

**MINUTES OF THE EIGHTH MEETING OF THE  
PUBLIC SAFETY NATIONAL COORDINATION COMMITTEE**

**Date/Time:** Friday, June 2, 2000; Meeting commenced at 11:50 a.m.

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

**Attendees:** See attached list

**Convening of Meeting:** Kathleen Wallman, National Coordination Committee (“NCC”) Chairperson, convened the eighth meeting of the NCC, welcoming attendees. Ms. Wallman requested the sign language interpreter to inquire by signing whether anyone needed such services, no one responded, and she then excused the sign language interpreter. Next, Subcommittee Reports were presented.

**Interoperability Subcommittee Report.** In the absence of John Powell, Chair, Dave Buchanan presented the report. He said Work Group 2 is working hard on the issue of the Incident Command System, some outstanding matters still remain, and, thus, action on the issue would be deferred until September. Work Group 3 reviewed several proposed changes to the band plan and, out of three options, one option -- known as the “Wells Option” -- was modified to correct for interoperability (“I/O”) channel spacing for easier combining of channels, with copies of the plan being available via handout. Mr. Buchanan said this modification would require editorial changes to I/O channel labeling and, if they would be unacceptable to the Federal Communications Commission (“FCC”), the Group would need to review labeling for compatibility with the band plan. He stated that such work on both wideband and narrowband data channels would entail a review of voice needs for compatibility purposes, and the work is planned for September. He said there was a recommendation for the NCC Steering Committee to consider changing an earlier recommendation to clarify that, regarding I/O mutual aid agreements, states should (as opposed to “shall”) be encouraged to form I/O executive committees and also to include mutual agreements with regional planning committees (“RPCs”) in such planning. Finally, Mr. Buchanan said the last item of business (which took most of the meeting time) involved finalizing a statement of requirements for wideband data standards to present to TIA so the latter could begin its work. He stated that in contrast to narrowband data, there was more uncertainty, which took more time to work through the issues. Nonetheless, he continued, after several modifications of a proposal that was disseminated on the listserv and approved with no objections at the Subcommittee meeting, the Subcommittee wanted Steering Committee approval for giving the proposal to Wayne Leland for use at the TIA meeting the following week.

Harland McEwen stated he wanted it on the record that the IACP opposes anything which mandates state I/O executive committees because he said the process should be driven by the RPCs and not by any state entity where there could be political control. He said the public safety users should drive the process, and the RPC, representing people in various states, will do what’s best for users. Mr. Buchanan agreed but wanted to clarify that it is mandatory to sign a mutual aid agreement, whether at the regional or the state level.

After some discussion, including clarifying one example of uses and I/O incidents shown in handouts made available, the Steering Committee arrived at consensus regarding a revised frequency/band plan.

**Technology Subcommittee Report.** Glen Nash, Chair, said there were presentations mainly from Federal personnel regarding the encryption standard, who requested that the Subcommittee delay recommending a standard because the Federal agencies are reviewing whether to go to triple DES standard or bypass this standard and directly go to AES as the recommended encryption standard. He also mentioned there had been a presentation on receiver performance standards and an ensuing discussion on whether or not minimum standards for receiver performance should be established, what those minimums should be, whether there should be “A” and “B” geographic areas, and what the implications might be for the frequency coordination process. Mr. Nash stated that there are technology issues that were presented in a document, identified as Draft No. 1, dated 5-10-2000 (“Draft No. 1”), containing specific recommendations including whether standards should meet or exceed FCC non-corrected data rate of 384 kilobits per second, that the TIA should explore the constraints and develop time frames for portable units as well as investigate the error and data throughput degradation issues which might result from mobile ground speed at both slower stationary mode operation and higher pursuit-type speed. Consequently, Mr. Nash sought Steering Committee approval of the recommendations contained in Draft No. 1, which, he said, would go to TIA for developing the wideband standard. Finally, he said there was discussion regarding software defined radio (“SDR”). The Subcommittee has some specific concerns on the matter, and there was insufficient time to review the matter thoroughly and arrive at specific recommendations concerning whether or not SDR should or should not be developed. As a result, Mr. Nash said, the Subcommittee prepared a revised draft statement, distributed that morning, with a copy being given to Ms. Wallman, for the NCC Steering Committee approval to forward it to the FCC.

