Appendix B

Public Safety

National Coordination Committee

MINUTES OF THE FIRST MEETING

Washington, D. C.

April 29, 1999

MINUTES OF THE FIRST MEETING OF THE
PUBLIC SAFETY NATIONAL COORDINATION COMMITTEE

Date/Time: April 29, 1999; Commenced at approximately 10:15 a.m.

Address: Federal Communications Commission
Commission Meeting Room
445 - 12th Street, S.W.
Washington, D.C. 20554

Attendees: See attached list

Opening Remarks (10:15 a.m.)

• **Susan Ness, Commissioner, Federal Communications Commission**, welcomed participants and provided welcoming remarks, acknowledged the presence of various individuals at the meeting, and provided a brief introduction into the background leading up to the formation of the Public Safety National Coordination Committee ("NCC"). Commissioner Ness then introduced Ms. Kathleen Wallman and turned the meeting over to her.

• **Kathleen Wallman, NCC Chair**, presented her opening remarks setting forth the major responsibilities of the NCC. During her presentation, several slides were shown to assist the participants in understanding the NCC's role. Ms. Wallman then introduced Thomas Sugrue.

• **Thomas Sugrue, Chief of the FCC Wireless Telecommunications Bureau**, provided remarks welcoming the participants and thanking them for their interest in the NCC. He also commented that, in Ms. Wallman, the NCC had a very qualified individual as Chair of the NCC. He then handed the meeting back to Ms. Wallman.

• Ms. Wallman introduced **Michael Wilhelm**, who is the Designated Federal Officer ("DFO") for the NCC. Ms. Wallman then introduced the following four individuals from the four Federal Government agencies that are co-sponsors of the NCC, with each representative providing brief remarks acknowledging co-sponsorship:

• **William Hatch, National Telecommunications Information Administration**
• **James Downes, Department of the Treasury**
• **James Turk, Federal Emergency Management Agency**
• **Ivan Fong, Department of Justice**

A videotape provided by the U.S. Department of Justice was shown. The tape highlighted the difficulty caused by the lack of interoperability among various public safety agencies and the need to implement interoperable systems.

Ms. Wallman provided an explanation of the functions of the NCC Steering Committee and provided the basis by which Steering Committee members were selected. The DFO announced the names of the Steering Committee Members: Marilyn Ward, Steven Proctor, Ernest Hofmeister, Kevin McCarty, Harlin R. McEwen, Bret Hester, Douglas Aiken, Ellen O'Hara, and Louise Renne. Ms. Renne had a statement read by the DFO because of her absence.

Approval of the Meeting Agenda (attached) was sought from the attendees, and approval was given unanimously.

Ms. Wallman announced that June 18, 1999, would be the date for NCC's second meeting, which will be held at FCC Headquarters. She requested that all NCC participants provide their E-mail addresses.

A short break was taken from approximately 11:05 a.m. until approximately 11:25 a.m.

• **Paula Silberthau, FCC, Office of General Counsel**, provided a short briefing on the Federal Advisory Committee Act ("FACA") Rules.

• **David Senzel, FCC, Office of General Counsel**, provided a briefing on the Commission's *ex parte* rules and how they affect the proceedings of the NCC.

• The DFO announced that two other Steering Committee Members, Rick Murphy and Mayor Clarence Harmon, inadvertently were not mentioned earlier.

The morning session concluded at approximately 11:50 a.m.

Afternoon Session -- the meeting reconvened at approximately 1:35 p.m.

• **Kathleen Wallman** opened the session.

• **D'wana R. Terry, Chief, Public Safety & Private Wireless Division, Wireless Telecommunications, Bureau, FCC**, presented an overview of public safety issues.

• **Philip Verveer, Willkie, Farr & Gallagher**, presented an overview of the Public Safety Wireless Advisory Committee (an earlier FACA committee).

• **Harlin R. McEwen, Deputy Assistant Director, FBI, International Association of Chiefs of Police**, presented an overview of public safety from a law enforcement perspective.

• **Ms. Wallman** stated that anyone who would be interested in being part of the NCC's

subcommittees identify themselves to the DFO by May 10, 1999. She repeated the date of June 18, 1999, for the second NCC meeting.

Audience Comments:

• **Paul Fishman**, Friedman, Kaplan & Seidler, was introduced by Ms. Wallman to moderate the audience comments portion of the meeting.

• **Bob Gurss** commented about the need to make sure that substantive matters were implemented by the NCC.

• **Dave Buchanan** commented on future meetings and days of the week for such meetings from an administrative viewpoint.

• **John Powell**, University of California at Berkeley, said that his university could host NCC meetings on the West Coast. He also stated that the NCC will need to address issues pertaining to standards and interoperability quickly.

• **Art McDole** mentioned that complete trunking standards are not yet in place.

• **Richard DeMello** mentioned that standards and economics go together. He also addressed interoperability issues.

• **Harlin R. McEwen** discussed the need for balance between the needs of fire departments and the needs of law enforcement, *e.g.*, law enforcement's more frequent need for encrypted communication.

• **Rick Murphy** commented that there have been reports of a need for encryption in fire fighting.

• **Don Pfohl** commented that disparate systems need the least common denominator in a digital world.

• **James Downes**, Department of the Treasury, commented that much time previously has been spent defining interoperability.

• **Carlton Wells**, State of Florida, commented that EMS (Emergency Medical Service) continues to require extensive communications capability. He also stated that the backing of Federal guidelines carries some weight and that supplemental funding is needed regarding interoperability.

• **Kathleen Wallman** said that some procedures for the NCC still are evolving. She also said that some Steering Committee Members might be Members on an alternating

basis. She emphasized that any NCC recommendations would be from the NCC as a whole but that the great reliance would be placed on the work of the subcommittees.

• **Robert Schlieman**, New York State Police, commented that for interoperability, there must be standards and, thus, a standard baseline is needed.

• An unnamed individual suggested that the NCC's open membership could result in disproportionate representation of particular interests on the Committee with a concomitant skewing of the NCC's recommendations to the FCC.

Closing Remarks

The DFO said that Commissioner Powell was testifying before Congress that same day about Y2K (Year 2000) matters and that a copy of his testimony was available outside the Commission Meeting Room for anyone who might be interested.

Ms. Wallman adjourned the meeting at approximately 3:05 p.m.

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Public Safety & Private Wireless Division
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Federal Communications Commission

Certified as to accuracy:

/s/ Kathleen Wallman

Kathleen Wallman

Date: June 8, 1999

Public Safety

National Coordination Committee

MINUTES OF THE SECOND MEETING

Washington, D. C.

June 18, 1999

MINUTES OF THE SECOND MEETING OF THE
PUBLIC SAFETY NATIONAL COORDINATION COMMITTEE

Date/Time: June 18, 1999; Commenced at 10:00 a.m.

Address: Federal Communications Commission
Commission Meeting Room
445 - 12th Street, S.W.
Washington, D.C. 20554

Participants: See attached list

Opening Remarks   (10:00 a.m.)

• **Kathleen Wallman**, National Coordination Committee ("NCC") Chair, called to order the second meeting of the NCC. After ascertaining that no one needed the benefit of sign-language interpretation, she then introduced Commissioner Furchtgott-Roth.

• **Harold Furchtgott-Roth**, Commissioner, Federal Communications Commission, welcomed all attendees at the meeting, thanked Ms. Wallman for chairing the NCC, pointed out the both the FCC and Congress recognize the importance of public safety communications, explained that the FCC needs input from the NCC, expressed the Commission's willingness to facilitate the NCC's discussions, recognized the difficulty of the NCC's task, and expressed appreciation for all of the NCC's efforts.

• Ms. Wallman introduced the leadership of the NCC's Subcommittees and, for acknowledgement, requested that they stand. (a) Interoperability Subcommittee: Chair is **Sgt. John Powell** of the University of California; First Vice Chair is **Kyle Sinclair** of the Treasury Department; and Second Vice Chair is **Steve Souder** of Arlington County, Virginia, Emergency Communications Center; (b) Technology Subcommittee: Chair is **Glen Nash** of the Telecommunications Division of California, Department of General Services; First Vice Chair is **Don Ashley** of the FBI; Second Vice Chair is **Steven Jennings**, Telecommunications Manager of Harris County, Texas; (3) Implementation Subcommittee: Chair is **Ted Dempsey** of the New York City Police Department; Second Vice Chair is **Richard DeMello**, Telecommunications Administrator of the Michigan Department of Natural Resources; and that the First Vice Chair is in the process of being recruited because an intended individual from FEMA was unable to take the position. All named Subcommittee leaders were present except Ted Dempsey.

• Ms. Wallman provided a brief overview of the day, based on the agenda provided to attendees at the sign-in table at the entrance to the meeting room.

• *Adoption of the NCC Governance Document.* Ms. Wallman announced that through conversations with the NCC's Steering Committee, procedural rules for the NCC had been adopted and incorporated into the document *NCC Public Safety Rules and Procedures* ("Governance Document"). She pointed out that the procedures established for decision-making

for the NCC would be made by consensus, that, generally, voting would be treated as a last resort with the exception that there would be a vote by the general membership on approval of the Final Report of the NCC to be submitted to the FCC. Ms. Wallman stated that based on the advice and concurrence of the Steering Committee, she was adopting the Governance Document and that copies of this Document were being made available at the meeting and also would be available on the NCC Web page.

- *NCC Subcommittee Reports*

Ms. Wallman stated that the core of the day's meeting would center on the reports of the NCC's Subcommittees (which met the day before). She pointed out that **Michael Wilhelm**, Designated Federal Official to the NCC, attended all three Subcommittee meetings in her absence, and that Mr. Wilhelm informed her that the Subcommittee meetings went exceptionally well and made substantial progress. Ms. Wallman then requested that each Subcommittee Chair give a report of the previous day's Subcommittee progress.

Interoperability Subcommittee Report. John Powell, Chair, presented in summary fashion the Interoperability Subcommittee Report. He said the Subcommittee first adopted definitions from the PSWAC Final Report for "public safety" and "interoperability," reviewed the various tasks assigned to it from the Steering Committee, and divided the tasks among five Working Groups which were established as follows: (1) Drafting Group, with Bob Schlieman from the New York State Police as Chair; (2) Operational Group, with Kyle Sinclair of the U.S. Treasury as Chair; (3) Rules, Policy and Spectrum Planning, with Carlton Wells from the State of Florida, as Chair; (4) Information Gathering and Liaison With Outside Groups, with Don Pfohl of the City of Mesa, Arizona, as Chair; (5) Trunking Interoperability Channels Group, with Dave Buchanan of the County of San Bernadino, California, as Chair.

Sgt. Powell said time lines were put in place for the Working Groups and specifically for the Trunking Interoperability Channels Working Group, with the latter to be presenting a report at the NCC meeting in September, and the other Working Groups presenting reports at the November Subcommittee meeting. He also said that a LISTSERVE was established for each of the five Subcommittee Working Groups as follows: <IOWG1-IOWG5 [for Working Groups One through Five, respectively] @NTOC@NET.NET>. He added that a good cross-section of the country and the layers of government involved as appropriate were represented on each working group. Via a Power Point presentation, he then discussed and elaborated on: the Interoperability Definition, Types of Interoperability (*i.e.*, Day-to-Day, Mutual Aid, Task Force); Interoperability Technologies (*i.e.* Conventional, Analog Trunked, Project 25-Digital, Infrastructure Based); The Future; "So Why Can't We Talk" problems; and how do we correct this situation.

Mr. Powell said his report would be posted to the NCC Web Page as would be the Subcommittee's formal minutes of its meeting.

Ms. Wallman stated that the NCC was obligated to provide a progress report to the FCC at the end of June, and that the core of periodic reports to the FCC would consist of such progress reports setting forth the work of the Subcommittees, and also would include material such as Sgt. Powell's presentation as well as narratives and minutes of Subcommittee meetings. [Editorial note: it was later determined that the report is due in August.] Both Sgt. Powell and Ms. Wallman noted that Tim Lowenstein has been quite instrumental and helpful in ensuring that information is being placed on the NCC Web Page.

Technology Subcommittee Report. Glen Nash, Chair, presented in summary fashion (via Power Point presentation) the Technology Subcommittee Report. He reviewed the Subcommittee leadership structure, identified five Working Groups per the Steering Committee's Statement of Work, discussed each Group's responsibilities, and named the Working Group Chairs. (1) Voice Standards Working Group, with Robert Schlieman, New York State Police, as Chair. Mr. Nash said that two motions raised at the Subcommittee meeting seeking FCC recommendation of certain ANSI air interface and vocoder standards were tabled pending the Working Group's analysis of the pros and cons for later presentation at the September meeting, with a hoped-for a decision at the November meeting. Mr. Nash discussed the need for quick action in transiting to digital technology, especially given the FCC's Public Safety Report and Order ("FCC R&O") (which, *inter alia*, designated 2.6 MHz for nationwide interoperability purposes among public safety agencies and announced the FCC's plan to establish the NCC). He said the Subcommittee had several questions (*e.g.*, matters related to trunking, fleet mapping, who would build the interoperability system and how would it be built) that would have to be addressed by the Steering Committee. (2) Non-voice Standards Working Group, with Dave Buchanan, County of San Bernadino, as Chair. Mr. Nash said, likewise, the Subcommittee had a question (*i.e.*, concerning transport layers and application layers) which required guidance from the Steering Committee. (3) Receiver Standards Working Group, with Don Pfohl of Mesa, Arizona, as Chair. (4) Spectrum Utilization Working Group, with Ron Haraseth, APCO-Intl., Chair; (5) Competition in Manufacturing Working Group, with Steve Jennings, Harris County, Texas, as Chair. He also said that a separate Writing Working Group, chaired by Don Ashley, would put together Working Group reports. Mr. Nash said there still was room for more individuals to sign up to be on the Subcommittee.

