The subcommittee met, pursuant to call, at 10:40 a.m., in Room 2322 Rayburn House Office Building, Hon. Marsha Blackburn [chairman of the subcommittee] presiding.


Staff present: Ray Baum, Staff Director; Kelly Collins, Staff Assistant; Zachary Dareshori, Staff Assistant; Sean Farrell, Professional Staff Member, Communications and
Technology; Chuck Flint, Policy Coordinator, Communications and Technology; Adam Fromm, Director of Outreach and Coalitions; Elena Hernandez, Press Secretary; Tim Kurth, Senior Professional Staff, Communications and Technology; Lauren McCarty, Counsel, Communications and Technology; Alex Miller, Video Production Aide and Press Assistant; Evan Viau, Legislative Clerk, Communications and Technology; David Goldman, Minority Chief Counsel, Communications and Technology; Jerry Leverich, Minority Counsel; Jourdan Lewis, Minority Staff Assistant; Lori Maarbjerg, Minority FCC Detatlee; Jessica Martinez, Minority Outreach and Member Services Coordinator; and Dan Miller, Minority Policy Analyst.
Mrs. Blackburn. [presiding] The Subcommittee on Communications and Technology will now come to order.

I recognize myself for 5 minutes for an opening statement.

I want to welcome everyone to this, as we continue our committee's oversight of FirstNet, the authority charged with deploying a nationwide interoperable broadband public safety network. The First Responder Network Authority was an important fixture of the Middle Class Tax Relief and Job Creation Act of 2012.

There is a lot of work that has been done by this committee and others, and it has gone into reviewing the recommendations from the 9/11 Commission on how to better prepare our first responders in times of crisis. Interoperability has long been a challenge for our state and local authorities. In the wake of the recent natural disasters and, of course, the terror attack that took place in New York City just yesterday, we have realized how incredibly important that it is that not only we do this, but that we get this right. There is no room for error when you are facing a disaster and need these communications.

I thank the witnesses for appearing today.

Mike Poth is the CEO of FirstNet. He now has both the privilege and the pressure of this huge undertaking. We know that it is going to be successful, and we look forward in making certain that the implementation is smooth and that the continuation is one of success.
Chris Sambar is a Senior VP at AT&T, and his company is the winner of FirstNet's RFP to gain access to 20 megahertz of the 700-megahertz spectrum.

Our friends from the states include John Stevens, who is the New Hampshire Statewide Interoperability Coordinator, and Brian Moran, who is the Virginia Secretary of Public Safety and Homeland Security. Their unique perspective of what states are thinking will illuminate how to avoid a top-down approach that could lead to failure.

Rob LeGrande consults now, but was the CTO for Washington, D.C., in building out a public safety broadband network. I am sure that he is going to be able to help us sort out issues that the states and localities face, and perhaps can even give us a little bit of a more granular view on how to address challenges that are in our rural and tribal areas, and how we work to calculate their decisions.

As you all know, this past September, FirstNet delivered its network plans to the combined states and territories. Part of what brings us here today is the December 28th deadline from that notice for those states and territories to elect whether they will accept the plan. Under the statute, states are permitted to opt into their respective state plan or opt out of the FirstNet network and build and maintain radio access networks, or RANs, from other providers, but still meet interoperability requirements set by the FCC.
I think it is also worth pointing out that, while AT&T will build the FirstNet RAN in opt-in states or territories at no cost to each jurisdiction, public safety entities will still be responsible for paying subscription cost and end-user device expenses. And they are not required to subscribe to the FirstNet service. We must ensure that choice remains a paramount principle as the states and territories proceed with their decisionmaking and their implementation.

While there has been some debate on schedules and fees, subscriber levels, device availability, and whether the network will be able to deliver mission-critical-level services, I know the panel today can help us sort through all of these issues to further reaching this goal.

At this time, I would yield the balance of my time to Mr. Lance.

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

Before I begin, let me say that our prayers are with the victims of the terrorist attack in New York yesterday, the worst loss of life in such an attack since 9/11.

Our 9/11 first responders from all over the tristate area responded to the unprecedented attack on the World Trade Center. Several issues with their communications system, including interoperability and resiliency, hindered the coordination of these fine public agencies. The equipment and networks used by the various departments that responded from all over the area,
including New Jersey, were in many cases incompatible. These issues were recognized by the 9/11 Commission.

As New Jersey was one of the first states to opt into FirstNet, I am interested in learning how our state and others can work with AT&T and the providers to prevent future challenges with interoperability and public safety agencies, as well as improving the resiliency and security of our public safety networks.

Thank you for being here today to discuss this important topic.

I yield back.

Mrs. Blackburn. The gentleman yields back.

At this time, Mr. Doyle, you are recognized for 5 minutes.

Mr. Doyle. Thank you, Madam Chair. Thank you for holding this hearing, and thank you to the witnesses for appearing before us today.

FirstNet and the National Public Safety Broadband Network have come a long way and made great progress in the five years since the program was established. FirstNet has designated its partner in AT&T. States have received their buildout plans, and 25 states and two territories have already opted to accept FirstNet's plans. By the end of the year, all states will have to decide whether to opt in or opt out of the FirstNet plans.

I am pleased with the progress that FirstNet and AT&T have made, and I hope this program continues to perform well as more
states opt in and the buildout of FirstNet begins in earnest.

Now I know a lot of hay has been made recently about the opt-out process and the costs for states to choose that route. States looking into opting out seem overwhelmed by the potential punitive cost and the risk they take on in building and managing their own network. Companies seeking to get states to opt out see this as a barrier to their entry into this market and a stumbling block to meaningfully engaging with states.

To my mind, the cost and risks placed on the states for opting out are steep because building and maintaining these networks is a hard and risky endeavor. Without access to tens of billions of dollars necessary to build out a dedicated network of their own, states that opt out need to gamble on a private partner's ability to leverage private capital, utilize a relatively small amount of shared spectrum, and undertake the buildup of a hardened multibillion dollar communication network. And they need to do all of this in a timeframe that is competitive with FirstNet, using technologies and systems that are fully interoperable.

To my mind, the monetary risk is so great because this is a hard problem and the likelihood of failure is high. More to the point, the risk to the public at large and first responders is high if a state fails to meet its obligations. If building this network wasn't hard, Congress wouldn't have needed to create FirstNet; first responders wouldn't have died on 9/11 because of communication failures, and the 9/11 Commission would not have
recommended the creation of a national interoperable public safety communications system.

Building this network and deploying the service is a serious challenge and we need serious solutions. States are free to make their own choices, but they need to understand and accept the risks. It is something I would encourage governors contemplating an opt-out to strongly consider.

I have also seen reports of competitors seeking to sign up individual first responders complaining about the requirements of creating interoperable services with FirstNet. Let me say, I am strong believer in the value of competition, but I also believe that, if other providers want to offer services to first responders, they need to be fully interoperable. Lower-cost services and devices can't fix the problem first responders face if they are not interoperable. We are still seeing this issue today in Texas, Florida, Puerto Rico, the Virgin Islands, and the wildfires that affected the areas of the West Coast.

Americans are lucky and grateful that so many people volunteer to help when disaster strikes, and first responders come from far and wide to help. What we need to do is ensure that they have access to the best available interoperable technologies. If a competitor can provide that, great. If they can't and they are putting equipment in people's hands that isn't interoperable, that is liable to create a problem rather than solve one.
I look forward to the testimony of our witnesses and the discussion here today.

