC is strengthened in accordance with the FLEWUG's positions as expressed in its Petition for Reconsideration and Clarification⁷ to the First Report and Order. However, the FLEWUG believes that, with the appropriate allowances made for co-equal

⁴ See First Report and Order at paragraph 33.

⁵ See FLEWUG ex parte filings of June 16, 1998; July 6, 1998; and July 8, 1998 (stating that "In the event that a channel allocation plan is adopted in the near future, the FLEWUG urged the Commission to consider the use of future technologies when adopting the channel allocation plan. Specifically, the FLEWUG believes that a portion of the 764-776/794-806 MHz band should be reserved for future wireless technologies. Such an allocation would enable the public safety community to benefit from the use of future technologies.").

⁶ See First Report and Order at paragraph 92.

⁷ See the FLEWUG Petition at paragraphs 28-32.

access by Federal Government entities⁸, the reserve spectrum should be designated for general use (vice interoperability) purposes because of unmet general use requirements.

6. The FLEWUG further believes that neither the existing Regional Planning Committee (RPC) process, as revised by the First Report and Order, nor a new state-based process are appropriate or sufficient approaches for licensing the reserve spectrum. Neither approach necessarily facilitates the development of statewide or regional public safety systems. Past experience in the RPC process has shown that it has not adequately promoted interoperable multi-jurisdictional systems. As discussed in more detail in Section D starting at paragraph 15 of these comments, state-based processes may result in a fragmented set of approaches. The FLEWUG suggests an alternative coordination and licensing process whereby the NCC becomes the controlling authority for determining and managing the use and licensing of the reserve spectrum and leads, oversees, and manages a strengthened RPC process as the mechanism for administering the reserve spectrum.

⁸ These allowances are per the provisions adopted in the First Report and Order regarding the Federal Government use of non-Federal Government frequencies. As indicated in its Petition for Reconsideration and Clarification at paragraphs 6 through 9, the FLEWUG interprets these provisions as the terms under which co-equal access will be granted, generally. These provisions thus apply when general use spectrum in the 700 MHz band is used for shared or joint-use systems that include Federal Government entities. *See* 47 C.F.R. § 2.103(b); *see* First Report and Order at Appendix E, E-1. Section 2.103 of the Commission's rules now states:

- (b) Government stations may be authorized to use channels in the 764-776 MHz and 794-806 MHz public safety bands with non-Government entities if the Commission finds such use necessary where:
 - 1. The stations are used for interoperability or part of a Government/non-Government shared or joint-use system;
 - 2. The government entity obtains the approval of the non-Government (State/local government) licensee(s) or applicant(s) involved;
 - 3. Government operation is in accordance with the Commission's Rules governing operation of this band and conforms with any conditions agreed upon by the Commission and the National Telecommunications and Information Administration; and
 - 4. Interoperability, shared or joint-use systems are the subject of a mutual agreement between the government and non-government entities. This section does not preclude other arrangements or agreements as permitted under Part 90 of the Rules. *See* 47 CFR §§ 90.179 and 90.421.

7. The FLEWUG provides specific comments on each of these matters (i.e., the use of the reserve spectrum, the existing RPC process, state licensing, the FLEWUG's proposed alternative, and statewide and regional systems development) in the paragraphs that follow.

B. Comments Regarding the Use of the Reserve Spectrum

8. In its September 1996 final report, the Public Safety Wireless Advisory Committee (PSWAC) determined the immediate need for 25 MHz of spectrum to satisfy existing demands.⁹ The PSWAC also identified the immediate need for at least 2.5 MHz of interoperability spectrum.¹⁰ By designating 2.6 MHz of the spectrum for interoperability purposes, the Commission has met the immediate need for interoperability spectrum in the 700 MHz band.¹¹ However, the Commission has yet to meet the immediate need for general use spectrum. To date, 12.6 MHz of the 700 MHz band has been designated for general use while 12.4 MHz of the 25 MHz recommended by the PSWAC to satisfy existing general use voice and data requirements remains uncommitted.

9. To address this shortfall, the FLEWUG asks the Commission to designate the reserve spectrum for general use purposes only. In so doing, the Commission will reduce the unmet PSWAC requirement by 8.8 MHz. The FLEWUG further urges the Commission to expeditiously identify and allocate the remaining 3.6 MHz necessary to meet the near-term PSWAC requirements.

⁹ See the PSWAC Final Report, Executive Summary at page 3; Key Recommendation 2.2.1 at pages 20-21; and the Spectrum Requirements Subcommittee Summary at pages 53 (item 4.4.1) and 55 (item 4.4.8).

