

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)

PUBLIC SAFETY WIRELESS NETWORK PROGRAM'S
REPLY COMMENTS IN RESPONSE TO COMMENTS FILED TO THE
THIRD NOTICE OF PROPOSED RULEMAKING

1. The Public Safety Wireless Network (PSWN) program respectfully submits the following reply comments in response to comments filed by other parties regarding 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).¹

2. In its Third Notice, the Commission directly addresses a number of issues, such as interoperability spectrum and regional/statewide systems development, that are of great interest to the PSWN program. The PSWN program continues to investigate these and other public safety wireless communications issues.² Through these reply comments and other contributions to this

¹ 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).

² See, e.g., the *Public Safety Wireless Network Program and Federal Law Enforcement Wireless Users Group Status Reports* for the period July 1997 through June 1998 (submitted with the PSWN Program Comments) for program activity synopses.

proceeding³, the PSWN program hopes to bring the benefits of its findings to the Commission as it decides the matters raised in the Third Notice.

Background

3. The 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's 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.⁴ The NPRG, previously known as the National Performance Review, 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.

4. 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.⁵ 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

³ The PSWN program was pleased to submit to the Commission comments on the Third Notice for Public Safety (filed with the Commission on January 19, 1999). The program anticipates additional participation in this proceeding, e.g., through ex parte presentations, the filing of petitions, and the submission of additional comments as circumstances warrant.

⁴ See the Public Safety Wireless Network NPRG booklet (submitted with the PSWN Program Comments), which contains a general overview of NPRG initiatives, as described by the Vice President; copies of NPRG action items IT04 (for establishing a national law enforcement/public safety network) and A06 (for establishing the intergovernmental wireless public safety network); and a one-page summary of the PSWN program vision and mission.

⁵ See the *PSWN Program Strategic Plan*, April 1998 (submitted with the PSWN Program Comments) at page 2.

implementation plan for interoperability among wireless networks.⁶ The program is in its third year and will soon approach the halfway mark of the first phase. During the second five-year phase, the program will assist the public safety community with its implementation of interoperability in accordance with the national plan.⁷

5. Consistent with its NPRG charter, and building on the findings of the Public Safety Wireless Advisory Committee (PSWAC), the PSWN program has made spectrum one of its priority areas of activity.⁸ The PSWN program has identified six key spectrum issues that require resolution for improving public safety radio communications: insufficient aggregate amount of spectrum, excessive number and undetermined appropriateness of frequency bands, insufficient interoperability spectrum, lack of affordable multi-band technology, complicated spectrum management processes, and lack of a migration strategy.⁹ In an effort to help resolve these issues and realize improvements in this area, the PSWN program has undertaken several spectrum-related activities.¹⁰ These activities are designed to raise awareness, improve understanding of processes and policy, and analyze issues in more specific detail as appropriate. They include making direct contributions to this and other Commission proceedings related to public safety spectrum.

6. The PSWN program addressed the following areas in its comments to the Third NPRM: use and licensing of reserve spectrum in the 700 MHz band, administration of interoperability spectrum in the 700 MHz band, interoperability below 512 MHz, Global

⁶ The information obtained and developed by the PSWN program through its activities is openly available via the program's web page at <http://www.pswn.gov>.

⁷ See the PSWN Program Strategic Plan. at pages 5, 9, and 10 for information regarding the PSWN program phases (e.g., their definitions, relative timing, and types of activities within each phase).

⁸ See the PSWN Program Comments at paragraph 5.

⁹ See *Id.* at paragraph 6.

¹⁰ See *Id.* at paragraph 7.

Navigation Satellite System, and the Year 2000 problem. The PSWN program provides herein comments in response to comments filed by other parties on each of these matters.

Use and Licensing of Reserve Spectrum

A. Comments Regarding the Regional Planning Process¹¹

7. The PSWN program agrees with certain commenters regarding the merits¹² of the regional planning process. In particular—

- The PSWN program agrees with the Cities¹³ and the County of Los Angeles¹⁴ that this process provides for regional perspectives. It promotes addressing region-specific public safety requirements based on specific geographic (e.g., mountainous terrain), demographic (e.g., urban), and environmental (e.g., natural disasters) characteristics of the region.
- The PSWN program agrees with the Association of Public-Safety Officials International (APCO)¹⁵ and the International Association of Chiefs of Police (IACP)¹⁶ that this process ensures inclusion of local public safety personnel perspectives. It allows for the direct

¹¹ The PSWN program's views regarding the regional planning process are based in part on the findings from its 800 MHz study. *See, e.g.*, the program's *800 MHz Study Report* at pages 5-7 (in the Summary Report) and pages D-1 through D-30 (in Appendix D, System Planner and User Perspectives). In addition, the program is currently performing a comparative analysis of public safety spectrum management processes. This effort is providing additional insights into the relative merits and shortfalls of the regional planning approach.

