

U.S. Department of Commerce
Commerce Spectrum Management
Advisory Committee (CSMAC)
Meeting
Wednesday, August 28, 2013

The Advisory Committee met in Room 4830 in the Herbert C. Hoover Building, 1401 Constitution Avenue, N.W., Washington, D.C., at 1:00 p.m., Brian Fontes and Greg Rosston, Co-Chairs, presiding.

Members Present:

Brian Fontes, Co-Chair
Greg Rosston, Co-Chair*
Larry Alder*
Thomas Dombrowsky, Jr.
David Donovan
Harold Furchtgott-Roth
Mark Gibson
Dale Hatfield*
Kevin Kahn*
Doug McGinnis*
Mark McHenry
Janice Obuchowski
Carl Povelites
Richard Reaser
Dennis Roberson*
Charles Rush
Daniel Stancil*
Thomas Sugrue
Bryan Tramont
Jennifer Warren*

Also Present:

Fred Moorefield, DoD
Karl Nebbia, Associate Administrator, Office of
Spectrum Management, NTIA/DoC
Larry Strickling, Assistant Secretary of
Commerce for Communication and
Information
Janet Young, FCC

*Participating via telephone

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Proceedings

(1:06 p.m.)

Welcome and Opening Remarks

Co-Chair Fontes: Good afternoon, everyone. I want to thank you, for those who were anticipating the throngs and the crowds and everything else to find your way here in person. I recognize this is the last week in August and many of you are on vacation. I'm only envious, but I hope that you are able to enjoy your vacation, even though you're taking time out of that to join this call, and I fully respect that.

I want to also recognize at the beginning of this Larry Strickling, who will be making a few comments to our group that are meaningful.

(Laughter.)

Mr. Strickling: Thank you, Brian. And thanks to all of you who are participating in today's CSMAC meeting.

So I think we've reached a very important milestone date today in terms of completing the work of the working groups on taking a look at the 1695 and 1755 bands. I want to thank everyone who participated, just as I've been thanking you all along, but not just those of you in the room today but also the dozens of folks from industry and from the agencies that have participated in this process for the last year.

I think we've learned a tremendous amount. I think, as all of you know, it's been an interesting process. It's been an important process, and, most importantly, it's a process that we now need to move forward and find a way to formalize and institutionalize as the new way of doing business as we continue to evaluate the re-purposing of spectrum and, most importantly, the sharing of spectrum between federal agencies and

industry.

So I want to thank everyone who has already been providing some analysis and overall comments about how the process is worked out. We will find an opportunity to take those sorts of comments and to collect that feedback in a more systematic manner here over the next month or two and try to use that information to improve our processes going forward.

But I am very pleased, very happy with where we've ended up in terms of what the groups have been able to accomplish as a first effort, as an experiment in how we can work more closely together, the agencies and industry, to try to solve as many of these issues at the front-end as we can.

And I think that will pay dividends as we move forward with these two particular bands and that I expect that the ultimate utilization of these bands by industry will come more smoothly and faster than it would have if we hadn't engaged in the work effort we did.

And I think the goal for all of us is to build on this going forward and find ways to continue to improve and streamline and make the process as efficient as we can because these issues aren't going away, as we all know.

So, again, congratulations to all of you for your help and participation and support in all of this. And we look forward to working with all of you going forward.

Opening Comments and Introductions by Co-Chairs

Membership Roll Call

Co-Chair Fontes: Appreciate that. We'd like to now do a roll call. My Co-Chair is joining by phone. I just want to make sure that Greg Rosston is on the phone.

Co-Chair Rosston: I am on the phone. This is Greg. And I'd remind everyone else on the phone to hit mute when you're not talking.

Co-Chair Fontes: Great. And also to say your name when you are talking, and to remove the mute button. Okay. So let's just go down the list here. Larry Alder?

Member Alder: Yes, Larry's here.

Co-Chair Fontes: Thank you. David Borth?

(No response.)

Co-Chair Fontes: Michael Calabrese?

(No response.)

Co-Chair Fontes: Marty Cooper?

(No response.)

Co-Chair Fontes: Mark Crosby?

(No response.)

Co-Chair Fontes: Tom Dombrowsky?

Member Dombrowsky: Here.

Co-Chair Fontes: David Donovan?

Member Donovan: Here.

Co-Chair Fontes: Myself. Harold Furchtgott-Roth?

Member Fuchtgott-Roth: Here by phone.

Co-Chair Fontes: Thanks. Mark Gibson?

Member Gibson: Here.

Co-Chair Fontes: Dale Hatfield?

Member Hatfield: Dale. I'm here.

Co-Chair Fontes: Thanks, Dale. David Kahn? Oh, Kevin. What am I saying?

Member Kahn: I'm on the phone.

Co-Chair Fontes: Thank you, Kevin. My mistake. Doug McGinnis?

Member McGinnis: Here.

Co-Chair Fontes: Thanks. Mark McHenry?

Member McHenry: Here.

Co-Chair Fontes: Janice Obuchowski?

Member Obuchowski: Here.

Co-Chair Fontes: Bob Pepper?

(No response.)

Co-Chair Fontes: Carl Povelites?

Member Povelites: Here.

Co-Chair Fontes: Carl is laughing because I didn't call him his nickname. Rick Reaser?

Member Reaser: Here.

Co-Chair Fontes: Thanks, Rick. Dennis Roberson?

Member Roberson: I am here.

Co-Chair Fontes: Great. Greg is here, Greg Rosston. Charlie Rush? Thank you, Charlie. Dan Stancil?

Member Stancil: Dan's here on the phone.

Co-Chair Fontes: Great, thank you. Tom Sugrue is here.

Member Sugrue: Here.

Co-Chair Fontes: Thank you. Bryan Tramont?

Member Tramont: Here.

Co-Chair Fontes: Thanks, Bryan. Jennifer Warren?

Member Warren: I'm here briefly.

Comments

Co-Chair Fontes: Thanks, Jennifer. Again, I appreciate everyone who is rearranging their vacation schedule to be on this call. So, thank you, I appreciate that. The comments are very brief, so we can be mindful of those who are actually on vacation.