¹⁰ See *Id.*

¹¹ However, at least an equivalent amount of interoperability spectrum is required below 512 MHz. The Commission indicates in the Third Notice at paragraph 188, and the FLEWUG concurs, that "locating interoperability channels in the 700 MHz and 800 MHz bands does not, standing alone, provide a comprehensive short term solution to the interoperability problem for either voice or data applications and that establishment of

10. However, the FLEWUG feels that it is premature to make any further determinations as to the use of the reserve spectrum (e.g., narrowband versus wideband designations, types of communications supported, types of technologies supported, set asides for joint-use or shared systems). Rather, the FLEWUG urges the Commission to defer these matters to the NCC and to sufficiently empower the NCC to deliberate and resolve these matters fully. Through the NCC, the Commission can achieve its stated objective for having reserved the spectrum in the first place, namely, to serve the public interest through the consideration of "other uses . . . for certain portions of the 700 MHz band that may best serve other significant public safety purposes."¹² There is no more appropriate entity available to the Commission to determine these other significant public safety purposes than the NCC.

C. Comments Regarding the Existing RPC Process

11. The FLEWUG has consistently expressed the view that the RPC process is not an adequate mechanism for achieving the purposes intended by the Commission.¹³ The FLEWUG reiterates and stresses this view in response to the Commission's consideration of using the RPC process for the reserve spectrum. The FLEWUG urges that the Commission not allow the RPC process to have a role in the licensing and administration of the reserve spectrum without fully

nationwide interoperability channels here is not mutually exclusive with the establishment of interoperability channels in other bands."

¹² See First Report and Order at paragraph 33.

¹³ See the FLEWUG Comments to the Second Notice at paragraphs 26 and 43-48; the FLEWUG Reply Comments to the Second Notice at paragraphs 25, 38-40, and 42-44; and the FLEWUG Petition to the First Report and Order at paragraphs 10-27.

addressing the shortfalls and limitations identified by the FLEWUG and others¹⁴ during the course of this proceeding.

12. Even if all shortfalls and limitations are addressed, the FLEWUG believes the RPC process alone is simply not suited to serve the strategic intent the Commission had when it designated the reserve spectrum. The RPCs are tactically oriented toward addressing the frequency requirements of systems development efforts taking place within the region of concern and not directly involved in users needs or operational requirements.¹⁵ In addition, RPC members are often radio managers, frequency planners, and spectrum managers and not systems users or public safety operations specialists.¹⁶ Furthermore, there is rarely a national perspective considered as part of their deliberations.

13. The FLEWUG believes that the perspectives of users and operations specialists, among others, are critical and essential for enabling the Commission to identify other uses for the reserve spectrum that may best serve significant public safety purposes. The RPCs do not provide this perspective, which could result in too narrow a consideration of possible other uses. However, once sufficiently improved, the RPC process could support an appropriately positioned lead entity, such as the NCC.

14. The FLEWUG thus urges that the Commission not delegate determinations regarding use and licensing of the reserve spectrum to the RPCs. The FLEWUG further urges that the Commission not engage the RPC process to assist with making such determinations without

¹⁴ See e.g., Joint Comments to the Second Notice at paragraphs 13, Joint Reply Comments at paragraphs 3-4, 5, and 7; Pennsylvania Comments at paragraphs 11-12; NPSTC Comments at paragraphs 23-24 and 29-30; and National League of Cities Comments at paragraphs 3-7.

¹⁵ The RPC functions and the regional plans are administrative in nature. See the PSWN program 800 MHz Study at Appendix C and at pages 6-7 and D-10 to D-13. See also the First Report and Order at paragraph 84.

¹⁶ See the PSWN program 800 MHz Study at pages D-12 and C-3 to C-8.

making the necessary improvements to the RPC process and without limiting the role of the RPCs to tactical operations in support of an appropriately configured and staffed lead entity.

D. Comments Regarding State Licensing

15. The FLEWUG does not support a role for state governments in spectrum management and does not support the licensing of spectrum, in block or in parts, to a single state government entity on behalf of all public safety entities within the state. The FLEWUG strongly believes that spectrum management needs to be simplified and standardized, not made more variable and complex through the potential promulgation of 50 unique approaches. The FLEWUG believes the Commission should be striving to normalize and stabilize its spectrum management approaches for the public safety bands, not introduce additional approaches that involve entities that have no spectrum management experience. As a part of these efforts, the FLEWUG urges the Commission to transition the eligibility provisions and the provisions governing Federal Government use of non-Federal Government frequencies for each public safety band to those now specified for the 700 MHz band¹⁷ so that one set of rules applies.

