

From: Michael Marcus [mailto:mjmarcus@marcus-spectrum.com]
Sent: Wednesday, December 18, 2013 2:01 PM
To: innovation
Subject: staff awards at FCC

I see Ms. Cornell has written "we encourage you to continue to submit your ideas" --
<http://www.fcc.gov/blog/public-input-process-reform>

Here is my latest blog post on FCC operations, <http://www.marcus-spectrum.com/Blog/files/PresRank1213.html>
. This time it addresses awards for staff excellence at FCC. FCC has a long history of being embarrassed about awards for their staff, although during the Fowler chairmanship SES bonus awards were a very public ceremony in the Commission Meeting Room complete with a military color guard.

The basic point is that FCC should have a clear and consistent policy of announcing staff awards recognizing excellence. Indeed, sloppy publicizing may defeat part of the reason and benefit of such awards. For examples in some past years, the Excellence in Economic Analysis Awards were publicly announced, while the parallel Excellence in Engineering Awards weren't. This year both were awarded at the same commission meeting without any written announcement before or after.

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1. Consider IEEE-USA proposals in <http://www.ieeeusa.org/policy/positions/SpectrumPoilcy1112.pdf> along with background material on each

The basic points in this paper are :

- FCC and NTIA should explicitly acknowledge the role of Section 7 of the Communications Act of 1934, as amended, and the intent of Congress to encourage new communications technology and services. These agencies should adopt transparent procedures for determining which innovations are subject to this statute and should make readily available information on such proceedings. The FCC and NTIA should recommend changes in the statute in a timely way, if the current terms of Section 7 are deemed not practical.
- Petitions for rule changes and clarifications are key issues in the regulation of the dynamic telecommunications industry. FCC should act on such petitions in a more transparent way, and make available information on petitions and their status on a consistent timely schedule.
- In selecting presidential appointments to FCC, NTIA, and the State Department in communications policy functions consideration should be given to individuals with experience in the information and communications technology (ICT) industries, to balance the backgrounds of the officials in these key positions.
- FCC commissioners should consider appointing individuals with experience in the information and communications technology (ICT) industries. as one of their three assistants, allowed by law.
- FCC and NTIA should supplement their existing Technological Advisory Council (TAC) and Commerce Spectrum Management Advisory Committee (CSMAC), which consist mainly of representatives of major communications firms, with a new advisory committee that serves both agencies and focuses on independent review of options for resolving spectrum conflicts and identifying outdated policies. The new group should be modeled on the EPA Science Advisory Board and the NRC Advisory Committee on Reactor Safeguards and members should have the necessary security clearances to deal with issues involving classified federal government spectrum users, if so requested.
- FCC and NTIA should have the resources to contract with the National Academy of Science's National Research Council (NAS/NRC), Federally Funded Research and Development Centers (FFRDCs) and private analysis contractors, to supplement their internal staffs on novel technical policy questions where they lack the appropriate internal resources.
- The NTIA and FCC technical staffs are key to the long-term success of U.S. spectrum policy. Recruiting and developing the careers of these personnel should be done using the best practices of other agencies involved in technical policy development.
- The executive branch should act to review and implement the recommendations for federal spectrum management reform in Sections 5.2 – 5.6 of the July 2012 President's Council of Advisors on Science and Technology (PCAST) report, "Realizing the Full Potential of

Government-Held Spectrum,” to facilitate the reallocation and sharing of federal spectrum for private sector use.

- FCC should complete action in a timely way on Docket 09-157, which deals with wireless technical innovation.

2. Adopt clear, timely, and transparent procedures on petition submitted to FCC. The right to petition is a clear right spelled out in the 1st Amendment and restated in 5 USC 552(e). Furthermore § 1.403 of the FCC Rules provides

"All petitions for rule making (other than petitions to amend the FM, Television, and Air-Ground Tables of Assignments) meeting the requirements of § 1.401 will be given a file number and, promptly thereafter, a "Public Notice" will be issued (by means of a Commission release entitled "Petitions for Rule Making Filed") as to the petition, file number, nature of the proposal, and date of filing. Petitions for rule making are available at the Commission's Reference Information Center, 445 12th Street, SW, Washington, DC and may also be available electronically over the Internet at <http://www.fcc.gov/>."