With that, Madam Chair, if there is no one on my side that would like my time, I will yield what I have left to Mr. McNerney.

Mr. McNerney. Well, I thank the ranking member for yielding.

The recent wildfires in my home state of California shed light on the critical role of our nation's first responders and the need for first responders to be effectively communicating and receiving information during these emergencies. It is essential that we have a resilient and redundant interoperable broadband network, so that our first responders are equipped to carry out their duties during natural disasters.

But it is also important that this network be secure and able to withstand attacks from the various actors. We cannot afford for cybersecurity to be an afterthought in these scenarios because the consequences could be fatal.

I look forward to the hearing and learning about FirstNet, what FirstNet is doing and the progress that it has made so far.

And I yield back.

Mr. Doyle. Thank you.

Madam Chair, I would like to introduce for the record an op-ed by Montgomery County's chief of police entitled, "For police, first responder communications network is much needed good news".
And also, I would like to introduce the written testimony submitted by Verizon. 

Mrs. Blackburn. Without objection, so ordered.

[The information follows:]
Mrs. Blackburn. And as we permit this, I would just like to say I noticed that there are several first responders in the audience today, and we recognize your presence and we thank you ever so much for your service. You are, indeed, on the frontlines.

Chairman Walden is not here. Does anyone on the Republican side seek his time?

[No response.]

No one is seeking that time. Ranking Member Pallone is not here. Anyone else seeking time?

[No response.]

No one else is seeking time. Everybody has got a sugar coma going on, I know. Yes, too much of that candy.

[Laughter.]

And we do thank all of our witnesses for being here today. We are grateful for your preparation, for your opening statements that were submitted in a timely manner, for your insights into what is before us.

As you can see, this is something where there is bipartisan agreement. Doing our due diligence in conducting oversight is important. So, we welcome each of you.

I previously recognized you. Michael Poth, who is the CEO of FirstNet; Chris Sambar, who is the Senior VP at AT&T for FirstNet Business Solutions, Global Public Sector; Rick Kaplan, who is the General Counsel and Executive VP of the National
Association of Broadcasters. John Stevens is the Statewide Interoperability Coordinator for the state of New Hampshire, and Robert LeGrande, who is the former CTO of Washington, D.C., now a consultant.

Again, we appreciate that you are here. We will begin our panel. Mr. Poth, you are recognized for 5 minutes.
STATEMENTS OF MICHAEL POTH, CEO, FIRST RESPONDER NETWORK
AUTHORITY; CHRISTOPHER SAMBAR, SENIOR VICE PRESIDENT, AT&T; JOHN
T. STEVENS, STATEWIDE INTEROPERABILITY COORDINATOR, STATE OF NEW
HAMPSHIRE; BRIAN J. MORAN, SECRETARY OF PUBLIC SAFETY AND HOMELAND
SECURITY, STATE OF VIRGINIA, AND ROBERT LEGRANDE II, FOUNDER,
THE DIGITAL DECISION

STATEMENT OF MICHAEL POTH

Mr. Poth. Great. Thank you, Chairman Blackburn, Ranking
Member Doyle, and members of the subcommittee. Thank you for
inviting me to testify today

I am Mike Poth, the Chief Executive Officer of FirstNet,
and I am pleased to be here to provide an update and progress
on this important initiative for our nation's first responders.

FirstNet is committed and accountable to this committee and
Congress, but, first and foremost, to public safety. And it is
the mission of serving public safety that drives my team toward
exceeding the goals that you set out for us when you established
FirstNet.

I, too, would also like to thank the members of public safety
who are in attendance today. We really appreciate their focus
and commitment.

We have faced an enormous task in developing this system
over the past few years. Nothing like this has ever been done
before, but thanks to the support of Chairman Walden, Ranking
Member Pallone, and all of you here today, we are closer than ever to providing public safety what they have long asked for, a dedicated network that will save lives.

We have spent the better part of three years consulting with our partners in the states and territories and tribal nations to ensure that we have gathered the needs of local first responders. This is a very complex technical, operational, and logistical effort to meet the needs and expectations of public safety.

Since our contract signing that Chairman Blackburn attended a little over 7 months ago, significant progress has been made. I am happy to report that AT&T has met or exceeded all of its required deliverables. There is a clear line of sight and plan for a successful implementation in the coming years, depending on the final determinations of the remaining states completing their due diligence on their options.

We have now established a binding contractual mechanism to ensure the successful buildout in the 56 states and territories of a nationwide public safety broadband network and the financial sustainability to support this effort for the next 25 years.

It is important to note that we are holding AT&T accountable while ensuring that we support their efforts. Their success is critical in order for this to work. If they fail, then we have to go back to the drawing board.

It is important to remember and give context that, through
this contract, AT&T is already contractually obligated to build out the system in the 56 states and territories to the plan that has been submitted to each of those states. This includes spectrum lease payments, adoption targets, disincentive and termination fees, if they fail to meet the terms of the contract. Only in those states that decide to pursue building their own radio access network is that obligation lifted from AT&T. FirstNet, along with our board of directors, the Departments of Commerce, Justice, Homeland Security, and the Office of Management and Budget continue to work alongside AT&T to ensure that they meet all the contractual requirements.

Over the last three years, FirstNet has gone to great measures to make sure that all the states and governors fully understand the opportunities, risks, and challenges to opting out. It is important to note, however, that FirstNet will do everything possible to make sure that an opt-out is successful. This process is involved, as failure, as has been previously mentioned, at the national, state, or local levels is not an option for our first responders.

We have delivered the final plans to the states and territories. Twenty-eight governors have approved and opted in, and another state will actually be announcing its opt-in choice this afternoon. This is truly an exciting time while the remaining 27 governors have 58 days left to make their final determination to either accept the FirstNet/AT&T's solution or
assume the risks associated with opt-out.

It is, again, important to note that FirstNet has been open and transparent in every step, ensuring that everyone who is involved in this process has as much information as possible.

We built in new steps as needed that allowed the states and the business communities to step up and become true partners.

Ultimately, each state and governor have all the information possible to make an informed decision.

The public and first responders need us to be successful. Lives will depend on this network. This is the standard against which we will be measured. When you look at the recent storms that brought devastation to Texas, Florida, and Puerto Rico, and the inconceivable tragedies that took place in Las Vegas and now New York, communications are a vital part of any response and recovery.

We are proud of what we have achieved thus far, but we also know that we have a long way to go to deliver to public safety what it truly needs and deserves. This has never been done before. And FirstNet will continue to work with each state and territory to get it right for them and for public safety.

Thank you again, and I look forward to answering your questions.

[The prepared statement of Mr. Poth follows:]

********** INSERT 2**********
Mrs. Blackburn. The gentleman yields back.

Mr. Sambar, you are recognized for 5 minutes.
Mr. Sambar. Thank you.

Chairman Blackburn, Ranking Member Doyle, members of the committee, I am Chris Sambar, AT&T Senior Vice President. I am responsible for AT&T's fulfillment of the FirstNet project, a special opportunity for AT&T and its dedicated employees to demonstrate their continued commitment spanning two centuries to public service and public safety.

I am proud to affirm to this committee that AT&T is on track to deliver on its commitments and has, in fact, met the first set of milestones identified in the FirstNet contract, as Mr. Poth mentioned. We have also launched the FirstNet application ecosystem, including an application store for America's first responders, as well as the first ever developer program geared specifically for first responders.