16. The FLEWUG believes that the Commission should strengthen its existing public safety management team, which consists of the NCC, the RPCs, and the public safety frequency coordinators. A sufficiently strong NCC and a sufficiently improved RPC process, together with

¹⁷ The eligibility provisions for the 700 MHz band allow any state or local government entity and, under certain conditions, nongovernmental public safety service providers to hold Commission authorizations for systems operating in the 764-776 MHz and 794-806 MHz bands. *See* 47 C.F.R. § 90.253; *see* First Report and Order at Appendix E, E-3. The Federal Government use provisions for the 700 MHz band allow co-equal access to frequencies in the 764-776 MHz and 794-806 MHz bands to federal entities under certain conditions. *See* footnote 8 of this document; *see* 47 C.F.R. § 2.103; *see* First Report and Order at Appendix E, E-1.

the work of the frequency coordinators, should provide the Commission with the necessary team members for responsive and responsible public safety spectrum management.

17. The FLEWUG believes that state licensing would provide no inherent advantage to statewide system development. Whether through the existing RPC process, an improved RPC process under the management of the NCC, or a newly established but equivalent state process, the planners and developers of statewide systems will still need to navigate through the spectrum management process to acquire the necessary frequencies. State licensing does not simplify this matter.

18. At best, state licensing simply transfers the work from one playing field and rule set to another. At worst, and more likely, it adds another spectrum management scheme to the several that now exist: One has just been established for the 12.6 MHz of designated general use spectrum in the 700 MHz band; another exists for the National Public Safety Planning Advisory Committee (NPSPAC) channels in the 800 MHz band; another applies for the general pool channels in the 800 MHz band; and still others exist for the public safety frequencies below 512 MHz.¹⁸

19. Further, the FLEWUG believes that state licensing could very well frustrate the development of regional systems that cross the boundaries of several states. For instance, the development of a regional system along the Nation's Southwest border is a possibility because of the common border-related public safety challenges confronted by the public safety community at all levels of government.¹⁹ Yet, if the state governments of California, Arizona, New Mexico, and

¹⁸ See the PSWN program's State and Local Spectrum Management Processes Report at pages 5-9 and the affiliated information in Appendixes C through G.

¹⁹ The PSWN program is currently performing a case study along the Southwest border to assess this possibility, among other purposes. Reports that provide the program's findings and recommendations are forthcoming.

Texas each adopted sufficiently different approaches to administering the reserve spectrum, the development of a cross-state regional system would be unnecessarily complicated and costly.

E. FLEWUG's Proposed Alternative Approach

20. In lieu of the existing RPC process or of new state licensing processes, the FLEWUG proposes that the NCC, with its charter adjusted and strengthened as described in the FLEWUG's Petition²⁰ to the First Report and Order, be given direct responsibility for determining and managing the use and licensing scheme for the reserve spectrum. The RPC process, once adjusted to address known shortfalls and limitations as described in the FLEWUG's Petition²¹ to the First Report and Order and as detailed below, should support the NCC in an administrative capacity for managing the reserve spectrum. Figure 1 (next page) shows the FLEWUG proposal.

21. The FLEWUG believes the reserve spectrum should be held for future use until such time as the NCC, with the support of the RPC process, has determined the most appropriate disposition for the reserve spectrum. The FLEWUG agrees with the Commission that the period over which this spectrum is held in reserve need not "necessarily be long-term but may be in fact short-term"²². The FLEWUG respectfully reminds the Commission of the standing urgent need for an additional 12.4 MHz of spectrum to meet the near-term recommendations of the PSWAC report. As such, the FLEWUG urges the Commission to require the NCC to move swiftly in making its determinations of how to use and manage the reserve spectrum. By doing so, the FLEWUG believes the NCC and, thus, the Commission will enable systems managers to plan for

²⁰ See the FLEWUG Petition at paragraphs 28-35.

²¹ See *Id.* at paragraphs 10-27.

²² See First Report and Order at paragraph 33.

the availability, licensing, and use of the reserve spectrum to support new systems and/or upgrades.