Ernest Hofmeister, Com-Net Ericsson, noted that Draft No. 1 was actually a revision from the previous day’s Subcommittee work and, thus, to avoid administrative confusion, he suggested that the document be labeled Draft No. 2. Dave Buchanan agreed.

Thereupon, Ms. Wallman inquired about and received consensus for this revised document, containing specific technical recommendations, to be submitted to TIA. She also inquired about and received consensus for submitting the draft statement on SDR (which also had been revised previously) for submission to the FCC.

**Implementation Subcommittee Report.** Lt. Ted Dempsey, Chair, reported that the Writing Working Group had continued to meet and had refined two documents, *i.e.*, the ones addressing national plan and regional plan guidelines, which will be close to completion by the September meetings. He said no further comments or recommendations were received and all comments and submissions were successfully incorporated into the working documents. He said the primary goal has been to retain the spirit of the original plan, currently in use in other bands, and regional plan guidelines, and that the changes suggested are designed to make the regional plan process more flexible. Lt. Dempsey said the Subcommittee will be drafting language outlining a process to allow the RPCs to modify the plans without having to request formal approval from the FCC. He encouraged those participating in the NCC process to forward recommendations to any Subcommittee members. He expressed his belief that the sample bylaws and district resolution process were complete, reiterated his request for additional comments or suggestions by NCC members, and said if no more comments are received, the two documents along with the draft national plan and regional plan guidelines would be forwarded to the Steering Committee at the September meetings. He said the Subcommittee has prepared a first draft of the DTV transition plan prepared by Dave Buchanan (Document IM-00022-2000602, with internal document being D0003), which will be incorporated in the I/O Subcommittee’s final report and available via handout. He said a complete set of documents would be posted on the Listserv by June 30<sup>th</sup> and would include all final versions of sections, including funding, technology uses, and I/O. Lt. Dempsey stated that there was discussion on use of a frequency availability presort to assist the RPCS in developing

their plans where regional borders are involved, and the Subcommittee has sought comment on how this process could be accomplished.

Ms. Wallman called a recess (taken from 12:25 p.m. to 12:35 p.m.), and then reconvened the meeting.

**Review of Dates of Upcoming Meetings.** Ms. Wallman reminded the attendees that the next set of upcoming NCC meetings would be held on Thursday, September 14, and Friday, September 15, 2000, at the Department of Commerce Building, Main Auditorium, 14<sup>th</sup> & Constitution Avenue, N.W., Washington, D.C. All three subcommittee meetings would be held that Thursday, and the NCC General Membership meeting would be held on Friday, beginning at 9:30 a.m. She said that the following set of NCC meetings would be at FCC Headquarters, Commission Meeting Room, on Wednesday, November 1, 2000, when the subcommittees would meet throughout the day and on Thursday, November 2, 2000, when the NCC General Membership meeting would begin at 9:30 a.m., with plans to finish at 12:30 p.m.

**Public Discussion.** Ms. Wallman opened the floor for public discussion. Because there was no response, there was no public discussion.

Ms. Wallman called a recess (taken from 12:40 p.m. to 1:05 p.m.), and then reconvened the meeting.

