

FEDERAL COMMUNICATIONS COMMISSION

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PUBLIC SAFETY NATIONAL COORDINATION COMMITTEE

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INTEROPERABILITY SUBCOMMITTEE

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THURSDAY  
MAY 30, 2002

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The Interoperability Subcommittee met in the Commission Meeting Room, Federal Communications Commission, 445 12th Street, S.W., Washington, D.C. at 9:00 a.m., John Powell, Subcommittee Chair, presiding:

MEMBERS PRESENT:

- David Buchanan
- Steve Devine
- John Powell
- Robert Schlieman
- Michael Wilhelm
- Rich Murphy
- Jeanne Kowalski
- David Eierman
- Bob Speidel, Esq.
- Sean O'Hara
- John Oblak
- Carl Kain
- Glen Nash
- Tom Tolman
- Wayne Leland
- Norm Coltri
- Edward Dempsey

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MEMBERS PRESENT (continued):

Fred Griffin  
David Funk  
Bette Rinehart  
David Pickeral

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1 P-R-O-C-E-E-D-I-N-G-S

2 9:13 a.m.

3 MR. MURPHY: One thing I did want to  
4 mention that Fred Griffin reminded me, we received a  
5 message last week from Dick DeMello that he could not  
6 attend the meeting because he was undergoing radiation  
7 treatments. I don't know the nature of his particular  
8 illness, but please keep him in your thoughts and  
9 prayer. And of that, John, as soon as you get plugged  
10 in we'll start the Interoperability Subcommittee.

11 MR. POWELL: Good morning. Hopefully  
12 everyone has had an opportunity to get the paperwork  
13 that is over on the side desk. And I would just like  
14 to go right through the Agenda. We do have a number  
15 of items this morning.

16 As usual, I would like to have Bob  
17 Schlieman to do the duties of Secretary if he would  
18 for the Subcommittee meeting this morning. And is  
19 there anyone new in the room that would be interested  
20 in participating on one of the working groups  
21 within this Subcommittee, they are actually listed out  
22 as to what their functions are. Under item 6 on the

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1 Agenda, please see myself or Bob and we will add you  
2 to the roster.

3 We have an Agenda and if could get a  
4 motion to accept the Agenda or if there are other  
5 items people would like to see added to it. We can  
6 amend it at this point. Have a motion to accept the  
7 Agenda? Rick Murphy, second. Dave Buchanan. Okay,  
8 no objections, we'll move forward.

9 We have the document number 88A which is  
10 the minutes of the last meeting in Washington, D.C. on  
11 January 30. If you could take just a minute to review  
12 those minutes and if there are any corrections or  
13 additions that need to be made, I will entertain them  
14 at this point. While Bob plays some music for us. No  
15 additions or corrections?

16 Do I have a motion to accept the minutes  
17 from the last meeting. Steve Devine. Second? Gee  
18 this is a quiet group today. Nobody wants to second  
19 the minutes. Dave Buchanan. Okay unless there is  
20 objections, we will accept the minutes.

21 Because the Document Summary List now is  
22 down to five pages. The only page I brought today is

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1 page five, which is the most recent documents that  
2 have been added since the Washington Meeting. I will  
3 after this meeting is over circulate this updated list  
4 along with other documents from this meeting to the  
5 list serve.

6 Under Working Group activity, Report  
7 Drafting, Bob is now waiting on me to get him some of  
8 the documents that have kind of slipped through the  
9 cracks and are hiding on various computers for Working  
10 Group 1.

11 Working Group 2 I understand that Rick, do  
12 you want to address Chairman Schiff of that?

13 MR. MURPHY: Thanks Mr. Chairman. Kyle  
14 Sinclair has moved on to work for the Transportation  
15 Security Administration. So, he is no longer with the  
16 Department of Treasury or the PSWN Program. But we  
17 would like an opportunity to delay until the next  
18 meeting. And between now and the next meeting to send  
19 you some nominations for taking over as Vice President  
20 of the Interoperability Subcommittee and heading up  
21 the Working Group No. 2, if that is your desire.

22 Also, we would ask that if there are any

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1 open items left on Working Group 2 that you let us  
2 know what they are so that we can complete the tasks  
3 on those.

4 MR. POWELL: Okay, Rick, thanks. So if  
5 there is anyone else? We typically had a Federal  
6 Member as Vice Chair and Kyle had volunteered to Chair  
7 the Operational Requirements Working Group. If there  
8 is anyone else that is here or you would like to  
9 nominate for those positions, please let me know by e-  
10 mail. And we will address that at the next meeting.

11 It is my pleasure at this point to  
12 introduce Steve Devine from the Missouri State Highway  
13 Patrol, sitting next to me here on my right. Who has  
14 taken of Carlton Wells position as Chair of Working  
15 Group 3. Which is Rules, Policy & Spectrum Planning.

16 As I knew it would be the case, Steve bailed right  
17 into this. And has been turning out a lot of  
18 documents. I will also add that he is Chair of the  
19 State Interoperability Executive Committee in Missouri  
20 and has a number of other activities in that arena  
21 going now that Steve, I think, would be of interest to  
22 the group also. With regard to the Federal Channels

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1 and so on when you have an opportunity to talk about  
2 that.

3 MR. DEVINE: We'll get to those on the  
4 Agenda here shortly as well, so.

5 MR. POWELL: It's all yours.

6 MR. DEVINE: Thank you Mr. Chairman. The  
7 Working Group 3 and my initial observance of it dealt  
8 with some Interoperability issues that were, at least,  
9 initially were perceived by some to be outside of the  
10 scope of the 700 band. And I think that probably is  
11 still going to be topic of some discussion. But more  
12 and more after doing some research and finding that  
13 some of the Commissions recent Interoperability  
14 proposals have referred to this body in particular,  
15 this group as being one to administrate those channels  
16 in the absence of anybody administrating them.

17 In particular, the third report in order  
18 addressing some of the VTEC and UTEC Interoperability  
19 and narrow band channels that have been, the  
20 administration of those channels in absence of the  
21 frequency coordinators adopting a plan was suggested  
22 possibly, that this body could do that. I would like

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1 to see in the scope of this work that, that at least  
2 addressed and hear some comments on that as well.

3 One of the other issues, from a local  
4 level, seem to be having difficulties with is the  
5 actual authority of the State Interoperability  
6 Executive Committee is those that have formed and  
7 their expansion or their at least authority outside  
8 the 700 band, which officially there isn't any, but I  
9 certainly do see the need for it at a local level.

10 It is not necessarily the draft rules, but  
11 certainly to bring the rules to the locals and in the  
12 hope of compliance and effectiveness with regard to  
13 some of these channels. As a separate initiative,  
14 outside of the Part 90 Material, we have entertained  
15 or at least initiated some discussion regarding the  
16 NTIA Law Enforcement Incident Response Channels  
17 regarding talking to NTIA and the official proposals  
18 involved both the FCC and NTIA regarding these  
19 channels.

20 And the response back was positive,  
21 indicating that a sponsor, a Federal sponsor would be  
22 needed for the partial implementation or whatever

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1 portion was appropriate due to Federal use of these  
2 channels. What we asked for was the ability to  
3 develop a plan state wide. And contrary to the public  
4 notice the commission issued regarding individual  
5 licensing for individual agencies sometimes being  
6 sponsored by individual Federal entities. We pondered  
7 the idea of perhaps taking a plan, having a plan  
8 approved, federally and letting the State  
9 Interoperability Executive Committee implement that in  
10 addition to some of the previously designated IO  
11 channels below 512 that the Commission has issued to  
12 be used as a resource by the SIEC to develop some  
13 Interoperability plans within Missouri, both the urban  
14 areas and metropolitan. The urban areas as well as  
15 the scarcely populated areas of the state. And we are  
16 entertaining that and we are continuing moving.  
17 Understand that there is federal incumbents adjacency  
18 on those channels now, so that will have to be  
19 addressed as well. But there is a possibility some of  
20 those channels may eventually be a part of a pulled  
21 resource in addition to some of the Part 90  
22 Interoperability Spectrum issued as well. So we

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1 certainly welcome any comments on any of those ideas.

