



**The Collective Voice of
Public Safety
Communications**

MEMBER ORGANIZATIONS

American Association of State Highway
and Transportation Officials

American Radio Relay League

American Red Cross

Association of Public Safety
Communications Officials -
International

Forestry Conservation Communications
Association

International Association of
Chiefs of Police

International Association of
Emergency Managers

International Association of Fire Chiefs

International Association of Fish and
Wildlife Agencies

International Municipal Signal
Association

National Association of State
Emergency Medical Services Officials

National Association of State Foresters

National Association of State
Telecommunications Directors

LIAISON ORGANIZATIONS

Federal Communications Commission

Federal Partnership for Interoperable
Communications

National Telecommunications and
Information Administration

Telecommunications Industry
Association

US Department of Agriculture

US Department of Justice

NIJ CommTech Program

US Department of Homeland Security

FEMA

SAFECOM Program

US Department of Interior

**68 Inverness Lane East, Suite 204
Englewood, CO 80112-5108**

PH: 303-649-1843

FAX: 303-649-1844

Toll free: 1-866-807-4755

www.NPSTC.org

NPSTC@highlands-group.com

National Public Safety Telecommunications Council First Quarter Report, 2006

This Quarterly Report documents the activities of the National Public Safety Telecommunications Council (NPSTC), its Governing Board, Committees, and Working Groups for the First Quarter, 2006.

Governing Board

During the First Quarter, 2006, the NPSTC Governing Board held quarterly meetings on January 23-25, 2006, at the Millennium Maxwell House, in Nashville, Tennessee, and in Pentagon City, Virginia, on March 20-22, 2006. The Governing Board reviewed and approved a number of changes, appointments, and activities of the four Committees and their Working Groups, detailed below in the individual Committee reports. The Governing Board approved filings and correspondence with the Federal Communications Commission (FCC), detailed below in FCC Filings.

In January 2006, NPSTC's Chair, Vincent Stile, met with the Chair of Regional Planning Committee (RPC) Region 8 and also provided a written reply regarding their letter to NPSTC on differing points of view on 4.9 GHz standards. The issue has been satisfactorily discussed and resolved. The Chair of Region 8 also has agreed to be NPSTC's Northeast regional representative to the RPC Committee.

At the March Governing Board meeting, the Chair called for nomination and election of a Vice Chair to replace Douglas Aiken, whose tenure in that position was to expire this year. Mr. Aiken was re-elected to his position as NPSTC Vice Chair.

Also in March, the Chair reported that Project 25 (P25) does not have a separate website although P25 Technology Interest Group (PTIG) has a website that is maintained by the P25 vendor community. Craig Jorgensen, P25/P34, asked if NPSTC would host the P25 Steering Committee documents on their website. The Governing Board approved the request.

Preparations for the first annual Dick DeMello award to be presented in the fall at the RCA dinner in New York City were being finalized during this quarter. There is an open nomination period through June that is open to the public. All the procedural information is available on the NPSTCC website at www.NPSTC.org. NPSTC's Governing Board also announced that the NPSTC Annual Report will be dedicated to Al Mello, a powerful force in public safety telecommunications and a founding father of NPSTC. Mr. Mello's passing will also be noted on a new memorial page on the website.

FCC Filings

NPSTC filed the following submissions with the FCC in the First Quarter of 2006.

- Reply Comments to WT Docket No. 03-264, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, & 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services.
- Ex Parte Communications for WT Docket 05-157 and WT Docket No. 96-86.