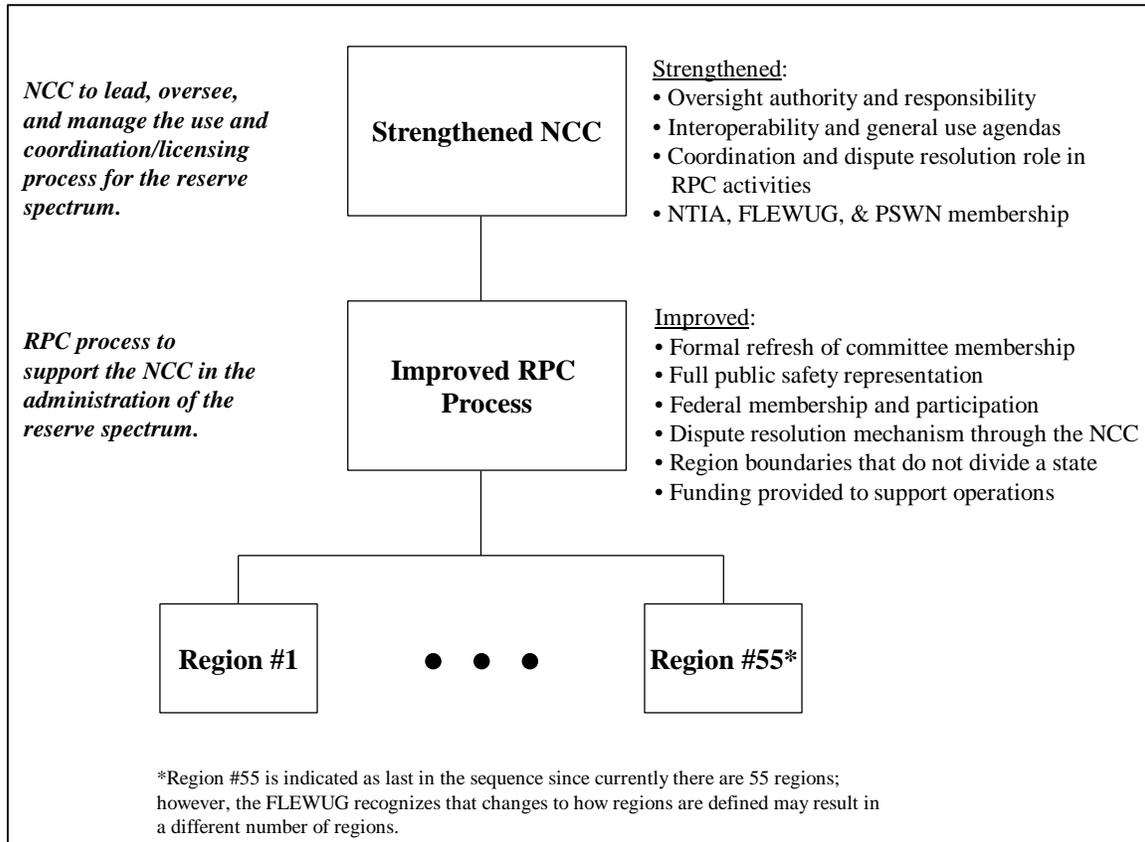


Figure 1: FLEWUG's Proposed Structure for Addressing the Use and Licensing of the Reserve Spectrum

22. Two items are prerequisites for implementing the FLEWUG proposal. The first is the strengthening of the NCC so that, among other things, the NCC has oversight authority. The second is the improvement of the RPC process so that, among other things, the membership of the RPC is representative of the full public safety community, including federal agencies.

23. *Strengthening the NCC.* The FLEWUG urges the Commission to address the following points as it works to establish the NCC.²³

- Oversight authority and responsibility – The FLEWUG believes that it is in the public interest for the NCC to have oversight and decision making responsibilities because: the Commission does not possess sufficient resources to provide the requisite degree of oversight, it is in the Commission’s interest to leverage the NCC toward this end, and without such authority the NCC may merely become a "paper tiger".²⁴ Moreover, the FLEWUG contends that the duration of the NCC need not be limited to four years, because the Federal Advisory Committee Act allows for repeated extensions.²⁵
- Interoperability and general use agendas – It is the FLEWUG’s view that the NCC address general use issues with the same level of involvement and responsibility as it will with the interoperability issues. Toward this end, the FLEWUG believes the NCC should address both general use and interoperability spectrum, and should maintain two distinct agendas to address both matters. The FLEWUG urges the Commission to consider the serious consequences that may arise if failures occur regarding the inappropriate segregation or coordination of the two discrete sets of issues.²⁶

²³ In addition to addressing these matters, the FLEWUG strongly urges the Commission to withdraw the proposed role of the NCC in the standards development process and the requirement for the NCC to pursue ANSI accreditation. The FLEWUG believes that the proposed NCC role in standards development will result in a duplication of effort with existing standards development, may result in the development of incompatible standards, and could further delay the use of the 700 MHz band for public safety purposes. The FLEWUG believes that the adoption of existing TIA/EIA-102 standards for digital interoperability in the 700 MHz band is a more workable alternative. See the FLEWUG Petition to the First Report and Order at paragraphs 32 through 35. Note also that the FLEWUG will provide comments to the FCC's Public Notice regarding the NCC to discuss in greater detail this matter and the others presented in paragraph 22 above, among other points.

²⁴ See FLEWUG Petition to First Report and Order at paragraph 31.

