

# 9-1-1 AND VoIP

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**FIELD HEARING**  
BEFORE THE  
**COMMITTEE ON COMMERCE,  
SCIENCE, AND TRANSPORTATION**  
**UNITED STATES SENATE**  
ONE HUNDRED NINTH CONGRESS  
FIRST SESSION

SEPTEMBER 1, 2005

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THURSDAY, SEPTEMBER 1, 2005

U.S. SENATE,  
COMMITTEE ON COMMERCE, SCIENCE, AND  
TRANSPORTATION,  
*Great Falls, MT.*

The Committee met, pursuant to notice, at 1:30 p.m. at the Great Falls Civic Center, Hon. Conrad Burns, presiding.

### OPENING STATEMENT OF HON. CONRAD BURNS, U.S. SENATOR FROM MONTANA

Senator BURNS. We'll call the Committee to order, and this is a Committee of one today, I see. If I've got the vote, we'll go ahead and pass this bill, and let's do away with the hearings.

But we want to welcome you all to this field hearing on Voice Over IP and E-911. We thank you for coming today. It's nice to have this, and a lot of our friends to be welcome to the Big Sky Country. This is really the last best place, and we don't need anyone out here in the state to tell us so, or should we try to control our words and the way we feel about Montana. I think I might need to place a call to the Copyright Office once I go back to Washington, however. We're arguing over, "The last best place." I don't think it's going to go inside the beltway.

It's not often that we get to do official business, Senate business here in Montana, but when we do, I'm always glad to welcome folks from around the state to take part. I find the people have a lot more sense outside the beltway, and Washington D.C. continues to be one of the logic-free zones of the country. So I welcome all of the people from Great Falls and around the state who are here today, and I'd also like to thank the city of Great Falls for making this great facility available to us today for this hearing.

Today's hearing is on a subject near and dear to me, emergency communication systems to first responders, making sure that they have access to the latest technologies that they need: 9-1-1 and enhanced 9-1-1 system in Voice Over Internet Protocol Services. We call that VoIP, Voice Over Internet.

That's quite a mouthful in itself. But it only describes the latest challenge in what is truly a simple and necessary matter of public policy, that our Nation's communications infrastructure, as it moves forward with technological change and new business models, must incorporate universal access to 9-1-1 and emergency services as it does.

A few years ago, with this important goal in mind, we set up the Congressional E-911 Caucus, which takes a leading role in identi-

fyng issues of pressing concern to public safety and the community, and helping us in Congress to understand what needs to be done, and what should be done to ensure that the 9-1-1 system is up to date, and responsive as it needs to be.

New technologies such as Voice Over IP are beneficial to telecom carriers, businesses, and consumers alike. My philosophy is that we should not do anything in Congress that would harm or impede the deployment of beneficial technologies.

But at the same time, it is clearly in the public interest for the Nation's emergency response infrastructure, including over 6,000 Public Safety Access Points, or PSAPs as we call them, to be included in the technological advances. And although they clearly understand the need to move forward, the PSAPs do not always have the resources or incentives to move quite as quickly as the private sector does. I think we in Congress can help all the affected stakeholders to achieve that common goal.

With that in mind, we worked on the ENHANCE 9-1-1 Act, which the President signed into law last December, that will provide matching grants to PSAPs that upgrade their system to receive enhanced 9-1-1 data from mobile phones, which is the location and the number of the caller, so that first responders can get to them the same way they get to the addresses of the landline callers, or the hard wire, as we call them. I hope to get full funding for that program this year.

But today we are here to talk about VoIP, and its services, what the best way might be for them to include 9-1-1 and E-911 in their services. Voice Over Internet Protocol services are growing dramatically. There are currently over three million Voice Over IP subscribers in the United States, with over 25 million expected in the next five years. I hope we're closer to that number than when we estimated cell phone users in 2000 when we passed the 1996 Act.

But we know that those services are minimally intrusive for providers and ensure subscribers that they have access to 9-1-1 service as they expect when they dial their phone.

It's important that we move quickly. There are a few well publicized cases of people actually dying earlier this year when they dialed 9-1-1 from a VoIP phone, and could not get through to 9-1-1 call centers. That kind of thing is shocking. It is also unacceptable.

With these stories in mind, last May the FCC issued an order making 9-1-1 and E-911 mandatory for VoIP providers, and requiring that incumbent Bell providers make access to the 9-1-1 infrastructure available to those companies.

In Congress on the same day, we introduced bills in the House and the Senate to do basically the same thing. I'm the sponsor of the Senate bill, and would like to thank my fellow Senators, Bill Nelson of Florida, and Hillary Clinton of New York, both Democrats, for their leadership as well on this issue. Public safety is not a partisan issue, and I'm proud to work across the aisle with Democrats if it will help save lives of Americans all across this country.

I understand Senator Nelson has inserted a statement in the record, and we're going to accept that by unanimous consent. So or-

dered. But being as he couldn't be here today, and there's good reason for that. So I would like to make note of that.

So I look forward to hearing testimony today on the state of 9-1-1 and VoIP services in general, the FCC order, and the bill that we will have before the Senate. I hope each one of you is going to tell us what the FCC order does right, and what it does wrong, and how the bill might be improved to fix some of the things that are especially difficult for companies to do.

I know you won't be shy in telling me what the problems are, but you should also be aware that this is a problem which we need to fix, and fix it very soon. So I look to you for your expertise in how we accomplish this great job.

Now, it gives me a great deal of pleasure to welcome to the table today our witnesses, and then we will start the dialogue. First of all, we have David Jones, president of NENA—and thank you, David, for your kind words today—Jerry Citron of Vonage, co-founder, and Chairman, and CEO; Wanda McCarley, APCO; and Greg Rohde, of course, you heard from today on E-911; and George Henry, CEO and Chairman of the Board of Intrado. So we welcome all of these folks. And David, we'll start off with you. Thank you for coming today.

**STATEMENT OF DAVID JONES, PRESIDENT, NATIONAL  
EMERGENCY NUMBER ASSOCIATION (NENA)**

Mr. JONES. Thank you, Senator Burns. Thank you for providing me the opportunity to appear before you today. Again, my name is David Jones, and I currently serve Spartanburg, South Carolina as the Director of Emergency Services. I'm also the President of the National Emergency Number Association, an organization consisting of more than 7,000 members in 46 chapters across the U.S. and Canada. Additionally, I serve as the Vice Chair of the Federal Communications Commission's Intergovernmental Advisory Committee representing the interests of local government and public safety.

Senator, I applaud your leadership, as well as that of your colleagues and staff, in bringing the 9-1-1 community to the table for these vital discussions about the future of public safety communications. The 9-1-1 community has known no greater friend than you, Senator, and we sincerely thank you for your continued leadership that you have provided on 9-1-1 issues over the years.

I'm here today to testify in support of the IP-Enabled Voice Communications in Public Safety Act of 2005. We applaud the recent actions taken by the FCC in adopting its order on E-911 requirements for IP enabled service providers, but NENA believes Congressional action in this area is needed as well. As legislation to update our communications law is drafted, NENA encourages Congress to include provisions that address critical 9-1-1 and public safety concerns. The IP Enabled Voice Communications and Public Safety Act provides a foundation for such action.

As 9-1-1 in emergency communications continues to advance, it is critical that communications regulation evolve in a parallel fashion, and is flexible enough to accommodate future advancements that have yet to be considered. Today IP is where we were with wireless some ten years ago, and industry and technology are ad-

vancing at a rapid rate with unlimited promise, facing the challenge, and regulatory requirement to provide E-911 to all customers.

Even today, though, after more than ten years of discussion and debate, wireless E-911 is available in less than 50 percent of the PSAPs in the U.S. We must not allow history to repeat itself with Voice Over IP.

Last June I testified before this Committee supporting the need for targeted Federal regulation for E-911 and VoIP, suggesting that this would most appropriately be handled by the FCC. Since then, the Commission has acted, and we applaud their leadership. Now we must work together at all levels of government and with industry to plan for a nationally standardized and coordinated approach to deployment of Voice Over IP E-911.

Too often in the past we have tried to draft new laws and regulations for 9-1-1 requirements for innovative technologies as they are introduced, including wireless VoIP. In recognition of this issue earlier this month, NENA joined APCO and several other groups in a letter asking Congress to include a clear statement on the jurisdiction of the FCC to establish rules requiring providers of interconnected voice telecommunications services to provide their customers with E-911 capabilities.

We certainly agree that this is an important topic to consider, given today's 9-1-1 system, but NENA asks Congress to go a step further. NENA believes that regardless of the service classification, telecommunications information, or otherwise, if a service provides a communications capability, in which a customer can reasonably expect to be able to reach a public safety answering point when dialing 9-1-1, whenever the PSTN, an IP network, or some other yet to be identified path, the FCC should have the clear regulatory authority to address the 9-1-1 aspects of these services.

This is not to suggest that the FCC should enact regulation to cover all potential service types, but the FCC should have sufficient authority if regulation is deemed necessary. Congress does not have to continually go back and update laws based on every new communications technology or service that need 9-1-1 access.

Therefore, we support the provisions in the IP-Enabled Voice Communication and Public Safety Act that authorizes the FCC to regulate in the area of IP-enabled voice communications, but we ask Congress to extend that authority to any service that provides a communications capability in which a customer can reasonably expect to reach a PSAP when dialing 9-1-1.

Funding for IP-enabled 9-1-1 services in the development of the next generation 9-1-1 systems is perhaps most important issue of 9-1-1 today. The public safety community is extremely concerned by the need and growing impact of VoIP on the loss of conventional service fees and surcharge revenue, and the uncertainties of any requirement to replace that critical operational funding stream in the VoIP environment.

Thus, in addition to establishing clear FCC regulatory authority, it is essential that Congress do nothing to compromise state and local authority to impose and collect 9-1-1 fees on all services where a customer has a reasonable expectation of being connected to 9-1-1, again, regardless of the type of technology. As technology



evolves, the classification of service or technology type should not have an effect on the ability of state and local government to address those issues.

Congress should also consider ways to facilitate state and local funding of critical 9-1-1 emergency communications systems. Last year Congress effectively acted in this regard by passing the ENHANCE 9-1-1 Act of 2004, and authorizing up to \$250 million per year in grants for 9-1-1 system upgrades. However to date, no monies have been appropriated to fund such a grant. NENA implores Congress to fund the ENHANCE 9-1-1 Act of 2004. The continued success and sustainability of our 9-1-1 system will greatly benefit from such action.

The IP-Enabled Voice Communications and Safety Act of 2005 requires each entity with ownership or control of a 9-1-1 infrastructure, known commonly as 9-1-1 system service providers, to provide requesting IP-enabled service providers access to the equipment, databases, network, and other necessary capabilities on a non-discriminatory basis. The bill also provides immunity from liability to the same extent as provided to local telephone exchange companies for providers of IP-enabled 9-1-1 service.

Additionally, the bill provides liability protection to the users of such services, as well as liability protection for PSAPs to the same extent they currently have for non-IP-enabled service.

On the issue of liability parity, the bill mirrors the language granted to wireless carriers, users of wireless service, and PSAPs that is contained in the Wireless Communications Act of 1999.

It is important to note that the Wireless Act of 1999 was passed before the widespread deployment of Phase I and II, an action that was deemed critical and applauded by both the 9-1-1 community and industry.

NENA believes it is also important to have liability parity for IP-enabled services enacted into the law before the quickly approaching 120-day VoIP E-911 deadline of November 28th.

Past experience in the deployment of E-911 has shown that a lack of legal clarity on important topics, such as liability parity and nondiscriminatory access to E-911 capability, can lead to a delay in the provision of E-911 service.

Therefore, NENA wholeheartedly supports the provisions, as we believe they are essential to ensure the timely deployment of E-911 for IP-enabled services.

Finally, NENA believes that planning now for the future 9-1-1 system is of paramount importance, and fully supports Section 3 of the IP-Enabled Voice Communications Act. We hope the telecom reform will be done this year, and include the important 9-1-1 provision identified in my testimony.

However, past experience has shown this type of reform can become bogged down in negotiations, and take longer than expected to complete. Should this happen, NENA believes it is very important that the 9-1-1 provisions discussed here be included in the stand-alone bill, such as a slightly modified version of the IP-Enabled Voice Communication Act, and considered by Congress before the session ends this year.

To conclude, NENA fully supports each of the provisions in this act as they pertain to VoIP 9-1-1, but asks Congress to broaden the

scope of the bill to include any service that provides communications capability in which a customer can reasonably expect to reach a PSAP when dialing 9-1-1. Thank you.

[The prepared statement of Mr. Jones follows:]

PREPARED STATEMENT OF DAVID F. JONES, PRESIDENT, NATIONAL EMERGENCY  
NUMBER ASSOCIATION (NENA)

Mr. Chairman and Members of the Committee, thank you very much for providing me the opportunity to appear before you today. My name is David Jones and I'm a nationally certified Emergency Number Professional (ENP), serving Spartanburg County, South Carolina as the Director of Emergency Services.

I'm also the President of the National Emergency Number Association (NENA), an organization consisting of more than 7,000 members in 46 chapters across the U.S. and Canada representing public officials, fire, EMS, law enforcement, equipment and service providing vendors of the 9-1-1 community. Additionally, I serve as the Vice Chair of the Federal Communications Commission's (FCC) Intergovernmental Advisory Committee (IAC), representing the interests of local government and public safety. I am also a longtime member of the Association for Public Safety Communications Officials (APCO) International.

Today I appear before the Committee on behalf of NENA, but also standing on the shoulders of the thousands of 9-1-1 professionals in America who work tirelessly to help those people who dial 9-1-1 in times of need. Admirable colleagues, like those on my team in Spartanburg, who continue to find ways to get the job done regardless of the technical obstacles or challenges of modern communications in our Public Safety Answering Point (PSAP). National leadership, like that of Senators Burns and Clinton, as well as Representatives Shimkus and Eshoo, co-chairs of the Congressional E-911 Caucus. I thank all of you for your tireless work to make our 9-1-1 system work like it should.

*Opening Comments*

Mr. Chairman, I applaud your leadership, as well as that of your colleagues and staff in bringing the 9-1-1 community to the table for these vital discussions about the future of public safety communications. The 9-1-1 Community has known no greater friend than Senator Conrad Burns. I sincerely thank you for the continued leadership you have provided on 9-1-1 issues over the years. NENA represents the national 9-1-1 community as the "Voice of 9-1-1", but if there is truly one voice of 9-1-1 in the halls of Congress, surely it is Senator Conrad Burns.

In the late 1990's, Senator Burns led an effort to recognize '9-1-1' as the universal number for emergency calling and to ensure the deployment of wireless E-911. Enacted by Congress, "The Wireless Communications and Public Safety Act of 1999" is our foundation for greater 9-1-1 policy goals.

Building off of the success of that legislation, Senator Burns helped found the E-911 Caucus, along with fellow co-chairs Senator Hillary Clinton, Congressman John Shimkus and Congresswoman Anna Eshoo, a group whose leadership on 9-1-1 issues has been unparalleled. Most recently Senator Burns, along with the other E-911 Caucus co-chairs, successfully led the charge to pass the ENHANCE 911 Act of 2004. Signed into law by President Bush on December 23, 2004, the ENHANCE 911 Act authorized the creation of a national 9-1-1 Implementation and Coordination (ICO) office and up to \$250 million per year for grants to upgrade enhanced emergency communications services. This was monumental legislation for 9-1-1 and I thank Senator Burns and the E-911 Caucus co-chairs for their efforts this year to secure an appropriation to fund the provisions in that law.

Thank you Senator Burns, and fellow E-911 Caucus co-chairs, for your continued leadership and support of 9-1-1.

I am here today to testify in support of the IP-Enabled Voice Communications and Public Safety Act of 2005. We applaud the recent actions taken by the FCC in adopting its Order on E-911 requirements for IP-enabled service providers, but NENA believes Congressional action in this area is needed as well. We appreciate the need to enact communications legislation that encourages innovation and the widespread deployment of broadband service which we believe will not only provide benefits to the general public, but will also have an enormous positive impact on public safety communications. As legislation to update our communications laws is drafted, NENA encourages Congress to include provisions that address critical 9-1-1 and public safety concerns focusing on today's needs and taking into consideration the progression towards the next generation 9-1-1 and emergency services sys-

tem. The IP-Enabled Voice Communications and Public Safety Act provides a foundation for such action.