2 And anybody think that that is or exactly what they  
3 think of that. That is kind of where we stand at the  
4 moment. There isn't any movement on that, but I am  
5 hoping to make some contacts and it is going to be a  
6 process, but I feel confident that a portion of those  
7 designated channels might be available to some degree  
8 as far as a resources for the region.

9 MR. BUCHANAN: Just a comment. I  
10 supported it. It fits in with what we want to do in  
11 California. Don Root of our Office of Emergency  
12 Services is trying to set up the State  
13 Interoperability Committee now and one of the things  
14 he wanted to do is review all of the channels. So I  
15 think that would be a great way to go if the NCC  
16 endorsed that, I would support that.

17 MR. POWELL: Right, I think that, since I  
18 am going to chair that committee in California. We  
19 have been talking about that there. Rick, from the  
20 Federal level, are you familiar with any other  
21 requests coming in for other states to do that kind of  
22 thing. But to pull in some of the Federal Channels

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1 into a pool?

2 MR. MURPHY: Yeah, just a comment on that.

3 There are considerations being looked at to make  
4 nationwide not only, we already have the narrow banded  
5 channels designated, but there is a move underway to  
6 make nationwide wide band until those narrow band  
7 become available and things get migrated over.

8 We don't know specifically what those  
9 channels will be right now. It is proposed that one  
10 repeater pair and one simplex frequency be provided to  
11 the state and locals both in the VHF band and UHF band  
12 so things can be pre-staged and ready to go when and  
13 if the federal government comes into a particular  
14 area. And that way everything is set up. And again,  
15 it gets back to what Steve mentioned. We are looking  
16 for a license that can be issued to a responsible  
17 party in the state. We don't want to have to  
18 authorize 55,000 different licenses for 55,000 public  
19 safety agencies. We would like to just authorize 50  
20 licenses, one for each state. Similar to what they  
21 did with the 70-0 band.

22 MR. DEVINE: Mr. Chairman if I could add

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1 as well that I certainly wouldn't want to have to be  
2 responsible for helping individual agencies and their  
3 compliance as well. So that all the more reason it is  
4 somewhat selfish. In addition to that, Missouri, the  
5 state government is taking some state dedicated wide  
6 band channels and also allowing to contribute them  
7 into the pool to expand this VHF wide band resource  
8 that we hope can be a pool for an incident command and  
9 some other things we can do at that state level. So  
10 it is not just the previously designated channels. It  
11 is not just the NTIA channels. There is also a state  
12 commitment there with us and previously designated  
13 wide band channels that were exclusive to state use  
14 that they are going to allow locals under particular  
15 MOU's and agreements with local agencies.

16 MR. POWELL: Michael, I am not sure how  
17 many SIAC is actually formed. Do you have that  
18 information?

19 MR. WILHELM: No, I, we aren't notified of  
20 that so we have no idea.

21 MR. POWELL: Okay.

22 MR. SCHLIEMAN: I thought that they were

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1 supposed to report that by April.

2 MR. POWELL: I thought that they were  
3 waiting for the mail system to get cleared up.

4 MS. KOWALSKI: Good morning, Jeanne  
5 Kowalski, FCC. The truth is, the Commission will be,  
6 is hoping to put out a public notice which will inform  
7 everyone what the results were concerning this  
8 Interoperability administration. Right now, there are  
9 some issues we are not certain how they are going to  
10 come out.

11 But generally I can tell you we have about  
12 33 of the states that have applied and asked to  
13 administer the Interoperability channels and they  
14 would either set up some independent body equivalent  
15 to SIEC. Or they have something that they want to  
16 use.

17 We have 16 that simply did not respond.  
18 And then there are 8 others and I know these numbers  
19 don't add up, but remember we have territories as  
20 well. So in the whole universe we are windowing  
21 through I think the four that is just not clear that  
22 they understand what they were applying for. And our

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1 goal is to have that out soon. The notice to get this  
2 settled so that a regional planning committees will  
3 know.

4 But independent of that, I think every  
5 state within every state, you should all know what  
6 your governor wishes to do on this issue. That should  
7 be common knowledge by now. And ours would simply be  
8 a confirmation of what is known locally.

9 MR. POWELL: I would hope you will be  
10 putting out a list then that would show who it will be  
11 based on the information you got for each of the  
12 states?

13 MS. KOWALSKI: Correct.

14 MR. POWELL: Great. That will be a big  
15 help.

16 MR. DEVINE: My only question is that Mr.  
17 Chairman would be, would there be any indications of  
18 that expanding any authority outside of what we all  
19 ready know it to be that the 700 authority. Or would  
20 it just be stating the states that have applied for it  
21 and who are forming? Or would it give any inference  
22 to that?

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1                   MR. POWELL: I am just going to have to  
2 wait to see what comes out. But I know from the way  
3 we administered things in California, certainly that  
4 the rules allow the state or some organization to step  
5 to the plate and coordinate all those channels. And  
6 we certainly have agreements with the frequency  
7 coordinators in our state. For example, on the  
8 Interoperability channels on the lower band, they will  
9 not issue a license, issue. They will not coordinate  
10 a license on those channels. They were only issued to  
11 one the one agency in the state that handles that for  
12 that the state. And it has worked well since 1961.

13                   MR. BUCHANAN: Long time.

14                   MR. POWELL: Long time.

15                   MR. BUCHANAN: Question, John. Is any of  
16 this leading to also siting on a digital standard? I  
17 know that is a little bit outside of the preview of  
18 the 700, but for the Interoperability below 512 as it  
19 goes narrow band, we just can't leave it as analog  
20 when the whole world is going digital?

21                   MR. POWELL: I think that is an issue, if  
22 you look at the first line under item 6c, the All Band

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1 Rule Making Proposal, document 85A. At the last  
2 meeting we talked about that. And I know we talked  
3 about it, but I don't remember if it was specifically  
4 included in the writing for that document. But, one  
5 of the things I would like to get accomplished today,  
6 since we did discuss it at the last meeting is to  
7 forward a letter to the Steering Committee asking that  
8 they request that the Commission to initiate a rule  
9 making to address all those issues across all the  
10 bands.

11 And it certainly from the third report in  
12 order where the Commission did designate, in fact,  
13 this subcommittee to handle some of the administrative  
14 duties if another organization did not want to do  
15 that. And Steve's got it right here and I am going to  
16 ask him to read it. Specifically what they said in  
17 the third R&O on this subject. But I think it is  
18 appropriate that we get that to happen.

19 And we did talk with the Steering  
20 Committee last meeting about it and they were very  
21 open to taking such a request and moving forward with  
22 it. Do you got that handy there Steve?

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1 MR. DEVINE: I think I gave a copy to you  
2 and Bob last night actually.

3 MR. POWELL: Well maybe I have it here.  
4 Let me see. I probably took off and left it.

5 MR. DEVINE: The job you are referring to  
6 is the third or fourth order Interoperability under  
7 512 that was discussed with the administration of  
8 those channels. And the commission expected the  
9 frequency coordinators to develop a plan for the  
10 implementation of the interoperability channels in  
11 lieu of that into this committee or something similar.