Again, thank you. I think progress is being made, there's no question about it. The measure of progress, however, is always determined by where you sit and your viewpoint of the world from that perspective. So I recognize that, from the commercial world, there is desire for more progress. From the government sector, you'll probably recognizing that progress has been made and continues to be made.

And so I think, under the overall banner, that we continue moving forward. I hope that we work to that end. And so that's my comments. Greg, do you have any additional comment?

Co-Chair Rosston: No, I don't, not at this time.

Acknowledgment of Special Guests/Visitors

Co-Chair Fontes: Great. I'd like to recognize our visitors. Introduce yourself.

Mr. Moorefield: Fred Moorefield, DoD.

Co-Chair Fontes: Thank you, Fred. Do we have any other visitors here? Great, thank you.

Reports - CSMAC Working Groups' Liaisons

Now we'd like to move to the reports, and I'd like to -- there's been a request to change the order of this briefly, in large part because folks are at the airport catching flights or on vacation and are going to be on the call for part of the call.

WG5 1755 - 1850 MHz Airborne Operations

So we'd like to move the Working Group 5 report up. Bryan, are you doing this one?

Member Tramont: I am.

Member Gibson: Thank you.

Member Tramont: Okay. And I'm pleased, we weren't sure that we all were able to be on the call, but we are and I'm hoping that Jennifer will weigh in. At our last meeting, the Working Group 5 report was presented in draft form. We are here -- and, sorry, the subworking group reports were also submitted.

We are here to ask that the CSMAC adopt the Working Group report as final, without changes. And then on the subworking group reports, we have, consistent with our conversation at the last meeting, been in the process of adopting conforming edits to simplify and clarify some of the subworking group reports to make them more consistent with the final Working Group report.

As of this morning, we do have finals of those reports of the subworking group reports, as well. So we would ask that the CSMAC adopt the Working Group reports, the rest of the subworking group reports as the package, and complete this process for Working Group 5.

There has been a lot of work back and forth amongst all the stakeholders here, and that

process has been arduous but, ultimately, has now proved successful with us being able to reach final closure to get this to the next step.

With that -- and Mark is in the room and is probably better positioned to answer any specific questions about language, but I wanted to at least frame that that way. And, Jennifer, I don't know if you have anything else to add.

Member Warren: No, that was perfect. Thank you.

Co-Chair Fontes: So is there a motion then to present to the CSMAC for adoption?

Member Obuchowski: So moved.

Member Gibson: Second.

Co-Chair Fontes: Okay. Janice moved it, Mark seconded it. Okay. Any discussion? Dave?

Member Donovan: Bryan, in the context of any edits that you made, it is my understanding that neither the working group reports or the subworking group reports provide specific recommendations for, essentially, comparable spectrum. Is that correct? That has not changed?

Member Tramont: Correct.

Member Donovan: Okay, thank you.

Member Tramont: That has not changed.

Member Donovan: Thank you.

Co-Chair Fontes: Are there anymore comments from those around the table or on the phone?

Co-Chair Rosston: This is Greg Rosston. I just, you know, you guys worked a lot over the last -- to do the conforming edits. Is there anything

in the conforming edits that we should be aware of that changes anything at all?

Member Tramont: It did at a macro level, but the bottom line is that the data has not changed at all. What has happened is that they've actually been sort of thinned, cut a lot of duplicate language or language that is laid out in the final working group report so that there wasn't inconsistencies or questionable interpretations of the subworking group reports.

And then there's a characterization -- and maybe Mark can catch me on this -- there's a characterization of language about the work plan going forward. It is fairly generic and will be added to all of the four subworking group reports, and I don't know if -- are you in a position to read that, Mark?

Member Gibson: Well, I'm not, Bryan, because I don't have the subworking group reports in front of me. But I think that what Bryan is saying is that -- and this is Mark, by the way. What Bryan is saying is that, for the most part, the --

Member Tramont: I have the language now.

Member Gibson: Okay, yes.

Member Tramont: I had to find it on my --

Member Gibson: Go ahead.

Member Tramont: -- on my device. So the Working Group 5 report, this is what's going to be contained in all of the subworking group reports. The Working Group 5 report contains several factors proposed for future study, which may in fact lead to the ability to significantly alter the technical analysis done and potentially change the conclusions underlying this report. For a range of reasons, these factors were not able to be included in the

current analysis, hence agreements to identify them for possible next steps in the Working Group 5 report.

So that is the only, I think, substantive, if you will, addition, just to characterize what forward work. Otherwise, it has largely been a thinning process.

CO-CHAR ROSSTON: Thank you.

Co-Chair Fontes: Thank you. Are there any other questions or comments from anyone around the table or on the phone?

Mr. Nebbia: I'll wait until after Working Group 4 is done.

Co-Chair Fontes: Okay. So for the motion on the floor to adopt Working Group 5's report, we'll put this for vote. All those in favor, say aye.

(Chorus of ayes.)

Co-Chair Fontes: Are there any who oppose?

(No response.)

Co-Chair Fontes: Abstain?

(No response.)

Co-Chair Fontes: Great. Thank you. Again, thanks to all of you who participated in this working group and were willing to roll up the sleeves and try to get the best report out, given the diversity of the group. So, very good.

So, Jennifer, if you're holding that plane up in order for you to get on it, feel free to get on the plane. And, Bryan, I'm sure you probably have a business meeting during your vacation. So if you have another meeting to go to, feel free.

Member Tramont: I actually don't for a little while, but thank you, Brian.

Member Warren: I'm actually not. I'm going to board my plane. Bye.

Co-Chair Fontes: Bye, Jennifer. Appreciate it.

Member Tramont: Bye, Jennifer.

Co-Chair Fontes: I also wanted to note at this time that, associated with this item and others, there are separate statements that have been prepared. And I think that, as we've talked about for beginning the process, these separate statements provide additional vantage point or perspective for those who ultimately will read these reports and the statements associated with that. So I just wanted everybody to note that. There were reports that were circulated and posted, or separate statements that were circulated and posted, so you should have those and we'll deal with those a little bit later, if there's any additional necessity to do so.

Okay. So now let's go back --

Co-Chair Rosston: This is Greg Rosston. I think you wanted to mention that Jennifer had added her name.

Co-Chair Fontes: Yes, I was -- thank you. Jennifer Warren asked to have her name added to the separate statement by Janice Obuchowski. That's the only change I've received so far.