Implementation Subcommittee Report. Richard DeMello, Second Vice Chair, presented in summary fashion (by narrative format) the Implementation Subcommittee report. He commented that the previous day's work of three Subcommittee was encouraging. He said that five Working Groups were created, and Chairs appointed. (1) Writing Group, with Ted Dempsey as Chair. Mr. DeMello said this Group would write reports that would be due to the NCC; (2) DTV Transition Working Group, with Dave Eierman of Motorola, as Chair. Mr. DeMello said that he hoped a fair amount of information would be gathered and made known for the September meeting concerning where 700 MHz public safety spectrum could be deployed consistent with television allocations. (3) Policy-Regional Planning Working Group, with Frederick Griffin as Chair. Mr. DeMello stated that the real task of the Subcommittee would be to develop all requested items and that standards baselines for giving guidance to the RPCs

would be available. (4) Technology Policy Working Group, with Ali Shahnami as Chair. Mr. DeMello said he hoped to have information put together for the September meeting and for the December report. (5) Inter Subcommittee Coordination Working Group, with Don Pfohl as Chair, would coordinate with the other Subcommittees. Mr. DeMello said the Subcommittee discussed: hoping to have documentation for the September meeting for making a recommendation that there be an FCC mandate put on receivers being produced in the U.S. to be DTV-type by a certain date, with the date to be determined later; DTV penetration; strong policy requirements being necessary for regional planning; engineering analysis to be developed by the Subcommittee for September and included in the November Report; the need for a data base, and adoption of signal standards.

A short break was taken from approximately 11:00 a.m. until 11:15 a.m., whereupon the meeting resumed.

• Open Mike Audience Participation

Ms. Wallman introduced **Scott Harris**, Harris, Wiltshire & Grannis, as moderator. Ms. Wallman said that the time could be used to address Subcommittee leaders because the Subcommittees are the core of progress, and issues surrounding DTV (*i.e.*, Digital Television). The following individuals spoke, in the order shown below (several persons spoke more than once), and their comments and questions are briefly summarized below.

John Powell said he sent an E-mail to Ms. Wallman and Mr. Wilhelm earlier this week suggesting changes in overall work guidelines from the Steering Committee pertaining to changing terminology. He hoped that the NCC Steering Committee would provide input on certain tasks *vis-a-vis* DTV and especially Task No. 8, which was given to the Interoperability Subcommittee.

Ernest Hofmeister of Ericsson and Steering Committee member, asked Mr. Nash, Technology Subcommittee Chair, if assessment/cost model/technology-readiness parameters (based on, *e.g.*, various modulation approaches) and estimates of the number of needed radios could be developed to assess the practicality of approaches. He suggested an additional work task involving technology readiness or practicality in terms of cost models be considered. He also stated IPRs (*i.e.*, intellectual property rights) issues must be added and addressed.

Glen Nash, responding to Mr. Hofmeister, said that the Subcommittee would have to turn back to the manufacturers for such information and needed manufacturers' guidelines for the ease or difficulty of various modulation techniques, and that users don't have such information. He said that estimating the marketplace may be harder to achieve other than saying that the entire public safety community is the relevant market. He pointed out that there is a large embedded base in such usage.

Bob Gurss, Wilkes, Artis, Hendrick & Lane, addressing the IPR issue, said he thought the FCC required ANSI or other entity's standards (*e.g.*, ITA) because they encompass guidelines for

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ensuring other IPOs are available whereas such an issue is well beyond the expertise of most of the public safety group present in the meeting and, thus, reliance on other bodies' decisions would be helpful.

Harlin McEwen, returning to Mr. Hofmeister's remarks, said that arriving at costs is not easy to do. He said that if he went to Motorola to ask how much 700 Mhz equipment would cost, it would be hard to arrive at figures. He gave an example of live scan fingerprint devices which started at about $70,000 and said that, while there have been improvements and refinements, prices essentially have gone down to around $25,000 because more people are buying them. He said there should be some reasonable way to get "ballpark" figures from manufacturers for 700 MHz equipment.

Art McDole, APCO, and also co-chair of the steering committee for Project 25, expressed vital concern about interoperability. He said that the idea is to get as many people speaking to one another as possible and that a common mode was needed. He applauded the FCC for allowing the balance of the 700 MHz band allotment to be open to any technique chosen, whether digital or otherwise. He stated that, for interoperability, both modulation techniques and vocoders must match or there will not be interoperability. He added that Project 25 now appears to be the most logical choice, especially with ANSI standards involved and that the goal was to try getting the most people into interoperability.

Joe Gallelli, President of the Gallelli Group, said that today's technology differs from that which existed ten years ago and, thus, allows for thinking in much broader terms. He said that some consideration should be given to new technologies. He thus stated that, consequently, there should be no rush to judgment on any one technology and that a good evaluation should be given to all possibilities.

Robert Schlieman, New York State Police, said that his Working Group has no way of independently verifying cost data that would be received from the manufacturers. He said that the problem in the United States, unlike Europe, is that there is not a tight geographic area. He said that to communicate with others not in the system requires a baseline standard for interoperability. He also said if there were to be crossband interoperability, there would be a need to at least have compatible vocodors for digital-to-digital communications. Thus, he said there are reasons for having a baseline standard for interoperability.

Ernest Hofmeister responded to Mr. Schlieman and said that he was trying to get an engineering judgment about degrees of difficulty and that he was not asking for precise estimates. He said he would volunteer to help provide cost estimates and was simply looking for relative comparisons.

Robert Schlieman said that, regarding IPRs, he had meetings on the subject and has made inquiries of the European Technical Standards Institute concerning IPR requirements of the Institute.

Don Pfohl, City of Mesa, Arizona, said that the output of NCC recommendations must be a balance of interests but that it should be focused on public safety and not manufacturing. He said that the public safety draws from federal, state, and local governments. He stated that while the NCC might very well err but in doing so, it should err on the side of the public safety issues and not on behalf of with manufacturing issues.

Fred Griffin said that the NCC Steering Committee should have a procedure whereby individuals would be excluded from subcommittees if they failed to attend a set number of meetings.

Michael Wilhelm, DFO, at the request of Ms. Wallman, responded to Mr. Griffin, saying that he recalled that the sense of the Steering Committee was that participants are volunteers and it would be unreasonable to remove someone from the NCC or a subcommittee for non-attendance at meetings. He noted, though, that the only requirement concerning attendance is that in order to vote on final NCC recommendations to the FCC, an individual must be a member of the NCC within the preceding 90 days of the vote. [Editor's note: Mr. Wilhelm inadvertently referred to a "90-day requirement" that had been deleted from the Governance Document.]

Glen Nash, State of California and Chair of the Technology Subcommittee, said that costs to inform people were essentially zero, costs to send out information were negligible, and it was important to keep people informed. He stated that, as for attendance and participation, the issue is whether the person is knowledgeable on the subject to be voted on. He said that the expectation was that not many votes would be taken but, rather, a consensus or unanimity should prevail.

John Powell said that, with electronic communications, conveyance of NCC information is relatively easy but that the cost of travel to participate in face-to-face meetings is beyond what many agencies can support. Thus, he said, it is difficult to limit participation on the basis of one's inability to get to meetings.

Carlton Wells, State of Florida, said that based on the draft of the NCC voting procedures, it appears that no quorum is required at meetings if a vote is called. He stated that if a vote is necessary, it is really necessary to reach consensus. Moreover, if one is not present when a decision is made, that person loses the right to have the matter reconsidered. He reiterated what previously was said, namely, that a vote (except for the final NCC report to the FCC) is evidence of failure.

Sal DiRaimo, New York State Technology Enterprise Corporation, suggested that, under the auspices of, *e.g.*, NTIA, metrics should be developed so that they can be associated with the level of difficulty and that they be given to the appropriate NCC Subcommittees in order to get an understanding of the complexity vs. cost factors of various types of technology.

Kathleen Wallman, in response to Mr. DiRaimo, pointed out that NTIA is a co-sponsoring

agency of the NCC, that it is an active participant, and that it would be therefore helpful in this regard. She inquired of an NTIA member present at the meeting about the suggestion.

Rich Orsulak, NTIA, in response, said that NTIA would like to help out as much as it can but he would have to take the matter under advisement because Don Speights was not present at the meeting.

Art McDole sought clarification regarding votes in relation to interim reports. He asked whether, given that the FCC R&O requires interim reports to the FCC on an ongoing basis, a vote was required in order for these interim reports to be given to the FCC.

Kathleen Wallman, in response to Mr. McDole, said that committee votes are not needed for interim reports but that she would have to consult with the Steering Committee regarding interim reports. Moreover, she said the NCC would consult with the FCC regarding the contents of such reports.

Bob Gurss asked whether there could be decisions made regarding recommendations involving digital standards before the NCC Final Report is given to the FCC. Ms. Wallman replied that she hoped so.

Dave Buchanan, County of San Bernadino and also representing the Southern Chapter of APCO, sought help regarding current allocations for DTV allocations that are precluding use of the new spectrum in Southern California. He requested ideas to speed up the departure of existing analog systems occupying that spectrum. He reminded attendees that the PSWAC process indicated a need for substantial amounts of spectrum in Southern California.

Robert Schlieman inquired about the Part IV Subcommittee decisional process concerning a subcommittee member's designating an alternate to serve at a subcommittee meeting. He asked whether it would be appropriate to submit the designation to the subcommittee chair for forwarding to Ms. Wallman, the NCC Chair.

Kathleen Wallman, in response, said that, yes, it would be appropriate in that the designation be done in advance via e-mail and that she was willing to delegate the designation to the Subcommittee chairs. Consequently, she affirmatively stated that this policy would be accepted.

Don Ashley, FBI and also with PSWN, said that the 800 MHz study which was produced under PSWIN auspices by Booz Allen was available at the following PSWN Web site: <wnw.pswn.gov>. He also said that various documents, namely, the Wireless Communications Interoperability Guide, the Public Safety Radio Spectrum Guide, the PSWN Program Analysis of Fire and EMS Communications Interoperability and documents, and fliers pertaining to the September PSWN Lansing, Michigan, symposium, were available at the sign-in table.

John Powell stated that the next meeting dates, especially for the San Francisco meeting, should

be locked in quickly for planning purposes.

Ms. Wallman, in response, announced that September 24, 1999, would be the date for the next NCC meeting that will be held in Lansing, Michigan. She pointed out that the Subcommittees would meet the day before, September 23, 1999, for one-half day following the PSWN symposium. Ms. Wallman also said that November 19, 1999, would be the date for the NCC meeting in San Francisco, with the Subcommittees meeting on November 18, 1999. Based on audience comments, it was observed that the San Francisco meeting would conflict with the November 19th Radio Club of America meeting in New York. Ms. Wallman then said calendars would be reviewed over lunch, and that she would confer with Jayne Lee, City and County of San Francisco, to arrive at options for other meeting dates to resolve conflicts.

• Ms. Wallman then introduced **Bruce Franca, FCC, Office of Engineering and Technology**, who gave a presentation concerning the transition to Digital Television ("DTV") (via overhead slides). He provided background on DTV regarding initial DTV allotments, indicating that Channels 60-69 were slated for early recovery and Channels 52-59 are to be recovered at the end of the transition. He discussed Channels 60-69 designations, pointing out that Channels 60-62 and 65-67 were designated for commercial operations and that Channels 63-64 and 68-69 have been designated for the public safety community. Mr. Franca also discussed DTV service rules and build-out schedules, pointing out that network stations in the top 10 markets must begin DTV service by May, 1999, and that network stations in the top 30 markets must begin such service by November, 1999. He also provided the current DTV construction status. Mr. Franca pointed out that the public safety community's main concerns would center on Channel 62 because it is an adjacent channel which would need protection, with traditional land mobile rules governing protection requirements, and also Channel 63. Mr. Franca showed separation distance contours for analog and digital Channels 62, 63, 64, 65, 67, 68, and 69, with maps showing adjacent and co-channels separations for each Channel.

At the conclusion of Mr. Franca's presentation, there were questions, comments, observations, and concerns directed to him from **Robert Schlieman, John Powell, David Eierman, Bob Gurss**, and **Dave Buchanan**. These matters, collectively, pertained generally to the following: ability to obtain copies of Mr. Franca's visuals; the Philadelphia, PA, DTV Channel 63 assignment; the number of the Top-10 markets meeting their May 1, 1999, deadlines; the lack of DTV audiences on the West Coast (specifically, the San Francisco area); the radius of adjacent and co-channel circles shown on Mr. Franca's slides; what analog and DTV stations were included, *e.g.*, licensed stations, applications, etc., in terms of DTV eligibility criteria; the Canadian DTV allocation along the Canadian-U.S. border; the need to overlay all maps used by Mr. Franca in one graphic to better understand adjacent and co-channel preclusion/protection standards; provisions for protecting part of an adjacent channel as opposed to the entire channel; issues and status of converters, relative to the calculation of penetration percentages; mandatory date for all TV sets being capable of DTV reception; and must-carry issues; Mr. Franca addressed all matters directed to him by answering, clarifying, and amplifying as appropriate.

Ms. Wallman summed up the positions of those present by asking Mr. Franca if there were any possible way to accelerate the transition to DTV by the FCC and that the sense of the group was that even small actions that the FCC might take to reinforce marketplace incentives for broadcasters to move off the channels assigned for public safety use would be appreciated by the public safety community. Mr. Franca responded that he hoped the transition would go very quickly, that things seemed to be working well to date.