12 MR. POWELL: We actually brought that up  
13 yesterday at the NPSTC meeting where the coordinators  
14 were there and I think, I see Ron here. The  
15 coordinators had no interest in administering the  
16 interoperability channels. Feeling that was not  
17 really within their scope. Bob did you find that copy  
18 there?

19 MR. SCHLIEMAN: Yes. That is it.

20 MR. POWELL: While Steve is looking for  
21 that. So, I think we need to look at alternatives for  
22 those channels and certainly I think from what Steve

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1 is going to read here with the Commission has given us  
2 and open on that.

3 MR. DEVINE: The actual states, if a  
4 licensing administration -- Interoperability channels  
5 we will rely on the four public safety frequency  
6 coordinators. We envision that the four coordinators  
7 will jointly develop an Interoperability plan  
8 regarding the management and nationwide use of these  
9 Interoperability channels. This plan could be  
10 developed in concert with the group staffed with the  
11 administering the Interoperability channels in the 700  
12 band. Additional, we would expect frequency  
13 coordinators to work with existing licensee  
14 experiencing harmful interference as we all know is  
15 already occurring in the Interoperability below 512.

16 MR. POWELL: From our prior discussion, I  
17 think there was general agreement within this group at  
18 the last meeting that it would be appropriate for the  
19 organizations within each state that are designated to  
20 manage channels in the 700 band that they also be  
21 given the authority to manager the Interoperability  
22 channels and all of the other public safety bands.

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1 Including the federal channels if agreements could be  
2 made with sponsoring federal agency to free up some of  
3 those channels. Realizing they may be different  
4 within each of the states depending upon federal use.

5 MR. DEVINE: And I also see no reason that  
6 the federal access to these channels through MOU's  
7 couldn't also be, if SIEC was implementing the  
8 Interoperability below 512 channels was no reason why  
9 they couldn't come in and know that is a common  
10 platform as well.

11 MR. POWELL: Right. Rick, I am going to  
12 ask you another question based on what Dave Buchanan  
13 brought up. Have you looked at any mandated digital  
14 standard for those channels that are going to allow  
15 users to use them at all?

16 MR. MURPHY: Actually, we haven't.

17 MR. WILHELM: Rick, I am sorry for the  
18 purposes of the Court Reporter, would you please come  
19 to the microphone again?

20 MR. POWELL: We'll just reserve a section  
21 over here for our federal representatives.

22 MR. MURPHY: Actually, we have not looked

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1 at these standards. We were sort of hoping that he  
2 committee would help guide us to those standards to  
3 say, this where public safety community is leaning.  
4 And this is what we are looking at as they --  
5 standards. We of course sit on the international for  
6 the broadband data, but definitely not the wide band  
7 data in 700 so that we're depending on this committee  
8 to try to come up with something. But we have not  
9 looked at any particular standard so far.

10 MR. POWELL: Okay. At this point, the  
11 only thing is really out there is analog?

12 MR. MURPHY: That is correct.

13 MR. POWELL: Your own users you have on  
14 those channels.

15 MR. SCHLIEMAN: John, could we make it a  
16 formal request of the committee that we forward that  
17 to NCC, that recommendation for SIEC to be authorized  
18 to manage the public safety Interoperability channels  
19 and all band and any federal Interoperability with any  
20 federal channels for Interoperability with state and  
21 local?

22 MR. POWELL: Yes, what I would like you to

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1 do is to include that and at this point entertain a  
2 motion to move a letter referencing document 85A to  
3 the Steering Committee tomorrow asking that they  
4 request the commission to either initiate or rule  
5 making or whatever other commission action would be  
6 appropriate to extend management of the  
7 Interoperability channels to the SIEC or designated  
8 organizations in each state. I should say other  
9 designated organizations in each state to manage all  
10 of the Interoperability channels in all of the public  
11 safety bands.

12 MR. BUCHANAN: John?

13 MR. POWELL: Yes Dave?

14 MR. BUCHANAN: Dave Buchanan. Could we  
15 also extend that to also ask that we be designated to  
16 select a digital standard for use on those channels?  
17 As long as we are going to ask for part of it, we  
18 might as well ask for everything?

19 MR. POWELL: Certainly.

20 MR. DEVINE: Mr. Chair?

21 MR. POWELL: Yes Steve?

22 MR. DEVINE: In addition to that, would be

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1 in the best interest of the entire process to so we  
2 don't have fifty plus different channel designations  
3 and channel names. Wouldn't there also be an  
4 opportunity in concert with the request for a digital  
5 standard to have a standardization to some degree  
6 regarding channel -- at least for naming abilities.  
7 And perhaps couldn't that be done through the same  
8 body?

9 MR. POWELL: I think that would be a  
10 logical way to go. We have another item at the very  
11 bottom of the list here regarding that. The  
12 commission so far has not wanted to do that at 700.  
13 Although they did it within the 700 order, third  
14 report in order, did name channels or standardized the  
15 -- for the lower bands which does not make a lot of  
16 sense to me, but we can raise the subject again. And  
17 I know that it is being raised in other circles now  
18 through the Homeland Security Directors in each of the  
19 states. So I think the commission will be hearing  
20 about it from another rep in the not to distant  
21 future. There is actually, we have a copy here from -  
22 -?

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1 MR. DEVINE: No that is actually the  
2 Missouri draft copy.

3 MR. POWELL: But this nomenclature was  
4 standardized in the new narrow band channels at VHF  
5 and UHF. So I think we could go ahead and include all  
6 of that in that request.

7 MR. SCHLIEMAN: So you need a motion  
8 right?

9 MR. POWELL: I need a motion.

10 MR. SCHLIEMAN: I move.

11 MR. POWELL: Is there anyone objecting to  
12 moving a letter forward to the Steering Committee?  
13 There are no objections.

14 Along that same line, the third item down  
15 on Mandated IO Channel Nomenclature through Project  
16 25. Those of you in the room that have been  
17 participating in that effort know that we have had  
18 this issue on the back burner pending the commission  
19 dealing with the recon request on the last report in  
20 the order. And it is my intention now that at the  
21 next Project 25 meeting to resurrect that again. And  
22 ask that Project 25 standardize the Nomenclature

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1 within its standards.

2 We say mandate the Nomenclature within its  
3 standards using the Nomenclature that the subcommittee  
4 recommended that the commission did not adopt in that  
5 report. That is another alternative that we have to  
6 do that. Of course, it would only be applicable for  
7 Project 25 equipment. But we will be moving that  
8 forward at the meeting coming up in 2 weeks in Denver.

9 Any questions on that? Just an information item.

10 MR. SCHLIEMAN: John, did the Commission  
11 refuse to put that Nomenclature into regulation and in  
12 the alternative would they perhaps consider putting  
13 it in a report in order and say have many other issues  
14 with respect to public safety?

15 MR. POWELL: I think that is a question  
16 for Michael or one of the Commission Staff here.

17 MR. SCHLIEMAN: I can't state --  
18 Commission Mike, regard a request like that.

19 MR. DEVINE: There's the order, the first  
20 couple of pages will tell you what to say.

21 MR. WILHELM: Yes.

22 MR. SCHLIEMAN: I would suggest maybe what

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1 we want to do is revisit that with the Steering  
2 Committee as a recommendation that it be put in the  
3 report and order rather than in regulation if the  
4 commission wont' accept regulation.