And now, again, as Mr. Poth mentioned, we have over half of the states and territories having made the decision to opt into FirstNet. AT&T is delivering on the promise of a dedicated interoperable network that will give first responders in those states and territories the technology they need to effectively communicate and collaborate across agencies and jurisdictions.

Before FirstNet, first responders frequently lacked the ability to communicate with each other and to coordinate incident response activities across agencies and jurisdictions. Relying
on over 10,000 radio networks as well as the same commercial networks that Americans used today, first responders have been hampered by a lack of interoperability and network congestion during times of significant emergency.

The recent unprecedented sequence of natural disasters and public safety incidents over the past couple of months have reinforced the wisdom of the widespread bipartisan consensus of Congress in 2012 to establish the First Responder Network Authority, FirstNet, as an independent authority within NTIA, to provide emergency responders with the first nationwide high-speed broadband network dedicated to public safety.

AT&T is honored to have been chosen to build and manage the FirstNet network. We committed to spend about $40 billion over the life of the FirstNet contract to build, operate, and maintain the network. AT&T also committed to connect the first responder network to our best-in-class telecommunications network, valued at over $180 billion, with a wireless network reaching 99.6 percent of the U.S. population.

Moreover, AT&T submitted a plan that ensures that local commanders in opt-in states can adjust the access in times of emergencies to the services, featuring priority and preemption, allowing others such as bus drivers during pre-storm evacuation or medical personnel after the storm has passed to have access to the same services in time of need. Priority access means just that. In times of network congestion, our first responders will
have communications precedent for primary users, be able to
preempt other users off of the AT&T and FirstNet network.

In earning the FirstNet contract, AT&T demonstrated its
particular competencies with respect to world-class national
disaster recovery. The national disaster recovery team at AT&T
recently demonstrated its value in preparation for and during
the aftermath of the devastating hurricanes that recently hit
Texas, Florida, Puerto Rico, the U.S. Virgin Islands, and, most
recently, the California wildfires.

We helped, and are continuing to help, restore
communications in these areas by deploying an array of equipment,
including portable cell sites, cell on light trucks -- we call
those COLTs -- generators, charging stations, evacuee centers,
and emergency communications vehicles. We used ships and
chartered cargo flights to deliver this equipment to our NDR
personnel in Puerto Rico. In northern California we were able
to move mobile restoration assets in quickly and place them in
areas where fire had destroyed our communications equipment and
where first responders needed them most.

In the meantime, there are significant and immediate
benefits to states that opt into the FirstNet network. Opting
in eliminates long-term risks associated with funding, building,
and for the next 25 years maintaining a network that interoperates
with the FirstNet network. Public safety entities in states or
territories that opt in can purchase, at competitive rates,
service with key features such as quality of service, priority access, and preemption. Notably, preemption over the AT&T LTE network for primary users is expected by this year's end.

In conclusion, I would like to reiterate that Congress intended for FirstNet to provide the public safety community with what it demanded for years, a single interoperable public safety network. That network that AT&T is building for opt-in states and territories brings security, priority, and preemption.

And I look forward to answering any questions you have today.

[The prepared statement of Mr. Sambar follows:]

********** INSERT 3**********
Mrs. Blackburn. The gentleman yields back.

Mr. Stevens, you are recognized, 5 minutes.
STATEMENT OF JOHN T. STEVENS

Mr. Stevens. Madam Chair, good morning. Members of the committee, good morning. I certainly appreciate the opportunity to speak here today.

Let me preface my remarks by saying that there is no greater advocate for FirstNet than the state of New Hampshire. As a former state police commanding officer, what often would keep me up at night was knowing that troopers, police officers, firefighters, and EMS personnel were in the field in some areas with little or no communications. So, when I came back to state service approximately 10 years later, many of the interoperability communications issues still existed. In my first conversations with FirstNet, approximately about three-and-a-half years ago, New Hampshire was going to receive a significantly small footprint. As one of the last recommendations of the 9/11 Commission, FirstNet was created and Congress appropriated $6.5 billion to build a nationwide network, a nationwide, dedicated first responder network, not a national network.

Even though FirstNet was under an edict to develop in rural areas, we recognized early on that there would be many areas of the country that would be underserved. Having the opportunity to see FirstNet maps that illustrated limited coverage, and looking at New Hampshire maps, that certainly the northern part
of the state was not being addressed, we looked at possible other opportunities.

Knowing the information and being familiar with FirstNet advertised timelines of 90 days for a governor to make a decision, and 180 days to develop an RFP, award an RFP, and create an alternative plan that would need to be submitted for approval, the timeline that was provided was unrealistic and unattainable for New Hampshire and probably many other states.

With that in mind, the state of New Hampshire, through the Statewide Interoperability Executive Committee and its Data Communications Working Group, began to develop an RFP in July of 2015. That, in and of itself, turned the industry upside down. Industry people were taking every opportunity to dismiss New Hampshire and its intentions for putting the RFP on the street in December of 2015.

On September 7th, 2016, the governor and council awarded a no-cost, no-obligation contract to Rivada Networks. Why? Because the proposal that was submitted was so intriguing that it could not be ignored. From September 2016 to September 2017, the state of New Hampshire along with Rivada Networks developed an alternative state plan that was delivered to Governor Sununu on or about the same date as the FirstNet/AT&T state plan was delivered. Today we are the only state in the country that has an alternative plan in place.

I mentioned early in my testimony that there was no greater
advocate than New Hampshire because it is an officer safety issue and it means increased capability to provide services to our citizens and visitors. So, it is unclear to us why FirstNet, NTIA, and now AT&T, would wish to make the reality of an opt-out decision so onerous and difficult.

At the beginning of last month, October 2017, New Hampshire SEIC made a unanimous recommendation to opt out. Why? Because the alternative plan was far superior to the FirstNet/AT&T plan that was delivered in regards to coverage and price. We are operating in good faith and we understand that there are regulatory permissions that need to be reached. However, based on what we know and what we have been dealing with, we feel threatened by policy and procedure, not by law. We will not allow this opportunity to fail, and we have every confidence in the proposed network that is being proposed.

Was that the intent of the law that created FirstNet or was the intent to provide to the first responder an unprecedented opportunity to communicate in the most difficult of situations? It is unfortunate, from our perspective, that in some ways FirstNet seems to have lost its intended mission.

When we first looked at this, we looked at this as a win/win situation. New Hampshire would secure an investor to build the infrastructure at no cost to FirstNet, where FirstNet could invest the $6.5 billion elsewhere, and then, New Hampshire would enter a fair and reasonable leasing agreement with FirstNet for the
utilization of 20 megahertz of 700 spectrum.

We have done our due diligence. In regards to due diligence, I would be remiss in my responsibilities if, in fact, we did not go down this road to try to create an alternative plan.

FirstNet demands our transparency, but fails to be transparent themselves. AT&T says it wants to work with the state, but says it will only negotiate pricing when the state opts in. NTIA says that it may take up to two years to approve an alternative plan.

I applaud Governor Sununu and all the work that has been accomplished in New Hampshire, which has also provided direction for many states who are weighing in on their options. When the scales seem to be tipped, when pressure is enhanced, and when there are unprecedented obstacles, which can all be seen as threatening states to opt in, we believe it is worthy of review.

In conclusion, New Hampshire has done its due diligence, and our only mission is to make FirstNet successful in New Hampshire.

Thank you.