**Remarks of Ari Fitzgerald.** Ms. Wallman introduced Ari Fitzgerald, providing his biographical information. Mr. Fitzgerald (who was in the process of leaving as the Legal Advisor to the FCC Chairman) then addressed the attendees. He thanked Ms. Wallman for the great job she has been doing chairing the NCC and, on behalf of Chairman Kennard, thanked the NCC membership for the work it has been doing. Mr. Fitzgerald then summarized the manner by which the Commission would deal with three public safety matters, the schedule, and what the Commission hoped to achieve during the next couple of months, as follows: (1) the Commission staff has reviewed the NCC Report submitted to the FCC on February 25, 2000, and drafted a notice of proposed rulemaking (“NPRM”) seeking comment on a number of recommendations contained in the Report, leading to FCC proposals in the NPRM. The Chairman’s Office has voted on the draft NPRM and Mr. Fitzgerald stated he hoped fellow Commissioners would do likewise in order to move the process forward. (2) The Chairman’s Office has received and reviewed a draft item regarding reconsideration of the public safety service rules promulgated for the 24 MHz of spectrum allocated for public safety, has voted that item, and is urging fellow Commissioners to do the same. (3) The Chairman’s Office expected to receive for review either that day or the following week a draft document, *i.e.*, the Third Memorandum Opinion and Order and Third Report and Order, pertaining to I/O below 512 MHz and potential interference to global positioning satellites from 700 MHz public safety operations. Mr. Fitzgerald said he would be leaving the Chairman’s Office next week but still would continue working at the FCC, and his replacement will be Clint Odom, whom he requested to stand for acknowledgment.

Dave Buchanan inquired about the FCC’s views regarding allocation of the 8.8 MHz of reserve channels (of the recently-allocated 24 MHz of public safety spectrum) in the regional planning context. Mr. Fitzgerald said the FCC would need to wait in order to obtain experience with the channels that would not be held in reserve and would want to receive feedback from agencies regarding anticipated future demands and needs.

Bob Gursch thanked Mr. Fitzgerald and his FCC colleagues for their frequent meetings with APCO and other public safety groups.

Robert Schlieman, New York State, expressed his concern that the Canadian DTV issue is not representative of the Congressional mandate for the 24 MHz for public safety and, thus, he inquired about the FCC’s views on the matter. Mr. Fitzgerald responded that, as a general matter, the FCC has taken

seriously the mandate relating to the public safety spectrum and said steps must be taken to ensure integrity of operations on that spectrum, which have included, *e.g.*, FCC-establishing guard bands in the 700 MHz between public safety and commercial operations. He also said the FCC recognizes that public safety operation in the U.S. is affected by Canadian DTV broadcast in the same manner as U.S. DTV would affect such operation. Mr. Schlieman mentioned a November 1999, Letter of Understanding (“LOU”) between Canada and the U.S., which, he said needs to be changed. Mr. Fitzgerald said many negotiations have taken place since the LOU, and that the public safety community should be kept apprised about the status of the discussions.

Glen Nash, APCO First Vice President, inquired about time frames surrounding the NPRM regarding standards recommended by the NCC Report. Mr. Fitzgerald said that, assuming release of the NPRM in June, he thought early Fall might be an appropriate time for FCC decisions on standards. He added that this time frame is based on the recognition that the NCC process has been a public one, that the NCC has provided a great amount of information, and the FCC, thus, does not have to start “from scratch.”