This "promptly" requirement has been a long standing problem at FCC going back more than a decade. There is no clear internal procedure for handling petitions within FCC. It is clear that the commissioners don't have access to a comprehensive list of pending petitions. However, it is not clear if even the Chairman and his staff has access to complete lists! As we revealed in a recent blog post, <http://www.marcus-spectrum.com/Blog/files/PetitionLimbo713.html> there is even a secret corner of ECFS where some of the pending petitions are hidden. FCC should announce clear procedures and time tables for acting on petitions: either dismissing them or putting them out for public comment within 90 days. FCC should also post an actual inventory of all pending petitions more than x days old.

3. Identify all technologies implicitly or explicitly banned by anachronistic rules, e.g. cell phones or airplanes, and seek comment on priorities of which should be addressed first given limited resources at FCC. Note that this is the process that resulted in Wi-Fi and Bluetooth.

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One more issue before the window closes:

FCC NOIs and NPRMs should not have an endless list of questions.

These are usually the byproduct of internal coordination within FCC where the easiest way to deal with an issue is add yet another question.

Thus questions are scattered throughout the documents making it difficult for both comments as well as the poor FCC staff who have to summarize comments. Compare these 2 documents, one an FCC NOI and the second a "consultation" from Ofcom the FCC's UK counterpart

http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-09-66A1_Rcd.pdf
http://stakeholders.ofcom.org.uk/binaries/consultations/spectrum-management-strategy/summary/spectrum_management_strategy.pdf

The FCC NOI has 180 questions ending in question marks.

required incumbent licensees to relocate any continuing operations as necessary to a reduced or modified frequency band.¹⁹ In other cases, the Commission reallocated spectrum from one service to another and relocated incumbents to other bands or media.²⁰ Has the Commission's past repurposing of spectrum spurred or resulted in innovation? Which of the Commission's methods for repurposing spectrum have proven most beneficial to fostering innovation? What lessons have we learned from such efforts? We are also interested in exploring which frequency bands present the best opportunities for repurposing spectrum, as well as how repurposing spectrum can best be accomplished. Can innovative uses develop in coordination with the incumbents in relevant bands or is clearing existing uses a prerequisite to innovative developments?

28. Repurposing spectrum is done at some cost, particularly where there are incumbents with investments and infrastructure reflecting the former use of the spectrum. What are these costs and which parties should be responsible for them? Are there auction approaches for affording "new" access to previously licensed spectrum that would also address the cost issues? For example, should incumbents be allowed to offer their spectrum rights at an auction in which the Commission also offers new licenses in the same spectrum band (sometimes referred to as a two-sided auction)? What other approaches to cost-bearing should the Commission adopt when repurposing spectrum for new uses, or otherwise facilitating the entrance of new licensees into spectrum with incumbents, as part of an effort to encourage innovative uses of spectrum? Should incumbents be compensated when their spectrum is repurposed and if so, how would this be accomplished (e.g., who would be responsible for providing compensation, under what terms or conditions, and what form would it take)? Should the Commission provide a transition period during which it would restrict the new licensees to operate only on a secondary, non-interfering basis?

3. Access to Spectrum

29. *Access Models.* In addition to making spectrum available for new services through suitable spectrum allocations and service rules, innovators must have the ability to gain access to that spectrum. We seek comment on whether new developments are changing the way innovators access spectrum either on a licensed or unlicensed basis, and whether new models of spectrum access would further support and encourage innovation in wireless services. Technology is rapidly transforming communications networks and devices so that they perform multiple functions and access multiple frequencies as available. As a result, the traditional association of particular services and applications with specific spectrum bands may become less relevant. Do these technological changes suggest a new spectrum access model that would permit increases in the efficiency of spectrum use? Under any of the Commission's applied access models, are there impediments to innovation or new ways of providing

It uses the phrase "seek comment" 40 additional times

11. We further **seek comment** broadly on the Commission's role in supporting and encouraging innovation and investment. For example, we **seek comment** on the most significant obstacles and deterrents to wireless innovation and investment, and what the Commission can do to reduce or eliminate them. We are particularly interested in how our rules or policies may have lagged behind important developments in the wireless industry and might be amended to better accommodate such developments without impairing the Commission's purposes. Similarly, we are interested in what elements of our rules and policies have been successful in stimulating and promoting innovation and investment. Moreover, we **seek comment** on the impact of regulatory certainty and regulatory flexibility on innovation and investment, and how the Commission should consider those impacts in crafting regulations.