- Ms. Wallman introduced an alternate for Mayor Harmon (member of the Steering Committee unable to attend the meeting), namely, Lt. Thomas Perchich, St. Louis Police Department.

- Ms. Wallman also announced that paper copies of the Minutes of the NCC Subcommittee meetings (held the previous day, June 17, 1999) would be made available after lunch.

- Ms. Wallman shared a message from the FCC that the Department of Justice ("DOJ") would be organizing a July 15, 1999, two-hour Y2K broadcast coordinated with the FCC. She said that DOJ was asking whether any police chiefs, fire chiefs, etc) wished to participate in the program; Ms. Wallman said if so, they should contact Michael Wilhelm so he could pass on the names to the Y2K personnel at the FCC; and that rehearsals for the broadcast would be held on July 14, 1999. Mr. Wilhelm said that all expenses would be paid by the FBI.

- Ms. Wallman introduced **Steven Proctor**, Director, Utah Communications Agency Network ("UCAN"). Mr. Proctor provided a presentation centering on the political, technical, financial, and regulatory issues of implementing what he termed a complex undertaking such as UCAN, which, he said, is a quasi-governmental entity. He provided an historical perspective leading up to the UCAN and discussed the Task Force findings centering on general findings and the number of radio systems in use; the Task Force's recommendations and estimated costs (statewide). Mr. Proctor showed a site map indicating an eight-county area within which service would be provided and showing current and planned links. He mentioned that the opportunity to host the Olympics in Year 2002 spurred development of the project. Focusing on the eight-county area, Mr. Proctor discussed particulars of the costs and focus of development, discussed where it stands today, and the interoperability design, which, he pointed out, is not yet firmed up.

At the conclusion of Mr. Proctor's presentation, there were questions and comments directed to him from **Carlton Wells**, **Larry Miller**, and **John Powell**, pertaining to, collectively, issues of mutual aid coverage systems in relation to non-mutual aid coverage systems, the migration date for NPSPAC channels and "give-back" channels, whether stand-alone or sub-systems would operate in a larger system and if so, whether interoperability talk groups would operate in a trunked mode. Mr. Proctor responded.

- Ms. Wallman returned to the matter of options for the NCC and Subcommittee November meeting dates in order to narrow the options and establish acceptable dates. Based on audience input, various dates in November and December were discussed. Ms. Wallman said that Ted Dempsey would be called over lunch, that Jayne Lee of San Francisco would inquire further of

San Francisco, and that Ms. Wallman would confer with Ms. Lee and John Powell over the lunch break in helping to arrive at an acceptable date.

• The morning session concluded at approximately 1:05 p.m., and Ms. Wallman announced that the meeting would resume at 2:00 p.m.

Afternoon Session -- the meeting reconvened at approximately 2:10 p.m.

• **Kathleen Wallman** opened the session by announcing that copies of the Subcommittee meeting minutes and a limited number of copies of Mr. Franca's presentation were at the sign-in table (with additional copies to be made available later).

Ms. Wallman stated that there were two plans regarding the November 18 and 19 meeting dates in New York: Plan A was to use the New York, Police Department's office, with Ted Dempsey making arrangements (the primary plan) and Plan B was to ask industry members of the Steering Committee to arrange for a New York meeting location. She also pointed out that because the Subcommittees would be meeting after the PSWN symposium in Lansing, they would only have about one-half day on September 23. Thus, she stated that part of the NCC general membership meeting scheduled on September 24 would be allotted for Subcommittee meeting time that Friday morning, with Subcommittee reports presented Friday afternoon.

A short break was taken until 2:30 p.m.

• Ms. Wallman introduced **Jane Schweiker**, American National Standards Institute ("ANSI") Director of Public Policy and Government Relations, who gave an overview of ANSI. She explained ANSI's two primary functions (in the domestic arena, ANSI accredits standards developing organizations and in the international area, ANSI is the U.S. representative for U.S. participation in the International Standards Organization, the International Electro Technical Commission, and other non-treaty organizations). She stated ANSI's mission was to enhance the global competitiveness of U.S. business and the U.S. quality of life (the latter including health and safety concerns and non-business interests). Ms. Schweiker discussed ANSI's value in three primary areas: as a policy forum, as an accreditor, and as a source of information. Ms. Schweiker discussed ANSI's composition as being a federation, *i.e.*, an umbrella or organization of companies, government agencies, trade associations, professional and technical societies, labor interests, and consumer organizations, and gave some examples of these entities. She said ANSI's Web site is <ANSI.org> and discussed ANSI requirements for ANSI accreditation (stressing the need for openness, due process, and an appeal process). She also expressed her willingness to act as intermediary in assisting the NCC, and said that four individuals from their respective organizations were with her at the meeting (naming in particular, **Ed Ornelas** of the Telecommunications Industry Association) for NCC members to discuss any matters.

Ms. Wallman noted ANSI's petition for reconsideration filed in the FCC's Public Safety R&O and for Ms. Schweiker's pointing out various other standards organizations that could be used by

the NCC.

Questions directed to Ms. Schweiker were from an unidentified individual and **Paul May** of Ericsson. These matters, collectively, pertained to differences, if any, between ANSI NST (National Standards) versus ANSI standards; and licensing and IPO considerations in relation to voluntary and mandatory standards. Ms. Schweiker addressed these matters.

• Ms. Wallman inquired whether the Subcommittees wished to use the remainder of the allotted time for Subcommittee work, and the consensus was that the Subcommittees did not because one Chair had left and others had to catch flights. Ms. Wallman stated that specifics regarding the November 18th and 19th meeting dates in New York City would be posted on the NCC Web site.

• Dave Buchanan asked whether any agencies currently were trunking the NPSPAC 5 channels. There was no indication from the audience that such was occurring.

• Ms. Wallman adjourned the meeting at 3:00 p.m.

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Prepared by: Bert Weintraub
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Wireless Telecommunications Bureau
Federal Communications Commission

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Certified as to accuracy:

_____
    Kathleen Wallman

Date: _____

11

Public Safety

National Coordination Committee

MINUTES OF THE THIRD MEETING

Lansing, Michigan

September 24, 1999

MINUTES OF THE THIRD MEETING OF THE
PUBLIC SAFETY NATIONAL COORDINATION COMMITTEE

Date/Time: Friday, September 24, 1999; Meeting commenced at 1:30 p.m.

Address: The Holiday Inn -- Lansing West Conference Center
6501 W. Saginaw Highway
Lansing, Michigan 48917

Participants: See attached list

· **Kathleen Wallman**, National Coordination Committee ("NCC") Chair, convened the third meeting of the NCC. She said the purpose in convening the NCC was to discuss how to improve interoperability of law enforcement and emergency medical and other first-respondent radio systems in case of an emergency and day-to-day use. Ms. Wallman dispensed with introductory remarks but thanked those present and the Public Safety Wireless Network ("PSWN"), which furnished some of the facilities used for the NCC meeting. Ms. Wallman then called for reports from the NCC subcommittees.

· *NCC Subcommittee Reports*

<u>Interoperability Subcommittee Report</u>   John Powell, Chair, presented a report from the Subcommittee's Working Group Number Five, saying their recommendations were derived from discussions held over the last two days and that consensus of the subcommittee had been achieved on the recommendations in the report. He handed the report to Ms. Wallman, saying he gave copies earlier to all members present. He pointed out that the Subcommittee referenced some other deliverables in the report which required participation by the other subcommittees before they could be completed. He expected a quicker pace of the efforts by the Subcommittee and its working groups due to better list server efficiency. Mr. Powell said the Committee's intention is to meet in connection with other meetings, such as the upcoming PSWN meeting in Florida in December, stating that in-person efforts are more efficient than working through the list servers or using conference calls. Mr. Powell expressed his intention to take all NCC documents generated to date and renumber them for distribution to the subcommittee. He expressed appreciation for any input/feedback as his Subcommittee moved forward; and, in response to Ms. Wallman, said that if in-person attendance at informal meetings was not convenient, participation by telephone conference calls would be attempted. Ms. Wallman thanked Mr. Powell for the report, thanked those who assisted him, and thanked Dave Buchanan as Chair of the Work Group for preparing the report. There were no questions from any attendees for Mr. Powell.

<u>Implementation Subcommittee Report</u>. Richard DeMello, Second Vice Chair, presenting the report in the absence of Ted Dempsey, Subcommittee Chair, said the Subcommittee first reviewed the June minutes, discussed the number plan sent by Mr. Powell (which the Subcommittee would use) and discussed milestones. Mr. DeMello said that not all of the milestones were listed, and indicated that the Subcommittee would not have the whole process completed by February 2000. However as many milestones as possible would be reached with the guidance of the NCC. Mr. DeMello stated that the subcommittee discussed rewriting the tasks assigned to the Working Groups, that there were about 12 tasks at the outset, and that they were readjusted and placed under various Working Groups for better reorganization. He said the first Working Group report was given by Dave Eierman of Motorola, who spoke about DTV blockage, using a number of slides. He said the slides would be sent to Michael Wilhelm, the NCC's Designated Federal Official ("DFO") for retention in the NCC files. He went on to say that what the slides identified were areas where use of various 700 MHz land mobile spectrum was

precluded by DTV assignments. Mr. DeMello indicated that at the next meeting, Mr. Eierman would identify different engineering criteria that might be used to identify areas in which 700 MHz public safety operations and DTV stations could coexist. He said that he would contact the Federal Communications Commission ("FCC") to find out about the latest licenses and obtain information on TV stations that have relocated and thus do not appear to pose a problem for land mobile licensees. He noted Hawaii was interested in research being done on land mobile spectrum availability. Tom Tolman of the National Law Enforcement and Correction Technology Center - Rocky Mountain Region ("NLECTC"), in the absence of Ali Shahnami, gave the presentation of the next Working Group. This work consisted of: distributing the minutes from the Group's meeting in Minnesota; discussing a comparison between Project 25 and TETRA; and discussion regarding NIJ and the relationship between NIJ and NPSTC (*i.e.*, National Public Safety Telecommunications Council) with respect to the development of a common database arena. Mr. DeMello pointed out that NPSTC is developing specifications for a common database for the 700 MHz spectrum and that his Subcommittee would like to see an NCC statement to the FCC recommending that the Regional Planning Committees ("RPCs") be required to use the common database in their planning processes. He added that the majority of the Subcommittee's time was spent with Fred Griffin's group regarding planning and policies, including determining the optimum number of mobiles per frequency or ascertaining the number of channels needed based on numbers of mobiles, nature of activities, etc. The subcommittee also discussed system implementation (*i.e.*, getting a license and monitoring its implementation); and discussion of the Booz, Allen and Hamilton report regarding regional plans. Ms. Wallman said there were some TETRA-related materials that were looked at today, that the Steering Committee expressed interest in looking at those documents, and asked if Mr. DeMello could make them available. Mr. DeMello said he would have them copied and distributed.

Technology Subcommittee Report. Glen Nash, Chair, said Don Pfohl gave the subcommittee a report on receiver standards; that Mr. Pfohl contacted TIA about obtaining documents on receiver performance; and that there was discussion on two levels of identified receiver performance for possible adoption. Mr. Nash said extensive discussion ensued on interoperability standards, looking at two candidate systems, namely -- Project 25 and TETRA. He noted that most subcommittee members favored one technology but some expressed concerns about making a premature decision, especially given that the Subcommittee published its intent to make a decision at the upcoming November meeting; and that he expected a consensus decision to be reported to the NCC at that meeting. Mr. Nash said a list of 18 criteria or questions for individuals and manufacturers to address concerning the two technologies were developed, that the responses will be disseminated via e-mail on the List Server, and that analysis of a consensus opinion hopefully would be presented at the November meeting. Mr. Nash said that the final issue, trunking, did not have much discussion in his Subcommittee but was raised more as a result of the decision made in Mr. Powell's Subcommittee meeting. He said that the Technology Subcommittee needs to consider whether it should recommend that the interoperability channels be regrouped to allow a TETRA-type system. He also raised the possibility that the Regional Planning Committees could identify general use channels that could be paired with the interoperability channels to form channel groups with four contiguous channels. Mr. Nash said this issue will be a task for the Subcommittee's Spectrum Working Group. (During Mr. Nash's presentation, Mr. DeMello handed the aforementioned TETRA information to the Steering Committee members.)

In response to a question from Ms. Wallman, Mr. Nash said there is a Project 25 meeting scheduled in Boulder, Colorado, at the end of October, when both Ericsson and TETRA proponents are scheduled to make presentations to the Project 25 Committee, with the decision there being whether or not Project 25 will establish tracks for either a two-slot and/or four-slot TDM version of the Project 25 standard. In

response to audience member questions, and those from Ms. Wallman, Mr. Nash said that, regardless of the outcome at the Project 25 meeting, his Subcommittee will have the answers to the 18 questions (in the matrix) from which the Subcommittee could better ascertain which of the two systems appears better. He stated that the sooner comments or suggestions are received (regarding the 18 questions), the sooner the subcommittee could come to a decision. Further, Mr. Nash said that "yes/no" answers to the matrix questions would be preferable to narrative answers. Harlin McEwen emphasized the importance of promptness in making responses, and Mr. Nash stated that any additions or comments about the criteria should be submitted to the List Server no later than two weeks from today's NCC meeting, so everybody can see them and respond; and that his Subcommittee intends to make the decision in the November meeting.

John Powell noted he had omitted an item he wanted to bring to the NCC's Steering Committee's attention, *i.e.* that he would be forwarding to the Steering Committee for consideration a modification unanimously approved by his Subcommittee pertaining to conforming terminology in the Subcommittee's statement of work to the terminology used in the PSWAC Final Report. Ms. Wallman reiterated that the NCC should be guided, where appropriate, by the PSWAC Report's conclusions.

