

UNITED STATES OF AMERICA

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FEDERAL COMMUNICATIONS COMMISSION

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PUBLIC SAFETY NATIONAL COORDINATING COMMITTEE

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TECHNOLOGY SUBCOMMITTEE

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WEDNESDAY

JULY 16, 2003

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The Subcommittee was called to order at 9:10 a.m. in the Commission Meeting Room of the Federal Communications Commission, 445 12<sup>th</sup> Street, S.W., Washington, D.C., Glen Nash, Chairman, presiding.

PRESENT:

GLEN NASH	Subcommittee Chairman
DAVE BUCHANAN	Member
MICHAEL WILHELM	Designated Federal Official

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

2 9:10 a.m.

3 MR. WILHELM: On the record. We're going  
4 to start with the Technology Subcommittee. It's a  
5 little out of order but we'll pick up with the  
6 Interoperability Subcommittee and the Implementation  
7 Subcommittee later on.

8 I received an e-mail from Ted Dempsey  
9 this morning. He is not feeling well. The docs  
10 don't know quite what it is and he didn't think he  
11 should come up here and spread it around so he will  
12 not be with us. Glen, if you are ready, we can start  
13 the Technology Subcommittee.

14 CHAIRMAN NASH: Good morning. What we're  
15 handing out is a letter from TIA regarding the  
16 wideband data standards that they are recommending.  
17 I do understand that we might have to do some pen and  
18 ink changes to the letter but I wanted to get this  
19 out since this covers the information that we need to  
20 adopt.

21 This being the final meeting of the NCC,  
22 there's a number of issues that we need to go over

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1 and deal with. We do need to complete our work on  
2 the wideband data standard which is covered within  
3 this letter. There is also an update to the Common  
4 Air Interface that TIA is finishing up work on and I  
5 would look that we recommend to the FCC adopt that  
6 modified document as a rule change.

7 Then I also noted that there is another  
8 change. The rules currently referred to for  
9 encryption refer to use of the DES Standard. As I  
10 recall, we had several meetings ago recommended use  
11 of the AES Standard. So I would be looking that we  
12 just confirm that to the Steering Committee as  
13 another recommended rule change. Being the last  
14 meeting I wanted to make sure that we got everything  
15 touched.

16 So to begin with, let's start with this  
17 letter from TIA. TIA has done a Herculean effort  
18 here to develop a standard for the wideband data  
19 documents. They have at this point developed six  
20 documents. About a month ago, I sent out an e-mail  
21 identifying these documents and actually I refer to a  
22 seventh document.

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1                   Let me deal with that seventh one first.

2                   The seventh document was going to be a standard  
3 related to text messaging between users. TIA did  
4 some investigation on that. We were looking at  
5 something similar to AOL's Instant Messenger or a  
6 variety of other similar type applications that are  
7 out there.

8                   TIA talked with AOL and they talked with  
9 a number of other companies. All of them said "No,  
10 our instant messaging type of service is priority and  
11 we're not interested in that becoming a standard and  
12 we will not offer it to become a open standard or a  
13 licensable standard." That put TIA in the position  
14 of having to develop a new standard and a new  
15 application for text messaging.

16                   In some discussions, we did come to the  
17 conclusion that what that was was an application and  
18 was not really down to the physical layers that we  
19 need to establish a standard for in the rule. It was  
20 rather a square items that could be built into the  
21 devices but not necessarily into the radios. So it  
22 probably is not necessary for us to actually adopt or

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1 recommend a standard to be included in the rules  
2 regarding that issue at least from a technology  
3 standpoint.

4 I do understand that John Powell with the  
5 Interoperability Committee still wants to address  
6 that as establishing a standard for some sort of  
7 instant messaging but as I said at this point that  
8 standard is still many months away. It is going to  
9 have to be completely developed and drafted as a  
10 completely new description of something that doesn't  
11 exist. Care will have to be taken to not infringe on  
12 any patents that might be held by AOL and other  
13 people that currently provide that as a service.  
14 It's going to be not the easiest standard to develop.

15 Am I right, John?

16 So with that, TIA has moved forward with  
17 the six documents. Four of them had been previously  
18 approved. The final two as I said in my e-mail a  
19 month ago were out for ballot. That ballot period  
20 did close. At that point in time under the TIA  
21 rules, they needed to have at least 12 responses.  
22 They did not have 12 responses. Therefore they

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1 extended the ballot period until this past Monday,  
2 July 14<sup>th</sup> in order to get 12 responses.

3           They did get 12 responses. They were all  
4 in the affirmative. There were some comments in a  
5 couple of the responses. The comments needed to be  
6 resolved and I understand that they are getting  
7 resolved. John can give us a full report on that.  
8 Anyway, we are ready at this point to at least  
9 recommend that these six documents be incorporated  
10 into the Rules as defining interoperability on the  
11 wideband data channels. John, do you want to make  
12 any specific comments?

13           MR. OBLAK: Again what Glen has mentioned  
14 is correct. The six documents that we have defined  
15 have all been published. There are two documents  
16 that are going for a higher level revision and they  
17 have as we said concluded the ballot and we can  
18 project a favorable outcome there. All the ballot  
19 comments were favorable to publish. Therefore we can  
20 project a publication date of August or early  
21 September at the latest. TIA would certainly  
22 recommend those six documents be brought forward for

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1 adoption in the Rules.