²⁵ See *Id.* In fact, the Commission states at footnote 233 of the First Report and Order that “advisory committees chartered under FACA can have terms of two years or less but charters can be renewed. See 5 U.S.C. App. 2 (1988). See Spectrum Planning and Policy Advisory Committee.

²⁶ See *Id.* at paragraphs 29 and 32.

- Coordination role and dispute resolution in RPC activities – The FLEWUG believes NCC assistance with general use regional planning should not be viewed as voluntary or optional. The RPCs should be required to obtain NCC assistance and follow regional planning guidelines established by the NCC. Failure to do so could render national planning for general use 700 MHz spectrum no more effective than it was for the 800 MHz NPSPAC channels.²⁷ In addition, the FLEWUG believe that the NCC should be charged with moderating disputes between the RPCs and that the failure to provide a third-party dispute resolution mechanism could further frustrate progress.²⁸
- NTIA, FLEWUG, & PSWN program membership – The FLEWUG agrees with the Commission’s decision “that a national coordination committee composed of a broad range of representatives of the public safety user community is appropriate.” Toward this end, the FLEWUG believes that the membership of the NCC should include representatives from the NTIA, the FLEWUG, and the PSWN program^{29, 30}

24. *Improving the RPC Process.* The FLEWUG urges the Commission to address the following points as it works to improve the RPC process to address known shortfalls and

²⁷ See *Id.* at paragraph 32.

²⁸ See *Id.* at paragraph 27.

²⁹ The Public Safety Wireless Network (PSWN) program is a federal initiative operating on behalf of all local, state, and federal public safety agencies. The Department of Justice and the Department of the Treasury are jointly leading the PSWN program efforts to plan and foster interoperability among public safety wireless networks. The PSWN program is a 10-year National Partnership for Reinventing Government (NPRG) initiative. The NPRG, previously known as the National Performance Review (NPR), is an effort to reengineer how government provides services to citizens through more effective use of information technology and through more concerted partnership efforts among government at all levels. Consistent with the NPRG, and in concert with the public safety community, the PSWN program hopes to achieve a shared vision of interoperability—seamless, coordinated, and integrated public safety communications for the safe and efficient protection of life and property. The PSWN program is developing partnerships and working closely with the public safety community throughout the first five-year phase of the program to develop a comprehensive implementation plan for interoperability among wireless networks. The program is currently entering its third year and will soon approach the halfway mark of its first phase. During the second five-year phase, the program activities will assist the public safety community in its implementation of the plan. More information about the PSWN program, its products, and its accomplishments are available on the PSWN program web page at www.pswn.gov.

³⁰ See FLEWUG Petition to First Report and Order at paragraph 30.

limitations. Without addressing these inadequacies, the FLEWUG believes the Commission cannot adequately delegate its public safety spectrum management responsibilities.

- Formal refresh of committee membership – The FLEWUG believes allowances for forming the 700 MHz RPCs anew must be made because the eligibility rules for the 700 MHz band are different from those in the 800 MHz band. The FLEWUG is concerned that the initial operations of the 700 MHz RPCs as described in the First Report and Order preclude the RPCs from being distinct from the 800 MHz RPCs.³¹
- Full public safety representation – Two common criticisms of the regional planning process are that it is not adequately inclusive of the broad public safety community,³² and that the RPCs have been dominated by law enforcement agencies to the exclusion of other public safety officials.³³ The FLEWUG believes it is critical for the Commission to address these points and ensure balanced membership from throughout the public safety community.
- Federal membership and participation – The FLEWUG strongly believes that at least one representative from the Federal Government must be included on each 700 MHz RPC. Moreover, in order to ensure the most equitable representation and participation, the FLEWUG should be given the responsibility of naming a federal participant to each

³¹ See *Id.* at paragraphs 15 and 16.

³² See FLEWUG Second Notice Comments at paragraph 18; Joint Commenters Second Notice Reply Comments at paragraph 5. See also NLC Second Notice Reply Comments at paragraph 3; State of California Second Notice Reply Comments at paragraph 32; NPSTC Second Notice Reply Comments at paragraph 32.

³³ See FLEWUG Second Notice Comments at 12. See also PSWN program 800 MHz Summary Report at 6 (finding that large portions of committee memberships consist of law enforcement agencies from large metropolitan areas).