**Presentation by Dr. Charles Jackson.** Ms. Wallman then introduced Dr. Charles Jackson, presenting his biography. Dr. Jackson presented an overview about SDRs via a PowerPoint presentation. He stated that the basic idea of SDRs is relatively simple, *i.e.*, given that engineers write “C” code and if, *e.g.*, 90 percent of the intellectual value in the radio is in “C” code, all that needs to be done is to change the “C” code to change how the radio works. Thus, *e.g.*, if there is one program, one would have an FM radio; a different program would result in a TDMA radio. Dr. Jackson referred to a Joint Tactical Radio System (“JTRS”) with an open architecture being reviewed by the Department of Defense (“DoD”). He also discussed SDRs in terms of looking at the hardware of a SDR, analog conversion to, and from digital, demodulation, various radio manufacturers’ sales literature pertaining to their radios, including references to TDMA, MSM (described by Dr. Jackson as the “heart” of a particular manufacturer’s CDMA mobile unit), CDMA, coders, and other technical engineering concepts. He said the term “software defined radio” is credited to Dr. Mitola of Mitre, and that the Software Defined Radio Forum (comprised of contractors to the DoD) is quite valuable for obtaining SDR information. He referred to the FCC’s Notice of Inquiry (“NOI”) regarding SDRs (ET Docket No. 00-47, released March 21, 2000), saying it is thoughtful and contains good background. Dr. Jackson further said there are many professional journals discussing SDRs and also SDR skeptics, including Dr. Arthur Ross, who, he said, spoke up at the last TAC meeting, characterizing SDR proponents as well intentioned but misguided. Referring to the SDR NOI asking, “Can SDR improve public safety interoperability?”, Dr. Jackson expressed his opinion that he did not think there is enough information known yet to answer the question, that he believed SDR technology is important for the military, that it will creep into commercial products in various fashion, and that benefit for consumers is harder to gauge. He said that, insofar as public safety is concerned, if the only difference between a digital cellular phone and public safety radio is that one operates in the 800 MHz band and the other operates in the 700 MHz band, with one having software load “X” and the other having software load “Y”, it might allow for reducing the cost for public safety radios that could operate in both the commercial mobile radio service bands and the public safety bands. Pointing out that there is going to be a new commercial band in the 700 MHz band right next to the public safety band, he said there might be a lot of opportunities for economies in such a situation. There were no questions for Dr. Jackson at the conclusion of his presentation.

**Presentation by Bruce Franca and Richard Engelman.** Next, Ms. Wallman introduced two people from the FCC: Bruce Franca, Deputy Chief, Office of Engineering and Technology; and Richard Engelman, Chief of the Planning and Negotiations Division, International Bureau. She also provided their biographies. Mr. Franca gave a PowerPoint presentation entitled, “Public Safety/DTV Update”. In this regard, he reviewed the efforts that the FCC is making in terms of the Channel 60 to 69 spectrum recovery effort and spoke about some of the DTV transition issues. He said that while the transition is scheduled to end in 2006, there are statutory extensions permissible, *i.e.*, if there is not a major network

station in the market and if there is actually less than 85-percent penetration of devices that can receive DTV. He said things were going quite well in terms of the DTV build-out and provided numbers for different markets. He mentioned that the Commission has another docket and rulemaking, *i.e.*, the DTV Periodic Review, which entails review of how the introduction of DTV and how recovery of spectrum are proceeding, and the public safety community might want to participate in this proceeding. Mr. Franca said issues have been raised in terms of compatibility with cable systems and the DTV transmission standard. He said it appeared real progress is being made between the cable industry and the consumer electronics industry and, hopefully, the foregoing issues would disappear, thus making it easier for consumers to buy TV sets. He said another issue raised by broadcasters relates to concerns about the standard and the ability of the standard to provide acceptable indoor reception. He said the FCC has a test program, having renovated one of its TV trucks, and is working with a number of receiver manufacturers to quantify the DTV design improvements.

Mr. Franca also discussed the U.S.-Canadian LOU. In this regard, he said discussions with Canada have been proceeding for quite some time, with Canadian participation in the DTV advisory committee activities beginning in 1989, and negotiations with Canada being held since at least 1991 about how Canada should develop a DTV plan. He mentioned the public safety community's concerns about Canada's use of Channels 60 to 69 and language in the draft LOU. He pointed out that both the U.S. and Canada tried to minimize use of Channels 60 to 69. He briefly characterized some earlier DTV discussions and negotiations with Canada and stated that there is an existing treaty between the U.S. and Canada that only allows for television broadcast operations on Channels 60 to 69. Thus, he said, one of the provisions the LOU would do is permit and recognize non-broadcast use of these channels by the U.S. As a result, Mr. Franca said there is no protection or no need to protect Canadian TV service extending beyond the Canadian border. He summed up his presentation by saying that the transition and recovery efforts are moving forward, many issues still remain to be resolved besides Canada, and much more work needs to be done both by industry and government.

Harlin McEwen requested that Mr. Franca do what he could to improve coordination between the U.S. and Canadian public safety communities in order for the Canadians to communicate earlier, particularly, the Royal Canadian Mounted Police, about the U.S. public safety community's concerns. Mr. Franca expressed the FCC's desire to work closer with the U.S. public safety community and believed that, based on ongoing discussions and work with Canada, Mr. McEwen's request could be met.