Member McHenry: Oh, I asked for my name added to Tom's, too.

Co-Chair Fontes: Okay.

Member Gibson: I was going to say, Brian, if we were going to -- I thought we were just going to table it, the separate statements, but I have a number of other folks that wanted to add to

the other separate statement as well, and I thought go through the working group reports and then, in separate statement --

Co-Chair Fontes: I think that's fine. I just wanted to note that there were separate statements associated with the items, and we'll pick that up to note these additions to the separate statements. Thank you.

WG3 1755 - 1850 MHz Satellite Control Links and Electronic Warfare

So now let's go back to the agenda, as presented, and go to Working Group 3. This is the 1755 to 1850 megahertz satellite control links and electronics. Who is presenting that?

Member Dombrowsky: Okay. I'll present it. We'd like to present our report as final. It was final last week and the last time, so we're ready to have it voted on.

Co-Chair Fontes: Okay. Is there a motion to move that to a vote? Thank you, Tom. Second of the motion? Thank you, Janice. There's been a motion that's been seconded to approve the Working group 3 1755 to 1850 megahertz satellite control links and electronic report.

I'll open it up for discussion or comment. Those in the room? Those on the phone? This is kind of the second review of this, if you will.

So we'll call for a vote. All those in favor, say aye.

(Chorus of ayes.)

Co-Chair Fontes: Any opposed?

(No response.)

Co-Chair Fontes: Any abstentions?

(No response.)

WG4 1755 - 1850 MHz Fixed Point-to-Point and
Tactical Radio Relay

Co-Chair Fontes: Great. Thank you very much. Next is the report by Working Group 4, 1755 to 1850 megahertz. This is fixed point and tactical radio relay. Who's making the presentation on this?

Member Gibson: I am.

Co-Chair Fontes: Thank you very much, Mark.

Member Gibson: Like Working Group 3, this report is done and we presented it kind of hot off the presses last time. So for those that have had a chance to read it, you know, are there any questions based on that? But it's done, it was done then, and so it's ready for vote.

Co-Chair Fontes: Great. Is there a motion then?

Member Reaser: I move we adopt the Working Group 4 report.

Co-Chair Fontes: Thank you, Richard. Second? Thank you, Mark. Discussion? It's open for discussion or comment. Dave?

Member Donovan: Mark, again, there's no changes that have been made with respect to recommendations for comparable spectrum?

Member Gibson: That's right.

Member Donovan: All right. So it's, essentially, what it was the last time?

Member Gibson: Right, exactly.

Member Donovan: Okay. I do have a brief statement. Do you want me to wait until the end, until we do all this, or -- it really applies to Working Group 4 and 5. But however you want to handle it.

Co-Chair Fontes: Sure, 5:30 is great.

(Laughter.)

Co-Chair Fontes: Just kidding. Why don't we do this and then we'll go through the statements so that we have the votes taken and then we'll review the statements --

Member Donovan: Correct.

Co-Chair Fontes: -- if that's okay with you.

Member Donovan: Not a problem, Professor.

Co-Chair Fontes: Yes. Thanks, David. Okay. Any other comments or questions on the Working Group 4 report?

All those in favor, say aye.

(Chorus of ayes.)

Co-Chair Fontes: All those who oppose, so note.

(No response.)

Co-Chair Fontes: Any abstentions?

(No response.)

Co-Chair Fontes: Great. Thank you. Those were quick reports, quick votes. A lot of this was, you know, a long time in the making. So I appreciate, again, all the work that went into developing these reports and the give and take that's associated when you work on these types of group reports.

Next, I'd just like to recognize that there are separate statements that are associated with these reports. Tom, we'll start with you. Do you want to comment on others that indicated --

Member Dombrowsky: Sure. I mean, the separate statement that I put together is up on the website. The one thing I did want to mention up-front is I had received emails from four other CSMAC members that also wanted to be signatories: Mark McHenry, Doug McGinnis, Bryan Tramont, and Martin Cooper for certain. And then Larry Alder, I think Larry's on the phone, I wanted to sort of ask him. I think he wanted to sign it, as well, but I don't want to speak for him because I wasn't clear from his email if he wanted to be added. So, Larry, are you on the phone still?

Member Alder: Yes, I'm here. I don't know if I have a very good connection, but, yes, I supported the statement and would like to sign it. And my preference would be to have a statement by the entire CSMAC, rather than one with a bunch of individual statements, if that was possible. That was my email exchange with Tom. But if we can't get to that, I would just sign on to the individual.

Co-Chair Fontes: Okay. So at this point then are you asking the question or at least making a motion that this separate statement be approved or at least -- it's kind of weird to approve a separate statement, but if there is consensus of adding all of the names of the CSMAC to the separate statement.

Member Obuchowski: I'm sorry. I'm just not prepared to do that, not because I necessarily disagree --

Co-Chair Fontes: That's fine.

Member Obuchowski: -- much of what he said, but I just wasn't prepared.

Co-Chair Fontes: Okay. So at this point, why don't we, if there's no objection to this, go to those individuals who want to be associated with this separate statement and include their names, if there's any in addition to the ones that you've raised, Tom.

Member Dombrowsky: Okay.

Co-Chair Fontes: And then, if there are others that want to sign on on that, then please do so, and we'd like to do that fairly quickly, either by the end of the day or certainly -- is there a cutoff time that works for you?

Member Dombrowsky: I mean, if people are here, I'd just note today that, you know, we're hoping to wrap this up.

Co-Chair Fontes: Okay. Charlie?

Member Rush: Thank you, Mr. Chairman. What will be the next step as we go on to the separate statements? Will they be included within the body of any report that is engendered as a result of this activity? Where will they be -- where will they appear? Thank you.

Co-Chair Fontes: Yes, fair point. The question is are they associated with the report itself or how is it going to be handled, I think, Charlie, is the fundamental question you've asked. They're already posted on the website. They've already been distributed among the CSMAC members, so everybody has them. But your question, I think, is more direct, is are they going to be attached to or an appendage to the report or are they just going to be an additional supplemental document, if you will, to the report?

