FULL COMMITTEE HEARING ON ADVANCING THE INNOVATION AGENDA: THE PERSPECTIVE OF THE TECHNOLOGY AND TELECOMMUNICATIONS INDUSTRY

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FULL COMMITTEE HEARING ON ADVANCING THE INNOVATION AGENDA: THE PERSPECTIVE OF THE TECHNOLOGY AND TELECOMMUNICATIONS INDUSTRY

WEDNESDAY, MARCH 7, 2007

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON SMALL BUSINESS,
Washington, DC.

The Committee met, pursuant to call, at 9:05 a.m., in Room 2360, Rayburn House Office Building, Hon. Nydia M. Velázquez [Chairwoman of the Committee] Presiding.

Present: Representatives Velázquez, Jefferson, Shuler, González, Bean, Cuellar, Lipinski, Altmire, Braley, Clarke, Johnson, Sestak, Chabot, Fortenberry and Davis.

OPENING STATEMENT OF CHAIRWOMAN VELÁZQUEZ

Chairwoman VELÁZQUEZ. I am very pleased to call to order this morning's hearing on technology and telecommunications policy issues. Let me just say that, because of the weather out there and the fact that we are going to have a joint session of Congress today with King Abdullah, we are going to go ahead and start this hearing. But let me just mention the fact that this is not going to be the first and only hearing on this issue; that we are going to be seeing each other quite often, and we are eager to learn more about technology and telecommunications as it relates to small companies in our Nation.

So these sectors are a major contributor to the U.S. economy and an engine for growth. The IT sector contributes nearly $1 trillion to the U.S. GDP each year, and, despite the size, will grow at more than 5 percent per year until 2009. The technology industry employs more than 3 million Americans. According to the AeA, these jobs pay 85 percent more than the average private sector job. These occupations which come with benefits like health care and retirement are the types of opportunities that we in Congress continue to talk about the economy's needing to create.

It is clear that innovation is leading the way in today's economy, and that small tech companies are at the forefront of this boom, employing over half of the Nation's scientists and engineers. Small research and development-oriented firms are at the heart of the industry's innovative core. Companies both small and large have helped usher in the information wave. Characterized by competition and similarly continual reinvention of goods and services, the

information economy has changed the way we go about our daily lives from artwork to education and recreation.

In order to sustain the environment that facilitated this rapid development, a number of challenges must be overcome. From workforce and broadband access to tax and international trade, we cannot stress enough the importance of effective policies in these areas.

This morning we begin the committee's work on technology and communications issues and take our first step towards transforming the American business environment for innovation. I can tell you that this committee intends to be very engaged in this area. Small businesses are some of the larger consumers and producers of advanced technology products. Given our role in this Nation's economy, our focus will include American competitiveness and broadband policy. It only makes sense that, as Congress begins its work on advancing innovation and enhancing U.S. competitiveness, the interests of small business are a priority. This committee will ensure real needs are taken into account in the policy process. Our country's continued leadership in technological development depends on it.

I would like to thank all of the witnesses for their testimony today and invite you to continue to work with our committee as these issues develop.

Chairwoman VELÁZQUEZ. I now recognize Mr. Chabot for his opening statement.

OPENING STATEMENT OF MR. CHABOT

Mr. CHABOT. Thank you very much, Madam Chair.

I want to wish everyone a good morning, and we want to thank our witnesses for adjusting their schedules to be here an hour earlier than had originally been planned.

I also want to thank Chairwoman Velázquez for calling this important hearing. Ensuring that small businesses have access to innovation and technology and that those small businesses that provide it are not unduly burdened by regulations is critical not only for small business owners and their employees, but for our Nation's economy as a whole.

Over the last decade or so, the way we communicate with one another has fundamentally changed. Information can be sent from one coast to the other instantly via e-mail and the Internet. Businesses can have staff meetings on line with employees thousands of miles away, and with the right equipment, massive amounts of data can be analyzed, sorted, stored, and accessed from nearly anywhere on Earth.

The United States is not alone in this revolution. Technology has allowed an increasing number of businesses to become global. E-commerce and the underlying infrastructure and technology that support it have allowed the smallest of mom-and-pop shops across the U.S. to sell their wares across the globe. Technology also enables small businesses to quickly adapt to ever-changing conditions simply by going to their computer and reading the latest developments in their industry. In this new economy, innovations are just as likely, if not more so, to come from small businesses on Maple Street in Hanover Township, Ohio, or Main Street in Shawnee,

Oklahoma, than the major corporations traded on Wall Street. Because of this fact, we must constantly ensure that all companies, large and small, rural or urban, have access to the technology and telecommunications infrastructure that drives commerce in our country.

Nearly all industries utilize this infrastructure either directly or indirectly. A healthy economy relies on free and fair competition between companies, and we must ensure that all businesses have the opportunity to compete with one another as well as against their foreign counterparts.

In addition to ensuring equal access to technology, we must see to it that the next generation, today's students, are well prepared to take the reins as retirements occur. We need engineers, technicians, computer scientists, and a whole host of technologically savvy people who have the desire and the knowledge to be the innovators of tomorrow.

While ensuring a fair marketplace in which businesses are held accountable, we must also prevent these small businesses, these technological leaders, from being slowed by burdensome Federal regulations. Red tape can stymie even the most innovative of companies by diverting much-needed resources, especially those in small businesses, away from innovation and invention and into accounting and compliance.

With these new innovations and technology come new challenges that must be met. We are here today to identify some of these challenges and to discuss possible solutions that will enable small business to continue to compete effectively in the global marketplace in the face of changing technology.

Again, I thank Madam Chair Velázquez for holding this important hearing. We want to thank all of the witnesses for taking their time to come here and testify and to share their priorities with us, and I yield back the balance of my time.

Chairwoman VELÁZQUEZ. Thank you, Mr. Chabot.

Chairwoman VELÁZQUEZ. Our first witness is Mr. William Archey. He is president and CEO of AeA, the Nation's largest high-tech trade association. AeA represents 2,500 electronics, information technology, semiconductor, and communications companies.

Mr. Archey, you will have 5 minutes. The green light means you have 5 minutes, and then the red light means your time is up.

STATEMENT OF WILLIAM T. ARCHEY, PRESIDENT AND CEO, AMERICAN ELECTRONICS ASSOCIATION

Mr. ARCHEY. Thank you very much, Madam Chairwoman and members of the committee.

As the Chairwoman noted, I am here representing 2,500 member companies of which 82 percent of our member companies have revenue of less than $100 million. Indeed, about 75 percent have less than 50 employees. So we represent most of the big guys, but we also represent a large number of small companies.

I would just like to note that we started dealing with the issue of competitiveness and innovation 2 years ago. It remains the single biggest priority for AeA as an institution and for our board of directors. Two years ago we issued our paper called Losing the Competitive Advantage?: A Challenge for Science and Technology

in the United States, 2 years ago last week. I would note, as I did to the board of directors at the time, that you could have had a meeting on competitiveness on Capitol Hill in February 2005 and hold it in a phone booth. One of my board members said I should not use that analogy because he said there is an entire generation who have no idea what a ″phone booth″ is.

One of the things that we are going to be doing, in fact, the week after next is we are reissuing our paper, only it is going to be retitled Still Losing the Competitive Advantage: It is Time to Act, and the emphasis is going to be on recommendations. The paper that we issued 2 years ago was on what is the nature of the problem, because it was our view recommendations were going to come fast and furious, but there was a considerable ignorance of what was the challenge and what were the problems that the country is facing particularly in the high-tech industry.

I would also note that we have worked this issue in an extraordinarily bipartisan way. We have worked at the White House. We were the cosponsor of the Republican summit that was sponsored by Republican members of the House Science Committee. We also worked very closely within Anna Eshoo and George Miller and the then-Minority Leader Pelosi. Indeed, I had the privilege and pleasure of briefing the entire Democratic House delegation from California, and Ms. Pelosi has made some rather good public statements about the work that we have done and the paper that we have produced.

I would just like briefly to say that where we are right now is that, in our new paper that is coming out, we basically have got a small number of priorities. The first is an increase in the number of students majoring in science, technology, engineering, and math—or STEM jobs—via a number of the Senate programs. The goal is to have 100,000 new students with STEM degrees. This is only going to happen if we improve the quality of teaching as well through teacher education programs, which also need to be funded.

The ability of all companies, small, medium and large, to be able to track and retain foreign nationals and to keep them by reforming the entire visa and green card process, an increase by as much as 10 percent a year for Federal funding of basic research in the physical sciences. It is that research by the United States Government over 40 years ago, 50 years ago that made the United States into the technological powerhouse it became. We need to get back to some of these things, particularly R&D and the physical sciences.

A strong and permanent R&D tax credit.

An expansion and improvement in the SBIR program that directly benefits small companies that often need financial assistance in bringing innovation to market.

An increase in broadband deployment, which is critical to enhancing productivity and innovation within the economy. We need to make the advanced broadband accessible and affordable. We are way behind the rest of the world. Indeed, a study came out 2 weeks ago. The United States is 17th in the world in terms of broadband deployment. We are way behind. South Korea leads the world.

Then, finally, changes in the Sarbanes-Oxley, Section 404 to make it less costly for small business to comply. This has been a huge issue for our small companies.

I would like to conclude by just quoting a member company of ours, $4 million in revenue, who sent me an e-mail and said, quote, ″We need to be eliminating barriers to finding and developing talented employees. If you do this one thing, we can figure out how to work around all of the other system failures that stifle growth and the improvement of the human condition across the Nation.″

On that note, Madam Chairwoman, thank you for the time.

Chairwoman VELÁZQUEZ. Thank you, sir.

[The prepared statement of Mr. Archey may be found in the Appendix on page 42.]

Chairwoman VELÁZQUEZ. Our second witness is Mr. Philip Bond. Mr. Bond is president and CEO of the Information Technology Association of America. ITAA is the largest of all the IT trade associations, representing 325 leading software services, Internet, electronic, commerce, and systems integration companies.

Welcome, sir.

STATEMENT OF PHILIP J. BOND, PRESIDENT AND CEO, INFORMATION TECHNOLOGY ASSOCIATION OF AMERICA

Mr. BOND. Thank you, Madam Chairwoman, and thank you to the members of the committee. It is a privilege to be with you this morning. I will try to be brief.

I want to start, though, by commending you for having this hearing and your interest and your record in this, including reports that have come from both sides of the aisle over the years out of this committee. If, indeed, we are to remain as the innovation headquarters of the world, which we have been for some time now, it will be because of the small business community that drives that innovation.

As you mentioned, ITAA represents a range of sizes of companies, much like my colleague at AeA. We also have a partnership with regional IT associations, 48 of those across the country, so we are probably in everybody's district by partnership with local regional groups.

Well, as has been mentioned, the U.S. is the leader in innovation and has benefited throughout the culture and society and economy from all of these innovations, whether it is having music that connects to your sneakers, or whether it is the emerging biotech sector, all of these driven largely by IT-enabled innovation. That innovation, however, cannot flourish in a vacuum, and so I would like to focus really quickly on a few issues.

I would affiliate myself, associate myself, with the remarks that Bill Archey made as well. I think there is great consensus among the IT and, indeed, the telecom industries on many of the points that Bill made, but I am going to reflect a couple of different views based on the fact that many of our members are contractors and providers of IT and services to government at both the State and Federal levels. So I will mention two that are important, and that is base, and then four others real quickly for your consideration.

The first is regarding SBA's definition and its size standards. This is extremely important to those serving the government. The

current standard is $23 million in revenue, and if a very small contractor is fortunate enough to get a piece of a multi billion-dollar contract, they could suddenly vault out of the small status, and yet they certainly are not ready to go compete with the multinationals of the world. That is something that we have been talking to the SBA about for some time and look forward to some changes there, especially for those serving the public sector.

Second, again critical to IT firms serving the Federal Government, there is a law on the books set to go into effect in 2011 which mandates a 3 percent withholding tax on all payments to contractors for goods and services. While we think this will just be built into higher costs ultimately if it goes into effect, it could be especially harmful to the small contractor who, again, may be fortunate enough to get a big contract, and the 3 percent withholding which is held then by the IRS for 12 to 15 months is more than they can afford with their cash flow, so the impact on small business of having to set aside at the outset and withhold 3 percent of the contract value could be detrimental. So that is the second one I would like to mention, and this is something that your report, Madam Chair, last year noted at the end of the year, your 2006 final report on the important innovations small contractors bring to the table, and we do not want to do anything to disadvantage them.

Third, I would like to say a little bit more about the importance of extending the ban on discriminatory Internet taxes. Again, citing your 2006 year-end report, Madam Chairwoman, you noted the impact that this could have on small businesses who now use that medium to reach the globe, as Mr. Chabot mentioned in his opening statement. And so anything at this time when we are 17th in broadband deployment—anything that adds weight to the Internet medium, I think, would be negative for our country, so we urge the extension of that.

Fourth, I want to mention the pursuit of the best and brightest. This includes both immigration and education. Mr. Chabot and others have mentioned the import of education, but we need access to the best and brightest. I think the question boils down to do they stay or come to America and create jobs, or do they stay in their country of origin and create jobs? Indeed, some are predicting shortages of as many as 10 million workers. Here we need the best and brightest to be welcome and then, of course, build our own supply here domestically.

I do think, when it comes to immigration, it is worth noting that a national venture capital study found that, over the last 15 years, one out of four VC-backed companies became public. One out of four were started by somebody new to America. And so I think immigration is important. Obviously I am referencing the H1B visas, but also the green cards, but again, this has to be coupled with education. More on that in a bit.

I did want to note that we put out a little booklet that is educational here, A Passport to Prosperity, the number of foreign-born folks who have come here and created jobs and prosperity in our economy. It is a powerful point.

The fifth of my six points is R&D and funding for R&D. This is very difficult in the budgetary environments you have to operate in, I appreciate that, but it is also a great bipartisan agreement

that basic R&D needs to be increased, and that is the role of government.

Finally, I want to talk about the sourcing of work, and again, this has the link to education. As Mr. Chabot noted, in a networked global economy, work can move anywhere, placing the right talent in the right location. It may be here; it may be in other countries, and it is important that our companies have access to that sourcing to be competitive in a hypercompetitive world. In fact, there is now a movement towards some more domestic sourcing that we are just finishing up a study on that we will share with Capitol Hill. It points out that just with government IT growth alone, there is not going to be enough domestically skilled workers, and so, while domestic sourcing is set to take off, we have to have the human capital there to take it.

Those are the six that I wanted to mention to you this morning, and I look forward to any questions. Again, thank you for your emphasis on this important subject.

Chairwoman VELÁZQUEZ. Thank you, Mr. Bond, for your presentation.

[The prepared statement of Mr. Bond may be found in the Appendix on page 46.]

Chairwoman VELÁZQUEZ. Our next witness is Mr. Grant Seiffert. He is the president of the Telecommunications Industry Association, TIA, 600 members who manufacture and supply information and communications technology equipment.

Welcome, sir.

STATEMENT OF GRANT SEIFFERT, PRESIDENT, TELECOMMUNICATIONS INDUSTRY ASSOCIATION

Mr. SEIFFERT. Thank you very much, and I am pleased to be here, Chairwoman Velázquez, Ranking Member Chabot and other members of the committee.

As you mentioned, I am happy to be here to share many thoughts, some thoughts regarding the issues that our 600 member companies are facing who manufacture/supply the information communications and technology equipment. It is important to note, as others have said, that 80 percent of our membership base is of small- and medium-sized companies.

To give some context to where I am speaking from, we are the companies who sell directly to consumers, whether a handset, a television or your laptop. We also sell our products and our infrastructure to cable operators, to telcos, to wireless providers, to satellite companies, and the list goes on.

So what does this mean? It means we are the closest to the public interest along with my other colleagues here on the panel. We simply want to sell our products to consumers, and they simply want to buy them. We walk hand in hand with consumers because we need to know what they want so that we can sell technology products to them and give them the functionality they desire. The more you, Congress, can do to get those products and services in the hands of consumers, the better we will all be.

When sales are up, prices go down. When more products are sold, more jobs are created. When a new product does well, we innovate back into that product to make a better piece of technology for con-

sumers to use. Our products and services are in classrooms, used for public safety, transportation, and provide countless of other societal benefits.

In TIA's 2007 annual market review, which covers the health of the industry, the U.S. market grew 9.3 percent this past year, 2006, which brings us up to $923 billion in U.S. revenues. The worldwide market grew 11.2 percent to total $3 trillion. The demand for broadband/high-speed service is fueling this growth. People and businesses are thirsty for broadband, and this is TIA's number one priority, broadband deployment. Our companies either manufacture the next-generation fat pipes that we know as the Internet or the products and services that ride over it.

Now, the question remains how can we work together to better facilitate this continued growth in the broadband space? Consumers' demand for voice over IP and video are not going to do the job alone. Your committee can help. Your committee can act now to advance this innovation in this area.

There are two things that TIA is asking you to do to help us be more competitive. First, achieve a national market-driven framework that fosters the diffusion of innovative communications technologies into all markets, support policies and encourage investment in next-generation network facilities, promote competition in the provision of multimedia applications and services. It spurs the proliferation of end users' devices. The bottom line, remove regulatory barriers to the deployment of new technologies.

Second, give relief to small- and medium-sized companies on Section 404 of the Sarbanes-Oxley Act, which places extraordinary and unnecessary costs and burdens on these companies. You have heard this before. Section 404 threatens the long-term success of companies in the U.S. in their capital markets. TIA and our members companies offer our help, support and time to help work on these important goals. Our Nation's small businesses will only benefit from increased broadband deployment.

In closing, I want to thank you for your leadership on these important issues. We enjoyed working with you last year and appreciate your continued support of small businesses and the relief of the Sarbanes-Oxley Act. So thank you very much.

Chairwoman VELÁZQUEZ. Thank you.

[The prepared statement of Mr. Seiffert may be found in the Appendix on page 53.]

Chairwoman VELÁZQUEZ. Now, our last witness on this panel is Mr. David Zesiger. He is the senior vice president, regulatory policy and external affairs, for Embarq, a telecommunications company based in Kansas. Mr. Zesiger is testifying on behalf of the Independent Telephone and Telecommunications Alliance.

Welcome, sir.

STATEMENT OF DAVID ZESIGER, SENIOR VICE PRESIDENT, REGULATORY POLICY AND EXTERNAL AFFAIRS, EMBARQ, ON BEHALF OF THE INDEPENDENT TELEPHONE AND TELECOMMUNICATIONS ALLIANCE

Mr. ZESIGER. Thank you, and good morning, Chairwoman Velázquez, Ranking Member Chabot and members of the committee.

I am David Zesiger, senior vice president of regulatory policy for Embarq, and today, I am testifying on behalf of the ITTA, the Independent Telephone and Telecommunications Alliance, which represents mid-sized telecommunications carriers here in Washington. Thank you again for the opportunity to share our perspective on how telecommunications can advance the innovation agenda for the Nation's small businesses.

Embarq is the Nation's fourth largest wireline telecommunications provider, serving approximately 7 million lines in 18 States. We serve well over 400,000 small and medium-sized businesses in our service territories, including nearly 300,000 of which are the smallest of businesses with one through four employees. We commend you for holding this hearing today to examine the role that telecommunications can play in driving business innovation in our economy.

Small businesses are the bedrock of our Nation's economy, and our Nation's telecommunications infrastructure plays an increasingly important role in empowering small businesses to do what they do best in our economy. Small businesses are increasingly reliant on broadband data networks to run their businesses, and they are demanding increasing bandwidth.

Expanding the availability of broadband to businesses and to consumers is a top priority for telecommunications providers like Embarq. As of the end of 2006, Embarq had deployed broadband to over 80 percent of all of our business and residential lines, and it turned up our one millionth customer.

In the same time frame, going forward in 12 months, we plan to provide access to 10-megabit service to approximately 50 percent of our DSL-capable lines and the vast majority of our small businesses, but businesses of all sizes are demanding even faster service than traditional broadband, so-called Ethernet services. These services begin at 10 megabits per second and range as high as a gigabit per second. Both upstream and downstream, they are symmetrical in nature. In 2006, Embarq and other carriers saw an explosion of demand for Ethernet services, from small and large businesses alike, and we have invested significant capital in upgrading our network to meet this demand.

Embarq also is a leading innovator in bringing benefits of convergence between wireline and wireless technologies to its customers. Last year we led the Nation and the industry in launching a dual-mode, cellular/WiFi phone that allows for seamless operation between the two platforms. We have now made this service available in 10 of our top markets, which collectively contain 70 percent of all of our lines.

This kind of innovation is expensive. It takes enormous up-front investment to upgrade our networks to offer the advanced services our customers demand, literally tens of billions of dollars a year. Embarq alone invests approximately $1 billion a year in upgrading its network.

There are several important things that Congress and you all can do and should do to ensure that telecom providers like Embarq in rural and urban markets alike can continue to empower their business customers with the best that telecommunications has to offer.

First, ensure a sustainable future for the Universal Service Fund. The fund made universal voice service possible in the 20th century. Congress needs to stabilize the fund today and expand and increase it to make broadband service available to all Americans.

Second, reform the Rural Utility Service Broadband program. Congress should reevaluate the goals of the RUS program and ensure that the RUS loan programs are used to increase broadband deployment to the unserved areas of this Nation. This year's reauthorization of the farm bill provides you with an important opportunity to do that.