- Regarding the issue of the Emergency Alert System (EAS), formerly the Emergency Broadcast System, NPSTC prepared a memo and comments for FCC proceeding addressing the EAS and the need to bring EAS capability to local areas. NSPTC Reply Comments on Emergency Alert System (EAS) Docket 04-296, February 23, 2006.
- Reviewed and prepared comments addressing proposal of American Association of Railroads (AAR) to combine licenses into one national license and preclude public safety agency sharing, and to examine effect on incumbent public safety licensees. There are approximately 400 incumbents in these frequency bands and it is unclear what will happen to them. In March, the AAR responded with comments, rejecting the premise that sharing will be foreclosed in the frequencies yet agreeing that it will be precluded during the transition period. AAR adheres to its position that the 95-mile sector on both sides of the right of way is necessary; that the freeze during the transition period is essential to accomplish the movement to more efficient spectrum; and that a procedure should be adopted to allow a modification to a license because of changed requirements during the transition period.
- Comments on Petition for Rulemaking (PFR) filed by ICOM, February 27, 2006. Two years ago, ICOM asked the FCC to take 150 common carrier channels, 25 kHz channels that were not bid on at public auction, and give them to public safety. NPSTC filed in support of ICOM's petition at the time.
- Ex parte letter to Michael Wilhelm regarding the 700 MHz band plan and proposed structures for broadband capability, February 6, 2006.
- Reply Comments on New York State DTV Waiver Docket 06-18, March 28, 2006.
- Regarding the unresolved spectrum issues of the southwest border, NPSTC has written a letter encouraging the FCC to confront interference on the southwest border, particularly in the UHF bands, 150.9-162 MHz and 450-470 MHz. In March, representatives of NPSTC met with the coalition of the Texas Sheriffs Border Coalition and California agencies to discuss the issues and seek support, assistance, and promotion of a solution with the Mexican authorities. Also unresolved with Mexico are 800 MHz reconfiguration issues that will require modification of current operations protocols. Reconfiguration issues on the northern border are unresolved as well, although the Canadian issues are very specific and differ from the broader unresolved issues with Mexico.

Executive Committee

During the First Quarter, the Executive Committee (EC) and the Executive Director met in person and via teleconference to discuss NPSTC program planning and future meetings. In January and March, the EC held Executive Committee sessions, and participated in the NPSTC Governing Board quarterly meetings.

In February 2006, representatives of NPSTC's Governing Board and its Executive Director attended the APCO Winter Summit in Orlando, Florida. The EC participated in the SAFECOM meetings, in Washington, D.C., on March 22-24, 2006, and participated in the FCC's webcast regarding reorganization. Other meetings during the quarter included discussions with NPSTC's Broadband Task Force and with the Pinellas County (Florida) 4.9 GHz project team to discuss and refine questions about project goals. The EC also met with representatives of ICOM and Spectrum Management Committee representatives met with Lucent representatives to discuss broadband applications. John Powell, Chair, Interoperability Committee, attended the January SDR Forum Meeting/Board of Directors Meeting and the Public Safety Applications for SDR at the APCO Winter Conference, and was a panel member on a Software Defined Radio panel, making a 30-minute presentation to about 500 attendees on SDR.

The EC assembled and confirmed Outreach Panels for Governing Board and Executive Committee representation at the American Association of State Highway and Transportation Officials (AASHTO), International Association of Fire Chiefs (IAFC), Forestry Conservation Communications Association (FCCA), International Wireless Communications Expo (IWCE), and Association of Public Safety Communications Officials – International (APCO). The EC provided a bulleted report to Kevin McGinnis, National Association of State Emergency Medical Services Officials (NASEMSO), to use as content for the committee report to the FCC's Hurricane Katrina Advisory Panel.

During the First Quarter, the Executive Committee drafted and completed a number of filings and other communications with the FCC, detailed below. The EC reviewed and approved a number of other documents and publications of NPSTC, including the 2005 Annual Report, both the *e-spectrum* and *spectrum* newsletters, Governing Board minutes, correspondence, and website materials. The EC continued its research and discussions on the Mexico border issues and regarding the ICOM petition and wideband/broadband configuration of the 700 MHz band, and on the 700 and 4.9 GHz standards issue.

Committee website membership has steadily grown since the new NPSTC structure has been introduced, more than tripling in size over the last two years. Growth continued since the Fourth Quarter.

Quarter	Interoperability	Spectrum Management	Technology	RPC
Jun-04	29	28	27	
Sep-04	42	38	39	
Dec-04	47	44	42	
Mar-05	61	58	56	
Jun-05	66	61	59	20
Sep-05	72	64	61	28
Dec-05	83	71	68	37
Mar-06	99	81	74	45

Spectrum Management Committee

The NPSTC Spectrum Management Committee currently oversees the activities of the following Working Groups: Broadband/Wideband, Border Issues, 700 MHz Outreach, and VHF Spectrum Acquisition.

New Items Approved by the Governing Board

During the First Quarter of 2006, the Governing Board approved the following items recommended to the Board by the Spectrum Management Committee.

