

USC Viterbi

School of Engineering

**International Symposium on Advanced
Radio Communications**

Boulder, CO

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Information Sciences Institute
Agent of Innovation: from visionary to viable

***Federal Government
Spectrum Panel***

Preston Marshall, Moderator (USC/ISI)

Ed Davison (NTIA/OSM)

Tomas Gergely (NSF)

Tom Kidd (Navy)

Christopher Lewis (DOI)

Victor Sparrow (NASA)

Mike Williams (DOD/DISA/DSO)



What We Aren't Doing!

- 1. Org Charts of how close/far the Spectrum Manager is from the head of the agency. Org charts are only important to those named on them (and for funding agencies, but that is another matter!)**
- 2. Depictions of how critical the Agency is. We accept that taxpayer dollars are being spent, and that there must be value. We should not assume that spectrum is a measure, or correlated with national importance.**
- 3. Why our equipment is so old it cant move, or share. This is a good discussion, but it should be in the context of what it might take to share, not why it can not be done.**
- 4. Doomsday scenarios. If a single UWB device could crash aircraft, there would not be such delays at airports. No Drama!**

The Administration has committed to finding a large amount of spectrum for use in broadband services. Much of that will have to come from Government and Federal users. Without debating the wisdom of that policy, is spectrum sharing an option for your Agency, if dedicated spectrum access must be constrained. Please feel free to answer from one or both of the following perspectives.

1. Could your Agency share existing primary spectrum assignments/allocations with other users to enable broadband and other uses of this spectrum when not in use by your Agency
2. Could some of your Agency spectrum needs be met by sharing of non-dedicated spectrum, as an enhancement to dedicated spectrum (which might be reduced to make room for broadband)

Question Posed by Paige Atkins (then DoD DSO Director)

I think the premise that **you will never be able to reallocate enough spectrum** to satisfy the growing demand should be the basic premise.

So how do you get better? One avenue is getting **better among yourselves** (eg military on military sharing to include use of DSA techniques/technologies). Likewise how **could DSA improve use of non-Federal bands to reduce need of reallocation.**

And then longer-term, how do we change the paradigm through policy/regulation, technology and standards. I would like for part of this discussion to include **what needs to happen to make Federal/non-Federal sharing palatable** and really work.

A big part of that will be the **appropriate enforcement mechanisms** that will allow things to get "fixed" if something goes wrong and "harmful interference" occurs to any "primary user".

There are also **architectural trades** that should be considered... across government and non-government users to reduce the need for spectrum for broadband and other applications (as appropriate)

Opening Presentation by Each Panelist (5-7min each)

Moderator Questions (20 Mins)

Audience Questions (40 Mins)

Goal: The objective is not to convince anyone of anything, instead I think we can feel we accomplished a lot if we just help understand the positions of participants in this dialog, and what technical, operational, or political reality they respond to.

No “D-Block” Specific Discussions