In my statement today, I will refer to our vision, our needs and respectfully make recommendations to improve the legislation before the Committee, emphasizing fundamental points for NENA, 9-1-1 and IP-enabled services.

*The Changing Landscape of 9-1-1*

Since its inception, the 9-1-1 system has been THE first responder in times of individual and mass emergencies. Every day, Americans call 9-1-1 at the time of their greatest need. Today we are averaging over 200 million 9-1-1 calls per year. Ninety-six percent of the Nation's geography is covered by at least some basic 9-1-1; ninety-nine percent of the American public has access to 9-1-1. For the caller and the public, the successful completion of a 9-1-1 call can mean the difference between danger and security, injury and recovery, or life and death. The ability to call for help in times of an emergency is not 'voluntary'—it's mandatory.

Yet the advancement of communications and network technology is quickly blurring the lines of familiarity in the world of emergency communications and 9-1-1. No longer can we discuss 9-1-1 solely in the context of the public switch telephone network (PSTN). No longer can we discuss the routing of 9-1-1 calls as being dependent on the use of the existing analog, circuit switched telephone network. In fact, just last week NENA introduced for public comment its first ever VoIP 9-1-1 standard. NENA started with "One nation—One number", and now we add, "any device, from anywhere, at anytime." As 9-1-1 and emergency communications continue to advance, it is critical that communications regulation evolves in a parallel fashion and is flexible enough to accommodate future advancements that have yet to be considered.

Truly the future is happening now. Already, over fifty million Americans are using some form of broadband Internet access offering exciting new communications possibilities. Voice over IP is coming. In many places it's already here. IP-enabled services are dynamic, competitive, innovative and most of all, an opportunity to improve all of our communications systems. Better, faster, cheaper technology and communications service is vital to American consumers and business, but it may prove even more vital for our public safety and security.

With our excitement for IP-enabled services comes some trepidation. Today, IP is where we were with wireless ten years ago; an industry and technology advancing at a rapid rate with unlimited promise facing the challenge, and regulatory requirement, to provide E-911 to all customers. Even today, after more than ten years of discussion and debate, wireless E-911 is available in less than fifty percent of the PSAPs in the United States. We must not allow history to repeat itself with VoIP. It is critical that all parties, public and private, come together in the spirit of cooperation, collaboration and good faith, to plan a national deployment for VoIP. To make this happen will require a good deal of leadership at all levels of government, starting with the United States Congress.

*National Plan for 9-1-1 and IP-Enabled Communications Services*

Last June I testified before this Committee supporting the need for targeted Federal regulation for E-911 and VoIP, suggesting that this would most appropriately be handled by the FCC. Since then the Commission has acted and we applaud their leadership. Now we must work together at all levels of government and with industry to plan for a nationally standardized and coordinated approach to the deployment of VoIP E-911.

To be effective and meaningful, E-911 must be included in a wide range of VoIP and IP-enabled products and services. This includes both voice and data, whether serving a fixed location, or nomadic locations that may change from day to day, or operating wirelessly in a much greater area over Wi-Fi or Wi-Max networks for example. Each of these service types offers different challenges.

The technical development of 9-1-1 must be convergent with its policy direction. Today's regulations for 9-1-1 are fragmented, consisting of a jurisdictional patchwork of rules for various types of communications, providers and stakeholders. Wireline issues are regulated by states. Wireless issues are regulated by the FCC. 9-1-1 public safety answering points are often local. Consumer expectations are national. VoIP can be international.

9-1-1 needs to be treated as an integrated public safety service, part of a larger whole for our safety and national security. This concept has been recently tested with the deployment of wireless E-911. Through this process, we've learned some important lessons in implementing new technologies with E-911 systems: (1) E-911 must be treated as an inter-dependent overall system; (2) coordination is very im-

portant; (3) Federal leadership is necessary for national implementation and resolution of issues.

In our experience, voluntary consensus development, within reasonable timeframes, of requirements and rules for technology and service integration provides the best results. To enable a coordinated national deployment of VoIP it is very important that Congress and the FCC provide directive influence to encourage the development of national standards and require the early adoption of recognized national standards when they become available. Federal rules and regulations should provide reasonable guidelines to enable a path forward but should allow the appropriate standards processes to determine the specific methodologies to meet such guidelines. In doing so, the FCC and Congress will contribute needed leadership toward the facilitation of a nationally-coordinated effort in delivering IP-enabled E-911 service.

NENA strongly encourages both the FCC and Congress to work closely with the joint NHTSA/NTIA national 9-1-1 Implementation and Coordination Office once established. We believe the ICO should manage all 9-1-1 specific functions at the Federal level. The ICO is uniquely positioned to coordinate and provide guidance to multiple ongoing 9-1-1 efforts at the national, state and local level. This will ensure that individual efforts are not occurring in a void and are not duplicated or at cross purposes.

#### *Regulatory Authority*

Too often in the past we have tried to draft new laws and regulations for E-911 requirements for innovative technologies as they are introduced, including wireless and VoIP. Recognizing this issue, earlier this month NENA joined APCO and several other groups in a letter asking Congress to include a clear statement in any telecom reform language on the jurisdiction of the FCC to establish rules requiring providers of interconnected voice telecommunications services to provide their customers with E-911 capabilities.

We certainly agree that this is an important topic to consider given today's 9-1-1 system, but NENA asks Congress to go a step further. NENA believes that regardless of the service classification—telecommunications, information or otherwise—if a service provides a communications capability in which a customer can reasonably expect to be able to reach a PSAP when dialing 9-1-1, whether over the PSTN, an IP network or some other yet to be identified path, the FCC should have the clear regulatory authority to address the 9-1-1 aspects of those services.

This is not to suggest that the FCC should enact regulations to cover all potential service types, but the FCC should have sufficient authority so that if regulation is deemed necessary, Congress does not have to continually go back and update laws based on every new communications technology or service needing 9-1-1 access. Therefore we support the provision in the IP-Enabled Voice Communications and Public Safety Act that authorizes the FCC to regulate in the area of IP-enabled voice communications, but we ask Congress to extend that authority to any service that provides a communications capability in which a customer can reasonably expect to be able to reach a PSAP when dialing 9-1-1.

#### *State Authority*

Funding for IP-enabled E-911 services and the development of the next generation 9-1-1 system is perhaps the most important issue for 9-1-1 today. The public safety community is extremely concerned by the immediate and growing impact of VoIP on loss of conventional service fees and surcharge revenue, and the uncertainty of any requirement to replace that critical operational funding stream in the VoIP environment. We support the need for national direction from the FCC, just as we support cabinet-level attention to 9-1-1 issues through the national 9-1-1 Program Office.

Thus, in addition to establishing clear FCC regulatory authority, it is essential that Congress do nothing to compromise state and local authority to impose and collect 9-1-1 fees on all services where a customer has a reasonable expectation of being connected to 9-1-1, again regardless of the type of technology. In addition to funding, there will be other state and local issues as well that are best addressed at that level, but it is clear that as technology evolves, the classification of service or technology type should not have an effect on the ability of state and local government to address those issues.

Congress should also consider ways to facilitate state and local funding of critical 9-1-1 emergency communications systems. Last year Congress effectively acted in this regard by passing the ENHANCE 911 Act of 2004 and authorizing up to \$250 million per year in grants for 9-1-1 system upgrades. However, to date no monies have been appropriated to fund such grants. NENA implores Congress to fund the

ENHANCE 911 Act. The continued success and sustainability of our 9-1-1 system will greatly benefit from such action.

While ensuring that states have the authority to impose fees on VoIP services is important, NENA also acknowledges that a shift in the 9-1-1 funding model may be needed as we move to the next generation IP-enabled E-911 network. This subject is a main topic of the NENA Next Generation NG E-911 Program, a year long effort that is also addressing key next generation technical and operational 9-1-1 issues. All Program participants agree that until a clear solution is identified for the immediate and long term 9-1-1 funding problem, attention to the need for technological change and evolution of the E-911 system itself is difficult to achieve.

It is important to add here that NENA continues to emphasize the necessity of state coordination in the deployment of E-911 services, regardless of service type. The importance of state coordination for wireless E-911 has been recognized by Congress through the Wireless Communications and Public Safety Act of 1999 and the ENHANCE 911 Act of 2004. This has proven to be a valid position as states with a coordination entity are generally further along in the Phase II wireless E-911 deployment process. While recognizing that the delivery of 9-1-1 service is managed at the local level and that local PSAPs have an important role to play, Congress and the FCC should encourage coordination at the state level for the deployment of IP-enabled E-911 services.

#### *Non-Discriminatory Access to Capabilities and Liability Parity*

The IP-enabled Voice Communications and Public Safety Act of 2005 requires each entity with ownership or control of 9-1-1 infrastructure, known commonly as E-911 system service providers (SSPs), to provide requesting IP-enabled service providers access to the equipment, databases, network and other necessary capabilities on a nondiscriminatory basis. The bill also provides immunity from liability to the same extent as provided to local telephone exchange companies for providers of IP-enabled 9-1-1 service. Additionally, the bill provides liability protection to users of such services as well as liability protection for PSAPs to the same extent they currently have for non-IP enabled services.

On the issue of liability parity, the bill mirrors the language granted to wireless carriers, users of wireless service and PSAPs answering 9-1-1 calls that is contained in the Wireless Communications and Public Safety Act of 1999. It is important to note that the Wireless Act of 1999 was passed before the widespread deployment of Phase I and Phase II wireless, an action that was deemed critical and applauded by both the 9-1-1 community and industry. NENA believes it is also important to have liability parity for IP-enabled services enacted into law before the quickly approaching 120-day VoIP E-911 deadline of November 28, 2005.

Past experience in the deployment of E-911 has shown that a lack of legal clarity on important topics, such as liability parity and non-discriminatory access to E-911 capabilities, has led to a delay in the provisioning of E-911 service. Therefore, NENA wholeheartedly supports both of these provisions as we believe they are essential to ensure the timely deployment of E-911 for IP-enabled services.

#### *Next Generation E-911*

As noted earlier, NENA believes that planning now for the future 9-1-1 system is of paramount importance and is why we have launched the NG E-911 Program. NENA plans to release a comprehensive report on the findings and recommendations of that initiative in early 2006 and will communicate the results with Congress. Therefore, NENA fully supports section three of the IP-Enabled Voice Communications and Public Safety Act requiring the national 9-1-1 Implementation and Coordination Office to provide a plan for the migration from today's 9-1-1 system towards an IP-Enabled emergency network.

#### *Timeframe for Action*

We hope that telecom reform will be done this year and will include the important 9-1-1 provisions identified here. However, past experience has shown that this type of reform can become bogged down in negotiations and take longer than expected to complete. Should this happen, NENA believes it is very important that the 9-1-1 provisions discussed here be included in a stand-alone bill, such as a slightly modified version of the IP-Enabled Voice Communications and Public Safety Act of 2005, and considered by Congress before the session ends this year.

#### *Conclusion*

Our Nation's 9-1-1 system is a homeland security asset. Everyday 9-1-1 callers are the eyes and ears of our defense. It is also a system that citizens depend on daily in times of need. Modern communications capabilities offer an opportunity to improve the system as we know it, but they also offer challenges. The 9-1-1 community

must embrace and react to change quickly, to better serve the American public, industry, and the mobile consumer in all emergencies. We need help from Congress in doing so.

NENA fully supports each of the provisions in the IP-Enabled Voice Communications and Public Safety Act as they pertain to VoIP E-911 but asks Congress to broaden the scope of the bill to include any service that provides a communications capability in which a customer can reasonably expect to be able to reach a PSAP when dialing 9-1-1.

With some modifications, the legislation will make great contributions toward public safety and security. On behalf of thousands of NENA members, the 9-1-1 professionals and all involved in supporting their work, I thank you for your support and the opportunity to be here today.

Senator BURNS. Thank you. I forgot to announce—if you could keep your statements within five minutes—and your full statement will be made part of the record—it would certainly help us a little bit. But you're just such a nice fellow, and you had nice words for me, I decided to give you extra minutes.

Jeffrey Citron, Vonage. He is the Co-founder, Chairman, and CEO of Vonage. Mr. Citron, thank you very much for coming today.

**STATEMENT OF JEFFREY CITRON, CHAIRMAN AND CEO,  
VONAGE**

Mr. CITRON. Thank you. Good morning, Senator Burns, Members of the Committee. Thank you very much for the opportunity to appear here today. I'm Jeff Citron, CEO of Vonage Holdings Corporation. We are the leading provider of consumer and small business Voice Over IP or VoIP Services in the United States, which nearly one million people are using our service today. Vonage is at the forefront of this new emerging market, which has approximately 2.3 million users, and as such, we are quickly becoming a leader in E-911.

As we speak, Vonage is building the first ever nationwide E-911 network designed for an all-IP environment. This new network will link hundreds of locally controlled selective routers, and thousands of public safety answering points across the country, allowing us to provide comprehensive service. This is a very serious undertaking. At Vonage, we are embracing this challenge as a critical partner in the Nation's E-911 system, as we blend voice and data into exciting new offerings.

Unfortunately, we are also confronting long standing technical, operational, and competitive barriers, as we try to connect to a system that is nearly obsolete. Vonage's leading challenge is deploying enhanced 9-1-1 Internet phone service for all our users as quickly as possible. There is no higher priority within our organization today. Vonage demonstrated commitment in this area by becoming the first mobile VoIP provider to adopt a basic 9-1-1 solution. We have continued this commitment by offering the first nomadic Voice Over IP E-911 solution in this country.

Mr. Chairman, I'm here today to make three points. First, Vonage is running very hard and fast to build the best E-911 system that is possible. Second, as an industry, Internet phone service providers face a number of challenges trying to deploy E-911. And third, I would like to highlight what assistance Congress can lend to ensure the industry deploys a functioning enhanced 9-1-1 service for all of our customers and their communities.

To date, Vonage has been working diligently with many companies, along with public safety officials, to architect a solution that works well for the entire industry, as well as our customers. Beginning at the grass roots levels with public safety officials, Vonage is already offering enhanced 9-1-1 service in New York City and Rhode Island, and in New York City alone, we have fielded thousands of successful E-911 calls.

Despite this great progress thus far, significant challenges do remain. For instance, the geographically based numbering system of the original 9-1-1 network is meaningless to Internet-based communications. The old 9-1-1 system required that all calls be local. If a citizen in Montana tried to place a 9-1-1 call with a Montana phone in Washington D.C., the old 9-1-1 system would have rejected this call.

In order to accommodate that mobility, wireless carriers patched up the old network to allow for out of area 9-1-1 calls to go through, and this is the exact same solution we are trying to use for Internet phone calling.

Furthermore, VoIP providers do not have access to all the elements necessary to create a comprehensive 9-1-1 solution. Such elements include access to selective routers in the Master Street Address Guide, also known as MSAG, as well as "Pseudo-ANIs," which we need to get calls from non-local phone numbers.

And because there are no standards for implementation, let alone access to the elements, novel 9-1-1 architectures make it impossible to implement a uniform nationwide solution. Instead, service providers like Vonage are forced to deploy a patchwork of local solutions to meet the various needs of PSAPs and network owners. Implementation of the FCC's 9-1-1 obligation within 120 days is extremely challenging.

We believe that a standardized approach giving VoIP providers access to these elements would accelerate our deployment, and create a uniform solution for the entire country.

Finally, Congressional action and authority can help speed Voice Over IP 9-1-1 deployment in several key areas. Currently Voice Over IP providers do not have the same liability parity with wireline or wireless operators. Vonage is not protected by the existing law in the same way that other carriers are. Therefore, every time we send a call to the 9-1-1 network, we are putting our business at risk should there be an unforeseeable network failure or mishap.

Additionally, in order to comply with obligations mandated by the FCC 9-1-1 order, Congress may need to grant VoIP providers access to the network elements necessary to complete the enhanced 9-1-1 call. The 9-1-1 network is a public trust, and should not be used as a competitive lever or barrier.

In conclusion, Mr. Chairman, Vonage strongly believes it's good policy for our customers and for the country for anyone using Voice Over IP to be able to get help when they need it by dialing 9-1-1. We also commend the FCC for the decisive action mandating a Voice Over IP E-911 rollout. We now need Congress to act to ensure VoIP providers have the tools that are necessary to meet that mandate.