[The prepared statement of Mr. Stevens follows:]

********** INSERT 4**********
Mrs. Blackburn. Thank you.

Mr. Moran, 5 minutes.
Mr. Moran. Well, good morning, Madam Chairman Blackburn, Ranking Member Doyle, members of the subcommittee. On behalf of Governor Terry McAuliffe, I would like to thank you for this opportunity to discuss FirstNet and our mutual desire to equip our first responders with the interoperable communication capabilities necessary to respond to all hazards.

Governor McAuliffe is proud that Virginia was the first state in the nation to opt into FirstNet. Virginia decided to opt in in July after a thorough review in order to provide public safety subscribers with the benefits of priority service at no cost to the Commonwealth and to proceed with the buildout of Virginia's portion of the National Public Safety Broadband Network. We also viewed the decision to opt in as a way to promote competition within the public safety communications marketplace in order to reduce costs and drive innovation for public safety agencies.

The option to opt out was thoroughly reviewed through in-depth engagement with our public safety stakeholders across the Commonwealth. But the unknown costs of network construction, maintenance, and operation were neither feasible nor determined to be in the best interest of Virginia.

Virginia has long been a leader in the field of public safety interoperable emergency communications. Our success is based on a belief that first responders and emergency communications
experts should lead the effort to identify solutions, as they are the ones who best understand the unique threats we face and the resources needed to respond.

I am joined here today by local public safety professionals from Virginia who have been instrumental in promoting interoperability and guiding our decision to opt in. Fire Chief Richard Bowers from Fairfax County is leading the effort to leverage the benefits from our decision to opt in, and I know Loudoun Chief Brower and others from Arlington County are here as well.

Fairfax Fire now has interoperability between their public safety radio system and broadband with a push-to-talk application. When Fairfax Fire deployed to Houston to support Hurricane Harvey response efforts, they were able to utilize priority service.

Terry Hall from York County serves as the Chair of the Statewide Interoperability Executive Committee. Through the SIEC, they have facilitated a collaborative multidiscipline process to engage our local governments.

Virginia's unique geography, critical infrastructure, and emerging threats require the Commonwealth's public safety community to be prepared for a wide range of threats. Since the attacks at the Pentagon on 9/11, the goal has been, and still is today, to ensure continued interoperable communication among our first responders.
We saw the importance of this this past June when Representative Scalise and his colleagues were victims of a horrible violent attack in an Alexandria ballpark. Again, in August, our Commonwealth was attacked when a large demonstration of white supremacists and neo-Nazis and counterprotesters descended on the city of Charlottesville for a rally that resulted in the death of Heather Heyer and two state police troopers.

It is tragic situations like these that highlight the importance of equipping our first responders with the tools they need to save lives. We believe that our decision to opt in creates the opportunity to realize the ultimate goal of creating a dedicated, safe, secure, and reliable network for public safety in the least risky manner.

Moving forward, we will continue to work collaboratively with FirstNet and AT&T to maximize the benefits of the network for the Commonwealth's public safety community. Essential to this collaborative effort is ensuring adequate coverage and reliability, especially in rural areas. We must ensure FirstNet and AT&T prioritize mission-critical voice and enhanced location capabilities in order to protect our men and women in uniform.

As more states determine their best way forward, I know that the public safety community will continue to provide feedback to Congress, FirstNet, and AT&T. Virginia's decision to opt in marked another significant step forward as we advance interoperable emergency communications and public safety, and
we look forward to the work ahead.

Thank you again, and I look forward to answering your questions.

[The prepared statement of Mr. Moran follows:]

********** INSERT 5**********
620  Mrs. Blackburn. The gentleman yields back.
621  Mr. LeGrande, 5 minutes.
STATEMENT OF ROBERT LEGRANDE II

Mr. LeGrande. Good morning, Chairman Blackburn, Ranking Member Doyle, and members of the subcommittee.

My name is Robert LeGrande, and I am the former Chief Technology Officer with the District of Columbia government. I am a former program executive for the National Capital Region's Interoperability Program. In this role, I led the District's Land Mobile Ready upgrade and, also, led the development of the nation's first citywide 700-megahertz wireless broadband network for first responders. This network was considered a model for the nation and served as a testbed how broadband applications can be shared among public safety agencies.

I left the D.C. Government in 2007 and formed The Digital Decision. My firm leverages lessons learned from the District, the Land Mobile Ready, as well as the 700-megahertz wireless broadband deployments, to help states, locals, and even commercial customers prepare to deploy public safety broadband communication networks.

I appreciate the committee's ongoing efforts to address this critical issue, and I thank you for the opportunity to present my views on FirstNet. It is important to remember that FirstNet was created to address the communications problems that have plagued public safety for many years, especially the lack of interoperability, which we have spoken about so many times.
already, among our first responders.

Along with my public safety colleagues, I believe that a dedicated public safety broadband network was what was needed to address the public safety requirements. In discussions with this subcommittee prior to the legislation being passed, I referenced my previous experience when working with a Seawolf Class nuclear attack submarine. No one would disagree that the Navy and our fleet is America's first line of defense. By the same token, no one should disagree that our first responders are our last line of defense, including their communication systems.

Now we would never consider a U.S. Navy and a Carnival Cruise Line partnership in order to cover the operating cost of a nuclear attack submarine. So, why would we rely on anything less than a fully-funded dedicated public safety broadband network for our first responders? Well, of course, that was not possible, given the limitations of the available funding. That would have been $50 billion or more. But Congress was able to provide FirstNet, and they did a good job of putting this together, with the spectrum and funding to support the development of a public safety broadband network and establish provisions to encourage the private sector involvement.

Now, while many public safety officials, including myself, fought for a true dedicated public safety broadband network, what we actually got from FirstNet is access to AT&T's network with public safety features and functions along with it. Now, while
that may have been necessary, and it was, given the limitation of funding, it also means that we must look at this network and its competitive options for states to make sure that they have viable means to opt out from this commercial offering, because it is truly a commercial offering.

Now, unfortunately, I do not believe, as Mr. Stevens had mentioned earlier, that the opt-out requirements established under FirstNet adequately preserve the states' rights to make their own decisions and consider competitive options for the network providers. This is especially troubling, given that half the FirstNet spectrum, half of it, came from state and local governments. That sacrifice in spectrum makes state and local governments investors in FirstNet.

At a minimum, states should have the same ability as FirstNet to develop a public-private partnership. States should be able to choose their preferred network provider and use that provider's core to serve its public safety users as long as that network core complies with industry standards and is interoperable with AT&T's network. If states are required to use a network core provided by AT&T, then that means that AT&T must provide service to their public safety users.

This is not the kind of opt-out provision that public safety had in mind. States should not be subjected to stricter limitations or harsher penalties or fees than AT&T. Competition is the reason why the United States has the most advanced
commercial LTE networks in the world, and competition must continue to ensure public safety benefits from the tremendous innovation and advances in communications. If there is one thing that the public safety communications industry needs, it is competition at every level.

FirstNet decided that a public safety broadband network, a dedicated one was not achievable, but, instead, chose a commercial solution. FirstNet should, therefore, ensure that this approach is implemented on several key principles.

First, it should support vibrant and fair competition. It should include open and nonproprietary devices and applications that are available to all providers. It should ensure that interoperability for all networks -- I'm sorry, let me say that again. It must ensure interoperability for all networks that satisfy a minimum public safety standard. It should create incentives, not penalties but incentives, for private sector involvement that encourages broader industry support, and it should ensure a level playing field for the states' opt-out process.

