

Remarks of Commissioner Meredith Attwell Baker

Spectrum Reform: A Progress Report

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When you get beyond MHz and GHz, spectrum is our nation's best opportunity for the third, fourth, fifth, and sixth broadband pipes into the home. It promises wireless connectivity, mobile solutions, and amazing innovation across networks, devices, and applications.

Five years ago, this was my state-of-the-art phone. It had blazing fast 2G speed, a brickbreaker game, and text messaging. This month, many a teen and tween will get their first cell phone for Christmas. A phone far cooler and feature rich than this. Overall, 75 percent of teens have a cell phone, and for many young people, mobile broadband is their only online connection. We learned with landlines that the under 25 crowd was the first to cut the voice cord.

For kids of all ages, the must-have wireless device will change between now and year's end, and then again five times next year. Just think, we didn't have iPads or Evos this time last year, and next year we will be surfing on 4G networks that will change how we live our lives in unimaginable ways, from work and entertainment to health and education.

The bet wireless companies are making on 4G is the type of private capital infusion and job creating activity this country and our economy needs: both new and incumbent providers are pumping billions into their networks. The wireless industry as a whole invested over \$21 billion from June 2009 to June 2010. 2011 is poised to be the year of substantial 4G investment and deployment.

Last year, I talked about the nation's need for a comprehensive spectrum framework, a long-term approach to spectrum policy. A year later, I am here with a progress report and a look ahead to 2011. This is an opportunity to assess how we are doing. I will avoid assigning a letter grade, "Baker gives FCC an A, a C, or an F." It is too tempting a headline and truly when it comes to spectrum, the grade will always be incomplete.

Spectrum reform is really an exercise in delayed gratification. It is going to Las Vegas and opening an IRA instead of putting \$1000 on black. Roulette will always be more fun, a quick shot of adrenaline, but the long-term play is the stronger investment.

I feel the same way about spectrum. The most significant steps in spectrum reform will not pay dividends for years—we will start seeing the rollout of 700 MHz services in earnest next year. That spectrum was auctioned in early 2008. So we have had almost a three year implementation period since the auction. That is just the tip of the iceberg. It would be too depressing to talk about when the process of re-allocating and setting a band plan for 700 MHz began. That would be 1996.

From a policymaker perspective, this means we must fight the urge for quick action and tomorrow's headline. Spectrum reform is a roll-up-the-sleeves exercise that is part political

corralling, part budget policy, part engineering and technical finesse, and large part taking the long view on hard questions.

So instead of a letter grade, let's assess three of our main strengths and the associated challenges we still face.

Strength #1—The Start of a Plan. The Broadband Team was mid-drafting when we last spoke, and Blair and his team deserve great credit for outlining in a global manner the spectrum challenges facing our nation. It was a call-to-arms, and framed a great deal of the Commission's subsequent efforts this year to modernize our spectrum policy. You can quibble with some of the details, but the Plan provides clear recommendations to shift us towards more efficient and effective use of spectrum. It was an accomplishment that deserves commendation. We should also note that the Administration and NTIA deserve credit for their work towards a more structured approach to spectrum policy.

The challenge we face is that we have not built from that foundation a truly comprehensive spectrum policy or framework. The Broadband Plan's spectrum chapter has become a default framework for the FCC, yet that was never its intent. The Broadband team was rightfully concerned with how spectrum policy can help promote mobile broadband solutions. A global spectrum policy must also address spectrum challenges across bands that may or may not relate to mobile broadband directly, and should also address inter-government challenges with spectrum management between commercial, public safety, and governmental users.

I guess I should have come earlier this morning and cornered Blair to convince him to get the team back together for a Spectrum Plan. If nothing else, it would do wonders for consultant jobs in DC. Jokes aside, we need a concerted effort to provide a more predictable and known approach to spectrum. We cannot address spectrum reform on a proceeding-by-proceeding or auction-by-auction basis. We need closer coordination with NTIA, and a renewed and upgraded mandate for the Commercial Spectrum Management Advisory Committee that has the ability to enhance opportunities for both the federal government and commercial spectrum users.