¹² *See* the PSWN Program Comments at paragraph 12.

¹³ The "Cities" refers to the National League of Cities and the City and Country of San Francisco. In its comments, the Cities state at page 11: "Representatives from local governments are most familiar with the geographic profiles of their communities, the demographic shifts that may indicate a high or low demand for public safety services, local ordinances that may restrict construction of radio systems, the condition of current local public safety radio communications systems, the availability and the potential sources of funds, and the pulse of local politics."

¹⁴ In its comments at page 2, the County of Los Angeles cites ". . . unique regional issues." In particular, "the extraordinary pent-up demand for channels, the unusual frequency propagation characteristics of the Southern California Coast, and the impact of the dominant mountain ranges in the region . . . pose special problems requiring planning on a regional basis."

¹⁵ *See* the APCO Comments at page 4, where it is stated that: ". . . it is important to keep in perspective that the vast majority of police, fire, and emergency medical services are provided at the county and city level."

incorporation of inputs from members of the public safety community who are planning, implementing, operating, and maintaining public safety radio systems.

- The PSWN program agrees with UTC, The Telecommunications Association (UTC)¹⁷ that the process serves as a coordination mechanism. It provides a forum through which systems managers and other leading public safety communications officials in a region can jointly develop and implement region-wide initiatives (e.g., mutual-aid plans and shared systems).

8. The PSWN program agrees with certain commenters regarding the shortfalls¹⁸ of the regional planning process. In particular—

- The PSWN program agrees with the Cities¹⁹ and Region 20²⁰ that the lack of funding is problematic. No funds are currently provided to support regional planning committee (RPC) operations despite the significant responsibilities these committees have as a part of the Commission's public safety spectrum management team. In effect, the Commission is levying an unfunded requirement on the community.
- The PSWN program agrees with the National Telecommunications and Information Administration (NTIA)²¹ and the Federal Law Enforcement Wireless Users Group

¹⁶ See the IACP Comments at page 2 where it is remarked that ". . . spectrum planning is best accomplished on the local level with the involvement of all agencies that operate in the area."

¹⁷ See the UTC Comments at page 5 where it is stated that "RPCs are also obligated to coordinate with their neighboring regions to develop compatible plans."

¹⁸ See the PSWN Program Comments at paragraph 13.

¹⁹ See the Cities Comments at pages 14-15 where it is remarked that "Most of the problems with the RPC process can be traced to one source: the lack of independent funding for the RPCs. The Commission has imposed a series of obligations on the RPCs. Yet the Commission has failed to ensure the RPCs have adequate funding to fulfill their obligations."

²⁰ See the Region 20 Comments at paragraph 4-6. Region 20 remarks that the costs associated with RPC activities (e.g., the provision of legal and technical expertise and administrative services) have been borne by those who agree to participate on the committees. Services are currently provided without financial compensation. Region 20 further states that if the Commission rejects establishing a mechanism to recoup administrative cost on a non-profit basis, it risks low levels of participation in the committees.

²¹ See the NTIA Comments at page 16.

(FLEWUG)²² regarding the inclusion of federal representatives on the RPCs to ensure that the broad interests of public safety personnel in the region are satisfied.

- The PSWN program agrees with the Commonwealth of Pennsylvania²³ and the Commonwealth of Virginia²⁴ regarding the difficulties caused by multi-state regions. Four of the existing 55 regions are multi-state (i.e., contain portions of more than one state). This has led to inter-state disputes within single regions, has complicated region-to-region coordination, and may be impeding statewide system development.
- The PSWN program agrees with the Cities²⁵ that a dispute resolution process is in order. No formal, third-party dispute resolution process exists to adjudicate disagreements within and between regions. Currently the burden is on the differing parties to resolve matter themselves. This is not always achievable. A third party, such as the National Coordination Committee (NCC) established by the Commission in the First Report & Order²⁶, should assume responsibility for resolving contentious disputes.
- The PSWN program agrees with the American Petroleum Institute (API)²⁷ regarding the limited national oversight provided through the regional planning process. No regular national management and coordination of regional planning activities is currently performed. While charged with this responsibility, the Commission has limited resources

²² See the FLEWUG Comments at paragraph 24 where it is stated that "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."

²³ See the Pennsylvania Comments at pages 7-8 where the Commonwealth " . . . urges the Commission to use a regional planning approach in which the regional jurisdictions are drawn based on state geographic boundaries" and where the Commonwealth notes that " . . . use of multi-state regional planning boundaries does not take into account changes in focus on planning efforts from local or county to statewide within individual states."

