REMARKS OF
COMMISSIONER MICHAEL J. COPPS
QUELLO CENTER SYMPOSIUM
WASHINGTON, DC
FEBRUARY 25, 2004

"DISRUPTIVE TECHNOLOGY…DISRUPTIVE REGULATION"

Thank you for your kind invitation and thank you Quello Center for the continuing contribution you make to America's telecommunications dialogue. Like Jim Quello himself, you just keep on giving and contributing and helping us all work together in the great and glorious goal of bringing the best and most advanced telecommunications service and products possible to every single American citizen.

I am asked in these introductory remarks to address the imposing topic of "Infrastructure Strategy and Policy in the Presence of Disruptive Technologies." So I'll try to do that and then maybe talk a little about talk a little about "Infrastructure Strategy and Policy in the Presence of Disruptive Regulation."

The past year has not only been a busy, but a momentous, one at your favorite regulatory commission. Important votes have been taken, some of them supposedly tentative but illustrative of where this Commission is heading nevertheless. We have teed-up and voted on issues that have the potential to remake dramatically the communications landscape of this country for many years to come. The changes we have made and those being contemplated have breathtaking consequences for competition and innovation and, most of all, consumer well-being.

Technology, it's almost trite to say, is developing at a blistering pace and forces us to confront new issues—to think anew and to act anew. How do the legal and regulatory frameworks apply and keep pace? How do regulators make good decisions in this fast-moving, paradigm-shifting environment? How do we create a landscape that really fosters innovation? How do we create an environment of regulatory stability and predictability that helps businesses to make right decisions about the future? And, most importantly, how do our actions benefit consumers? We need to be thinking bigger thoughts. And if ever we needed to have a national discussion about how we are going to accomplish all this while technology change engulfs us, that time is now. So the issue you're gathered here to discuss is critical—how to deal with the question of disruptive technology, the issue posed by Joseph Schumpeter's "gales of creative destruction."

So let's go to my assigned "Infrastructure Strategy and Policy in the Presence of Disruptive Technologies" topic and let's use broadband as our case study. Some of you have already heard me say that I think broadband ***is*** the great infrastructure challenge of our time. If you double back over the course of our nation's history, you will find that just about every major era has had its own particular infrastructure challenge. It might be opening new lands to settlement way back at the beginning. Then, once those lands were

settled, it was building the roads and turnpikes and canals and ports to get the bounty of the newly-settled lands to market. After that, as we began to industrialize before the Civil War, the need was to start building regional railroads and then, as we spread across a continent after the war, to bind us together through the great transcontinental railroads. Closer to our own era, in the Eisenhower years, came the Interstate Highway System. Indeed, you can see that same role in the build-out of the nation's telephone infrastructure in the 1900s. After the invention of the telephone, rural communities not having telephone service ended up, if anything, more isolated than before. So we came to realize that we had to tackle that infrastructure problem, too, and tackle it we did.

In all of these infrastructure build-outs, business and government worked together and there was, in each instance, a critical and clearly proactive role for enlightened government policy to help achieve a great national objective. Public sector and private sector working together—it's how we grew the country. It's the story of America.

When I talk to technology innovators, they tell me that broadband networks ***are*** the canals and railroads and highways and byways of the Information Age. They tell me that our future will be hugely impacted by how we master, or fail to master, advanced communications networks and how quickly and how well we build out broadband connectivity to all our people—and ***all*** the people is indeed the challenge. If Americans have widespread access to broadband, we'll see a new era of innovation. If they are denied this access, we'll see another era of stagnation and we'll find it impossible to compete against countries that are more aggressive in meeting infrastructure challenges than we are. Many countries are already far ahead of us.

The challenge here is not about finding some "killer app." On that score, maybe bandwidth itself is the killer app and we should wake up to how deeply it has already entrenched itself already in our daily lives. Or maybe the killer app is lower cost, like in Japan or South Korea or many other places where consumers are signing up in droves because they get significantly more speed at significantly lower prices than we can get.

No, the question here is this: how do we get infrastructure deployment done? And I think most of us in this room would agree that the private sector can, should and will be the lead locomotive for the broadband deployment train. That's entirely as it should be. But given the scale of the challenge, given the difficult economics of rural areas, and given the rapidity with which other counties are building out their own broadband networks, we would be remiss if we didn't ask whether the market alone can get the whole job done.

