

**Key Note Address of FCC Commissioner
Kathleen Q. Abernathy
Arctic ICT Regulatory and Policy Roundtable
Crystal City, VA
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Thank you for inviting me here today to speak with you. I am very happy to be able to spend time with you to discuss some of the key issues that the FCC and regulators around the world, including those in the Arctic Region, are facing in terms of rural deployment of broadband services.

The era when “plain old telephone service” defined a country’s telecommunications development is rapidly receding. Today, regulators around the globe, including in the United States, are focused on how to promote broadband deployment to all their citizens. The policy issues regulators face are remarkably similar no matter the size of the country. And the issues become even more complicated when dealing with very rural and remote regions, such as the Arctic.

Before I proceed with a discussion on the policy aspects of broadband, I thought it might be helpful to take a step back and to talk about just what broadband is and why we are so enamored of this new technology. When I first heard about broadband a few years ago, I was tempted to think it just meant faster e-mail – which is nice, but not particularly earth shattering. But now I know that the potential benefits are immeasurable. It is increasingly clear that broadband technology is fundamentally reshaping the way each of us communicates, the way we work, the way learn, the way we receive health care, and the way we are entertained.

Perhaps the most powerful benefit of broadband is that it makes geographic isolation irrelevant. It brings a world of information to rural communities via the Internet, so that school children have access to the same resources in a remote corner of Alaska as they do in Washington, D.C. Broadband enables telemedicine, which gives rural families access to medical specialists without having to travel long distances. And it fuels economic expansion by connecting small businesses to millions of potential customers all over the world and by allowing larger businesses to set up call centers and otherwise tap into a new employee base. Broadband networks are also inherently more efficient than narrowband networks, so they allow service providers to lower their costs. Because of these consumer benefits and efficiencies, analog networks are rapidly giving way to packet-switched networks that transmit a converged stream of voice, video and data via Internet Protocol.

I have been able to witness first hand the transforming benefits of this technology. Last year I traveled to Alaska to visit a village above the Arctic Circle, where the residents have incorporated DSL and wireless broadband services into their daily lives. Using these broadband technologies, a consortium of government and private entities has established links to schools, health clinics and many private homes. These new

broadband connections dissolve geographic isolation, linking citizens to government services and energizing local economies.

Similar broadband rollouts are being pioneered all over the world. I have heard about governments from Russia to Bhutan to India to Brazil to Canada that have experimented with broadband network solutions – many of them wireless – to overcome distance and isolation by linking villages and rural areas to national networks. There is increasing evidence that broadband applications, such as agricultural extension, tele-medicine and distance-education may be instrumental in appealing to rural constituencies and providing a customer base for sustainable business operations.

What makes all this possible is the advent of new, low-cost broadband technologies. As each day progresses, it appears that there are more and more options for linking communities and individuals to each other and to the wider global community. For example, Wi-Fi hotspots are becoming more common place for broadband wireless Internet Access.

These technologies are revolutionizing our societies and helping to close the “broadband divide” that exists within and among our countries. But these beneficial effects will be stunted if licensing and regulatory frameworks impose artificial barriers and disincentives to investment. So it is up to each country’s regulators to adjust, alter or reform the old regulatory codes, and to dismantle unnecessary rules that may have been appropriate when markets were dominated by monopolies but may no longer make sense in light of innovation and competition in a converged environment.

Now, how do we get from here to there? I would now like to spend a few minutes talking about how regulators can help to harness and drive the trends of broadband and converging technologies. Essentially there are two major challenges to delivering on the promise of broadband nirvana:

- 1) Providing incentives for investment in broadband networks (assuming government is not footing the bill); and
- 2) Regulatory frameworks must be modified to accommodate the broadband revolution.