Finally, avoid imposing unnecessary and harmful regulation on broadband networks that would limit network providers' abilities to invest in new and innovative services.

The debate over Internet regulation or Net neutrality is likely to continue for some time, but all parties should be able to agree on the importance of accelerating deployment of greater bandwidth to all users. Avoiding unnecessary regulation that discourages investment in networks will help business users, equipment manufacturers, network providers, software providers, and even edge providers who ultimately rely on the network to reach their customers. By taking these three steps, Congress can ensure that providers like Embarq will continue to have the right incentives to innovate and to invest in their networks and open a world of opportunity for small businesses and all Americans.

Thank you again.

[The prepared statement of Mr. Zesiger may be found in the Appendix on page 57.]

Chairwoman VELÁZQUEZ. Thank you very, very much, and this has been an incredible panel. I am very grateful for your participation this morning.

Mr. Archey, I would like to address my first question to you. Your organization has released data demonstrating the benefits that small firms receive from the R&D tax credit.

Given their significant contribution to innovation, what improvements can be made to allow additional small companies to access the credit? Can we simplify the process, and can we provide more technical assistance? Please tell me how can we improve, or how do you think we should proceed here.

Mr. ARCHEY. Well, I think, on the R&D tax credit, one of the continual issues has to do with the fundamental formula that is used in terms of the base years that you can use. There were some changes in the recent extension in the R&D tax credit which, I think, are going to, in fact, help smaller companies, because what it is going to do is it is going to open up the R&D tax credit to a larger universe than the previous formula allowed for. I think that has got to continue to happen.

The problem, of course, we have is that the R&D tax credit was only extended for 1 year, and we would like to see it permanent. We realize there are issues there on the budget. There are also other issues on it, but I think that making it permanent, which gives it much greater predictability for the companies to use, and particularly the small companies who are not as, if you will, sophisticated about the R&D tax credit as the larger companies with large tax organizations within those companies can do. So basi-

cally, it is the formula, and it is to essentially make it permanent that, in turn, gives it that predictability.

Chairwoman VELÁZQUEZ. Thank you, sir.

I would like for each of the witnesses to comment on my next question. There are many different ideas about what Congress could do to promote the deployment of broadband throughout the country and to encourage the consumer in the adoption of broadband in areas where it is currently available. I would like each of you to identify the two steps that Congress could take or refrain from taking that will contribute the most to the FCC's stated goal of affordable access to broadband for all Americans.

Mr. SEIFFERT. Sure. Thank you very much.

As you all know, broadband technology is the foundation of our 21st century economy, and most recently the FCC just released rules on reforming video franchise competition. What that means is allowing the telecom companies to get into the video business. You certainly could support that. Last year there was legislation up here on the Hill to reform that. Now it has been taken up with the FCC, and they have implemented rules which we support. Legislatively here with Congress, there have been proposals in the past to support broadband tax credits. Certainly my colleague here to my left has talked about reforming the U.S. RUS and the Universal Service Fund to allow broadband providers to be a part of that. Those are some steps.

Then I would just put a caution of any regulation on this amazing new economy in the Internet space to refrain from regulating. That is one thing Congress should do.

Mr. BOND. I would very quickly add a couple, one that I mentioned in my testimony, of course, which is this is not the time, given our international standing, for any discriminatory taxes against the Internet when we are trying to roll out greater bandwidth.

The second that I would mention that I think Congress has an opportunity to incentivize in many ways is the uptake of digital health records and e-health. That touches every American's life, every family. To the extent that we can provide more of those services through the broadband connections which allow you to see not only records, but to see X-rays and scans and so forth that takes a lot of bandwidth, that would really promote the broadband take-up.

Thank you.

Mr. ZESIGER. Just to reiterate the three points, Madam Chairwoman, that I made earlier in my introductory testimony, I will focus on one in particular, which really was the focus of a hearing last week on the Senate side in the Senate Commerce Committee. There is one program that will move the needle in broadband deployment, and that is the Universal Service Fund. It has got its problems. There has been a lot of debate. There was legislation that was considered last year in the last Congress. All of that was very constructive; none of it passed. There has to be forward movement on this issue if you really want to change our status from number 17 in the world to something greater.

Mr. ARCHEY. One other point I would just add is that one of the things that we have got to look at when it comes to the whole issue

of broadband deployment and the infrastructure itself is there are an awful lot of barriers at the State level, and AeA happens to have the largest State public policy program in the country—we are in 15 different States—and what we have found is that certain things like right-of-ways, things like that, are really problems for enhancing or increasing broadband deployment. And it is not a very sexy issue, but it is an awfully important one.

Chairwoman VELÁZQUEZ. Thank you.

Now I will recognize Mr. Chabot.

Mr. CHABOT. Thank you very much, Madam Chair.

Mr. Archey, if I could start with you, you mentioned the research and development tax credit, the importance of that and the importance of making some of these tax cuts permanent so that businesses can rely upon them and be able to plan into the future. Could you expound upon that just a little bit of why that is important?

Mr. ARCHEY. Well, one of the problems with the R&D tax credit which we certainly saw in the past year is whether it is going to exist, and that is a real problem in terms of companies like some predictability, and we ended up virtually a year after it expired making it retroactive and then extending it for a year. There has got to be a better way to do it, and if it is not going to be permanent, then how about 2 or 3 years at least of an R&D tax credit with a specific formula that people know, can understand and can execute on?

I just think one of the problems that we discovered when we were doing some analysis of this is that the number of companies who could not use the previously expired R&D tax credit because of the underlying formula. They just could not use it very well, if at all. So I think that is where we are now, and I think that Congress, by the way, on this extension did make some changes in the underlying formula which were very helpful. That has got to continue.

Mr. CHABOT. Okay. Thank you.

Mr. Bond, let me turn to you next if I could. You mentioned taxes as well in yours and specifically relative to the Internet, and many of us would like to keep the Internet as tax-free as possible.

Would you comment on that? And also if you wanted to follow up on the question I asked Mr. Archey about taxes and the impact and the importance of making the tax cuts that have been passed permanent.

Mr. BOND. Sure. I would be happy to, Mr. Chabot. Thank you.

I think that the Internet tax is important for so many reasons. It is important because it is a global medium whereby the small can be big, a very small company, and north of Cincinnati could be marketing to the entire world, and I am sure there are some that are, and so any additional weight or burden on that medium at this time is going to hurt those innovative companies. It is going to hurt the medium at a time when we really want all of society on a high bandwidth connection so that more services and innovation can come out of that.

So I think the permanence is important. It is important for a lot of reasons, not the least of which kind of relates back to the Sarbanes-Oxley comment that has been made by a number of folks.

You cannot tell your auditor, ″Well, do not worry. Congress is going to pass that again. They always do extend it. They did not get to it, but do not worry. It will happen.″ that is obviously not going to make it in terms of your report and your auditing, talking to Wall Street and shareholders. So they need to be able to count on it for both Internet tax and R&D.

Thank you.

Mr. CHABOT. Thank you.

I have got some questions for the other two witnesses, but would either of you agree with the other gentleman relative to the importance of the tax cuts and making them permanent?

Mr. SEIFFERT. Absolutely.

Mr. ZESIGER. Yes, we would agree with that.

With regard to the Internet tax moratorium, there has been a recent trend among State and local localities to begin to tax broadband services and facilities. That tax moratorium needs to be expressly expanded to those kinds of services so that we do not burden the kind of deployment that you all want to see in your districts.

Mr. CHABOT. Okay. Thank you.

Mr. Seiffert, you had mentioned Sarbanes-Oxley as a deterrent to small business growth. What specific ideas would you suggest for us to ease the impact yet maintain the spirit of the law?

Mr. SEIFFERT. Sure.

I think that everyone supports the spirit of the law and understands that there are reasons to have those controls. Really, the bottom line is that you are reallocating resources, dollars—real dollars—from hiring engineers or salespeople rather than putting the money into accountants, and so I think the issue is a dollar expanse, and if we can take away some of the duplication in the accounting space, that would certainly help. We have many companies that would rather see engineers on their payroll rather than an accounting firm.

Mr. CHABOT. Okay. Thank you.

Mr. Zesiger, I will conclude with you. You had talked about the concern that you have with increased regulation by the government at various levels.

What in particular are you concerned about that might be out there that you think we should avoid to make business more challenging than it already is?

Mr. ZESIGER. Again, I mentioned in my opening testimony the threat of regulation that really does not have a problem that causes it. ″net neutrality regulation″ is what it is called. It is Internet regulation by any other means or name. That is going to be a debate that you will hear more of from the next panel, and you have heard, I am sure, already at this point in time that it is a very serious threat to our ability to continue to invest. If you take away incentives through regulation that really has no predicate for it, and there is no problem it is solving—if you take away the incentives we have to employ, we simply will fall further behind in our competitive status.

Mr. CHABOT. Thank you very much.

I yield back, Madam Chair.

Chairwoman VELÁZQUEZ. Now I recognize Mr. Johnson, and I will ask the members to please observe the 5-minute rule since we have a very important panel, second panel.

Thank you.

Mr. JOHNSON. Thank you, Madam Chair.

Members of the panel, I appreciate your appearing here today to share the concerns about your industry, and I am a first-year Congressman, previously elected to the county commission, DeKalb County, so I have got local government experience. And local government, DeKalb County specifically, funds its county operations based on, in large measure, sales tax revenues, and even our EMS service for ambulance is partially offset by monies that we collect on landlines, a fee that the service providers pay to local governments. And so, of course, local government provides things like police and fire, roads and drainage, sanitation, those kinds of basic services that make life better for people. And the people can go to the mall and go shopping at the mall and purchase goods, pay the sales tax; money comes back to the county; the county provides the services to the people, but with the growth of Internet shopping, it has definitely shown up in the bottom line of retail throughout America, and eventually, I think, Internet shopping will become so pervasive that it will definitely start shrinking the number of retail outlets that people actually shop at, and that will decrease the amount of revenues that county governments or city governments take in, and State governments as well, to render basic services to people.

Now, you, Mr. Bond, have talked about the discriminatory Internet taxes, and there are a whole range of taxes, and I do not want us to kind of paint all taxes with the same broad stroke. What are you talking about when you talk about discriminatory Internet taxes, and does that include things like taxing the sale of products on the Internet?

Mr. BOND. Thank you for the question, because I know it represents the source of funding for so many government services, the sales tax in particular.

The emphasis on the moratorium has been on nondiscrimination against that medium, not that transactions and business that may take place over the Internet and sales that may take place over the Internet could not have taxation affixed to them, but that it not be discriminatory, that it not be more to say that because you do not have a store in the mall, you should pay more in taxes or whatever. And I would just say, too, that this goes to a fundamental question for local governments everywhere, which is to also make sure that you have a growing economy. I think this medium is critically important to our growing and competing internationally.

Mr. JOHNSON. Certainly, and we have just got to make sure that we have a balance, that we are able to fund basic operations, governmental operations, that help people live safely and comfortably on a day-to-day basis. We have got to be able to fund that, and we need to be able to recognize the fact that State and local governments rely on sales tax revenues to fund their operations.

So, from what I hear you say, Mr. Bond, you would not be opposed to a treatment of Internet sales, if you will, in the same way that sales to a traditional retail—or through a traditional retail

outlet would be handled; in other words, say, a 6 percent tax on the sale of goods at a store in a particular jurisdiction. Should that jurisdiction be able to levy that same sales tax on a good that was purchased over the Internet from that jurisdiction?

Mr. BOND. The controlling principle for the industry, and I think I probably speak for everyone up here, is nondiscrimination against the medium. However, the depth and profundity of your question is because what is presence and what is nondiscrimination gets very, very difficult—

Mr. JOHNSON. Those things can be worked out.

Mr. BOND. —but the controlling principle is do not discriminate against the medium.

Mr. JOHNSON. Right. Right. On either side, do not put Internet sales in a priority posture at the expense of regular retail.

Do any of the other panel members have anything they would like to add if I still have time?

Chairwoman VELÁZQUEZ. Quick. Just 1 second.

Mr. JOHNSON. All right. Well, I will yield back my 1 second, Madam Chairwoman.

Chairwoman VELÁZQUEZ. Thank you.

Mr. Davis will be recognized for 5 minutes. Thank you.

Mr. DAVIS. Thank you. I just have a very quick question.

When I was back in my district a couple weeks ago, I had some small business owners come visit me about net neutrality, and they are concerned that if they are put on a slow Internet system, and bigger companies are put on a faster Internet system, it is going to put them out of business.

Can you just talk about that and see if you think that is reality, and if not, help me understand it so I can explain it to my constituents?

Mr. ZESIGER. Effectively, as we go towards increasing the bandwidths, the bandwidth that we provide our customers, there is a natural evolution towards a proliferation of products that we can sell as a business to them. Some of those products are a higher bandwidth and products that customers and businesses desire. If you want to download a movie, and you have a basic 1.5 meg service, how long is that going to take you? Are you willing to wait for that? It is faster to go out to your local video rental store, in fact. So will customers be interested in purchasing, basically, almost a turbocharging-, supercharging-like approach where, for a short period of time, they can increase their bandwidth, pay for that service and reap the benefits of it at home? That is one example of the kinds of services that we would like to provide, but if regulations are put on our backs, we will not be able to.

Right now the question really is: Is the Internet still free? Can users access the Internet in any way, form or fashion that they choose? The answer to that question is absolutely yes. There is nothing like a blocking of traffic or a discriminatory practice at this point in time. Frankly, the FCC currently has the jurisdiction necessary to oversee that process. Those folks probably did not mention that to you in your meeting back home, but if you contact the Chairman of the FCC or their staff, they will clarify that fact for you.

Mr. DAVIS. As I move through and think about this situation, not all small businesses, or not even all large businesses, can afford to advertise on Super Bowl Sunday, but they can choose to do that if they want to do that, and if they want to stay competitive, then they decide to make that decision for their business. Is that pretty much the way you see this? If you want to stay competitive in a global marketplace, you have to step up to the plate and move to the next level of technology?

Mr. ZESIGER. Yes. We want to keep these as marketplace decisions, driven by marketplace realities. If you intervene with regulation, you are going to distort the marketplace and really discourage investment.

Mr. DAVIS. Thank you.

Mr. ARCHEY. I would like to offer a contrary point of view on this.

The board of directors of AeA about 4 months ago took a position favoring pure Net neutrality to, in fact, deal with the issue. We think that if you go to different levels on the Internet in terms of access, you are going to have a discriminatory Internet, and we believe very strongly that a pure Net neutrality issue that favors, to some degree, the Internet service providers is the way we ought to go and not allow the carriers to, in fact, provide extra services where there is going to be a certain, if you will, class of users who have a higher status than others.

I would also note to you that this is the one issue where this panel is clearly not going to be in agreement.

Mr. DAVIS. Any other thoughts from the other panelists?

Mr. SEIFFERT. Sure.

I would associate—TIA would associate itself with Mr. Zesiger, and you are right. You are going to have a debate as we address these other issues. We do not believe there is antidiscriminatory behavior going on, and I would just caution that any regulation you place on these telecommunications networks will disincent the incentive to invest and upgrade the networks to be competitive in this global market and bring us from the 17th spot up to number 1.

Mr. BOND. I think my association is a little bit more like Congress. We have folks on both sides.

Chairwoman VELÁZQUEZ. Okay. Thank you.

We will recognize Mr. González for 5 minutes.

Mr. GONZÁLEZ. Thank you very much, Madam Chair.

Mr. Davis, we need to have a really good discussion. I think if we had a real education about this Net neutrality—unfortunately, it is such a wonderful term that it is such a misnomer, but I will tell you now it is not about small business interests. It is not about the bloggers or the individual users of the Internet. It is about Google and AOL and EBay. Believe me, when we get educated on this issue, sooner rather than later, we will understand that the market really should drive these practices to build out the proper measure of what do the networks deserve in the way of their investment and such. But that is for another day, which I would say that the testimony you all gave here today—and I understand the difficulty. When you provide this type of testimony, you probably

have to take it over to Financial Services. You could take it to Ways and Means. You could take it to Energy and Commerce.

The challenge that we face here on this committee is really trying to identify those aspects of an issue that relate specifically to the needs or to the challenges of small business, and so that is how I am going to try—and I only have 5 minutes and have used up about a minute on this Net neutrality, but I am going to pose just three questions, and then each member of the panel—and you are only going to have about 20 seconds to address this thing.

There are three aspects of what I see here when it comes to information technology. Small business, first of all, is a consumer, and that is the purchase and utilization of information technology; secondly, as a provider, and that is providing the product and the service of information technology because obviously they are out there; and lastly, the most difficult are the challenges facing small businesses, which is the evolving Internet business model.

I think it is probably going for the best at this point because we are getting away from—that you have to advertise or promote or market your product now in the traditional medium such as radio, television, the Yellow Pages, and newspapers. We have expanded it, and we are finding niche markets as long as those—that control the manner in which small businesses are able to access the Internet, and I am talking about rankings.You know, any time that you have a search, how discriminatory can that be? Those are the challenges. So let us start off again.

As a consumer of IT, as a provider of IT and, lastly, small businesses in the Internet marketplace and its evolution, and we can start with Mr. Archey.

Mr. ARCHEY. In 20 seconds, right? Okay.

Small business is a purchaser. One of the great things about the IT industry and the IT evolution is it is one of the very few industries in which products and services that are purchased are cheaper now than they were 5 years ago and dramatically cheaper than they were 10 years ago, et cetera, et cetera.

Some wag made the comment that if the auto industry had followed the IT industry, a new car would be about $4.75. So I think that—as a purchaser, I think it is fine. As a provider, one of the things that we noted—and it is part of the reason that I responded to Mr. Davis as I did in terms of the Internet and about the whole issue of Net neutrality is that the Internet is an extraordinarily democratic infrastructure, and it is one that enables companies to get into business, precisely because the Internet exists as both a provider, a service provider, a product provider or what have you, and I think things are going to be very, very positive in the future precisely because of, if you will, the democracy of the Internet.

Then, lastly, it is basically the same answer, which is on the Internet business model, more and more small companies are leveraging the use of the Internet than are some of the larger ones, and there are a lot of new companies that are coming into existence precisely because of their ability to use the Internet in very, very creative ways, and that is a trend that is not going to stop.

Mr. BOND. Thank you for three profound questions.

Small business as a consumer, I would go back to Internet tax. I think it is critically important that we not burden them in that regard.

As a provider, I think it boils down to the R&D discussion that has been mentioned and the Federal Government's role there and people, our own domestic skill sets and production. And I would just very quickly say in that regard there is a lot of talk about STEM, and I think it is really STEM Plus. In today's environment, we need to look at what are the 21st century skills. Is our education and secondary education system mapped well to those skills?

Third, on the Internet business model, to my mind this links really to some of the comments about global sourcing, not only having access to the best and brightest via the Internet model, but also bringing the best and the brightest here to start their companies here as we have a rich history of. It is something that we should pursue as a country.

Mr. SEIFFERT. Again, thank you for the question.

I would just say, as a purchaser, there is much more opportunity for choice as a small business because of the Internet and the access to the different opportunities out there to create efficiencies to sell their products.

Certainly as a provider, again, there is more range of reach to the rest of the world because of this technology that these small businesses are established on, and I would just comment about the challenges with the Internet model. I think entrepreneurs who are out there figuring out and carving a new way of doing business, you know, against the traditional models that we know and what you have talked about, advertising and marketing their products.

Chairwoman VELÁZQUEZ. I am sorry. Time is up. Thank you.

Now we go to Mr. Fortenberry.

Mr. FORTENBERRY. Thank you, Madam Chairwoman.

Good morning, gentlemen. I do not have the benefit of your earlier testimony, so I apologize if this is a little redundant.

Can any of you define the size of the problem in terms of a lack of broadband access in rural communities? That is a hard question because there is a lot of overlap in some areas that are proximate to urban communities that are in pretty good shape, and other areas that are very remote are not, but it is hard to quantify. If any of you can give a reasonable opinion on that.

Secondly, there is a Federal program, the Rural Utility Service Program. I am also on the Ag Committee. That could be an important part of the discussion of the next farm bill, which is likely to happen this year. There are some potential opportunities there and some potential dilemmas in terms of, in effect, government subsidies to companies that would provide better access in rural communities, but that also may end up competing in urban communities with those companies who have invested in infrastructure and purely through the private sector.

Whoever would like to—

Mr. ZESIGER. As a telecom provider, Embarq addresses these issues, and we addressed them this morning in our testimony, so I would recommend that to you. I will not recap all of that, but simply say it is a very, very expensive proposition. We are investing aggressively. Tens of billions of dollars a year go into this in-

dustry to expand broadband speeds and access and availability. It is going to cost billions more—it is a big country—and we referenced in our testimony this morning the fact that we have covered over 80 percent of all of our lines, and that last 20 percent is the most expensive part. And we keep chipping away at it year by year, but programs like Universal Service is really the only program, and programs like that, at the State and Federal levels, that will move the needle on broadband deployment. So that is the first takeaway.

With regard to deployment, the RUS Broadband Loan Program is also helpful. It is the second point we made in our testimony. It is important that those funds are directed to areas that are unserved today instead of areas that already have broadband service and, therefore, only support redundant networks. And so a change in the parameters and the goals of the RUS Broadband Loan Program are an important part of the kind of conversation you will have in the ag bill this year.