RPC.³⁴ It is crucial for each RPC to have a federal member in order to ensure that federal co-equal access is available as specified in Section 2.103(b) of the Commission's rules.³⁵

- Dispute resolution mechanism – The FLEWUG believes that the Commission’s regional planning approach must include a third-party dispute resolution provision. The FLEWUG believes that the NCC should be charged with this role.³⁶
- Region boundaries that do not divide a state – The FLEWUG urges the Commission to readjust the regional approach so that no state is included in multiple regions and thus split among regions. Regions 8, 20, 28, and 54 should be realigned so that the following states are no longer part of multi-state regions: Connecticut, Illinois, Indiana, Michigan, New Jersey, New York, Pennsylvania, Virginia, and Wisconsin.³⁷
- Funding provided to support operations – The FLEWUG urges the Commission to evaluate the very real concern that RPCs will be unable to fulfill the expanding obligations imposed on them by the Commission due to a lack of funding. The FLEWUG contends that RPC operations are, therefore, a fiduciary responsibility of the Commission and, for this reason, the Commission needs to ensure their viability.³⁸

³⁴ See FLEWUG Petition to First Report and Order at paragraph 17.

³⁵ See 47 C.F.R. § 2.103(b).

³⁶ See FLEWUG Petition to the First Report and Order at paragraphs 21 through 24.

³⁷ See *Id.* at paragraphs 18 through 20.

³⁸ See *Id.* at paragraphs 25 and 26.

F. Comments Regarding Statewide and Regional Systems Development

25. Throughout paragraphs 174 through 180 of the Third Notice, the Commission discusses and invites comment on several matters pertaining to statewide and regional systems.

The FLEWUG makes the following comments in response.

- The Commission asks whether a regional or statewide system would provide economies of scale and scope that would increase incentives to participate in the regional or statewide system. The FLEWUG believes this to be the case provided the missions of the potential participating agencies are sufficiently similar to allow for coherent system planning and integration. In addition, larger systems such as regional or statewide networks, when properly designed, also facilitate interoperability.
- The Commission notes that an increasing number of states have endeavored to construct statewide systems. The FLEWUG agrees with this observation. The FLEWUG has showcased three statewide development efforts during recent monthly FLEWUG sessions (i.e., Montana, Pennsylvania, Wisconsin). Several member agencies of the FLEWUG are interested in joining these and other systems on a joint-use or shared basis.
- The Commission is concerned that those administering statewide systems may be less responsive to local and rural area needs than those of major metropolitan areas. The FLEWUG believes this is a reasonable concern. The FLEWUG feels that agreements establishing statewide systems should ensure that local and rural needs are met. The FLEWUG believes the Commission could make meeting these needs a condition for obtaining frequencies.
- The Commission seeks comment on whether the state government should be permitted both to use and share the use of 700 MHz band frequencies with its local, political

subdivisions, as well as federal and other public safety service providers. The FLEWUG reiterates its opposition to state licensing of public safety spectrum. However, the FLEWUG fully supports the concept of frequency sharing as described here by the Commission.

- The Commission seeks comment on whether the aggregate limits of 25 kHz (narrowband) and 150 kHz (wideband) adopted in the First Report and Order are appropriate for state licenses, and if not, what limits are appropriate for a statewide system. The FLEWUG reiterates its opposition to state licenses. However, the FLEWUG believes that these limits are appropriate for voice and low speed data applications and that these are the applications for which the 700 MHz band is intended. Larger aggregates to support such applications as real-time video, full-motion video, or high-speed data transfers are not appropriate for the 700 MHz band. Additional allocations of public safety spectrum, such as in the 3 GHz range, are required to support such advanced data applications.³⁹
- The Commission seeks comment on whether the states are an effective and appropriate "bridge" between local and federal governments to facilitate the development of interoperable systems that will service all elements of the public safety community. The FLEWUG believes that statewide and regional systems, if properly designed, can greatly facilitate interoperability. Interoperability requirements can be met more easily among different public safety disciplines within and between levels of government if statewide and

³⁹ The FLEWUG's point is not a new one. In the PSWAC Final Report, the Spectrum Requirements Subcommittee noted the following in page 34 of its report: "In December of 1993, the Coalition of Private Users of Emerging Multimedia Technologies (COPE) submitted a petition to the FCC requesting an allocation of 75 MHz for the development of advanced private land mobile radio systems. This spectrum request was to meet the unique needs of the private land mobile radio users for advanced wireless imaging and decision processing/remote file access capabilities. COPE's request was for an allocation of spectrum below 3 GHz, in the vicinity of the 2 GHz band."

regional systems are designed accordingly. Viewed in this context, then, such systems could be an effective bridge between federal and state, local and state, and local and federal, as well as between fire and police, EMS and fire, and police and EMS. Statewide systems, federal initiatives, regional development, and major metropolitan systems may lead to an integrated "network of networks" concept to greatly enhance interoperability.