2 CHAIRMAN NASH: Are there comments from  
3 the audience relative to going forth with a  
4 recommendation to adopt the six documents that are  
5 listed on this TIA letter? Seeing none, we will  
6 exercise the Chair's prerogative of saying that we  
7 have concurrence. We have consensus. I will so  
8 report then at tomorrow's Steering Committee meeting  
9 that the recommendation of the Technology  
10 Subcommittee is to go forward with a recommendation  
11 to incorporate these six documents into the Rules as  
12 defining the technical requirements for operating on  
13 the wideband data interoperability channels.

14 The next items of business as I said is  
15 TIA has been working on an update to the ANCI 102.B  
16 (aaaa) document which would make it a B(aaaa)-A. Is  
17 that right, John? That is a revision to the Common  
18 Air Interface document for the narrow band channels.

19 It would apply to both the voice and the data  
20 interoperability. That document is critical to both  
21 of those.

22 What the update does is amongst some

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1 other changes most critically it incorporates a  
2 section on operation of the AFC for frequency  
3 stability. That change is needed from our viewpoint.

4 It's critical to maintaining the radio's  
5 performance within the requirements of the FCC Rules.

6 Therefore it becomes a critical element of the  
7 interoperability standards that we have.

8 Again I would seek any comments regarding  
9 our recommending that the Steering Committee forward  
10 a recommendation to the FCC that Section 90.548 of  
11 the Rules be modified to make reference to the ANCI  
12 102.B(aaaa)-A Common Air Interface document for both  
13 the voice and narrow band data applications. Any  
14 comments? Again it would appear that we have  
15 consensus on that issue. I will so report.

16 Finally on Monday in preparing for this  
17 meeting, I took a look just to make sure we were  
18 covering everything since this is the last meeting of  
19 the NCC. Section 90.553 of the Rules currently  
20 refers to encryption. As you may recall while  
21 encryption is not required for operation in the  
22 interoperability, if encryption is employed on the

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1 interoperability channels, we had then initially  
2 recommended use of the DES Encryption Standard.  
3 Several meetings ago, we had discussions and had  
4 updated that to a recommendation for the AES  
5 standard. That has not yet been incorporated into  
6 the Rules and I'm not aware of a NPRM to so  
7 incorporate it. I just wanted to bring it up at this  
8 meeting to ensure that such a change does go forward  
9 as a recommendation. Wayne.

10 MR. LELAND: Yes, Glen, just a comment.  
11 Wayne Leland. The letter that you are referring to  
12 that I initiate with that recommend there is an error  
13 in there in the fourth sentence. It says "50  
14 megahertz channels". It should "50 kilohertz".  
15 Please scratch that out and correct it. Thank you.

16 CHAIRMAN NASH: Okay. Going back to the  
17 TIA letter, the fourth line of the first paragraph  
18 where it says "operating on 50 megahertz channels  
19 with 16 QAM." That is super wideband and we will  
20 narrow it down to being "50 kilohertz channels". Are  
21 there other corrections to that letter? That is a  
22 rather significant change, Wayne.

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1 MR. LELAND: Although we would take 50  
2 megahertz channels.

3 CHAIRMAN NASH: If the Commission is  
4 willing to give us that, we certainly will accept it.

5 Any comments on the encryption standard? The  
6 recommendation would be to incorporate AES and I  
7 understand we need to further define that, John, as  
8 block.

9 MR. OBLAK: That's correct. There was in  
10 the change from DES encryption to AES encryption in  
11 which there was a new TIA document that was  
12 published. It's called "The Blocking Encryption  
13 Protocol." That document defines the encryption  
14 modes including AES and therefore TIA would recommend  
15 that the blocking encryption protocol replaces the  
16 existing DES standard that's referenced in the Rules  
17 currently.

18 CHAIRMAN NASH: Okay and I know that the  
19 existing was already an (aaa)-A so this now would  
20 become a (aaa)-B.

21 MR. OBLAK: Actually a completely  
22 different number.

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1 CHAIRMAN NASH: It's a completely new  
2 document.

3 MR. OBLAK: Yes.

4 CHAIRMAN NASH: It's been validated.

5 MR. OBLAK: It is published.

6 CHAIRMAN NASH: Yes, it is published. So  
7 if you could get that new number for us.

8 MR. OBLAK: That will be in my  
9 presentation.

10 CHAIRMAN NASH: We'll go forward with a  
11 formal recommendation then to adopt that document in  
12 place of the one currently referred to in the Rules.

13 That's all I had down as being business for this  
14 Subcommittee. Does anyone have anything else that  
15 they want to bring up for the Technology  
16 Subcommittee? With that, Michael, I think we have  
17 completed our work per the request from the  
18 Commission. I will go ahead and adjourn this  
19 meeting. I see John Powell is now here so we can  
20 move forward.

21 MR. WILHELM: Okay, thanks for leading  
22 off.

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1 PARTICIPANT: Since this is the final  
2 meeting, how about giving a round of applause for the  
3 work they have done.

4 (Applause.)

5 CHAIRMAN NASH: Thank you. I have give  
6 all the credit to TIA, John Oblak and the TIA  
7 Committee. They've done a tremendous amount of work  
8 and really supported us very well. John, if you  
9 would express that to the Committee. Thank you. Off  
10 the record.

11 (Whereupon, the above-entitled matter was  
12 concluded at 9:28 a.m.)

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