Ms. Wallman said that several people had apprised her of matters that they wanted to raise on the record. She said that a request was made by two of the NCC's co-sponsors to have a letter from the State of Wisconsin on federal access to spectrum be read into the record, and she requested that Michael Wilhelm, DFO, read the letter. Mr. Wilhelm read into the record a one-page letter, dated September 22, 1999, addressed to Ms. Wallman from the State of Wisconsin (signed by David A. Hewitt, Director Bureau of Communications, Wisconsin Department of Transportation). The letter stated that Wisconsin supports the Federal Law Enforcement Wireless Users Group ("FLEWUG") request for federal co-equal access to non-federal spectrum in the 746 MHz to 806 MHz frequency band, and provided Wisconsin's reasons for its support.

Steve Proctor, Executive Director of the Utah Communications Agency Network and Executive Vice Chair of the PSWN Committee, said PSWN supports FLEWUG's position on co-equal access and believes federal users should be afforded eligibility on these (*i.e.*, 800 MHz) channels on a secondary basis to achieve interoperability with the States. He noted that in light of the disaster (*i.e.*, tornado) that recently struck Salt Lake City, interoperability had to be emphasized. He related his personal experience in preparing for the Olympics in Utah, and said that some federal, state, and local entities indicated their intent to operate on different frequency bands in a manner that would make interoperability difficult if not impossible. However, there is not a move toward most of the State and local government entities' operating in the 800 MHz band on a combined system, which will alleviate the problem of lack of interoperability. Mr. Proctor said PSWN endorses the sharing of this spectrum with the Federal government on a secondary basis to facilitate interoperability.

Harlin McEwen, FBI, saying he was speaking with 38 years' experience in state and local law enforcement, supported Mr. Proctor's comments. He said that there was a particular need for more coordination between law enforcement, fire, and EMS (*i.e.*, Emergency Medical Services), and that the same considerations (*i.e.*, the need for sharing arrangements) apply to the federal sector. Thus, on behalf of the IACP (*i.e.*, International Association of Chiefs of Police), he supported Mr. Proctor's proposal.

Larry Miller, American Association of State Highway and Transportation Officials (an FCC-certified frequency coordinator) sought clarification, saying Mr. Proctor talked in terms of the federal

government's wanting access both on a co-primary basis and on a secondary basis. Mr. Proctor, in response, stated that "co-equal access" does not mean federal-only communications systems; does not mean primary user status; does not mean eminent domain by the federal government; and does not mean licensing of non-federal spectrum to federal entities. Rather, he said, it means a cooperative partnership between state, local, and federal users to achieve interoperability.

Rick Murphy, Co-Chair of FLEWUG, in response to Mr. Miller's question asking if co-equal federal access would be limited to the interoperability channels answered that it was not but that access to interoperability and other channels should be on the basis of memoranda of understanding between federal and state entities. He stated that if the federal government is going to invest in a system that purportedly has co-equal access, then the Federal taxpayers must have some protection associated with the access, *i.e.*, that the federal government cannot arbitrarily be removed from the system because, *e.g.*, a state requires more coverage or more of the frequency band. Thus, he said the federal government must be treated as a co-equal user of the bandwidth pursuant to agreements with state or local entities.

Ms. Wallman added that there is an element of comfort because – although there is a statutory bar to licensing Federal users on non-Federal spectrum, there also is the recognition that, if investment in shared systems is to be encouraged, federal users cannot arbitrarily be evicted from a shared system. Consequently, she said that the NCC will remain sensitive to this issue and that she is taking under advisement the letter from Wisconsin and Mr. Proctor's and Mr. McEwen's statements.

An audience member identified only as "Richard?" stated that the Forestry Conservation Communications Association would wholeheartedly support Ms. Wallman's position. He said wildfire suppression is very dangerous, is something occurring every day, that there is a need to work more closely than has been done in the past, and that co-equal sharing is desirable on that account.

Art McDole, representative of APCO International, said APCO International has an open membership, many valued partnerships with the federal government, and expresses its wholehearted support to the sharing proposals outlined.

Steven Mueller, St. Louis Police Department, representing Mayor Harmon, said the Missouri National Guard had recognized the need for interoperability between federal, state, and local operations for disaster operations and began trying to find some commonality between those entities, but none could be found. He stated establishing interoperability on the 700 MHz band would satisfy that need and allow interoperability to occur.

Harlin McEwen said that at a meeting in Columbus, Ohio, the previous week, Joe Hinman of the Phoenix Police Department ("Phoenix PD") brought to his attention interference that the Phoenix PD was encountering to its mobile data terminals from a Nextel radio system in Phoenix. Mr. McEwen gave a copy of a one-page summary of the interference matter to Michael Wilhelm, DFO, for the record and then he read the letter into the record. The letter, dated September 15, 1999, was entitled, "Destructive Radio Interference - Phoenix Police Mobile Data System." The letter recited *inter alia* that the Phoenix PD Mobile Data Terminal system was installed in 1993-94 using 821-866 MHZ NPSPAC channels with narrow band pairing; that coverage was expanded in 1998; and that in August, 1999, it was discovered that the Phoenix PD was unable to send or receive MDT traffic when their units were in the vicinity of a Nextel tower. Measurements were conducted there, and other Nextel sites, and it was discovered that Nextel stations operating on frequencies between 851 MHz and 865 MHz overwhelmed the low power

three-watt MDT transceivers. When the Nextel transmitters were off, the MDT performed normally. The Nextel interference creates a major officer safety problem. Mr. McEwen said the letter reinforced the concerns that Ms. Wallman, as NCC Chair, expressed in a recent letter to the FCC expressing NCC's concern about the possibility of adjacent channel interference to 700 MHz public safety channels.

Dave Buchanan, County of San Bernadino, said the City of Ontario in the County is having a similar interference problem, with three Nextel cell sites appearing to cause interference and that the interference affects portable units in particular. He said that in the new band (*i.e.*, the 700 MHz public safety band) all necessary measures should be taken to avoid similar interference. Among the solutions discussed was the establishment of "buffers" or guard bands to isolate sources of adjacent channel interference.

Mr. McEwen added that he understood that there might be more than one way to deal with this problem and the NCC should consider all options. He added that if there are to be buffers, they should be taken from adjacent, commercial space, not from the 24 MHz of 700 MHz spectrum allocated for public safety use. Acknowledging that the imposition of interference-reducing conditions would not be popular, he nonetheless said the NCC should take a position on this matter early on.

Ron Haraseth, APCO International, said the Nextel incident is just one of several nationwide of which APCO has been aware in its interference work, and it shows the need to be very careful about what is done in the 700 MHz band. He said about one and one-half months ago, several APCO members, including Joe Hanna and himself, visited several FCC commissioners to make them aware of the need to protect channels 60, 64, 68, and 69, including the need to place compatible services on the frequencies that are immediately adjacent to these channels. Mr. Haraseth suggested that the NCC explore this matter further in discussions with the FCC and other agencies and associations.

Ms. Wallman said the letter she sent to the FCC pointed out that the FCC's actions in establishing the 700 MHz public safety band could be for nought if adequate attention were not paid to potential interference from adjacent bands. She said that based on Mr. McEwen's remarks, it might be time for the NCC to be more active and more specific with the FCC to ensure that the problem is not overlooked in the enthusiasm to transition to DTV. She added that her letter is part of the docket in the relevant proceeding, and that the letter will be posted on the NCC Web Page.

Marilyn Ward, said the NPSTC wrote to Ms. Wallman about a pre-coordination, pre-allocation type of database to be used by the RPCs. Ms. Ward said the database's purpose was to ensure that RPCs coordinate in the assignment of channels so that there are no interference conflicts along the borders of the regions. Ms. Ward said NPSTC asked NLECTC (Tom Tolman's group) if it would support development and administration of a common database for use by the RPCs. Ms. Ward said that NPSTC developed a flow chart of information regarding frequency coordinators and that NPSTC has asked the NCC to support the development and use of this database by all Regions. In response to a question from Ms. Wallman, Ms. Ward said that the matter would be addressed by one of the Working Groups of the Implementation Subcommittee. In response to a question from Mr. McEwen, Ms. Wallman said she thought no action need be taken by the NCC today but that the matter should be vetted through the Working Group and Subcommittee structure and then it would become the subject matter of the NCC's recommendations to the FCC. Ms. Ward agreed and observed that it should happen quickly.

Mr. Robert Schlieman, New York State Police, emphasized the importance of the pre-coordination database and wanted to make sure that everyone, *i.e.*, both the regional planners and frequency

coordinators are "playing off the same sheet of music" so there are no disagreements about frequency assignments. Mr. Richard DeMello asked if it would be appropriate for the matter to be on his Subcommittee's agenda for November, and Mr. McEwen replied that it would be.

· Future Meetings. Ms. Wallman said that the NCC's first recommendations to the FCC are due the last week in February, and that the next NCC meeting will be on November 19, in New York City at One Police Plaza, courtesy of Lt. Ted Dempsey. Two NCC meetings are proposed in January because December is quite inconvenient and the two meetings should provide sufficient time for the NCC and its Subcommittees to arrive at the recommendations it must submit to the FCC. Ms. Wallman gave the following schedule of future meeting dates and locations:

> · *At New York*: Subcommittees will meet on November 18, 1999; and the NCC will meet on November 19, 1999.

> · *At Washington, D.C.*: Subcommittees will meet on January 13, 2000; and the NCC will meet on January 14, 2000.

> · *At San Francisco*: Subcommittees will meet on January 27, 2000; and the NCC will meet on January 28, 2000.

Ms. Wallman then introduced Steering Committee member Louise Renne, who has extended the invitation to the NCC to meet in San Francisco in January. Ms. Wallman also noted said one of the NCC's previous open microphone (audience participation) hosts, Paul Fishman, recently became the President's nominee to serve as the U.S. Attorney for the District of New Jersey. Ms. Wallman then opened the floor by inviting anyone to speak about any issues.

· *Public Discussion/Open Microphone (Audience Participation)*

Robert Hlivak, State of Hawaii, revisited the adjacent band issue and said the NCC perhaps could devise technical standards *e.g.*, some type of a performance mask, to alleviate interference. He is concerned that Hawaii will be unable to deploy 700 MHz public safety systems before the Nextel network is in place there. He questioned whether there would be regulatory relief that would require auction-obtained stations to discontinue operation if they interfered with 700 MHz public safety systems. Michael Wilhelm responded that the FCC has received comments and reply comments in the allocation of adjacent spectrum proceeding and that anyone still has the opportunity to make *ex parte* contacts to the FCC in the matter. (Mr. Wilhelm explained what *ex parte* contacts are and said if anyone wanted to submit *ex parte* comments and needed additional information, they could contact him.)

Carlton Wells, State of Florida, requested that when the Subcommittees recommend assigning responsibilities for interoperability channels, *e,g,*, spectrum planning, establishing standards, or developing guidelines for the RPCs, that the NCC does not unintentionally abrogate its responsibility to implement nationwide standards and guidelines.

Mr. McEwen agreed fully, supported Mr. Wells' comments, and said that the issue is one of having a strong national plan without fragmentation in the Regions.

Mr. Rick Murphy said that FLEWUG agreed with Mr. McEwen because a strong national committee is

needed and must coordinate among all the RPCs. Marilyn Ward said NPSTC also agreed with that position wholeheartedly.

Ernest Hofmeister said that based on apparent agreement that the NCC needs to protect the band and its desire to be more pro-active, it was unclear to him what steps the NCC will take and how it will be more pro-active. Ms. Wallman responded that there will be an opportunity for discussion on an upcoming Steering Committee conference call, with information being disseminated on the List Server. She said that in light of her letter pending at the FCC, she planned to call the FCC, saying she has raised the issue and wanting to know what the FCC's plan was on dealing with the matter.

Ron Haraseth, of APCO and as Working Group Leader for the Spectrum Utilization Subcommittee of the Technology Subcommittee, said his Group already has discussed auctioning of bands adjacent to public safety spectrum and the eligibility standards for those bands. He said his working group will continue to explore that issue and has material addressing the interference criteria and levels that it would like applied to the adjacent bands, compatible uses of adjacent bands, and related matters. He hoped the work would be part of the complete NCC report.

Glen Nash, speaking as Chairman of the Technology Subcommittee, thought the interference issue would be within his Subcommittee's responsibility. He said in thinking about the Phoenix interference, what came to mind was that the interference was due to several co-located transmitters and not the result of a single transmitter. He said this means that to mitigate the problem, a rule must be considered regarding the net effect of multiple transmitters at a single site or nearby sites, which, in turn, will not be a simple problem for the FCC to regulate.

Harlin McEwen, addressing his comments to Mr. Nash, said he was thinking of the matter in a slightly different vein as he viewed it more in terms of the NCC's recommending to the FCC that there be a "buffer" on each side of the group of channels that public safety will be using. Mr. McEwen said that all that the NCC wants to do is to protect against any interference that might render the channels ineffective. He said there must be a mechanism providing that if anyone is using, *e.g.*, one and one/half MHz of space on each side of the public safety group, that user must be forewarned that it creates interference to public safety adjacent channels, and it might be forced to change its system or discontinue operation.

Richard DeMello, FCCA, said that many view this interference in relationship to one or two transmitters but that there is a parallel in the manner in which the FCC regulates R.F. radiation exposure, whereby the sum of all contributing transmitters − not only individual transmitters − is considered.

There being no further comments, Ms. Wallman then thanked everyone for attending the meeting, said she looked forward to working with the attendees in bringing matters to fruition in the NCC's first phase in February, 2000, and seeing them at the intervening three meetings, and wished everyone a safe trip home.