²⁴ See the Virginia Comments at page 1 where the Commonwealth supports refining RPCs along state boundaries to ensure radio frequency licenses are properly coordinated and implemented within a state.

²⁵ See the Cities Comments at page 14 where it is remarked that " . . . the Commission establish an appeals process to ensure the objectivity of the licensing of spectrum."

²⁶ See the First Report & Order at paragraph 92.

to dedicate for this purpose and therefore is unable to provide comprehensive oversight with the exception of the administrative bookkeeping of regional plans and ongoing disputes. The PSWN program suggests the Commission consider assigning national oversight responsibilities to the NCC.

9. In light of comments made by others, the PSWN program reiterates its belief that the regional planning approach would be a reasonable one for administering the reserve spectrum provided the Commission addresses the shortfalls listed above.

B. Comments Regarding State Licensing

10. The PSWN program agrees with those commenters that do not support state licensing of the reserve spectrum.²⁸ The PSWN program reiterates its belief that the Transition Subcommittee of the PSWAC sufficiently explored the issue of state licensing.²⁹ The Transition Subcommittee concluded that state licensing should not be pursued based on reservations raised during its deliberations. Among the concerns expressed to the subcommittee were:

(1) Requirements vary dramatically from state to state, reflecting size, population, geographical and demographic differences. Blocks would have to be adjusted accordingly. (2) Radio signals cannot be confined to state boundaries and coordination with adjacent states would become much more difficult, particularly if states were free to adopt their own rules and regulations. (3) Most states do not have an organization or structure for administering a program of allocating and managing frequencies. This would be costly and they may be reluctant to assume this responsibility. This could be interpreted as a federal mandate and would require funding. (4) Maintenance of a master data base to reflect the various state blocks and their individual uses would be extremely difficult to create and manage on an individual state basis. (5) Coordination and interoperability would be threatened by disparate use of frequencies by different services and by lack of a uniform state plan. (6) In most states local government, counties and cities would probably strongly object to state control of the spectrum, particularly in states with

²⁷ See the API Comments at paragraph 10 where API strongly urges ". . . the Commission to facilitate national oversight of any regional processes so as to ensure the adoption and implementation of national standards."

²⁸ These commenters include APCO, the Cities, UTC, the County of Los Angeles, the State of California, and the FLEWUG.

²⁹ See the *PSWAC Final Report, Volume II*, at pages 736-738.

home rule. While the FCC is not a user, in most instances the state is the largest user itself and it would be extremely difficult to maintain an objective position. (7) While the FCC presently provides the licensing service at no cost to the applicant, states would be forced to recover costs, probably through charges to users.³⁰

C. Comments Regarding Regional/Statewide System Development

11. The PSWN program agrees with the Commonwealth of Pennsylvania that statewide systems can ". . . provide economies of scale and other benefits not only to state agencies, but also to local government public safety agencies within the state."³¹ In fact, leveraging economies of scale may be critical for meeting the considerable fiscal challenge represented by nationwide radio system modernization and replacement.

- *Funding Requirements:* The PSWN program has estimated the overall replacement value of land mobile radio (LMR) communications equipment installed and in use in the United States by local, state, and federal agencies with public safety responsibilities is \$18.3 billion.³² This estimate assumes one-for-one replacement. It is considered a lower bound since it does not include personnel, operations and maintenance, or real estate costs.
- *Funding Sources:* The funding sources available to public safety are insufficient to meet this requirement.³³ To address this issue directly, the Attorney General established an Interagency Working Group for Funding (IWGF) to suggest funding alternatives for

³⁰ See *Id.* at page 737.

³¹ See the Pennsylvania Comments at page 5. See also the PSWN Program Comments at paragraphs 17-19 regarding catalysts for regional/statewide systems development and at paragraph 20 regarding economies of scale brought by regional/statewide systems.

³² See the PSWN program's *LMR Replacement Cost Study Report*, June 1998 (submitted with the PSWN Program Comments) at page 5.

³³ The PSWN program has assessed the funding resources available to the public safety community and has found them insufficient for the purposes of adequately maintaining and upgrading radio systems. See the PSWN program's *Report on Funding Mechanisms for Public Safety Radio Communications*, December 1997 (submitted with the PSWN Program Comments). This confirms the NPRG's original contention in *Access America A06* for the need to establish an alternative funding mechanism for federal, state, and local public safety officials to improve their wireless communications systems. See the PSWN NPRG booklet at page 9.

public safety communications.³⁴ The IWGF developed a recommendation for an alternative source of funding. This recommendation has been included in the President's Fiscal Year 2000 budget submittal.³⁵

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

12. The PSWN program agrees with those commenters that do not support state licensing.³⁶ The PSWN program repeats its reminder to the Commission of the conclusion reached by the Transition Subcommittee of the PSWAC that state licensing should not be pursued.³⁷ The PSWN program believes this conclusion holds for the interoperability spectrum as well as for the reserve spectrum.