In response to Robert Schlieman's question, Mr. Franca said that the four top networks are ABC, CBS, NBC, and FOX.

In response to Dave Buchanan's inquiry about treaty matters between the U.S. and Mexico, Mr. Engelman responded, saying there is a LOU with Mexico allowing the U.S. to implement DTV stations in the border area. He added that unlike the U.S.-Canadian border, there is an advantage along the U.S.-Mexican border in that there are only a few problematic areas; matters are more settled with Mexico, and Mexico is perhaps much further behind Canada in terms of implementing DTV. Mr. Engelman said he would look further into the agreement with Mexico and would try to respond to Mr. Buchanan later.

Bob Gursch inquired whether, as a general matter, the FCC might try to facilitate Channel 60 to 69 broadcasters' moving of their analog allotments to their digital allotments. Mr. Franca said possibly. In response to Mr. Gursch's inquiry about Mr. Franca's view regarding the transition in the Los Angeles area, Mr. Franca reiterated that the public safety community should look at the DTV Review item mentioned earlier and, further, the FCC reserves the right to decide on final channel allocations. Mr. Gursch asked whether there are issues the Canadian public safety community should look at in order to be more conservative thereby to provide more spectrum for public safety. Mr. Franca responded that the

Canadians have allotted Channels 60 to 69 to low power TV and to vacant allotments whereas the U.S. did not.

Dave Eierman, Motorola, referred to the low power TV/vacant allotment matter just discussed by Mr. Franca. Mr. Eierman also raised with Mr. Franca the time frame as to when DTV stations on Channels 60 to 69 must cease operation. Further, he raised with Mr. Franca the issue regarding a date certain by which cable must guarantee that its systems are upgraded so that they can carry digital transmissions.

Tom Cowper, State of New York, sought clarification on the current status of the LOU between Industry Canada and the FCC. Mr. Franca said it is a draft that is being revised at the staff level. Mr. Engelman added that there is pressure to have the draft resolved because, absent an agreement, spectrum within 250 miles of the border could not be used for anything other than analog television stations, which means that there could not be any public safety, commercial operation, or digital television stations in the border area. In response to Mr. Cowper's question whether there is anything New York State could do to assist in the process, Mr. Engelman replied that the presence by both Mr. Franca and Mr. Engelman at today's meeting is to try and open up the public process, that the FCC is trying to ensure it has the right input into the agreement, and that the FCC would do its best to advise of the status of the agreement.

Ms. Wallman said that she sensed, both in today's meeting and in prior meetings, frustration or anxiousness about the process, given that the decision is being made in government-to-government negotiations but that those who must live with the results are not receiving information and are not providing input. Thus, she asked Mr. Engelman to describe limitations formally adopted concerning the sharing or soliciting of information about the process. Mr. Engelman responded that the only limitation is, and must be, government to government. He nonetheless said that meetings with New York State personnel would be welcomed by the FCC. Mr. Franca echoed this willingness to meet and speak with anybody.

Kathleen O'Brien-Ham, Deputy Chief, Wireless Telecommunications Bureau, FCC, indicated that she had spoken with Mr. Engelman about keeping the public safety community informed concerning the Canadian situation and that one solution was perhaps posting a fact sheet on the NCC web site and that the FCC's International Bureau would be consulted for viability in this regard. Ms. Ham also said that in addition to Mr. Franca and Mr. Engelman, she was available for receiving input anytime on the matter.