With that, I really appreciate the committee's time, and I look forward to answering the questions.

[The prepared statement of Mr. LeGrande follows:]

********** INSERT 6**********
Mrs. Blackburn. The gentleman yields back. That concludes all of our opening statements, and we are going to move to the question-and-answer portion.

For all of our colleagues that are here today, Mr. Doyle and I have discussed how we want to stay right to that 5-minute questioning. And if you get to the end of your 5 minutes and you have got a question, if you will submit it for a written response, that will help us to be mindful of everyone's time and finish the hearing prior to votes being called.

So, I recognize myself for 5 minutes for questioning.

Mr. Sambar, I want to come to you first. Cybersecurity and cybersecurity measures are something we continue to talk about here in this committee. So, as you are looking at this network and the buildouts and the integration, do you all have a strong cybersecurity plan? What type encryptions or firewalls do you have that will prevent some malicious cyberattacks?

Mr. Sambar. Thank you, Chairman. I appreciate the question.

I will start with Mr. LeGrande's point that he just made on interoperable cores. I think that feeds right into your question.

Part of this is a nationwide interoperable network. Part of the strength in that nationwide interoperable network is reducing what I call seams or vulnerabilities as much as possible.

When you try to have cores interoperating and force
interoperability between cores, you introduce seams. That is why the interpretation of the law that was passed, the RFP that was issued, and the FirstNet Authority, as I have said publicly recently, core-to-core interoperability is not something that they are interested in because they don't want to introduce those vulnerabilities. So, that is really the first step in cybersecurity.

Next, beyond that, we are building a separate public safety core. So, to say that this is going to be traffic on our commercial core is not correct. From a technical standpoint, we are building a separate interoperable public safety core network, which means all of the traffic for first responders that flows across this network will be on that core, not on our commercial core. So, that is the next level of security. That core network will be encrypted from end to end, and we have designed that encryption, at the direction of the FirstNet Authority, to comply with various state and federal requirements. And then, the last piece of this -- well, there is actually another one. I could probably go on for 10 minutes, but I want to --

Mrs. Blackburn. No, I have only got 5. That is okay.

[Laughter.]

Mr. Sambar. I understand. So, I will respect your time. The next piece is the device itself in the first responder's hand. So, we do self-certification on all of our devices, but
the FirstNet Authority has a lab in Boulder, Colorado, where they will also be certifying the devices.

Then, the applications on the device, oftentimes vulnerabilities are introduced to a device through the applications on a device. That is why we have set up a public safety app store specifically for public safety -- you have to authenticate to get into this app store; it is not open to the public -- where we can validate the security and functionality of those applications.

And then, the last piece of this, the Security Operations Center. So, AT&T operates a Global Security Operations Center. We are standing up a separate Security Operations Center, roughly 100 people that will do nothing but 24 hours a day, 7 days a week, 365 days a year, monitor the traffic on this core network, the first responder traffic.

So, as you can see, multiple steps that we are taking to ensure cybersecurity is job 1 on this network.

Mrs. Blackburn. Okay. Mr. Stevens, I want to come to you and Mr. Moran.

There are several of us on this panel that have rural areas, and I am sure Mr. Loebsack is going to talk to you about some of this. And when we look at the expectation of buildout schedules, you talked a little bit about the timeline on the RFP end. So, on the expectation of the buildout schedule for these rural and remote areas, as you are reviewing proposals, do you
think that we should be confident they are going to be able to make these schedules? Should we be apprehensive? Should we change how we are reviewing and monitoring some of this ourselves? What do you think the expectation is here? And is FirstNet being helpful to the process or not?

Mr. Stevens. The state of New Hampshire certainly is a rural state and it is divided by a number of different sections. The southern part of New Hampshire is considered really metropolitan Boston. We have a major rural area in the western part of the state and in the northern part of the state.

When we originally looked at the maps that were being provided by FirstNet early on in the process, much of the northern part of the state was ruled out as far as development was concerned. In fact, FirstNet said to us at that point in time that primarily they would be looking at building out from Manchester and Nashua, which are the two largest cities in New Hampshire.

Now, since that time, we have had a number of meetings in regards to buildout and price. I will have to say that the meetings that we had with AT&T and FirstNet were extremely constructive, and we felt that the buildout was much larger than we had originally sought from the original plans. However, what we were able to ascertain from our alternative plan was the alternative plan was providing for us statewide coverage from the northern part of New Hampshire to the southern tip and east
to west.

Mrs. Blackburn. Thank you.

Mr. Poth, I am going to submit a question for the record for you on NTIA. I want to get some answers there.

Mrs. Blackburn. And, Mr. LeGrande, I will submit one to you having to do with your work as state and local authorities. We have got a couple of points there.

The gentleman is recognized for 5 minutes.

Mr. Doyle. Thank you.

Mr. Moran, you look like you are a much younger, better-looking version of former Congressman Jim Moran. Are you related to him?

[Laughter.]

Mr. Moran. I am not sure. Will you accept my comments based on my answer?

[Laughter.]

Mrs. Blackburn. We could tell by your voice the minute you started to talk.

Mr. Doyle. Welcome. Tell Jim we say hello.

Mr. Moran. Will do.

Mr. Doyle. Mr. Poth, if a state opts out and contracts with a third party and the network fails or fails to meet its obligations, what are the risks and what are the obligations to FirstNet and other states?

Mr. Poth. That is a great question, and thank you for that.
As you point out, if a state that has opted out at any path along
the way of that 25-year period is unable to continue because of
the contractor, or for whatever reason, we are going to instantly
start working with that state to try to minimize the impacts to
that state and, most importantly, to public safety in that state,
to reconstitute the network and try to move it forward.

As you mentioned in your opening statement, this is a very
complicated network with a lot of moving parts. And if a state
that opts out -- and we are fully supportive of that -- has those
problems, then we are going to have to figure out ways to recover
costs. FirstNet will not have the cost. AT&T is not obligated
to put any money into that to help recover the cost in that state
that has run into the problem. So, we are going to be working
with the state on how to quickly minimize.

If they have, for example, received some funding, grant
funding, from NTIA that hasn't been completely expended, that
may be an opportunity to use some of those funds to help get the
network back to a point where it is, once again, nationwide and
operable.

Mr. Doyle. Thank you.

Mr. Stevens, I understand Rivada has conducted projects here
and around the world and has some valuable experience, but I also
understand that Rivada is not currently operating a live radio
access network in the United States or, for that matter, anywhere
else in the world. I understand they made you an offer you
couldn't refuse, but I am just curious, are you a little bit nervous contracting with a company that doesn't currently operate a network anywhere in the world?

Mr. Stevens. Well, based on the information that we have been provided through the alternative plan, and with the safeguards that we have enacted through the negotiation with Rivada as far as having performance and surety bonds in place, we feel that, as we move forward and actually develop a service contract, if, in fact, there should be a decision in New Hampshire to opt out, then we feel that New Hampshire is confident that we would be able to continue and provide a statewide application to FirstNet for all our first responders.

Mr. Doyle. Thank you.

Let me ask Mr. Sambar and you, Mr. Stevens, we have seen, with the recent devastating hurricanes in Texas, Florida, Puerto Rico, the Virgin Islands, as well as what has happened in California with the wildfires, that communications can go down during disasters because of a lack of electricity and for other reasons. I would think a state would want to be assured that the FirstNet network is supported by a carrier with the wherewithal and the experience to recover communication services during disasters.