- Approve the following elements of the proposed public safety 700 MHz bandplan.
 1. Narrowband spectrum must be fully protected with no change in the location of narrowband blocks.
 2. Provide a 50 kHz baseline channelization across 767-773/797-803 MHz.
 3. Within 767-773/797-803 MHz, provide flexibility to deploy wideband and/or broadband per agency requirements and RPC approval.
 4. When broadband is deployed, it is located with a 3.75 MHz block centered at 770.0/800.0 MHz.
 5. Broadband use within the 3.75 MHz block would be channelized to accommodate up to three 1.25 MHz channels.
 6. These 1.25 MHz channels can be aggregated to provide a broadband channel up to 3.75 MHz wide.
- Change the name and focus of the VHF Rebanding Working Group to the VHF Spectrum Acquisition Working Group.
- Create and approve the mission, scope and charter for the In-Building Working Group to develop positions regarding public safety needs related to the activities of the In-Building Wireless Alliance (IBWA), and to monitor actions and engage, as needed.
- Approve placement of IBWA's poll on the NPSTC website.

Broadband/Wideband Working Group

During the First Quarter, NPSTC, the Spectrum Management Committee, and the Broadband/Wideband Working Group, spent a great deal of time studying potential recommendations to change the 700 MHz channel plan to allow for broadband channels. The band plan developed at the January Governing Board meeting was approved and filed with the FCC in January. NPSTC has restated its position that public safety wants the flexibility to utilize both wideband and broadband. NPSTC does not want to mandate a standard for interoperability on wideband, but if an agency uses the interoperability channel, NPSTC agrees that it should use the Telecommunications Industry Association (TIA) 902 standard. Regarding the broadband channels, there is a continuing need to study the different technologies that could be available before NPSTC can make a potential recommendation to the FCC.

Broadband Reallocation Possibilities: The Governing Board reviewed proposals to aggregate 700 MHz wideband spectrum into broadband channel blocks. The channel plans will provide guardbands on either side to protect the voice channels and would leave some channels that could be used in a mixed scenario. It would allow a wideband and broadband mix depending on whether the user is in an urban or rural area. Allocation would be region by region. Interference to neighboring voice channels is unacceptable.

- Option 1 offers three paired 1.25 channels that support CDMA [Code Division Multiple Access], EVDO [evolution version data only], and IEEE 802.20 proposals, and Mobile WiMax (IEEE 802.16e) may be possible. This proposal has the least amount of changes to existing COTS. EVDO has a frequency reuse of 100 percent, which means the same channel can be used for different sectors, simplifying regional planning for channel allocation. EVDO has good built-in security features; if deployed by everyone, it enables interoperability and it was originally designed for mobile technology.
- Option 2 has four channels, with 500 kHz guard bands. Option 2's advantage is obviously that it has one more channel, but it takes more filtering, which means more changes to COTS technology, driving up the cost accordingly.
- Motorola also presented an alternative band plan to the Governing Board during the quarter that had been presented earlier to the NPSTC Broadband Task Force in November. The Motorola band plan has slightly different interference tradeoffs. In the current bandplan, the interoperability channels are spread throughout the wideband while Motorola's plan would move the interoperability channels out to the ends of the band. Motorola recommends keeping channels at 50kHz, allowing aggregation of 50 kHz channels up to 1.25 MHz. Motorola needs to refine the interoperability component utilizing wideband to provide the baseline interoperability.

Broadband Technologies: The Broadband Task Group has also collected and reviewed data and information collected from the broadband/wideband vendors, primarily on EVDO and SAM [Scalable Adaptive Modulation] technologies. The task group has also met with Motorola and Lucent to discuss this information in detail and review analyses. The task group will continue the band coexistence analysis and develop deployment guidelines.

Broadband Demonstrations: NPSTC continues to monitor the 4.9 GHz Pinellas County, Florida, Project. In response to Governing Board queries about the project raised at the January Governing Board meeting, Pinellas County Emergency Communications wrote a letter to NPSTC, detailing some of the ways in which the project is trying to address the needs of public safety. Pinellas has made it clear that they want to maintain a relationship and respond to NPSTC's concerns.

700 MHz Advocacy Working Group

During the First Quarter 2006, as in 2005, NPSTC continued to strongly advocate a date certain digital television (DTV) clearing in 700 MHz. On February 17, 2006, the DTV Clearing legislation, providing a 2009 date certain in TV clearing in the 700 MHz band, was passed and signed by the President.