Administration of Interoperability Spectrum (2.6 MHz Designated in First Report and Order)

26. For the reasons stated previously in reference to the reserve spectrum, the FLEWUG believes neither the RPC process nor a new state licensing process is appropriate as the mechanism for administering the 2.6 MHz of interoperability spectrum designated in the First Report and Order. Determining and managing this process is squarely a responsibility for the NCC to undertake. The NCC should deliberate on this matter as one of its first agenda items for interoperability. The NCC should determine what role, if any, the RPC process should play to support the administration of the interoperability spectrum.

Interoperability Below 512 MHz

27. The FLEWUG applauds the Commission's effort to provide a select number of channels in the VHF and UHF bands below 512 MHz for public safety interoperability. The FLEWUG has long emphasized the need for such spectrum in each of the bands occupied by public safety.⁴⁰ The FLEWUG further emphasizes the need for federal co-equal access to these frequencies as well as to any other interoperability channels or bands designated by the Commission.

28. The FLEWUG believes that a more systematic and comprehensive solution to addressing the need for interoperability spectrum below 512 MHz is needed in order to meet the PSWAC recommendation for at least 2.5 MHz of such spectrum below 512 MHz.⁴¹ The FLEWUG supports the concept of an interoperability band below 512 MHz. The FLEWUG also supports the suggested requirement that every public safety mobile radio have the capacity to transmit and receive on at least one nationwide interoperability channel in the band in which it is operating.

29. Until a more comprehensive solution can be attained, the FLEWUG commends the efforts of the Commission to proceed on a channel pair-wise basis. Each new pair of interoperability frequencies represents incremental progress toward addressing the broader challenge.

30. The FLEWUG supports the Commission's decision to include five interoperability channels in the 150-174 MHz band and five additional interoperability channels in the 450-512 MHz band. The FLEWUG finds these decisions to be in accordance with recommendations from the PSWAC. The FLEWUG requests co-equal access for federal users to these frequencies.

31. The FLEWUG takes exception with the inclusion by the Commission of the 138-144 MHz band in the Third Notice as an option for high-band VHF interoperability spectrum. The 138-144 MHz band is Federal Government spectrum used by the Department of Defense and the Federal Emergency Management Agency. The NTIA, not the FCC, is the responsible regulatory authority for matters pertaining to this spectrum. Moreover, while the NTIA has identified 3 MHz of the 138-144 MHz band for reallocation as required by Title III of the Balanced Budget

⁴⁰ See the FLEWUG Comments to the Second Notice at paragraph 10, Reply Comments at paragraph 10, and ex parte filings of June 16, 1998; July 6, 1998; and July 8, 1998.

⁴¹ See the PSWAC Final Report at page 21.

Act of 1997⁴², this spectrum would not be reallocated until 2008 and must be, under current provisions of the law, auctioned for assignment to new telecommunications services.⁴³ The FLEWUG supports the Administration's position on this matter.

Global Navigation Satellite System

32. The FLEWUG believes that, under certain conditions, public safety transmissions (fixed or mobile) in this band will interfere with GNSS operations unless appropriate emission criteria are adhered to. Mobile transmissions in the 794-806 MHz band and within 100 feet of an aircraft while on final approach, which is a likely situation for public safety operations, could interfere with the aircraft critical radionavigation functions in the GNSS band. Based on this scenario, the NTIA has suggested appropriate emission limit criteria. In particular, the NTIA has suggested the second harmonic levels of public safety systems (mobile or fixed) transmitting in the 794-806 MHz band be subject to a -70 dBW/MHz emission limit criteria for wideband emissions and -80 dBW/700 Hz emission limit criteria for narrowband emissions.⁴⁴

33. The FLEWUG fully supports the NTIA's determination and agrees with the NTIA's proposed emission limit criteria because the FLEWUG believes public safety operations, and thus transmissions, do and will take place within the 100 feet separation distance. The FLEWUG commends the Commission for its proposal to adopt the emissions limits requested by the NTIA.⁴⁵ The FLEWUG strongly urges the Commission to adopt the NTIA's proposal.⁴⁶

⁴² See the Balanced Budget Act of 1997, Pub. L. No. 105-33, 111 Stat. 251 (1997).

⁴³ See the NTIA Spectrum Reallocation Report, Response to Title III of the Balanced Budget Act of 1997, at Executive Summary page iii, iv, and v.

⁴⁴ See Third Notice at paragraph 197 and at Appendix G, G-1.

⁴⁵ See Third Notice at paragraph 199.

⁴⁶ The FLEWUG is sensitive to the concerns raised by others about the potential implications these criteria may have for system performance and the implications these criteria may have for end-user equipment. However, given

Year 2000 Problem

34. The FLEWUG commends the Commission for its leadership in raising the question of Year 2000 readiness for public safety radio systems. Members of the FLEWUG attended with great interest the Public Safety Year 2000 Round Table held by the Commission on June 1, 1998. The FLEWUG joins the Commission in expressing concern regarding this matter. The FLEWUG supports the general proposition that additional information regarding the level of Year 2000 preparedness of public safety radio systems is necessary and encourages the FCC to pursue such a course of action.

