CSMAC:

Spectrum Management via Databases Working Group

Interim Report July 10, 2014

Version 1

Charter

Question:

"How can sensitive and government classified operations be included and protected using a database-driven sharing approach, particularly one that strives toward real-time responses?"

Current Members

- Co-Chairs:
 - Larry Alder
 - Mark Gibson
- Members
 - Michael Calabrese
 - Mark Crosby
 - Mark McHenry
 - Janice Obuchowski
 - Richard Reaser
 - Your Name Here!

Update

- Prior to Dec 9, 2013 meeting, the WG generated internal documents including overview of how a Spectrum Access System (SAS)/dynamic database might work including timing considerations and a view on types of information required for sharing. Those documents were not yet distilled into recommendations or shared with entire CSMAC as we felt further engagement with DoD was necessary to explore the issues.
- At Dec 9 meeting, the WG presented an interim update and requested case study with DoD focusing on the 3.5GHz band with ship borne "SPY" radar.
- At March 2014 Meeting, the WG presented and while unfortunately the DoD did not have resources to engage in the case study, they was an exchange where the DoD did provide a list of questions to the WG regarding how an SAS would function with respect to sensitive information.
- The WG did not meet in the interim between March and July as the new CSMAC was being formed and thus has not yet addressed these questions.

DoD question List

- How is government information in the SAS protected?
- Who actually holds the government information?
- What type of information is required to coordinate use?
- What data would commercial SASs and commercial devices (CBSDs and end-user devices) collect, aggregate, and distribute?
- What is the minimum amount of information needed?
- What are the specifics of the database?
- Who controls the database?
- What layers of security are in the database

- What access would the user have to the database?
- How might data obfuscation(primarily ship location information) be applied to balance various objectives? How does it impact industry?
- Assuming that radar characteristics plus ship movement and location drive the coordination analysis result, what methods could be used to obtain the ship location information? DoD reporting, beaconing, commercial monitoring, others?
- Can regular DoD operations be treated in the SAS differently than the unusual cases? For example could exclusion areas be used for ports that commonly harbor navy ships that do flight operations, but a different method for other areas where such ship presence is likely to be the exception.

Next Steps

- WG will continue under new CSMAC hopefully adding new members that wish to participate.
- WG will address DoD questions as best as possible.
- WG still seeks meeting with DoD to explore questions in more detail.
- WG will build on initial work and answers to DoD questions and generate final recommendations.
- WG to bring answers recommendations to next meeting.