So I ask just about every business leader I meet if he or she is convinced the market alone ***can*** get the job done. Some answer "yes." But even more of them tell me that for the last 10 or 20 percent of Americans, maybe not. And I would point out that leaving 10 percent behind amounts to about 29 million people, and leaving 20 percent behind would abandon 58 million people. So this issue has a human face. I'll tell you this: if we get to the year 2020 and we have 29 or 58 million Americans without

broadband, we will have a Broadband Chasm that denies our fellow citizens the tools of opportunity and denies our country critically needed economic growth.

Now let me try to marry these thoughts back to a new and hot and disruptive technology of the moment: Voice over IP. If we needed another wake-up call that a national broadband policy is needed, here it is. This technology may be a substitute for more traditional circuit switched telephony, or it may be a complement. It comes in many flavors already, with undoubtedly more to follow. We know that IP technology means huge changes in the mechanics of how we communicate. It may confer a universal language for communications, whatever the device—phones, laptops, personal digital assistants, you name it.

So we all marvel at the transformative potential of new IP services. They sizzle with possibility for consumers and businesses alike. We all talk about the competition and new services that VoIP can bring—and we're right.

But we need to realize that—no matter how enthusiastic our rhetoric, no matter how strongly investors pledge devotion, and no matter how supportive a regulatory environment we craft—IP technologies will ***only*** reach their potential if the infrastructure is there to support it. IP applications will only revolutionize communications if everyone has access to really high capacity bandwidth. Have you ever had a VoIP conversation over a dial-up connection? It . . . is . . . not . . . an . . . appealing . . . prospect. And how much of a competitor will Voice Over be if a third of all Americans have to pay $100 a month or more on top of VoIP in order to get the required broadband because we haven't figured out how to bring low-cost broadband to everyone? If that's the case, maybe this new technology won't be so disruptive after all.

Our actions in the *Pulver* decision and the *IP-Enabled Services* rulemaking week before last garnered a lot of attention. But for Voice Over to be truly transformative and disruptive—rather than just being a marginal change that doesn't shake the system—we need ubiquitous broadband deployment. We shouldn't be debating this technology in terms of how it can help us to game the system or to create yet another generation of arbitrage maneuvering. We should be thinking larger thoughts.

Part of this thinking must focus on whether we believe that market forces alone—practically and not just theoretically—will blanket this land with broadband. And, yes, that means we have to struggle with universal service rather than say it doesn't matter anymore in our brave new world. It matters. If we don't start this dialogue right now, I'm afraid we'll be ignoring history. And having been an historian, I would never do that. It also means we'd be ignoring Congress, and having spent many years on the Hill, I would never, ever consider doing that! After all, we enjoy a basic telephone penetration rate in this country that is one of the highest in the world. More than 95 percent of households have access to basic phone service. Credit universal service with much of that. Why, then, when it comes to broadband, would we turn our backs on what has been so historically effective?

Sure, what I'm talking about is expensive. So is it expensive to deny opportunity to so many citizens. So is it expensive to put those 29 or 58 million people I mentioned off limits to our entrepreneurs and innovators. Providing meaningful access to advanced services for all of our citizens, on the other hand, would have a significant impact on changing continued stagnation to economic revitalization because access to broadband is absolutely essential if every area of this country is going to be able to compete for high-quality jobs and investment. A twenty-first century system of universal service also matters for innovators—for innovators in the Silicon Valley and for innovators working away in garages and collaborating in cubicles and laboratories all across the country. If having broadband available everywhere is the prerequisite for IP services and for all the other applications that are sure to come out of these garages and back-yard labs, then why not address it first. Wouldn't we be a lot better off thinking about this rather than spending all of our time trying to shoe-horn new technologies into old regulatory categories? Isn't planning for the future better than gaming the present? With ubiquitous deployment—which is really what universal service means—new technologies would have a chance to prove how disruptive they can be. Otherwise we'll never know. Technology could do the disruption rather than having poor regulation disrupt the promise of technology.