5 MR. POWELL: I think we need to look at  
6 the alternatives. And we'll do as best we can. As I  
7 said, the commission will be hearing about this and  
8 other venues as activities from some of states and  
9 other federal organizations move forward so. I think  
10 at this point we will just ask the Steering Committee  
11 to deal with it as they fell appropriate. Outlining  
12 what we would like them to do and then work with the  
13 commission to come up with something that is  
14 acceptable to all of us. Hopefully.

15 Working Group 4 -- Any other items for  
16 Working Group 3? I will work on that letter tonight  
17 and we'll have it for the Steering Committee tomorrow.

18 Working Group 4, Don Pfohl is not present  
19 and had no additional information regarding the other  
20 committees beyond the list that he passed us at the  
21 last meeting or prior to the last meeting.

22 Dave Buchanan, I know you got a lot of

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1 activities on Working Group 6, so I will turn it over  
2 to you. And will probably spend most of the rest of  
3 the meeting working on that.

4 MR. BUCHANAN: Hopefully you picked up the  
5 Users Need document. This document we have previously  
6 approved and there was some question last time about  
7 what were the needs and things. And basically, one of  
8 the key items, and by the way, this is not the final,  
9 what we are handing out today was a second draft.  
10 Which was very close to the final document that went  
11 to TIA and was approved by the full NCC committee.  
12 But I couldn't dig out the final copy. I don't know  
13 what happened to it on my computer.

14 A couple things that we need to reconfirm  
15 on this. One is that basically we want one bandwidth  
16 for the Interoperability so that we are not dealing  
17 with radios that need to scale from 50 kHz to 100 to  
18 150 all in the same radio. From what I understand  
19 from talking to our representatives from TIA here is  
20 that also fits with there thinking.

21 The actual bandwidth is more than a  
22 purview of the technology subcommittee. But we need

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1 to confirm that one bandwidth is needed. My other  
2 suggestion is, I think in reviewing this document that  
3 just about all of the needs for wide band data could  
4 be done on probably in the 50 kHz channel width except  
5 for maybe high or near broadcast quality, high frame  
6 rate video. Which would require 150 kHz bandwidth,  
7 knowing the through puts that the standards that TIA  
8 is developing will handle.

9 So, and I think there is still, and this  
10 my question to the group. I think there is still a  
11 need for some video in Interoperability, I think  
12 particularly Fire would have some need for it.  
13 Although the commission has come out with the docket  
14 for the 4.9 GHz band, they have said that there would  
15 be no airborne video and I know there is some  
16 consideration and they are going to be asked to change  
17 their mind and allow at least some limited helicopter  
18 type operations on that band for the broadcast quality  
19 video. But that is still an unknown. Also that band  
20 is relatively short range. If you need to send video  
21 back longer distances, through a repeater or something  
22 like that, I think that the Interoperability channels

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1 should have at least, we should designate at least one  
2 channel at a 150 kHz bandwidth or full bandwidth  
3 maximum data through put, however you want to put it  
4 to handle the video.

5 Other than that, I think all the needs  
6 could be done on probably the 50 kHz channel. And the  
7 question for this group is is there any disagreement  
8 with that philosophy and can we take that to the next  
9 subcommittee, the technology, and go with it that way?

10 Anybody have any comments on that to start?

11 MR. POWELL: Dave, I have a question as to  
12 whether we, with the uses of these channels, whether  
13 we want to even allow them to be aggregated for some  
14 what similar to run, if it is possible to do that even  
15 to run broadcast quality video. Run high data rate  
16 video? -- video on a 50 kHz channel? With 4.9 coming  
17 available --

18 MR. BUCHANAN: 4.9, I think will handle  
19 most of the video requirements, but I still think that  
20 we may want to set aside one, just one block of three.

21 MR. POWELL: We have got 2.

22 MR. BUCHANAN: If the channels are divided

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1 into 50 kHz channels and I think there is 18 that are  
2 available. Oh, I am sorry. It is even more than  
3 that. Look at item six on that, the quantity are  
4 available, 106 are available. We could take 3 away  
5 from that 18 figure, leaving 15 channels of wide band  
6 data. And that is quite a bit of data and you would  
7 still have one channel that folks could use if they  
8 needed. If they didn't need it, you could still have  
9 3.

10 But a we could at least designate one that  
11 would require a different radio. It may be more for  
12 local type needs, I don't know. I am just suggesting  
13 that. If the consensus is, no we really don't need  
14 that, then fine. I am not sure if everything can be  
15 handled on the 4.9 GHz. I am just thinking  
16 particularly wildfires and things like that where you  
17 have got a wide area to cover that you may not be able  
18 to do all your video needs.

19 Certainly if it is a small screen, I agree  
20 with you, you should do it at 4.9. Just bring in and  
21 set up and have that network there that could handle  
22 all types of data that the 4.9 GHz.

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1                   MR. POWELL:   Comments?   From some of the  
2                   technical people in the room, what kind of quality are  
3                   we going to get pushing digital video into 1050 kHz  
4                   channel?   David?   Not your area?

5                   MR. EIERMAN:   David Eirman with Motorola.  
6                   I have done a little bit of investigation of this,  
7                   but I don't think you are going to get anything like  
8                   high speed quality out of it.   First off, you are  
9                   probably going to be limited to quarter frame and not  
10                  full frame video.   It is going to be more like high  
11                  quality over a wire line type video I think what you  
12                  are going to get out of that kind of channel  
13                  bandwidth.   You know, quarter frame, probably a few  
14                  frames per second, definitely much less than 10 frames  
15                  per second.   So there will be some blurring and stuff  
16                  like with high speed motion or something.   But you  
17                  know, probably better quality we get on some of these  
18                  headshot type cameras we get on PCS.   You are going to  
19                  get nothing near a 6 MHZ wide tv channel video over  
20                  this.

21                  MR. BUCHANAN:   From my own knowledge of it  
22                  and from what I have seen, I agree with Dave.   It is

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1 not broadcast quality, it is a step below that. But  
2 it is certainly a step above what you consider you  
3 know, slow scan video. So really the question is does  
4 that benefit enough to sacrifice three channels into  
5 one or not. And I just want to bring it up now and  
6 have it discussed. I think it is, but I am not that  
7 firmly --

8 MR. POWELL: the reality of it is, you  
9 would end up with 2 because you got, with the pairing  
10 if you wanted to do it that way.

11 MR. BUCHANAN: The pairing. See and that  
12 is the other advantage to it. It could be done  
13 through repeater if you needed to extend the range.  
14 Which is something you wouldn't be able to do at 4.9  
15 Gigahertz. Mr. Speidel?

16 MR. SPEIDEL: Good morning, John. Bob  
17 Speidel with -- Electronics. I just want to sort of  
18 make us look back. In reading your thing, David here,  
19 I don't really have a problem with it. I have a  
20 concern in so much is I really don't see us talking  
21 about Interoperability. This paper say we are going  
22 to identify the Interoperability needs functions,

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1       whatever.

2                       Yes, all we see is that one example.  
3       Which I think is a fair example, my question is, at  
4       the last meeting we talked a lot about what do we want  
5       to do from an Interoperability standpoint in the wide  
6       band channels. Glenn stood up and Glenn said hey the  
7       only thing we have identified as Interoperability need  
8       in a data sense. And he said both narrow band and  
9       wide band, were short text Messaging. And I thought  
10      we were going to come back here and take a look at it  
11      and say what is it that we are expecting these  
12      channels to do.

13                     I think in your scenario where you talk  
14      about going from a helicopter down to a command post  
15      and all that kind of stuff, I don't see any problem  
16      with that. But I do question, is that really what we  
17      are talking about Interoperability. For example,  
18      somebody coming from New York out to California and  
19      they were going to do that. Well if they have got the  
20      same equipment, or I guess maybe the question is, are  
21      we talking about equipment interchangability? Or do  
22      we want to have one plain vanilla everywhere. And if

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1 you do that, then you don't really even need  
2 Interoperability channels.