Strength #2—More Spectrum Awareness. We have collectively recognized the need for more spectrum for mobile broadband across government. The Administration issued a Memorandum calling for 500 MHz of spectrum for mobile broadband by 2020. NTIA in October released its preliminary report detailing 2200 MHz of federal and non-federal spectrum that warrants investigation. NTIA also identified over 150 MHz as part of a fast track evaluation.

While we can have an honest debate about whether 500 MHz is just the right amount, not enough, or too much, the pertinent fact for me is that there is broad agreement: we need hundreds more MHz. This is vitally important.

Given my prior roles, I am particularly appreciative of the efforts of the FCC, NTIA, federal spectrum users, and commercial users to work collaboratively in a coordinated fashion to meet the spectrum challenges of our government and our nation. The future of spectrum will necessarily blend federal and non-federal spectrum with increased sharing and opportunistic use of spectrum. The first step towards a more cooperative future is mutual trust, something I have

worked hard at this past year. I am happy to report we saw real progress on this front, and that is extremely important for the long-term.

The challenge is that this is all terribly hard. We can't snap our fingers and find hundreds of MHz of spectrum. No spectrum is sitting idle ready for reallocation. The future of D Block has been delayed as we address the broader question of how best to solve the challenges of the nationwide public safety network. NTIA reports that the most promising commercial pair for AWS-3 spectrum is not easily reallocated.

So as 2010 ends, we will have seen almost three years pass since the last major wireless auction. Even worse, there is no auction scheduled for 2011 right now. Spectrum shortages will not appear overnight, but they are also clearly foreseeable. All trend lines point to a continued explosion in mobile data and video: some estimates say traffic will increase 40 times over by 2014, others 66 times in even less time. Our own personal usage is a daily reminder of how intensive mobile broadband users we have all become. The *Wall Street Journal* reports that nine percent of holiday shoppers plan to buy an iPad in the next 90 days.¹ These devices will challenge networks as much as they will delight their owners.

We must provide a pipeline of spectrum in 2011 and for the next 5 years. To do so, we need to dedicate resources and funding to the teams responsible for evaluating the 2200 MHz of spectrum, and we should prioritize those spectrum bands that have the most commercial value and are harmonized for international use. For that reason—with true appreciation of the difficulties associated with the band—I hope we continue work to find a solution for the 1755 to 1780 MHz band.

We need to establish this pipeline in a forthright manner, making plain our intent to impose any licensing conditions or eligibility limitations. Not surprisingly, I strongly believe that the most flexible and least unencumbered licenses serve the consumer best, but we need to have this debate in a transparent manner. We should also focus our efforts on allocated spectrum that is encumbered today either by adjacent spectrum users or less than optimal technical rules.

Strength #3—Irons in the Fire. In response to the Broadband Team, Ruth, Julie and their teams get a clear A for effort. It seems that we start a new proceeding on a spectrum-related matter every open meeting. We had three new items just this week, and 60 percent of all Open Meetings items in the past five months have been spectrum-related. OET alone has started more proceedings this year than in the prior two years combined.

The challenge is that we have started so much, but finished relatively little. This is of course an unfair criticism—an inherent problem of taking a snapshot of agency action at an artificial date. Regardless, we need to bring these matters to final decision, an objective I know I share with staff. 2010 was the year of asking questions, 2011 must be a year of action.

¹ Ian Sherr, "For Cyber Shoppers, Gadgets Look Hot," *Wall Street Journal*, Nov. 29, 2010. Available at: <http://online.wsj.com/article/SB10001424052748703678404575636570051326434.html>

In doing so, we should prioritize those efforts that can help with 4G buildout next year. I spoke last month about what steps we can take to help jump-start 4G buildout: focusing on MSS, secondary markets, service rules, and a rural action plan. Our energies should be focused on what steps we can take to affirmatively promote faster—both in terms of actual broadband speed and in terms of availability date—4G service nationwide.