Mr. FORTENBERRY. Any other comments?

Mr. BOND. I would only observe for the record that, of course, there are some other technologies coming along that will have great impact on rural America. Broadband over power lines many Members, I think, are familiar with and have read about, but also the now emerging WiMAX technology, which has been called ″WiFi on steroids,″ but has much greater reach in a wireless capability to maybe solve some of those expensive last mile issues.

Mr. SEIFFERT. I would just add, Congressman, that we have not quantified it, but I think the realities of rural America are that, without broadband access, you do not have access to telemedicine technologies; I mean, you know, the basic issues that we mentioned earlier about education and access to the rest of the world. You have brain drain for some of these rural communities going to larger cities, and so that should be an issue we look into.

Chairwoman VELÁZQUEZ. Ms. Clarke.

Ms. CLARKE. Thank you very much, Madam Chair.

Gentlemen, this has been a very impressive and important conversation we are having here this morning. My question is directed to Mr. Seiffert, but if any of you have any thoughts on it, if you could answer, it would be great.

I am looking at your whole—addressing the issue of broadband deployment, and you talk about a strategy. Have you given any thought to that and what we should do in the Congress working with the administration to really spur that?

I am one who looks at deadlines very seriously, and we are already in the first quarter of the year 2007. What suggestions or recommendations do you have.

Mr. SEIFFERT. Sure. For many years, we have been focused on this issue, and we have addressed it from the standpoint of how do we incent our customers to invest in these risky investments. They take on deploying these new technologies. I think, from a Federal standpoint, you need a national policy, as I mentioned earlier in my testimony, a national framework to incent investment, and that can be through removing barriers to deploy and to new market spaces.

The FCC has been quite critical in the recent growth that we have seen in our industry. Again, from 2006, we reported that the industry grew 9.23 percent; and, you know, that was because the competition that was created by the telcos and the cable industry and the wireless and satellite industry was coming together in new spaces.

We have also supported up here on Capitol Hill tax incentives, broadband tax incentives. I mean, from a world perspective, these are risky investments and there has got to be some kind of guaranteed return in these investments.

The wireless space, which Mr. Bond just mentioned, is critical. I think the Congress and the administration has been successful in bringing more spectrum to the marketplace through the Commercial Spectrum Enhancement Act addressing 3G wireless auctions, allowing more people to buy wireless services and also, with the DTV transition, there is more spectrum coming to the marketplace. That will serve not just rural but urban communities through WiFi or WayMAX.

So there are a few issues that we can continue to address at the FCC and here in Congress through tax incentives and allowing more services to come to competition.

Mr. BOND. I would mention one other thing. There still is a lot of public housing being built without pipes in the public housing. Most of that is going to be flipped to a commercial sale at some point in time, so the investment would certainly come back to the builders. A number of States have moved down this path in terms of requiring it. I think it is a discussion for Congress to have with HUD about how to adjust the scoring on that.

Ms. CLARKE. Thank you. I yield back.

Chairman VELÁZQUEZ. Mr. Shuler.

Mr. SHULER. Thank you, Madam Chair.

Mr. Archey, I want to thank you and all of the panel for just your wealth of knowledge and your participation in the panel. It has been very informative.

Mr. Archey, you mentioned the need for expanding the HB-1 visa opportunities in a technology work place. Why don't you believe that the American technology needs can be met by American workers?

Mr. ARCHEY. Because they can't. Right now, there is an enormous shortage. You take a look at, for example, Microsoft's Web site. There are several thousand job openings that have been on that Web site for a year, 2 years, sometimes longer.

The fact is that we are not producing our students, our kids, with a background in math and science in the colleges partly because, I think, of the inadequacy of the instruction when they are in high school. Because there is also a view—I mean, I get this question all the time, why don't more of our kids take math and science? And my pat response is, because it is hard.

One of the things is that, you know, people get into—it gets in the way of the fact that it is more of a grind, if you will, in those areas, but there is also this issue—the Department of Education noted last year that a maximum of 41 percent of high school students in the United States take a course in math and science that is taught by a teacher who actually majored in the subject. And

Congressman Miller made the comment at a hearing that I was a witness in a few weeks ago where the answer is not to let us make our history teachers into physics teachers. We have got to start this whole ball game over and put an enormous emphasis on it.

Lastly, the point I would make is that, given this inadequacy you have, to then look at what is going on in the graduate schools. Almost 55 percent of all—56 percent of all Ph.Ds and engineers are going to foreign nationals. About 50 percent of all Ph.Ds in physics are going to foreign nationals. The average is about 50, 51 percent in the science, technology, engineering, and math areas. Math is very high.

But the point about that also is that is another complication. We then say to these students that were just educated in American universities, goodbye. We don't want you to stay. That is absurd.

And the other thing is partly because in the Congress and in other institutions there is a view that if you let foreign nationals in it is a zero-sum game against American workers. Think of the history of the last 40 years. It will prove that is not the case. The number of coups that have been started by foreign nationals and the jobs that were created is extraordinary.

But so one of the things that—my last point of this is this not the first time we have had to deal with this issue. We had to deal with this issue as soon as Sputnik went up in 1957. And, in 1958, the Congress passed the National Defense Education Act. It was about a $1.3 billion appropriation, which in today's money is about $7 billion. That appropriation led to thousands of our young kids getting interested in math and science and taking not only in undergraduate but in graduate degrees, and it is not a coincidence for the next 50 years the United States dominated the world both economically and technologically. That was a very important intervening variable.

Then, lastly, I would just note that, in terms of should we do it again, the difference today versus 1957, 1958, we were very afraid; and public policy always gets pushed when we are afraid. We are not so afraid now. We are used to being number one. We think that it is almost a God-given right that we are going to be number one; and the fact of the matter is, we have slipped. We are still number one, but that lead is not what it used to be.

Mr. BOND. We do have shortages that everybody is seeing. Our domestic companies can't find the folks. Even though we have global companies coming to the U.S. saying they can't find the folks in the market, we are not drawing the kids in, as Bill has mentioned, to take those kinds of degrees.

The good news somewhat there is that market, if you look at it for the kids, seems to be pretty elastic, that if they get positive signals, as they got during the dot com boom, that is the place they go, they major in those things. But since that point in time it has been nothing but negative messages. We have higher IT employment today than we have had in the last 14 years. So it is really coming back.

I guess I would make this analogy, if you would allow me, given your background, to not go after the best and brightest would kind of like be telling the University of Tennessee you have to recruit only in State.

Mr. SHULER. We do like the State of Florida when it comes to the recruiting.

Madam Chair, just—sorry that my time is up, but I just wanted to thank all of you for coming again. It is very informative, and we certainly have some work to do in education workforce. Hopefully, at a later date, with more time, that you can certainly educate the other Committee of how we can continue to get our bright students into the workplace and we can recruit them here. I think that would be, obviously, even in my district, a very rural district, that we could continue to send our brightest students in mathematics. It is something that we have been talking throughout our community about, to continue to send our bright students to make sure they are in math and engineering.

I thank you for your testimony.

Chairwoman VELÁZQUEZ. Mr. Braley.

Mr. BRALEY. Mr. Archey, where do you live?

Mr. ARCHEY. Alexandria, Virginia.

Mr. BRALEY. Mr. Bond, where do you live?

Mr. BOND. Fairfax Station.

Mr. BRALEY. Mr. Zesiger?

Mr. ZESIGER. Leewood, Kansas.

I want to follow up on my neighbor, Mr. Fortenberry's, question, because I grew up in rural America. I represent a good section of rural America, and rural America is in trouble. Every small business owner I know in rural America is dependent upon technology to survive. Every economic development director I talked to in rural America talks about expanded access to broadband as a fundamental opportunity for success and survival in rural America.

This is a critical issue. The State of Iowa has been exporting educators, technicians, scientists as part of this brain drain that Mr. Seiffert talked about for over a decade. And yet, at the same time, we are starting to attract small businesses from the coast, people who are looking for a different lifestyle and who depend upon technology to compete in a global marketplace and are doing it successfully.

As someone who depended heavily on technology in my small business to expand the market that I worked in, I would like to follow up on your comment, Mr. Zesiger, and ask you, when you talk about this goal of increasing broadband deployment in underserved areas and coming from Kansas, what real-world examples can you share with us to help us learn how we can make this a higher priority in the Small Business Committee?

Mr. ZESIGER. Excellent question. The needs are real; and telecommunications and high technology, primarily telecommunications, is really the leading high-tech investor in rural America. The next panel will address this. There will be at least two representatives of that panel that can address these issues from a smaller provider's perspective.

But we provide service to literally hundreds of rural committees across the country. And the answer is it just takes money. It is very capital intensive to buy Mr. Seiffert's products. His members' products are not cheap.

To provide those products in rural markets, which are uneconomic to serve, there are not enough customers. There are not

enough large businesses that you might find in the urban areas. It is a true challenge. It has always been a challenge. And it is the Universal Service Fund that really resolved that challenge as effectively as any nation in the world has ever done.

We ought to be proud of as much as we do today. We need to do more. To make that fund more sustainable in the long term, to reform it and going forward so that it supports broadband is the primary goal here today.

Mr. BRALEY. I want to follow up with you, Mr. Archey, on your recommendation that the SBIR program should be expanded and improved. That is one of the programs that is under the jurisdiction of my Subcommittee; and, given your expertise in technology and innovation issues, I wanted to give you an opportunity to expand on that recommendation. Because this Committee and Subcommittee are likely to examine that program very closely, and I believe a number of the members of this Committee are interested to know how you believe the SBIR program could be improved.

Mr. ARCHEY. One of the points, Mr. Braley, is we are finding—I have gotten in the last month a number of queries and call complaints from some small companies. Companies that are partially controlled by a venture capital company are not eligible for SBIR, and that is the rule that was put into place about a year ago, year and a half ago. I think that ought to be revisited, because I think what is happening is that some innovations are, in fact, not being discovered precisely because these folks can't get into the program.

The second thing that I have been hearing from the companies, because I haven't had a lot of in-depth looks at SBIR but I have to basically reflect what my companies are saying, is that there is still a fair amount of bureaucracy involved with applying and with getting into the program. The word I hear all over our small business people is simplification, and I think that would go a long way to increasing participation and increasing the consequences of the results of the program.

Beyond that, I would be guessing. But those two points come directly from our member companies.

Mr. BRALEY. Would you be willing to discuss that further with your members and be a resource as we look at that program further and the concerns?

Mr. ARCHEY. I would be happy to. In fact, we have 17 local councils consisting of full-time staff and high-tech executives, many of whom are small. This week, I will go back out to them and point-blank ask them, if you were changing the SBIR program, how would you do it? And I will get it back to you within a week, week and a half.

Mr. BOND. Our venture capital capabilities are a huge advantage for us globally. Many countries come here expressly to mimic that. So knocking out a VC back company for SBIR has taken our advantage off the table.

The other thing I would mention is, to protect the program, you also want to police the program. So there have been occasional complaints about SBIR mills making the same application to multiple agencies and getting funded multiple times; and so, obviously, good policing protects the political support.

Chairwoman VELÁZQUEZ. Let me just mention for the record, Mr. Archey, you write in your comments regarding inequities of venture capital and the SBIR. We will be addressing those issues right before this summer, this Committee.

Mr. Chabot?

Okay, so let me thank all of the witnesses. This has been quite an extraordinary discussion, one that will remain open, and we will continue to talk to you, reach out to you to see what the next step that should be taken coming out of this Committee. Thank you very much.

We will move to the second panel.

Good morning to all of you. Thank you for coming and participating in this second panel.

STATEMENT OF WALTER B. McCORMICK, JR., PRESIDENT AND CEO, U.S. TELECOM ASSOCIATION (USTELECOM)

Chairwoman VELÁZQUEZ. Our first witness is Mr. Walter McCormick, Jr. Mr. McCormick is President and CEO of the United States Telecommunication Association. USTelecom represents service providers and suppliers in the new telecommunications marketplace.

Mr. MCCORMICK. Madam Chairwoman, thank you for having me today. I appreciate the opportunity to appear before the Committee to discuss our Association and our industry's perspective for advancing the innovation agenda.

Our Association represents innovative companies ranging from the smallest rural telecoms in the Nation to some of the largest corporations in the United States economy. Our companies offer a wide range of services across the communications landscape, including voice, video, and data over local exchange, long distance, Internet and cable networks.

Most of our world providers are small businesses themselves; and many of them have been at the forefront of providing their customers with the triple play of voice, video, and data. These innovative communication services provided by our members play a vital role in the success of many small businesses.

Our members also provide small businesses with personalized solutions to meet their individual needs. For example, our members offer small businesses a range of Internet services including state-of-the-art security protection, 24/7 live technical support, Web site hosting and business e-mail accounts. Differentiation of products and services is important to small businesses as differentiation provides options and flexibility for entrepreneurs to choose the best service with which to meet their needs.

Madam Chairwoman, the ways in which businesses conduct commerce and communicate with each other and their customers has changed fundamentally. Today, you can make a phone call using a wireline phone or a wireless phone, a cable phone or an Internet phone. Technology has made it possible for cable operators, who historically offered only video, to offer voice and Internet services. Especially relevant for this hearing, a number of cable companies are now moving to compete in the business market.

Similarly, Internet access is available through wireline or—wireline, DSL or cable modem, through wireless or satellite, and

increasingly over municipal WiFi systems and broadband, over power lines. In fact, today there are more than 1,200 broadband service providers in the United States, and broadband is exploding. The FCC says that during the first half of 2006 more than 6.7 million wireless high-speed Internet lines were added by businesses, for an increase of over 200 percent.

Madam Chairwoman, our industry, our member companies of the United States Telecom Association, are committed to furthering broadband deployment; and we believe the Congress can do three things to advance broadband deployment in this country. First, Congress should ensure a sustainable future for universal service; second, an important part of the equation for broadband deployment lies in ensuring continued funding for the Rural Utilities Service broadband program; and, finally, Congress can promote broadband deployment by permanently expanding the tax moratorium, by allowing for faster depreciation of broadband equipment and fiber, and by establishing a tax credit for the deployment of broadband equipment and fiber.

By continuing to advance policies that promote competition and ensure investment, Congress has the opportunity to encourage broadband deployment and to create a new wave of small business entrepreneurs across the width and breadth of this country.

Again, thank you very much for the opportunity to testify before you today.

[The prepared statement of Mr. McCormick may be found in the Appendix on page 60.]

Chairwoman VELÁZQUEZ. Our next witness is Shirley Bloomfield. Mrs. Bloomfield is Vice President, Government Affairs and Association Services for the National Telecommunications Cooperative Association. NTCA represents over 570 rural community based communications providers throughout the United States.

Welcome.

STATEMENT OF SHIRLEY BLOOMFIELD, VICE PRESIDENT, GOVERNMENT AFFAIRS AND ASSOCIATION SERVICES, NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION (NTCA)

Ms. BLOOMFIELD. Thank you very much.

I know that you are pressed for time, so I will try to keep this to the points that I think are the most relevant.

NTCA members really are small businesses. They serve between 50 to 100,000 access lines in communities across this country. So they are the small of the small.

I will also tell you broadband has really come up as a big topic today. Ninety percent of member companies serve over 90 percent of their service territories, and I admire the commitment this Committee has in figuring out how do you get to that last 10 percent. I really look forward to working with all of you on that.

I am just going to focus on a few things that we think are very key to ensure that all Americans, regardless of where they live, will have access to new technologies and advanced services.

You have heard this before, but modernizing and sustaining the Universal Service Fund is critically important.

Access to video content. We have talked today about what are the take rates out in rural America. Why can't you get people to take a higher level of broadband services? I think access to video and video competition is going to be very key to that portion.

Spectrum policy, network regulation and the Regulatory Flex Act I think are all going to be key.

Restructuring the Universal Service Program properly is critical to determining whether all Americans will have access to all of the advanced services we are talking about here in the 21st century. Even though all Americans rely increasingly on sophisticated services, bandwidth for economic health care and certainly educational opportunities, there are a lot of folks that are looking to actually limit the Universal Service Program.

While other countries are making an effort at this point in time to ensure ubiquitous broadband coverage for their citizens, the United States remains a step behind in making a genuine commitment to broadband deployment. It is NTCA's position that, rather than contemplating ways to cap or otherwise limit this program, policymakers should be looking for ways to enhance it and to accelerate the deployment.

NTCA has a policy course that we have been looking at that has been very forward looking in terms of the advancement of this. It covers things such as expanding universal service base contributors so that all contribute so we can continue that build-out, strengthen the public interest in the ETCs and eliminate the identical support rule.

A second priority for us is access to video content. Small video programmers in small areas are having a difficult time obtaining video programming from the content providers who actually own the content.

There are two critical issues that I just would like to take a second to highlight. The first is shared head ends. What we find in a lot of our folks right now, we have folks in the State of Tennessee, for example, is they come together because the economies of scale for these small telephone companies is very limited and to buy a head end to receive your telephone content is very expensive to do. So a lot of these folks across the country have gone together to either lease a head end or purchase a head end jointly.

But what has happened is a lot of the video content providers have prohibited that type of arrangement, and what that is doing is that is cutting off those rural subscribers for having access to those programs. It is making it very expensive to provide service when it is a stand-alone service because nobody else in those service territories are offering those services or to provide a competitive service.

The other point that I would raise that I think we are going to hear a lot of this year is the need for retransmission consent reform. The broadcast stations are electing retransmission consent, and they are increasing the price that the video carriers are having to pay to provide their services to their customers. What this is doing is this is increasing the cost to the customers, and it is also requiring some of the small carriers to have to choose or box some of the different channels that they are carrying at this point in time. And they want to be responsive to their customer base.

Regarding spectrum policy, you have heard a little about that today. NTCA has done some very comprehensive surveys with our members who do provide wireless service. We found that, in 2006, 30 percent were able to obtain spectrum but close to 50 percent still cited that it is very, very difficult to do and a lot of them use unlicensed spectrum in part because it is actually easier to get, although it is very difficult to make a long-term business commitment. The spectrum is important in the broadband department because wireless broadband is going to be the next effort out there, and 700 megahertz is going to be key to rolling out this technology.

I think this Committee could play a role in terms of ensuring that the FCC continues to look at small license areas, continues to encourage the FCC to license off the spectrum in the small markets where those carriers who are local will make sure that they provide those services to their customer base.

In terms of network regulation, I only want to point out one nondiscriminatory fact about the whole discussion that has come up about Internet neutrality. That is that one thing that does get lost a little bit in the discussion is that NTCA are small carriers, and we need to ensure that small companies are not discriminated against in our access to the Internet backbone. We don't own that Internet backbone, and we need to have that same access to those services so our customers can get the broadband deployment services without discriminatory pricing on our carriers that will increase the cost for the rural consumers.

Just with regard to the Reg Flex Act, NTCA encourages this Committee to ensure that Federal agencies are doing their due diligence to make certain that small businesses aren't economically disadvantaged by new regulations. This is particularly important in the communications industry because so many small independent providers do not have the resources to fully comply with all of the regulations.

I think small communication carriers have a lot going for them. They are innovative, they are community focused, they are diverse in their services, they are agile enough to move quickly, and their service ensures economic development in the rural communities they serve.

Thank you very much.

Chairwoman VELÁZQUEZ. Thank you. Right on time.

[The prepared statement of Ms. Bloomfield may be found in the Appendix on page 64.]

Chairwoman VELÁZQUEZ. Our next witness is Mr. Richard Cimerman. He is the Vice President of State Telecommunications Policy for the National Cable & Telecommunications Association. NTCA members include cable operators serving more than 90 percent of the Nation's cable telecommunications subscribers.

STATEMENT OF RICHARD CIMERMAN, VICE PRESIDENT OF STATE GOVERNMENT AFFAIRS, NATIONAL CABLE AND TELECOMMUNICATIONS ASSOCIATION (NCTA)

Mr. CIMERMAN. Chairwoman Velázquez, Ranking Member, members of the Committee, the cable industry is the Nation's largest broadband provider of high-speed Internet access after investing more than $110 billion over 10 years to build out a two-way inter-

active network with fiberoptic technology. We also provide state-of-the-art digital telephone service to millions of American consumers. Thank you for the opportunity to appear before you today to discuss the cable industry's priorities for the 110th Congress.

I am proud to report that our small and mid-sized operators have invested billions of dollars of private risk capital in small towns and rural communities all across this country in order to provide a full array of advanced broadband services equal to what our larger operators offer, including services such as residential and commercial high-speed Internet access, high definition, digital and on-demand video services and digital telephone service. Some of the smallest towns in the United States have access to some of the most advanced digital services in the world because of the commitment and investments made by our smaller and mid-sized operators.

To take just one example, Midcontinent Communications is offering households and businesses in Buxton, North Dakota, with a population of 350, state-of-the-art high-speed Internet service, digital cable and high definition programming and digital telephone. These investments have created new jobs for American workers and new business opportunities for small entrepreneurs in rural America.

I want to briefly touch on four topics that are explained in more detail in my written testimony. They are that competition in the communications marketplace is working, Congress's decision to leave the Internet unregulated is an unquestioned success, broadband deployment initiatives should be focused on unserved areas, and new government fees should not be imposed on broadband service.