(Whereupon the meeting was adjourned at approximately 2:50 p.m., Friday, September 24, 1999.)

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Prepared by: Bert Weintraub
Attorney Advisor
Public Safety & Private Wireless Division

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Wireless Telecommunications Bureau
Federal Communications Commission

Certified as to accuracy:

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Kathleen Wallman

Date: _____

Public Safety

National Coordination Committee

MINUTES OF THE FOURTH MEETING

New York, New York

November 19, 1999

MINUTES OF THE FOURTH MEETING OF THE
PUBLIC SAFETY NATIONAL COORDINATION COMMITTEE

Date/Time: Friday, November 19, 1999; Meeting commenced at 1:30 p.m.

Address: New York Police Headquarters
One Police Plaza -- First Floor Auditorium
New York, New York (Lower Manhattan) 10038

Attendees: See attached list

· **Kathleen Wallman**, National Coordination Committee ("NCC") Chair, convened the fourth meeting of the NCC. She asked if anyone needed the services of the sign-language interpreter who was present, and no one responded that such services were needed. Ms. Wallman then thanked the New York City Police Department ("NYPD"), particularly, Ted Dempsey and Neil Walsh, for facilitating the NCC's logistical coordination and presence at Police Headquarters. She also thanked the NCC's Steering Committee, its subcommittee leaders, and everyone who has participated in the NCC process, and expressed her appreciation for the energy and dedication participants have brought to the NCC process. Additionally, Ms. Wallman stated the importance of continued devotion and commitment in making NCC recommendations consensus-based ones, which can be given to the FCC as such. She said the NCC will continue to seek ways to ensure the broadest possible participation in the NCC process. Further, she noted that cost savings could continue to be effected – and travel minimized -- by use of conference calls and other means of electronic communications.

Ms. Wallman said she knows that achieving the NCC's goals will not be a perfect process and that some frustration inevitably will occur. She expressed the hope that NCC members would speak with her, with Michael Wilhelm, NCC Designated Federal Official ("DFO"), or any Steering Committee members when process problems arise. She also commended efforts of the frequency coordinators in continuing to work together, looked forward to hearing about the results of their upcoming meeting in early December, and commended NPSTC for facilitating informal frequency coordinator discussions. Ms. Wallman then called for the report from the Interoperability Subcommittee.

· *NCC Subcommittee Reports*

Interoperability Subcommittee Report. John Powell, Chair, said he was awaiting copies of two reports concerning action taken in the previous day's Subcommittee meeting and would furnish those reports to the Steering Committee as soon as they became available. He noted that, after the last Subcommittee meeting in Lansing, Michigan, he had forwarded to the Steering Committee a recommendation concerning trunking of the interoperability channels. Subsequently, the Steering Committee requested the Subcommittee to refine its recommendation with particular attention paid to the issue of priority access to trunked channels when the need arose. Mr. Powell said his Subcommittee would forward later that day two recommendations, unanimously approved by the Subcommittee, regarding: (1) voice requirements for interoperability

including channel nomenclature, identifying number of channels, specific services, etc.; and (2) questions on the trunked interoperability channel issue, specifically, prioritization and a method of notifying users when a higher priority should be implemented so trunking or conventional use at a lower priority could be interrupted while higher priority communications were taking place. He said other action items would be included in a follow-up letter, one of which was a repeated recommendation that voice interoperability capability need not be supplied in radios designed for data-only transmission on the narrow-band interoperability channels. Mr. Powell stated that the Subcommittee interpreted the current FCC rules as requiring voice capability on data-only radios and that the Subcommittee would recommend to the Steering Committee that – which should in turn recommend to the FCC -- that data-only radios not be required to have voice interoperability capability

Mr. Powell said that it was the consensus of the Subcommittee that encryption not be permitted on channels that the Subcommittee proposed be used as calling channels, but that encryption should be optional on all other narrow-band channels. If the Subcommittee's recommendation is implemented, the Technology Subcommittee should identify a standard whereby, with the appropriate "key," one could communicate with other users in an encrypted mode on channels other than the calling channels. He said the Subcommittee spent considerable time discussing data, transmission and heard two data-related presentations, one from FreeSpace and one from Dataradio. The subcommittee's discussions were generally focused on data requirements, potential data equipment and future service offerings. Working Group 5 chair, Dave Buchanan, offered to chair a new Working.Group 6 to identify specific user needs for both narrowband and wideband data. Relying on some work already completed, Mr. Buchanan believes that his new Working Group could quickly define user needs so that the Subcommittee may examine the issue of requiring an interoperability standard for data in narrowband interoperability channels. Mr. Buchanan noted that the Federal Communications Commission's Public Safety Report and Order [FCC 98-191, adopted August 1998, released September 1998] ("R&O") did not discuss the matter of narrowband data transmission in any detail. Noting the two earlier mentioned reports just arrived, Mr. Powell had them distributed to the Steering Committee. He advised the Steering Committee and attendees present that the Project 25 Committee, on November 12, approved Project 25 Phase II dealing with the use of 6.25 kHz or equivalent technologies, including TDMA. Mr. Powell said that Ericsson presented the Project 25 Committee with a proposal for a two-slot TDMA system and that TETRA submitted a proposal for a four-slot proposal system operating with a 25 kHz bandwidth. Mr. Powell said both organizations met preliminary requirements that the Project 25 established for Phase II offerings, including compatibility with Phase I, and use of a 12.5 conventional common air interface, which would be included in all subscriber units for interoperability. There being no questions for Mr. Powell, Ms. Wallman then called for the report from the Technology Subcommittee.

Technology Subcommittee Report. Glen Nash, Chair, said that after reviewing the matrix prepared by the Narrow Band Working Group and after evaluation of competing technologies, the Subcommittee recommended that the ANSI/TIA/EIA 102.BABA

Project 25 Vocoder [*i.e.*, digitized voice] description be recommended as the standard for the Vocoder portion of a narrowband standard. Mr. Nash said there was wide consensus for recommending the vocoder and that only one party abstained from the consensus process. Mr. Nash said that the matrix – and the Subcommittee's lengthy discussions -- treated: (a) the ANSI TIA/EIA 102.BAA-1 Project 25 FDMA Common Air Interface ("CAI") using a 12.5 kHz bandwidth (Phase I mode); (b) the same standard but using the 6.25 kHz (Phase II) mode; and (c) the ANSI 396 DMO mode of operation). After considerable deliberation, the Subcommittee recommended to the Steering Committee that the ANSI TIA/EIA 102.BAA-1 FDMA CAI using the 12.5 kHz (Phase I) mode be adopted. Mr. Nash said much discussion centered on the need to immediately select a standard so equipment could be made available and that based on manufacturer input, 6.25 kHz bandwidth (Phase II) equipment would not be available for several years. Thus, while 6.25 kHz bandwidth per voice channel is the mode most favored by the FCC, the issue of timeliness was the overriding factor for the Subcommittee's 12.5 kHz (Phase I) recommendation.

Mr. Nash noted that the Wideband Working Group has not made significant progress on a wideband interoperability standard. The Subcommittee believes that the lack of progress is due to the lack of standards for wide band RF applications. It was suggested that AMPS, or a similar protocol, be adopted as an interim standard and accreddited through the ANSI process. Mr. Nash indicated that the Subcommittee would request assistance from TIA to establish such a standard. He said the Spectrum Working Group is collecting information regarding its work assignments; and the Receiver Standards Working Group has been working with TIA and is apparently close to having a recommendation for the Subcommittee. He added that based on the discussions in the earlier meeting of the Interoperability Subcommittee, the Technology Subcommittee was evaluating an encryption standard. If such a standard is developed, a rulemaking petition seeking adoption of the standard should be filed with the FCC. Mr. Nash noted that encryption should not be required on all radios. However, should encryption be implemented in a radio, on interoperability channels it should conform to the encryption method adopted as a standard. He said that the Project 25 series of ANSI 102 documents currently describes a number of different encryption modes. Mr. Nash stated that Federal personnel have informed him that the DES mode included in the Project 25 standards is nearing its life cycle and that federal agencies have been developing a new standard, FI-PS 46. The Subcommittee believes that the upgraded version of DES be adopted rather than the encryption standard contained in the ANSI 102 document.

In response to a question from Ms. Wallman concerning the expected life cycle of the development of FI-PS, Mr. Nash said that FI-PS 46-3 is published and is going through the TIA process. He, thus, said it appeared the Subcommittee could consider it as the recommended standard prior to ANSI final approval. Mr. Ernest Hofmeister, Steering Committee Member, commented that any future vocoder have backward compatibility. In response, Mr. Nash expressed concern that once manufacturers begin building equipment and an installed base of equipment develops, a *de facto* standard would arise and users would resist changing to another standard until the cost of their existing

equipment had been amortized. There being no further questions for Mr. Nash, Ms. Wallman called for the report of the Implementation Subcommittee.

Implementation Subcommittee Report. Ted Dempsey, Chair, thanked Mr. Richard DeMello for chairing the Subcommittee during the past six months. He then said the Subcommittee's meeting earlier that morning centered around two issues, namely, (a) DTV transition and monitoring thereof, and (2) a means of encouraging DTV transition as soon as possible to free up the 700 MHz spectrum. He said Dave Eierman, Chairman of the Working Group, has requested help from all Steering Committee members and all NCC members to monitor the transition in everyone's respective region and inform the Subcommittee of the status. Mr. Dempsey said the Subcommittee was submitting with its report a draft white paper outlining the 746-806 MHz national regional plan and that comments would be appreciated as soon as possible in that Fred Griffin needs comments submitted to him by December 10, so he can give results to Mr. Dempsey by December 15. Mr. Dempsey also said the Subcommittee was considering a proposal for a to-be-named Working Group to be headed by Tom Tollman, NIJ, to discuss/study funding issues, *e.g.*, (a) funding construction of systems, particularly those that implement interoperability channels; and (b) whether there is a means to fund some regional planning groups, state planning groups, etc. Mr. Dempsey added that the NIJ currently is preparing a RFP to solicit a vendor for the pre-coordination database, which, is projected for completion in February, 2000.

Harlin McEwen, Steering Committee Member, said Mr. Tollman was a good choice for the funding study. He stated a strategy was needed for next year's budget process wherein there is a coordinated public safety community effort to approach the Congress and perhaps the Administration for funding. He believed the International Association of Chiefs of Police, the Fire Chiefs, and many other organizations would be supportive. There were no more comments or questions directed to Mr. Dempsey.

· *FLEWUG Presentation*

Julio ("Rick") Murphy, Steering Committee Member, said the Steering Committee and the Federal Law Enforcement Wireless Users Group ("FLEWUG") is very concerned about adjacent channel interference to 700 MHz public safety spectrum. He said the National Telecommunications and Information Administration (NTIA) is the largest member of FLEWUG and produced a *White Paper* analyzing the maximum acceptable level of received adjacent channel interference. Mr. Murphy said that the *White Paper* was formally presented to the FCC earlier that day and that Ed Drocella, of FLEWUG, would deliver a slide presentation on the subject of the White Paper.

Mr. Drocella then gave his slide presentation, which was entitled *Analysis of Adjacent Band Emission Limits for Transmitters Operating in the 746-764/776-794 MHz Bands*. His presentation centered around protection of the 746 to 764 MHz, 776-794 MHz bands for public safety operations. He said there currently were two guard band proposals for the 746 MHz and 776 MHz bands, one by Motorola and one by

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FreeSpace Communications. In his presentation, he briefly provided background leading to the *White Paper* and then provided a detailed technical discussion on the subjects raised in the document. Mr. Drocella said there were alternative approaches to developing an interference threshold, namely, a noise-limited system or an interference-limited system. Among some of the detailed, technical items Mr. Drocella discussed were the FCC's adjacent emission limit of 43 +10 log transmit power; conservative carrier to noise ratios, and the use of milliwatts per kHz as a limitation on adjacent channel emissions. [Editorial note: the FLEWUG slide presentation is part of the NCC's public file.]

Harlin McEwen commented that procedures should be put in place to insure that there is a rapid and effective response to complaints of interference to public safety systems. Mr. Drocella responded, saying that, at some given distance between the interfering transmitter and victim receiver, interference will occur. Glen Nash commented that a -78 dBC limit is not an adequate way of insuring against adjacent channel interference. Mr. Drocella responded that a better proposal would be to define it in terms of 70 plus 10 Log(ERP). Derek Shaffer, of FreeSpace Communications, supported an absolute limit on the power of adjacent channel transmitters. He noted that in FreeSpace's recent filings, there was more detail about interference protection offered under its plan. Mr. Ernest Hofmeister, Ericsson, thanked FLEWUG for doing the analysis, saying it was balanced and based on fundamentals on which all engineers could agree. Ms. Wallman thanked Mr. Drocella and Don Speights of NTIA.

· Ms. Wallman called a brief recess (which was taken from approximately 2:30 p.m. to 2:35 p.m.)

· Ms. Wallman reconvened the meeting. She said the NCC was honored to have at the meeting Howard Safir, 39th Police Commissioner of the City of New York. She provided Commissioner Safir's biographical information. Commissioner Safir then addressed the attendees. He briefly talked about the Public Safety Wireless Advisory Committee ("PSWAC") and its report, existing uses of radio communications systems, wireless technology and potential use of radio communication from the law enforcement perspective, and the critical nature of interoperability in relation to the public safety community's ability to respond rapidly and efficiently to emergency situations. He provided examples of recent such emergency situations arising in New York. Commissioner Safir requested that NCC recommendations provide for the distribution of the newly allocated spectrum for public safety in a manner which is efficient and permits maximum interoperability, and will permit the public safety community to make full use of developments in technology.

· Ms. Wallman called a brief recess (which was taken from approximately 2:45 p.m. to 2:55 p.m.)