We enthusiastically support the IP-Enabled Voice Communications and Public Safety Act of 2005, as a thoughtful, balanced piece of legislation that would ensure Voice Over providers can get access to the necessary technical elements, legal protections, flexibility, to create the best solution for our customers.

I look forward to answering any questions that you might have, and thank you for the opportunity to speak here today.

[The prepared statement of Mr. Citron follows:]

PREPARED STATEMENT OF JEFFREY CITRON CO-FOUNDER, CHAIRMAN, AND CEO,  
VONAGE

Good morning Senator Burns and Members of the Committee. Thank you for the opportunity to appear here today. I'm Jeffrey Citron, CEO of Vonage Holdings Corporation. We are the leading provider of consumer and small business Voice over Internet Protocol (VoIP) services in the United States, with nearly one million subscriber lines. Vonage is at the forefront of this new emerging market, which has approximately 2.3 million users, and as such we are also quickly becoming a leader in E-911, as we move to deploy the first ever nationwide 9-1-1 service. This will be the first 9-1-1 service designed for an IP environment, across hundreds of locally controlled Selective Routers and thousands of Public Safety Answering Points. This is a serious undertaking. And we at Vonage are embracing this challenge not just for our customers but as a partner in the Nation's E-911 system. As we move forward in this exciting time in 9-1-1, VoIP is helping turn the notion of traditional 9-1-1 networking on its head. We are recognizing new opportunities to blend voice and data into exciting new offerings, but we are also confronting long-standing technical, operational and competitive barriers, as we try to connect to a system that all too often is obsolete and sheltered by old-fashioned telecom thinking.

To that end, Vonage is leading the charge to deploy Enhanced 911 Internet phone services for all of our users as quickly as possible. There is no higher priority within Vonage today. Vonage demonstrated commitment in this area by becoming the first mobile VoIP provider to adopt a basic 9-1-1 solution, and we will further this commitment by offering the first nomadic VoIP E-911 solution in this country.

Mr. Chairman, I am here today to make three points. First, Vonage is running hard and fast to build the best 9-1-1 system possible. Second, as an industry, Internet phone providers face a number of challenges in trying to deploy Enhanced 911. These challenges are similar to those faced by wireless companies when they began offering E-911 services over ten years ago. Finally, I would like to highlight what assistance Congress can lend to ensure the industry deploys a functioning Enhanced 911 service for our customers and their communities.

To date, Vonage has been working diligently with the technology companies, Bells, CLECs and public safety officials to architect a solution that works well for the industry and our customers. Working at the grassroots level with public safety officials, Vonage is already offering Enhanced 911 service in New York City and Rhode Island. In New York City alone, we have already fielded thousands of successful E-911 calls. We recently signed a contract with SBC to gain access to the 9-1-1 elements we need throughout their 13-state territory to begin offering E-911 in SBC's footprint. Vonage is also working with Level 3 on a nationwide basis to use their existing network to route calls to the E-911 system. With our technology partners TCS and Intrado, Vonage's 9-1-1 solution enables calls to go to the right 9-1-1 answering center even when our users change physical location. Perhaps most importantly, last month Vonage initiated an outreach program to begin a dialogue with the public safety community regarding our plans to implement a novel E-911 solution within a very short timeframe.

Despite this great progress thus far, significant challenges remain. For instance, the geographically-based numbering system of the original 9-1-1 network is meaningless to Internet-based communications. The old 9-1-1 system required that all calls be "local." If a citizen from Montana tried to place a wireless 9-1-1 with her Montana phone in Washington DC, the old 9-1-1 system would have rejected that call. In order to accommodate that mobility, we patched the network to allow for "dummy numbers" to get those out of area 9-1-1 calls through. This is the exact same solution we're using for Internet phone calls, but in order to make it work for us, we need access to the same technical elements that wireless companies use.

Furthermore, VoIP providers do not have access to all the elements necessary to create a comprehensive 9-1-1 solution. Such elements include access to selective routers and the Master Street Address Guide (MSAG), as well as "Pseudo-ANI"



(dummy numbers) which we need to get calls from non-local numbers into the 9-1-1 system. And because there are no standards for implementation, let alone access to elements, novel 9-1-1 architectures make it impossible to implement a uniform nationwide solution. Instead, service providers like Vonage are forced to deploy a patchwork of local solutions to meet the various needs of PSAPs and network owners, making the implementation of the FCC's 9-1-1 obligation within 120 days difficult if not impossible. We believe that a standardized approach giving VoIP providers access to these elements would accelerate our deployment and create a uniform solution for the entire country.

Finally, Congressional action and authority can help speed VoIP 9-1-1 deployment in several key areas. Currently, VoIP providers do not have liability parity with wireline or wireless operators. Vonage is not protected by existing laws in the same way other carriers are—therefore every time we send a call into the 9-1-1 network we are putting our business at risk should there be an unforeseeable network failure or other mishap. Right now, the burden is singularly the VoIP provider's to bear should something go wrong.

Additionally, in order to comply with the obligations mandated by the FCC's 9-1-1 Order, Congress may need to grant VoIP providers access to all the network elements necessary to complete an Enhanced 911 call. The 9-1-1 network is a public trust, and should not be used as a competitive lever.

In conclusion Mr. Chairman, Vonage strongly believes it is good policy for our customers and the country for anyone using a VoIP application to be able to get help when they need it by dialing 9-1-1.

We also commend the FCC for their decisive action in mandating an aggressive timetable for VoIP E-911 rollout. We now need Congress to act to ensure VoIP providers have the tools necessary to meet that mandate. We enthusiastically support the IP-Enabled Voice Communications and Public Safety Act of 2005 as a thoughtful, balanced piece of legislation that would ensure VoIP providers can get access to the necessary technology elements, legal protections and flexibility to create the best solution for our customers.

I look forward to answering any questions you may have. Thank you.

SENATOR BURNS. Thank you very much. I've got a couple questions coming off that statement. Next we have Ms. Wanda McCarley, who is with APCO. Thank you for coming today.

**STATEMENT OF WANDA MCCARLEY, PRESIDENT-ELECT OF THE ASSOCIATION OF PUBLIC-SAFETY COMMUNICATIONS OFFICIALS-INTERNATIONAL (APCO)**

Ms. MCCARLEY. Thank you, Senator Burns, for the opportunity to appear at this hearing today to discuss the critical issue of Voice Over Internet Protocol services, and their impact on the provision of 9-1-1 service by our Nation's public safety answering points.

I am the President-Elect of the Association of Public Safety Communications Officials International, known as APCO, a professional association of over 16,000 individuals who manage and operate public safety communications systems for state and local government agencies across our Nation. APCO has long been an active participant in FCC proceedings and Congressional actions concerning public safety communications, addressing both radio spectrum issues, and Enhanced 9-1-1 issues, that impact the operational requirements of PSAPs, and the ability of emergency personnel to respond quickly and accurately to 9-1-1 calls.

I am also the operations and training manager for the Tarrant County 9-1-1 District in Fort Worth, where I work day to day on the challenges facing PSAPs.

APCO has long been deeply concerned with the ability of PSAPs to respond effectively to 9-1-1 calls made through Voice Over IP providers. Early on, there were problems with Voice Over IP calls being routed to the wrong PSAP, in some areas to PSAPs in distant states. Some Voice Over IP providers adopted a strategy of routing

9-1-1 calls to PSAPs' ten-digit emergency or administrative numbers. However, these administrative numbers are not usually answered by trained 9-1-1 call takers. Indeed calls to these administrative numbers often go to voice mail systems with a taped message informing callers to hang up and dial 9-1-1 if this is an emergency.

Unfortunately, that inability to get through to a 9-1-1 call taker from a Voice Over IP phone has led to dangerous delays in dispatching emergency personnel, and as described in recent testimony before the FCC, tragic, and perhaps avoidable deaths in certain instances.

In May, the FCC addressed this problem with firm but fair rules to ensure that Voice Over IP 9-1-1 calls will be delivered to the correct PSAPs, with the location information necessary for rapid emergency responses. APCO applauds FCC Chairman Martin and his colleagues for this critical and courageous decision. Absent FCC action, we would still be searching for solutions to protect the safety of a growing number of Voice Over IP subscribers, most of whom choose their telephone service without realizing the potential difficulties of calling 9-1-1, and receiving emergency assistance.

Of course, still more needs to be done. The definition of Voice Over IP services covered by the new rules may need to be refined, and we need to find ways for call location information to be provided automatically without caller intervention. We also need to find ways to locate Voice Over IP callers who interconnect to the Internet from different physical locations. The FCC is currently examining these issues, and we urge the Commission, Voice Over IP providers, and the public safety community to work together to find solutions as quickly as possible. We commend those Voice Over IP providers who are working cooperatively toward these goals.

APCO also believes that Congress and the FCC should look into the future, and adopt a rule to ensure that yet to be developed telephone technologies will be subject to appropriate 9-1-1 requirements. Unfortunately, Voice Over IP took off in the marketplace before necessary 9-1-1 protections could be adopted. That left the public at risk, even while they were enjoying the fruits of the new technology. APCO believes that all voice communications that interconnect with the public switched telephone network, and use standard telephone numbering, must provide full E-911 capability.

We know some have urged that PSAPs upgrade their systems to IP technology. While APCO strongly supports technological improvement to PSAPs, we urge extreme caution. First, under no circumstances should the current state of PSAP technology serve as an excuse for non-compliance by providers of Voice Over IP and other telephone services. These services should be required to deliver 9-1-1 calls to the existing PSAP networks.

Secondly, calls for PSAP system upgrades overlook the fundamental financial constraints facing PSAPs. Most operate on limited budgets, with funding coming from either subscriber fees, or local government appropriations. Either way, most PSAPs can not afford the enormous cost of switching to IP-based technologies. Thus any discussion of upgrading PSAP capability must be accompanied by discussions for full funding for these upgrades.

Overall, funding for PSAPs is another critical issue that we believe Congress needs to help us address. It is essential that there continues to be a reliable source of funding for PSAPs even as we move toward new forms of telephone communications. One way or another, all users of the telephone network who might someday need to call 9-1-1 must contribute towards the cost of providing 9-1-1 services.

APCO has created a task force to examine the future funding challenges for PSAPs, and has prepared a white paper on sustainable funding models for emergency telecommunications across the country, which we would be happy to make available.

Senator Burns, I want to sincerely thank you again for the opportunity to appear at this important field hearing. APCO looks forward to working with you and other Members of the Committee, and other members of the public safety community, in addressing this and other critical public safety issues.

[The prepared statement of Ms. McCarley follows:]

PREPARED STATEMENT OF WANDA MCCARLEY, PRESIDENT-ELECT OF THE ASSOCIATION OF PUBLIC-SAFETY COMMUNICATIONS OFFICIALS-INTERNATIONAL (APCO)

Thank you Senator Burns for the opportunity to appear at this hearing today to discuss the critical issue of Voice over Internet Protocol (VoIP) services and the impact of those services on the provision of 9-1-1 services by our Nation's public safety answering points (PSAPs).

I am here today in my capacity as the president-elect of the Association of Public-Safety Communications Officials-International, known as APCO, a professional association of over 16,000 individuals who manage and operate public safety communications systems for state and local government agencies across the Nation. APCO has long been an active participant in FCC proceedings and congressional actions concerning public safety communications, addressing both radio spectrum issues and Enhanced 9-1-1 ("E-911") matters that impact the operational requirements of PSAPs and the ability of emergency personnel to respond quickly and accurately to 9-1-1 calls.

I am also here today as the Operations and Training Manager for the Tarrant County, Texas 9-1-1 District where I work day-to-day on the challenges facing PSAPs.

APCO has long been deeply concerned with the ability of PSAPs to respond effectively to 9-1-1 calls made through VoIP providers. Early on, there were problems with VoIP calls being routed to the wrong PSAP, in some cases to PSAPs in distant states. Some VoIP providers adopted a strategy of routing "9-1-1" calls to PSAPs' ten-digit administrative numbers. In many cases, however, those administrative numbers are not answered by trained 9-1-1 call-takers. Indeed, calls to those administrative numbers often go into voice-mail, with a taped message informing callers to "hang up and dial 9-1-1 if this is an emergency." Unfortunately, that inability to get through to a 9-1-1 call-taker from a VoIP phone has led to dangerous delays in dispatching emergency personnel and, as was described in recent testimony before the FCC, tragic and perhaps avoidable deaths in several instances.

In May, the FCC addressed this problem with firm, but fair rules to ensure that VoIP 9-1-1 calls will be delivered to the correct PSAPs with the location information necessary for rapid emergency responses. APCO applauds FCC Chairman Martin and his colleagues for this critical decision. Absent FCC action, we would still be searching for solutions to protect the safety of the growing number of VoIP subscribers, most of whom choose their telephone service without realizing the potential difficulties of calling 9-1-1 and receiving emergency assistance.

Of course, still more needs to be done. The definition of VoIP services covered by the new rules need to be refined, and we need to find ways for call-location information to be provided automatically, without caller intervention. We also need to find ways to locate VoIP callers who interconnect to the Internet from different physical locations. The FCC is currently examining these issues, and we urge the Commission, VoIP providers and the public safety community to work together to find solu-

tions as quickly as possible. We commend those VoIP providers who have elected to work cooperatively with public safety towards this goal.

APCO also believes that Congress and the FCC should look into the future, and adopt a rule to ensure that yet-to-be developed telephone technologies will be subject to appropriate 9-1-1 requirements. Unfortunately, VoIP took off in the marketplace before necessary 9-1-1 protections could be adopted by the FCC. That left the public at risk, even while they were enjoying the fruits of the new technology. APCO believes that all voice communications services that interconnect with the public-switched telephone and use standard telephone numbering must provide full E-911 capability.

We know that some have urged that PSAPs upgrade their systems to IP technology. While APCO strongly supports technological improvements for PSAPs, we urge extreme caution. First, under no circumstances should the current state of PSAP technology serve as an excuse for non-compliance by providers of VoIP or other "new" telephone services. Those services should be required to deliver 9-1-1 calls to the existing PSAP networks. Second, calls for PSAP system upgrades overlook the fundamental financial constraints facing PSAPs. Most operate on limited budgets with funding coming either from subscriber fees or local government appropriations. Either way, most PSAPs (many who have just completed upgrades to accept wireless E-911 calls) cannot afford the enormous cost of switching to IP-based technologies. Thus, any discussion of upgrading PSAP capability must be accompanied by discussions of full funding for those upgrades.

Overall, funding for PSAPs is another critical issue that we believe Congress needs to help address. It is essential that there continues to be a reliable source of funding for PSAPs even as we move towards new forms of telephone communication. One way or another, all users of the telephone network who might someday need to call 9-1-1 must contribute towards the cost of providing 9-1-1 services. APCO has created a task force to examine the future funding challenges for PSAPs, and has prepared a white paper on sustainable funding models for emergency telecommunications across the country. I would be happy to make copies of this white paper available to the Committee.

Senator Burns, I want to thank you again for this opportunity to appear at this important field hearing. APCO looks forward to working with you and other Members of the Committee in addressing this and other critical public safety issues.

Senator BURNS. Thank you for your testimony. Mr. Greg Rohde, who is Executive Director of the E-911 Institute. Thank you for coming.

#### **STATEMENT OF GREG ROHDE, EXECUTIVE DIRECTOR, E-911 INSTITUTE**

Mr. ROHDE. Thank you for inviting me here to testify. I really appreciate the invitation to testify here at this field hearing. It's very fitting that this hearing is being held on the first day of National Preparedness Month. In my judgment, access to E-911 services is a fundamental component of community preparedness. For our country to receive a sufficient level of nationwide preparedness, we're going to need to have universal access to E-911 services.

The legislation which is the subject matter of this hearing really, as you know, parallels action by the FCC earlier this year in June that requires VoIP, providers of VoIP services to provide access to E-911 capabilities to their subscribers.

But you also know it goes further. In particular, the legislation addresses two areas that the FCC asserted it did not have authority to address. One area is the area of liability protection; and the second is the area of requiring access to emergency services infrastructure, such as selected routers, on the part of VoIP providers.