During the quarter, the Governing Board approved comments for submission to Industry Canada (IC) and follow-up technical participation regarding Canada 700 MHz and Channels 63/68 for public safety. Monitoring continues on the U.S./Canada border agreement, related to mobile use.

Regarding the issue of additional spectrum and reports to Congress by December 17, 2005, NPSTC filed comments with APCO to the FCC, reaffirming the need for more public safety spectrum. The next steps are to review the FCC's report and determine an action plan for long-term spectrum need. An action plan for long-term spectrum covers more than the 700 MHz band and would support the need to update the Public Safety Wireless Advisory Committee (PSWAC) Report. The Working Group will develop a white paper to determine the scope of the effort and the resources required to take this project on.

The Working Group continues its active study and discussion of 700 MHz wideband reserve and the 2+2 guardband. The Working Group's advocacy for advanced dates for DTV tuners has been completed. The white paper on Low Power TV (LPTV) incumbency has been completed.

NPSTC reviewed New York State's waiver for immediate use of their 700 MHz narrowband channels in southern Region 8. In its 2003 filings, the state filed comments that showed that TV sharing can be maximized through the use of engineering study and that interference can be eased. There is significant analysis to support waivers to allow such operation, but there is strong resistance from broadcasters. New York State has a template that it will make available to other constrained areas. NPSTC, APCO, and Region 24 have filed in support.

In Building Working Group

During the quarter, the Spectrum Management Committee created the In Building Working Group. Its mission: To promote the availability of affordable in-building and in-tunnel communications in ways that do not interfere with critical operations and to serve as the NPSTC liaison with other entities addressing in-building communications. The initial objectives of the Working Group are to assess public safety in-building communications requirements; determine interference concerns; explore ways to minimize interference; formulate NPSTC recommendations to the FCC on in-building communications issues for Board approval; and liaison with the IBWA. The IBWA's goal is to improve communications in buildings, not just for public safety, but for cellular use in general. Commercial real estate, carriers, and manufacturers are involved. The IBWA structure—a steering committee with five working groups—includes a public safety working group. The IBWA has posted a survey requesting input on public safety needs related to in-building communications; IBWA will provide the results of the survey to NPSTC.

As an accompanying issue, NPSTC will poll the RPCs on their interference experiences with bi-directional antennas (BDAs) or signal boosters, and the interference problems they can cause. The Spectrum Management Committee will provide questions to the RPC Committee for the poll.

Border Issues Working Group

NPSTC prepared a letter to the FCC addressing VHF/UHF interference on the Mexican border. Another letter is to be written on behalf of NPSTC and presented to the FCC on treaty negotiations concerning 800 MHz rebanding and reconfiguration.

VHF Spectrum Acquisition Working Group

During the First Quarter, the Spectrum Management Committee changed the name and focus of the VHF Rebanding Working Group to the VHF Spectrum Acquisition Working Group. The Rebanding Working Group has been fairly inactive recently because there is no green space to realistically allow rebanding across the nation, but because there are some areas that could benefit from rebanding, NPSTC continues to believe it is worthwhile to search for spectrum below 512 MHz.

Wyoming's plan for paired channels to facilitate trunking has been in the works for some time and is a good plan for that area; however, in other areas of the country, this wouldn't be possible because the band is so crowded. The Working Group has discussed developing a NPSTC position paper stating that NPSTC would support voluntary regional efforts to follow the Wyoming plan, but also reaffirming that NPSTC continues to support the need for more spectrum. The newly formed VHF Spectrum Acquisition Working Group will investigate the task of acquiring more VHF spectrum for public safety. According to APCO, 48 percent of public safety users rely on VHF nationwide.

There has been no action on the ICOM PFR yet. Two years ago, ICOM asked the FCC to take 150 common carrier channels, 25 kHz channels that were not bid on at public auction, and give them to public safety. NPSTC filed in support of ICOM's petition at the time. The Spectrum Committee will initiate an ex parte document inquiring about VHF spectrum in association with its support of the ICOM petition.

Technology Committee

The NPSTC Technology Committee oversees the activities of the following Working Groups: NCC Recommendations, Narrowbanding Below 512 MHz, Amateur Radio Services and Broadband Over Powerline Technology, 700 MHz Technologies, Voice over Internet Protocol, Security, Paging Technologies, and Surveying Equipment.