Let me ask you, what experiences does Rivada have in restoring communications during hurricanes and fires and other natural disasters of this magnitude? And I would ask Mr. Sambar
the same question.

Mr. Stevens. Are you asking me, sir?

Mr. Doyle. Yes, sir.

Mr. Stevens. The only thing that I am familiar with in regards to communications that were set up based on a natural disaster was Rivada's commitment to the state of Louisiana after Katrina.

Mr. Doyle. Mr. Sambar?

Mr. Sambar. So, from AT&T's standpoint, Congressman, you are probably aware of the last four hurricanes, all the restoration efforts. I could go into details of tornadoes, wildfires in California. We have extensive experience. Our natural disaster recovery program has been funded at over $600 million over the past 20 years. So, we have a significantly large program.

And I will note, just in the Q3 earnings that AT&T released last week, we noted a 2-cents-per-share earnings hit or earnings cost to AT&T based on the recent disasters just in the quarter. That equates to roughly $200 million in impact to AT&T. So, obviously, a large company with the wherewithal to absorb impacts like that is probably very important to this program, and we think we are that company.

Mr. Doyle. Thank you.

Madam Chair, I see, in the spirit of what we are trying to accomplish here, that I will not ask my other questions, but submit
them for the record for answers.

Mrs. Blackburn. Quick learners.

[Laughter.]

Mr. Doyle. Thank you. Mrs. Blackburn. Mr. Lance, you are recognized, 5 minutes.

Mr. Lance. Thank you very much, Chair.

Mr. Poth, as I mentioned in my opening statement, interoperability issues faced by the first responders on 9/11 was a significant factor in the creation of FirstNet. The law allows state and local public safety agencies to make their own communications decisions, regardless of the state's opt-out decision. Consequently, it is likely that some public safety agencies will continue to use other network providers beside AT&T.

Does FirstNet intend to establish agreements with other providers to enable interoperability across multiple networks and, if not, how would that have an impact on public safety communications?

Mr. Poth. So, the current system will allow the interoperability. So, another carrier provider to public safety, those devices will be able to talk to a FirstNet/AT&T device. We are not going to be pursuing contractual relationships with other providers for that, since the interoperability is a requirement and it is a standard.

We are also, as part of our statute, requiring open standards for the devices and applications, as Mr. Sambar mentioned earlier,
for public safety. So, we think that that addresses the needs if a public safety agency all the way down to a local firefighter decides that the better solution for them is to go with another solution set other than the FirstNet one.

Mr. Lance. Thank you.

Mr. Sambar, would you like to comment on that?

Mr. Sambar. Yes. Thank you, Congressman.

So, I would say, to make it brief, there are international standards which govern the wireless industry around the world called 3GPP standards. We have committed to FirstNet Authority, which they asked us to commit to, that we will maintain those standards. We have for the past 40-plus years in the wireless industry and we will continue to do so.

It is the reason that, when I text you on your phone, regardless of what provider you have, we can get a text across with no problem. We can send an email. We could talk to each other. And it works that way around the world.

We will continue that. We are very interested in open interoperable.

Mr. Lance. Thank you.

And, Mr. LeGrande, could you please comment on what the public safety implications would be in the case of failure to enable interoperability?

Mr. LeGrande. Well, we need no, unfortunately, looking further than what happened in New York. That was tragic.
And when I started my work here in Washington, D.C., believe it or not, in 2001 we didn't have any public safety communications at all in the WMATA tunnel systems. That was a program that I led -- I think there is a member of the fire department here -- proudly, with Chief Ramsey and Chief Thompson.

I think it is important to note that what Mr. Sambar was referring to with regards to interoperability and 3GPP standards, yes, carriers have interoperability that they do every day. I mean, there are partners that AT&T has around the world. Core-to-core interoperability is what they do as a standard practice.

What I am advocating for is to make sure that we have established a swim lane internationally and nationally how carriers operate, and that we should not alter that because we have a commercial system that we are leveraging. We are not leveraging a dedicated network only for public safety. It is a shared network with the public. Now it is segregated at the core, as he mentioned, but it is certainly shared at the RAN, which is the lower part of the architecture.

I don't want to be too technical. I don't want to go too far on this answer. But it is important that we continue to allow the carriers who exist to fight for public safety's business.

The bottom line, the biggest barrier of entry -- and I have been around the country talking to folks, sir, and Frank Gianetti in Pittsburgh, Pennsylvania, where I am from -- the biggest barrier
to entry is cost. And the best way to drive down cost and to
drive up innovation is competition. And, oh, by the way, to
ensure that the carriers follow the way they have already done
business, which is to interoperate through those standards, and
core-to-core is a part of that.

Mr. Lance. Thank you very much, Mr. LeGrande.

And, Chair, I yield back 50 seconds.

Mrs. Blackburn. There you go.

Mr. Loebsack for 5 minutes.

Mr. Loebsack. Thank you, Madam Chair. I have abused the
5-minute rule in the past. I promise I won't do it this time.

Thank you very much. I readily admit that.

[Laughter.]

I really appreciate this hearing today.

Mr. Moran, I had the same thoughts -- thank you very much
for being here today -- about your relation.

I do greatly appreciate FirstNet's vigilance to ensure that
rural areas of the country gain access to the nationwide public
safety broadband network, including by specifying a 15-percent
geographic requirement for the prime contractor to partner with
existing rural telecom providers. And we have a lot of those
folks in Iowa. We do all over rural America.

So, to Mr. Sambar and to Mr. Poth, where is AT&T in its
progress towards that 15-percent geographic requirement? Is
there any public information that AT&T and/or FirstNet can share
Mr. Sambar. Thank you, Congressman.

The 15 percent is a requirement contractually between AT&T and the FirstNet Authority. I will tell you, the network build is just beginning. So, I can't give you a number today because we haven't actually built it yet. But I have no problem in the coming months and years of providing that information, whether it is in this forum or in a different forum.

Mr. Loebsack. Yes, we would like to keep track of that as we are progressing.

Mr. Sambar. Yes, and we are happy to. What I will tell you is that, based on the network designs that we have today -- and again, only half, just over half of the states have opted in -- but should all of the states opt in, or close to all of the states, we actually think we will exceed the 20 percent mark.

So, 15 percent is the bare minimum that we need to attain. We are actually looking at over 20 percent at this point. So, we are very confident in our ability to hit that target and use those rural providers.

Mr. Loebsack. As you both know, Iowa has opted in.

Mr. Poth. Right, right.

Mr. Sambar. Thank you.

Mr. Poth. And it is important to note, also, that in our contract they are required to build out rural in each phase of the contract. They can't wait until the other areas that they
wanted to build or built and, then, start rural. The next phase
they have to have 20-percent rural buildout; the phase after that,
60 percent; 80, and all the way up to 100 percent.

Mr. Loebsack. So, how do we define a rural partner in
situations like this? How does AT&T define it or FirstNet define
it?

Mr. Sambar. I am going to give the quick answer, and he
will give the detailed answer. We define it based on their
definition, and he will tell you their definition.

Mr. Loebsack. All right. Go ahead.

Mr. Sambar. You are the boss.

Mr. Poth. So, we required in the RFP that they identify
rural TELCO partners in each of the states that they had intended
to partner with. And then, that is what we are measuring them
against, to make sure that those relationships have, in fact,
been consummated.