The cable industry fully embraces and thrives today in a robust, competitive marketplace in all of its businesses. The cable industry has never asked Congress for a handout, and we are not looking for regulatory advantages over our competitors. We don't oppose efforts designed to lighten regulatory burdens on our competitors in order to foster fair competition on a level playing field.

Fifteen years ago we commanded 95 percent of the multi-channel television market, but today, because of fierce competition from DBS satellite television providers and other broadband providers, our market share has fallen to less than 68 percent. And now the Regional Bell Operating Companies have entered the fray, and they are not your typical underfunded, undercapitalized, newly entered market. Rather, they bring with them annual revenues of $219 billion, more than three times those of the entire cable operator industry. As a result of this competition, over 31 million consumers, almost one of every three video subscribers, now obtain multi-channel video programming from someone other than a local cable operator.

As stated by the FCC last year, competition in the delivery of video programming has provided consumers with increased choice, better picture quality and greater technological innovation.

Our entry into the telephony market is also great news for consumers across America. Today, nearly 10 million households have chosen cable phone service, with more than half of those added within the last 10 years. According to a recent J.D. Power report,

cable phone customers are saving over $10 a month on their phone bills, and recent projections show that total anticipated consumer benefit for phone competition over the next 5 years will total more than $100 billion. Small cable operators are increasingly bringing the benefits of these competitive telephone services to rural areas as well.

It is still the case, however, that phone companies serve the vast majority of Americans. It is also true that competitive voice services cannot survive without physical interconnection to the phone company controlled public switched telephone network at a fair and reasonable rate.

We hope that Congress will continue to support competition of the voice market by working to ensure that the interconnection rights Congress established in 1996 apply to all providers in a fair and reasonable manner and on a technology neutral basis, including requirements that rural telephone companies interconnect with competitors.

With our triple play of phone, data, and video, consumers are enjoying tremendous cost savings and enhanced value as cable operators and our broadband competitors offer bundled packages of these services. Competition in the communications marketplace is working.

Now the deployment of high-speed Internet access in the United States has been an amazing success story. I know there were questions earlier about quantifying the extent to which broadband is available. Cable broadband service is available to more than 94 percent of all U.S. homes. That is cable alone. DSL and other services don't overlap completely. So there is something more than 94 percent available today. So when we look at the unserved areas, that portion is something less than probably 5 percent; and our view is that is the area where government policy needs to focus in terms of deployment.

Both Mr. Fortenberry and Mr. Zesiger mentioned the RUS program, which we believe is badly flawed as it has been administered. RUS funds have gone to areas with multiple providers, rather than to unserved areas. We think that is something Congress should address.

Finally, let me just say that Congress's decision to leave the Internet unregulated is an unquestioned success. With usage growing at a rapid pace, continued investment will be needed to keep these services robust and give consumers the level of services and innovative new products and features they desire. So-called net neutrality proposals, however, seek to cement in stone today which business models are permissible and which ones are not. They would impose by government fiat outcomes that are better left to the marketplace.

We believe Congress's hands-off policy has worked and should remain.

Thank you, And I look forward to any questions.

Chairwoman VELÁZQUEZ. Thank you.

[The prepared statement of Mr. Cimerman may be found in the Appendix on page 71.]

Chairwoman VELÁZQUEZ. Now our next witness is Mr. Earl Comstock. He is the President and CEO of COMPTEL. COMPTEL rep-

resents more than 180 competitive communication service providers.

Welcome, sir.

STATEMENT OF EARL COMSTOCK, PRESIDENT AND CEO, COMPTEL

Mr. COMSTOCK. Thank you, Madam Chairwoman and members of the Committee. It is a pleasure to be here on behalf of COMPTEL. We represent the competitive communications providers, over 185 member companies, carrier companies as well as associated suppliers serving primarily small business.

The COMPTEL members would like to be serving a greater portion of the country. I am sad to report today that under the current FCC and FCC policies competition is diminishing in this country, as opposed to increasing.

What was fascinating about the presentations by the previous users is every single one of them requested government intervention. Yet, at the same time, all of them that represent the large incumbents, and I am talking about incumbent telcos and the incumbent cable providers, also suggested that you should deregulate them with respect to removing competition.

The reality is the Internet was created by regulation, not the other way around. What was unregulated on the Internet was the content and services you could provide. But the fact of the Internet, which is a communications network, it is nothing more than the next generation of public-switch telephone network, was created by the fact that government rules allowed innovators and small businesses access to that network at reasonable prices and on reasonable terms and conditions. This is the key to competition, this is the key to solving broadband in rural America, and this is the key to making small businesses competitive.

The issue you hear about, net neutrality, is an issue over gatekeepers, an issue over will the two transmission facility owners in the country, the incumbent cable companies—notwithstanding Rick's claim about private risk capital, which, by the way, it was absolutely true. There was private risk capital. But with the government guaranteed monopoly when they started, they got to build their infrastructure while protected from competition, protected, I might say, from the telcos.

Likewise, the telcos got to build their networks while protected from competition. That is why their network reaches a hundred percent of the country, and the cable industry reaches roughly 94 percent of the country, because they got to build in a protected environment. None of the companies I represent got that same privilege. We all have to build our networks in a competitive environment in the face of entrenched incumbents.

So the bottom line is, I am here just like everybody else saying, yes, government does need to set some rules if you want this to happen.

Now, if you look at your innovation agenda and the concerns that have been expressed here, the key factor is America, to remain competitive in the 21st century, must have access to faster speeds at lower prices.

As Rick accurately portrayed, broadband deployment is not your problem. Broadband penetration is. Broadband penetration is the rate at which people buy the service, and that is a function of price, and only competition is going to bring that price down.

It was government regulation that created the competition and video that, as Rick pointed out, cost them some market share. We created the program access rules that Shirley said they need access to in order to provide video in the small areas. We support USF, which is another government program, but only as—I think we would agree with the cable industry—there needs to be some changes to it to ensure it remains competitive.

But all of us are talking about a common infrastructure; and if you have any doubt about the fact that the Internet and the public switch network are the same thing, try knocking down the telephone pole in front of your house and see what happens to your Internet service. And that is true whether you have got cable modem or Internet DSL.

Fiber is not coming to rural areas any time real soon except in the areas, I would say, perhaps by the smaller telephone companies. Not the big companies. But the big companies are not rolling fiber.

You have heard about Verizon's deployment plan. It covers 40 percent of their customers. But, at the same time, they are coming in saying, give me regulatory relief. You know what their priority agenda is? Let us not have net neutrality because we don't want people to have reasonable access to this network. We want to lock it up and control which content and services you get. They want the cable model. The cable network is a broadband network, yet you can't buy broadband, the entire broadband capacity of that cable network, because the cable company gets to tell you this is the package of services you get.

So, you know, you have all got my prepared testimony. It goes into things.

We are concerned about the fact that, right now, absent intervention by Congress, the FCC is rapidly removing the rules that give companies access on reasonable terms and conditions to that infrastructure that was built in a monopoly environment.

Without that access, it is very difficult for us to provide service. Without that access, we can't continue to serve the small business customers we serve today. And we are the ones providing that service. Don't forget, we wouldn't be in business if we didn't provide lower prices, better service, greater innovation. All of the major leaps in technology that went on, whether you are talking about the Internet, the fax machine, even different phones, came about because government rules gave us access to that network.

So what I am here to say is this Committee can play a role in advocating to the FCC that you maintain reasonable rules to ensure access to infrastructure because we are not building three, four, five or six or seven new infrastructures across this entire country.

Thanks very much.

Chairwoman VELÁZQUEZ. Thank you.

[The prepared statement of Mr. Comstock may be found in the Appendix on page 88.]

Chairwoman VELÁZQUEZ. This has been quite an exciting and challenging discussion, and I will go to Mr. Chabot.

Mr. CHABOT. Thank you very much.

Mr. McCormick, I will start with you. I think you stated earlier in your testimony that you believe Congress should extend the Internet tax moratorium; is that correct?

Mr. MCCORMICK. Yes.

Mr. CHABOT. Could you state briefly why you believe that, and if the other members could just indicate if they agree that we ought to extend the moratorium.

Mr. MCCORMICK. Yes. If a principal goal of Congress is to speed broadband deployment, to increase broadband take rates, then you don't want to disincent the taking of broadband by taxing the taking of broadband. So we think that the Internet tax moratorium makes a lot of sense. You impose taxes on things like alcohol and cigarettes to discourage consumption. Don't impose taxes on Internet access. We don't want to discourage consumption

Mr. CHABOT. Do all the other members agree?

Mr. CIMERMAN. We agree.

I also stated in my testimony that we don't believe that broadband should be assessed for universal service, which in effect is exactly the same thing, imposing a tax on a service that we are trying to get more people to buy. So neither Internet taxes or universal service fees ought to be imposed on broadband service.

Mr. COMSTOCK. Again, I think the devil is in the details, and we would agree with the concept of not taxing Internet access unfairly. I think the concern is much of the debate around Internet tax is also bundled up with the idea that you are not going to regulate the networks that are used; and if Internet tax moratorium extensions results in loss of access to those networks, I think that is a huge problem.

Ms. BLOOMFIELD. Universal service is not a tax. It is an intercarrier support mechanism. So I would like to separate out those two notions between each other.

Mr. CHABOT. Okay. Mr. McCormick, what do you see as the next important demand from consumers for telecommunications services? In other words, what is the next big thing after cell phones, the Internet, et cetera?

Mr. MCCORMICK. Congressman, I think it is making life simple. It is having technology conform to the way in which you live your life, rather than you having to conform your life to the state of the art of technology.

Where we are headed with our investments is to provide consumers and small business with communications their way, to be able to have seamless mobility, to be able to move between wireless and wireline environments seamlessly, to be able to access the Internet or to be able to access a host of new video entertainment and social services seamlessly. Health care providers over advanced networks. Home security services provided. So we see we are really at the threshold of the information economy, and technology is going to make life simple and more efficient for all.

Mr. CHABOT. Thank you.

As a follow-up, just as one human being, a thing that would make it simpler. I know we have cable at home. I have basic up

here, but the cable at home where my family is, but trying to figure out what is on in an hour from now when there is 150 channels is just—I haven't grasped the concept of figuring that out. So I do what most guys do, is whatever my wife picks is what we will watch.

Chairwoman VELÁZQUEZ. Wise choice.

Mr. CHABOT. Ms. Bloomfield, would you point out some of the benefits that urban residents receive from the Universal Service Fund?

Ms. BLOOMFIELD. I think when you look at the value of the network, the network is only as valuable as the number of entities of business people that you connect to it. So it is truly one of those things like—the analogy being the highway system. The fact that you can cross seamlessly. We have stories of ranchers in South Dakota who sell their wares to markets in Chicago. Universal Service, by building out the network in these markets, allows that interconnectivity that increases the value for all Americans. You can't separate that out.

I will also note that Universal Service is not only a high-cost fund. There is also a non-rural fund that goes to the larger companies to build out in their markets as well as the fact that there is a lifeline and link-up which provides access to those lower-income consumers to allow them to have access to the network as well.

Mr. CHABOT. Is concentration in the video programming market reducing cable companies' ability to invest and improve broadband access?

Mr. CIMERMAN. I don't think so. I mean, I think that, first of all, in terms of broadband per se, we are at 94 percent plus. We are not looking for additional government funding to push that out further.

I would say, in response to some of the statements that were made before about our standing in the world as 17th, that there is a little bit of a misunderstanding about that because it is—our deployment is not 17th. It is penetration that is 17th. And there is a lot of different reasons why people choose not to take service in the U.S. Twenty-One percent take dial-up today. Twenty-six percent have no computers at home. We do lead the world in the number of actual Internet users that are out there. We are a much more geographically vast and less dense country than some of the other countries that are often touted as having these tremendous penetration rates, and very often people who have broadband at work just don't see the need for purchasing broadband at home.

So we think that some of the—it has been a little bit overstated as to where we stand or what the problems are in terms of broadband in the U.S.

Mr. CHABOT. With respect to broadband speeds, how much of the increased capacity comes from government investment versus private sector investment, if you know, or if you could venture an opinion.

Mr. COMSTOCK. The question of capacity—what increases the speed typically is greater innovation, and that comes from the freedom to attach devices, I mean, when the Internet came about, because people could attach newer electronics to the existing telephone infrastructure without having to get AT&T's permission to

do so as long as it was certified by FCC as not harming the network. I think that is the key.

I agree with you about the 150 channels, having to wait and scroll through. But that is what happens when you leave this to the private sector. The cable industry was not required to allow other people to attach devices to their network. So you can't get some innovator that comes along and says I don't want to watch 150 channels, scroll through one by one. I want to type something in and have it pop up. You can't get that because they control which devices get access to their network. And, in fact, there has been a 10-year fight since the '96 Act over the ability to use non-cable company controlled devices on the cable network.

Mr. CHABOT. Thank you very much.

Chairwoman VELÁZQUEZ. Ms. Bean.

Ms. BEAN. Thank you, Madam Chair; and I would like to thank you and our ranking member for hosting an important forum here today. Your testimony has been helpful, as well as the first panel. Unfortunately, I missed little bits of it, and I apologize. You know how things work here on the Hill. But it has been helpful. I know all of us will be looking at the further testimony as well that you provided on the net neutrality debate between the carriers and the content and balancing access that is affordable to the Internet with the necessary infrastructure development that needs to continue. I have found that helpful.

But I would like to change subjects briefly and ask from an industry perspective about another issue. With the converging technologies, there is a lot more access, whether it is data or voice or music or entertainment; and these technologies are converging into the homes, in many cases, and parents have a lot of concerns about Internet safety. Given that there is going to be more availability in the homes and more access for children and the increasing concerns about child predators, what is the industry doing, from your perspective, and what do you think could be done further on industry's part so the government doesn't have to get overly involved in the interest of protecting children from predators?

Mr. MCCORMICK. It is a very significant issue, and much of that has to be addressed through sophisticated network management. It is the type of things like—it is an extension of extending parental control, spam control, firewalls. It is the kind of challenge that does require us to be able to engage in pro-consumer-oriented network management, and it is one of the reasons we are fearful of net regulation or net neutrality regulation. Because you are—in effect, as you begin to move into this area and give consumers greater control over what comes into their house, you are engineering the network in ways that will allow the consumer to choose to block certain functionality.

It is something that we see as not only a very important social objective, but we also believe it is a very important market objective, because we know how consumers desire to have these kinds of safeguards.

Ms. BEAN. I will add a little later to this, as you go further on this, is we have done a number of forums on this in our district. Part of the challenges as parents, as you can imagine, are busy working, running their businesses, trying to provide their kids with

technology that helps them in school, that is often used for other purposes as well. And as quickly as those protections become available that they do—that they thought they bought when they brought the equipment home or they added some additional software, those who seek to undermine those provide products to allow people to get around them. So how do parents, in the interest of protecting their children—should it all be on the consumers to provide that protection from the leapfrogging that goes on?

Mr. COMSTOCK. If I could offer something on that. I think you are highlighting the difficulty and the distinction that has always been there between the regulation and the transmission networks and the regulation of the content. Regulating the content, Congress has tried numerous times through various laws, and it is exceedingly difficult to do, and it often gets struck down in court.

I think the concern that we would express on the opposite side, while we agree it is a huge problem and a great concern, is you are picking a path, if you go down the path that Mr. McCormick is suggesting, of saying let the network operator do it exclusively. Then you are counting on one or two companies to really solve this problem. If you go down the other path of saying, no, we are going to keep the network open and let all innovators attack this problem, you have got thousands of minds looking at this issue. You have got lots of innovation, and it is going to be a cat-and-mouse game.

It is always going to be a case of you design a safeguard, somebody designs a way around it. That is the nature of the beast with software development. And I think that speaks for all kinds of things. But that is why we would say keep the network open and accessible and don't turn it over exclusively to a couple of network operators.

Mr. CIMERMAN. I wanted to mention that there was recently a new initiative that was formed in conjunction with the Internet Caucus, the Congressional Internet Caucus; and it includes, I believe, company members of all of ours—and I am sorry that the name escapes me, but it is something like the Child Online Safety Alliance that is designed to offer tools and programs to parents and educate them about what they can do. I will get the name and Web site for you, but it is a major initiative that was announced several weeks ago by all of our companies.

Ms. BEAN. Thank you.

Chairwoman VELÁZQUEZ. Thank you.

I would like to ask you the same question I asked the first panel. And that is for each one of you to identify two steps that Congress can take or refrain from taking so that it will contribute the most to the FCC stated goal of providing affordable access, broadband access to all Americans.

Mr. MCCORMICK. First, do no harm. Broadband investment is occurring. It is occurring at record rates. We heard Mr. Seiffert talk this morning about the extent to which his industry is seeing the broadband investment. The FCC notes the broadband investment. On the wireless side, it increased by over 58 percent, according to FCC statistics over the first 6 months of 2006. But, first, do no harm through net regulation.

Secondly, there are good, strong programs like Universal Service and the Rural Utilities Loan Program; and those programs should be stabilized and focused and directed to making sure the broadband is deployed to those areas that are unserved.

We now have 96 percent of the United States served by at least two broadband providers, but there are areas of the United States that remain unserved, and we have an obligation to extend broadband to all Americans, and those are two good programs to help with that.

Ms. BLOOMFIELD. I would say number one is look for incentives to create the build-out. As I mentioned, our members have broadband to 90 percent of their service territories. That last 10 percent is very, very difficult and very expensive. Universal Service, the RUS broadband program, what incentives some of the larger companies may need, all of those are going to be important. And keep the technology neutral. What we find is our folks are reaching those markets by DSL, by their cable networks, by wireless services, by satellite services. So keep in mind that it may be different technologies for different parts of the country.

And the second thing I would say is the take rates. Again, going to risks points, penetration is a huge problem. Is it cost? Is it availability? Is it a killer application? So as you go through policy, keep in mind what role will wireless policy or might video policy play in terms of creating some of those applications out there that will actually incite the American public to purchase the service.

Mr. CIMERMAN. I would agree that the focus, as mentioned before, should be on unserved areas. We support the Universal Service Program.

I know that Mr. Chabot had asked a question about the benefits for urban residents. We support the program, but that doesn't mean that the program doesn't need to be reformed. Simply dumping more money into the program as it exists today when there is wide-spread agreement that some reform is necessary, simply dumping money into the program to fund broadband would not be the way to go. We should specifically have a carve-out, a separate—if we are going to try to subsidize in some way some unserved areas—a separate program rather than the Universal Service Program as it exists.

In terms of—I don't want to get into a debate of whether it is a tax or not, but I would suggest that if you ask any of your constituents what that 10 percent tax is on the bill that they pay every month, you would be hard pressed to find any of them that wouldn't say it is not a tax of some sort. So focus on unserved areas. Pass the Internet Freedom Act and no new universal freedom fees on broadband.

Mr. COMSTOCK. I think the key thing that you can do is continue to focus on necessary regulations, and those range from ensuring that innovators have access to the network.

Right now, as I mentioned, there are a lot of things happening down at the FCC where they are recreating the monopoly that existed before. The old AT&T is restructuring itself and they are doing it by removing rules that Congress adopted in the 1996 Act to promote competition. Without that competition, you are not going to get innovation, you are not going to get new products, and

you are going to get the United States falling further behind. We need rules to maintain that access so we can't have these forbearance petitions.

So I would say that is the most important thing. This Congress needs to send a message that we want access. And you keep hearing that broadband deployment is a risky investment. If it is so risky, then fine, use the marketplace. By keeping it open to other people to get access on reasonable terms and conditions, you spread that risk. Allow other people to come out and officer service.

Let me give you one example. Cavalier Telephone today in Richmond, Virginia, is offering service using Verizon loops, a triple play service. They are attaching newer electronics. What is Verizon's response? It is not to get out there and offer that same service. It is to seek relief from rules that give Cavalier access.

If you are worried about regulations somehow making investment not possible, take a look at what is going on in Europe. They do have a reasonable regulatory oversight that provides this kind of access, and they are not seeing any diminishment in investment. In fact, they are seeing lower prices, faster speeds and greater service offerings than we see in the United States today.

Thank you.

Chairwoman VELÁZQUEZ. Mr. Chabot, do you have any other questions?

Well, let me say, this has been an incredible discussion. We look forward to continue working with you, and I want to thank all of you for your participation.

Thank you. The Committee is now adjourned.

[Whereupon, at 11:00 a.m., the Committee was adjourned.]

STATEMENT
of the
Honorable Nydia M. Velázquez, Chair
Committee on Small Business
Full Committee Hearing on Technology Agenda
Wednesday, March 7, 2007

I am very pleased to call to order this morning's hearing on technology and telecommunications policy issues.

These sectors are a major contributor to the U.S. economy and an engine for growth. The IT sector contributes nearly $1 trillion to the U.S. GDP each year, and despite its size, will grow at more than 5 percent per year until 2009. The technology industry employs more than 3 million Americans. According to the AeA, these jobs pay 85 percent more than the average private sector job. These occupations, which come with benefits like healthcare and retirement, are the types of opportunities that we in Congress continue to talk about the economy needing to create.

It is clear that innovation is leading the way in today's economy and that small tech companies are at the forefront of this boom. Employing over half of the nation's scientists and engineers, small research and development oriented firms are at the heart of the industry's innovative core.