12. We also **seek comment** on the most important high-level trends driving innovation and investment throughout the wireless ecosystem. In particular, how has the development of Fourth Generation (4G) technology shaped the nature and rate of wireless innovation and investment? Are there innovations in chipsets, antennas, batteries, or other physical components of the wireless ecosystem that promise to drive wireless innovation more generally? To what extent is spectrum use by unlicensed devices playing a role in encouraging or facilitating innovations in wireless devices or networks? Are there any important trends regarding spectrum use of which we should be aware?

13. We further **seek comment** on how we should think about or measure the relationship between innovation in wireless and investment, economic growth, and job creation. Are there important trends in considering this relationship? Are there any data that demonstrate measurable correlations?

14. In addition, we **seek comment** on research and development (R&D) as a generator of investment. Does spending on R&D provide a predictable response in terms of new ideas? What benefits are likely to result from basic R&D and from research targeted to specific product development? Are there particularly successful models of wireless R&D in other countries, and if so, what contributes to their success? We **seek comment** on these concepts and any others that will further our understanding of wireless innovation.

B. Innovative Uses of Wireless Services

15. We **seek comment** on how wireless services are being used in innovative ways to solve problems and provide consumer benefit in both the private and public sectors. These innovations are the product of creative efforts by consumers, businesses, and public entities to use the growing range and capability of communications tools available to them to solve important real-world problems. We seek to understand this aspect of wireless innovation, to learn more regarding how wireless communications are being used to provide practical benefits, particularly in instances of broad public benefit, to identify any barriers or deterrents to innovation in the use of wireless services and to take steps where appropriate and necessary to facilitate or accommodate such innovation.

16. For example, we **seek comment** on innovative uses of wireless to improve the effectiveness, cost, or availability of health care in the nation. We have discussed in other items the dramatic benefits that advanced telecommunications has provided to the health care industry, including improving the capacity for telemedicine, and facilitating the exchange of medical data and opinions through broadband.⁸ We **seek comment** now on what wireless devices or services are having impact and what we could do to encourage additional growth in this area.

But search on question marks and the phrase "seek comment" is not even adequate to find all the questions!

The creative authors have also written

Thus, we seek, as a general matter, comments regarding the spectrum requirements that are needed to foster innovation in wireless networks and systems (para. 25)

In particular, we solicit comment on the extent to which secondary market transactions result in the introduction of new and innovative services. (para. 33)

Commenters should, in particular, discuss how such information might be collected and made transparent to promote effective sharing.(para. 43)

We encourage commenters to identify unlicensed technologies that may be under development, and to discuss how we can promote further innovations in the use of unlicensed spectrum under our Part 15 rules.(para.45)

Accordingly, we encourage commenters to consider how policies for innovation in the wireless domestic market might appropriately reflect or support global innovation for international networks generally. By business model, we refer to a framework for converting technology to economic value. (para. 61)

From the above accounting there are 225 questions in this NOI. Perhaps there are more. Is it no wonder that FCC has never finished action on this NOI?

The Ofcom document has 13 numbered and clearly identified questions starting on p. 41

Which document would you rather write comments for?
Which document is most likely to result in useful information?

FCC NPRMs and NOIs have too many poorly organized questions tht result from teh coordination process and the lack of any final editing and organizing after all is done.

thus they are more often unmanageable.

Start numbering questions as a first step.

The make question control an explicit efficiency goal.

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Here is a clearer discussion of this 2nd point on questions in NOIs/NPRMs and how other countries handle the issue.

<http://www.marcus-spectrum.com/Blog/files/Questions1213.html>

No need to acknowledge. If your colleagues want to read it, it is out there for them to read.

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