And at this point, since there may be some within the working group and there may be some outside of the working group that may want to sign on to this and others that may not want to do it, then I think it's probably best to include it as a supplemental to the report. And I'm certainly open to any other thoughts on that, but I think that's one way of ensuring that it's there but it's almost distinguishable from the report.

Member Reaser: This is Rick Reaser. I don't think we actually have a report. I think we

have, like, five reports, right? So I think these are just more documents to get submitted. That's what I'd recommend.

Larry and I talked about writing kind of a cover letter for all the reports, and I think we both kind of ran out of gas for that. But that obviously didn't happen. That would have been nice to do. Then you could just have, here's all the reports, we've submitted them, and here's the separate statements, and then you'd have, like, a cover letter. But we didn't -- we kind of ran out of gas for that.

But I think you just say they're all separate documents because there's five reports.

Co-Chair Fontes: That's fair. And then we could just combine the separate statements as supplementals to these reports.

Member Kahn: Yes. The only question I have -- and this is Kevin Kahn on the phone. The only question I have is how many people wind up on the, say, one statement that has a lot of signatories and what percentage of the total CSMAC membership does that represent? If this is just to or close to 50 percent, then, at the very least, you know, it's getting to where it's sort of representing a sense of the Committee majority, then maybe we're in a different situation. And I have no idea what that ratio is right now because I've lost track, but somebody ought to at least think about that.

Co-Chair Fontes: Okay. Right now, for those who are quick in the math around the table here came up to me and indicated there are currently 12 out of 24 that have agreed to sign on to, I call it the Tom Dombrowsky letter for simplicity.

Member Stancil: I'd like to add my name, also. This is Dan Stancil.

Co-Chair Fontes: Oh, add Dan.

Member Kahn: I guess my point is that if we actually are above that 50 percent, then I think that that represents a statement that has to be noted in some reasonable way with the reports as, you know, a substantive comment of the Committee.

Co-Chair Fontes: Yes. I mean, frankly, I think that could be reported with everybody's name listed to this, and I think that's probably, from my mind's eye, a clear way of noting, and you can say that over a majority of the participants have signed on to this separate statement.

The reason I think it's easier done that way is there are some that have not been involved in some of the specific -- you know, they haven't been involved in all of the working groups, and some have been involved in one or two that may be applicable to this statement and may not necessarily feel comfortable signing on to a statement. And, therefore, you know, just listing those who are the signatories, I think, is a clear way of noting. And there could be language indicating that there's a majority, over a majority.

Member Sugrue: Tom Sugrue. Yes, I'm just going to endorse that. I think that's a good way to handle it. Otherwise, we'll get separate statements to separate statements and it will just -- and the names will speak for themselves. It will be part of the record, and it will be there.

Co-Chair Fontes: I think it's the easiest and cleanest way of doing it, and it takes into consideration folks who are not prepared to add their names now to this statement or not.

Member Kahn: Yes, I'm fine with that. I just wanted to make the observation. This is Kevin. Thanks.

Co-Chair Rosston: This is Greg Rosston. Just checking as to when do people need to get their names to Tom Dombrowsky for the final list of

names on that separate statement? Do we have a time line for that?

Member Dombrowsky: Now or today would be good.

Co-Chair Fontes: Yes, today would be a good opportunity to do that. It's not like this is something new. It's been posted and it's been available to you.

Mr. Strickling: This is Larry Strickling. I just wanted to add that, first off, for anyone who prepared a separate statement that we've seen so far -- I can't prejudge, David, your statement because I haven't heard it yet -- but I do want to thank everyone for their thoughtfulness.

But what's really important here is what do we do with these issues? And I think, certainly in this one statement we're talking about for which Tom's name appears first, whether or not he claims drafting credit or not, it's important, I think, to make sure that this group takes up these issues. And I think you already are planning to take up these issues with the future work that we've already talked about and will be talking about later today.

So that, I think, is the really important thing -- and this relates back to my opening remarks -- we know this was a first step, a first effort. We know it has to get better, and we appreciate people wanting to continue to work to improve the process. So that's really what's important here.

These statements will be posted on the website. They will be totally public. Everybody will be able to see them. But if we don't actually take on these tasks and try to work with them, then it really doesn't matter what's in them.

Co-Chair Fontes: Okay. So is that an agreed upon approach for all of these separate statements, then? Great.

The only other addition I just wanted to note, and we mentioned it earlier, is Jennifer Warren wanted to be added to yours, Janice. Okay?

Are there any other names that want to be added to any of these statements? And I got your name, David. And, Tom, you got his name, as well.

Okay. So those are for the statements that have been posted and written. David Donovan had indicated that you have a statement to make, as well?

Member Donovan: Thank you, Mr. Chairman, and I will be brief. I think as -- and I spent, you know, a significant amount of time in the last meeting, and I want to reiterate some of those concerns, but let me just expand on the thought a little bit.

It is clear from this work, which was very, very hard and my compliments to all the subworking groups and the working groups that put this together, but this focused on the ability in the interference aspects of sharing federal systems and, in particular, Department of Defense systems with LTE and the band that was to be examined. That was the nature and scope of the work, 1755 to 1850.

But outside the scope of that work, which is why I didn't write specifically to these reports, is the issue of, okay, now what do we do? And in that regard, I think, as I raised, Larry, last week, we have not examined that as we move these systems to comparable spectrum, how should that be analyzed and should we have a say in doing that? I realize that is a far more difficult task.

But I think one of the things that we're going to be faced, as we move very important federal systems, is many of the same issues that we ran into here with respect to information, with respect to technical access, are going to be -- we

are going to be faced with in the various bands in which we're looking at.

And so, again, I guess I would raise the question as to whether or not this Committee has the ability to look at that and to examine those issues, because there's an important federal interest here as to whether or not we can go forward and share these bands with other commercial bands.

Now, surprise, surprise, of course, I am very concerned about, given these reports, sharing in the 2025 to 2110 band, because that is the band in which we do electronic -- what this country does for electronic news gathering. And many of these systems are designed during emergencies and to use during emergencies, many of these federal systems, which is precisely the exact same time when you need to have remote news gathering.

And so I think that there is a compelling security interest here. And, as a result, I do think that perhaps maybe we should -- we've done sort of half the job here. I think perhaps we ought to think about looking at, if we're going to move these federal systems, what does that scenario look like and can we have a role in making an analysis there?