· Ms. Wallman reconvened the meeting. She said that Nokia will be sending her a note identifying some concerns that Nokia has, and that she will share Nokia's concerns with the Steering Committee for Steering Committee. Ms. Wallman then opened the floor for

general public discussion.

Public Discussion/Open Microphone (Audience Participation)

Carlton Wells, State of Florida, expressed his thanks to participants involved in the exchange of e-mail, telephone, facsimile, etc., relating to NCC matters.

Robert Schlieman, New York State Police, said there were discussions during some NCC subcommittee meetings concerning digital television allotments in Mexico and Canada. He suggested that the NCC should register its position on such allotments with the FCC. He said he has a slide program showing significant impact in the New York State area from digital television stations proposed along the Canadian border. He stated that these allotments effectively preclude use of 700 MHz public safety spectrum within 100 km of the Canadian border. He believes it possible to devise a channel plan that would minimize interference between digital television and public safety radio facilities. He noted that the Canadian public safety people wrote a position paper seeking to coordinate 700 MHz public safety spectrum planning with that of the United States. Mr. Schlieman believes such coordination could be effected, patterned on the NPSTC agreement.

Harlin McEwen said border issues are properly resolved through international negotiations under the U.S. Department of State. He added that when he was a police chief in New York State, interference problems with Canada often were resolved on a police department-to-department basis. He said understanding of the Regional Planning Committee ("RPC") process is a prerequisite for meaningful discussion of interference issues.

Mr. Schlieman said that industry in Canada does not hesitate to contact U.S. public safety groups when there is potential interference from a NPSTC allocation. Resolution is usually achieved in discussions with the appropriate RPC technical chair. However, he stated that, technically, United States public safety representatives may not engage in similar negotiations with the Canadians. However, he agrees with Mr. McEwen that person-to-person contacts are effective in solving cross-border interference problems. Mr. Schlieman believes the FCC provides technical support to the U.S. Department of State but that the process – which currently is not an open one – should provide for public participation.

Ms. Wallman said that she seeks guidance from Michael Wilhelm, the NCC's DFO, when deciding whether the Steering Committee should take a position on matters pending at the FCC. Mr. Schlieman followed up, saying New York State probably will file a petition with the FCC on the issue of cross-border interference.

David Buchanan, County of San Bernadino, said the same cross-border interference issues apply to Mexico. He said that the City and County of San Diego have begun the regional planning process. When cross-border interference issues are identified, they are referred to the FCC, which, in turn, raises the matter with the State Department.

The State Department then discusses and attempts to resolve the issue with Mexican representatives.

Art McDole, APCO, said the FCC R&O contains "little meat" concerning the regional planning process, and there is no oversight provided. He said APCO was concerned about the lack of FCC oversight of the process.

Bob Pierce sought information about NCC actions subsequent to the two NCC January meetings, for example the role of the Technology Subcommittee between now and the final NCC recommendation to the FCC. Ms. Wallman responded, saying a schedule had not yet been established. She then provided a typical scenario, e.g., after NCC meetings, she coordinates with Michael Wilhelm to ascertain the subsequent schedule. Taking into consideration the Thanksgiving week, she expected to coordinate with subcommittee leaders and the Steering Committee concerning the upcoming schedule. The schedule information then would be circulated to the NCC membership.

Harlin McEwen commented that those having concerns or objections to any matters, such as the processes used by the NCC, should participate in the process both orally and in writing to have their voices heard. He pointed out the importance of raising matters in a timely fashion as opposed to complaining after the Subcommittee and NCC meetings have taken place. While recognizing that the bandwidth issue is a very touchy one, he said many people have been involved in the process for a long time, and the NCC must move forward with a recommendation. He pointed out that the entire process must be centered around what is best for the people of the U.S. as opposed to any group's own wishes.

· *Future Meetings*

Ms. Wallman said that the next set of meetings would be in Washington on January 13 and 14, 2000, and also in San Francisco in January. [Editorial Note: following the Washington meeting, another meeting will be held in San Francisco, at the City Hall on January 27 and 28, 2000.]

· There being no further discussion or comments, Ms. Wallman wished everyone a safe trip home.

(Whereupon the meeting was adjourned at 3:15 p.m., Friday, November 19, 1999.)

> Prepared by: Bert Weintraub
> Attorney Advisor
> Public Safety & Private Wireless Division
> Wireless Telecommunications Bureau
> Federal Communications Commission

Certified as to accuracy:

_____

Kathleen Wallman

Date: _____

Public Safety

National Coordination Committee

MINUTES OF THE FIFTH MEETING

Washington, D. C.

January 14, 2000

MINUTES OF THE FIFTH MEETING OF THE
PUBLIC SAFETY NATIONAL COORDINATION COMMITTEE

Date/Time: Friday, January 14, 2000; Meeting commenced at 1:40 p.m.

Address: Federal Communications Commission
                Commission Meeting Room
                445 – 12th Street, S.W.
                Washington, D.C. 20554

Attendees: See attached list

Kathleen Wallman, National Coordination Committee ("NCC") Chair, convened the fifth meeting of the NCC. She stated that the NCC had very productive subcommittee meetings the previous day and a half. She mentioned that one more session for Subcommittee meetings and the NCC General Membership meeting would be held in San Francisco on January 27, and 28, 2000, respectively, and that at the end of February, the NCC owes a report to the FCC. Ms. Wallman then called for the report from the NCC's Interoperability Subcommittee.

Interoperability Subcommittee Report. John Powell, Chair, said the Subcommittee formed a new working group, Working Group 6, chaired by Dave Buchanan, at the New York Subcommittee meeting to look at operational requirements for interoperability data for narrowband and wideband data. He said interested participants in this working group are encouraged to contact Mr. Buchanan. Mr Powell said much Subcommittee work between the New York meeting and yesterday's meeting were stymied because of attention focused on Y2K matters by many of the attendees present. He said that Working Group 3, chaired by Carlton Wells, raised an issue for presentation to the NCC Steering Committee which pertained to adding a footnote to one of the recommendations made two of the designated interoperable channels labeled for mobile repeater applications. He said that the recommendations would more clearly define what was meant by the FCC station class definitions, i.e., FB2T (for temporary locations) and MO3 (for extender operations), both being permitted on the two channel pairs would be added by footnote would be given to Steering Committee. He said that Don Pfohl, who chairs Working Group 4, has put together list of the Regional Plan Convenors, which will be available and will play a key role for the Subcommittee as well as the Implementation Subcommittee. Most of discussion was in Working Group 6 regarding data standards for narrowband and wideband, seen as "two parts to the puzzle." Mr. Powell said he submitted a proposal using the already adopted ANSI 102 Series 9600 Data Standard coupled with the AX.25 open architect standard. He said he hoped to have equipment demonstrated at the San Francisco meeting. Regarding the wideband data issue, Mr. Buchanan's Working Group is working with the Project 34 Statement of Requirements, which has been made available and is posted on APCO's website (web address included in documents submitted to the Steering Committee yesterday). Mr. Powell said his Subcommittee was adding into the document the requirements for the spectrum available in the 700 MHz band. He said there also was discussion on data users roaming into and out of other users' systems. He then mentioned his discussion with Allan Caldwell of the International Association of Fire Chiefs regarding the need to adopt standard operational procedures for use on the interoperable channels and the recommendation to adopt the Incident Command System (ICS), which has been mandated by a number of states. Finally, Mr. Powell initiated a brief discussion concerning steering committee member Marilyn Ward's request that the Subcommittee recommend Commission adoption of a rule that would require applicants to engage in pre-coordination of their applications using the NIJ pre-coordination database.

Ms. Wallman informed Mr. Powell of an issue raised in discussions with the Steering Committee regarding the Committee's concern about what occurs operationally on channels if trunking is permitted on a secondary basis. Specifically, the Steering Committee is concerned about priority of access when an emergency arises and a channel must be released from a trunked system and used in the conventional mode for interoperability purposes. Ms. Wallman noted the suggestion that the priority issue could be resolved if the Regional Planning Committees (RPCs) developed standard operating procedures whereby channels could be released from trunking immediately when the need arises. Ms. Wallman suggested that Mr. Powell's Subcommittee could prepare model language for use by the RPCs in resolving priority issues. Mr. Powell responded by saying that assignment of priorities is an issue for all interoperability channels, not only those that might be used for secondary trunking. Ms. Wallman said she would like to have the priority matter resolved at the San Francisco meeting.

A wide-ranging, general, and lengthy discussion then ensued concerning the priority issue. The following individuals spoke, and, collectively, made various comments, posed various questions, and provided information based on their experiences, understandings, etc. These individuals were David Buchanan, Steven Proctor, Harlin McEwen, Glen Nash, Kathleen Wallman, Ali Shanami, Ron Haraseth, and John Powell. Mr. Powell said that Carlton Wells, whose Working Group handles the detailed operational requirements would be provided information regarding implementation and management of a priority system.

Schedule for Future Meetings. Ms. Wallman addressed possible dates for the next group of NCC and Subcommittee meetings. There was general consensus that the Thursday-Friday sessions (*i.e.*, the Subcommittees meetings being held all day Thursday and on Friday mornings and the NCC general membership meetings being held on Friday afternoons) seemed to be working well and, thus, would be maintained. There was, though, no apparent consensus for specific dates for the next group of meetings.

Remarks of Thomas Sugrue. Ms. Wallman said that the NCC was honored to have at the meeting Thomas Sugrue, Bureau Chief, Wireless Telecommunications Bureau, FCC. Ms. Wallman provided Mr. Sugrue's biographical information. Mr. Sugrue then addressed the attendees. He said he has been keeping tabs on the NCC's work, has observed that the NCC has made substantial progress, and, noting that the NCC is comprised of volunteers, he thanked, on behalf of the Commission, the NCC for its efforts to date. Mr. Sugrue stated that the FCC looked forward to receiving the NCC's recommendation on the issue of trunking and technical standards in February, which, he noted, would be critical to the Commission's decision-making process. He said he thought the Commission would find most valuable standards that represent the latest in today's technology and which have a clear, timely, and realistic migration path to more spectrum-efficient technology in the future. He observed that there was some sentiment within the NCC that the February recommendations for technical standards be characterized as final standards. Mr. Sugrue suggested that this would signal an "as far as we go" view, *i.e.*, that the NCC would be saying the task of considering technical standards is over and would come to a full stop as soon as the initial recommendations are made. Mr. Sugrue thought this would be unfortunate and unnecessary.

Mr. Sugrue said that, on the other hand, the Wireless Bureau would be concerned that public safety licensees would be reluctant to buy interim standard radios that could be made obsolete if standards changed. Moreover, he said, the Bureau would have no interest in recommending to the Commission final standards that would quickly render obsolete any equipment built to an interim standard. He thus hoped that regardless of how the standard is characterized, it both

permits near-term deployment of 700 MHz systems and enables the long-term realization of the spectrum efficiency benefits of developments in technology. Thus, he said, striking that balance and explaining how the NCC's recommendations strike that balance would be very useful to the FCC. Mr. Sugrue said that on the general category channels, the FCC is requiring trunking on all systems with six or more channels, and he rhetorically asked if the FCC also should require trunking on the interoperability channels. He said he understood there might be some difference of opinion within the NCC on the subject and noted that some NCC members believe operational considerations make trunking a bad choice for such channels. He said other NCC members think trunking should be permitted on the interoperability channels as they could be made available on a secondary basis to become part of larger, trunked systems for day-to-day communications. Mr. Sugrue said that if this latter type of trunking is done, provisions would be needed to immediately return the trunked channels to conventional use for interoperability in the event of an emergency. He similarly said that as with the technical standards, the Commission has the same goal, *i.e.*, receiving NCC recommendations offering spectrum efficiency consistent with rapid deployment of the technology, affordable cost, and conformity to public safety's operational requirments.

Mr. Sugrue observed that the NCC has made considerable progress on recommendations for narrowband voice channels but has not yet addressed the matter of data transmission on the narrowband channels. Thus, he said the Commission is looking to the NCC to recommend narrowband technical standards that include data transmission as well as voice and that he hoped those standards could be provided as part of the NCC's February recommendations. He said: that he also understood that the NCC subcommittees have encountered difficulty defining a wideband data standard; that Ms. Wallman asked TIA to develop a wideband data standard; that while Ms. Wallman's request is being considered by the TIA standards committee, it might be possible for the NCC to at least look at minimum wideband data standards that could be put in place to meet currently known user requirements; and that if, possible, the NCC could address this subject in its February recommendations. Mr. Sugrue re-emphasized that, based on the importance of the NCC's work with the largest allocation of spectrum ever made to public safety, it is crucial for the NCC to "get it right" the first time. He said the NCC not only must be concerned about technical issues but, also, the public safety community would be best served if the NCC recommendations result in vigorous competition among manufacturers. He again thanked the NCC for its hard work and especially thanked both Kathy Wallman for her leadership in chairing the NCC and the wise guidance provided by the NCC Steering Committee.

Schedule for Future Meetings (continued). At the conclusion of Mr. Sugure's remarks, Ms. Wallman returned to the matter of scheduling future NCC and Subcommittee meetings. Based on apparent consensus of attendees, she set April 6 and 7, 2000, and June 1 and 2, 2000, for the next groups of meetings, and set Washington, D.C. (*i.e.*, FCC Headquarters) as the location for these meetings. She also said it was reasonably convenient last year for meetings in August and, thus, she suggested that meetings for the rest of the summer might be held in conjunction with other meetings or seminars that NCC members might be attending elsewhere.

Ms. Wallman called for a brief recess (which was taken from 2:45 p.m. to 3:05 p.m.) Upon reconvening the meeting, Ms. Wallman requested the report from the Technology Subcommittee.