35. To address this issue at the federal level, the FLEWUG has formed a Year 2000 working group to determine Year 2000 readiness among law enforcement and public safety radio systems operated by federal entities. The working group is concerned with identifying Year 2000 problems among federal systems and with sharing solutions and fixes to expedite completion of readiness efforts. To the extent practicable and appropriate, the FLEWUG is willing to share with the Commission, the vendor community, and the public safety community information regarding the general state of preparedness among the radio systems operated by the FLEWUG members as well as regarding solutions adopted in addressing this problem.

the global implications of this issue, the FLEWUG feels that the solution proposed by the NTIA is the best available given the band plan adopted by the Commission. The FLEWUG believes the scope of the potential GNSS interference problem can be greatly reduced through changes to the band plan, which currently allows for mobile and fixed transmissions in the 794-806 MHz band. Allowing for mobile transmissions exacerbates possible interference with the GNSS band (1559-1605 MHz). The FLEWUG makes this case in its Petition to the First Report and Order at paragraph 41: "In light of the implications of these criteria, the FLEWUG believes that the needed solution is to confine the interference problem and to reduce the impact of the problem as much as practical. The FLEWUG recommends that this can be achieved by limiting the 794-806 MHz band to base station-to-mobile transmissions. This recommendation will reduce significantly the possibility of transmitters operating from multiple and unknown locations and thus confine the problem to fixed stations only. This coordination would be more complicated if several possible mobile transmitters were in the vicinity. It also reduces the impact of the problem with respect to the equipment modifications required to adhere to the emission limit criteria. Slight increases in weight or size in base stations would be manageable. Similar changes to the handheld devices would be much more apparent and may be a hindrance to public safety operations. Thus, the FLEWUG respectfully

36. The FLEWUG cautions the Commission regarding the sensitive nature of information reporting on the preparedness status for specific systems. The Year 2000 problem has a dual characteristic. The first is simply as a computer software and firmware problem. The second is as a security problem. From a systems security perspective, the Year 2000 problem represents both a threat and a vulnerability. The problem is analogous to a computer virus attack on systems and should be treated as a matter of infrastructure protection and information assurance. Contingency plans and other security measures should be put in place to minimize the risks posed by the Year 2000 problem to public safety radio systems.

37. The extent to which any public safety agency has or has not addressed the Year 2000 problem for its radio systems is thus sensitive information because it reveals the extent to which that agency's system is ready to withstand the threat posed by the Year 2000 problem. This information could in turn be exploited. Thus, no matter what means the Commission chooses to collect information regarding the Year 2000 problem for public safety radio systems, the FLEWUG urges sufficient safeguards to ensure system-specific information is not revealed.

38. The FLEWUG believes there is merit to each of the data collection approaches the Commission proposes in the Third Notice. The FLEWUG reminds the Commission that attempting to collect information through the existing 800 MHz RPCs will only yield information on systems operating at 800 MHz, and that a more comprehensive approach is in order. In addition, the 800 MHz RPCs could operate in a given region as an exchange forum for the identification of problems and solutions, much like the FLEWUG's Year 2000 working group.

39. To the extent that frequency coordinators are used to collect this information, the FLEWUG believes that the Commission should ensure the coordinators do not attempt to charge

requests that the Commission reconsider the band plan for the 764-776 and 794-806 MHz public safety bands and

additional fees to their public safety customers or raise fees for coordination services. The public safety community should not realize fee increases as a result of Year 2000 data collection efforts. The FLEWUG does believe the frequency coordinators provide convenient collection points for information. Collecting information through the frequency coordinators vice from the licensees directly might be a more efficient approach.

40. The FLEWUG thus sees merit to using the RPCs and the frequency coordinators as mechanisms for collecting the information in question. Another option is for the Commission to perform a survey of all public safety agencies. Such a survey should be structured to yield statistically significant results for ascertaining both the current state of Year 2000 readiness and the progress and range of compliance initiatives. The information sought by the Commission likely could be collected with a relatively short survey instrument (e.g., two pages). Given the imminent nature of the Year 2000 problem, any such survey effort would need to be completed quickly and with a sufficient response rate from the community.

limit the 794-806 MHz band to base station-to-mobile transmissions."

Conclusion

41. For the reasons set forth above, the FLEWUG respectfully requests that the Commission adopt the measures proposed in these Comments in its rulemaking actions for the Third Notice.

Respectfully submitted,

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