Determining what happens in the 1755 to 1850, I think, was an important first step and a very good first step. But I think, as we look forward in doing other future work, that perhaps we ought to look at can these systems share with other commercial entities and other bands, as a generic matter? And, of course, you know, make no bones about it, I'm very concerned with our ability to gather news and information in this country in the 2025 to 2110 band. We shouldn't just kick the information problems that we've had here down the road. We really should try to address them in this context.

And with that, Brian, I told you I'd be fairly brief. You have worked me harder in other years and made me work late at night over at the

Commission as chief of staff, so I, hopefully, can return the favor.

Co-Chair Fontes: For those who don't know, David was a student of mine when he was working on his master's degree, and I just had this momentary flashback of when we were sitting around our conference table and our Monday night seminars and, you know, trying to make his arguments so artfully. And, obviously, others have trained you well, and your comments were succinct. Congratulations.

Member Donovan: Thank you for agreeing with me, Mr. Chairman. I look forward to working with you on the issue.

Co-Chair Fontes: Succinct. That's right. But in any event, David, the question I have is how do you wish to have that memorialized, other than this oral statement here? Are you anticipating providing a short separate statement, as well?

Member Donovan: I certainly can provide a short separate statement. I didn't write one because the issue with that, the working groups performed the tasks to which they were assigned. This really is an issue in terms of what should be on our plate going forward. But if you would like me to memorialize that in a paragraph, I am more than happy to do that and get it in to you by tomorrow.

Co-Chair Fontes: I'm not making that request. I'm just asking the question as to how you wish to have that noted, and it could be noted in the minutes of this meeting.

Member Donovan: I'm comfortable with that.

Co-Chair Fontes: Okay.

Member Obuchowski: Well, as a suggestion, this concept of bidirectional sharing is, for me, one that comes up in the next round. So it

would be a good idea if you helped sort of craft this --

Member Donovan: Sure. I'll be more than happy to do that.

Co-Chair Fontes: Great. Thank you. Thank you for your suggestion, Janice. Okay. Are there other comments that need to be made with respect to the separate statements or other comments with respect to the reports?

Member Obuchowski: Well, I was happy to see that all the separate statements were very respectful, respectful of the process because, as those of us who were involved in this process know, many people devoted very material resources on both sides of the equation in some cases or private sector people were giving their time and resources. And, certainly, I've never seen such a commitment in terms of the nuts and bolts of sharing on the clinical side, so I was very happy to see all the separate statements, including the one that Harold submitted, but they were all very respectful and thoughtful.

As far as the one that I submitted with Jennifer's agreement to sign on, I think it's probably the other side of the same statements, in the sense that when you embark on a process such as this, you know, push comes from one direction oftentimes and the having to react comes from the other. The folks in this case who were being asked to look at sharing in new and different ways worked extremely hard, committed substantial resources, made a lot of progress, and I think, in fact, illuminated the process substantially. I don't really believe that most people in the private sector had any concept of the complexities in the systems of sharing that we're required to accommodate.

So I'm happy with the way the process brought people up to a higher level all the way around.

Co-Chair Fontes: Thank you, Janice. I'd just like to add my vote of thanks, too. When we sat down with Larry and Carl, Greg and I, we talked about the idea of changing the process a little bit and by raising questions and having questions asked and answered during the process, rather than just at the end, simply to keep things moving, to keep them relevant and current.

We also raised the concept of separate statements and the value of separate statements to those policymakers that have an opportunity to read these reports, so they understand where some may have some agreement or disagreement or where some may feel that there are certain emphasis that should be placed either on process or the journey that we take in the whole effort to try to, in this case, share spectrum. And they agreed to allow that to be part of an overall process.

So thank you, both of you for allowing this. I think what we have is an opportunity to reach consensus on reports more efficiently and effectively, while also enabling those who may have concerns about X, Y, or Z issues or want to underscore something, they, too, have that process.

So, again, thank you. And I totally agree with what you said, Janice. I thought these separate statements truly reflected the professional nature of everyone who participates on this advisory committee. So, again, thank you.

Government and Industry Collaboration Lessons Learned - Next Steps

Okay. So a lot of work has been done, and now we move to the next item in our agenda. This is government and industry collaboration - lessons learned. And Karl is going to -- sorry. Karl is going to be addressing us at this point.

Mr. Nebbia: So as we go on from here, we would like to consult with all of you and consult with other participants in the working groups to get

a sense of what you think you've learned by this process, ideas that we could then use to improve future efforts, as we look to go down this path again potentially in other bands.

So our initial thinking is to have a forum where we would invite the participants from the working groups to come in and to discuss and offer their ideas with respect to ways that we can improve this process. Certainly, one of the areas that we see as, you know, most significant is the information sharing piece that we, as we've gone through this, have now made arrangements between DoD and I believe its 12 participants to continue some of these discussions and maybe get at some of the ideas that are referenced in the letters that we have in moving the process forward in this specific band we're dealing with.

We've also, of course, got the issues ahead on our work list regarding how we can improve some of our analysis techniques that we consider. But certainly, in this process where we fairly rapidly set up an organization, invited participants, appointed working group chairs, co-chairs, got government and industry involved, had probably a more public process than we were ever expecting in that, at times, there were, you know, 80 people on the telephone, that kind of thing.

So we got such a tremendous response in the process, but I think it would be important for us to understand, ultimately, what of that works best in getting to the end recommendations, providing good ways forward, what may not be necessary that we did, what hinders the process, and so on.

So as I said, our initial idea is to hold a forum within the next couple of months, inviting people in. It would include any of you who wanted to participate. It would include any of the participants in the actual working groups or subgroups that wanted to come in and discuss it.

We're talking about it in terms of being a public event, so people in the public can know the kinds of discussions and inputs that are provided. But we're really soliciting the inputs from the people who are in the groups and working the issues.

So that's our thinking. We are interested in whether you have any other thoughts, but that's, you know, our current plan is to head down that path within the next couple of months. Yes, sir?

Member Povelites: Was there, we're going to extend that invitation to the federal government participants, as well? I mean, because they were, obviously, very involved and it would be helpful to hear what their perspective on this was, as well.

Mr. Nebbia: Certainly. Any other thoughts? Janice?