**Presentation by Robert Schlieman.** Ms. Wallman then turned the floor over to Mr. Schlieman, who said that New York State has been working on a statewide radio communications project for a number of years. He said the project is to provide a common communications system, *i.e.*, the ultimate I/O, for all state and local agencies wishing to participate. He then gave a PowerPoint presentation entitled, "Recommendations for Resolution of the U.S. Public Safety – Canadian DTV Problem in 746-806 MHz", which consisted of New York State's recommendations for resolving the Channels 60 to 69 problem between the U.S. and Canada. (Copies of his presentation were handed out.) He said that no consideration was given to protecting the 746-806 MHz spectrum along the U.S.-Canadian border, according to the LOU. He stated the Canadian plan could be reshuffled by clearing Channels 60 to 69 within the LOU's 400 kilometer, or 250-mile range of the border, and that's the only way to protect the U.S. and future Canadian public safety and commercial spectrum. Mr. Schlieman said that preliminary investigations and analysis indicate that successful reshuffling is possible by reconsidering the criteria for Canadian allotments, determining that which is both realistic and feasible in a manner similar to the manner the FCC and the U.S. created a plan. He discussed in some detail the Canadian TV station class structure and allotment for these channels, providing various percentages, figures, and technical information.

At the conclusion of Mr. Schlieman's presentation, Ms. Wallman asked Mr. Engelman for his comments on the feasibility of some of the suggestions contained in the presentation. Mr. Engelman said that he appreciated the recommendations, that he would look at them, that he would speak with other negotiators, and that the recommendations would be presented to the Canadians for their reaction. Mr. Schlieman said the State would welcome the chance to discuss further alternatives to help the process.

**Close of Meeting:** Ms. Wallman determined there was no further business, reiterated that the next NCC gathering is in September at the Department of Commerce Auditorium, and thanked everyone.

(Whereupon the meeting was adjourned at 3:10 p.m., Friday, June 2, 2000.)

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

Certified as to accuracy:

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Kathleen Wallman

Date: \_\_\_\_\_

## **NCC ATTENDANCE ROSTER FOR June 02, 2000**

<i>Last Name</i>	<i>First Name</i>	<i>Meeting Date</i>
Aiken	Douglas	June 02, 2000
Buchanan	David	June 02, 2000
Carter	Renaë	June 02, 2000
Catalano	Al	June 02, 2000
Coltri	Norman	June 02, 2000
Cowper	Thomas	June 02, 2000
Crosby	Mark E.	June 02, 2000
DeMello	Richard	June 02, 2000
Eierman	David	June 02, 2000
Engelman	Richard	June 02, 2000
Ensminger	Robert	June 02, 2000
Frye	Richard	June 02, 2000
Gastler	Charles	June 02, 2000
Gillory	Ronald	June 02, 2000
Griffin	Fred	June 02, 2000
Gurss	Robert	June 02, 2000
Hammill	Jim	June 02, 2000
Haraseth	Ron	June 02, 2000
Hofmeister Dr.	Ernest	June 02, 2000

<i>Last Name</i>	<i>First Name</i>	<i>Meeting Date</i>
Jackson	Chuck L.	June 02, 2000
Kearns	Kevin	June 02, 2000
Leland	Wayne	June 02, 2000
Loewenstein	Timothy	June 02, 2000
McDole	Art	June 02, 2000
Mickelsen	Scott	June 02, 2000
Miller	Larry	June 02, 2000
Mueller	Steven	June 02, 2000
Nash	Glen	June 02, 2000
Netro	Ron	June 02, 2000
Overby	Stu	June 02, 2000
Periard	Jim	June 02, 2000
Pickeral, J.D.	David	June 02, 2000
Poltronieri	Jeanine	June 02, 2000
Ross	Marshall	June 02, 2000
Schlieman	Robert F.	June 02, 2000
Shahnami	Alireza (Ali)	June 02, 2000
Siegle	Derek	June 02, 2000
Smith	McRae	June 02, 2000

<i>Last Name</i>	<i>First Name</i>	<i>Meeting Date</i>
Speidel Esq.	Robert	June 02, 2000
Tolman	Tom	June 02, 2000
Vaughan	Don	June 02, 2000
Vogel	Emil	June 02, 2000
Wallman	Kathleen	June 02, 2000
Wells	Carlton	June 02, 2000
Wood	Terry	June 02, 2000
Yurman	Joseph	June 02, 2000

**Total for Attendance Roster: 46**