3 I just don't think, I am just saying to  
4 the committee here, have we really decided what  
5 function we were supposed to be doing in the  
6 Interoperability channels and data. Once again, we  
7 all know what we mean when we talk about voice, but  
8 data is something new. And we don't, I don't think we  
9 really -- none of us really understand it.

10 MR. BUCHANAN: I think you are last  
11 comment is right on Bob. It is new and it is hard to  
12 define what people are going to dream up. You know  
13 the users are going to dream up a lot of things once  
14 they get the equipment and start using them. So my  
15 thought is can we give them enough flexibility to  
16 dream up all these issues. If we divide it up  
17 strictly in the narrowest channels only, then we have  
18 limited some flexibility because we have essentially  
19 limited the peak through put of data. If we set aside  
20 one or two, we have given them some additional  
21 flexibility of the users.

22 I am not sure how to answer your -- First

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1 question is, what are the needs? What are going to be  
2 the uses. I don't know, I don't think any of us know  
3 that answer.

4 MR. POWELL: Project Mesa has identified  
5 service by service in a very big document both --  
6 internationally generated document. A huge laundry  
7 list of these services, a number of which are going to  
8 be way to band heavy to or require much more spectrum  
9 than we have here. But I think we can certainly glean  
10 through that list a whole number of applications. And  
11 this was generated from the community both here and in  
12 Europe, put together. So it is quite an extensive  
13 document. And it is available for people to look at  
14 off that web site.

15 MR. SPEIDEL: You know, I think if  
16 nothing, I just want to point out, TIA at our last  
17 meetings, we were talking about recommending only  
18 doing the 50 kHz in the Interoperability spectrum as  
19 going forward with the standard, correct?

20 MR. POWELL: Yes, right, for  
21 Interoperability?

22 MR. SPEIDEL: Yes.

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1 MR. POWELL: Yes.

2 MR. SPEIDEL: When you talked about the  
3 wide band digital standards that is what we talked  
4 about.

5 MR. POWELL: Right. Sean?

6 MR. O'HARA: Sean O'Hara, Syracuse Research  
7 Corporation. I think one of the things we need to  
8 realize, when we are looking at -- my next question  
9 is what quality of video can we expect for what  
10 bandwidth? Or what bandwidth do we need to support a  
11 given quality a video? We also really need to  
12 understand the requirement for what range you are  
13 looking for to get that video across. Because, you  
14 know, obviously a shorter range is you can operate  
15 with high order modulations, push a lot more data  
16 through in smaller bandwidth. But if your requirement  
17 is also an extension of range, then you can't do that  
18 anymore. And I think you really do have to look at  
19 putting the blocks together at a minimum.

20 MR. DEVINE: Steve Devine, State of  
21 Missouri. I think Davis right with the immediate  
22 coverage of the current 5.21 license spectrum, 5.2

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1 gig. If a 4.9 is going to be anything similar to  
2 that, the literally driving down the end of the street  
3 and making a left turn puts you out of the loop, so it  
4 is very possible that in some terrains and some areas  
5 there might be need to be some of the channels  
6 aggregate to improve certain off rigs at the command  
7 post and some scenes. Especially in a rural areas  
8 where the terrain is not going to be forgiven. So I  
9 think keeping some that can be aggregate is certainly  
10 option even if you are going to make 18 at 50.

11 MR. POWELL: I think certainly one of the  
12 applications is the one that is discussed in here with  
13 airborne. Whether it is surveillance or fire scene,  
14 certainly in the western states, the fire, wild land  
15 fire issue is a major one. And we currently use video  
16 a lot for that. Beyond that as to other uses for  
17 video, point to point surveillance or things like that  
18 would come to mind in the law enforcement arena. But  
19 there maybe other alternatives there, especially where  
20 you are establishing a fixed link. And to this point,  
21 state and local law enforcement has not made an awful  
22 lot of use fixed surveillance wireless. For one

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1 reason, not having the spectrum available to do it in.

2 So perhaps, again, looking to the federal folks over  
3 here, what there experience has been with wireless  
4 fixed surveillance.

5 MR. SCHLIEMAN: You have to speak up.

6 MR. MURPHY: Again, from the federal  
7 perspective, fixed surveillance is not commonly  
8 shared, you know, and I think we get back to Bob's  
9 question is exactly the applications. I think John's  
10 recommendation that we look at the existing user need  
11 document that Project Mesa has put together to glean  
12 out those activities and/or applications that can be  
13 put in what we feel a 50 MHZ channel would probably be  
14 the best first shot at figuring out what the document  
15 needs to say and where we are driven towards.

16 But again, I emphasize what Bob has  
17 already mentioned and that is there a need to share a  
18 lot of that data Interoperability short of the text  
19 Messaging that he was referring to?

20 MR. POWELL: Typically, certainly for  
21 surveillance applications and even for the airborne  
22 platform, that is usually point to point. Not

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1 necessarily with a whole bunch of people looking at  
2 it. It is going back to a fire base or the command  
3 base.

4 MR. MURPHY: Right, yes.

5 MR. POWELL: It is not point to multi-  
6 point.

7 MR. BUCHANAN: And there may be, I know we  
8 have talked about text Messaging, but I can't imagine  
9 that if this is available and the through put is  
10 available that folks out there aren't going to decide  
11 that they need pictures and other things that take up  
12 a little more bandwidth and need more higher speed  
13 data just to get the response time down. That they  
14 are not going to want to do other than text Messaging.

15 Matter of fact, if it was just text Messaging that we  
16 do, then why do we even need the wide band data.

17 MR. POWELL: The Mesa document identifies  
18 a whole number of other --.

19 MR. BUCHANAN: And maybe we need to take a  
20 look at that before we make the final recommendation  
21 to the technical committee. Because really what we  
22 are recommending out of this committee is the needs

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1 and in the technical committee, we have got to  
2 recommend a bandwidth. But we can certainly recommend  
3 that most stuff can be done with a lower through put  
4 or all of it can be done with a lower through put. I  
5 think that is the answer we need to answer today to go  
6 on to the technical committee.

7 And if we need to look at that other  
8 document, then maybe we need to put it off to the next  
9 meeting. But we can't go much longer, because TIA  
10 needs an answer too.

11 MR. POWELL: I think John, you were  
12 looking to get an answer from this series of meetings?

13 MR. OBLAK: Yes, in fact, tomorrow as the  
14 Steering Committee, I will be presenting the progress  
15 to date on the Tier 85 Wide band Data activity. And  
16 in there will be several questions will pose to the  
17 NCC. One of them being the issue of bandwidth,  
18 modulations types, modulation protocols. And so right  
19 now we see a combination of up to 18 different  
20 combinations of these and we certainly would make some  
21 recommendations tomorrow as to how we would like to  
22 narrow that down. And certainly one of the

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1 recommendations we are going to make is 50 kHz. But  
2 again, we certainly need the input from the NCC on the  
3 desires here.

4 MR. POWELL: And for the record that is  
5 John --

6 MR. OBLAK: John Oblak, yes.

7 MR. POWELL: I was not apart of a lot of  
8 the discussion at the last meeting, the TIA meetings.  
9 Did you look at some of the needs that or what the  
10 manufacturers saw as uses for these channels?

11 MR. OBLAK: Yes, we did. We will present  
12 that again tomorrow. We feel that within what we  
13 understand as the needs, we can do it in a 50 kHz  
14 bandwidth. But we certainly are looking for your  
15 inputs because you ultimately determine what should be  
16 the Interoperability modes.