Member Obuchowski: Perhaps -- I know if I want to proffer a suggestion I should flesh it out some more. It would seem that, for the next round to be very productive or even more productive, it would be a good idea to have an FCC rep. It doesn't need to be a voting rep but a resource person because a lot of the issues now are very, very tightly interwoven. And as we look at issues such as enforcement, they're going to be on the table, and it seems, you know, kind of a less than productive way forward if we're not getting routine public updates and perhaps the opportunity to seek feedback, where that's possible. I realize the APA applies, but I guess it doesn't apply at all here was the clarification we saw.

So to the extent we can do this, I would like to see more engagement by the FCC in an advisory fashion.

Member Dombrowsky: Just a question because -- this is Tom Dombrowsky. I'm sorry. The working group meetings I attended, there were FCC folks there. Were you looking at higher-level

FCC folks or what was -- and certainly -- well, we engaged, we actually put them on the spot more than once and said, you know, if we do this, is this something the FCC wants or how would we actually get here so the FCC could actually implement it, and there was a lot of back and forth from the -- and it was FCC staff. I mean, I don't want to underestimate that, and, if you were talking about elevating it to a next level, that would be a different participation. I'm not sure, frankly, how beneficial that would be, just because of the technical details we're talking about there. But I'm just trying to get clarification as to what exactly you were looking for.

Co-Chair Fontes: We'll go with Richard and then David.

Member Reaser: This is Rick Reaser. Is this a forum, or is this a CSMAC thing? It wasn't really clear is it really part of the CSMAC or not or just a forum that you're going to have and you just invite people. I just -- could you clarify that?

Mr. Nebbia: Right. Well, certainly, the CSMAC is the organization represented, the group that's represented here in this advisory body. So, essentially, it's outside of CSMAC, but we would be inviting the members here and the people who participate off the various working group lists. Once again, open to the public but held to ask those people the questions. We're not really looking for just general input from the general public in terms of providing inputs and they didn't participate. We're really looking to ask the questions of the participants.

Member Obuchowski: I guess, you know, as I say, I'll have to flesh this out and present it at whatever this sort of feedback session is --

Mr. Nebbia: And this is Janice.

Member Obuchowski: Oh, sorry. This is Janice. But as I look at it, and, yes, Tom, there

were questions asked, but those were -- this whole round that we're leaving behind or closing out was highly technical, and the questions were often very technical, could you live with this or that. If you look at the questions going forward, they become, at least in my estimation, much more oriented towards policy and regulatory stuff: How do we improve upon, you know, information gathering about spectrum? You know, what is bidirectional sharing and how far can that go? What is realistic in enforcement if sharing is to happen? Those are primarily technical questions, and they are also, in almost every case, before the FCC and before us and before the Congress.

And I think one thing that I would welcome is, particularly as the FCC goes forward with the rulemaking on this very band and on some of these subjects, that when the CSMAC meets, someone comes and kind of gives a report. You know, that doesn't mean the other kind of conversation that happens in the working group, which only those who happen to be in the working group here, isn't welcome. That's very welcome. But there's a different kind of conversation that I don't think happens as often it should.

Co-Chair Fontes: Great. Thank you. Are there any other suggestions for Karl? Oh, David, I'm sorry.

Member Donovan: No, that's all right. I just wanted to back up and support what Janice just said. Some of the work going forward, which is exceedingly important if federal sharing is supposed to work, ultimately also involves resource questions of the Commission. And so, in order to properly advise Larry and properly advise, you know, NTIA in going forward, I think at least we need to have that discussion to have that basic information to decide what works and what doesn't work or to get a sense of what can be done and what can't be done. So I just want to echo Janice's comments.

Co-Chair Fontes: Are there other, are there other comments? Karl, do you have any final comment?

Mr. Nebbia: Just that we will let you know. We'll inform everybody, and we will be working through the working group chairs to make sure we're able to contact all the people on their lists.

Co-Chair Fontes: Thank you. The next item on our agenda is a break, and I would suggest that we just simply not have a break, out of courtesy for those people who are on the call and for those of us who are sitting around the table. We are definitely ahead of schedule, so let's just continue to move forward through the agenda. Everybody agree? Great.

New CSMAC Work on the Horizon

The next item on the agenda is looking at the new CSMAC work that's on the horizon. All of you should have received this proposed future CSMAC work dated August 21 taking a look at the various committees or working groups, if you will. And, obviously, there's those individuals who identified themselves as co-chairing or volunteering to chair these groups and individuals have also identified themselves as willing to participate in the work of these future working groups.

Karl, do you have anything to add to all of this?

Mr. Nebbia: The one other thing, in addition to getting more people to sign up, which did happen over the last month, the one other thing we did do, at the request of the Committee, is to draft specific questions from NTIA related to each of these issue areas. So we would be looking for feedback on whether you think there's any other specific questions that we need to ask, and I think we have found in the past that asking those specific questions is essential to our success. So we have

tried to write those down in a way that asks the questions that we think we need to understand, but you may feel like there's some other questions and things that we need to understand.

So we would certainly be happy to take additional specific questions that we could add to the list. There is probably some point at which you get too many questions and so on. And if there's any of these that you think the group is just not capable of answering, that also would be nice to know.

So I think the critical thing for us at this point is for you to begin looking at these questions. We've got the names of volunteers. If there are more volunteers that want to be co-chairs or want to be added to the list, we would like, even if we need to pass that around today and ask for the people on the phone to make one last email or call in or whatever to tell us which groups they want to be on, we would like to get the work started.

Co-Chair Fontes: Karl, is there a deadline of which the questions or edits to the questions that are there or new questions that folks would like to have included in this should be presented?

Mr. Nebbia: I would say it would be helpful if we could get any of those within the next two weeks. Even sooner would be helpful. But, once again, we need to get the work started. We need to know what the range of issues are.

Co-Chair Fontes: Okay. Thank you. And then, also, one of the things I think would be helpful for these working groups in this new tranche, if you will, of activity is to be able to try to prioritize the questions that you'll be working on first, second, third, so that we can move through that list and we'll have an understanding of the priorities in which the working groups are working within so that we can bring reports up as you move through those questions with answers, etcetera, and

move through the work of those working groups.