"Well fine," some of you are thinking, "but that goes far beyond what our favorite regulatory agency should be doing. Your job is to tend the regulatory categories and not get carried away with the big picture." I disagree. Sure we have to work with the system we have and implement the laws we have as best we can, but the Commission also has an obligation, I believe, to think larger thoughts. We should be devising creative options and suggestions, and if we lack the authority to implement such changes, then we should be up in the Congress saying here are the options, here's what we think would work, and we need some additional authority to get it done.

I believe we have a statutory obligation here. Section 706 of the Telecommunications Act directs the Commission to encourage the deployment of advanced telecommunications capability—broadband—to all Americans. If the Commission finds that this is not being accomplished in a reasonable and timely fashion, Congress directs us to take action to accelerate such deployment. In fact, Congress directs us to take ***immediate*** action. It's worth dwelling on that word "immediate" for a moment, because it has been two and a half years since the Commission even teed-up questions for a Section 706 Report. That's just the 706 ***study*** that I'm talking about, ***not the deployment action***. Rumor around the Commission is that we might get around to a study shortly, but why such a long delay for so important a topic? I've been calling on the Commission to move forward on this for a long time. It's our duty under the law to perform this study, to use it as a tool to craft our broadband approach. By putting it off, we've been flying without the fuel that makes for good decisions.

Here are some of the things we need to do in that report. First, we need a serious study of what other countries are doing to ensure that their consumers get attractive broadband services at attractive prices. We do know this: nearly all of the industrialized countries, except the United States, have national plans for broadband deployment. It's

not that we need to emulate what others with different traditions and economies and even population densities may be doing, but can't we be serious enough to at least look at what they're doing? There are some pretty creative deployment initiatives going on out there beyond America's borders. There may just be a lesson or two there for us.

It should also be a concern that consumers in other lands are getting a lot more capacity to a lot more people at a lot lower cost than we are. Investment here is nowhere near where it could and should be, and statistics show we now rank 11 rungs down in global broadband penetration, behind South Korea, the Netherlands, Japan and a number of others. The USA—Number 11! What more of a wake-up call do we require?

I might add that, in the Commission's hoped-for future effort to measure broadband deployment, let's not use data and standards that are passé. For example, who still thinks the broadband revolution will happen at the 200 kilobit figure the Commission has been using as its key benchmark? I mentioned the 200 kilobit figure to someone and the response I got was: "How 1997." Nor can Commission measurements be credible if we continue to claim that reasonable and timely deployment in an area means that one subscriber has signed up in a zip code. These are not the analytical methodologies needed to help the nation cope with so momentous an infrastructure challenge.

We need to look within our own borders, too, specifically at what so many towns and municipalities have done to deploy broadband themselves, issuing bonds and taxing themselves to get the job done. What does ***that*** mean? Why are they doing it? With what success? And what lessons does this have for other localities?

We ought to be convening expert panels, community roundtables, Congressional discussions and a national dialogue on this. Then, as I said, use the powers we have for reasonable and timely deployment and if they are not enough, then ask Congress for whatever else is needed. You may not agree with my analysis here, but shouldn't we at least be asking the questions and teeing up the options on a matter so clearly important to the country's future?

So, yes, I worry about our approach. We're nickel-and-diming huge issues. We're backing into classifying all the new technologies that come along without clearing away the regulatory underbrush that keeps them from fulfilling their potential. Here's another example: intercarrier compensation. Our intercarrier compensation system is Byzantine and broken. We have in place today a system under which the amounts and direction of payments vary depending on whether carriers route traffic to an incumbent local provider, a competitive local provider, a long-distance provider, an Internet provider, a CMRS carrier or a paging provider. In an era of convergence of markets and technologies, this patchwork of rates should have been consigned by now to the realm of historical curiosity. Certainly no one should be surprised that with new technologies in the mix, carriers are disputing when and where charges apply. The dialogue is heated, the disagreements between carriers are substantial, and I suspect we're having a lot of disputes that we probably didn't need to be having.

It may be the easier course for the Commission to answer only narrow questions about how to keep the current system afloat and to twist new technologies so they can somehow be brought into the rubric. But bailing wire can only hold this system together for so long. At some point—and we're long since there—more patches and band-aids don't help. In fact, they hurt.