New Items Approved by the Governing Board

During the First Quarter of 2006, the Governing Board approved the following items recommended to the Board by the Technology Committee.

- Dissolve the NCC Working Group and the 700 MHz Technologies Working Group and reassign the current work of those Working Groups to the Broadband/Wideband Working Group in the Spectrum Management Committee.
- Dissolve the Narrowbanding Below 512 MHz Working Group.
- Create an Emergency Alerting System (EAS) Working Group.
- Approve a new Vice Chair to the Technology Committee.
- Approve a new Chair for the Amateur Radio Services and Broadband Over Power Line Working Group.
- Transfer the review of RPC Region 8 4.9 GHz group security guidelines from the Technology Committee's Security Working Group to the RPC Committee for a time period of one more quarterly Governing Board meeting pending action from Region 8.
- Add an alerting function to the Statement of Requirements for Project 25.
- Approve a PFR to allow public safety to use Business/Industrial spectrum, currently used by the private surveyors, for purposes of conducting land surveying activity.

During this quarter, the Technology Committee also addressed a proposal made by the Association of American Railroads to consolidate all its member's licenses in the UHF band into one nationwide license, and further, that they not be required to identify specific site locations or usage. NPSTC has filed a position opposing that action for a variety of reasons including the fact that the locations of their stations would not be available. Although sharing of railway frequencies is limited, public safety has utilized those frequencies in the past. There are also questions regarding who would be authorized to use the frequencies, such as whether or not it would include short lines or light rail, and questions as to what would happen to public safety licensees in those areas. NPSTC will also research municipal licensing in public safety bands rather than in industrial/business bands because they are municipalities that includes public safety licenses for such entities as municipal golf courses and their watering systems.

Also during the quarter, the Chair participated in a telephone interview with a researcher conducting research for SDR Forum. Discussion centered around public safety requirements for radio communications, the technology being used, some problems associated with cellular-type technologies, and the role of NPSTC in providing information on these topics. Although within the responsibility area of the Spectrum Management Committee, the Chair also had discussions with a federal official regarding modification of the protocols with Mexico regarding the sharing of the 800 MHz spectrum. During these discussions, it was revealed that NPSTC's efforts to heighten the importance of completing negotiations with Mexico appear to have been successful. Additionally, discussions were conducted regarding the need for similar protocols regarding the sharing of the 150-162 MHz and 450-470 MHz spectrum with Mexico.

NCC Recommendations Working Group

During the first quarter of 2006, NCC Recommendations Working Group was disbanded and rolled into a new comprehensive Broadband/Wideband Working Group that will operate under the Spectrum Management Committee.

Narrowband below 512 Working Group

In its final report in January, the Narrowband Working Group noted that the FCC has not yet acted on NPSTC's ex parte filing asking the Commission to delay any further consideration of 6.25 kHz technology and the 2011 date. Due to the

completion of its stated tasks, the Governing Board disbanded the Working Group on the recommendation of the Technology Committee.

Security Working Group

The Working Group has removed the final RPC Region 8 4.9 GHz group security guidelines from its action items until the documents are available for NPSTC's review. The GLOBAL Security Working Group has again invited NPSTC to participate in their meetings, which will ensure inclusion of public safety's knowledge, perspective, and needs regarding wireless telecommunications.

Voice over Internet Protocol (VoIP) Working Group

During the first quarter of 2006, evaluation and testing protocols for VoIP continued in development. A precursor to the VoIP requirements documentation should be released in March. Testing of full duplex for mission critical voice for public safety has been completed.

The National Institute of Standards and Technology (NIST) has created a DoC ISSI Evaluation and Test System (DIETS), an evaluation and test framework for emerging implementations of the ISSI protocol as defined by Project 25 (P25). The test framework is usable, modular, and easy to extend. This has the long-term potential for being the first step for P25 standards for VoIP.

Surveying Equipment Working Group

During the First Quarter, the ongoing work of Surveying Equipment has focused on establishing spectrum to support government surveyor operations using Global Positioning Systems (GPS) systems. Commercial surveyors have been able to license spectrum in the business/industrial channels, but public safety has different requirements. The Working Group is developing specific frequency recommendation to support surveyor operations and contacting vendors regarding the likelihood of equipment manufacture to support that need. NPSTC will develop a PFR that would allow government agencies to obtain licenses in the UHF Business/Industrial category for purposes of conducting land surveying activity.