In my judgment, both these areas are necessary for successful implementation of E-911 over IP-enabled communications systems, and these provisions, as well as other provisions, really make your legislation necessary.

I'll restrict my comments to making just three brief points about the legislation itself. One is: I would like comment on a provision which is probably overshadowed by many of the other provisions in the Act, and that is the provision that requires the new Joint Program Office that was established in the ENHANCE 9-1-1 Act enacted last year, to provide a national migration plan for IP emergency communications systems.

While the provision might be overshadowed, it might very well be in the long run the most significant provision in your legislation, requiring the Administration to begin establishing a migration plan for citizen activated national IP-based communications system is badly needed, and the time to develop it is now.

Certainly what gets the headlines, and what gets most of the attention, are the aspects of this issue with respect to the relationship between E-911 and VoIP services are on the challenges that such relationships impose on the existing system. Those challenges need to be overcome, and is clearly a top priority.

However, that's not the whole story. The other piece of the story is we can't forget that moving to an IP-based communications system provides an enormous opportunity to get ahead of the game, and potentially provide significant new opportunities and tools for public safety and citizens to respond to emergencies.

So I really applaud the foresightfulness of the legislation, and the fact you appreciate the fact that IP communications systems can in the long term greatly enhance public safety. We cannot leave the emergency communications systems in the country in a perpetual state of playing catch-up. We have an opportunity now to get ahead of the game, and pushing the Administration to develop a plan is essential.

In addition to pushing your legislation and this provision, I would also suggest you consider ways to commit more resources to either the Joint Program Office, or to the Institute for Telecommunications Sciences, the research lab of the National Telecommunications Information Administration. Both or either of these entities and the Federal industry can work cooperatively with industry on public safety, and really develop an effective migration plan.

My second point is on the provision that requires the FCC to establish requirements and obligations for IP-enabled voice service providers to ensure that the customers have access to 9-1-1 and E-911 services. As I stated before, the FCC has already taken this action. The FCC deserves an enormous amount of credit. I think to a person, all four of the existing Commissioners are very dedicated to public safety, and work very hard to take this very important step.

However, this particular requirement is so important that it should not be left to a regulatory rule. I think that it's necessary for it to become a matter of statute. As you know, commissions can change, new players can come in. We don't want to have the circumstance of a future commission revisiting this issue. So it should be made a matter of statute.

I also suspect that the deadline set by the FCC for compliance is going to be less a finish line, and more the beginning of the end. As we learned, and as we are currently learning in the implemen-

tation of wireless E-911 services, that you simply can't impose deadlines and expect it to happen. The FCC is going to have to manage compliance, not simply assert it, and it's going to work carefully with industry, and need to maintain flexibility in imposing and enforcing the rules, but allow the industry to have a flexible way of achieving those rules.

This industry in particular is characterized by rapid change and innovation, and should allow and foresee that as an opportunity, not as a problem.

My third and final point is the issue of definitions—telecommunications versus information services. In my judgment, there we do have a circumstance of regulatory failure. The regulators are in part responsible for problems that we've had, and some of the early headlines we've seen of citizens calling 9-1-1 and VoIP not being able to connect.

The reason why is the FCC. The regulators have allowed the providers to hide under the shroud of calling themselves an information service, when in truth they are a telecommunications service. As you know, Senator, it's very clear from the letter of intent of the 1996 Telecommunications Act, there was no such thing as a distinction between voice and data service. The FCC over the past several years has pursued an agenda to create escape hatches out of the statute.

I would suggest that you consider, either as part of this legislation or some other legislation considered by the Commerce Committee, that you address this issue head on, and clarify to the Commission that any service that is sold, and functions, and looks, and acts like traditional telephone voice service is a telecommunications service, period.

With that, I'd be happy to answer any questions.

[The prepared statement of Mr. Rohde follows:]

PREPARED STATEMENT OF GREGORY L. ROHDE, EXECUTIVE DIRECTOR, E-911  
INSTITUTE

#### *Introduction*

Senator Burns, thank you very much for inviting me to testify at this field hearing today on S. 1063, the "IP-Enabled Voice Communications and Public Safety Act of 2005." It is very fitting that this hearing is being held on the first day of "National Preparedness Month." The nationwide emergency call number, 9-1-1, is the citizens' link to emergency response. In my judgment, access E-911 (enhanced 9-1-1) services is a fundamental component of community preparedness. For our country to achieve a sufficient level of nationwide preparedness, we need universal access to E-911 services. Addressing the challenges in implementing E-911 over IP-based communications systems is one of the many issues that require the attention of Congress and regulators at the Federal and state levels to advance public safety.

My name is Gregory L. Rohde and I serve as the Executive Director of the E-911 Institute. The Institute is a not-for-profit organization and, as you know, works closely with the Congressional E-911 Caucus, which you co-chair with your colleagues, Senator Hillary Clinton (D-NY), Representative John Shimkus (R-IL), and Representative Anna Eshoo (D-CA). The Institute is not an advocacy organization and my work for the organization is completely voluntary, i.e., without compensation. My testimony today reflects my personal views and I am not advocating any particular position on behalf of the E-911 Institute members.

The E-911 Institute has approximately 600 members from around the country. Our membership includes individuals from the public safety community, first responders, academics, industry professionals, and government officials at the local, state, and Federal levels. We conduct educational events for policymakers, including community forums done in conjunction with our affiliation with the Citizen Corps program in the U.S. Department of Homeland Security. Our funding comes entirely

from donations from our members and organizations which share our mission to advance E-911 through education and awareness efforts.

*General Comments on S. 1063*

As introduced, the IP-Enabled Voice Communications and Public Safety Act of 2005 would:

- Require the Federal Communications Commission (FCC) to “establish requirements or obligations on providers on IP-enabled voice service to ensure that 9-1-1 and E-911 services are available to customers of IP-enabled voice services;”
- Require IP-enabled voice providers to notify their customers if their service cannot provide 9-1-1 or E-911 service;
- Require entities which own or control the “necessary emergency services infrastructure” to provide non-discriminatory access to IP-enabled voice service providers;
- Establish liability immunity related to IP-enabled voice service that is on par with liability protections afforded to 9-1-1 service over wireless or traditional landline telephone service; and
- Require the Joint Program Office established under the ENHANCE 911 Act to develop a plan for migrating from the existing 9-1-1 system to a national IP-enabled emergency network.

This legislation parallels the recent action by the FCC in June of this year requiring interconnected VoIP (Voice over Internet Protocol) service providers to provide E-911 capabilities to their subscribers, but it also goes further. In particular, the legislation addresses two areas which the FCC asserted it lacked authority: (1) liability protection and (2) requiring access to emergency services infrastructure such as selective routers. In my judgment, both these areas are necessary to ensure a successful implementation of E-911 over IP-enabled voice service systems. This makes your legislation necessary and would complement the actions already taken by the FCC to require 9-1-1 and E-911 over IP-enabled telecommunications systems.

*National Migration Plan Requirement*

One unique provision in your legislation which merits further discussion at this hearing is the provision requiring the establishment of a national migration plan for an IP-enabled emergency communications system. While the provision to require the Joint Program Office to establish a plan to migrate to an IP-enabled emergency communications system may be overshadowed by other provisions in S. 1063, it could become one of the most significant aspects of your legislation. Until recently, E-911 issues have received little Federal attention. The work of the Congressional E-911 Caucus, including the successful passage and enactment of the ENHANCE 911 Act, has helped to elevate the discussion of E-911 issues at the Federal level. Requiring the Administration to begin establishing a migration plan for a citizen activated national IP-based emergency communications system is badly needed and the time to develop such a plan is now.

Much of the focus on E-911 issues with respect to IP-enabled communications systems is centered on the challenges that IP-enabled systems impose on the current 9-1-1 emergency call number system. Indeed, there are significant issues that must be addressed and the “near term” issues of ensuring E-911 access over the current generation of VoIP systems is a top priority. Consumers expect that any service which is sold to them as a “telephone service” will be able to connect to 9-1-1 and Federal and state regulators should not allow a voice communications service to be sold to the public without such capability.

However, the story of how E-911 relates to the IP-enabled communications system is not limited only to the challenges VoIP E-911 imposes on the existing system. As we address these immediate challenges, we cannot lose sight of the potential benefits and enhancements that IP-enabled communications systems can mean for emergency communications. Significant research and development efforts are underway which explore the next generation 9-1-1 systems that could be created on an IP-based system. Such a system, if developed and deployed effectively, could provide citizens, call centers, and first responders with greatly enhanced tools to address calls for help via 9-1-1.

I applaud your insightfulness to be forward looking and to appreciate the fact that IP-enabled communications systems can, in the long-term, greatly enhance public safety communications. Pushing the Joint Program Office to explore these capabilities and develop a national plan is the right step to take at this point in time. We do have an opportunity to get ahead of the game. Our emergency communications systems should not remain in a perpetual state of “catch up.” The proliferation of

broadband access and the emergence of new IP-enabled applications such as VoIP are creating an opportunity to build a better, more capable system that enhances public safety. Thoughtful planning, at the Federal level working in cooperation with local, state, and tribal officials is a necessary first mover towards this objective.

In addition to pressing the Joint Program Office, as provided in S. 1063, to develop a migration plan for the next generation E-911 system, I would suggest, in addition, that you consider ways to commit more Federal resources for research and development of IP-enabled emergency communications systems through appropriating funds to the Joint Program Office and/or to the Institute for Telecommunications Sciences (ITS), the research laboratory of the National Telecommunications and Information Administration (NTIA). Either ITS or the Joint Program Office can work cooperatively with public safety, industry, and academia to develop the next generation 9-1-1 system that is IP-based and provides greatly enhanced capabilities than the present system today.

#### *E-911 Access Requirements for IP-Enabled Services*

Section 2 of S. 1063 requires the FCC to establish requirements and obligations on IP-enabled voice service providers to ensure that their customers have access to 9-1-1 and E-911 services. While the FCC has already taken this action under their authority, making this a statutory requirement is very important. The current FCC displayed admirable leadership in taking this action, but it is still only a regulation that could be changed at a later point in time. A mandate to provide access to E-911 over IP-enabled voice communications systems is important enough that it should be a requirement in the statute. Going forward, the FCC's role should be to manage the implementation of this requirement and not to entertain considerations and appeals to reverse course.

I suspect that the deadline set by the FCC for compliance is going to be less a finish line and more the beginning of the end. As we have learned from the FCC's attempt to implement wireless E-911, achieving the goal is more complicated than simply setting deadlines. There are technological limitations and the ability of providers to meet the requirements changes as technology develops.

The FCC needs to manage compliance, not simply assert it. The Commission should be clear in the objectives it desires from providers, but allow the industry flexibility in meeting those objectives. The FCC needs to be a strong enforcer, but more importantly, the Commission needs to play the role of pushing providers under its jurisdiction to optimize the performance of the best available technology and not reduce their role into a "gotcha game." The IP-enabled services area is a highly innovative sector characterized by rapid change. It is important to use this opportunity for innovation to the advantage of public safety. Therefore, enforcement of FCC requirements should be flexible and always mindful of technology evolution and the advantages that innovation can provide.

As Congress considers directives to the FCC to require access to 9-1-1 and E-911 service on IP-enabled voice service providers, assume that the FCC will have to engage in some complex implementation activity. The Congress should contemplate significant oversight and require the FCC to continuously report on progress.

#### *Telecommunications vs. Information Services*

I would also encourage you to address the fundamental regulatory cause of failure with respect to the availability of VoIP service to provide access to 9-1-1 and E-911 services. The core of this problem lies in the FCC's agenda to engage in definitional hairsplitting with respect to telecommunications and information services definitions. While the statute does not distinguish between voice and data services, the FCC, nevertheless, has created this artificial distinction in order to pursue a service classification game designed to undermine the statute. In the process, the FCC has made it possible for voice communications services to be sold to the public which lack access to 9-1-1 and E-911.

VoIP service that is sold to the public as an alternative to traditional telephone service should have never been allowed to hide under the shroud of being an "information service" and avoid the obligations imposed on traditional voice service. One of those obligations is to provide access to E-911. In my judgment, the VoIP services that look, act, and function like traditional voice service should have never been allowed to be sold to the public unless 9-1-1 and E-911 was a standard feature of the service. The current FCC deserves credit for their leadership, but the previous FCC deserves an equal share of responsibility for allowing this circumstance to emerge in the first place.

This is 2005, not 1905. We live in an era of advanced telecommunications services and there is no reason why services being sold and marketed to the public would be absent the basic emergency communications feature most Americans expect



today—access to the 9-1-1 system. While I have very high praise for the leadership of Chairman Kevin Martin and his fellow Commissioners who acted with speed and clarity on this matter, I am deeply disturbed by the fact that the FCC had to act after the fact.

But, we are where we are and it would not be in the best interest of the approximately 2 million consumers with VoIP service to have their service terminated. In fact, the Commission acted wisely last week, in my judgment, in demonstrating some flexibility with respect to enforcing the June 3rd order by extending the deadline for positive affirmation from consumers that they are aware of the service limitations of their VoIP service. While the FCC rule is a good one—customers should be made aware of the service limitations of their service—the FCC did the right thing in not using the ultimate hammer by terminating service at this time. Termination of service should be done only in extreme cases of non-cooperation by providers and imposed by the Commission only with respect to actions that are in the control of the provider. We need to move forward from this point and I am confident that the Commission, with Congressional oversight, will manage compliance with their requirements reasonably.

I suggest that the Congress clarify to the Commission that IP-enabled voice services, including VoIP services, are telecommunications services and should be treated like other voice services. The clear meaning and intent of the Telecommunications Act of 1996 was to have similar services treated in similar ways. The Congress needs to rein in the Commission's efforts to find escape hatches out of the statute. The problem of VoIP service being provided without access to E-911 is a necessary outgrowth of the definitional gamesmanship environment that has been fostered by the Commission since the enactment of the Telecommunications Act of 1996.

Furthermore, it was the unwillingness of the Commission to classify VoIP as a telecommunications service that became the grounds for assertion that the Commission was unable to ensure that VoIP providers could access the selective routers and emergency communications systems they need to access to provide 9-1-1 and E-911 service. The Commission left this important step up to voluntary negotiations among industry segments. S. 1063, however, does address this specific issue of requiring access to the selective routers and emergency communications systems controlled by incumbent companies. As I alluded to earlier, this is one of the provisions of this legislation which makes the enactment of this measure necessary to ensure 9-1-1 and E-911 access over IP-enabled systems.

I would suggest that either in S. 1063 or other telecommunications legislation considered by this Committee, that you address this classification problem that is undermining key social covenants that many Americans have come to expect in modern day life—such as access to 9-1-1 and E-911 service. I am by no means suggesting that IP-enabled services be subjected to the whole range of regulatory obligations of traditional telephone service. Many of these requirements may not be necessary. The FCC has the tools under the forbearance authority contained in the statute to ensure the new, innovative services such as VoIP are not smothered in unnecessary regulations. But, there are some necessary regulations and in my judgment, access to emergency communications services such as E-911 is one of these necessities. New services such as VoIP will fare much better in the marketplace if the regulatory requirements are clear from the start. The current circumstance is an environment of uncertainty. This is far more constraining on innovation than a clear regulatory environment where providers can have a clear sense of their obligations and requirements.

#### *Conclusion*

Thank you again, Senator Burns, for inviting me to testify. More importantly, thank you for your leadership. You have truly been the leading voice in the U.S. Senate in advancing E-911. A great deal of progress has been made, in part directly from your efforts, and the public safety community and the industry have shared praise of your efforts.

I would be happy to respond to any questions.

Senator BURNS. Thank you very much. Now we go to Mr. George Heinrichs, who is CEO and Chairman of Intrado. Thank you for coming.

**STATEMENT OF GEORGE HEINRICHS, PRESIDENT AND CEO,  
INTRADO**

Mr. HEINRICHS. Thank you, Senator Burns. I'm George Heinrichs, the CEO of Intrado. We are a provider of the core infrastructure of our Nation's emergency network. I've been privileged to work with you on 9-1-1 issues for many years, and in fact, I first testified before you in the Senate Communications Subcommittee in May of 1989 when you convened a hearing on the original E-911 bill, which required that 9-1-1 be the universal number for emergency calls over cell phones.