I think that will keep everybody moving, rather than trying to accomplish all response to all questions all at the same time. It may be a little more problematic. However, it may work for your group, so let's leave some flexibility with that. But if there is an opportunity to prioritize them and to report back to Greg, myself, Karl with what those priorities would be, that, I think, would be helpful so we all know what people are working on first, second, and third.

I don't know if there's a need to go through all of this. I think we've done this before. We did this at our last meeting. I think these are the key points that you wanted to make, Karl. And I think that we've identified these working groups as what would be beneficial, I think, in a moving forward or going forward basis.

Mr. Nebbia: So if somebody would like to be involved on one of those and you're here today, if you could just come up after the meeting and sign up, that would be helpful. If you're on the phone, if you could send Bruce Washington an email within, let's say by the end of the week. Once again, these topics have been out there for a while, but if you could let him know by the end of the week then he will add your name to the various lists.

Co-Chair Fontes: I think another important question that the working groups will probably have is what's the time frame of getting everything done. Other than last week, I think we can realistically, in terms of trying to identify with the priorities that are set, what the realistic time frame is to work with this.

And I'll ask either Karl or Bruce. I'm not sure when, actually, this CSIR ends -- CSMAC. I'm using my, yes, I'm using my, I'm getting federal agencies confused here. I'm not sure when the termination date of this CSMAC is. Do we know --

in May of 2014. So if we were to use that as kind of a target date to get some, if not all, of these reports done by that time frame, then so be it.

Now, and I defer to Karl and Larry, since that is their call if there is, in fact, a new CSMAC convened, will some of these questions that were not answered be moved to that CSMAC?

Mr. Nebbia: Just so I'm clear on that, that's the membership expires then? The Committee itself, the charter, is not at that time, it's the following year?

Mr. Strickling: Just so people remember, we re-chartered CSMAC earlier this year, so we're already partway into the new two-year term of the Committee. But then we automatically extended everybody's membership into the first year just because we wanted to keep the continuity of the work effort. So we will be, I think, before the end of this year, initiating the process to invite people to apply to join CSMAC. Those appointments will be made by next May. Hopefully, many of you will want to continue on, and we'll have the opportunity to do so.

But we will go through that process next May, so that's why the May time frame seems to be a good time in terms of trying to wrap up this tranche of work just because you all may be so tired of it by that point none of you wants to continue on. Hopefully, that won't be the case but just in case.

Mr. Nebbia: This is Karl. So in order to complete that work by next May, I think we would be hoping for, as we've done before, initial draft ideas or presentations probably toward the end of this year, you know, very beginning of next year kind of thing, so that then the larger group that maybe isn't directly involved in the specific working groups will be introduced to the ideas, be able to ask questions, and so on. And that may require you, as Brian was saying, to look at the list and say these ones we think are realistic for us to finish by

that point and maybe some of them, some of them are less realistic.

So we just need, I think, to come up with a reasonable work plan for everybody and those kind of goal dates.

Co-Chair Fontes: Janice?

Member Obuchowski: I think -- this is Janice -- those time tables are realistic and probably as ambitious as ultimately will be. But some of the questions really do bear so directly on the sharing that's going to be envisioned, on some of the study that's going to be envisioned going into the auctions, I would like to think that on some of the topics we can move somewhat more aggressively if we want to be relevant.

And, again, none of these problems are going to be solved. I mean, some of us have been remarking that we were grinding these axes long ago, longer than I'd want to admit, but, you know, certainly, in terms of breaking new ground on enforcement, for example, and sharing context, it's not going to be perfected by the FCC or by us in the next year, but it's going to be on the table and we want to be relevant.

Co-Chair Fontes: I think that's a very important point to make is just the work that we do here is significant, and we want to ensure that that significance is also relevant to the time frames and the processes by all involved. Okay. Any other --

Member Gibson: Can I ask one more question? And this is more specific with the transitional sharing -- this is Mark -- with the transitional sharing discussion. And this is my ignorance of how this works, so pardon me for a minute.

This discussion would benefit greatly from involvement by government and specifically DoD and those that have equities and assets in the

bands we're talking about. Is that possible within the framework? You know, maybe not exactly like we've done recently, but, I mean, this is what we're talking about, sharing transitionally with the federal spectrum. So thoughts on how that would work with federal involvement?

Mr. Nebbia: I think it's certainly possible for them to participate in the working groups as a theoretical concept or processes and so on that we would be talking about in terms of applying these concepts to all types of relocation. I think you will probably find an openness to have that conversation.

As you start to get more into the specifics of individual government systems, that's where you run into the information conflicts. And our hope is that the progress on those specific tasks aspect is going to be made between DoD and those 12 people that have been nominated through our existing process. Having that discussion, I think, as they walk through that, they will certainly enlighten us on some, taken in that specific context that we'll hopefully be able to use in the more general context, as we're talking about here. But I have a lot of hope for that process going forward on the side.

Co-Chair Fontes: Are there any other comments? Yes, Charlie?

Member Hatfield: This is Dale on the phone.

Co-Chair Fontes: Okay. Go ahead, Dale.

Member Hatfield: I was just adding, I thought I'd add just a point here regarding the enforcement. And as you know from the writeup, there is a similar parallel effort on enforcement going on within the technical advisory committee at the Commission. And if my memory serves me right, and, Dennis, I think, Roberson is on the call and he could help, we will try to wrap that work up

with a report, I think it's probably early January or late December.

So these will sort of go in parallel, so I'm just raising that as an area where there will be some parallel activities. I think it also goes to Janice's point regarding the importance of having Commission involvement in the enforcement area, as well.

Co-Chair Fontes: Great. Thank you for that information. That will be useful to that group, there's no question. Charlie? Member
Rush: Thank you, Mr. Chairman. Charlie Rush. During the discussions that we had with regard to the separate statements and, in particular, the separate statement that has been signed, I guess, or will be signed by, the 12 members has a religious connotation there, I guess. But a comment was made, the statement was made by the Assistant Secretary that he thought that a lot of the issues that were raised were going to be addressed in the future work that we've already laid out. I'm not sure that I see that exactly, and I was wondering where that could, the issues that were raised with regard to the interference environment and the realism of the assumptions made in this initial study, where is that going to be addressed in the future studies? Thank you. Mr. Nebbia:
Well, I think certainly our view of that is that the direct work is to go on between the 12 people that are working with DoD, have NDAs written with them. If they are able, through those discussions, to come out with some specific outcomes that apply to the current situation, they can certainly provide them to us. DoD is always in consultation with NTIA. The possibility also exists that those people together can go back to the particular working groups that were operating here, back to the co-chairs and say we've raised some additional conclusions that would improve upon the previous work and they could actually bring them back to us through that method.