17 MR. POWELL: Okay, thank you.

18 MR. KAIN: I am Carl Kain with MITRE Tech  
19 Systems. I agree with Dave about that flexibility.  
20 We have a federally funded project to bring video back  
21 from transit buses to transit management centers for  
22 the transit police. And they may have some

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1 Interoperability needs with local police. Transit  
2 companies, by and large now are putting digital video  
3 recorders on their buses. But the video isn't going  
4 anywhere. If there is a real time incident that needs  
5 attention to, all they are going to be able to do is  
6 use that video for evidence at the end of the day.

7 We are at a Project 2, bring the video  
8 back on commercial systems, like the Verizon express  
9 net service or the GPRS service. We don't know if  
10 that is going to cut it. We are going to find out and  
11 have results by the end of this year. We are using  
12 commercial systems because we don't have a public  
13 safety band alternative. And I agree with Dave, if we  
14 discover that 50 kHz is not going to be sufficient,  
15 then we are going to have be recommending to the  
16 transportation folks that they may have to go with  
17 commercial services only.

18 There are other needs, I think in the  
19 intelligent transportation system incident management  
20 area for needs between transportation, highway  
21 maintenance and between local first responders for  
22 video also. I think that the reason they don't do it

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1 is because they don't have the bandwidth and they  
2 don't have the equipment. So I agree with Dave, you  
3 set aside at least a small portion of channels that  
4 allow the flexibility to develop these newer services,  
5 then the newer services will develop. If not, our  
6 customers will be migrating to the commercial services  
7 and staying out of the public safety bands.

8 MR. POWELL: John, follow up?

9 MR. OBLAK: Yes. John Oblak. Just  
10 respond to that. For a moment, we at TIA are  
11 developing a standard that does incorporate all the  
12 bandwidth, all the modulations all the way from 50 kHz  
13 channels to 150. The issue at had though, is what  
14 will we use as a baseline for the Interoperability  
15 channels? The standards we'll develop with have the  
16 wide band aggregate channel capability. Simply, the  
17 question we would like answered or need to answer, is  
18 what is the requirement for the Interoperability  
19 channels?

20 MR. POWELL: Okay, Glenn?

21 MR. NASH: Glenn Nash with APCO  
22 International. And just sitting here and listening to

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1 some of this, one of our real problems is that with  
2 wide band, we have no experience. We don't know what  
3 that will be used for. What services will in fact be  
4 developed there. What is practical, what is not  
5 practical. And so one of our difficulties here is  
6 that while we certainly don't know what is going to be  
7 used for as an operational channel, it makes it even  
8 more difficult to talk about what it would be used for  
9 as an Interoperability channel. And what are needs  
10 are for Interoperability.

11 The thought that kind of crossed my mind  
12 is maybe in this point of uncertainty, that what we  
13 should be doing is leaving ourselves open for future  
14 flexibility. And my point is, there are a number of  
15 channels in that wide band currently set aside for  
16 Interoperability. I am going to suggest, strictly as  
17 an idea off the top of my head, you know real quick  
18 here. Maybe, let's only define one of the here at  
19 this point and time as the Interoperability and leave  
20 the others open for future discussion as we develop  
21 what works and what doesn't work. And what we have  
22 needs for we then come forward and define what those

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1 channels are later on. If they are best defined as 50  
2 kHz channels, we can do that. If we discover that we  
3 have a need for you know a couple of 150 kHz wide  
4 Interoperability channels, we have the ability to do  
5 that. We haven't committed ourselves to a specific  
6 thing. If you will, we define one and suggest that  
7 the others be put in reserve for a period of time as  
8 we develop what we are going to be doing wit this.

9 MR. BUCHANAN: That certainly give us the  
10 flexibility. I think that is what you are saying that  
11 is that we pick on or two of these, I'll just call  
12 them the 150 kHz, although they would be divided in to  
13 50 kHz. The rest of them we just leave for now and  
14 say, when and if the need arises for a wider band  
15 width, then we designate them at a later date. Is  
16 that basically what you said Glenn?

17 MR. NASH: Sure.

18 MR. BUCHANAN: I guess from the standpoint  
19 of this group, I think we are going to have to make  
20 the statement that we are developing all of this with  
21 no real world experience. I think we can all agree on  
22 that. For most of the basic Interoperability, it can

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1 be done at the lower through put rates requiring  
2 probably no more than the 50 kHz channels that TIA is  
3 asking for. So maybe we do just say two of the  
4 channels are set aside, essentially be six 50 kHz  
5 channels would be designated right now for the  
6 Interoperability wide band channels. The others would  
7 be reserved for future needs. Either more 50 kHz or  
8 the need arise for wider bandwidth, high through put  
9 that we could come back and designate one or two more  
10 as 150 kHz wide.

11 MR. POWELL: Actually Dave, I think to  
12 meet what TIA is looking for right now. If we simply  
13 say that we know there is going to be a need at 50 and  
14 we think that should be the baseline, we could then go  
15 ahead to the next meeting and review the Mesa  
16 documents in between and perhaps at the September  
17 meeting, get a better picture of where we are. But  
18 still give TIA the direction that they are looking for  
19 for their meeting in two weeks to move towards  
20 resolution of those issues.

21 MR. BUCHANAN: Glen's coming back up, but  
22 when we get into the technical committee, I think if

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1 at all possible, if we go this direction, then that  
2 would probably give us enough in put to the technical  
3 committee then to make some tentative decisions there  
4 that would let TIA go ahead starting now, rather than  
5 waiting until our next meeting, which isn't until  
6 fall, so.

7 MR. NASH: Glenn Nash, now wearing my hat  
8 as the chairman of the Technology Subcommittee. One  
9 of the real concerns I have is if we put this off  
10 until September, we are supposed to have a final  
11 decision and report by January. And September just  
12 doesn't give TIA enough time to do it. And I am not  
13 sure that you have enough time now, but September  
14 certainly would be.

15 So I think we need to do something at this  
16 meeting that gives them a solid direction to move  
17 towards that we can have something in September when  
18 the NCC at least in theory, comes to an end. And  
19 Mike, I will leave that open as to how much longer  
20 this is going to carry on. But we do need to make a  
21 decision here so that we can get this thing moving  
22 forward.

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1 I think at this point, since the only  
2 definable thing we have come up with is text  
3 Messaging. And that can be done in a 50 kHz channel.

4 Let's define that and as I recommend, let's leave the  
5 other open for some future decisions as it becomes  
6 clearer, what the define need is.

7 MR. POWELL: John?

8 MR. OBLAK: John Oblak. Again from the  
9 standpoint of TIA, I don't believe that the decision  
10 today is absolutely necessary. We are developing the  
11 standards assuming multiple bandwidth. Multiple  
12 modulation formats and so forth. And so from the  
13 standpoint of developing the standard, I don't think  
14 it delays us if the a decision is not made today.  
15 However, I think it probably helps your though  
16 processes and recommendations if the decision is made  
17 as early as possible. Obviously we will come up with  
18 a standard that will define all of these modes. It  
19 will be, we can make and we will make recommendations  
20 to you as to what we think is appropriate for  
21 Interoperability modes. But we are certainly flexible  
22 enough that if you would change your mind later, that

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1 we can accommodate that.

2 MR. BUCHANAN: John, based on all of that,  
3 I am going to make this recommendation. I am going to  
4 recommend that we set aside-- One basically that we,  
5 first we agree that most of the Interoperability needs  
6 that we can foresee at the moment can be handled at  
7 the lower data rates which require only the 50 kHz  
8 channel width. And that we set aside six channels now  
9 for that. Also, I think since TIA, the standard is  
10 flexible enough to handle 150 kHz wide channels. Also  
11 that we set aside one channel pair for that and hold  
12 the rest in reserve to see which way need for the  
13 future for the number of channels.