Technology Subcommittee Report. Glen Nash, Chair, said that the previous day's Subcommittee meeting was long, with a lot of information exchanged and discussed. He said Tim Goodall of Motorola gave a presentation on wideband data applications and what the future of wideband data transmission looked like. Mr. Nash summarized Mr. Goodall's conclusions presentation by mentioning, among other things: that there is a trend for using Internet Protocol (IB) standards for wideband data. He also noted that the industry expected tremendous growth in

data applications, far exceeding those seen in voice. He noted that with data transmission, there are tradeoffs between the amount of data being transmitted versus the amount of time for transmission; that the future indicates a packet- type data network, and that in sending packet information, one must consider, in particular, the "ACK/NAK" (*i.e.*, acknowledged/not acknowledged) protocol.

Mr. Nash said that both prior to, and during Mr. Goodall's presentation, various items came to mind. He said that, for example, the Subcommittee has viewed a data rate of 384 kilobits as being a consensus target. However, he questioned whether there should be one, or several, data rate standards; and, if the latter, how many standards are needed. He also raised the issue of whether a 150 kHz channel was adequate to meet data transmission requirements. He said that such questions have been forwarded to the Wideband Applications Working Group headed by Dave Buchanan, and hopefully, answers would be forthcoming. Mr. Nash said that the Narrowband Working Group, which submitted a report at the last meeting recommending the Project 25 Phase 1 and ANSI 102 Series, has not done additional work. He noted that questions had been raised concerning an appropriate encryption standard, but that the encryption working group had not yet submitted a recommendation. However, there are various ongoing discussions taking place with various federal governmental entities. He said there was some discussion in the Subcommittee regarding narrowband data standards and the Subcommittee still has a question as to what the target is for such standards.

Mr. Nash said that there was a report from Ron Haraseth, Chair of the Spectrum Working Group, wherein Mr. Haraseth made three recommendations, one of which the Subcommittee acted on and is forwarding to the NCC Steering Committee for its consideration, *i.e.*, that the NCC's Technology Subcommittee recommends that the FCC acknowledge the industry effort to develop RF system performance standards by TIA and EIA; specifically, the TSB 88 document entitled, "Wireless Communication Systems Performance and Noise and Interference Limited Situations Recommended Methods for Technology Independent Modeling Simulation and Verification". Mr. Nash said that he had received a report from Don Pfohl, Chair of the Receiver Standards Working Group. Mr. Nash said since the last meeting, TIA had not met and, thus, no progress had been made regarding establishing receiver standards. Hopefully, he said, after TIA meets next week in Arizona, there would be some action and, thus, something to report in San Francisco. He said that there had been discussions of whether different receiver standards should be developed for receivers used in rural and urban settings. If so, the cost of the radios used in a rural setting could be lower.

Michael Wilhelm, Designated Federal Officer (DFO), requested that Mr. Nash address the Subcommittee's position relative to Mr. Sugrue's estimate of the Wireless Bureau's expectations for the February recommendations. Specifically, Mr. Wilhelm asked about the current status of the Subcommittee, what the Subcommittee planned for the upcoming San Francisco meeting, and how the NCC would get information into a final document for submission to the FCC? Mr. Nash responded that he did not think there could be a data standard recommendation by February either for narrowband or wideband data. He said the wideband, in particular, and the narrowband modes, were not well defined and that, to date, no one has come forward with the specific technology that would provide a 384 kilobit data rate within a 150 kHz bandwith. Moreover, there does not appear to be an existing standard or document that could be pulled off-the-shelf to forward as a recommendation. Mr. Wilhelm noted that the Commission's required throughput rate for the 700 MHz channels was 4.8 kilobits per 6.25 kHz, and he asked Mr. Nash if that were the throughput goal the Subcommittee was working toward. Mr. Nash replied that such a data rate described a spectral efficiency rate but not the data throughput rate.

Based on the Wilhelm/Nash exchange, there was a wide-ranging, detailed, technical discussion regarding data standards. The following individuals spoke on the matter and, collectively, made various comments, posed questions, provided hypotheticals and information based on their experiences and understandings, sought and provided clarifications, etc., in addressing various aspects of data standards as well as ANSI standards and the open process of arriving at recommendations: Robert Schlieman, Harlin McEwen, Dave Buchanan, Larry Miller (of AASHTO), Michael Wilhelm, Art McDole (of APCO), and Glen Nash. In concluding this portion of the discussion, Kathleen Wallman suggested to Bob Schlieman that the matter be discussed off line and made the subject of the subcommittee's meeting in San Francisco. Mr. Nash agreed. Ms. Wallman then requested the report from the Implementation Subcommittee.

Implementation Subcommittee Report. Tom Tolman, Vice Chair, said he was giving the report as Ted Dempsey had a family emergency, and Richard DeMello, Second Vice Chair, was unavailable. He thanked Emil Vogel for assembling the report. He said that, during the Subcommittee's meeting, David Eierman, Chair of Working Group 2, reported on the status of DTV (Digital Television) transition, which could be summarized by saying that if commercial services move into the 700 MHz band, they will help move TV out of the band. Mr. Tolman said that Ali Shanami, Chair of Working Group 4, reported on the status of technology policy. Mr. Tolman said much of the Implementation Subcommittee's work depends on work of the other subcommittees. He said Fred Griffin, Chair of Working Group 3, Policies and Recommendations, reported that material on regional planning had been submitted on a listserver for comments, and that only a few comments had been received. Mr. Tolman said that Marilyn Ward, on behalf of NPSTC, inquired about the status of the NPSTC proposal contained in a letter submitted to the Steering Committee this past Fall regarding a database. Mr. Tolman said the Subcommittee was seeking a response regarding the pre-coordination database and is prepared to proceed with development. In this regard, he said the Subcommittee recommends that the NCC support the database proposal for use by the RPCs. Mr. Tolman said that, for the database to be effective, the FCC should mandate that each of the 55 regional planning committees provide input. He also said a letter concerning the database would be submitted today to the Steering Committee. He said there was discussion on funding mechanisms, under the purview of Working Group 6, and that Tim Loewenstein would be setting up a listserve for this Working Group. Mr. Tolman said there was discussion to the effect that, for this Working Group to be effective, there had to be a clearly-defined focus on funding. He said key points in this regard included voluntary assistance to, and developing costs (including costs for meetings) for, RPCs; implementing systems at least for interoperability channels and possibly other regional interoperability channels developed by RPCs within the general-use blocks, with this list being prioritized. He said there also was discussion on resources for funding, including: (1) an interagency working group (*i.e.*, a combined effort of Departments of Justice, Commerce, and Treasury) which put together an "effort document" for funding public safety. Mr. Tolman said although this effort was unsuccessful, it was suggested the document could be revamped and the matter revisited; and (2) that TIAP (via the National Telecommunications and Information Agency) is known now as TOP (*i.e.*, Telecommunications Opportunities Project). However, the funding from this organization would not apply to the public safety arena. He said it was suggested that a statement of work be developed and presented at the San Francisco meeting.

Fred Griffin, Chair of the Implementation Subcommittee's Policy Working Group 6, said that due to microphone problems at the Subcommittee meeting, he was not heard at that time saying that vendors could be queried about reducing the cost of trunked equipment. Ms. Wallman said that she and Louise Renne had discussed at the recess, the possibility of having part of the San Francisco meeting as an opportunity to look at the synergies between commercial applications and commercial vendors and public safety applications. She said that she, Ms. Wilhelm, Ms.

Renne, and Jayne Lee (Ms. Renne's assistant) would converse to see about developing a forum for discussions along those lines.

Ms. Wallman said that, knowing the Subcommittee's position on acknowledging the NIJ pre-coordination database resolution would be discussed at today's meeting, she briefed the NCC Steering Committee on the issue, and it was her sense that the Steering Committee might be prepared to support the resolution. She then queried the Steering Committee, which concurred by consensus to acknowledge the merits of the database.

Public Discussion (Audience Participation).

Kathleen Wallman asked Michael Wilhlem about: (1) the status of the IPR (*i.e.*, intellectual property rights) letters that are to be given to the NCC and (2) his overview concerning the "end game" leading up to February and past the San Francisco meeting. Mr. Wilhelm responded, saying he anticipated consensus would be reached in San Francisco on adoption of the reports of the Subcommittees. He said there might be need for minor modifications to the reports but if there could be agreement reached on the substantive issues involved, then a covering document could be prepared summarizing the recommendations in non-technical terms. Mr. Wilhelm said that document would be reviewed by the Steering Committee, which could make edits prior to sending it to the Commission. As to the status of the IPR, he said three companies must supply statements that they either will make their IPR available at no cost or will license it on fair, reasonable, and non-discriminatory terms. In this regard, he said the NCC has received two letters which, after minor modification, were satisfactory; and a third letter which requires modification. Concerning the third letter, Mr. Wilhelm said he was going to discuss needed modifications with Ernest Hofmeister. He stated that he did not regard the modifications as contentious because they merely reflected the requirements set out by the FCC in its R&O (*i.e.*, the Public Safety Report and Order, FCC 98-191, adopted August, 1998; released September 1998). Mr. Wilhelm expected the matter to be concluded by the San Francisco meeting.

Harlin McEwen inquired whether NCC General Membership meeting time could be changed consistent with the legal requirements that bind the NCC. Michael Wilhelm noted that minor modifications had been made in the meeting times of previous meetings and he foresaw no problem in doing so for the San Francisco. He said that the important thing is for parties to have notice of what is going to be discussed and the opportunity to participate. Kathleen Wallman said if the Subcommittees were willing to start earlier, the General Membership meeting could be started earlier. Glen Nash suggested that the public notice of the subcommittee meetings specify only the starting time of the first subcommittee meeting and state that the meetings of the subcommittees will be consecutive. That way, if a subcommittee meeting concludes early, the next subcommittee meeting can commence with concomitant savings of time. Carlton Wells suggested that the General Membership meetings should be published with an earlier starting time. Thus, if the subcommittee meetings end early, the General Membership meeting may start early. John Powell commented that westbound flights are difficult but eastbound flights are easy to get.

Larry Miller of AASHTO wanted to clarify what he said at the New York meeting. He read a letter summarizing AASHTO's telecommunications position, which stated, among other things, that if the objective is interoperability, the emphasis should not be limited to mandating a digital standard in the 746 MHz -806 MHz band; and that the objective should include the development of gateways using industry standards and communications switches that can interconnect not only the technologies implemented in this band but also other technologies used in other frequency bands.

Steve Proctor wanted to announce that PSWN has completed a spectrum analysis report and that this report is available in the back of the room.

There being no further discussion or comments, Ms. Wallman thanked the attendees and said that the NCC would see everyone in San Francisco.

(Whereupon the meeting was adjourned at 4:00 p.m., Friday, January 14, 2000.)

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Public Safety & Private Wireless Division
Federal Communications Commission

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Certified as to accuracy:

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     Kathleen Wallman

Date: _____

Public Safety

National Coordination Committee

MINUTES OF THE SIXTH MEETING

San Francisco, California

January 28, 2000

MINUTES OF THE SIXTH MEETING OF THE
PUBLIC SAFETY NATIONAL COORDINATION COMMITTEE

Date/Time: Friday, January 28, 2000; Meeting commenced at 1:40 p.m.

Address: San Francisco City Hall – The Chambers (Room 250)
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

Attendees: See attached list

Kathleen Wallman, National Coordination Committee ("NCC") Chair, convened the sixth meeting of the NCC, welcoming attendees. She noted that the NCC had accomplished much over the past 11 months and is in the process of producing a significant interim report containing a number of recommendations which are due to the Federal Communications Commission ("FCC") February 25, 2000. Ms. Wallman said today's meeting would consist of NCC subcommittee reports summarizing their work over the past year and presenting their recommendations to the Steering Committee. Ms. Wallman thanked Louise Renne, Esq. (NCC Steering Committee member) and her staff for their excellent work in providing the facilities and support for the NCC's January meeting. She then called for the report from the Interoperability Subcommittee.

Interoperability Subcommittee Report. John Powell, Chair, noted that the Subcommittee had been charged with the task of providing guidance on administrative oversight for the interoperability channels and earlier had addressed that issue in revised Document 0036D. He said the document expresses a preference for State management of interoperability channels, with the alternative of regional planning committee ("RPC") management as a fallback position if the States decline the management function. The issue of governance of the interoperability channels constituted the Subcommittee's first recommendation to the NCC Steering Committee. Mr. Powell said the Subcommittee's second recommendation was that the FCC require licensing of subscriber units on the interoperability channels. He said the third recommendation was that the RPCs have oversight for the technical parameters of infrastructure operation (*i.e.*, the base stations or temporary base stations or repeaters implemented within their regions). Moreover, he said, the RPCs should be tasked with developing the operational plans discussed in Recommendation No. 1. Mr. Powell said the Subcommittee's fourth recommendation was establishing a prototype memorandum of understanding ("MOU") initiated between either the state planning committee or the RPC, as appropriate, and the individual user agencies and containing the essential provisions for management of the interoperability channels. He said some of the key criteria of the MOU should include: (1) monitoring the calling channels at all times to identify any declaration of priority use by a calling party; (2) use plain (*i.e.* unencrypted) language on the interoperability channels for all transmissions; and (3) relinquish secondary trunked operation on approved trunking interoperability channels when requested by a conventional user with the same or higher priority.