I would like to see more focus on infrastructure in particular. There are wireless backhaul opportunities that need action as well as the potential for wireless backhaul in the TV bands. Infrastructure is but one of the challenges unserved and underserved wireless communities face. We need to take a more focused look at a handful of these communities—whether they are in west Texas, mountainous West Virginia, or rural Maine—to work with industry and communities on the incentives necessary and resources needed to push wireless services, particularly 4G services, to all Americans. A more detailed analysis of the challenges faced in rural America will better inform our spectrum policies, and highlight opportunities for investment and entrepreneurs. It will also provide us with a potential blueprint to drive wireless coverage deeper across the country. My guess is there will never be a one-size-fits-all approach, but there will be some commonalities in the challenges we face that we can address head-on.

The more fundamental challenge comes from the Commission's non-spectrum decisions that can have the effect of undermining all of these promising spectrum-specific steps. Earlier this year, the Commission refused to find the mobile market to be competitive in its annual report. This was despite 91 percent of Americans having a choice of at least four wireless voice providers. The mobile broadband statistics were even more fantastic: from 2008 to 2009 alone, the number of consumers with choice of three mobile broadband providers has jumped from 51 percent to 76 percent.

Couple that unfortunate decision with the troubling Harbinger satellite merger condition that singled out two uninvolved wireless carriers for special restrictions on future spectrum access, potentially inhibiting the organic evolution of a wholesale 3G and 4G spectrum market. The practical concern is that findings like these suggest a more interventionist government approach, a competition policy that micromanages what has been a wildly successful and customer-driven market. This has genuine investment-chilling consequences.

In this regard, how we will address the question of data roaming in the months to come will be important to watch. As an agency, we still have yet to come to grips with our lack of statutory authority to act. I know that sounds familiar to some of the other issues we're working on right now. From a policy perspective, I certainly understand the goal of ubiquitous and interconnected data networks, but expanding voice rules to data is far from a straightforward exercise, and a mission impossible legally. It also fails to capture all of our key policy goals: our focus must also be on providing the incentives we need for 4G network investments. I would also hope we would better understand this market before we interceded. We need more information about how this new market is working in practice. Is this a 2G, 3G or 4G issue? What is the status of negotiations? We encourage industry to work together to find solutions, are they? Thus far, I have not seen clear evidence of industry-wide challenges. But I think we need more information before we act.

On Net Neutrality, my position is clear: the courts have told us we have no authority to act, and Congress has told us plainly not to act. Moving forward is a legal and political mistake. It is also the wrong policy decision—there is no identified market failure or systemic public interest harm we seek to curb. The Internet is open today. We see billions in investment across all sectors of the Internet economy, and consumers benefiting from new services, faster connections, and the latest and greatest applications. There is no problem to be solved. What we are doing is checking the box on a campaign promise, and we are doing it in a non-transparent and non-data-driven manner.

One of my biggest frustrations is that this partisan political decision may inhibit our ability to achieve what is our much broader consensus agenda. Central to that agenda is the spectrum reform we have talked about today. We have clear momentum and bipartisan agreement that a substantial spectrum crunch is on the horizon and we need to revamp our approach to spectrum comprehensively. To move forward, we need Congress to provide us the tools to do so, including—but not limited to—incentive auction authority. We need to partner with the new Congress, and we need to work together to find sensible middle ground positions. We have a window of opportunity, and I have real concerns that moving forward aggressively with a controversial Net Neutrality proposal will only hamper our ability to achieve our shared goals.

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I don't want to leave on a sour note. On spectrum-related matters, there is much to be thankful for in 2010. We have started thinking more holistically about spectrum, we have coalesced around the need for significantly more spectrum, and we have started countless promising proceedings to promote more efficient spectrum use.

The most exciting thing about spectrum policy is how many additional strengths we did not talk about today. The FCC's new spectrum dashboard – the clearest manifestation of our effort to inventory commercial spectrum – was rolled out this year. Important advancements for the dashboard are in the works to add additional information to facilitate secondary market transactions. White spaces are actually coming into fruition, and important progress is being made on dynamic spectrum access.

Now the hard part. We need to identify specific spectrum for future auctions with concrete reallocation plans and timetables. We need to identify the right spectrum, not just 500 MHz to check the box. We need to complete dockets that are central to 4G deployment. We need to do all of this in a way to avoid investment-chilling steps that run the risk of stopping short the rapid deployment and adoption of a terribly exciting generation of mobile broadband services. We have our work cut out for us and we will need all of your help. Thank you.