13. As far as how to administer the interoperability spectrum in the 700 MHz band, the PSWN program agrees with the National Public Safety Telecommunications Council (NPSTC)³⁸ that the NCC should promulgate uniform guidelines for the development of interoperability/mutual aid plans. These plans should encourage common approaches to interoperability within regions and promote the inclusion of interoperability requirements in the development plans for systems.

Interoperability Below 512 MHz

³⁴ The PSWN program supported the deliberations of the IWGF.

³⁵ For a description of the IWGF's recommendation, *see generally the Funding of Public Safety Wireless Communications Systems, Report of the Interagency Working Group*, June 1998 (attached).

³⁶ These commenters include APCO, the Cities, UTC, the County of Los Angeles, the State of California, and the FLEWUG.

³⁷ *See* paragraph 10 of these Reply Comments.

³⁸ *See* the NPTSC Comments at paragraph 9.

14. The PSWN program agrees with those commenters³⁹ who support the designation by the Commission of channels in existing public safety bands for interoperability as described in the Third Notice.⁴⁰ These designations are consistent with the PSWAC's recommendation to provide interoperability spectrum between 138 MHz and 512 MHz.⁴¹ The PSWN program has found that the majority of public safety agencies operate in bands below 512 MHz, necessitating sufficient interoperability spectrum in these bands.⁴²

15. The PSWN program agrees with the FLEWUG 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."⁴³ The designations proposed in the Third Notice constitute a minor fraction of what was required by the PSWAC. The PSWN program urges the Commission to identify the remaining spectrum needed to meet the PSWAC requirements.

³⁹ These commenters include: the State of California, the Commonwealth of Pennsylvania, the NTIA, the FLEWUG, APCO, IACP, the Cities, and NPSTC.

⁴⁰ See Third Notice at paragraphs 190 and 191.

⁴¹ See the *PSWAC Final Report, Volume 1* at page 21.

⁴² See the PSWN program's *Cost Study Data Characterization Report*, February 1999 (attached) at pages III-4, III-4F, VI-4, and VI-4F. Of those local agencies responding to the program's cost survey, 94.1 percent indicate operations in bands below 512 MHz. Of responding state agencies, 91.9 percent report operations in bands below 512 MHz.

⁴³ See the FLEWUG Comments at paragraph 28.

Global Navigation Satellite System

16. The PSWN program agrees with the State of Florida on two points with respect to this issue.⁴⁴ First, the PSWN program agrees with Florida's comment that this matter must be more thoroughly investigated prior to further conclusions being made by the Commission.⁴⁵ Second, the PSWN program agrees with Florida's comment that geographic restrictions, e.g., limiting use of the 700 MHz band near airports, is not a satisfactory way of providing interference protection.⁴⁶

Year 2000 Problem

17. Given the possible presence of the Year 2000 problem among public safety radio systems, the PSWN program agrees with those commenters⁴⁷ that believe it is advisable for the Commission to attempt to ascertain the extent of the problem and the degree of readiness within public safety radio communications systems.⁴⁸ The PSWN program reiterates its support for doing so through a short (e.g., two page) survey sent directly to public safety agencies⁴⁹ and agrees with the IACP that it is not appropriate to burden either the RPCs or the public safety coordinators with Year 2000 responsibilities.⁵⁰

⁴⁴ See the State of Florida Comments at paragraph 20.

⁴⁵ See the PSWN Program Comments at paragraphs 26 and 27.

⁴⁶ See *Id.* at paragraphs 28-30.

⁴⁷ These commenters include: APCO, IACP, the Cities, NPSTC, the FLEWUG, and the State of California.

⁴⁸ See the PSWN Program Comments at paragraph 31.

⁴⁹ See *Id.* at paragraph 33.

⁵⁰ See the IACP Comments at page 6. See also the PSWN Program Comments at paragraph 32.

Conclusion

18. The PSWN program commends the efforts of all commenters to this NPRM and respectfully requests the Commission to consider carefully the program's positions herein submitted on many of the comments made by others. The PSWN program also respectfully requests that the Commission adopt the measures proposed in the PSWN program's original comments to the NPRM.

Respectfully submitted,

James E. Downes
Co-Program Manager and Chairman, Spectrum Integrated Program Team
Public Safety Wireless Network (PSWN) Program