

Prepared Testimony of
Sascha D. Meinrath
Director, Open Technology Initiative
New America Foundation

August 13, 2009
Wireless Technology Workshop
Federal Communications Commission

I work for a DC-based think tank – holding down the technology arm of the foundation's work.

The Open Technology Initiative formulates policy and regulatory reforms to support open architectures and open source innovations; and facilitate the development and implementation of open technologies and communications networks.

OTI promotes affordable, universal, and ubiquitous communications networks through partnerships with communities, researchers, industry, and public interest groups; and is committed to maximizing the potentials of innovative open technologies by studying their social and economic impacts – particularly for poor, rural, and other underserved constituencies.

Today we are living through a critical juncture in telecommunications history.

A trifecta of recent societal shifts are combining to create a “perfect storm” for advancing policies to better meet the needs of all U.S. residents.

- First, technological advances are creating a whole host of new platforms and hardware to better connect people, dramatically increasing the utility of communications tools.
- Second, consumers everywhere are clamoring for access to advanced services and new applications – driving multi-media

production and information dissemination.

- Third, generational shifts amongst our country's key decision-makers are generating the potential for seismic changes in our country's regulatory environment.

Taken together, these factors should be driving a communications renaissance akin to the introduction of the printing press, telephone, or the Internet itself.

Instead, what we are seeing is a systematic entrenchment of vested interests that are diligently:

1. working to prevent many of the most innovative technologies from ever seeing the light of day;
2. who are engaging in draconian attempts to limit media production and stifle information dissemination; and,
3. as Amy Schatz reported yesterday in the Wall Street Journal, launching unprecedented lobbying efforts to stagnate or prevent meaningful and much-needed reforms.

Here inside the Beltway, an epic battle is about to be waged between those seeking to create a participatory, distributed, and democratic digital public sphere and forces seeking to re-establish a command-and-control regime over next-generation telecommunications infrastructure.

As the populace shifts from wireline to mobile communications as their connectivity norm, wireless technologies are at the very heart of this battle.

Instead of building next-generation networks focused around lowering costs for consumers and maximizing user control over the services and hardware we have bought, providers are architecting systems that maximize billable moments – commoditizing every new space and function possible.

Instead of fostering interconnectivity of networks and interoperability of

devices, the forces of command-and-control seek new ways to capture market share and generate path dependencies to limit customer churn.

Handset exclusivity and the lockdown of cellular phones and PDAs are symptomatic of this business model; but so too are the myriad limitations we've already seen to prevent users from doing everything from steaming video, to Google Voice and Skype.

Historically, over the past 75 years, we have dramatically increased wireless capacity by opening up higher and higher frequencies as the technologies have made these bands viable. Allocations for new uses have paralleled these reforms.

However, assignments to license holders in years' past, being based upon the cutting edge technological capacities of their day, are remarkably inefficient by today's standards.

Today, cognitive and software defined radio technologies allows us to “in-fill” throughout the public airwaves – dynamically reusing empty or underutilized frequencies.

This opportunistic spectrum reuse – and its potential to dramatically decentralize and improve communications – is one of the most powerful tools available for breaking the current strangleholds we face over how we communicate.

Today's technological capabilities have far outstripped many current business practices – straining infrastructure that was built for the wrong purpose.

Tomorrow, this disruptive potential is certain to grow and – so long as current systems remain locked down and service provision fails to meet consumer needs – may achieve explosive proportions.

The question we must all face and answer, is “How do we transition to a more distributed, participatory, democratic telecommunications system?”

After years of burying our head in the sand, a continuing failure to forthrightly address systematic shortcomings in our wireless communications infrastructure will dramatically increase the headaches (and economic costs) that we will eventually have to face.

Leadership from Congress, from private industry, and from the public interest sector is desperately needed to ensure that these necessary transitions are graceful instead of unmanageable and liberatory instead of harmful.

But most importantly, the onus lies with the FCC to ensure that the future of wireless communications lives up to its democratic potential.

The FCC, through incentives and regulatory fiat has the responsibility to ensure that the public airwaves serve, first and foremost, the best interest of the residents of the United States and leverage the capabilities of open hardware and software; cognitive radio technologies; and peer-to-peer, distributed infrastructures.

I look forward to hearing how each of my co-panelists sees their company's role in supporting this mandate and look forward to your questions.