Companies, both large and small, have helped usher-in the information wave. Characterized by competition and seemingly continual re-invention of goods and services, the information economy has changed the way we go about our daily lives – from our work, to education and recreation.

In order to sustain the environment that facilitated this rapid development, a number of challenges must be overcome. From workforce and broadband access, to tax and international trade – we can not stress enough the importance of effective policies in these areas.

This morning, we begin the Committee's work on technology and telecommunications issues, and take our first step towards strengthening the American business environment for innovation.

I can tell you that this committee intends to be very engaged in this area. Small businesses are some of the larger consumers and producers of advanced technology products. Given the role of entrepreneurs in this nation's economy, our focus will include American competitiveness and broadband policy.

It only makes sense that as Congress begins its work on advancing innovation and enhancing U.S. competitiveness, the interests of small business are a priority. This committee will ensure entrepreneurial needs are taken into account in the policy process. Our country's continued leadership in technological development depends on it.

I would like to thank all of the witnesses for their testimony today, and invite you to continue to work with our committee as these issues develop. I now recognize Mr. Chabot for his opening statement.

U.S. House of Representatives
SMALL BUSINESS COMMITTEE
Representative Steve Chabot, Republican Leader

March 7, 2007

Opening Statement of Ranking Member Steve Chabot

Advancing the Innovation Agenda: The Perspective of the Technology and Telecommunications Industry

Good morning. I want to thank our witnesses for adjusting their schedules to be here an hour earlier than originally planned today. I also thank Chairwoman Velazquez for calling this important hearing. Ensuring that small businesses have access to innovation and technology is critical not only for small business owners and their employees, but our nation's economy as a whole.

Over the last decade or so, we've seen our nation and our economy change at an almost unbelievable rate. Information can be sent from one coast to the other instantly via e-mail and the Internet; businesses can have staff meetings online with employees thousands of miles away. And with the right equipment, massive amounts of data can be analyzed, sorted, stored and accessed from nearly anywhere on earth.

The United States is not alone in this revolution. Technology has allowed an increasing number of businesses to become global. E-Commerce, and the underlying infrastructure and technology that supports it, have allowed the smallest of mom and pop shops across the U.S. to sell their wares across the globe. Technology also enables small businesses to quickly adapt to ever changing conditions simply by going to their computer reading the latest developments in their industry.

In this new economy, innovations are just as likely, if not more so, to come from small businesses on Maple Street in Hanover Township, Ohio or Main Street in Shawnee Oklahoma than to come from major corporations traded on Wall Street.

Because of this fact, we must constantly ensure that all companies, large and small, rural or urban, have access to the technology and telecommunications infrastructure that has become the backbone of our economy.

Nearly all industries utilize this infrastructure, either directly or indirectly. A healthy economy relies on free and fair competition between companies so we must ensure that all businesses have equal opportunity to compete with each other as well as with foreign corporations.

In addition to ensuring equal access to technology, we must ensure that the next generation of students is well prepared to take the reigns when our generation retires. We need engineers, technicians, computer scientists, and a whole host of technologically savvy people who have the desire and the knowledge to be the innovators of tomorrow.

While ensuring a fair marketplace in which businesses are held accountable, we must also make sure these small businesses, these technological leaders, are not overburdened with government regulations. Red tape can stymie even the most innovative of companies by diverting much needed resources, especially those in small businesses, away from innovation and invention and into accounting and compliance.
With these new innovations come new challenges that must be met. It is our job, as your elected officials, to listen to what these new challenges are and work with you to find solutions that will enable small business to continue to compete effectively in the global marketplace.

Again, I thank Madame Chair Velazquez for holding this important hearing. I thank each of the witnesses for taking the time to share their priorities as we begin the 110th Congress and I look forward to hearing your testimony.

I yield back the balance of my time.

Statement of Rep. Jason Altmire
Committee on Small Business Hearing: "Advancing the Innovation Agenda: Perspective of the Technology and Telecommunications Industry"
March 7, 2007

Thank you, Madam Chair. Thank you for holding this important hearing today on how small businesses are affected by technology and telecommunications laws and regulations. Small businesses are both the largest developers and users of IT and telecommunication. The issue is multidimensional: first, how do we foster small business innovation and development of new technologies, and second, how do we ensure that small businesses have adequate access to the resources and technologies that they need to grow and compete.

I look forward to hearing from all of our distinguished witnesses, who represent a wide spectrum of IT and telecom interests. From their disparate viewpoints I hope we can begin to develop a consensus on how the 110th Congress might best move forward on IT and telecom issues.

To help our small businesses prosper, we need to examine methods of ensuring a strong, educated, and talented workforce. Access to broadband communications tools should be affordable and accessible for all American businesses. We must ensure that small businesses' resources are not unduly diverted away from research and innovation and towards compliance with overly burdensome regulations.

Driven by small businesses, America has long been the world's leader in innovation. I look forward to working with the witnesses and my colleagues on the Committee to advance technology issues for the betterment of America's small businesses.

Thank you, Madam Chair. I yield back the balance of my time.

Statement
On Behalf of
AeA, Advancing the Business of Technology
Before the
U.S. House of Representatives Committee on Small Business

William T. Archey
President and CEO
AeA

March 7, 2007

Good morning. My name is William T. Archey, and I am the President and CEO of AeA, the nation's largest high-tech trade association. On behalf of AeA's 2,500 members that span the spectrum of electronics and information technology companies, from semiconductors and software to mainframe computers and communications systems, I would like to thank you for this opportunity to testify before your Committee on AeA's policy priorities and how the Congress can advance the Innovation Agenda.

This hearing is particularly important to me and AeA because two years ago we issued our report entitled, "*Losing the Competitive Advantage?: The Challenge for Science and Technology in the United States*." Our purpose back then was not to emphasize recommendations but rather to raise awareness that we really do have a competitiveness issue and challenge.

During the last two years we have worked with the White House, House and Senate Republicans, and Democrats. Indeed, I briefed Congresswoman Anna Eshoo, Congressman George Miller, and the entire Democratic California delegation, which included then-Minority Leader Nancy Pelosi. I am very proud of the fact that during the release of the Democrats' Innovation Agenda, Minority Leader Pelosi publicly stated, "We want to thank AeA who provided the intellectual basis for our agenda."

Despite almost no disagreement between the White House, Republicans, or Democrats during the 109th Congress, almost nothing happened. We fervently hope that this Congress will indeed do something about competitiveness.

Many of the items in the Innovation Agenda are consistent with AeA's policy priorities. In moving the agenda forward, we would like to see:

- An increase in the number of students majoring in science, technology, engineering, and math (STEM) via a number of incentive programs. The goal is to have 100,000

new students with STEM degrees. This will only happen if we improve the quality of teachers through teacher education programs which will also be funded.

- The ability of all companies (small, medium, and large) to be able to attract and retain foreign nationals AND to keep them by reforming the entire visa and green card process.
- An increase by as much as 10% a year to federal funding of basic research in the physical sciences. It was federal basic research that made the United States into the technology powerhouse it is today. After years of cuts, we need to return to the days of adequately funding basic research. All companies benefit from this.
- A strong and permanent R&D tax credit.
- An expansion and improvement in small business investment research (SBIR) to directly benefit small companies who often need financial assistance in bringing an innovation to market.
- An increase in broadband deployment, which is critical to enhancing productivity and innovation within the economy. We need to make advanced broadband accessible and affordable. We are way behind the rest of the world.
- Changes in Sarbanes-Oxley Section 404 to make it less costly for small businesses to comply.

To emphasize the importance of getting talented workers, I want to quote a $4 million AeA member company:

> "We need to be eliminating barriers to finding and developing talented employees – if you do this one thing we can figure out how to work around all the other system failures that stifle growth and the improvement of the human condition across our nation."

The debate on innovation and U.S. competitiveness is often dominated by the big companies. But today I'm here to talk about the small companies struggling to become the next Intel or Google. Small companies account for the majority of job creation and innovation in this country. If public policy does not work to help these businesses thrive, our country suffers.

And that couldn't be more true than in the Information Technology (IT) industry which accounts for 5.8 million jobs that pay 85 percent more than the average private sector position. Roughly five percent of private sector jobs are in IT; however, the technology industry as a whole accounts for 9.5 percent of the U.S. payroll.

The United States is not preordained to lead the world in technological advancement. Over the last 60 years we have been able to lead the world by focusing on factors that made us the most competitive economy in the world.

- We fostered a technologically skilled workforce by educating young Americans in math, science, and engineering. Today, we do not have enough students pursuing careers in these areas.
- We welcomed highly skilled talent from around the world. Today, it is difficult to obtain an H-1B visa for a foreign national. What is truly absurd is that we

educate foreign nationals and then make them go home. What seems to be constantly missed is that for the last 60 years the best and brightest came to the United States, founded new companies – small companies – and created literally tens of thousands of high paying, high value-added jobs, mostly in high tech.

- We recognized that investment in research and development was critical to promoting technological innovation. Today, we are not investing in a new foundation of research that will fuel innovation in 10 or 20 years from now. And while other countries are offering more competitive and permanent financial incentives to attract R&D to their shores, we continue to have only a temporary R&D tax credit that is used both by small and large high-tech companies.

The fact that we no longer follow our own playbook has cast some doubt about our ability to maintain our position as the most competitive and innovative nation in the world. The United States still leads the world, but other countries are challenging us by making the same investments we did for 60 years. If we do not act now, the next wave of technological breakthroughs could be created abroad.

With many of these issues, our companies are trying to deal with them and trying to solve them. But some of these issues – if not most of them – result from misguided public policy.

The difficulty in recruiting highly skilled and educated workers is a problem that is pervasive throughout the technology industry; however, the challenge of recruiting highly skilled workers is the *most* critical for small companies. The larger companies are much more likely to have operations abroad. If they need workers with specialized skill sets and cannot find them in the United States – or if they cannot bring them to the United States – they can staff that job overseas. The small guys can't easily do that. If they cannot find the workers they need, they have few if any options.

We must address this critical shortage of homegrown high-skilled talent. We need to face up to the long-term challenge of our education pipeline, which is failing to prepare tomorrow's workforce for an economy that is knowledge based and driven by technology. We've got to renew the invitation to the best and brightest to come to the United States and develop the high paying jobs here rather than in some country overseas.

In addition, we must address the impact of Section 404 of the Sarbanes-Oxley Act on smaller companies. AeA has particular insight to small and micro-cap technology companies through our two widely respected annual investor conferences that we sponsor for issuers, analysts, and portfolio managers. The stratum of American companies that have "graduated" from venture or bootstrap capitalization to the financial markets represent a spirit of risk-taking that reflects the best of America's market economy. But for these companies, the impact of Section 404 has been devastating.

Advancing U.S. competitiveness requires more than just passing a few bills and appropriating funds. These actions are certainly necessary, but they are not sufficient.

This is not a one time fix, but an ongoing process, a new way of thinking that recognizes and adapts to the changing world.

Madam Chairwoman and Members of the Committee, it's not like we don't know what we need to do. In the 109th Congress we had the President's American Competitiveness Initiative, the House Republicans National Summit on Competitiveness, numerous bills in the Senate, and last but by no means least, the House Democrats' Innovation Agenda. I would note that all of these proposals address the problem, though none more comprehensively than the Democratic Innovation Agenda.

Most of the proposals offer:

- A major new program to attract our young people to take more math and science courses;
- Programs to increase the number of teachers with the skills and background in these areas;
- Increases in the federal basic research budgets to once again put us in the forefront of innovation, which happened from 1958 until recently;
- A permanent extension of the research and development tax credit;
- Various recommendations for how to address the problems in the visa system for high-skilled workers; and
- The Innovation Agenda also includes a provision that addresses the disproportionate impact Sarbanes-Oxley Section 404 is having on smaller companies.

Last year there was a consensus on what needed to be done but nothing happened because it was an election year. I sincerely hope that this year will be different.

Government intervention on these issues is not unprecedented. Eleven months after Sputnik went up, President Eisenhower and the Congress passed the National Defense Education Act. That act indeed spurred a whole generation of kids to take math and science and reinvigorated the emphasis on the importance of basic research to innovation. Madam Chairwoman, for the next 40 years, the United States dominated the economic and technological spheres on the world stage.

Madam Chairwoman, and Members of the Committee, we can do that again.

I thank you for your time.

Statement of

Phillip J. Bond
President and CEO
Information Technology Association of America

Concerning

Advancing the Innovation Agenda:
The Perspective of the Technology and Telecommunications Industry

Before the

Committee on Small Business
U.S. House of Representatives

March 7, 2007

Madam Chairwoman, Members of the Committee, my name is Phil Bond and I am president and CEO of the Information Technology Association of America. Thank you for giving me the opportunity to present my association's views on the issues affecting innovation in the U.S. information technology and telecommunications sector.

ITAA's more than 325 member companies range from the smallest IT start-ups to the largest industry leaders in the fields of Internet, software, IT services, digital content, systems integration, telecommunications, and enterprise solutions. We are a leading voice on issues of importance to our industry, including information security, tax and finance policy, digital intellectual property protection, telecommunications competition, workforce and education, immigration, online privacy and consumer protection, government IT procurement, human resources, and e-commerce policy.

While ITAA represents companies of all sizes, about half of ITAA members are small businesses with revenues of less than $10 million a year. As you are probably already aware, according to the National Federation of Independent Business, small businesses create two-thirds of the new jobs in the United States, and 40 percent of the U.S. gross domestic product is supplied by small businesses.

The United States is a world leader in innovation. Innovations in the last century have not only revolutionized the way Americans live and work but have fueled economic growth for centuries. One needs only to consider the revolutionary changes brought about by innovations of the 20th century—ranging from sneakers and Pampers to the World Wide Web and automated sequencing machines used in deciphering the human genome—to appreciate the vast potential of innovation.

Many of the nation's most pioneering innovations have been born of small businesses, positioning these companies at the controls of the worldwide innovation headquarters. Today, some of the largest and most successful IT and telecommunications companies are global industry leaders because of the creative innovation they spawned as start-ups.

An Outline of the U.S. Economy, prepared for the U.S. Department of State, quite aptly points out that "a particular strength of small businesses is their ability to respond quickly to changing economic conditions. They often know their customers personally and are especially suited to meet local needs. Small businesses -- computer-related ventures in California's Silicon Valley and other high-tech enclaves, for instance -- are a source of technical innovation."

Innovation defines success in a fiercely competitive global marketplace. And as world leaders in innovation, U.S. IT and telecommunications companies are critical to the global competitiveness of the U.S. economy, while also remaining essential to local economies.

Nevertheless, innovation cannot happen in a vacuum. Companies need a fertile policy environment for their ideas to materialize into products and services ripe for the marketplace.

ITAA believes the optimal policy framework to foster innovation ensures adequate public funding for innovation projects; allows companies to tap into talented and skilled human resources; provides tax incentives for businesses; and fosters partnerships with state and local governments as well as federal agencies.

I would like to focus my comments today on six key policy issues currently in play, which ITAA believes are critical to companies' ability to survive, thrive and innovate. We believe Congressional leadership will be central to shaping a regulatory and tax policy framework that promotes innovation in the small business sector, today and in the years ahead. These include the Small Business Administration's IT size standards restructuring initiative; repeal of the impending 3 percent tax withholding on government contractors; immigration reform; a permanent ban on Internet taxes; availability of funding for research and development; and domestic sourcing.

IT Size Standards Restructuring

The Small Business Administration has been considering proposed changes to its size standards for some time. This initiative is extremely important to ITAA members, especially those serving the public sector, because the current $23 million revenue size standard for IT-related business is so low that it hampers federal agencies' ability to benefit from the diversity and

innovation small business offer—and agencies rely on—to meet customers' unique business needs. Unlike their commercial counterparts, federal contracts can place a company above the $23 Million threshold, but this does not prepare them to compete against giant firms serving the public sector.

ITAA has submitted detailed comments to the SBA to encourage them to raise this threshold, and to establish separate and distinct size standards for federal procurements. We also believe that the definition of "information technology services" should be broad enough to reflect the diverse and dynamic IT services provider base. These considerations are critical to ensuring our smaller members can continue to provide their customers with optimal levels of innovation and service. We believe that the SBA is still considering taking actions with regard to size standards and we hope to see another proposed rulemaking before summer.

Contractor Tax Withholding Relief

Another issue under consideration in Congress, which is critical to IT firms serving the federal government, concerns a mandated 3 percent withholding tax on all payments to contractors for goods and services provided to federal, state, and local governments. This provision, enacted in 2005 and slated to go into effect in 2011, would have a chilling effect on companies and their government clients by imposing seriously higher costs and limiting business options for the public sector. In this era of tightening budgets, we have already seen attempts to move implementation of this new withholding requirement to as early as this year.

This measure will seriously affect all U.S. companies serving government clients, but I want to emphasize that its impact on small business is particularly acute. Small and medium-sized businesses supporting the public sector operate on low margins and modest reserves. Therefore, this withholding would especially impact them. The IRS would retain these payments for 12 to 15 months before the excess above their corporate taxes would be returned in refunds to them. ITAA urges federal policymakers to fully repeal this provision so that all companies may avoid these costly business impediments. This provision will be difficult to administer, will increase the cost of products and services provided to the government, and will make government contracting less attractive to innovative firms.

Permanent Ban on Discriminatory Internet Taxes

ITAA supports a permanent extension of the current ban on discriminatory Internet taxes, enacted in 1998 and set to expire in November of this year. The ban prevents state and local governments from assessing taxes on Internet access, taxing transactions already taxed by another jurisdiction, and levying discriminatory taxes that treat Internet purchases differently from other types of sales.

More than $100 billion a year flow over the Internet because retailers and consumers consider cyberspace to be a fair marketplace. Allowing new taxes could slow the spread of broadband Internet access and create disincentives for Internet commerce, two enormous steps backward for innovations that have for more than a decade benefited consumers and businesses alike. ITAA urges Congress to make permanent the ban on discriminatory Internet taxes so that innovations in online commerce may continue to flourish.

Immigration Reform

Immigration is an important ingredient in innovation in our industry. Companies of all sizes must have access to the world's best and brightest to compete in a global economy. Historically, immigrants have also played a key role in launching new ventures in the United States. In order for companies of all sizes to innovate and compete, the national debate on immigration reform should honor this correlation.

A recent study of the National Venture Capital Association, *American Made: The Impact of Immigrant Entrepreneurs and Professional on U.S. Competitiveness*, highlights the growing imprint these individuals are making on the U.S. economy and in small businesses particularly. For example, over the past 15 years, immigrants have started more than 25 percent of U.S. public companies that were venture-backed. Immigrants also started some of our industry's leaders, including companies like Intel, Sun Microsystems, eBay, Yahoo!, and Google.

As in many service industries, the IT and telecommunications sectors rely heavily on highly skilled workers to develop new products and processes and serve customers. Some workforce experts predict that, because of the wave of Baby Boomer retirements anticipated during this

decade, the United States could face a shortage of some 10 million workers. While no country has the monopoly on smart people, it is a serious problem when U.S. companies face skill shortages in local markets, leaving employers a deficit of qualified job applicants. Immigration policy restricting the capacity of U.S. corporations to sufficiently tap into the global talent pool undermines their ability to do business effectively.

Business immigration programs like the H1-B visa help U.S. companies gain access to critical talent while helping organizations innovate, grow, and create jobs for American workers. However, more can—and should—be done to ensure access to the widest and deepest possible talent pool.

ITAA believes that the most valuable approach to business immigration ensures that U.S. companies can continue to attract highly specialized technical professionals from around the world; keep access barriers to overseas markets low; and maintain an environment that cultivates productivity and innovation. Significant progress could be made toward achieving these goals by easing restrictions on business immigration, including the cap of 65,000 on H1B visas, which typically is reached far too early in each year, as well as caps on green cards.

Funding for Research and Development

If small business enterprises are at the controls of the worldwide innovation headquarters, research and development compose the main switch. There would be little if any true innovation brought to the marketplace without adequate support of R&D programs in the government and commercial sectors.

Each year we see R&D funding increases included in the proposed budget for the U.S. government. However, even with these proposed increases, federal R&D funding repeatedly fails to keep up with inflation. Total federal spending on R&D is proposed to increase a modest 1.8 percent to $137 billion in fiscal year 2007 but, as in previous years, the share allocated for IT and communications will likely compete with that of numerous other high priority sectors.

We strongly hope policymakers who are committed to preserving and promoting innovation in the United States will demonstrate their commitment by supporting expanded federal funding for research and development, at a level of increase that, at a minimum, keeps pace with inflation.

Domestic Sourcing

In a global, networked economy, work moves. Customer organizations look for the right talent in the right location to provide IT support and services. As many of you know, that often involves offshore outsourcing, which is more appropriately termed global sourcing. As part of an open economy, the impact of this phenomenon is largely positive for the U.S.

That said, a viable business case is being made for low cost domestic sourcing – keeping work in the United States but doing it in low cost areas of the country – as an alternative that firms may consider before deciding to move some jobs offshore. Recent experience and studies of this trend demonstrate that governments at all levels can work with their communities and industry to remake previously underperforming areas of the country into competitive destinations for IT services. Government agencies and other organizations with sensitive needs are part of a growing market for this trend. Small businesses, in form of subcontractors and support providers in these regions would benefit substantially from the spread of domestic sourcing.