The harder course here is also the right one. We have a two-year old proceeding on intercarrier compensation. We need to act on it. We desperately need to create a level playing field that will provide more rational investment signals. Amid converging technologies and blurring jurisdictional boundaries, we are challenged to justify a system that treats similar intercarrier connections differently. We may not be able to fully migrate to a one-size-fits-all approach. We obviously have to keep in mind the important element of cost recovery here, especially for rural carriers. That's important for rural consumers and it's important for rural America. Our goal must be a system that relies to the greatest extent possible on market forces—and not arbitrage—to drive technological advances and innovation.

I am encouraged by reports that industry is talking—dare I say collaborating—on an intercarrier compensation proposal for the Commission. That could be a tremendous public service and get us a good ways down the road toward some solutions. It's a huge order, but I'd like to see us get a plan for discussion and I'd like to see the Commission formally resolve to get the job done—*finis*—by December 31 of this year. I think it will take that kind of priority and that kind of commitment from us. And it will take tremendous commitment from you in this audience and the captains of your industries to bring us something that contains at least the seeds for success.

Going forward, then, we need to develop a real national plan for broadband deployment. Over the long-term, the debate over what is "telecommunications" or "telecommunications services" or "information services" cannot be the single-minded focus of our broadband dialogue. Think about it: we have all spent the better part of the last two years classifying, reclassifying and declassifying. What do we have to show for it? We're all exhausted, that's for sure. We're in free-fall when compared with broadband penetration in other nations.

Worse, we have no plan for the future. The Commission needs to start thinking now about how to get us out of our Broadband Ditch. Let's think anew and act anew. We need to be gathering the data—far more extensively than we do now so that we can make intelligent decisions. We need to be doing the analytical studies—far more extensively than we do now. We need to be engaging stakeholders of every kind in a national dialogue about America's broadband future—far more extensively than we do now. And then we need to take our authority under Section 706 and use it to the extent we can, to get advanced communications deployed—truly deployed—across this nation.

What we don't need to do is wait around to begin thinking until after Congress rewrites the Act. We ought to be producing the data and analysis and developing the options and recommendations ***for*** Congress—and we ought to have started this process

long ago. In other words, let's use the authority we have and ask for whatever else may be needed. Isn't that a legitimate function for a Commission charged with great public policy responsibilities?

Maybe we can actually get to a broadband regulatory regime that is constructive rather than destructive. Probably all of us would agree that regulatory regimes can sometimes be destructive. But my point here is not so much to debate recent decisions of the Commission—you know where I stand on these—but to say that we need to be thinking about the future. And this doesn't reduce to a debate about regulation versus deregulation. Ideology can't get us from here to there. There are regulatory provisions that are hurting us and there are regulatory safeguards that are helping us. The national challenge of building broadband infrastructure deserves better than this tired old regulation-versus-deregulation fixation. Sometimes good policy is deregulation, sometimes it is regulation. No, what we need is good data, serious and substantive analysis, broad stakeholder dialogue to chart our course, and considered options and recommendations to meet the broadband challenge. Failure to do justice to the larger questions I have posed—and I'll bet you can come up with many others—is precisely the kind of disruption that our country and our children cannot afford.

Summing up, we are dramatically changing the ways we communicate in this country—and around the globe. We are challenged to adjust our rules and polices not only to accommodate, but to facilitate, this process of change. We need to create an environment where competition flourishes and innovative services thrive. When disruptive technologies erupt—and they will—we need to ensure that value is transferred as seamlessly as possible and that consumers are the real beneficiaries of these changes. In what I think is going to be a truly transformative chapter in our country's history, the Commission needs to step up to the plate and do its part.

These are not easy issues and far be it from me to suggest that any of them is a slam-dunk. Despite the frustrations I have discussed this morning, however, I remain an optimist about the future of communications, about the paradigm-creating new technologies that are becoming available to us. I still believe that communications technologies will be the lead engine of American prosperity in this new century. And I remain committed to the idea that the best infrastructure development occurs, as it always has in the United States, when the private and public sectors find creative ways to work together. I have spent the overwhelming bulk of my years in Washington trying to build exactly these kinds of partnerships because I believe this is how we best serve the common good, the public interest. And that is how we will ensure that the Digital Revolution of our time leaves no American behind.

Thank you.