Mr. Powell also discussed six recommendations contained in a second document, revised Document 0037D, pertaining to low speed data transmission (*i.e.*, data typically transmitted in a channel width of 25 kHz or less): (1) Select one pair of channels for each of the two TV blocks (*i.e.*, TV channels 63-64 and 68-69) and assign them for use as 12.5 kHz channels. He stated that appropriate changes to the Subcommittee's suggested channel assignment plan were made to reflect re-designation of channels for data transmission. (2) A single technical standard for the data channels be selected by the Technology Subcommittee. (3) Identification of a standard that

would support three different transmission modes, *i.e.*, direct unit-to-unit mode in any interoperability scenario, a unit-to-unit mode using one or more stand-alone intermediate stations acting as a repeater or store and forward facility, and a unit-to-unit mode through some type of infrastructure. (4) The data standard must be robust and capable of showing unit I.D.s (identifications). (5) The standard selected should be RF band neutral in order to communicate with subscriber units in other bands through an appropriate gateway. (6) If a subscriber unit has data capability, data must be transmitted and received only according to a data interoperability standard to be specified by the Technology Subcommittee.

Remarks of Chief Peter Hurley. Ms. Wallman deferred questions or comments regarding Mr. Powell's presentation in order to introduce Chief Peter Hurley. Ms. Wallman said Chief Hurley represented the California Police Chiefs Association ("CPCA") and is a CPCA past President with 33 years of California law enforcement service. In his remarks, Chief Hurley said that Marin County, California, of which he currently is Chief of Police, is implementing a county-wide public safety trunked digital radio system. The shared UHF TV band was chosen not only because of the shortage of 800 MHz channels but because of its superior performance characteristics in Marin County's irregular terrain. Chief Hurley said the trunked system uses a portion of the Project 25 (P-25) standards. Because the County chose the P-25 common air interface and vocoder, the system's units will be fully interoperable with those of other UHF public safety agencies. He urged NCC to recommend to the FCC that similar interoperability be provided in the 700 MHz band, saying interoperability is the key to rapid, effective multi-agency voice and data communication. He mentioned that the California Law Enforcement Mutual Aid Radio System ("CLEMARS") is the largest mutual aid radio system in the world, with over 100,000 subscriber units licensed. He recommended CLEMARS as a model to the NCC.

Interoperability Subcommittee Report (continued). Ms. Wallman invited questions for Mr. Powell regarding his Subcommittee presentation. Glenn Nash, representing the State of California, pointed out that, based on a point made by Dataradio Corporation (during the Subcommittee meeting), the NCC needed clarification from the FCC concerning the statement in the FCC's Public Safety Report and Order [FCC 98-191, adopted August, 1998, released September, 1998] ("R&O") that: "All radios offered for sale in this band [*i.e.*, the portion set aside for public safety in the R&O, namely, 764-776 MHz and 794-806 MHz (collectively, the "700 MHz band")] must be capable of operation on the interoperability channels." Clarification is needed on the question of whether the quoted provision requires that "data-only" radios be required to operate on the interoperability channels. Ms. Wallman requested Michael Wilhelm, the NCC's Designated Federal Official ("DFO"), to provide the requested clarification. Ms. Wallman then said that, in describing the work of the Interoperability Subcommittee, the NCC had before it three reports, *i.e.*, trunking, administrative oversight, and low speed data, and an additional matter (addressed below). Wayne Leland (representing absent Steering Committee member Ellen O'Hara) commended the Subcommittee's reports. Ms. Wallman said she understood a consensus among the Steering Committee members in attendance to forward these three reports to the FCC as recommendations. Mr. Powell and Ms. Wallman thanked David Buchanan and Carlton Wells for their efforts as working group members in compiling the reports.

Ms. Wallman said that the referenced additional matter pertained to a previous NCC discussion, concerning contents of a one-page document entitled, "Federal Co-Equal Access to Non-Federal Spectrum in the 764-776 MHz and 794-806 MHz Frequency Band". Ms. Wallman asked whether there was Steering Committee consensus on the substance of the document. Chief Harlin McEwen (Steering Committee member) said it was well-worded document that accurately covers matters previously discussed and decided, and, thus, that he endorsed it. Ms. Wallman thereupon ascertained that there was Steering Committee consensus for the document to be forwarded as

part of the NCC recommendation to the FCC. Ms. Wallman then asked for the NCC's Technology Subcommittee report.

Technology Subcommittee Report. Glen Nash, Chair, said that at the New York meeting, the Subcommittee achieved consensus regarding recommendations to the Steering Committee for the technical standards for voice operation on the narrowband interoperability channels. The consensus standard was identified as ANSI 102.BAAA (the common air interface standard) and ANSI Standard 102.EAEC (a vocoder standard). He said that a dissenting view was registered in a letter sent to Ms. Wallman by Nokia on January 20, 2000. Mr. Nash said that during the Subcommittee's meeting the previous day (*i.e.*, January 27), the Subcommittee listened to Nokia's comments, questioned the company's representatives, and decided not to reverse its recommendation. Mr. Nash therefore recommended to the Steering Committee that it forward the two referenced documents as recommendations to the FCC. Mr. Nash also said that on the previous day the Subcommittee had discussed recommendations regarding a data interoperability standard. He said based on the Interoperability Subcommittee's six requirements for such standard, the Technology Subcommittee arrived at a recommendation to forward to the Steering Committee. The recommendation encompassed five specific documents supporting data operations on the narrowband channels, *i.e.*, (1) ANSI 102.BAAA (common air interface establishing the over-the-air interface for transmission of digital information); (2) a document currently an interim standard with TIA, but balloted and approved for publication as a full ANSI standard pending publication, to be known as ANSI 102.BAEA (a data overview); (3) a document to be known as ANSI 102.BAEB (the packet data specification); (4) a document to be known as ANSI 102.BAEC (a circuit data specification); and (5) a document to be known as ANSI 102.BAEE (the radio control protocol defining the data interoperability mode of operation). Mr. Nash said the Subcommittee the previous day also acted on an encryption standard to recommend to the Steering Committee for forwarding to the FCC. He said the consensus was to recommend a document known as FIPS 46-3,which describes an encryption technique,"Triple DES". In response to Ms. Wallman, Mr. Nash said there was yet no written report to the Steering Committee describing the encryption recommendation but that he would prepare such a report.

Harlin McEwen, on behalf of the membership of the International Association of Chiefs of Police, commended the Subcommittee for its recommendations. He said that they properly took into account user needs for interoperability standards and would result in products that are competitive in the marketplace.

Because there was no written report regarding the encryption recommendation, Ms. Wallman sought Steering Committee advice on how to handle the matter procedurally. A discussion followed in which it was noted that the FIPS 46-3 document would eventually become an ANSI document after ANSI certification. In response to Ernest Hofmeister (Steering Committee member) asking if the encryption standard was required in the February 25th report to the FCC, Mr. Wilhelm said specification of such a standard would be desirable because of the need for non-Federal public safety radios to communicated with federal units that typically employ encryption and that it therefore should be included in the February 25 report. Ms. Wallman suggested that Glen Nash circulate a suggested encryption standard report using the listservers and that the matter be further addressed by the Steering Committee in a conference call prior to issuance of the February 25 report.

Ms. Wallman then asked for additional comments from the Steering Committee. Receiving none, she interpreted that as consensus that the Steering Committee forward a recommendation to the FCC for use of the TIA 102 voice standard. In response to Mr. Nash, Ms. Wallman then asked whether, apart from the encryption matter, there were any views involving the data

recommendation. There were none and Ms. Wallman interpreted that to be an expression of Steering Committee consensus that the Subcommittee's recommendations be forwarded to the FCC. Ms. Wallman then requested the report of the Implementation Subcommittee.

Implementation Subcommittee Report. Richard DeMello, Second Vice Chair, said that the Subcommittee discussed funding, that a funding committee (*i.e.*, working group) was created during the previous meeting in Washington, and that additional members had been added subsequently. He said that, based on Tom Tollman's information, the working group would be developing a specific needs document. He reported that David Eierman advised the Subcommittee members on some DTV activity, particularly with respect to low power stations. Mr. DeMello said the Subcommittee also discussed the spacings necessary if public safety facilities were to operate adjacent to TV stations. He said this discussion led to considering the interference potential of Canadian and Mexican TV stations and discussions concerning negotiations with the two countries. He said that a letter to Ms. Wallman would be drafted for Ted Dempsey's signature addressing the need for interaction with Canada and Mexico in order to move forward with the 700 MHz systems in the United States without undue interference. He then discussed documents distributed immediately prior to the Subcommittee report regarding the activities of the National Public Safety Telecommunications Council ("NPSTC") and the National Institute of Justice ("NIJ"). (Editorial note: the documents he referred to related to the NPSTC database proposal.) Mr. DeMello said the NIJ will be providing funding for part of this project, and that specifications are being developed for the production of the database. In response to a question from Mr. McEwen, Mr. Wilhelm said the appropriate process for obtaining NCC support for the proposed database is for the Subcommittee to forward a letter to the Steering Committee, which, after review, would forward it NCC Chair for submission to the FCC. Mr. McEwen stated he recalled seeing a letter in this regard, did not believe that the Steering Committee had acted on it.

Mr. DeMello said the last issue related to the draft outline for the national and regional plans. He said the Subcommittee had discussed the ten-page document, which consists of bullet points and topics for inclusion in a subsequent report. He said the Subcommittee incorporated, into the document, interoperability standards that had been discussed earlier. He said the Subcommittee spent considerable time discussing the document and added five additional items for consideration, including informational material about DTV and a plan to ensure administrative continuity in the regional planning process. Mr. DeMello said the Subcommittee also discussed funding requirements, licensing, use of interoperability channels by non governmental organizations and membership and voting rights within the RPCs.

In response to a question from Rick Murphy, Mr. DeMello said that, when he referred to state licensing, he meant the state holding the licenses for the interoperability channels and not that the states would issue licenses. Ms. Wallman noted that Mr. DeMello's presentation was not a report for presentation to the FCC but, rather, described the Subcommittee's ongoing work. Hence, no Steering Committee action was required in response to the presentation. She thanked Mr. DeMello and all those working with him.

February 25th Report. Ms. Wallman said that, having heard from all three subcommittees, she believed the Steering Committee had achieved consensus on the content of the February 25th report. She said the February 25th report essentially would consist of the subcommittee reports accompanied by a cover document. She noted that the report would be timely submitted and thanked all concerned for their efforts.

Review of Dates of Upcoming Meetings. It was ascertained that, according to the schedule of meetings previously established, upcoming NCC meetings would be held April 6 and 7, 2000, and June 1 and 2, 2000, at the FCC Headquarters in Washington, D.C.

Public Discussion (Audience Participation). Robert Schlieman read a letter he had provided to Ms. Wallman earlier that day which stated that the State of New York is currently engaged in a planning process to develop a statewide radio communication system for all agencies but is being frustrated by apparent disregard for the U.S. 700 MHz band by the proposed Canadian DTV allotment plan issued March 2, 1999. Mr. Schlieman then presented a PowerPoint presentation entitled, *Impact of Current Canadian Digital Television Transition Allotment Plan, Issue 2, April 1999, upon United States Public Safety use of the 764-776/794-806 MHz band in the New York State area. TV channels 62,63, 64, 65, 67, 68 and 69.* Mr. Schlieman said he gave this presentation at the Public Safety Wireless Network symposium in Lansing, Michigan, on September 23, 1999. He went through a sequence of slides showing the allotment of channels for DTV, and he discussed various technical matters arising out of his desired proactive stance in resolving potential interference problems.

Ms. Wallman said a hard copy of the PowerPoint presentation should be provided to the Steering Committee. She said while the interference matter was urgent, it is a matter of treaty negotiation between the United States and Canada and, thus, she wanted to be procedurally correct in terms of how the NCC might proceed in the matter and would seek the counsel of Mr. Wilhelm.

Mr. Eierman, speaking as a member of the Implementation Subcommittee and chair of the DTV Working Group, said his Working Group will be submitting a letter detailing some of the Canadian/U.S. border issues. He also said that the Canadian/U.S. border problem is not just a New York State issue; rather, it is a problem extending to Seattle, all the Great Lakes, and St. Lawrence Seaway. He said Mr. Schlieman's presentation would be useful backup information for inclusion in the letter. Mr. McEwen said his concern is that such matters have not been easily resolved in the past and, thus, he wanted to know how to bring the matter to the U.S. State Department for resolution. Ms. Wallman concurred with Mr. McEwen and said she wanted Mr. Wilhelm's advice and also wanted to speak with Thomas Sugrue (Chief of the FCC's Wireless Telecommunications Bureau ("WTB")) on the matter. Mr. Powell added that the problem is not solely with Canada but that interference issues also exist with respect to Mexico. He noted that there had been negotiations with Mexico concerning cross-border use of the NPSPAC channels.

Ms. Wallman informed the meeting that, earlier that day, she had received a memorandum from Steering Committee member Douglas Aiken who had taken issue with virtually all of the Subcommittee recommendations. She said she would speak to Mr. Aiken concerning how he preferred his views to be expressed in the February 25 report, *e.g.* as a dissenting opionion.

Ms. Wallman reiterated her thanks to Ms. Renne, Jayne Lee, Julia Friedlander and other San Francisco city employees who worked in support of the planning and execution of the San Francisco meeting. Ms. Wallman also thanked Bert Weintraub and Joy Alford of the WTB's Public Safety & Private Wireless Division ("PSPWD")). She acknowledged the presence in the audience of Jeanne Kowalski, PSPWD Deputy Chief for Public Safety. She also conveyed her thanks to Mr. Wilhelm, the NCC's Designated Federal Officer, and to the subcommittee and working group members who had contributed to the reports discussed during the meeting.

(Whereupon the meeting was adjourned at 3:20 p.m., Friday, January 28, 2000.)

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Certified as to accuracy:

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      Kathleen Wallman

Date: _____