Conclusion

In closing, we commend Chairwoman Velázquez and the committee for highlighting the importance of innovation and for examining the issues driving innovation in the IT and telecommunications sector. We believe the 110th Congress has a tremendous opportunity to effect change that will allow innovation to flourish. We are grateful for having been invited to share our comments and we stand ready to participate in the national conversation as it moves forward.

Testimony of Grant Seiffert
President of the Telecommunications Industry Association (TIA)

Before the U.S. House Small Business Committee

March 7, 2007

I would first like to thank you for having me here today and allowing me to share some thoughts on behalf of the 600 members of TIA, who manufacture and supply information and communications technology equipment. It is important to note that 80% of TIA's 600 members are small or medium size companies. I will keep my comments brief, as I believe a dialogue will be much more useful to working together in a positive direction, which is the reason we are all here today.

To give some context to where I am speaking from, we are the companies who sell directly to consumers – whether a handset a television or a laptop – and we also sell our products and infrastructure to cable operators, the telcos, wireless providers, satellite, and the list goes on.

So, what does this mean... It means we are the closest to the public interest as you're going to get. WE simply want to sell our products and CONSUMERS simply want to buy them. We walk hand-in-hand with consumers because we need to know what they want.... so we can sell it to them and give them the functionalities they desire.

The more you, Congress, can do to get our products and services into the hands of consumers, the better we will all be. When our sales go up, prices go down. When more products are sold, more jobs are created. When a new product does well, we innovate to make the next product even better. Our products and services are used in classrooms, for public safety, for transportation, in health care, and

provide countless other societal benefits. There is NO downside to our companies doing well.

And, fortunately, I can say that TIA's Market Review and Forecast of the health of the telecom industry shows that the U.S. market grew 9.3 percent in 2006 to total $923 billion in revenue, and the worldwide telecommunications market grew 11.2 percent to total $3 trillion.

We have seen that demand for broadband and high-speed services is fueling this growth, as carriers invest in new fiber, new IP technology and new wireless infrastructure to provide state-of-the-art voice, video and data services. People are thirsty for broadband, and that is TIA's number one priority... broadband. Our companies either manufacture the next-generation, fat pipes that we know of as the Internet or the products and services that ride over it.

We have seen technologies like broadband video, voice over Internet protocol or VoIP, as well as new mobile data services, spark new growth in the telecommunications industry. As a result, cable, telcos, wireless, and others are offering more competitive all-in-one bundled packages, and consumers are seeing lower prices and more services.

This year's Market Review reports that in 2006 cable modems and DSL continued to dominate the U.S. market, capturing 96 percent of the broadband market, which in 2005 overtook dial-up access service. By 2010, 87 percent of Internet connections will be over broadband technology, as opposed to dial-up.

It forecasts growth for competing new broadband technologies such as fiber, satellite, wireless and broadband over powerline, which combined will account for more than 11 percent of broadband subscribers in 2010.

Broadband video is one driving force behind deployment of the state-of-the-art fiber needed to carry the high-capacity signal; it allows telephone carriers to provide a TV service comparable to cable TV. Whether it's FiOS from Verizon, Project Lightspeed from AT&T, or cable upgrades in order to keep up, video is driving broadband investment and entry should be fostered, not derailed. Recognizing this, the FCC and ten states have enacted measures to ensure that video entry is facilitated.

On the voice side, growth is expected in VoIP. The broadband-based phone technology is forecast to make up 34 percent of all U.S. residential landlines by 2010, or 25.5 million subscribers, up from just 10 percent and 9.5 million subscribers in 2006. A majority of cable telephone subscriptions use VoIP.

In general, more U.S. businesses are using communication systems based on Internet protocol technology. Whether used in a home office, the neighborhood bank, or in the local "mom and pop" store, IP systems are expected to overtake traditional enterprise systems by 2009. This will also result in huge cost savings and lessen overhead expenses.

Now, the question remains, how can we work together to better facilitate CONTINUED broadband growth. Consumer demand for VoIP and video are not going to do the job alone.

The President ambitiously set a goal of deploying broadband to all Americans by 2007. We need to do much more to accomplish that goal. Whether it's replicating on a national level what is occurring in Connect-Kentucky, or if universal service is the answer, broadband tax incentives, you name it. Let's try it all. But let's have a strategy. That's what is missing... a strategy.

TIA and our companies offer you our help, support, time, and whatever you might need to see the President's goal through to completion. We will all benefit from increased broadband deployment, at home in the U.S. and on a global level, where others' are currently leading instead of following. We can turn things around if we work together.

We enjoyed working with you last year and appreciate your support for small business relief from burdensome laws like the Sarbanes-Oxley Act, which are incredibly detrimental to small businesses, and we look forward to working with you on other important issues before us in this Congress.

Thank you again for having me here today, and I look forward to your questions, and a thoughtful discussion and dialogue.

Testimony of
David W. Zesiger
Senior Vice President of Regulatory Policy and External Affairs
Of Embarq
Before the
House Small Business Committee
March 7, 2007

Advancing the Innovation Agenda:
The Perspective of the Technology and Telecommunications Industry

Good morning, Chairwoman Valasquez, Ranking Member Chabot and Members of the Committee. I am David Zesiger, Senior Vice President of Embarq for Regulatory Policy and External Affairs. Thank you for the opportunity to testify before you today on the importance of technology and telecommunications for the nation's small businesses.

Embarq is the nation's fourth largest wireline telecommunications provider, serving approximately seven million lines in 18 states and offering business and residential consumers a full suite of voice, Internet, wireless and video products. We are also the leading provider of telecommunications services to businesses in our markets. We serve well over 400,000 small and medium-sized businesses in our service territories, including a quarter million of the smallest businesses – those with between one and four employees. I am testifying today on behalf of the Independent Telephone and Telecommunications Alliance (ITTA) which represents midsized telecommunications carriers.

We commend you for holding this hearing because we recognize, as you do, that small businesses are the bedrock of our communities and of our economy. Especially in rural areas, the communities we serve can only survive when there is a strong, healthy, environment for small businesses. As we further immerse ourselves in the 21st Century, an increasingly indispensable part of that environment is the communications infrastructure of each community.

Broadband deployment

Small businesses in our territory are becoming increasingly reliant on broadband data networks to run their business, primarily driven by online transactions. As such, they are demanding a broad portfolio of technologies that provide reliable, secure access to their data, regardless of whether they access it in the office via a wireline network or in the field via wireless technologies. Such services have opened a whole new world of opportunity, particularly to smaller businesses and entrepreneurs, allowing access to resources, markets and customers that typically only larger businesses had in the past.

Expanding the availability of high-speed Internet services to our business and residential customers is a top priority for Embarq. As of the end of 2006, only one carrier

saw a greater percentage increase in their broadband subscribership than Embarq. By year-end, we had deployed broadband to over 80% of all our residential and small business lines. In early December, we turned up our one millionth broadband customer.

In 2007, we are making it our top priority to increase the bandwidth available to our customers. In the next twelve months, we plan to expand access to 10 megabit per second service to almost 50% of our DSL-capable lines. Also in 2007, we will expand our broadband customers' upstream capacities by approximately 20%, which is especially important for businesses that share large data files, video content or other peer-to-peer applications.

Businesses of all sizes are demanding services that provide even greater speeds than traditional broadband – so-called Ethernet services that begin at 10 megabits per second and range as high as a gigabit. In 2006, Embarq and other carriers saw an explosion of demand for Ethernet services from small and large businesses alike. As a result, we have invested significant capital in upgrading our network to provide these services. And since Ethernet services provide equal upstream and downstream capacities, this investment will increase businesses' abilities to upload files exponentially.

Convergence

Embarq is also a leading innovator in bringing the benefits of convergence between wireline and wireless technologies to its customers. Last year, Embarq led the industry in launching a dual-mode, cellular/WiFi phone that allows for seamless operation between the two platforms – our SmartConnect service. SmartConnect simplifies usage and reduces costs to the user by transferring mobile calls to a WiFi hotspot whenever the user is at home or at the office – allowing customers to shift their calling from expensive wireless minutes to WiFi service that has no incremental cost. We have now made SmartConnect available in 10 markets, which collectively contain 70 percent of our lines.

Embarq also offers a unified voicemail service that eliminates the need to check multiple voicemail boxes. In 2007, we will also begin offering a service that automatically converts voicemails to text e-mails.

The need to ensure continued investment

This kind of innovation does not come cheap. Telecommunications is a highly capital-intensive industry. It takes an enormous up-front investment to upgrade our network to offer cutting edge services to our customers. In recent years, Embarq has invested almost a billion dollars a year into upgrading and expanding our network.

There are several steps that Congress can take to ensure that carriers in rural markets can continue to empower their business customers with the best that telecommunications can offer.

- Ensure a sustainable future for the federal Universal Service Fund: The Universal Service Fund (USF) was authorized by Congress in 1996 "to make available, so far as possible, to all the people of the United States ... a rapid, efficient, nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges." For many, USF programs offer the most direct and certain path to realizing the modern vision of a connected and thus thriving nation. USF made universal voice service possible in the twentieth century, and Congress now has a choice about whether to expand and strengthen USF to make universal broadband service possible as we begin a new era.

- Reform the Rural Utilities Service (RUS) Broadband program: The second policy direction that Congress can take is to reevaluate where support for broadband deployment is truly needed. Most of our country is served by at least one broadband provider and the goal of increasing broadband deployment should be weighed in areas that that are unserved, as opposed to subsidizing redundant networks in areas that already have access to broadband. Congress can continue programs such as the Rural Utilities Service (RUS) which is administrated through the Department of Agriculture and achieve maximum impact by focusing on unserved areas.

- Avoid unnecessary and harmful regulation of broadband networks that limit network providers' ability to invest in new and innovative services. The debate over internet regulation or "net neutrality" will probably go on for a long time. But one thing all parties should all be able to agree on is the need to accelerate deployment of greater capacity to all users. Avoiding undermining investment in networks helps everyone: business users, equipment manufacturers, network providers and even edge providers who, like other businesses, rely on the network to reach their customers.

Taking steps like these will help ensure that providers like Embarq will continue to have the right incentives to innovate and invest in their networks and provide the services our customers desire.

Thank you again for inviting me to testify today on behalf of Embarq and ITTA.

Statement of Walter B. McCormick, Jr.
President and CEO of the United States Telecom Association
Before the House Small Business Committee
March 7, 2007

Madam Chairwoman, and members of the Committee, I am Walter McCormick, president and CEO of the United States Telecom Association (USTelecom). I appreciate the opportunity to appear before this Committee to discuss USTelecom's perspective for "Advancing the Innovation Agenda."

USTelecom represents innovative companies ranging from the smallest rural telecoms in the nation to some of the largest corporations in the U.S. economy. Our member companies offer a wide range of services across the communications landscape, including voice, video and data over local exchange, long distance, Internet and cable networks.

Most of our rural providers are small businesses themselves and many of them have been at the forefront of providing their customers with the triple play--voice, video and data. These innovative communications services provided by our members play a vital role in the success of many small businesses.

Our members also provide small businesses with personalized solutions to meet their individual needs. For example, our members offer small businesses a range of Internet services including state-of-the-art security protection, 24/7 live technical support, website hosting and business e-mail accounts. Differentiation of products and services are important to small businesses as it provides options and flexibility for entrepreneurs to choose the best service which meet the needs of their business.

Madam Chairwoman, the ways in which businesses conduct commerce and communicate with each other and their customers has changed fundamentally during the last decade. Today, you can make a phone call using a wireline phone, or a wireless phone, or a cable phone, or an Internet phone. Technology has made it possible for cable operators, who historically offered only video, to offer voice and Internet services. Especially relevant for this committee, cable companies are increasingly targeting their services toward the business market.

Internet access is available through DSL, or cable modem, or wireless, or satellite – and, increasingly, over powerlines and municipal wi-fi systems. In fact, there are more than 1,270 broadband service providers in the U.S. today. And according to the FCC, during the first half of 2006, more than 6.7 million wireless high speed Internet lines were added by businesses, for an increase of more than 200%. Competition among wireline and wireless broadband service providers has created a variety of product and service options for small business owners to effectively manage their businesses. Fiber, DSL, EV-DO, WiFi, WiMAX, cable modem and satellite technologies are among the numerous flavors of telecommunications broadband technologies at their disposal.

Against this competitive backdrop, North American telecommunications companies invested an estimated $70 billion this year in upgrading broadband infrastructure. The next wave of broadband innovation holds the promise of significant, life-enhancing advances from health care to the environment, education and to our economy. This promise provides a host of new opportunities for small business and individual entrepreneurs across this country. Access to advanced broadband technology is critical for small business to compete in the global marketplace, seek new opportunities outside traditional local/regional markets, to connect with customers/suppliers/partners and to be effective partners in commercial supply chains.

As American businesses and consumers stand poised to reap the benefits of the next wave of Internet innovation and ongoing investment in U.S. broadband infrastructure, some would risk this potential by imposing the first government regulation of the Internet in our nation's history.

Internet regulation, wrongly called "net neutrality," would impede the ability of entrepreneurs to launch new applications that advance a range of consumer benefits from home health monitoring, to distance learning, to telecommuting opportunities. Furthermore, regulation of the Internet would impede our companies, both small and large, from the ability to tailor packages specific to their customers and small businesses. In addition, others have suggested that as telecom companies transition to fiber, that they also maintain existing copper-wire technology. Such action would significantly reduce the tempo of broadband deployment in this nation.

Laws are inflexible and difficult to fine-tune, particularly when applied to technologies that are evolving rapidly. Additionally, the needs of the Internet are growing, paced by the latest technologies. One example is the move of video to high definition, or HD, a technology that demands greater amounts of bandwidth. If the popular video site YouTube – just that one site – switched to HD, it would double the capacity needs of the entire Internet. Government micro-management would undermine network operators' ability to meet these growing technological challenges.

Rather than address the hypothetical concerns posed by those who wish to regulate the Internet, this Committee and the entire Congress should pursue an important national goal that can provide tangible benefits to consumers today—expanding broadband's reach to all Americans, including small businesses. As you know, broadband has become the backbone of economic development, and for rural and underserved urban areas, it is as important to economic progress as roads, bridges, and waterways.

While the nation added more than 13.4 million high speed Internet lines in the first half of 2006 alone, more needs to be done, especially in rural America, to accomplish the goal of universal broadband access.

USTelecom and our member companies are committed to furthering broadband deployment and believe that Congress can advance a number of initiatives that promote this goal.

First, we must ensure a sustainable future for universal service, a program designed to increase access to telecommunications services nationwide and to maintain affordable rates in low-income and rural areas. USTelecom and our member companies have advocated that universal service should be reformed to create a strong and sustainable system that can provide affordable, reliable telecommunications for all Americans. The current funding system is eroding at a rapid pace requiring the current system to be reformed. In the House, Representatives Boucher & Terry will shortly introduce reform legislation that we believe takes the right approach to reform. We hope the Committee will encourage the consideration of such reform legislation this year.

Second, an important part of the equation for broadband deployments lies in ensuring continued funding for the Rural Utilities Service (RUS) broadband program. In fact, we should consider expanding the loan program to

increase deployment into high-cost areas, which could dramatically enhance the lives of rural Americans by delivering greater proximity to advanced health care and education, as well as new jobs and economic growth. We are fortunate that Congress will consider a Farm Bill this year and hope the Committee will keep an interested eye on how this program is reauthorized.

Finally, Congress can promote broadband deployment by permanently extending the Internet Tax Moratorium; allowing for faster depreciation of broadband equipment and fiber; and creating a tax credit for the deployment of broadband equipment and fiber. USTelecom was recently joined by NCTA and CTIA in a letter to all House members in support of H.R.743, bipartisan legislation introduced by Representatives Anna Eshoo and Bob Goodlatte. I encourage all members of the Committee to consider cosponsoring this legislation and urge the House take up this important legislation before its expiration in November.

By continuing to advocate policies that promote competition and ensure investment, Congress has the opportunity to encourage increased investment and deployment of advanced networks, which will help create a new wave of businesses and entrepreneurs.

Again, Madam Chairwoman, thank you for this opportunity to appear today. We look forward to working with you and the members of the committee.

NTCA

NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION

The Voice of Rural Telecommunications

www.ntca.org

Statement by
Shirley Bloomfield, VP Government Affairs and Association Services
National Telecommunications Cooperative Association

Before the
United States House of Representatives Committee on Small Business
"Advancing the Innovation Agenda: The Perspective of the Technology and Telecommunications Industry"

March 7, 2007

Good morning. My name is Shirley Bloomfield. I am the Vice President of Government Affairs and Association Services for the National Telecommunications Cooperative Association.

NTCA represents over 570 rural, community-based communications providers throughout the United States. Our members' roots are in the traditional telephone business but they are also cellular phone providers, wireless and wired broadband providers, and over half are video providers delivering video content to their consumers via IP technologies, direct broadcast satellite service (DBS) or traditional means. Our members are small business deeply rooted in their communities; many of them have been serving their communities for 100 years or more. The services they provide are essential to the economic viability of their communities, and despite the regulatory uncertainty and hardships they face, they remain not only committed to serving their communities but also to being pioneers in the communications industry.

Today I am going to highlight for you five priorities that NTCA is working on on behalf of its members: modernizing and stabilizing the universal service fund; access to video content; spectrum policy; network neutrality; and the Regulatory Flexibility Act.

Modernizing and Stabilizing the Universal Service Fund

Today, the universal service fund emphasizes an assurance that necessary cost recovery is available to those that make the commitment to serve the nation's most economically challenging markets. Policymakers must understand that this is the key to building the nationwide network that has guaranteed all Americans the ability to enjoy an unprecedented era of access to information.

NTCA looks forward to working with members of this committee to modernize and stabilize the fund. There are nine key changes that, if made, would accomplish this goal:

- The universal service fund must continue to be an industry-funded mechanism, and neither supported through general tax revenues nor subjected to the federal Anti-Deficiency Act.

- The base of contributors must be expanded to include all providers utilizing the underlying infrastructure, including but not limited to all providers of two-way communications, regardless of technology used.

- Support shall be made available for the cost-recovery needs of carriers deploying broadband-capable infrastructure.

- The contribution methodology must be assessed on all revenues or a revenues hybrid that ensures equitable and nondiscriminatory participation.

- The regulatory authority to modify the scope of contribution obligations as technology evolves must be clarified and strengthened.

- Support must be used to construct, support, and maintain networks to benefit all consumers and must not be voucher, auction, or block-grant based.

- Support must be based upon a provider's actual cost of service.

- Support must not be used to artificially incite competition.

- The rural and nonrural fund distinctions must be maintained.

Access to Video Content

Small video programming providers face many obstacles when trying to obtain video programming from content providers and attempting to enter new markets. Unreasonable programming rates, exclusive dealing arrangements, abuse of market power through nondisclosure agreements, tying practices, predatory pricing, unfair and costly restrictions/prohibitions on the use of shared headends, and prohibitions on Internet protocol (IP) and analog transport are some of the barriers faced by small video providers.

- **Shared headends:** Many small video providers have been able to provide retail video services to their communities by pooling their resources and jointly purchasing or leasing a headend from another owner. Sharing a headend with several small companies substantially reduces initial investment and allows a small video provider to give consumers an affordable video services offering. Some wholesale video content providers have imposed unfair and costly restrictions/prohibitions on small video providers that share a headend. Without the shared headend option, many rural consumers would not have video service, or would be limited to direct broadcast satellite service (DBS) without any other competitive offering. Both the House and Senate telecom bills debated last congress contained language allowing shared headends and prohibiting vertically integrated content owners from denying shared headend users access to their content. We would like this policy to be adopted in the 110th Congress.

- **Retransmission Consent Reform**: Broadcast stations that elect retransmission consent increasingly are mandating per subscriber rates and/or tying/bundling arrangements as part of their terms and conditions for carriage. The terms and conditions demanded by the broadcasters often are unaffordable to small carriers, forcing small carriers to increase consumer rates and/or remove desirable channels from their package line up to accommodate the additional channels demanded by the broadcasters. Broadcasters would have you believe that these negotiations are market based. They are not. Our small member companies have no negotiating power in dealing with large monopoly broadcasters. Several remedies to this situation should be adopted, such as the ability to go to arbitration, utilize pool-bargaining, and allowing providers to "shop" for a broadcaster outside of their designated market areas.

- **Nondisclosure agreements should be prohibited**. Virtually all of the contracts negotiated between content providers and large, multiple systems operators

(MSOs) include nondisclosure agreements. By restricting the flow of information, video content providers make it virtually impossible to establish any semblance of "market rates." Consequently, smaller retail CATV and IPTV providers must enter into negotiations at a significant disadvantage, as they possess far less information than the party with whom they are negotiating.

- **Mandatory multicasting must be prohibited.** As a result of the digital transition, broadcasters are seeking carriage of all of their digital signals, versus just the primary signal as required by law. Forcing the small video provider to carry all of these additional channels will have negative consequences on the video provider's ability to tailor its product to meet the needs of its consumers. Carriage of signals beyond the primary signal should have to be negotiated, versus being forced upon a video provider via the election of must-carry.

