

## **Interim Status Report of CSMAC Sharing Subcommittee**

July 27, 2010

See below for a Status Report on the deliberations of the CSMAC Sharing Subcommittee.

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From: Gary Epstein [mailto:gary.epsteindc@gmail.com]

Sent: Tuesday, July 13, 2010 1:45 PM

To: djweitzner@ntia.doc.gov; 'Bob Gurss'; 'Bryan Tramont'; 'Dale Hatfield'; 'Darrin Mylet'; 'David Borth'; 'David Donovan'; 'Gary Epstein'; 'Joe Gattuso'; 'Julie Zoller'; 'Mark Crosby'; 'Mark McHenry'; 'Marty Cooper'; 'Michael Calabrese'; 'Michele Harden'

Subject: July 12 CSMAC Sharing Subcommittee Call

This email will summarize yesterday's "kickoff call" by the CSMAC Subcommittee on Sharing ("the SC"). In very brief summary, we agreed on a tentative approach for the SC's work, but also determined we need more input from the CSMAC Co-Chairs and/or NTIA to make sure we are on the right track.

SC members on the call were Michael Calabrese, Mark Crosby, Martin Cooper, David Donovan, Mark McHenry, Darrin Mylet and me. Craig Gilmore also attended on behalf of Bryan Tramont. The call lasted about one hour.

1. As an introductory matter, I noted that the purpose of the call was to propose a way to approach the extremely broad (and well-trod) issue of "sharing" and to see if there was a consensus on how to provide a timely, useful and meaningful contribution to the CSMAC effort.
2. We also briefly reviewed prior CSMAC work in this area; including the 9/18/08 CSMAC Report on Streamlining Federal/Non-Federal Spectrum Sharing and the 12/13/08 CSMAC Transition Report summarizing prior CSMAC work.
3. We also pointed out the relevance of President Obama's 6/28/10 Presidential Memorandum on Unleashing the Wireless Broadband Revolution. We noted specific references to sharing issues, e.g. Sections 1(a) and 3.
4. We recognized that the full CSMAC would be meeting in Boulder on July 27 and our need to make progress before then. Several SC members are also either attending or participating in the 2010 International Symposium on Advanced Radio Technologies which will be held in Boulder immediately after the CSMAC meeting.
5. After further discussion, and in view of the FCC's recent Broadband Report and the Presidential Memorandum, our tentative view is to confine our work to sharing between the Federal Government ("USG") and commercial entities for the purpose of wireless

broadband deployment. Because the sharing area is such a large one, we felt the need to limit the scope of our work.

6. This means that, at least for now, we will not explore USG sharing with public safety entities and that we will not look at narrowband sharing. We discussed and tentatively agreed that we would focus on sharing of spectrum blocks of 1 MHz or more in size.

7. As a threshold matter, we also felt it important to attempt to define our terms and the scope of work. “Sharing” is such a broad concept that we felt we needed a good definitional framework. Marty Cooper volunteered to undertake this task.

8. We then discussed the need to identify and analyze two or three “case studies” of USG/commercial sharing. One SC member briefly discussed the example of USG/commercial sharing in the unlicensed 900 MHz and upper 5 GHz bands. SC members agreed to provide additional examples and details for the SC’s review.

9. Several SC members thought our task would be more useful, especially in view of the breadth of the topic and time constraints, if either of our Co-Chairs, Bryan Tramont and Dale Hatfield, or NTIA would recommend specific bands for us to review. I said I would raise this issue.

10. We then discussed what we would do with the results of the “case studies.” Our goal is to recommend “best practices” for USG/commercial sharing. In addition, in an email to me, Bryan Tramont suggested that it would be useful for the SC to produce a “model agreement” for sharing. We are not sure how this would arise in the case of USG/commercial sharing, but want to follow up re this.

11. Darrin Mylet had submitted a brief paper (previously distributed) re a “test bed” experiment for sharing. This led to a discussion by SC members of ongoing NTIA test bed work. No one on the call had specific knowledge of the scope and status of the test bed experiment, so we agreed to find out.

12. We stressed the need to further refine our work plan and “get going”, so that we could produce a timely and useful report for the CSMAC.

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From: Gary Epstein [mailto:gary.epsteindc@gmail.com]  
Sent: Tuesday, July 22, 2010 1:45 PM  
To: djweitzner@ntia.doc.gov; 'Bob Gurss'; 'Bryan Tramont'; 'Dale Hatfield'; 'Darrin Mylet'; 'David Borth'; 'David Donovan'; 'Gary Epstein'; 'Joe Gattuso'; 'Julie Zoller'; 'Mark Crosby'; 'Mark McHenry'; 'Marty Cooper'; 'Michael Calabrese'; 'Michele Harden'

Subject: Update to July 12 CSMAC Sharing Subcommittee Call

My July 13 email summarized the results of our kickoff call. In the email I set forth our tentative conclusions, asked for feedback. I also agreed to get in touch with Messrs. Hatfield and Tramont to get further input and direction, and would also try and touch base with NTIA to get any further input NTIA may have.

I received helpful input from several Subcommittee members, did have some discussion with our Co-Chairs and emailed back and forth a couple of times with Joe Gattuso. In view of this limited additional input, I did not schedule another call. Instead I will summarize the developments below. If anyone receiving this email has comments or edits, I will be glad to make them part of the report.

Re NTIA input – while Joe Gattuso thought a call with NTIA could be helpful, the pre-Bolder timing just did not work out. I am sure the discussion in Boulder and thereafter will give us additional direction.

1. Marty Cooper continues to advocate that our Sharing Subcommittee would make an important contribution by creating a document that explains the concept of spectrum sharing, lists the various methods for sharing used in the past and proposed for the future, and discusses the potential of these methods for future contribution.
2. Julie Zoller stressed the need to address technical matters specifically in the report, and, of course, she is correct. For example, the frequency range (which determines propagation characteristics), the types of services (e.g., the fixed-satellite service sharing with a terrestrial mobile service), and the top-level regulatory framework for those services must be addressed to determine the general prospects for sharing. I think Julie's comments also point to reviewing specific frequency bands.
3. Darrin Mylet recommended we also consider USG to Utility (Smart Grid) and public safety sharing. He also stressed the need to differentiate between sharing in major metro and rural areas.
4. Bryan Tramont had several good suggestions –
  - He recommended we review of David Donovan's most recent Interference Subcommittee draft because he thought there were some natural jumping off point in the Subcommittee's definition of interference and our work.

- He agreed that our “prime directive” should be USG/commercial broadband sharing, but, like Darrin Mylet, also thought we may want to consider public safety/commercial sharing as well.

- Re my question about a model agreement, he noted there were model agreements between the USG and public safety entities. We will follow up.

- He also liked the idea of focusing on specific band and pointed to the 1675-1710 MHz and 1755-1850 MHz issue.

Post-Boulder I do think we will be able to come to a better more detailed outline and get moving on a good work product. One question to discuss is whether it makes sense for the Subcommittee to consider providing input on the current issue of spectrum to be paired with the 2155-2175 MHz AWS-3 band.