Overcoming these challenges will vary from country to country but there are some common best practices for all regulators to consider. These best practices were adopted by over 100 telecommunications regulators from around the globe who participated in the ITU’s Global Symposium for Regulators, which I had the honor to Chair this past December. I had the honor to chair the conference and work closely with my global colleagues on a new blue print. We ultimately agreed to a Best Practice Guidelines for the Promotion of Low-Cost Broadband and Internet Connectivity. I have made these guidelines available to you through the organizers of the Conference and I hope that you will take a few moments to look at them in more detail.

Just to give you an idea of some of the important recommendations, I'll summarize a few. First, we recommended that countries embrace access to low-cost broadband interconnectivity encompass at all levels – from identifying local needs in our communities to cultivating support at the highest levels of government. This is especially critical in the Arctic region, where the needs of the people for business ties, educational links, and medical access to the rest of the world are accentuated exponentially by the extraordinary isolation and the extreme climate of the region.

As an example of the unique challenges to broadband rollout in America's Arctic region, it is useful to note that Alaska is one fifth the size of the "lower 48" states and two and one half times the size of Texas. If you superimposed a map of Alaska on a map of the continental United States, its periphery would stretch from the Atlantic to the Pacific Oceans and from Canada to Mexico. Very few of the communities are connected by roadway -- to each other, or to the public highway that connects the Anchorage and Fairbanks areas, and points in between. Most places can be reached only by air, or, in some cases, by waterway and the highway of ice it creates in winter. Often, poor weather conditions limit air and boat travel – sometimes for days at a time. These conditions require particularly intensive and creative rollout strategies by all levels of government working in concert.

In addition to recommending broad governmental support for this new technology, we also recognized that regulators cannot work in a vacuum – they need to harness the energy of all stakeholders in partnerships, to promote broadband development. We recognized that the evolving, liberalized ICT sectors are increasingly market driven – but at the same time market forces must work in tandem with government policy to deliver outcomes in the public interest. Again, it is important to emphasize that each stakeholder has a role in broadband deployment. Earlier, I talked about the consortium that helped bring broadband telecommunications services to Alaska. Strategic partnerships among government agencies, regional economic development organizations, private business interests, and the residents of underserved communities, helped achieve this success both in Alaska and in other isolated, rural regions of the United States as well. For example, the Upper Midwest Aerospace Consortium, a group of educational institutions is using satellite technology to provide online curricula in elementary school classrooms, as well as vital operational data to farmers, ranchers, foresters, and firefighters. Various public/private partnerships in Appalachia, the Mississippi Delta Region, and Indian Country, serve as incubators for broadband deployment initiatives that foster economic development, distance education, and life-saving health care access.

While the normal operation of market forces in the United States leaves little doubt that broadband will be rolled out to our nation's cities, this is not necessarily the case in our more rural areas, such as Alaska. Accordingly, the FCC has paid special attention to ensuring the deployment of broadband to rural America. Sparse populations and rugged terrain, like we see in the Arctic regions of our countries, increase both the costs and risks borne by service providers. That's why each country's telecommunications regulator has an important role to play in making sure that these communities are not left behind by the digital revolution.

Finally, we properly recognize that, in the end, the objective of regulation – and of the promotion of broadband – is to improve the lives of our citizens. For that reason, it is imperative that we educate consumers about the new services that will be available to them through broadband networks and digital services. As we work to close the broadband access gap, we must also ensure that our citizens are empowered with the skills they need to make full use of these new multimedia and computing applications. This way we can build communities of users and stimulate the kind of demand that will sustain broadband and IP enabled services in all kinds of localities.

In closing, I think it is important for regulators to recognize that technology is moving faster than we are and that's as it should be. Our challenge is to develop more flexible regulatory structures that are centered on the fulfillment of core social policy objectives and less bound up with labels or arcane service categories. It will undoubtedly be a major challenge for regulators to construct appropriate regimes that promote investment and innovation, rather than retarding these benefits.

Thank you very much for allowing me to speak with you today, and if we have time, I would be happy to take some questions.