- **Tying arrangements should be prohibited.** Many over-the-air commercial broadcast networks and cable programming networks require small CATV and IPTV providers to take additional networks, as many as 12, in order to have access to a flagship network. The end result is that the small CATV and IPTV providers must pay a higher price in order to ensure access to the desired flagship network that is necessary for a truly competitive offering.

- **Predatory pricing by large incumbent cable operators must be prohibited.** Under the current rules, as new IPTV providers enter the market, the large incumbent CATV provider can drop its price for service significantly below the cost in the areas where it faces competition. This predatory move makes it impossible for the new entrant to gain a foothold. The incumbent cable operator is able to afford this practice by increasing the service price in areas where there are no competitors.

- **Exclusive programming arrangements must be prohibited.** Some incumbent cable operators use their market power to make it difficult for competitors to obtain programming. The incumbent CATV providers understand that without access to certain programming, competitors cannot make their services attractive to subscribers. Certain CATV providers are known to have entered into exclusive programming arrangements. Contracts are written in such a way as to bar new IPTV providers from access to local or regional sports or news programming. Local subscribers expect programming and are unlikely to switch to a new provider that is unable to provide it.

- **IP-Transport must be allowed.** New, small IPTV providers are facing discriminatory practices hindering their ability to enter the video services marketplace and gain access to video content. Some content providers prohibit their video content from being distributed through DSL or the Internet. They claim that IP-transport prohibition is required to prevent the piracy of their content on the Internet. This concern, however, is easily addressed through

today's encoding and encryption capabilities that enable IP-transport to be more secure than traditional cable transport.

- **Encryption should not be mandatory for traditional CATV providers.** Some content providers are insisting that small, analog CATV providers upgrade their systems to support encryption. Many small, rural video providers do not have the economies of scale and scope to incur the costs of providing encryption on their networks. Mandatory encryption would result in such a substantial increase in rates to consumers that it would effectively put the small company out of the video business and leave the residents in the community with possibly only one option for video services—DBS.

Spectrum Policy

Regarding spectrum policy, I would like to highlight for you some of NTCA's findings from the association's 2006 wireless survey:

- 30% of survey respondents obtained access to spectrum during the course of the year (up from 6% a year previous);
- More than half of respondents not offering wireless are considering doing so; two-thirds of those currently providing wireless service are looking to expand their wireless offerings;
- 46% cited ability to obtain spectrum as a challenge (up from 27% a year earlier)

While the FCC did a good job of making spectrum available to small carriers in 2006 in the AWS auction, these carriers need access to even more spectrum in order to carry out their future plans.

In this regard, we hope that the members of this committee will weigh in with the FCC and ask the Commission to consider the special needs of rural America when it auctions spectrum in the 700 MHz band that is being freed up by the digital television (DTV) transition.

Specifically, we would like to see the FCC auction the spectrum in small geographic licenses to ensure those entities who serve rural communities are able to afford to participate in the bidding. In fact, the House endorsed this idea last year when it passed DTV legislation directing the Commission to auction an additional 700 MHz band using Cellular Market Areas (CMA) instead of Economic Area Groupings (EAG). Unfortunately, this provision was dropped from the final bill for procedural reasons.

The auction of spectrum using larger license areas precludes small to mid-sized carriers from participating in auctions because of the high cost of the license. That leaves the auctions to large companies, deploying service in urban and suburban areas first, while leaving rural communities the last to receive their service, if at all. Experts have indicated that the 700 MHz spectrum is uniquely able to serve rural America with wireless broadband because it travels farther over open spaces and is less susceptible to natural barriers. As you can see it is very important to get more of this spectrum into the hands of those who are in the business of serving rural areas.

Net Neutrality

NTCA has developed net neutrality policy positions that I would like to share with the committee. Our net neutrality positions attempt to accomplish the following: (1) maintain the current level of consumer freedom on the public Internet; (2) allow small, rural communications providers the opportunity to pursue future revenues streams from IP-enabled service providers through tiered/priority pricing of private services; and (3) protect small, rural communications providers from large, vertically integrated Internet backbone providers that could abuse their monopoly or oligopoly market power in rural areas through unfair and discriminatory pricing of Internet backbone services.

This last issue is one I want to highlight because it is often out of the "mainstream" net neutrality discussion. Our member companies need to have access to the Bell Internet backbone to provide Internet services. With all of the consolidation in the industry we are concerned that the large Internet backbone operators could impose unfair and discriminatory pricing on our carriers which could substantially increase prices for rural consumers. NTCA's net neutrality positions are as follows:

1. Telecommunications, cable, wireless, satellite, electric, and other companies are required to provide consumers with nondiscriminatory access to any lawful content or services on the public Internet through their Internet connection, and allow consumers to attach any lawful equipment to their Internet connection.
2. Telecommunications, cable, wireless, satellite, electric, and other companies are allowed to offer tiered/priority-private services to providers of IP-enabled services that seek to guarantee the quality of their services to the telecommunications, cable, wireless, satellite, electric, and other provider's end-user customers, independent of the public Internet.
3. Internet backbone providers are required to provide all telecommunications, cable, wireless, satellite, electric, and other companies with nondiscriminatory access to the Internet backbone, including special access transport needed to reach the Internet backbone.
4. Internet backbone providers are required to price their Internet backbone services, including special access transport needed to reach the Internet backbone, based on their costs to provide the service.
5. Internet backbone providers are required to provide nonaffiliated telecommunications, cable, wireless, satellite, electric, and other companies the same terms, conditions, and prices that the Internet backbone providers charge their affiliated companies for access to the Internet backbone, including special access transport needed to reach the Internet backbone.
6. Internet backbone providers are required to make publicly available all of the terms, conditions, and prices for their Internet backbone services, including special access transport needed to reach the Internet backbone.
7. To achieve and maintain the goal of universal affordable broadband service for all Americans, the FCC shall regulate the terms, conditions, and prices of Internet backbone services, including special access transport needed to reach the Internet backbone, to prevent large, vertically integrated Internet backbone providers from abusing their market power by imposing unfair and discriminatory pricing on

small, rural communications carriers providing retail high-speed Internet access service in rural, insular, and high-cost areas of the United States.

Regulatory Flexibility Act

NTCA encourages this Committee to ensure federal agencies are doing their due diligence to make certain that small businesses aren't economically disadvantaged by new regulations. This is particularly important in the communications industry as many small independent providers simply do not have the resources to fully comply with all new regulations. Specific to the FCC, it is important to understand that big company regulations don't always make sense for a small operator, both in terms of practicality and feasibility.

Thank you for inviting me to testify before you today. NTCA looks forward to continuing to work with this committee on legislation pertinent to the communications industry to benefit our small businesses and communities throughout the United States. I look forward to answering any questions you may have.

Testimony of Richard Cimerman

Vice President of State Telecommunications Policy

National Cable & Telecommunications Association

before the

House Committee on Small Business

March 7, 2007

"Advancing the Innovation Agenda: The Perspective of the Technology and Telecommunications Industry"

Chairwoman Velazquez, Ranking Member Chabot, and members of this Committee, my name is Richard Cimerman, and I am Vice President of State Telecommunications Policy for the National Cable & Telecommunications Association (NCTA) , which is the principal trade association representing the cable industry in the United States. Its members include cable operators, including small and mid-size operators, serving more than 90% of the nation's cable television subscribers, as well as more than 200 cable programming networks. NCTA's members also include suppliers of equipment and services to the cable industry. The cable industry is the nation's largest broadband provider of high-speed Internet access after investing more than $110 billion over ten years to build out a two-way interactive network with fiber optic technology. Cable companies also provide state-of-the-art digital telephone service to millions of American consumers. Thank you for the opportunity to appear before you today to discuss the cable industry's priorities for the 110th Congress.

NCTA is proud to report that its small and mid-sized operators have invested billions of dollars of private risk capital in small towns and rural communities all across this country in order to

provide a full array of advanced broadband services equal to what our larger operators offer. For example, cable companies serving rural and smaller markets like BendBroadband in Oregon; Eagle Communications in Kansas; Bresnan Communications in Colorado, Montana, Utah, and Wyoming; and Midcontinent Communications in North Dakota, South Dakota, and Minnesota have deployed a full panoply of advanced broadband services, including services such as residential and commercial high-speed Internet access, high definition, digital and on-demand video services, and digital telephone service. Some of the smallest towns in the United States have access to some of the most advanced digital services in the world because of the commitment and investments made by our smaller and mid-sized operators. For example, Midcontinent Communications is offering households and businesses in Buxton, North Dakota, with a population of 350, state of the art high-speed Internet service, digital cable and high definition programming, and digital telephone. The investments have created new jobs for American workers and new business opportunities for small entrepreneurs in rural America.

Competition in the Communications Marketplace Is Working

The cable industry fully embraces, and thrives today in, a robust, competitive marketplace. Our policy for several decades has been to minimize regulation on us and our competitors. The cable industry has never asked Congress for a handout and we don't seek to obtain regulatory advantages over our competitors. Nor have we opposed efforts designed to lighten regulatory burdens on our competitors in order to foster fair competition on a level playing field.

With respect to the video market, fifteen years ago, cable commanded 95 percent of the multichannel television market. Today, because of fierce competition from DBS and other

broadband providers, cable's market share has fallen to less than 68 percent of multichannel video households. And now the Regional Bell Operating Companies have entered the fray, bringing with them annual revenues of $219 billion – more than three times those of the entire cable operator industry. Consumers can now choose from a variety of multichannel video providers, including Direct Broadcast Satellite (DBS), alternative broadband providers like RCN, local telephone companies, and utilities. As a result of this competition, 31.2 million consumers (almost one of every three video subscribers) now obtain multichannel video programming from some company other than a local cable operator. As stated by the FCC's 12th Annual Report on the Status of Competition in the Video Marketplace (March 3, 2006) "[C]ompetition in the delivery of video programming has provided consumers with increased choice, better picture quality, and greater technological innovation."

The entry of cable operators into the telephony marketplace is also great news for consumers across America. Ten years ago, when Congress enacted the Telecommunications Act of 1996, cable operators and telephone companies promised to bring new competition to each other's core businesses. The telephone companies, which previously had been barred from providing cable service in their telephone service areas, promised to do so if the prohibition was repealed. Cable operators, which had been subject to stringent rate regulation, promised to rebuild their systems and bring new competition to the telephone marketplace if Congress eliminated regulation of rates for the expanded basic ("cable programming service") tier.

The cable industry, for its part, kept its promise and since 1996, has invested more than $110 billion to upgrade facilities in order to compete in the new digital broadband marketplace. Small

and large cable operators today use their facilities to provide local telephone service – just as they said they would. And with the development and deployment of VoIP technology, the cable industry is offering consumers across the nation a competitive choice of facilities-based local wireline telephone providers. Today, more than 9.5 million households have chosen cable phone service with more than 150% growth (5.7 million homes) since December 2004.

Cable is offering consumers a choice in local telephone service and consumers are reaping the benefits. According to a recent J.D. Power report, cable phone customers are saving over $10 a month on their phone bills. Based on the projected growth of cable phone services, Microeconomic Consulting and Research Associates recently projected that the total anticipated consumer benefit from competition over the next five years will total more than $100 billion. And small cable operators are increasingly bringing the benefits of their competitive telephone services to rural areas.

It's still the case, however, that the telephone companies serve the vast majority of Americans and still enjoy near-monopoly power in most markets in the country. It is also true that competitive voice services cannot survive without physical interconnection to the Bell-controlled public switched telephone network (PSTN) at a fair and reasonable rate. For that reason, Congress provided interconnection rights to competitive local exchange carriers (CLECs) as part of the 1996 Act so they could exchange traffic with the Bells on an economic basis, without glitches or delays, in order to promote local voice competition. These rights are critical to all competitors, including facilities-based competitors such as cable and cellular companies, because consumers simply won't buy a telephone service if they can't easily speak to friends and

acquaintances served by the Bells. We hope that Congress will continue to support competition in the voice market by working to ensure that the interconnection rights Congress established in 1996 apply to all providers in a fair and reasonable manner and on a technology neutral basis.

And with respect to high-speed Internet access, cable operators large and small continue to lead the way in helping to close the digital divide by investing private risk capital to deploy broadband in thousands of small rural towns and communities all across America. When cable operators decided to rebuild their facilities in order to provide a more robust multichannel video programming service they also set in motion a revolution in the provision of advanced broadband services. The cable industry was the first to market with an affordable residential high-speed Internet service. Cable modem service not only responded to significant consumer demand for faster access to the World Wide Web, it also stimulated and created new and more intense demand by creating a platform for the delivery of new Internet services that were unimaginable in the era of dial-up service. High-speed cable Internet access has literally transformed the way we listen to, share and purchase music, the way we get our news and information, the way we shop, and the way we communicate. Once consumer demand for cable modem service became evident, the telephone companies entered the marketplace with their own DSL service. Having conceded a head start to cable operators, the telephone companies quickly captured a significant share of high-speed Internet customers. Today, 59% of all high-speed Internet (HSI) households are cable HSI customers, while 38% purchase DSL service.

Cable operators and the telephone companies compete aggressively for new and existing Internet customers. And while that competition is intense, several other technologies provide additional

choices for consumers. These include satellite broadband, fixed wireless, mobile wireless, and WiFi networks

Finally, consumers are enjoying tremendous cost savings and enhanced value as cable operators and their broadband competitors offer bundled packages of digital services that include telephone, video, and high-speed Internet access. For example, a decade ago a consumer could purchase dial-up Internet service, 46 channels of analog video, local telephone, and long distance telephone service with per minute charges for about $130 (real dollars adjusted for inflation). Today, cable operators are offering a bundle that includes high-speed Internet access, unlimited local and long distance telephone service, and 75+ channels of digital video programming for promotional prices of as low as $90 to $99. Clearly, consumers are winning as competition and innovation have transformed the marketplace.

Today's competitive telecommunications marketplace is due in no small part to the pro-competitive policies adopted by Congress over the past decade. We would encourage Congress to continue to pursue a legislative agenda that promotes innovation, advances the deployment of broadband to all Americans, and creates a level playing field for all competitors in the telecommunications marketplace. We would also strongly encourage Congress to refrain from imposing new regulations on the Internet that would stifle innovation and threaten broadband deployment.

Congress's Decision to Leave the Internet Unregulated is an Unquestioned Success

Keeping the Internet free of regulation has helped to spur the tremendous investment and

competition in broadband networks and services referenced above. Left free to create new business opportunities and services, small cable operators have invested billions of dollars to bring high-speed Internet access services to consumers across the nation. With bandwidth usage growing at a rapid pace, continued investment will be needed to keep broadband services robust.

If broadband providers are to continue to make these investments, and if consumers are going to be given the levels of services and innovative new products and features they desire, all at prices they can afford, broadband providers need to have continuing flexibility to innovate in the business models and pricing plans they employ. Many so called "net neutrality" proposals, however, would seek to specify today which business models are permissible, and which ones are not, both for broadband providers and for website owners and content providers. They would impose by government fiat outcomes that are better left to the marketplace. This is especially so where that marketplace is highly competitive, where no real world problems needing a solution have been identified, and where the pace of technological development is breathtaking. There can be no better circumstances than these to leave it to the marketplace rather than government to be the regulator.

It is far too early for us – or Congress – to predict which business approaches will succeed in the long run. Any attempt to do so runs the unintended, but high, risk of promoting an approach that fails in the market. By the time the law catches up to the market, it will be too late to recapture the momentum that characterizes broadband today.

The hands-off policy has given small cable operators the flexibility to innovate and respond to

consumer demand. Abandonment of that policy will result in less investment and threaten additional broadband deployment in the rural and underserved areas. The economic benefits of high-speed Internet access for small businesses in rural America are unquestioned. Broadband access connects small businesses to our national and global economy in a way that was never before possible or even imaginable. The Internet has made it possible for small businesses in remote rural towns to compete in a global marketplace. That means more jobs and greater opportunities for all Americans no matter where they choose to live. Our goal should be to make sure that all Americans have those opportunities. Should Congress impose new regulation on the Internet it will create a huge disincentive for companies to make the investments necessary to extend broadband service to all Americans.

Broadband Deployment Initiatives Should Be Focused on Unserved Areas

The deployment of high-speed Internet access in the United States has been an amazing success story. Today, cable broadband service is available to more than 94 percent of all U.S. homes. However, there remain remote rural areas and small towns scattered across America that continue to lack affordable broadband access. We recognize that some form of subsidy may be necessary to promote broadband deployment in remote rural areas where no provider is currently offering a broadband service and it is otherwise uneconomic to do so. The cable industry has offered support for legislation that would offer loans or tax incentives to companies that deploy broadband services in clearly defined and carefully targeted unserved areas. However, the government should take great care not to subsidize broadband in communities where companies are already offering consumers broadband service. Subsidizing competition is unfair to the companies that have taken the risk to deploy broadband service in high cost areas and a huge

waste of scarce resources that should be targeted to areas where a market based solution has not developed.

As noted above, small cable operators have spent billions of dollars to upgrade their facilities and deploy broadband services in rural communities. They did this without a government mandate and without a government subsidy because they want to make certain that rural customers have the same access to advanced digital technology as all Americans. It is unnecessary and profoundly unfair for the government to subsidize a broadband competitor to these small cable operators or any other broadband provider that has already stepped up to the plate and answered the call to help close the digital divide.

Despite our support for government programs that target funding to unserved areas, we would like to point out that any program that subsidizes private entities to deploy broadband service is fraught with the potential for abuse. An example of such a program, though well intentioned, is the current Rural Utilities Service (RUS) broadband loan program. The RUS Broadband Loan Program has lost its focus on rural, unserved America. RUS loans are frequently granted to applicants proposing to serve areas that already have multiple broadband providers.

A September 2005 report by the Department of Agriculture's Office of the Inspector General, details this problem, stating: "*Based on this review, we found that RUS has not maintained its focus on rural communities without preexisting service*" (Audit Report 09601-4-Te, p. ii). The OIG report goes on to say, "*In some cases, loans were issued to companies in highly competitive business environments where multiple providers competed for relatively few customers*" (p. 15).

Such RUS loan practices have the effect of discouraging further private sector investment in rural areas and also diverting scarce government resources away from rural communities that are not served by any broadband providers. We believe that Congress should reform the RUS broadband loan program and direct the RUS to change its loan approval procedures to address the concerns raised by the Inspector General and to ensure that broadband loans are directed to unserved areas, rather than funding competition in markets that are already well served.

In addition, the RUS should ensure that incumbent providers have the opportunity to review and comment on loan applications. Broadband providers already serving rural areas have no way of verifying that an application submitted to the RUS accurately describes the market conditions or even their own current service offerings. Thus, the RUS may be frequently approving loans based on inaccurate information.

By allowing private broadband companies already serving an area to comment on the loan applications and provide the RUS with additional details on both the market conditions and the type/quality of service already offered in the region, the RUS will have the information needed to determine whether a loan is both economically sound and necessary.

We believe that the RUS should focus broadband loans on unserved rural areas and open up the application process to ensure they have the complete and accurate information they need to make sound loan decisions.

New Government Fees Should Not Be Imposed on Broadband Service

The cable industry strongly supports the goals and purposes of the universal service fund (USF). We believe that quality telecommunications services should be available to all regions of the country at just, affordable, and reasonable rates. In that regard, even prior to the Federal Communications Commission's recent order requiring that all VoIP providers pay into the USF, cable operators offering voice telephone service—either by way of traditional circuit-switched telephony or VoIP—have always contributed to the universal service fund.

A strong universal service program is an essential component of national telecommunications policy and we share the concerns of policymakers, industry stakeholders, and the public that, in its current form, the universal service program is not sustainable. While there is general consensus that all aspects of the system, including contributions, eligibility, and level of support are in need of reform, the cable industry strongly encourages Congress not to impose fees on high-speed Internet access services as a means to restore the solvency of the universal service fund.

Under the current USF contribution mechanism, cable recognizes that reliance on the assessment of interstate telecommunications revenues virtually guarantees that the funding base will continue to shrink. An increasing number of companies offer consumers voice telephone service for a fixed monthly rate that does not differentiate between local or long distance calls. Companies also offer bundled packages of digital services that include voice telephony. Most consumer VoIP services are offered without regard to intrastate or interstate distinctions. The fact is that interstate telecommunications revenues have been declining and are predicted to

continue declining for the foreseeable future. As the line between what is a local and long distance call continues to blur, the existing USF contribution mechanism will become increasingly obsolete, which threatens the viability of the program itself.

The cable industry has long advocated the adoption of a telephone numbers-based contribution mechanism, a simple yet effective reform that will sustain the long-term health of this fund while adapting to the evolving technology and economics of voice telephony. Using telephone numbers would be a relatively simple means of determining who should contribute as well as when contributions were owed and in what amount. There would be no need to apportion provider revenues into interstate versus intrastate or to determine which portion of a bundled offering represents interstate telecommunications. It would also make no difference whether a service was defined as a telecommunications service or as an information service. Under a telephone number-based system, all that matters is whether or not the service uses a phone number. As such, a numbers-based system promotes competitive neutrality among providers and technologies and ensures that no provider of a voice telephone service is placed at a competitive disadvantage due to disparate treatment with respect to universal service fund contributions.