Fortunately, the Wireless Communications and Public Safety Act of 1999, which you authored, passed into law. I have no doubt that many lives have been saved by this commonsense piece of legislation.

Thank you for inviting to me to testify today on the critical topic of bringing lifesaving enhanced 9-1-1 capabilities to the increasingly important area of Voice Over Internet Protocol services. I would also like to take the opportunity to acknowledge the tireless efforts of my colleagues, who are also here to testify regarding national concerns, namely David Jones of NENA, Wanda McCarley of APCO, Greg Rohde of the E-911 Institute, and Jeffrey Citron of Vonage. Their leadership and countless hours of work have significantly contributed to furthering emergency services in our country.

It's truly a team effort, and I'm proud during my career to have served as a call taker, an EMS responder, and a law enforcement officer, and today my role is in service to a much larger constituency, as the primary provider of the Nation's underlying 9-1-1 technology.

Senator Burns, you've long been a champion of 9-1-1 issues, and have shown both a tremendous passion and an effective advocacy for creating strong coalitions that have resulted in lifesaving legislation.

I should add that the location of today's hearing in your beautiful state of Montana is particularly appropriate, for rural states have the challenge of dealing with vast distances that make efficient and universal emergency communications all the more important, and absolutely vital for citizens.

Unfortunately, many rural states suffer in this regard without the leadership and resources of your home state. Furthermore, as Montana is currently in the grip of the fire season, threats to the public safety highlight the constant need to attend to the state's emergency communications infrastructure.

In your capacity as a champion of 9-1-1 issues in the Senate, your efforts have been relentless in seizing any opportunity to upgrade our Nation's critical emergency networks.

Most recently, the public safety community was particularly impressed at the act of political leadership displayed on the final day of the 108th Congress, by simply refusing to allow the Senate to go out of session until the ENHANCE 9-1-1 Act of 2004, which you authored, was passed. While it was the very last bill of the 108th Congress, it is also among the most important, as the bill authorized \$1.25 billion for upgrades of public safety answering points across the country so that 9-1-1 callers could be accurately located.

Unlike so many issues before Congress, 9-1-1 is truly bipartisan in nature, which you showed by reaching across the aisle to team with Senator Clinton in creating the 9-1-1 caucus. In the little more than two years since its creation, the E-911 caucus has rapidly transformed into a key national policy forum where the public safety community musters support for lifesaving initiatives.

Just as you showed great vision in moving forward on bringing critical 9-1-1 services to cell phones, you recognized early on that as VoIP services began to grow in popularity, lifesaving 9-1-1 capabilities remain an essential aspect of telecommunications service to all Americans.

Last summer, you authored the Burns amendment to VoIP legislation being considered in the Senate Commerce Committee, which required 9-1-1 services to be offered by VoIP providers. You have continued this leadership by championing Senate Bill 1063, the IP-enabled Voice Communications and Public Safety Act of 2005.

Before discussing the merits of the legislation, I would first like to provide you with a brief description of Intrado. For over a quarter of a century, telecommunications providers, public safety organizations, and government agencies have turned to Intrado for communications needs. Founded in 1979, Intrado has built a strong reputation as an innovator in emergency communications. Today Intrado provides the core of America's 9-1-1 infrastructure and a wide range of offerings for safety and mobility markets that include 9-1-1 data management, call routing and subscription services, wireless data services, and notification services.

Throughout its history, we have enthusiastically participated in bringing our experience and resources to bear in the evolution of America's emergency communications policy. The rapid growth of wireless and Voice Over Internet Protocol and alternative technologies present new challenges to the current infrastructure. Intrado products, services, and systems support an estimated 200 million 9-1-1 calls a year, with a growing percentage of these calls coming from wireless and VoIP phones. The Intelligent Emergency Network, which is our next generation product, is designed to address and support those changing requirements.

Turning our attention to Senate Bill 1063, we would like to extend our full support for this critical public safety legislation. Senator Burns, your leadership and commitment to ensuring that our Nation's citizens continue to receive the emergency services they need when dialing 9-1-1, regardless of the technology employed by the users, have been met with much deserved and widespread approval of the public safety community.

In addition, there are vital issues that still need to be addressed that only Congress has the authority on which to act. The technology that is required to provide both fixed and nomadic VoIP subscribers with emergency service exists today. However, the necessary policy changes are not yet in place, and both Congress and the Federal Communications Commission must continue to work together to ensure such changes are made.

As such, we recommend the following policy enhancements that will provide appropriate statutory framework for the delivery of emergency services to all subscribers of IP-enabled services.

The critical matter that still needs to be clarified is exactly what types of entities are afforded access to the 9-1-1 network in order to reliably deliver the caller's location and call back number to the appropriate answering point when a call is placed from an IP-enabled device. Without minimum standards for access to our Nation's critical 9-1-1 infrastructure, VoIP service providers operating outside this country, or those who are technically naive would be granted access to our 9-1-1 network, posing a significant threat to homeland security.

This is not a theoretical concern, as America has already been the target of increasingly sophisticated attacks from organizations of foreign origin on our core emergency information infrastructure, and these mirror previous denial of service attacks on the Internet at large.

This is a clear and present danger to the security of our Nation, and must be acknowledged and prevented. If the 9-1-1 network of the United States were rendered inoperable, the results could be tragic.

Let me skip quickly to two other points. One is official standards. We recommend strongly that the Federal policy should recognize the important role of accredited standards organizations, and should insist on adherence to 9-1-1 standards developed within those organizations. Having this policy measure will ensure that appropriate rules are in place, and do not hinder the deployment of VoIP 9-1-1 services.

Finally, to give our support for liability protection, which we believe is important to provide the parity for all of the carriers that are providing service in the U.S. Thank you very much.

[The prepared statement of Mr. Heinrichs follows:]

PREPARED STATEMENT OF GEORGE HEINRICHS, PRESIDENT AND CEO, INTRADO INC.

Senator Burns, I am George Heinrichs, CEO of Intrado Inc., the provider of the core infrastructure of our Nation's emergency communications network. I have been privileged to work with you on 9-1-1 issues for many years. In fact, I first testified before you in the Senate Communications Subcommittee in May of 1999 when you convened a hearing on the original E-911 bill, which required that 9-1-1 be the universal number for emergency calls over cell phones. Fortunately, the Wireless Communications and Public Safety Act of 1999, which you authored, passed into law. I have no doubt that many lives have been saved by this commonsense piece of legislation. Thank you for inviting me to testify today on the critical topic of bringing lifesaving enhanced 9-1-1 capabilities to the increasingly important area of Voice over Internet Protocol (VoIP) services.

I would also like to take the opportunity to acknowledge the tireless efforts of my colleagues who are also here to testify regarding national concerns, namely David Jones of NENA, Wanda McCarley of APCO, Greg Rohde of the E-911 Institute and Jeffrey Citron of Vonage. Their leadership and countless hours of work have significantly contributed to furthering emergency services in our country. It is truly a team effort and I am proud during my career to have served as a call taker, EMS responder and law enforcement officer. Today, my role is in service to a much larger constituency as the primary provider of our Nation's 9-1-1 technology.

Senator Burns, you have long been a champion of 9-1-1 issues and have shown both a tremendous passion and effective advocacy for creating strong coalitions that have resulted in lifesaving legislation. I should add that the location of today's hearing in your beautiful state of Montana is particularly appropriate, for rural states have the challenge of dealing with vast distances that make efficient and universal emergency communications all the more important and absolutely vital for their citizens. Unfortunately, many rural states suffer in this regard without the leadership and resources of your home state. Furthermore, as Montana is currently in the grip of the fire season, threats to the public safety highlight the constant need to attend to the State's emergency communications infrastructure.

In your capacity as a champion of 9-1-1 issues in the Senate, your efforts have been relentless in seizing any opportunity to upgrade our Nation's critical emergency communications networks. Most recently, the public safety community was particularly impressed at the act of political leadership you displayed on the final day of the 108th Congress by simply refusing to allow the Senate to go out of session until the ENHANCE 911 Act of 2004, which you authored, was passed. While it was the very last bill passed in the 108th Congress, it was also among the most important, as the bill authorized \$1.25 billion for upgrades to public safety answering points across the country to allow for 9-1-1 callers to be accurately located.

Unlike so many issues before Congress, 9-1-1 is truly bipartisan in nature, which you showed by reaching across the aisle to team with Senator Clinton in creating the E-911 Caucus. In the little more than two years since its creation, the E-911 Caucus has rapidly transformed into a key national policy forum where the public safety community musters support for lifesaving initiatives.

Just as you showed great vision in moving forward on bringing critical 9-1-1 services to cell phones, you recognized early on that as VoIP services began to grow in popularity, lifesaving 9-1-1 capabilities remain an essential aspect of telecommunications service to all Americans. Last summer, you offered the Burns amendment to VoIP legislation being considered in the Senate Commerce Committee, which required 9-1-1 services to be offered by VoIP providers. You have continued this leadership by championing Senate Bill 1063, the IP-Enabled Voice Communications and Public Safety Act of 2005.

Before discussing the merits of this legislation, I would first like to provide you with a brief description of Intrado. For over a quarter of a century, telecommunications providers, public safety organizations and government agencies have turned to Intrado for their communications needs. Founded in 1979, Intrado has built a strong reputation as an innovator in emergency communications. Today, Intrado provides the core of North America's 9-1-1 infrastructure and a wide range of offerings for the safety and mobility markets that includes 9-1-1 data management, call routing and subscription services, wireless data services and notification services.

Throughout its history, Intrado has enthusiastically participated in bringing its experience and resources to bear in the evolution of America's emergency communications policy and infrastructure. As 9-1-1 has grown to become an essential element of telecommunications service, Intrado has played a key role in defining, building and maintaining our complex emergency communications infrastructure.

The rapid growth of wireless and Voice over Internet Protocol communications and other alternative technologies presents new challenges to the current infrastructure. Intrado products, services and systems support an estimated 200 million 9-1-1 calls each year, with a growing percentage of these calls coming from wireless and VoIP phones. The Intrado Intelligent Emergency Network™, Intrado's next generation, IP-based emergency communications services network, is designed to address and support these changing communications requirements.

Turning our attention to Senate Bill 1063, Intrado would like to extend its full support for this critical public safety legislation. Senator Burns, your leadership and commitment to ensuring that our Nation's citizens continue to receive the emergency services they need when dialing the digits "9-1-1," regardless of the technology employed by users, have been met with much-deserved, widespread approval in the public safety community.

In addition, there are vital issues that still need to be addressed that only Congress has the authority on which to act. The technology that is required to provide both fixed and nomadic VoIP subscribers with emergency services exists today; however, the necessary policy changes are not yet in place, and both Congress and the Federal Communications Commission must continue to work together to ensure such changes are made.

As such, Intrado proposes the following policy enhancements that will provide the appropriate statutory framework for the delivery of emergency services to all subscribers of IP-Enabled services:

*Qualified Access to the 9-1-1 Network*

A critical matter that still needs to be clarified is exactly what types of entities are afforded access into the 9-1-1 network in order to reliably deliver the caller's location and call back number to the appropriate Answering Point when a 9-1-1 call is placed from an IP-enabled device. Without minimum standards for access into our Nation's critical 9-1-1 infrastructure, VoIP service providers operating outside of this country or those who are technically naïve would be granted access to the E-911 network, posing a significant threat to homeland security. This is not a theoretical concern, as America has already been the target of increasingly sophisticated attacks from organizations of foreign origin on our core emergency information in-

infrastructure, which mirror previous denial of service attacks on the Internet at large.

This clear and present danger to the security of our Nation must be acknowledged and prevented. If the 9-1-1 network of the United States were rendered inoperable, the results could be tragic. Clearly, safeguarding our 9-1-1 infrastructure from these threats through a minimally intrusive qualification process is paramount. E-911 service providers, who currently provide access into the 9-1-1 network, must have the technical acumen to ensure those providers gaining access are qualified and meet an appropriate level of technical sophistication and security, for the purposes of providing E-911 services. The combination of qualified E-911 service provider operation of the secure network connectivity point and some minimal criterion for companies that interconnect with them would ensure our Nation's future E-911 network is at least as safe and reliable as today's 9-1-1 infrastructure.

Appropriate policy measures should be considered that provide a framework for the evolution of the 9-1-1 network to accommodate future advancements in telecommunications. This should include accommodation or modification of the current 9-1-1 network and the setting of clear objectives to move the U.S. forward in more advanced and intelligent communications infrastructures.

#### *Official Standards*

Federal policy should recognize the important role of accredited standards organizations and should insist on adherence to 9-1-1 standards developed within those organizations. Having this policy measure will ensure that appropriate rules are in place that do not hinder the deployment of VoIP 9-1-1 services across the country and are in line with this current technology. Legacy deployment practices will not work in this new IP environment and reliance on such will only slow down a nationwide rollout of emergency services.

#### *Liability Protection*

Given that only Congress can assign liability protection to IP-Enabled service providers, it is imperative that Federal legislation is enacted to ensure this provision becomes a Federal mandate. Congress must grant VoIP providers the same liability protection and immunity as dictated by the States—much like you did for wireless carriers under the original Burns E-911 bill, the Wireless Communications and Privacy Act of 1999. In order for the IP-Enabled Service Providers to obtain liability protection, they will need to meet certain criteria so that the integrity of the 9-1-1 network is not placed in jeopardy. In addition, it is important that liability protection be extended to third-party providers, vendors and agents of these IP-Enabled Service Providers.

As VoIP services become ever more popular among Americans, our Nation's telecommunications policy must keep pace with this development. One key aim of policymakers when creating the proper regulatory structure of VoIP technology should be the preservation of our Nation's critical E-911 information infrastructure. You have shown your leadership in the national policy arena by sponsoring vital public safety legislation which is balanced, far-reaching and has been met with enthusiastic support. By enacting policy that addresses the aforementioned issues, Congress will not only preserve the integrity and reliability of the 9-1-1 network, but will also achieve its goal of providing the policy framework required to ensure all users of IP-Enabled services have access to full E-911 emergency services. Again, Intrado thanks you for your well-considered, commonsense legislation and supports its passage by the Congress in rapid fashion.

Finally, I am pleased to see Michael Brown, the Under Secretary of the Department of Homeland Security in attendance and would like to extend my appreciation to him for all of his work in bridging the gap between emergency services and homeland security. The Under Secretary's understanding of the real threats facing America's communities is a credit to him and to this administration. Creating and maintaining the best emergency communications network in the world is a constant challenge and is truly a collaborative effort.

Thank you again for the opportunity to testify here today. I would be more than happy to answer any questions you may have.

Senator BURNS. Thank you, and thank all of you for your testimony today. I've seen it written up in the communications papers and communications that being as the FCC has passed this order, further legislation needed? I'll start with you, Mr. Rohde.

Mr. ROHDE. Yes, Senator, I believe it is, for a number of reasons which I just outlined. One is I do think it's important to make the

requirement a statutory requirement, not simply a regulatory requirement. For that reason alone, you should pass legislation.

I also think—and the other panelists have said the same thing—that the liability parity provision is necessary. The liability immunity you provide for wireless E-911 services and landline 9-1-1 services should apply to VoIP services.

Third is the provision of—the FCC chose not to assert authority to require that VoIP providers have access to the emerging infrastructure that local exchange carriers control, such as selected routers. So since the FCC did not make that a requirement, Congress really has to step in and make that requirement.

So for those three reasons alone, that legislation is necessary.

Senator BURNS. Mr. Citron.

Mr. CITRON. We would agree wholeheartedly that those items just recognized be included in Congressional mandates. I want to make one additional comment that was made during the previous testimony, and that that is our Nation's network of E-911 is really a patchwork quilt of 6,000 different sets of standards, and a national standard should be created, and 9-1-1 should be treated as a national asset, not as something that is incredibly local, and can deviate freely, depending on the service areas being currently covered by 9-1-1.

Senator BURNS. Do you want to comment on that, George?

Mr. HEINRICH. We're not in Washington. I'll just keep the word short.

Senator BURNS. Wanda.

Ms. MCCARLEY. I think most assuredly there's more work to be done, and Congress has a role in that. To just reiterate, I'll just ditto Greg's comments. The items that he's outlined are excellent examples of the role that Congress could take in forwarding these goals.