Amateur Radio Services/Broadband Over Power Line Technology Working Group

The Working Group is in the process of drafting guidance on the use of amateur radio services for auxiliary communications.

700 Wideband Technology Working Group

In January, the 700 MHz Wideband Technologies Working Group decided to temporarily suspend work because the effort was related to unresolved spectrum issues in the 700 MHz band that were being addressed by the Broadband Task Force. By March 2006, the 700 Wideband Technologies Working Group was rolled into a new comprehensive Broadband/Wideband Working Group that includes 4.9/5.9 GHz and NCC Recommendations, and operates under the Spectrum Management Committee.

Paging Technologies Working Group

The Paging Technologies Working Group is awaiting an FCC response on its 2005 filing to the FCC on paging spectrum availability.

Emergency Alerting System (EAS) Working Group

During the quarter, the Technology Committee initiated the EAS Working Group. The FCC's Media Bureau made inquiries related to modifications to Emergency Broadcast System, now known as EAS. NPSTC prepared comments asking that it be made more accessible to state and local public safety as a means of informing the public of actions needed and information following the event. The Working Group is beginning to explore the work performed by associated groups and will prepare a mission statement and goals in the short term, to be presented at the June Governing Board meeting.

Interoperability Committee

The NPSTC Interoperability Committee currently oversees the activities of the following Working Groups: Statewide Interoperability Executive Committee, Project MESA, Software Defined Radio, Cognitive Radio, System Interconnect, and International Telecommunications Union.

New Items for Governing Board Review

During the First Quarter of 2006, the Governing Board approved the following items recommended to the Board by the Interoperability Committee.

- Investigate a proposal that the concept of deployable P25 trunking systems operating in the 24 available reserved 700 MHz 12.5 kHz channels, designated Trunking on Wheels (TOW), be further investigated and that a Request for Rulemaking be prepared for submission to the FCC to provide for this service.
- Develop a Working Group to research interoperable broadband applications and standards. Following further development of the goals and objectives of the group, the Governing Board will officially vote on the proposal at its June meeting.

Statewide Interoperability Executive Committee (SIEC) Working Group

In January, the Working Group completed an updated list of 34 SIEC contacts identified from an earlier survey initiated by the Working Group. In March, the Working Group was asked to investigate and further develop the concept of regional channel names consistent with the National Coordination Committee (NCC's) common nomenclature list. Following discussion regarding naming conventions at the March meeting, the Committee agreed to explore basing a channel numbering scheme on a regional basis, using a structure such as the 10 FEMA regional offices. The 10 regions would give each region 100 channels. Although there are only 900 channels, the numbering scheme could still be accomplished by adding a zero in front of one set of numbers. The SIEC Working Group offered to adopt this issue.

It was further noted at this meeting that during the NCC process, there were discussions regarding dispute resolution of inter-regional working groups by a National Plan Oversight Committee (NPOC). The discussions have not been active for a couple of years. The Working Group will also research the NCC's NPOC requirements and develop a potential mission and goals of the role for consideration by the Governing Board at its June meeting.

Project MESA Working Group

After discussions in late 2005 and early 2006 that raised the possibility that Project MESA would become a practitioner only group because of a dwindling level of vendor participation, the vendor community responded with renewed participation. Project MESA was to hold a meeting in Boston, Massachusetts, in early April where participants expect many interesting presentations and strong vendor participation at the meeting in response to Project MESA's call for industry to provide proposals to meet the requirements developed.

Border Issues Working Group

During the First Quarter of 2006, talks on the 800 MHz rebanding issue continued with Mexico. On the Canadian front, documentation of common usage channels has not occurred.

Software Defined Radio (SDR) Working Group

During this quarter, the SDR Forum (SDRF's) Public Safety Interest Group (PS SIG) Request for Information (RFI) was completed and will be released as the Forum's PS SIG Report on SDR Technology for Public Safety. The report will be available via the NPSTC website as soon as it is published by the SDRF. The Software Defined Radio Working Group works closely with SDRF and NPSTC actively participates in the Forum as well. Follow-on activities to this report will include security work associated with the downloading and reconfiguring of waveforms. SDRF is reaching out to

appropriate public safety network security groups. SDRF is also examining cognitive applications with the Cognitive Radio Working Group and working with vendors on cost model development.