While a numbers-based approach would capture any service designed as a replacement for plain old telephone service (POTS), it would avoid assessments on a service that might include a voice component. Few would argue, for example, that applications, or devices, where voice functionality is ancillary to the actual purpose of the service or device—such as voice enabled gaming—should be assessed for USF purposes. Most importantly, a numbers-based assessment scheme would assure that high-speed Internet access is not subject to new fees that would make

the service more expensive for all consumers.

As stated above with regard to the RUS program, we recognize that some form of subsidy may be necessary to promote broadband deployment in remote rural areas where no provider is currently offering a broadband service and it is otherwise uneconomic to do so. In the context of USF support for rural broadband deployment, we recognize that many in Congress would like USF money to fund broadband deployment. But we believe it would be a mistake to make broadband services eligible for USF distributions in areas that already have a broadband provider. While we share the desire to ensure that all Americans, including those who live in rural communities, have access to high-speed Internet service, we would like to reiterate that it is both unnecessary and profoundly unfair for the government to subsidize broadband competition when an existing provider has already stepped up to the plate and invested in these communities.

Cable Supports Congressional Efforts to Prohibit Taxation of the Internet

Just as it would be a bad idea to increase the price of high-speed Internet access by imposing new USF fees on broadband service, we believe it is also important to keep state and local governments from imposing new taxes on Internet access service. In that regard, NCTA has endorsed legislation, the Permanent Internet Tax Freedom Act (PITFA) of 2007 (S.156 and H.R. 743), that would permanently ensure that states do not tax Internet access services, regardless of the technology used to provide those services. These bills would also permanently extend the ban against multiple and discriminatory taxes on electronic commerce. Without this moratorium, state and local governments could view Internet access as an easy target for additional tax revenues, as evidenced by the high level of taxes imposed upon other communications services.

Precluding the taxation of Internet access is necessary for Congress to advance a bipartisan goal of ubiquitous broadband deployment and affordable Internet access.

Congress first passed the Internet Tax Freedom Act (ITFA) in 1998. The moratorium was extended by Congress in 2001 and 2004 and expires this November. State and local governments continue to look for creative ways to try to tax Internet access services. The moratorium needs to be permanently extended to ensure that this critical component of the American economy is not the target of excessive taxes imposed by state and local governments.

Permanently extending the Internet tax moratorium will broaden the reach of technology and help eliminate the digital divide. Over the last eight years, electronic commerce has become a crucial engine for economic growth as the number of Americans who can access the Internet has increased dramatically. To enhance future growth and strategically position Americans to compete in the global economy, the moratorium should be permanently extended. This will help ensure that all Americans can have affordable access to the Internet and promote further broadband deployment in rural and outlying areas that may lack high-speed Internet access.

Permanently extending the Internet tax moratorium will also encourage growth in the digital economy. The technology sector continues to invest billions in supporting the growth of high-speed Internet access. Taxes that impede consumer demand for access and inconsistent application of state taxes on new technologies are a roadblock to those new investments. The Internet is also a gateway to entrepreneurship, regardless of race, income or neighborhood.

Thousands of small businesses, many minority-owned, have been born using the Internet. Higher taxes on technology would be a direct hit on the ability of small businesses to operate, grow, and create new jobs.

Municipal Broadband Networks Should Not Overbuild Private Companies

Some Members of Congress would like to promote additional broadband deployment and competition by making it easier for municipalities, particularly in smaller and rural communities, to offer broadband services. While the cable industry welcomes competition and the benefits that competition brings to consumers, municipal broadband ownership in a competitive marketplace poses unwarranted risks to consumers and taxpayers. Numerous state legislatures have wisely determined that allowing localities to offer broadband services in a competitive marketplace creates an unwarranted risk to taxpayers and results in market distortions that harm all consumers.

Municipalities that compete with private broadband companies could use unfair advantages including access to tax revenues, below cost loans, cross subsidization, and discriminatory access to poles and rights-of-way. Such municipal advantages could threaten the viability of networks built and operated using private risk capital and strongly discourage private sector investment. According to most studies, municipally owned broadband systems are likely to fail. The impact of that failure is felt not only by the taxpayer but also by consumers of broadband services who may not have an attractive private sector alternative because it was overbuilt by a municipally owned system.

Rather than competing with private entities, the appropriate role of government is to create an environment that encourages and rewards private investment in broadband infrastructure. Governments should only deploy broadband networks or subsidize private networks in areas that do not have broadband services and are unlikely to be served by the private sector.

Conclusion

The policies adopted by Congress over the past decade have helped to create a dynamic and highly competitive marketplace where companies have an incentive to innovate and consumers have more choices—more choices in advanced digital services offered by an increasing number of broadband companies. In real dollars, consumers are paying less and getting more—high-speed Internet access at speeds that continue to accelerate, hundreds of channels of digital and high definition video, and new digital telephone service using Internet protocol technology. As Congress considers legislation that would build upon this success and promote additional broadband deployment at affordable prices, the cable industry would strongly encourage you not to impose new "network neutrality" regulation on the Internet and to keep the Internet free from government fees. The success of the last decade will grind to a halt if Congress imposes new regulation or new fees on the Internet. Furthermore, as Congress seeks to promote more broadband deployment in rural areas, we would encourage you to avoid subsidizing competition and to target limited federal resources to the areas of the country that still lack access to broadband service.

Thank you for providing me with an opportunity to testify before you today. I look forward to answering any questions.

Statement of Earl W. Comstock
President and CEO of COMPTEL
House Small Business Committee hearing on
"Advancing the Innovation Agenda: The Perspective of the Technology and Telecommunications Industry."
March 7, 2007

Madam Chair and members of the Committee, my name is Earl Comstock and I appreciate the opportunity to be here today. I am the President and CEO of COMPTEL, a trade organization that represents all types of competitive communications service providers. Our more than 180 voting members range from multi-billion dollar companies like Sprint-Nextel and EarthLink to start-ups few people have heard of yet. The bulk of our members provide wireline communications services to small and medium size business customers, though we also have companies that serve large enterprise customers and the mass market, as well as companies that are deploying so-called "triple play" services (voice-video-data) to residential consumers. For more than a quarter century, COMPTEL has been aggressively advocating for competition in the telecommunications industry.

Today, the Committee is looking into "Advancing the Innovation Agenda." Four of the main planks of that agenda – a new generation of innovators; a sustained commitment to research and development; affordable broadband access for all Americans; and a competitive small business environment for innovation – are all critically dependent on communications networks for their ultimate success. As a result, I applaud the Committee for looking at how communications policy fits into the achievement of the Innovation Agenda.

Sadly, the United States is headed at full speed in the wrong direction with respect to communications policy. The Federal Communications Commission (FCC) has been rapidly removing the very policies that led to the creation and success of the Internet, and the Justice Department has been allowing the re-establishment of the communications giants that strangled innovation in the communications industry for decades.

Let me note a few statistics from a report by Free Press, the Consumers Union, and the Consumer Federation of America that was released last fall. That report, *Broadband Reality Check II: The Truth Behind America's Digital Decline*, accurately sets the stage for the topic we are discussing today. To summarize some key points from that report:

- the United States remains 16th in world in broadband penetration (i.e., the rate at which consumers purchase broadband services) according to the International Telecommunications Union;
- 14 other OECD nations saw higher overall net growth in broadband adoption than the United States did from 2001 to 2005;
- among OECD countries only Turkey, Slovakia, and Mexico had higher levels of students who had never used a computer;
- other countries' broadband success can largely be attributed to their successful implementation and use of non-discriminatory open access regulatory policies on communications networks;

- other countries enjoy broadband connections that are far faster and cheaper than those found in the United States;
- broadband prices in the United States show no real sign of declining; and
- that the threat of competition, and not deregulation, is the most important factor behind incumbent providers investment decisions.[1]

Taken together, the statistics cited above illustrate the magnitude of the problem this Congress faces. The communications networks on which the success of the Innovation Agenda depends are rapidly becoming subject either to monopoly control by the newly deregulated telephone incumbents or else to a cozy duopoly between the incumbent telephone company and the unregulated cable companies. Without intervention by Congress – either in the form of guidance to the FCC to reverse its present trend toward wholesale deregulation of dominant carriers or in the form of new legislation that reinstates the common carrier framework that the FCC is so cavalierly abandoning – then America is likely to fall further and further behind other developed nations in a whole range of areas because we are burdened with higher prices, slower speeds, and less innovation with respect to the critical communications networks that are the essential lifeblood of our information age industries.

Communications networks are indeed the lifeblood of our economy. They are as important to our economy today as highways were in the 20th century and railroads were in the 19th century. Businesses today depend on communications networks to offer

[1] *Broadband Reality Check II: The Truth Behind America's Digital Decline*, Free Press et al (August 2006), pp. 3-4. Available at www.freepress.net/docs/bbrc2-final.pdf

goods and services to their customers, to advertise, to inform, and to be informed. Without reasonable and non-discriminatory access to communications networks, no business can be certain of their ability to compete in the marketplace and no student can be confident of their ability to learn and innovate with the best and brightest. Communications networks are the key to success in the 21st century, yet the United States is increasingly adopting policies that will permit a few network operators to decide which businesses succeed or fail, and which innovations are allowed to reach consumers in the marketplace, through their private control of these public information highways.

In particular, Congress can provide guidance to the FCC on four areas of critical importance that affect the ability of COMPTEL members to continue to provide competitive services to small businesses and residential consumers. Those areas are access to incumbents' networks, special access pricing, forbearance petitions, and copper loop retirement. I will discuss each of these areas more fully below.

COMPTEL is greatly concerned about access to the incumbent telephone companies' ubiquitous networks. Competitive service providers pay for access to incumbent networks at either an unbundled network element (UNE) rate, which is determined through arbitrations overseen by the FCC and state public utility commissions, or at a "special access" rate, which in most markets is set by the incumbent. Special access rates are significantly higher than UNE rates.

This Committee's concern is that America's small businesses have the ability to purchase the advanced communications services, most notably broadband services, which will enable them to compete in the new millennia. The only way to ensure affordable broadband for small business in this country is to maintain or reinstate the successful policies that enable competitors to reach small business customers. The FCC is busy dismantling the common carrier legal framework that enabled the development of the fax machine, computer modems, the Internet, and broadband over both cable and DSL technologies. It is this common carrier framework that enables competitors to offer new and innovative services to small businesses by allowing non-discriminatory access to the incumbent communications infrastructure on reasonable terms and conditions. The FCC's current approach increasingly requires competitors to first construct their own ubiquitous network in order to compete, something that has never been successfully done here in the United States or, for that matter, anywhere else in the world. If this unfounded FCC policy is allowed to continue, it will not only diminish competition among communications providers, it will ultimately destroy the Internet as an engine of US economic growth.

The Internet is an interconnected series of networks. It was created in the United States through common carrier policies that ensured reasonable and non-discriminatory access to transmission infrastructure for the attachment of devices, interconnection of networks, and the provision of services. The Internet is not a new network – it was made possible by the ability of innovators to attach new electronics to the existing Public Switched Telephone Network (PSTN) and obtain for a reasonable and non-discriminatory

fee the right to provide services to consumers using those electronics, all without those innovators having to obtain the consent of the incumbent network operators. The Internet, the PSTN, and increasingly the cable network, are one in the same when it comes to the physical infrastructure – either fiber, copper, and coaxial cables – that are used to carry Internet, phone, and video traffic. If you have any doubt about that, try cutting the phone or cable wire to your house and see what happens to your Internet service. Congress needs to make clear to the FCC that they expect all competitors to be able to access the underlying communications infrastructure on reasonable terms and conditions.

The second issue of great importance to COMPTEL members is special access pricing. Special access is an industry term of art for dedicated point-to-point transmission services purchased from the incumbent telephone companies that almost all competitors, including wireless carriers and Internet backbone providers, use special access to provide communications services to businesses and wireless customers. Competitors have to purchase more than 95% of their special access services from incumbent Bell companies, and AT&T and Verizon alone take home 82% of the special access revenue. The FCC claims that the special access market is competitive, yet according to information filed by the Bells with the FCC their rates of return last year on special access services ranged from 42% to nearly 100%!

A recent study by the Government Accountability Office (GAO) that was released in November 2006 at the request of Congressman Tom Davis, then Chairman of the

House Government Reform Committee, looked at the specific issue of special access. The GAO looked at the FCC's methodology for determining if competition exists in a specific market and then looked at what happened to prices in the specific markets where the incumbent Bell companies were given regulatory relief by the FCC.

First, the GAO found that the FCC's data did not provide a robust measure of the strength of competition in a market. The GAO wrote that:

> FCC uses various data to assess competition for dedicated access, but most of these data have significant limitations in their ability to describe the presence, extent, or change in competition in any given area. For example, the data presented in a price flexibility petition measure potential competition at one point in time and FCC does not revisit or update them, even though competitors may enter bankruptcy or be bought by another firm.[2]

Even worse, the GAO found that prices for dedicated access were actually higher in markets where incumbent carriers had been granted full deregulation from pricing rules.[3] As a result, competition in these markets declines and the cost of telecommunications services for small business goes up. This Committee and other members of Congress could bring rate relief to small businesses and wireless consumers and increase the level of competition by directing the FCC to reinstate special access price caps.

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[2] GAO Report 07-80, *FCC Needs to Improve Its Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services*, November 2006, page 20.

[3] *Ibid.*, p. 13.

The third area in which the Committee could be helpful in promoting access to communications networks is with respect to the forbearance petitions that incumbents are increasingly using as a means to get regulatory relief. Presently, the FCC is considering a number of petitions from the largest telecommunications companies – AT&T, Verizon and Qwest – that seek forbearance under section 10 of the Communications Act (47 U.S.C. 160) from other provisions of the Communications Act that require these incumbents to provide nondiscriminatory access to their monopoly networks. In essence, the ILECs have been using the forbearance process to re-write the 1996 Telecom Act to their benefit without Congressional involvement. The FCC is supposed to ensure that providing such forbearance is in the public interest and that approving it "will *promote* competitive market conditions, including the extent to which such forbearance will *enhance* competition among providers of telecommunications services." (47 U.S.C. 160(b))

These petitions affect the largest metropolitan statistical areas (MSAs) in the United States. Verizon alone has requested forbearance in most of the major East Coast markets – from Boston to Virginia Beach. Should these be petitions be granted, competition will suffer. Prices for access to the incumbents' networks will skyrocket, making it even harder for competitors to offer services to the small business community.

Let me give you an idea of what this means, practically speaking, to a small business. It is estimated that the price of a DS-1 or T1 line, one of the most common

services a business will purchase, will go up 25%[4] if service providers are forced to purchase access to the incumbent network at rates set solely by the ILECs instead of rates regulated by rules established by Congress in the 1996 Telecom Act. For New York, the cost to competitors is estimated to exceed $168 million per year. In Ohio, the cost estimate is more that $114 million.[5]

COMPTEL strongly opposes the forbearance petitions and encourages Members of Congress to also oppose them. As members of the Small Business Committee, you should take to heart the fact that FCC Commissioner Copps has said "this Commission does not have a small business record to brag about."[6] Absent guidance from Congress, it is highly unlikely the FCC's dismal record will improve.

A final issue of great concern for the competitive industry is the "retirement" of copper loops, which refers to the ILECs cutting or removing the copper wiring from their networks. Current FCC rules require only the disclosure of the ILECs' intention to retire a copper loop, leaving limited opportunity for consumers and other affected parties to object to the proposed copper retirement.

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[4] *Economic Impact of the Elimination of DS-1 UNEs*, Microeconomic Consulting & Research Associates, Inc. June 2004.

[5] Ibid.

[6] *Section 257 Triennial Report to Congress; Identifying and Eliminating Market Entry Barriers for Entrepreneurs and Other Small Businesses*, Dissenting Statement of Commissioner Michael J. Copps, February 12, 2004.

It is access to these copper wires that enables many COMPTEL member companies to offer innovative and lower priced services to residential and business customers. Examples of these services include DSL service to residential customers and small business customers for a fraction of the monopoly price the incumbents' used to charge businesses for the same service, and also "triple play" services. Small businesses rely on the existence of the copper network with its competitive access rules to ensure that they have a choice among service providers. Even though the installation of new fiber facilities is part of routine network maintenance for incumbent providers, under the FCC's present pro-incumbent rules, competitors do not have a legal right to access more than 64 kilobits per second – a single voice line – on an incumbent's fiber transmission facilities. Thus the existing copper network is the only means by which we can provide competitive services to America's small businesses and consumers.

When a portion of the copper network is retired a critical piece of the network infrastructure, which could be used to provide alternative services to consumers, is lost. Under the present FCC rules, without copper loops to access, there is no possibility of competitive alternatives being provided over the incumbent infrastructure. Absent alternative facilities – and fewer than 6 percent of the *commercial* buildings nationwide have alternative (non-ILEC) fiber running to them – there is no realistic possibility for competitors to offer service to the customers whose copper has been removed.

The ILECs claim they no longer wish to maintain a network that they don't use and have little use for. However, our companies are using that network to do what the

"Innovation Agenda" seeks. For example, today in Richmond, Va., a company called Cavalier is providing the "triple-play" of voice, television and Internet access for $95 per month ***using the existing copper lines of the Verizon network.*** As a result, consumers and small business customers enjoy lower prices and greater choice in services, not only from Cavalier, but also from Verizon and the incumbent cable operator, who both have to respond to Cavalier in the marketplace (though as noted above Verizon's response has largely been to file a forbearance petition seeking to eliminate access by companies like Cavalier rather than continue to compete in the marketplace).

In 2006 Verizon filed one notice of copper retirement. In January of this year, a number of COMPTEL member companies filed a petition at the FCC on this matter requesting that the FCC establish a formal process for approval of copper loop retirement. Since January, the ILECs have filed 83 additional notices of copper retirement. Where will that leave the customers, your constituents, in those 83 markets? Congress needs to push the FCC to enact reasonable rules to ensure that Verizon and other incumbents do not use fiber deployment and the accompanying copper loop retirements as a means of diminishing competition. The FCC could easily address the issue by either establishing reasonable requirements to ensure continued access to copper facilities or by removing its 64 kilobit limitation on competitive access to fiber, thus ensuring that consumers can enjoy the benefits of fiber deployment and competition at the same time.

Madam Chairman and members of the Committee, I thank you for your time and welcome your questions.

March 8, 2007

The Honorable Nydia Velázquez
Chair
House Committee on Small Business
United States House of Representatives
Washington, DC 20515

The Honorable Steve Chabot
Ranking Member
House Committee on Small Business
United States House of Representatives
Washington, DC 20515

Re: Hearing on Advancing the Innovation Agenda: The Perspective of the Technology and Telecommunications Industry, March 7, 2007

Dear Chair Velázquez and Ranking Member Chabot,

We are pleased to submit written comments in response to the hearing held on March 7th, 2007 entitled, "Advancing the Innovation Agenda: The Perspective of the Technology and Telecommunications Industry." Women Impacting Public Policy (WIPP) is a bi-partisan public policy organization representing well over a half million women and minorities in business nationwide including 47 associations that partner with us.

We would like to thank the Committee for holding this hearing on the technology and telecommunications industry as it relates to the small business community. As you know, small businesses account for the majority of job creation and innovation. According to the U.S. Census Bureau, small firms employ half of all private sector employees and have generated 60 to 80 percent of net new jobs annually over the last decade. WIPP knows that the success of its member small businesses, in the domestic and global marketplace, depends on their access to technological efficiency and innovation and we commend the Committee for exploring this important topic.

As representatives of women business owners, we believe that market demand, innovation in technology, and competition between providers should drive changes in the telecommunication sector, as opposed to government regulation. We understand how important access to the latest technological innovation is for the success of a small business. In fact, WIPP members report that access to technology is increasingly important to the growth of their business. In a 2005 survey, 63% of our members support lessening telecommunications regulation if it will increase the availability of new technology and widen consumer choice. In the same survey, 41% of our members believe that the best way to ensure that customers get the best products at the lowest prices is when government reduces regulations so companies can compete for customers in a free market.

Today, because of open, market-based competition policies for the Internet, small businesses can choose from numerous telecommunications products, services and applications that allow them to grow their business in the marketplace. Furthermore, access to broadband internet services enables small businesses to compete with larger companies, seek opportunities globally and become efficient in strategic partners' supply chains. WIPP believes that these choices for broadband services and the benefits to business that results from them are due in large part to competitive market forces.

WIPP believes that the advent of open, market-based competition among a variety of different technology mediums, has promoted the rapid deployment and adoption of broadband telecommunications services, applications, products and content. Consumers, small business owners and large enterprises have access to more applications, products and services than ever, in large part due to the open nature of the Internet. We believe that continued advancement of technology and inherently the spirit of innovation should continue to be the responsibility of free-market forces. Policies which support free-market principles are in the best interest of preserving the benefits afforded by telecommunications and technology advancements. We feel imposing "net neutrality" regulations upon broadband network providers could ultimately jeopardize the momentum to innovate and construct newer networks - an important issue to women business owners.

WIPP does not believe a good case has been made to impose further regulations on Internet and broadband services. In fact, net neutrality is a solution in search of a problem, whereby there is no evidence of any problems which exist today associated with consumers' broadband experience. Technology and innovation are thriving in the open market and net neutrality regulations could have devastating effects on future investment and innovation. We urge the Committee to keep in mind the effects that regulations on the telecommunications industry can have on the small business community.

Sincerely,

Barbara Kasoff

Barbara Kasoff
President

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