



# University of New Hampshire

## Broadband Center of Excellence

September 4, 2014

Attn: Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
Washington, D.C.  
Re: GN Docket 14-126

Comments filed with regard to the FCC's Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act.

GN Docket 14-126

### **TENTH BROADBAND PROGRESS NOTICE OF INQUIRY**

In its GN 14-126, the Federal Communications Commission has issued a Notice of Inquiry seeking comment in four areas as part of its assessment of the availability of advanced telecommunications capability to all Americans including in particular elementary schools, secondary schools and classrooms.

The questions are:

- What is Advanced Telecommunications Capability?
- How Should Broadband Deployment Be Measured?
- Is Broadband Being Deployed to All Americans in a Reasonable and Timely Manner?
- What Actions Can Accelerate Deployment?

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I am Dr. Rouzbeh Yassini, Executive Director of the University of New Hampshire Broadband Center of Excellence (UNH BCoE) and well known as the “father of the cable modem,” for my pioneering work in the cable broadband technology. The BCoE is a visitor-friendly showcase and resource organization whose goals are to enable all – government, universities, schools, communities and industry participants – to use broadband as a tool to create economic growth, societal improvements and business success. The Center strives to meet these goals by conducting research, providing consulting services, and sharing information. To do so, the BCoE leverages UNH resources, research and technology expertise, and process and policy tools to support advances in broadband services and capabilities. In this capacity, I would like to offer my responses to your list of questions.

### What is Advanced Telecommunications Capability?

In its consideration of this question, perhaps the FCC could consider the services that broadband should deliver simultaneously for each American citizen rather than raw speed. The BCoE believes that all Americans can and should have broadband services that can deliver:

- Two simultaneous live video conferencing feeds
- Streaming of three HD videos
- Four uninterrupted voice lines
- Constant two-way access to Web services, i.e., chat and texting

As such, a symmetrical service of a minimum of 10 Mbps per household should be the baseline for broadband offerings to all Americans. . Today’s two-way utilization requirements have rendered the use of asymmetrical broadband connections unacceptable.

### How Should Broadband Deployment be Measured?

In our view, broadband should be measured by performance, the degree of intuition required to use it, how ubiquitous it is and how affordable. Specifically, these metrics may be:

- Sustained throughput downstream and upstream
- Percentage of households passed by 10M symmetrical service
- Dollars per month per Mbps and per Gigabyte transferred

### Is Broadband Being Deployed to All Americans in a Reasonable and Timely Fashion?

The short answer is no. The FCC’s inquiry document itself notes with detail in Paragraph 40 on page 20 that the percentages of Americans without access to broadband whether they live on tribal lands, in cities or in rural areas. All are Americans and all deserve access to affordable broadband.

Presently, the price of broadband in America is among the most expensive in the world as measured by most indicators. Today millions of Americans lack access to broadband, many due to physical location and others due to pricing or performance.

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If we cannot, as a nation, have a broadband connection available to every individual 100% of the time, notwithstanding where we live or work, we are disadvantaged. This status applies to many areas, including healthcare, education, and our economy.

We need to create a broadband blueprint that empowers every citizen of the U.S. to be part of the intelligent grid, including more extensively examining alternative wireless technologies such as TV White Space which has potential to provide ubiquitous broadband coverage for the entire country.

### What Actions Can Accelerate Deployment?

We propose the following actions:

- Make access to affordable and ubiquitous broadband a national goal.
- Establish a Cabinet level position to be responsible for all aspects of broadband, not because the FCC is unable to perform this role, but because this level of prominence for broadband would bring added exposure and profile. In the 21<sup>st</sup> century, broadband is and will be as important to our economic development as electricity proved in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. All other Cabinet-level functions require the use of broadband for the delivery of their mission. Consequently, the Broadband Secretary can support the inter-agency dialogue necessary to meet the goals around broadband.
- Under this Cabinet level executive, consolidate portions of the Information Technology budgets of the other governmental departments reporting to the President, in order to create a budget for a National office of Broadband.
- Support state Broadband Authorities
- Adequately fund engagements with representatives of the nation's top 100 research universities and land grant universities to monitor broadband and to ensure that our delivery of services and bandwidth are via technologically state of the art systems that are capable of delivering 10 Mbps symmetrically, affordably.

In conclusion, America deserves more ubiquitous and affordable broadband service because this advanced telecommunications capability is a cornerstone of our country's economic development for the coming century. If we fail to deliver broadband to all Americans, our country will suffer.

Thank you for this opportunity.

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