14 Whether most of the needs are going to  
15 only require 50 kHz then we could divide them up  
16 later. And 50 kHz if more need comes about that it  
17 need higher bandwidth then we have some ready that  
18 could be aggregated for higher.

19 MR. POWELL: My concern is this, we are  
20 going to do a review of the best guesses and what we  
21 are going to need. Assuming this committee ends its  
22 work on schedule as the commission would like, we

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1 wont' be meeting anymore to discuss those --

2 MR. BUCHANAN: I understand that. But it  
3 is just something that the Commission can bring up at  
4 a later date once there is actual use. I think you  
5 are probably, I mean realistically, you are not going  
6 to be able to use probably for another five to ten  
7 years. If we don't leave ourselves with the most  
8 flexibility, then we are locking people in ten years  
9 down the road to stuff that we really don't understand  
10 today.

11 MR. POWELL: How about if we do the,  
12 forward to the technology subcommittee our belief that  
13 there will be a significant number of 50 kHz  
14 applications here. And let's review the information  
15 in the Mesa documents and come up with some channel  
16 numbers at the next meeting. That is not going to  
17 hurt anything to delay it.

18 MR. BUCHANAN: We can do that, yes.

19 MR. POWELL: That way everyone will have a  
20 chance to look at it and give us their input since we  
21 don't have a large group here today to really look at  
22 that. That would give the, since we haven't addressed

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1 this issue today would give an opportunity for people  
2 not in attendance to get some input back to you. Is  
3 that agreeable to people? Glenn does that meet your  
4 needs?

5 MR. BUCHANAN: Okay, we will leave the  
6 numbers until next meeting. But the majority of it  
7 can be done.

8 MR. POWELL: Anybody disagree with moving  
9 forward in that manner? Glenn, then we'll just  
10 indicate to you right now, verbally, that we believe  
11 from this subcommittee that there will be a  
12 significant application for 50 kHz Interoperability  
13 channels and you can go ahead and move forward with  
14 that during your meeting.

15 MR. BUCHANAN: That should let us Glenn,  
16 also then at the technology look at some of the other  
17 issues that they need to decide at the symbol rate and  
18 all that. If that is decided, I guess the other issue  
19 that we brought up with that usage -- loading criteria  
20 is an issue we need to bring up at the tech committee  
21 and with TIA. We need some guidance there. Haven't  
22 heard anybody that has been able to tell me how many

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1 units could be loaded on one of these 50 kHz channels.

2 How much and what to expect, we kind of know that for  
3 the channels we use for mobile data now at 25 kHz.  
4 But we really don't have that for the high speed, the  
5 wide band channels. So that is something that we  
6 would be looking for also for those wide band.

7 MR. SCHLIEMAN: Dave, Bob Schlieman.

8 MR. BUCHANAN: Yes.

9 MR. SCHLIEMAN: Could you provide those  
10 statics on your 25 kHz channels as to how you have  
11 identified the traffic load at the present time?

12 MR. BUCHANAN: Well I couldn't today.

13 MR. SCHLIEMAN: No, I didn't mean right  
14 this instant. But could we share that information, I  
15 think it would be useful. Certainly if we are going  
16 to send high speed data in a wider bandwidth, it  
17 should be somewhat related to what you send for data  
18 at a lower speed in a narrower bandwidth in terms of  
19 the quantity of information transferred.

20 MR. POWELL: It gets to be getting down to  
21 what you are sending. If you are sending --

22 MR. DEVINE: Exactly.

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1 MR. POWELL: Primarily pictures --

2 MR. DEVINE: -- quantifying the type of  
3 data that is being transmitted and so on like that. I  
4 know there are some numbers that NCIC 2000 had put  
5 forth for explaining the different performance  
6 parameters. And I don't know if you are matching up  
7 with those or what. But if you could share that, it  
8 would be useful.

9 MR. BUCHANAN: I'll try to dig it out and  
10 put it into the e-mail then. But I would still ask  
11 the TIA folks if they have got anything put together  
12 that would really help us or if they could put  
13 something together.

14 I think the other issue that is still  
15 outstanding is that we had the proposal last time from  
16 me as regards to using IP addressing and all of that  
17 on the narrow band channels. Where we are at right  
18 now, to move that forward, any, we still need to some  
19 agency PSWN, FLEWUG responded to me. They don't feel  
20 either of those organizations are the right  
21 organizations to be the administrator of all of this.  
22 Because they are not going to be in existence long

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1 term. So we still need some organization that is  
2 going to be in existence long term to administer on a  
3 nationwide basis if we want to standardized IP  
4 addressing for the Interoperability channels, narrow  
5 band and probably wide band also. Because looking at  
6 the document that was handed to me this morning on the  
7 standard that it very much envisions IP addressing.  
8 In that, is that correct John? Yes.

9 So if you are going to have IP addressing  
10 on these Interoperability channels, you still have to  
11 have some way that it is defined in advance. You just  
12 can't do it ad hoc. Make it up at the scene every  
13 time and re-invent the wheel each time. It needs to  
14 be done on a nationwide basis of some structure that  
15 assigns the addresses so that people are known when  
16 they come in, they can registered quickly and get on  
17 the air and start receiving and sending the data. So  
18 I guess on that issue, does anyone got any ideas on  
19 who could administer that?

20 MR. POWELL: We actually, looking at Tom  
21 Tolman over there. We were going to discuss this as a  
22 NPSTC activity, in conjunction with the database.

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1 Because even though there is not guarantee as to how  
2 long NIJ will manage the database, there is a  
3 mechanism that assures that that will continue with  
4 the coordinators taking over the management of the  
5 database. And we had some initial discussion about  
6 this being an item that could be coupled with the  
7 database or at lease we could propose to NIJ that we  
8 do that.

9 I think it is a really critical issue that  
10 we need to address. And we let that slip through the  
11 cracks for yesterdays meeting. But I think that is  
12 one organization and there is already this database  
13 for the 700 band. To me that is a very logical place  
14 to couple and if we can get the funding to and I don't  
15 know that it is a real complicated database.

16 MR. BUCHANAN: It is not. A couple of  
17 things need to be done with it. One, is whoever it is  
18 needs to apply for the address block, a class B  
19 address block. And then also to get a dot-gov type  
20 address for the e-mail addresses that you can assign.

21 I didn't bring the paper, but I put it all in that  
22 paper that I put together. I think those two things

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1 need to be done and then beyond that is just the  
2 database that people can register to with all their  
3 units.

4 MR. SCHLIEMAN: Bob Schlieman. Just as a  
5 discussion piece, in Project 25, there is a  
6 identification, I guess I'll call it algorithm that is  
7 based on the call sign in the system. And I wonder if  
8 it is possible to come up with some kind of a uniform  
9 scheme for at least at the system level identifying an  
10 IP address scheme for based on something like that.  
11 That would simplify the assignment process.

12 MR. BUCHANAN: The answer is yes. What  
13 you have got to do is just come up with whatever. It  
14 can be the ID or the serial number, address for the RF  
15 modem for the Project 25 modem. It could be the unit  
16 identifier, if everyone has standard unit identifiers  
17 of their units. Anything like that. Then you can tie  
18 that back because you can't assign, as I understand  
19 the IP and I have quizzed my IP experts at, you know  
20 at my county quite extensively on this.