Senator BURNS. How realistic is November 28th? Is that a realistic date?

Mr. CITRON. I guess as the one here who was responsible for releasing the service throughout the entire United States by that deadline, we suspect that we will get the majority of our customers online well within that time period. I think it's going to be challenging to get every single customer on in that period. Getting access to underlying facilities, just the timeline of testing is quite difficult. I'm sure that APCO and NENA represent their constituents, but we need to test and implement the solution with hundreds of selective routers, and literally implement 6,000 PSAPs.

We think that to go out and rush to get it online when it's not been properly tested and give the fail safe protections and standards necessary is difficult. With that said, we'll, of course, move as fast as possible, get as many people as quickly as possible, irrespective of any deadline set by the FCC.

Senator BURNS. Should the FCC be pretty flexible on this?

Mr. CITRON. We think the FCC should look at what the service providers are doing on an individual case-by-case basis. Providers are working diligently and hard getting this rolled out. They should provide the flexibility and comment on necessary time lines, too.

Senator BURNS. You know we have challenges of getting this done. Is it the technology? What kind of challenges, what are you

running into out there that would slow the progress of instrumenting E-911 and Voice Over IP?

Mr. CITRON. I think there are a lot of challenges. The first for starters is identifying every selected router in the country we need to hook into, because there is no such mandated list maintained by any Federal or state authority. So we don't even know all the things we need to do. We're still finding every single—APCO, and NENA, and Intrado are great partners—in trying to identify those access points.

Even beyond that, accessing those elements, having to negotiate commercial agreements, interconnect with those relationships, without any standards made available, requires us to literally sit down with every single operator and owner, and explain to them how this solution is going to work, and to customize that solution, because there are no standards for local communications. Beyond that, the testing with PSAPs takes a quite a bit of time. And everybody has got a little bit of a different view.

So I think there are a lot of challenges out there, and only time and the dedication of all the people at this table are going to be required to make this work.

Senator BURNS. Would you like to comment on that question? Nobody?

Mr. HEINRICH. Senator, I would suggest that I think the timeline is unreasonable in the sense that it's unprecedented in the history of 9-1-1. If you look at the history of rolling out wireless in the United States, it was measured in a matter of years or decades actually. If you look at wireless, we've worked together on this for a long time, and we're still working on that.

One Hundred and Twenty-days certainly provided a lot of motivation for a lot of people working very hard. I think when we get to the end of that, they'll see the fruits of their labor, and it will be good, but it's not going to be 100 percent. I think it's clear to me right now from where I sit that this will not be nationwide and complete by that deadline.

Senator BURNS. I've looked at the wireless thing, and also on Voice Over IP, and that's the reason I asked the flexibility question. I'd hate to see the FCC go and fine people or anything like this before they get it done. There are challenges out there, some challenges that we didn't have in 9-1-1, to be honest with you. But I still think it's important.

We had testimony of many—of instances where 9-1-1 wasn't answered and something very bad happened. So we're very much—I would like to stay in the circle on all of you—especially you, Mr. Citron, because of your experience with trying to put 9-1-1 into Voice Over IP—challenges that might arise that we don't think of. And just to stay in it, as we put this technology out there, and try to force it out.

As you know, sometimes the marketplace does it faster than Congress or deadlines can do it, but sometimes I always have the feeling that the market should really force a lot of this, and would do a better job.

Mr. CITRON. In addition to the challenges that I've already outlined, there are others that do concern us. We think that the FCC has done a great job in really moving the ball forward. We tried



to deploy E-911 for a very long time, and Intrado worked very hard with us on issues; and without getting the underlying access, it was nearly impossible, and only with the help of the FCC intervention have Bell Operating Companies and owners of the 9-1-1 infrastructure started to let us get access.

But the FCC has other policies that do concern us, and may come up to hurt us in a bad way, and that is clearly the FCC has mandated that if 9-1-1 service can't be provided, that service be discontinued to a user. And as users of nomadic Voice Over IP services move around, it's quite possible that a user will move around to a location, will type in his new location, and then the service will of course stop working, and then that will force the user to potentially select a different market where 9-1-1 is currently available, thus causing misrouting of calls, and we find that to be a very large concern.

Senator BURNS. Do you find that the responsibility is going to be just as much on the user as it is on you folks who provide the service?

Mr. CITRON. Yes.

Senator BURNS. That's the conclusion I drew, too. We thank you for your testimony today. And as we move this legislation forward, let's keep the communication lines open, and let us know the challenges you run into, and to make it work, and make it fair. Thank you for your testimony.

We go to the second panel today, which is made up of Jeremy Ferkin, General Manager of CenturyTel; Jeff Brandt, Director, Montana Department of Administration; Bill Squires, Blackfoot Telecommunications Group; and Chairman Greg Jergeson, Montana Public Service Commission. So we welcome all of you. Have we got a change here?

Ms. KELLY. I'm Jeff Brandt today. Janet Kelly, Director of the Department.

Senator BURNS. Yes. Okay. And again, we would like to have you kind of keep your testimony down to five minutes, and your full statement and anything that you want to put in the record will be received at this time.

And Ms. Kelly, since you're the stand-in, you get to lead off today.

**STATEMENT OF JANET KELLY, DIRECTOR, DEPARTMENT OF ADMINISTRATION, STATE OF MONTANA**

Ms. KELLY. Senator Burns, thank you so much for providing me with the opportunity to appear before you today. My name is Janet Kelly. I'm the Director of the Department of Administration. And I'm appearing today on behalf of the State of Montana because the Department of Administration has responsibility for managing the statewide 9-1-1 program.

The State of Montana supports Senate Bill 1063 because it addresses a number of our concerns, and supports our efforts to provide the highest quality public safety services to the citizens of Montana. I would like to thank Senator Nelson for sponsoring the bill, and Senators Clinton, Kerry, Snowe, and Burns, co-sponsors.

Senator Burns, you have been a leader on this issue, not only here in Montana, but throughout the Nation. 9-1-1 services, let

alone public safety technology, are not plug-and-play operations. There have been exciting advances in communications technology that provide our citizens with greater choice and capabilities.

However, we must be sure that the deployment of these new technologies does not interfere with our ability to provide important public safety services. The technology landscape is ever-changing, and Senate Bill 1063 will help ensure that public safety services will be available to all citizens, regardless of their choice of technology.

Technological advances will continue to create new issues and challenges as businesses offer new services to our citizens. Therefore, additional legislation, regulation, and standards may be needed to be sure that our citizens are adequately served, and that the public safety community needs to have a place and a voice at that table.

Montana is among the handful of states that has attained statewide basic 9-1-1. However, our citizens, even those living in remote areas, expect enhanced 9-1-1, and we met the challenge of deploying E-911 solutions across our state by the 9-1-1 program office collaborating with the Montana Sheriffs and Peace Officers Association; and with the assistance of a Federal appropriation in fiscal year 2003, we have a statewide E-911 network project underway.

Montana's 9-1-1 program is successful because of the cooperation among legislators, regulators, state and local government administrators, and the telephone industry; and our future success will require continued cooperation to solve the problems created by the new technologies and conditions that will impact the public safety community.

Voice Over IP creates new opportunities and new challenges, and I will address these from the State of Montana's perspective. First, we need to safeguard the ability of Montanans to pay for the delivery of public safety services across our vast state.

Montana is concerned with the potential for unfunded mandates that would impact our ability to update and maintain our infrastructure. We want to be sure that we're able to continue to work in enhancing existing technology, rather than having to deal with planned obsolescence or incompatible technologies. As the technology evolves, it must not interfere with the public's access to critical public safety services.

Today's hearing reinforces the importance of the industry, Congress, and the public safety community working together, and I applaud the Committee's commitment and continued support of public safety in this country. The State of Montana is working on solutions, and embracing the new technology for public safety, and we stand ready to assist you in any way we can to make our Nation safer. Thank you.

[The prepared statement of Ms. Kelly follows:]

PREPARED STATEMENT OF JANET KELLY, DIRECTOR, DEPARTMENT OF  
ADMINISTRATION, STATE OF MONTANA

Mr. Chairman, Members of the Committee, Senator Burns, thank you very much for providing me with this opportunity to appear before you today. My name is Janet Kelly, and I am the Director of the Department of Administration for the State of Montana. I am appearing today on behalf of the State of Montana because

the Department of Administration has responsibility for managing Montana's Statewide 9-1-1 Program.

The State of Montana offers its support for the IP-Enabled Voice Communications and Public Safety Act of 2005 (S. 1063). This bill addresses a number of concerns I will identify and supports our efforts in providing the highest quality public safety services to the citizens of Montana.

Mr. Chairman, I would like to take this opportunity to thank Senator Nelson for sponsoring this bill and to Senators Clinton, Kerry, Snowe and Burns, its cosponsors. Senator Burns has been a leader on this issue, not only here in Montana but throughout the Nation. For example, in 1999 he sponsored the Wireless Communications and Public Safety Act, an important roadmap for deploying wireless 9-1-1.

9-1-1 services, let alone public safety technology, are not a "plug and play" operation. There have been exciting advances in communications technology that provide our citizens with greater choice and capabilities. But we must ensure that the deployment of these new technologies doesn't interfere with the ability to provide important public safety services. Furthermore, the technology landscape is ever-changing. We must maintain vigilance so that critical public safety services continue to be provided as technology evolves. The legislation that Senator Burns and others have sponsored will be a valuable tool in ensuring that public safety services will be available to all citizens, regardless of their choice of technology.

Undoubtedly, technological advances will create new issues and challenges as businesses offer new services to citizens. Legislation, regulations and standards may be needed to ensure the citizen is adequately served. The public safety community, in particular, needs to have a place and a voice at that table.

The challenge of keeping pace with technology, let alone responding to the challenges that have been dropped on the doorstep of our 9-1-1 Public Safety Answering Points (PSAPs), is a daunting task. In addition, we have limitations in our respective jurisdictions as to our authority and ability to enforce the rules. With limited funds and a small population spread across a vast state, we knew we had to work together. So in Montana we collaborated with local, state and Federal partners.

In 2002, the Governor's office created the Public Safety Services Bureau in the Department of Administration. The Public Safety Services Bureau manages the State's 9-1-1 Program and statewide planning of public safety radio communications.

Montana is among the handful of states that have attained statewide basic 9-1-1 service, but the public, even in remote areas, expects enhanced 9-1-1 service. When faced with the challenge of deploying E-911 solutions across the State, the 9-1-1 Program office collaborated with the Montana Sheriff's and Peace Officers' Association, and, with the assistance of a FY03 Federal appropriation, a statewide E-911 network project is underway. Montana's 9-1-1 program is successful because of the cooperation among legislators, regulators, state and local government administrators and the telephone industry. Our future success will require continued cooperation to solve the problems caused by new technology and conditions that will impact the public safety community.

Now we turn our attention to VoIP. Like most technologies, it creates new opportunities but also new challenges. I applaud the bill sponsors for tackling these new challenges. I will address these challenges from the State of Montana's perspective.

First, we need to safeguard the ability for Montanans to pay for the delivery of public safety services across Montana's vast territory. We are concerned with the potential for unfunded mandates that would impact our ability to update and maintain our infrastructure.

We want to be sure that we will be able to continue to work to enhance existing technology rather than having to deal with planned obsolescence or incompatible technologies.

We want to be sure that our citizens continue to have access to public safety services. As technology evolves, it must not interfere with the public's access to critical public safety services.

This hearing today reinforces the importance of the industry, Congress and the public safety community working together, and I applaud the Committee's commitment, efforts and continued support of public safety in this country.

The State of Montana is working on solutions and embracing the new technology for public safety; and we stand ready to assist you in any way we can to make our Nation safer.

Thank you.

Senator BURNS. Thank you for your testimony. We'll hear from Mr. Jeremy Ferkin, General Manager of CenturyTel.

**STATEMENT OF JEREMY FERKIN, GENERAL MANAGER,  
CENTURYTEL, INC.**

Mr. FERKIN. Thank you, Senator. We are pleased to be the—as the State so-called it—the one throat to choke providing the E-911 services for the state of Montana. As our testimony has been submitted, and questions you've asked, I'll get right to the issues that really speak to the heart of S. 1063, and also the issues that we're focused on.

Liability is the number one paramount issue we've had to deal with negotiating with the State of Montana, and is also the issue that we face in the 26 states we serve across the United States. There's a patchwork of liability issues throughout the country, and we believe, like NENA, like the other testimony that you received, it's the first issue that we really think needs to be addressed.

Limitation of liability isn't a balloon management issue. You don't squeeze it in one area, and it pops out, and someone else has the liability over here. It is a matter of who is going to put money forward, and who is going to be willing to step out and be a different company, and just say that this is bigger than any one person's event. 9-1-1 is that event we all have to be concerned about.

So the other side of it is we know that Voice Over Internet is not a technology issue. We heard Mr. Citron and everybody else speak too. The technology is not the problem with implementing. The relationships, and negotiation, and navigation is where the issues typically happen.

That's not dissimilar to what we experience in the state of Montana, with all the different PSAPs, all the different vested entities in this. So I don't know that it's legislation, but we do know that relationships are the key to making this happen. As Montanans, we all know that if you know people, you know how to get stuff done.

The other part of S. 1063 that we believe is critically important is the transition period that the FCC put out there. I'm glad to hear that Mr. Citron believes that the time line is semi-satisfactory. We believe that there are implications to E-911 implementation on IP that possibly are not thought of long term.

For instance, what if IP isn't the underlying protocol that's going to be used five years, ten years from now? So whatever legislation goes on needs to address further technologies and further applications that may be out there, whether it's SIP (phonetic) based, which is the newest, latest, greatest thing that we talked about, or whether it's neural implants, we don't know. But technology will change.

The additional focus S. 1063 addresses, but does not fully address, is the compensation side of what's going to happen. So if we are required to open up access, that access is going to put more costs on whoever is providing those 9-1-1 services. That funding, as was spoken about earlier, where does that come from? That additional expense, is that borne by us? If so, does it negate or does it require us to actually not want to be a 9-1-1 service provider? That would be a catastrophic event, to have people who are stepping out to provide the service, being encumbered, to have to pay for service that they don't benefit in any way from.

We also believe that, as we talked about, the liability issues. But some general issues that are out there, is if you're on the network, if you're utilizing the network, compensation is the biggest issue. So they boil down to two issues. Liability is the biggest issue; and then compensation for how do we fund it, and how do we navigate it for those who own that infrastructure.

[The prepared statement of Mr. Ferkin follows:]

PREPARED STATEMENT OF JEREMY FERKIN, GENERAL MANAGER, CENTURYTEL, INC.

Senator Burns and Members of the Committee, thank you very much for providing me with this opportunity to appear before you today. My name is Jeremy Ferkin, and I am General Manager for CenturyTel operations in Kalispell, Montana. I am pleased to have this opportunity to discuss Voice Over Internet Protocol (VoIP), its implications for Emergency 9-1-1 (E-911) and, more specifically, the Senate E-911 bill entitled "IP-Enabled Voice Communications and Public Safety Act of 2005" (S. 1063).

CenturyTel serves more than 63,000 customers in the Flathead Valley of Montana and was recently selected to be the 9-1-1 provider for the state. In addition to our Montana operations, CenturyTel is also a national telecommunications company and a leading provider of broadband services in rural America. We are a leading provider of telecommunications services in 26 states that include many of the states represented by Members of this Committee including Montana, Texas, Mississippi, Nevada, Oregon, Louisiana, Washington, Arizona and Arkansas. We specialize in providing high quality telephone, long distance, Internet, broadband, satellite and advanced services in rural and small urban markets. Today, CenturyTel is the eighth largest telephone company in the United States with 2.3 million access lines. Much of CenturyTel's recent growth has come from the acquisition of telephone lines from the larger Bell Operating Companies in multiple states. The majority of our 3 million customers and 7,000 employees live and work in the very areas that have the most critical stake in the issue we will discuss today.

*Voice Over Internet Protocol*

CenturyTel is excited about the introduction of IP-enabled services in the marketplace and about deploying new technologies and creating new services for our customers and communities. CenturyTel already offers IP-based services to many of our business customers across the country. That said, CenturyTel believes an appropriate transition period will be required for full-scale delivery of IP-enabled services to all Americans. Related, but critical, features such as law enforcement capabilities and access to emergency services must be readily available and tested because of the technical aspects and dynamics of IP technology.