System Interconnect Working Group

The System Interconnect Working Group is incorporating comments on the gateway white paper, reorganizing some of the sections, and adding suggested lessons learned from practitioners. The white paper will be posted in the Interoperability folder and distributed via the listserv.

Cognitive Radio (CR) Working Group

In January, the Interoperability Committee approved the creation of the Cognitive Radio Working Group that will explore the application of SDR and Cognitive Radio to public safety's operations and interoperability needs. The CR Working Group will work with the PS SIG to examine scenarios that leverage radio capabilities to support public safety applications. The following technology areas will be examined: Spectrum RF characterization, connection rules, user interface, digital filtering and PHY MAC functions, and networking functions. For each of the areas, the Working Group will research technology capabilities, perform analyses and simulations, and come to conclusions regarding requirements, current capabilities, and future development efforts. The report should be complete by Fall 2006.

Other Business

At the March meeting, the Interoperability Committee discussed a concern that arose at the California SIEC meeting about the handling of the NSPSAC bands during rebanding. During the rebanding process, the operations of the five national channels will be impacted nationwide. As rebanding begins in a region, from the time the first agency begins the conversion process until the last agency finishes, the operation of the five interoperability channels can be affected. One approach to the issue is to make an initial pass through an area, convert all subscriber units so they can operate on both the old and new interoperability channels, then go back and remove the old channels when the transition is complete. Nextel has objected to this approach because it would require touching all units twice. The second approach would be to use repeaters, which would repeat out on both the old and new channel; however, in California, there are very few repeaters in place. The operation of the interoperability channels is on scene and unit-to-unit.

Regional Planning Committee (RPC) Committee

During the first quarter of 2006, the Regional Planning Committee (RPC) Committee continued its rapid growth as its three new Working Groups named Chairs and participants and began to develop tangible goals and objectives.

Common Nomenclature Working Group

The goal of the Common Nomenclature Working Group is to achieve a common nomenclature for all interoperability channels in all public safety bands. To that end, the Working Group assembled a list of names from the nomenclature portion of the FCC files of regional plans for the five mutual aid channels, and initiated a survey of the RPCs to assess the level of compliance with the Public Safety NCC's common nomenclature scheme.

RPC Funding Working Group

As the First Quarter began, the RPC Funding Working Group developed a letter to explain funding policy and processes that was distributed to the 55 regions on February 15, 2006. Funding resources to the RPCs come from the National Institute of Justice (NIJ) through the Texas Sheriff's Association. All travel must be approved before it occurs. Any expenditures will be reimbursed after they are incurred. The budget will go to the Governing Board for approval. Pre-approved expenses are reimbursed within 1 to 2 weeks. Travel expenses and per diem rates mirror NPSTC's travel policy.

Rebanding Support Working Group

The Working Group is examining how NPSTC and APCO, which is also ramping up its response to the rebanding, can partner in facilitating a lessons learned database during the rebanding effort.

Future NPSTC Activities

The NPSTC Governing Board will hold its next quarterly meetings on June 12-14, 2006, in Ontario, California. Important issues to be covered at this meeting will include 700 MHz broadband, 800 MHz rebanding, border issues with Mexico, and the Pinellas County 4.9 GHz project.

Formed on May 1, 1997, NPSTC is a federation of organizations representing public safety telecommunications. NPSTC was originally formed to encourage and facilitate implementation of the findings and recommendations of the Public Safety Wireless Advisory Committee (PSWAC), established in 1994 by the Federal Communications Commission (FCC) and National Telecommunications and Information Administration (NTIA) to evaluate the wireless communications needs of local, tribal, state, and federal public safety agencies through the year 2010, identify problems, and recommend possible solutions.

NPSTC has since taken on additional responsibilities including implementing the recommendations of the FCC Public Safety National Coordination Committee (NCC) and the support and development of the Computer Assisted Pre-coordination and Resource Database System (CAPRAD) for 700 MHz spectrum to assist the Regional Planning Committees (RPCs). NPSTC develops and makes recommendations to appropriate governmental bodies regarding public safety communications issues and policies that promote greater interoperability and cooperation between Federal, State and local agencies. Issues include: 4.9 GHz rebanding, Software Defined Radio (SDR), US/Canadian/DTV Transition, Project MESA, Spectrum Resources, Amateur Radio (ARRL), 800 MHz, State Interoperability Executive Committees (SIECs) Broadband, and the International Telecommunications Union.