21 You have to use dynamic IP assignment. In  
22 other words, you get a block of address, but that

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1 block isn't big enough to give to everybody in the  
2 country their own. So you assign them dynamically as  
3 they are needed. So they change, the actual IP  
4 address changes. But you tie that back to an  
5 identifier that identifies each unit uniquely. So the  
6 answer is yes, Bob.

7 MR. NASH: Yes, I think, Glenn Nash here.

8 Let's keep in mind that the problem goes far beyond  
9 granting access into databases and things like that.  
10 Let's go back to what we have identified as the  
11 Interoperability requirement here is simple text  
12 Messaging. In order to have simple text Messaging,  
13 you must have a way to address the person you want to  
14 send the message to. And that addressing scheme needs  
15 to be something that if, you will, is intuitive.  
16 Because again, we are talking Interoperability.

17 So these in theory, are people who do not  
18 normally work with each other so how do they know what  
19 the other guys address is in order to send to him a  
20 message. You know, it starts really getting it down,  
21 you know the operational issues appear of how do we  
22 make this Interoperability work from the field

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1 officers view point. -- very difficult thing here.

2 MR. BUCHANAN: Again, when you set that  
3 up, they end up with an e-mail address just like all  
4 of us have generally, an e-mail address. So if you  
5 tie it to a unit identifier, you have a standard way  
6 of identifying units and that becomes, operationally,  
7 you can do that. You can also send that information  
8 to a unit as a register on the system so that they can  
9 find people they are working with.

10 Generally, I agree if you have, we'll  
11 let's take a fire example. When you have an incident  
12 now and you bring in mutual aid resources, they come  
13 into a staging area and then they are assigned. Part  
14 of that staging assignment could be, getting their  
15 unit identifier, getting registered on the system.  
16 Getting that propagated to the other units so they  
17 know they are there, to the command post. So the  
18 command post knows who it is. And that way you can  
19 send the addresses.

20 If it is a law enforcement type thing, it  
21 is going to have be some type of similar process and I  
22 think, and I a not as familiar with law enforcement,

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1 but I don't think as they bring incidents today.  
2 Number one they don't do as much mutual aid between a  
3 lot of units. But if that becomes more common, I  
4 think they are going to have a staging procedure and  
5 do the same type of thing. But that can all be  
6 handled under the IP address in and under the e-mail  
7 addresses.

8           Again, it is something beyond the purview  
9 of this committee to set up all those operational  
10 details, were going out of business. So there is no  
11 use us trying to do it. It has to be something like  
12 NPSTC --

13           MR. NASH: But I think this committee  
14 needs to set up that frame work. Because again, you  
15 are now talking about a dynamic thing and so you can  
16 get back to you know the questions of not knowing do  
17 you have to you know, tell that individual unit what  
18 its address is. As you said, you have to communicate  
19 to everybody else that is part of that activity what  
20 the address is of that unit. And where that unit fits  
21 into the scheme of the event.

22           So that people who need to send a message

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1 to the unit performing security at the south end of  
2 Highway 99, how do they identify what the address is  
3 of that unit to send them a message?

4 MR. BUCHANAN: Yes, it becomes an e-mail  
5 address and you do that. It was in the paper I put  
6 together. And I don't think, I think that is all  
7 doable, and I think we should adopt, eventually that  
8 paper or an aversion of it to send on, but before we  
9 can even do that, we have got to find somebody that is  
10 going to take on this pass of keeping track of all  
11 this assigning the e-mal addresses and keeping the  
12 database. Number one that you know a unit is even  
13 authorized to even be on it. That you are not getting  
14 units on there and that somebody that is not even  
15 authorized.

16 MR. POWELL: Then you get into all the  
17 authentication issues and everything else.

18 MR. BUCHANAN: Right and I don't think  
19 that is something that this group can work out all  
20 those details. We may want to, but I don't think we  
21 can.

22 MR. POWELL: But we should come up with

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1 the frame work.

2 MR. BUCHANAN: We can come up with the  
3 framework, but not all the details.

4 MR. POWELL: And if we do the frame work  
5 right, then --

6 MR. BUCHANAN: But before we do the frame  
7 work, I would like to know that there is somebody  
8 there that is going to take on the task it is all for  
9 nothing.

10 MR. POWELL: I think we can certainly  
11 discuss it within NPSTC as to whether that would be an  
12 appropriate adjunct to the database that already  
13 exists for this band. And again, I don't think we are  
14 talking a complicated database. Especially if we have  
15 a structure that establishes how those addresses are  
16 going to be put together as what was suggested for P  
17 25.

18 MR. BUCHANAN: From my paper, what I  
19 suggested is, is that the - and I don't know if other  
20 states do this, but in California for fire folks,  
21 every fire agency has a 3 letter identifier. Say like  
22 SBC for San Berdino County. You can take the SBC the

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1 unit number, it might be Engine 201, that becomes your  
2 e-mail address. It is just would be  
3 SBCUnit201@whatever, mutualaid.com or .gov or  
4 something.

5 MR. POWELL: We can look at that.

6 MR. BUCHANAN: And that was in that  
7 proposal was in the paper that I put together last  
8 time. I can put that back out on the list serve and  
9 we can look at adopting that next time. Letting  
10 everybody take one more look at it.

11 MR. POWELL: And certainly within --

12 MR. BUCHANAN: But if you can get with  
13 NPSTC, if Tom and you guys can all get together, tell  
14 us whether you will take it on, we can go from there  
15 pretty easy. Freddie will tell you the direction it  
16 needs to head.

17 MR. POWELL: I think actually if we look  
18 at a national level, there are, every agency in law  
19 enforcement has an NCIC identifier. Fire service does  
20 the same thing. Every fire agency has a nationally  
21 coordinated --

22 MR. DEVINE: Already unique numbers --

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1 MR. POWELL: Unique numbers established.  
2 And we are able to be build upon that.

3 MR. BUCHANAN: However that works, that is  
4 what it needs to be. Tom?

5 MR. TOLMAN: Tom Tolman with NPSTC Support  
6 Office. I would suggest that the best way to proceed  
7 with this is to formalize some type of action. And  
8 you are right, it is in accurate to say that it needs  
9 to run it through NPSTC. That is, formalize some type  
10 of letter that finds its way to the NPSTC chair and  
11 that is the process we will take.

12 MR. POWELL: Would recommend from this  
13 subcommittee that the NCC chair send a letter to NPSTC  
14 asking if they will take that on.

15 MR. BUCHANAN: Take that on? Is that  
16 agreeable with everybody?

17 MR. POWELL: And if it isn't you need to  
18 give us a better alternative.

19 MR. SCHLIEMAN: But procedurally you want  
20 to run it through the Steering Committee.

21 MR. POWELL: Go to the Steering Committee.

22 MR. BUCHANAN: I think that is all I have.

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1 MR. POWELL: We have this one last issue  
2 here that it has been suggested by a number of people  
3 that it might be appropriate for this subcommittee to  
4 recommend to the Steering Committee that a follow up  
5 letter be sent to TIA stressing the urgency of  
6 completing their work on the standard prior to the end  
7 of the year. And if there are no objections, I will  
8 also put that as an action. I have to go to the  
9 Steering Committee tomorrow.

10 Do we have any new business people would  
11 like to bring up? Glenn are you ready. We'll take a  
12 20 minute break at this point to allow the  
13 subcommittees to change places. And we will adjourn  
14 this meeting. And in 20 minutes at quarter to eleven  
15 the Technology Subcommittee meeting will start.

16 (Whereupon, the hearing in the above-  
17 entitled matter was concluded at 10:32 a.m.)  
18  
19  
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