VoIP is an example of even better things to come, as our industry increasingly integrates with the computer hardware, software, and entertainment sectors. Internet Protocol is blowing the voice market wide open, allowing a variety of providers to serve "some" business and residential customers. I say "some customers" because, that VoIP service will not work unless a facilities-based provider like CenturyTel or the local cable company has made the network investment required to enable a broadband connection that VoIP needs to work properly.

CenturyTel and companies like it are building rural America's broadband network. Building robust rural networks requires expertise, commitment, access to capital and substantial investment—all without the assurance of a high density customer base to make a business case. While CenturyTel only averages 14 access lines per square mile and seventy-five percent of our customers are residential, more than seventy percent of our customers nationwide have access to CenturyTel DSL. In the State of Montana alone, almost ninety-six percent of CenturyTel's sixty-three thousand access lines are DSL-enabled, and a significant portion of our one hundred fifty-six million dollar total investment went towards deployment of broadband to enable advanced services. Advanced communications networks like ours are the foundation for realizing the promise of IP-enabled services like switched digital video and other new services yet to emerge. Quite simply, you can't deliver the promise of IP without a high capacity network.

Without question, the further integration of IP-enabled services as a telecommunications alternative offers both challenges and opportunities for local telecommunications companies. We have adapted to a new world of rapid-paced innovation and intense competition from a wide variety of players. Equally true, this new reality is forcing fundamental shifts in our industry—from proposed mega-mergers to the new services and choices our companies are rolling out. Now, the Nation's commu-

nications policy must adapt as well. Since we have barely scratched the surface of broadband's potential to produce a whole new generation of innovative applications, I appreciate knowing that this Committee has proposed to write policies that broadly encourage network investment and product innovation far beyond first-generation VoIP.

*Importance of E-911 Capabilities for IP-Enabled Services*

AT&T first made "9-1-1" available nationally for wireline access to emergency services in 1965, and since that time, the American public's dependence on 9-1-1 service has continued to increase. The National Emergency Number Association (NENA) estimates that some form of 9-1-1 service is available to 99 percent of the population in 96 percent of the counties in the United States, and roughly 200 million calls are made to 9-1-1 in the United States each year. CenturyTel supports the concept advanced by the Federal Communications Commission (FCC) that a service or device should be subject to 9-1-1/E-911 regulation if the customers using such service or device have a "reasonable expectation of access to 9-1-1 and E-911 services." Indeed, providing reliable and secure 9-1-1 and E-911 services has become a necessary cost of doing business for all voice providers, regardless of platform used.

The American public's expectations for access to emergency services have not diminished, but admittedly have become more challenging to meet, as new technologies for delivering voice communications have arisen and as consumers have become more mobile. The wireless industry can attest to the challenges in implementing emergency services in an increasingly mobile environment. No doubt, IP-enabled voice communications is another technology that will present challenges in implementing emergency services because it can be delivered using so many different platforms. However, the time is NOW to address the unique challenges VoIP presents for having access to emergency services. Intrado, a national provider of 9-1-1 database management services, projects a nearly tenfold increase in expected VoIP 9-1-1 calls from 2004 to 2006, to a total of 3.5 million residential VoIP 9-1-1 calls in 2006, as this new communication technology becomes more widespread.

Unfortunately, recent incidents in Texas, Florida and Connecticut have brought to the forefront the need to address public safety issues related to IP-enabled voice communications. By now everyone has probably heard about the family in Houston, Texas who was in need of emergency assistance when an intruder entered their home and attempted to burglarize the family at gunpoint. During the incident, a 9-1-1 call using an interconnected VoIP service was unable to be completed, thus delaying dispatch of an ambulance for the wounded homeowners. The incidents in Florida and Connecticut were just as traumatic and harrowing.

We applaud Congress for introducing S. 1063 (and likewise H.R. 2418 in the House) and holding this field hearing in light of the reasons listed above. While the FCC has issued an Order and Notice of Proposed Rulemaking on E-911 requirements for IP-enabled service providers, we are glad Congress has stepped in to address those issues where the FCC believes it lacks jurisdiction—namely, requiring incumbent local exchange carriers (ILECs) to give VoIP providers access to emergency services infrastructure and immunity from liability for providing 9-1-1 services. We also believe S. 1063 provides more clarity than the FCC's Order on some issues crucial to owners of emergency services infrastructure and can hopefully move more swiftly towards resolution of these critical issues. I will discuss S. 1063 and those other crucial issues more fully in the remarks that follow.

*Appropriate Compensation for Access to Emergency Infrastructure*

S. 1063 contains a provision that requires entities with ownership or control of emergency services infrastructure to "provide any requesting IP-enabled voice service provider with nondiscriminatory access to their equipment, network, databases, interfaces and any other related capabilities necessary for the delivery and completion of 9-1-1 and E-911 calls and information related to such 9-1-1 or E-911 calls." The owner "shall provide access to the infrastructure at just and reasonable, non-discriminatory rates, terms and conditions." CenturyTel is pleased S. 1063 addresses this issue and believes the FCC's June 3, 2005 Order does not fully address the issue of requiring VoIP providers to compensate owners of emergency services infrastructure. CenturyTel, like other local telephone companies, has invested in networks capable of connecting our customers to life-saving services such as 9-1-1, and we believe that providing 9-1-1 access is a legitimate cost of doing business for all voice providers.

CenturyTel believes that creating a seamless public safety and reliability standard for all voice service providers is the best public policy and VoIP providers should be held to the same public safety and reliability standards as other voice providers.

To require less of a provider merely because a different technology is used to facilitate the voice call is not in the public's best interest. In addition, VoIP providers should properly compensate incumbent carriers for access to their 9-1-1 infrastructure. ILECs should not have mandates to provide 9-1-1 and related services to VoIP providers for free.

Today, CenturyTel either owns the emergency services infrastructure in a particular area or properly compensates other owners of emergency services infrastructure in areas where CenturyTel is not itself the owner. Generally, a telecommunications carrier can either access emergency services infrastructure under a tariff arrangement or through an interconnection agreement, depending on the requirements in each specific state. Under the current sections 251 and 271 requirements in the Telecommunications Act of 1996, the VoIP provider either has to declare itself a "certificated" telecommunications carrier or negotiate access to emergency services infrastructure through a third party competitive LEC. Facilities-based providers must have assurances that VoIP providers have a requirement to adequately compensate those who make the necessary investment for access to emergency services infrastructure. Such compensation should be made at a level that adequately covers the actual costs of ownership of emergency services infrastructure. The tariff process provides sufficient protection for all providers involved in such an arrangement.

#### *Liability Concerns*

This past June, CenturyTel and the State of Montana entered into a contract under which CenturyTel will provide 9-1-1 services throughout the entire State of Montana. During the negotiations for this contract, it became apparent that a major concern for all stakeholders throughout the emergency services industry is liability in the event something goes wrong in the process. While S. 1063 does contain a provision that gives providers of IP-enabled voice service immunity or other protection from liability of a scope and extent that is not less than that given to any local exchange company under applicable Federal and State law (whether through statute, judicial decision, tariffs filed by such local exchange company, or otherwise), CenturyTel feels more inquiry and work needs to be done to develop this issue further.

Statutes providing immunity and limitations of liability for 9-1-1 service providers vary widely from state to state and in many cases do not really provide the liability protections that may be appropriate for telecommunications companies, Public Safety Answering Points (PSAPs), emergency services personnel, and local governments. CenturyTel believes Congress should develop a Federal statute that provides meaningful limitation of liability provisions for all parties to add some consistency to the process and supplant the patchwork of state statutes currently addressing liability issues. To be clear, CenturyTel proposes a Federal statute that provides immunity from liability for all parties who act without willful or wanton conduct in the execution and provision of a 9-1-1 call, similar to that codified in Oregon Revised Statutes §401.715 (2003), as follows:

"No provider . . . or any other person that supplies 9-1-1 emergency reporting system equipment . . . or the 9-1-1 jurisdiction . . . shall be held civilly liable for the installation, performance, provision or maintenance of a 9-1-1 emergency reporting system or enhanced 9-1-1 telephone service if the provider . . . supplier . . . or the 9-1-1 jurisdiction . . . act without willful or wanton conduct."

#### *Key Policy Decisions Facing Congress and the FCC*

Congress should affirm that those using the network must pay for their use. "Phantom traffic" and other payment avoidance schemes really are just theft, plain and simple. Advanced communications networks are the foundation for realizing the promise of IP-enabled services and without investments by companies like CenturyTel, there would be no broadband connection, no VoIP and ultimately no services like switched digital video or telemedicine.

Congress should support the 21st century network through maintaining the Nation's commitment to Universal Service. Congress should support stability in universal service by broadening the base of support to include all providers of voice service, including VoIP, and setting high standards in order to receive universal service. Also, because of broadband's importance to the future of advanced services deployment, consideration should be given to providing explicit support for broadband deployment.

Congress should continue to address social and public safety concerns in an ever changing technological and mobile environment. The tragic events of 9/11 and in Texas, Connecticut and Florida have highlighted the sense of urgency in this area. Congress can simply make clear that public safety responsibilities apply to all, and must be fulfilled as a necessary requirement for all providers.

Congress should make clear that VoIP providers who are given nondiscriminatory access to emergency services infrastructure must pay adequate compensation to local telephone companies and other owners of such infrastructure in an amount that adequately covers the actual costs of ownership of the infrastructure. 9-1-1 is a legitimate cost of doing business for all voice providers and need not be borne entirely by customers. Without such assurances, no one will voluntarily want to be an owner of this emergency services infrastructure. Therefore, those companies that “step up to the plate” should be protected for their commitment to public safety.

Congress should develop a Federal standard that addresses limitation of liability issues in the provision of E-911 services. Today’s patchwork of state statutes presents significant difficulties for stakeholders who seek to understand their rights, responsibilities and potential liabilities with regard to implementation and provision of 9-1-1 services. A national program like 9-1-1 that requires so much cooperation between all stakeholders across the country should not be subject to the politics and whims and desires of each state if it is to work as seamlessly as the American public desires.

*Conclusion*

Senator Burns, we thank you for holding this hearing. I think everyone understands the importance of VoIP and E-911 to the Nation’s economy and consumers and can appreciate that your decisions in this area will help shape the future of telecommunications and consumer safety. CenturyTel is eager to work with you in the future and hopes that you will seriously consider the points we make here today. I thank you for the opportunity to join you today and look forward to your questions.

Senator BURNS. Thank you very much. A question arising from that also. Now we’ll hear from Bill Squires, Blackfoot Telecommunications Group, and he follows the compliance issues very closely. Bill, thank you for coming today.

**STATEMENT OF WILLIAM SQUIRES, SR. VICE PRESIDENT AND GENERAL COUNSEL, BLACKFOOT TELECOMMUNICATIONS GROUP**

Mr. SQUIRES. Thank you very much, Senator. My testimony has been submitted, so I’ll depart actually greatly from that, because I think the testimony I’ve submitted, I would encourage the Committee to consider.

But it addresses—much like the rest of the testimony—VoIP issues, and how that hits our rural company. I talked to Monica this morning, and she also asked me to address some of the wireless compliance issues, so I’ll do my best to hit those.

For the record, my name is Bill Squires. I’m Senior Vice President and General Counsel for Blackfoot Telecommunications Group, which is headquartered in Missoula. On behalf of our company, I very much appreciate the opportunity to appear at this hearing today.

Our company started in 1954, Senator, and its mission at that time, and now, continues to be bringing the best in communications to rural Montana. Part of that mission involves the safety and security of our members and our neighbors, and we do that largely through E-911.

The critical issues that you’ve already heard about from other witnesses here today, I’ll just reiterate briefly some of the things that concern us as a rural provider in Montana.

Jeremy Ferkin just hit on compensation issues. Certainly that’s an issue for us. We don’t have objections with access to our network for VoIP providers in order to enable E-911 services; but as you’re keenly aware, the cost of providing services in rural Montana is extreme. Certainly we’re greatly dependent on Universal



Service Funds for that; and as Jeremy Ferkin stated, the people that use the network do have to adequately compensate our members and our company for that kind of access.

As somewhat of a side note to that same issue, Senator, I urge you and Members of the Committee to reconcile that access requirement in Senate Bill 1063 with the rural exemptions in the 1996 Telecom Act. As you're aware, there are some provisions in that act that give protection to rural companies to opening their network and their network elements to other companies in order to protect the viability of rural telecommunications. We need to ensure that the access provisions of Senate Bill 1063 do not negate those protections that were built into the 1996 Act.

Certainly the liability parity issues, I think that we certainly would and do support. Montana has a pretty good statute on liability protection for telephone providers, traditional telephone companies, when it comes to providing E-911, and I think it makes perfect sense to extend that same protection to providers of VoIP services.

Certainly the biggest problem we're facing, Senator, in the trenches is rural addressing, an issue I know you're familiar with, but it's one that continues to haunt our implementation of E-911, particularly certainly on the wireline side.

In my own county, in Missoula County, where Qwest is the RBOC provider to Missoula, and we're the independent provider to the communities surrounding Missoula, such as Seeley Lake, Clinton, etc., that are also in Missoula County, the data was validated to a sufficient level from a population percentage standpoint to roll out E-911 simply by validating the MSAG for the Missoula urban area, if we can call it that, without having to validate rural addressing for the rural areas.

And so E-911 has been implemented in Missoula County, really to the exclusion of the rural areas, and that's something that has to be addressed, I think, with the standards that you have heard from other witnesses about. The counties that we work with are very good about cooperating with us, but the fact of the matter is they're all doing their own thing, and we do need some standards to allow us to interact with counties on the same basis.

Briefly, Senator, I'll just touch on wireless issues in the interests of full disclosure. We continue to operate a wireless business in western Montana, but we've sold it. We're no longer the owners of the wireless business, although we're the operators currently. I'm pleased and proud to report to you today that that system is fully compliant with the provisions of wireless E-911. We've met all of the standards to date, and we have no doubt that we'll hit full compliance under the current statute.

And I would be happy to address any questions you may have with wireless compliance as well. Again, thank you for the opportunity, Senator.

[The prepared statement of Mr. Squires follows:]

PREPARED STATEMENT OF WILLIAM SQUIRES, SR. VICE PRESIDENT AND GENERAL COUNSEL, BLACKFOOT TELECOMMUNICATIONS GROUP

*Introduction*

Senator Burns, my name is Bill Squires. I am the Sr. Vice President and General Counsel for the Blackfoot Telecommunications Group headquartered in Missoula,

Montana. Blackfoot is both an incumbent rural telephone company, providing service to approximately 18,000 customer access lines in rural western Montana, and a competitive local exchange carrier, providing competitive telecommunications services to the Missoula market.

#### *Support for Senate Bill 1063*

Since 1954 when Blackfoot began service as a small rural telephone cooperative, it has done so in large part to provide our rural members with much needed contact with others, including vital access to emergency services. The continuing development of our global economy, and the absolute need for Montana to be a player in that economy, dictates that our telecommunications networks and services be on par with those in much larger urban areas—and they are. However, we must always have as our first goal the safety and security of our families and our neighbors. To that end, we applaud the introduction of Senate Bill 1063, and very much appreciate your co-sponsorship of this important legislation.

There is a great deal of “buzz” surrounding the virtues of IP-Enabled Voice Services, or “VoIP” as it has been dubbed. To be sure, this technology represents significant advances in not only network utilization and efficiency, but in customer choice flexibility. With that flexibility comes the heightened obligation to ensure, to the greatest extent possible, that all our customers, including those in our rural areas, will have the benefits of Enhanced-911 services should they ever be needed. Senate Bill 1063 takes many important steps in ensuring that E-911 services will be available to VoIP customers.

#### *Implementation Realities*

Senate Bill 1063 delegates to the Federal Communications Commission the authority to prescribe regulations in order to establish a set of requirements on providers of IP-Enabled Voice Services. Section 2(b) of the bill would require companies such as Blackfoot to provide non-discriminatory access to emergency services infrastructure. While Blackfoot certainly does not object to this requirement, I implore you to be as specific as possible in the Congressional Record regarding just what is meant by such “nondiscriminatory” access, as well as the cost recovery mechanisms for such infrastructure. With a limited customer base, Blackfoot and similar companies simply cannot absorb a great deal of additional expense relating to updates to master databases of location information. This process can be complicated by the dynamic nature of IP devices, meaning that location databases may need to essentially have immediate updates whenever a user of this service changes location. I would suggest that, similar to wireless E-911, a simpler and more cost effective implementation regime may be to require, over time, that all VoIP devices be GPS-equipped.