Mr. Loebsack. So, it is determined at the state level who
rural is then? Is that --

Mr. Poth. No, not at the state; at AT&T who, as all the
bidders had to, identified rural partners in each of the states.

Mr. Loebsack. Right.

Mr. Poth. Some have multiple TELCOs that they may be using.
Some might have used only -- we are measuring them against what
they committed to in their proposal.

Mr. Loebsack. I have to throw it back to you, Mr. Sambar.
Mr. Sambar. Sure.

Mr. Loebsack. So, how do you define rural?

Mr. Sambar. Sir, I think you are looking for a definition of the word "rural"?

Mr. Loebsack. Yes, right.

Mr. Sambar. FirstNet Authority defines, because we were curious when we signed the contract, FirstNet defines it based on the Rural Electrification Act.

Mr. Loebsack. Right.

Mr. Sambar. And it is 20,000 population in a given geography.

Mr. Loebsack. Okay.

Mr. Sambar. So, we are following that definition.

Mr. Loebsack. Okay. Thank you so much.

Mr. Sambar. Yes, sir.

Mr. Loebsack. And to you, Mr. Sambar, does AT&T's rural partnership efforts include only wireless networks and towers or is AT&T also planning to leverage fiber-back, all assets?

Mr. Sambar. Yes, sir, it will be wireless, wire line. That includes cable, microwave, and fiber. So, it will be all of the above.

Mr. Loebsack. Okay. Great. Thank you.

Still some time left, Madam Chair?

It will be essential that FirstNet is able to roam onto existing rural networks before the MPSBM is available. Mr. Poth,
how are you ensuring that devices are developed that can successfully roam onto Tier 2 and Tier 3 rural wireless networks?

Mr. Poth. That is a great question. I think I will defer to Mr. Sambar since they are the ones that have to implement the technology.

Mr. Loebsack. A lot of deference today.

Mr. Sambar. We do defer back and forth, don't we?

[Laughter.]

So, the way the wireless world operates today is you have no issue when you go into different areas around the country -- and I travel every week -- whether it is a rural carrier in one area, and depending on what the backhaul is or the fronthaul with the wireless network; it doesn't matter. We will continue to do the same thing on the FirstNet network.

And again, it is based on the 3GPP standards that I mentioned earlier. Those are international standards. So, whether you are on a domestic wireless network owned by AT&T or a rural provider or your international -- say you are in Mexico, South America, or somewhere in Europe -- you will be able to roam on any provider's network and it won't be an issue.

Mr. Loebsack. Okay. And again, respecting the Chair's request that we finish up in a timely fashion, I do have a question about affordability, but I think we can probably submit that for the record.

Thank you, Madam Chair.
Mrs. Blackburn. The gentleman yields back.

And, Mr. Shimkus, you are recognized for 5 minutes.

Mr. Shimkus. Thank you, Madam Chair.

I am wondering how Loebsack got all my questions. How did you get my questions over there?

Mr. Loebsack. I lucked out. I was before you.

Mr. Shimkus. Okay. Yes.

Mr. Loebsack. Not normally am I, but --

Mr. Shimkus. That is almost word for word. So, he covered a lot of the rural concerns that I had.

But I guess I would want to follow up with the question of overbuilding that may occur. And that would be to Mr. Sambar.

How do you protect from what we have seen, overbuilding in other areas and other aspects of communication? So, what about overbuilding?

Mr. Sambar. Sure. Thank you, Congressman.

I should have started off my comments with rural, which everywhere that I have traveled over the last year and a half around the country, whether it is a governor or the governor's staff, public safety entities, some of the gentlemen back here, the first responders -- thanking them for coming -- but some of them have mentioned it to me. You need to cover rural areas. So, we have gotten the message loud and clear. We absolutely understand that.

We are embarking on an aggressive build plan to build out
rural areas. Some of that will be AT&T building it, and some of it, that would be considered us building. And in some cases we will be using rural providers to build that out.

The topic of overbuilding, the 15 percent was set because they believe that is an attainable goal. If our goal was to go and overbuild repeatedly, we would never hit the 15 percent and we surely would not a hit a 20-percent number, which is what we are projecting.

There will be some cases where we can't come to commercial agreement with a rural provider, but in those cases we will look to other rural providers to see if they are interested, so that we can maintain that percentage with rural. So, our goal is to use rural providers as much as possible. In many cases their economics are better than ours, and it just makes sense for us to do that.

Mr. Shimkus. Great. Thank you.

Let me go to Mr. Stevens from New Hampshire. I pulled up the FirstNet website. So, maybe you can help explain this to me.

They have that you have, the state has released a plan, and the state plan's review is under consultation. Is that how you view that?

Mr. Stevens. Yes. Yes.

Mr. Shimkus. So, part of this plan is your opt-out? That is part of the plan that you have submitted to FirstNet? Or using
Mr. Stevens. No. We are in the process of reviewing all aspects in regards to opt in and opt out. No decision has been made by New Hampshire at this point in time. And basically, we are comparing the two plans, the alternative plan and the state plan provided by FirstNet, to ascertain what is best for New Hampshire.

Mr. Shimkus. Okay. Thank you. I appreciate that.

Mr. LeGrande. AT&T and its partners did a bid for this to FirstNet, and then, obviously, they won the bid. In your opening statement are you proposing that the bid specifications should be now modified?

Mr. LeGrande. No, I am not suggesting that the bid should be modified.

Mr. Shimkus. I mean as far as the responsibilities, the agreements, and what they are supposed to do?

Mr. LeGrande. No. What I am suggesting, just so we are clear, that FirstNet, if we were to join a dedicated network, meaning when I say "dedicated," I mean --

Mr. Shimkus. No, we have got it. We have had that debate here. We did this because we didn't have the money and we wanted to leverage the success of the private sector.

Mr. LeGrande. In fact, the exciting thing about it is there is a real opportunity where FirstNet can say, well, okay, I agree that you may not want to establish any contracts or agreements
with the other carriers, but certainly try to meet with them to
bring them and incent them. Take out the penalties from AT&T;
incent them.

When I was a CTO here, my biggest problem is I couldn't get
despite the other carriers, but certainly try to meet with them to
bring them and incent them. Take out the penalties from AT&T;
incent them.

When I was a CTO here, my biggest problem is I couldn't get
to these guys in my office because we are a small market piece now.

The great thing about it, the great thing about what is going on with FirstNet is they have created an opportunity where
FirstNet can act as a regulatory --

Mr. Shimkus. I only have 50 seconds left.

Mr. LeGrande. Right. Sorry. I'm sorry.

Mr. Shimkus. So, I know you are very passionate.

Mr. LeGrande. Absolutely.

Mr. Shimkus. And I appreciate it.

[Laughter.]

Mr. Sambar, do you feel that some of these proposals may
provide different goals and objectives than what was laid in the
original bid?

Mr. Sambar. I can't speak for the states and their goals and objectives. Over half of them have opted in, so they are completely aligned with our goals and objectives. When we go into the states, we negotiate with them on where they want additional infrastructure, where they want generators, what areas they want covered. And we leave the decision largely up to them.

So, I think our goals are 100-percent aligned.

I think there are some states that may have other goals in
mind, not just a first responder network, but monetization, for example, to get money for the state budget. That is not what this is about. This is not a rural broadband initiative. This is for first responders, which does overlap into rural, thankfully. But I think we need to focus on first responders. That is what we are building this for. This is not a money-making scheme. This is not a spectrum deal. This is for first responders for the next 25 years.