So dealing with that specific band and activity, that's the next step that moves forward. But the concepts in general that might be applied more broadly are going to need to be, you know, taken on in this other context.

Co-Chair Fontes: Tom?

Member Dombrowsky: Tom Dombrowsky. I was just going to say, Charlie, I think, in the transitional sharing group, that's where I sort of see a lot of that going into. So, I mean, from my perspective, that's where, the way I read that charter, a lot of discussion was about the interference protection requirements, and we may not get down to the next level, but at least we're going to continue the discussion there now. And that's the way I looked at it, basically.

Mr. Nebbia: Karl Nebbia again. Yes, certainly, we believe that the same kind of sharing techniques that are used during the transition or what people refer to as early entry period, I think, in the past case, are the kinds of more specific sharing results that might, up-front, better inform an auction and so on. So I think they are very closely tied, but, once again, I think the activities directed toward resolving some of the known issues in the 1755 - 1780 band are going to be approached by these other folks initially. But, certainly, this is the key to any transition, any relocation, any early entry that we get to understand more of what these techniques are.

A lot of things were used during the 1710 - 1755 approach in coordinating with specific agencies that are not generally part of our up-front interference analysis. And that's how they improved the results and moved the ball more quickly.

Co-Chair Fontes: Charlie?

Member Rush: One thing, two things that concern me, and I'll be very, very blunt about it, is

that it's alluded to in the comment of the 12, or the 15, and that is there's less than a realistic representation of the LTE system model that has been used. That has to be corrected. I'm not sure that that gets corrected simply as a result of 12 people talking with the DoD. In fact, I would think that probably would take us away from moving towards something that is as realistic, quite candidly.

And the other issue that, I think, has to be corrected is, and this is in the context of using the appropriate models, is to get the involvement of the people in the development of these models that are experts when it comes to radio propagation because this is key in terms of how signals go from one point to another and how they interfere from one point to another.

And this may be totally out of place, but NTIA has a national treasure available to it in Boulder that are the propagation experts and that people out there, in the form of Paul McKenna and his people, are my go-to people. And I don't think there's anybody in the world that can match that capability in terms of knowing what's available in the ITU, what's available in terms of the programs that are being used now by people and used and misused and what it is that needs to be done in order to make them applicable to the problems here. And I'd really, really strongly suggest that NTIA find a way to get that resource involved in these studies as we go forward.

Co-Chair Fontes: I think those are very good points taken.

Mr. Nebbia: We actually do know Mr. McKenna. He worked with our people out there regularly. In fact, they've been -- sorry. I mean, in the discussion of the models, many of those models were developed by people at ITS and our technical people work with them all the time. So it's --

Member Rush: They were developed at

ITS when I was out there, so I know those models and I know how they were used and how they were not used. That's why I'm raising the question. I think we need to have some, an expert group that can speak without having to be subjected to trying to find compromise on the physical principles.

Mr. Nebbia: Fair point.

Public Comment

Co-Chair Fontes: Okay. Are there any other comments on the future working groups here? Okay. Next on the agenda is an opportunity for public comment. And we'd like, as we have in the past, limit these to, I think it was three minutes. And if you could come to a microphone, if you could, and identify yourself, that would be helpful.

Ms. Young: My name is Janet Young. I'm with the FCC. And I just wanted to bring a couple of things to mind. We do have, as you're aware, a notice of proposed rulemaking on AWS-3 looking at sharing and use of these bands. I'd like to note that we had a public notice out very recently covering ex parte rules for involvement in that.

Specifically, we wanted to be able to let the FCC continue to work with the CSMAC process. We have been involved in the working groups. We want to be able to continue that work. So these proceedings have been exempted from having to do the ex parte filings. You can look to that public notice for more detail.

If there is something that has been promulgated in a meeting that you want us to consider as part of the rulemaking, we'd just ask that you go ahead and file it with the FCC if you want that to be included.

Co-Chair Fontes: Thank you.

Ms. Young: Oh, and I did want to express John Leibovitz sends his regrets that he

could not be here. He's been feeling a bit under the weather.

Co-Chair Fontes: Thank you very much for pointing that out so that it's on the record here and that everybody on the call and around the table will hear what the Commission has going on. So very much appreciate it.

Ms. Young: All right. Thank you.

Co-Chair Fontes: Thank you. Are there any other public comments?

Before we close, I'd like to turn it back -- oops, did you have a comment? This is a non-public comment.

Mr. Nebbia: A non-public comment. We just want to let everybody know that, after 39 glorious years, Eddie Davison is going to retire on the 3rd of September, and we have a board out front, if you would like to sign it as part of one of his going-away presents. But Eddie has worked since his summer between his senior year in high school and now as a spectrum manager. He was in a fellow program coming here to NTIA even before he started his freshman year in college, and he has never left.

So he will be leaving on the 3rd, and we will miss him greatly. But I just wanted to mention that because it's certainly been a terrific career and a lot of you have worked with him and enjoyed his presence. So thank you.

Co-Chair Fontes: Thank you, Karl. And to work that many years in spectrum management and maintain your sanity is a true compliment. Thank you.

Before we close, I'd like to just turn it over to Greg Rosston to see if, Greg, if you have any closing comment.

Co-Chair Rosston: Yes. I just want to thank everyone for the hard work on all the working groups. It's been a great process to get this to where it is. And moving forward, I think it looks like it's going to be very good and hopefully useful to NTIA, as well. Thank you.

Co-Chair Fontes: Thank you. I have no other comments. Anyone else around the table? Motion to adjourn? Thank you. All in favor, say aye?

(Chorus of ayes.)

Co-Chair Fontes: Thank you, everyone, for your work today. And now you have some free time.

(Whereupon, the foregoing matter was concluded at 2:15 p.m.)