Any non-discriminatory system will undoubtedly involve updating of customer support software. Again, the Commission’s rules should provide for the fair recovery of these costs.

As an aside, and somewhat out of the scope of this hearing, I also encourage the Committee, and the Commission, to reconcile the bill’s “non-discriminatory access” provisions with the overriding provisions of Section 251(f) of the Telecommunications Act of 1996, which exempts rural telephone companies such as Blackfoot Telephone Cooperative from certain “unbundling” requirements otherwise imposed by that Act.

Finally, I would be remiss if I did not comment on the biggest obstacle to date in implementing E-911 in rural service areas, and that is the issue of rural addressing and county-state collaboration. Regarding addressing, some counties in Montana have contracted with third-parties to do rural addressing, and it is working very well. However, some counties have chosen to undertake the addressing themselves. This has led to delays in completing rural addressing in a timely manner. In Missoula County, for instance, E-911 has been implemented without completion of addressing in many of the rural areas served by Blackfoot.

Compounding this issue is the lack of mandated standards for addressing. While the state has set forth recommended standards, each county is free to implement addressing in their own way. It may sound tedious, but designations such as “Lane”, “In”, or “Ine” have significant database implications. Similarly, inconsistencies in databases maintained by some E-911 providers cause a great deal of delay, and expense, in scrubbing data. Future funding and implementation regulations can be used by the Commission to entice more counties to move toward standards, and for providers to pay greater attention to clean data.

#### *Conclusion*

Again, on behalf of Blackfoot Telecommunications and similar rural telephone companies, I would like to thank you for bringing forward this important legislation.

As with any legislation, the devil certainly is in the implementation details, and I commit to work with you, your staff, the Commission, and other interested parties to see that this legislation brings to rural Montana the benefits of E-911 services, while allowing us all to realize the opportunities brought by VoIP services.

Senator BURNS. Thank you, Mr. Squires. I appreciate that very much. Mr. Greg Jergeson, Public Service Commission of Montana. Welcome.

**STATEMENT OF GREG JERGESON, CHAIRMAN, PUBLIC  
SERVICE COMMISSION OF MONTANA**

Mr. JERGESON. Thank you, Senator Burns, for having invited me to appear before your Committee today.

I want to express my appreciation that you're holding this important hearing in Montana, the state that you and I both represent as public servants, and it's a special honor, frankly, for me that you choose to have this hearing in Cascade County, which turns out to be a cornerstone community of my own Public Service Commission District No. 1, which runs from here north to the Canadian border, and east to North Dakota; and if there's a definition of rural, that probably is PSC District 1. So I appreciate you bringing this hearing here today.

One of the first things I learned back in 1975 when I entered the Montana Senate as a fresh faced, really gung-ho kind of guy, was some of the older hands said, "The first bit of advice is don't filibuster your own bills to death;" and though this is not my bill, I do support it, and I don't wish to filibuster your bill to death, Senator. So I'm going to keep my remarks fairly short.

We've submitted written testimony. I'll just kind of paraphrase some of the items in the written testimony, and then be happy, like the others, to answer any questions you may have.

Clearly Montana citizens expect that when they dial 9-1-1, that that will get them the service that they need in whatever emergency situation they're experiencing, irrespective of who their telecom or communications provider is, be it wireline, wireless, or VoIP; and the Montana PSC believes that this bill is important, in that it is designed to make sure that that accepted universal service by almost everybody in the public is observed.

The other thing important about it, we find that sometimes on the Montana PSC, we think that we have authority to do certain things, but we get a certain comfort level by going to our Legislature and saying, "We would like to have that authority expressly put into the statutes," and I think much of your bill does that very same thing with respect to the FCC ruling that came out on this particular subject, is that it will clearly clarify that in fact the FCC had that authority.

From my perspective as Chairman of the State Public Service Commission, we appreciate the provisions in your bill, particularly Section 2(h), which permits the FCC to delegate to the state commissions implementation and enforcement of the national rules. We appreciate Section 2(c) that clarifies that nothing in these Federal laws or rules will prevent the collection of fees on a non-discriminatory basis from the providers, provided that that revenue is dedicated to the 9-1-1 purposes.

I've attached to my testimony a resolution passed by the National Association of Regulatory Utility Commissioners at their summer meeting in Austin, Texas this summer in support of the provisions of this bill, and believe that that gives clearly a nationwide feel to the support for this fine bill.

As a final observation, I would note that this bill and its requirements that all service providers share in the delivery of this essential universal service demonstrates that the distinction some would make between information services and telecommunications services is in fact a distinction without a difference. And I support this bill, and I can think of no reason why it shouldn't pass without delay. I commend you for your sponsoring this bill, and your cosponsors as well, and I thank you for this opportunity to testify.

[The prepared statement of Mr. Jergeson follows:]

PREPARED STATEMENT OF GREG JERGESON, CHAIRMAN, PUBLIC SERVICE COMMISSION OF MONTANA

Montana citizens who dial 9-1-1 expect to be connected to emergency services personnel. This expectation exists no matter what kind of telephone service they are using—wireline, wireless or the newest telecom technology, broadband/VoIP. This bill goes hand in hand with, and strengthens, the recent FCC action to require VoIP companies to provide their customers with the same E-911 calling capability that other telephone companies provide.

It is essential to public safety that VoIP providers be required to make this vital emergency service available to all of their customers without delay. This bill does that, and more. It also recognizes that traditional phone companies own the existing E-911 infrastructure and mandates that those companies give VoIP providers access to their 9-1-1 networks on a nondiscriminatory basis and at reasonable rates. And, just in case there is any ambiguity in current law about the FCC's authority to act on VoIP E-911, this bill explicitly provides the FCC with that authority.

From my perspective as chairman of a state public service commission, it is important to retain the provisions in the bill that recognize the role of states in the provision of E-911 emergency services. In particular, Section 2(h) of the bill, which permits the FCC to delegate implementation and enforcement of the national 9-1-1 rules to state commissions, should be retained. State commissions are the agencies best situated to implement and enforce national 9-1-1 standards concerning the telecommunications providers operating in their states.

In addition, Section 2(c) clarifies that nothing in the bill or in Federal law or rules prevents states from collecting 9-1-1 fees from VoIP phone companies, in the same way fees are collected from other phone companies, if none of the collected revenue is diverted for non-9-1-1 purposes. This, too, is an important feature of this bill. Certainly the state of Montana should be able to require VoIP companies to share the same responsibility for supporting Montana's 9-1-1 program as other types of phone companies currently do.

I note for the record that the National Association of Regulatory Utility Commissioners, which includes the Montana PSC, adopted a resolution at its summer meeting that commended you for introducing this legislation and stated the organization's commitment to working with Congress, the FCC and the industry on this issue. I've attached a copy of the NARUC resolution to my testimony. NARUC is particularly interested in preserving the productive state commission role in arbitrating and enforcing interconnection to 9-1-1 and E-911 trunk lines and hopes to clarify that role as this bill moves forward.

As final observation, I would note that this bill and its requirements that all service providers share in the delivery of this essential universal service demonstrates that the distinction some would make between information services and telecommunications services is, in fact, a distinction without a difference.

I support this bill and can think of no reason why it shouldn't be enacted without delay by Congress. I commend Senator Burns for sponsoring it as well as for his continuing support of Montana's E-911 program. Thank you for the opportunity to testify.

Senator BURNS. Thank you. Commissioner Jergeson, can you answer a question? Nine times out of ten, we start going down the

road of legislation, and we wrestle with definitions. Are we going to have to change some of the definitions between, say, communications and information services?

Mr. JERGESON. Well, I think maybe we need to review what kind of definitions the various parties are trying to put to those kinds of services, and beware that they may be making distinctions that serve their purposes, and that we may need to make sure that we have a definition that meets the old adage about the nature of the duck, how it walks and quacks.

Senator BURNS. That's a good answer. Mr. Squires, would you like to comment on that? Because we don't always define the same things the same way, and whenever we start down this, I just think if we define them right off the bat, then it makes our job a lot easier.

Mr. SQUIRES. It would, Senator. I agree with that. As I was listening to the question and Chairman Jergeson's response, I was thinking of the duck adage. You beat me to it.

You heard testimony from someone—and I apologize. I can't remember which one it was—on the panel right before us that essentially if it's a voice call, then it's a telecommunications service. And I would absolutely agree with that.

If it's a two-way voice call, where I'm picking up my phone, and calling your office, even though that is carried over IP protocol, that's a telecommunications service; and if there are advantages to be gained in the market—be they regulatory advantages, or other competitive advantages—by trying to shoehorn something into an information services definition, I think companies will do that, and I don't think there's necessarily anything wrong with that. That gives them a competitive advantage.

That's why I do think it's important that legislation and regulatory rules clarify just what is a telecommunications service, and in my mind, it's just pretty simple. It's a two-way conversation.

Senator BURNS. Same, Jeremy?

Mr. FERKIN. The only thing I would add to it is, since we're on adages, follow the money. Why are people creating a differentiation between an information service and a telecommunications service? And in most cases, it's to get around paying for whomever's network you're using. There is no IP without CenturyTel and companies like Blackfoot building the broadband infrastructure out to your home, your ranch, or wherever it may be.

So Vonage could not exist without our infrastructure. And if they're utilizing our infrastructure, and the voice communications over it that are being used in such a manner that it takes revenue away from us, so we then are more dependent on things like USF for other things. Then if it quacks like a duck, it walks like a duck, it's a duck. The reality is. Voice is voice.

Senator BURNS. Let's talk about mapping and addressing. That seems to be a concern. Why is it so difficult that we can't get correct mapping for locations for our different emergency centers? What's the problem that we run into in mapping?

Mr. SQUIRES. Senator, the problem that quite simply we run into in our area is resources. It's expensive. Typically counties will hire consultants, or can hire consultants—there are several companies out there that do this—to essentially go around and GPS every

farmhouse, every home, every business out in our service area. It's expensive.

So resources, I think, are the number one issue. I think counties are doing the best they can, but they don't have the human resources or the financial resources to complete the job. And to the extent that Congress can help them with those resources, I think that would go a great, great way towards getting rural addressing and rural mapping done.

The other issue, of course, is that people hate to change their address. We have to change our address in Granite County, at Georgetown Lake, because we're on the opposite side of the road. We have to be an odd number, not an even number. And that's fine for a cabin, but a business hates to change their address. And so from that standpoint, there's certainly some customer reluctance to do it, but the main problem is resources. The counties need the money to get it done.

Senator BURNS. When you go Voice Over IP, addressing becomes even more important, because when you move your computer, that is not noted whenever they call it in that he's moved to another city, even though it may be in the same area that the telephone company or whoever serves. Is that a problem, and should some responsibility be incumbent on the computer user or the person using the Voice Over IP services?

Mr. SQUIRES. Certainly I think it should be, Senator. I think there are some personal responsibilities that people have to take. And mobility in our society causes an increase, I think, of some of that responsibility.

Some of our technical folks think that we should get to the point where we track VoIP devices just like we do cell phones, use GPS. That's several years down the road, and right now there's the expense, and there's privacy issues certainly that go with that. But that can go a long ways towards taking care of that mobility problem.

Senator BURNS. Mr. Jergeson.

Mr. JERGESON. Well, I think that it's extremely important that somehow that person is located, and the technology probably exists to accomplish that. But the other thing that is important, I think, in this whole realm or whether or not we have effective 9-1-1 is whether or not the various technologies have coverage. I think the cell phones in so many areas of the state being dead spots in Montana. Your cell phone might be able to tell somebody where you're at, but if you're not in a place where you can get a signal, you can't complete the call to begin with.

Therefore, I think that's a major consideration as we work on improving and fixing our 9-1-1 systems, is that part of that needs to be able to make the coverage of these various technologies available almost everywhere.

Senator BURNS. Jeremy.

Mr. FERKIN. Most of the—as you mentioned earlier—the dark suited people are carrying devices similar to this, Blackberries or whatever they may be. So I think our laptops and our concerns about the mobile computer are going to be a temporal issue. We have On Star in most of our vehicles. Commission Jergeson speaks perfectly about the fact that we still have issues where there aren't

cell coverage areas in Montana. So regardless of whether you won't be able to get VoIP, you won't be able to get cell coverage issue, but more and more people are going to a highly mobile device.

By the way, this has a GPS chip in it, so you don't have to think about that. So I think we have a time period here where laptops are going to continue to be of use, but Federal statutes could step in and say GPS devices need to be in them if you're going to provide VoIP. But the other side is technology protocols—not that it will mean anything to a lot of people in the room—but things like MPLS, we're doing Multi Protocol Label Switching, it's amazing how when you're sitting somewhere remote, your email still gets to you, right? We can put in the addressing packet of that data where you are.

So yes, it would be a requirement of that person, when they register their computer, like if it was a brand new Dell, to who they are, where they're at; then when they go to a new location, to have a pop-up that says, "We see that you're not coming from same IP address," or "You're not coming from the same location. You're hitting new routers," and it gives you a pop-up requirement.

Service providers can require that. Service providers can demand that. So the technology isn't the issue—we heard that from Mr. Citron and other people—the issue is how do we make it happen? You've got to force it, and you've got to demand it.

So those tragedies that have happened in multiple states aren't a result of technology, they're a result of people being unwilling to work together, and Federal statute demanding that they work together.

Senator BURNS. Mr. Jergeson, are you pretty happy with the build-out and the progress that's being made in the wireless communications in this state?

Mr. JERGESON. No, I wouldn't say that I'm particularly happy so far. There's been a lot of build-out. But when you think of my PSC district, you can drive a lot of miles between Grassrange and Circle, and not have cell phone service; and just because it's a sparsely populated area doesn't mean that people there who are concerned about the ability to communicate, particularly in emergencies or family matters, not having coverage, they ought to be able to have coverage.

We're working very hard, and some of the providers are working very hard, and the approval of ETC status for Midrivers Telephone is—their wireless company is probably going to help a great deal in the build-out of that service, and as we work through those with other providers around the state. But the process is slower than I like it at this point.

Senator BURNS. We've kind of identified some of the problems, and there are some of the problems that we can work on in the legislation and some of them that we can't, the application, and on how we force this new service out into rural areas, and do a really good job in emergencies such as these. I'm a very strong believer in 9-1-1. I've seen it save lives, but we also hear some horror stories whenever we start talking about locating people.

Here in Montana, there was one instance in Petroleum County, of all counties. We get a 9-1-1 call. It did go to the closest re-

sponder, which was Lewistown, and they couldn't find him, and we lost a life just because of that.

So that's what we're trying to prevent in this piece of legislation. We've identified some of the areas, and I look forward to working with all of you to get this legislation passed, but also implemented. I think it takes all of us working together to implementation.

The mapping concerns me, the addressing concerns me, because that's very important, especially where you have communities— Let's go to the Flathead over here in your part of the country, Mr. Squires, where you have growth, Missoula experiencing great growth, new areas coming up. How do we stay ahead of that? And the old folks that have always had the same old address, they're not going to change.

Also our Blackberries. I changed the name of my Blackberry to Dr. Pepper. In order to manage my life, I only turn it on at ten, two, and four, and then I turn it off. But nonetheless, we are living in the age of instant communications. And so I'm under the assumption that human nature being as it is, if you don't really respond to a problem right away, well, in two hours they've already solved it, and they didn't need you anyway. But sometimes that is not always the case. But I know that people don't like to change addresses, and they're just reluctant to change, but they're going to have to. And most of them will. But we still have human nature as it is.

Thank you for your testimony today. I'm going to leave the record open for other Senators. If they have questions, you may get written questions from this hearing. If you would respond both to the Committee and the individual member of the Committee, I would appreciate that. And of course, all your statements will be made a part of the record. I thank you for coming today. It's been very informative to me. We've still got a little work to do. I think working together we can get it done. Thank you very much. We're adjourned.

[Whereupon, at 2:53 p.m., the hearing was adjourned.]