Mr. Shimkus. Thank you very much.

I yield back.

Mrs. Blackburn. Mr. Pallone, you are recognized for 5 minutes.

Mr. Pallone. Thank you, Madam Chairman.

FirstNet implementation is essential for creating a state-of-the-art nationwide public safety network, and this is critical during emergencies. This week marks five years since Superstorm Sandy swept through my district, and the lessons of that storm are as applicable today as they were then. And five years later, I can say there are three things we need to focus on to make sure we are better prepared for the next major storm.

First, we need to keep our networks online during these emergencies, and that is why I drafted the SANDy Act to give our network operators the resources they need to repair our networks during disasters. And that is also why I worked with the wireless industry to create the Wireless Network Resiliency Cooperative.
Framework, to ensure people can call for help during an emergency, even if their network goes down.

And second, we need to upgrade our 911 networks to be more secure and resilient and to handle the information required of a 21st century network. Among other things, that means ensuring that 911 knows your location when you place a call.

And third, we need to get FirstNet operational as quickly as possible to give our first responders the tools they need to better protect us and coordinate emergency responses.

I wanted to mention specifically that New Jersey was one of the first states to opt in, which makes sense, given JerseyNet's success as a proof-of-concept for FirstNet as a whole.

So, I wanted to ask Mr. Poth, are there lessons learned from New Jersey's experience that can benefit the nationwide network?

Mr. Poth. Absolutely, and New Jersey was a great example. The state did opt in. We have been working with them for years. But what actually happened with the recent hurricanes down in Florida, New Jersey, who had already opted in with their assets from JerseyNet, asked if they could respond down to Florida to help another state using those assets. So, the nationwide response for public safety was happening in real time. So, I think that was a great example of taking advantage of an early builder and of New Jersey's "can do" attitude, that really helped Florida with FirstNet assets that were residing in New Jersey.

And we hope to see that that model replicates itself throughout
Mr. Pallone. Well, thank you.

I wanted to clear up some questions about the bipartisan law that we passed in 2012 that established FirstNet. First, when Congress passed the law, we made clear that states could opt out of the wireless portion of the network, but they are prohibited from building a different core of the network.

So, again, Mr. Poth, is that your understanding of the law as well?

Mr. Poth. Yes, and, as it was discussed earlier, one of the other complications with any additional cores is around that cybersecurity. That is something that we cannot have any leniency. This must be a robust, secure network. But a single core is the intent, and that is what we are executing to.

Mr. Pallone. Well, thank you.

The second thing, when we passed the law, some of us were concerned about the way states divert 911 fees to other projects. And to stop that from happening to FirstNet, we required all fees raised by the states to be invested only back into the network.

So, let me ask Secretary Moran, if I can, can you walk us through the financial considerations you took into account when Virginia decided to opt into the network?

Mr. Moran. Well, first of all, in Virginia we don't raise fees. So, it's a low-tax state, very competitive for business.
[Laughter.]

So, Mr. Congressman, it was at no cost. That was one of our primary reasons for opting in, was that it was at no cost to the Commonwealth. In assessing and evaluating the options for the state to build out the network, it would have been cost-prohibitive. And obviously, our primary responsibility, as yours is, is to provide that dedicated network to our first responder community. So, we saw the no cost being one of the primary factors to make that decision. So, there is no cost to the Commonwealth.

Mr. Pallone. I don't know if anybody mentioned it; you look a lot like your brother, but you sound just like him when you spoke.

Let me ask Mr. Sambar, going back to the three priorities I mentioned earlier -- next-generation 911, network resiliency, and FirstNet -- as the only carrier testifying today, what are you doing to further these goals?

Mr. Sambar. So, your three goals, I will hit them in order.

Networks online. If you use Hurricane Harvey in Texas as an example, at anytime we had no more than 4 percent of our network down at any given time throughout Texas. That is when the hurricane hit through the week following with the floods. So, we are pretty proud of our ability to keep networks online, and that is hundreds of thousands of people working very hard to keep the network going.
Secondly, the 911 networks. AT&T is one of the largest carriers investing in the 911 networks or next-generation 911 in the United States. And we feel really good about the natural synergies between the next-generation 911 that we are offering and the FirstNet network, and the ability to go from the call that the citizen is making into the 911 PSAP and out to the first responder over the FirstNet network. There is some real natural synergies there that work really well.

And then, getting FirstNet up and operational, and that is possible by a big carrier like us. We do start with our commercial network as the foundation. So, states that have opted in, we already have subscribers signing up for FirstNet. They do start on our commercial core and our commercial network. They will graduate in March of next year to the FirstNet network, but we want to get it up and operational as soon as possible. We don't want states to have to wait two, three, four, and five years.

Mr. Pallone. Thank you.

Mr. Sambar. So, I think that hits all your priorities, Congressman.

Mr. Pallone. It does. Thank you.

Thank you, Madam Chairman.

Mrs. Blackburn. Mr. Johnson, you are recognized for 5 minutes.

Mr. Johnson. Thank you, Madam Chairman.

And it is a really important hearing. I represent a district
in Ohio that is very, very needy in terms of broadband. There are many places throughout my district where we have high school children who have to go to the neighboring town to get to a Tim Hortons or a Panera Bread, where there is a wifi, so that they can do their homework assignments, or to a public library to get to a computer. Some schools even give out laptops, but the students don't have any connectivity to the outside world with which to do their work. So, it is a really, really important issue for me.

And when you think about the opportunities and the economics of it, companies aren't going to come into a region and set up facilities if they can't get access to their customers, to their suppliers, recruit employees, et cetera, et cetera. So, it is a serious -- I mean the urban/rural divide is a very real thing from a broadband perspective.

Mr. Sambar, first of all, thank you for your service. I appreciate that. I have a number of Navy SEALs in my district back in Ohio. I could probably throw their names out there. And I worked for Admiral Tom Steffens. I don't know if you remember him.

Mr. Sambar. Yes, sir.

Mr. Johnson. But he was my last boss when I was on active duty at Special Operations Command.

So, thank you for your service.

The buildout of rural broadband, obviously, is a priority
of mine. I have held multiple roundtables in Ohio to discuss with stakeholders the benefits and challenges of broadband deployment.

If a state such as Ohio opts into FirstNet, how will it impact the broadband buildout in rural areas?

Mr. Sambar. Thank you, Congressman. Thank you for your service as well, especially helping my brothers and sisters at the Special Operations Command.

Mr. Johnson. You bet.

Mr. Sambar. I appreciate that.

So, as I mentioned earlier, it is not a rural broadband initiative, but the benefits for rural customers and those in rural areas are unbelievable when it comes to FirstNet. And I will give you a specific example. I won't give you the state.

But a state in the South that has opted in, one of the main requirements that they put on us was they said, "We want every school in our state covered with coverage, wireless coverage."

And they are not all today. They told us specifically which schools were not covered, and we went out and did wireless surveys to ensure that they were. And they said, not only do first responders go to those areas, but in a lot of those areas those are the severe weather centers where people evacuate to. So, we said, absolutely, and we fulfilled that requirement for the state.

So, this goes back to the flexibility of the program and
the ability of the states to negotiate where they want the incremental coverage. The public-private partnership between us and the FirstNet Authority makes it possible. You noted the challenging economics in some cases to cover rural areas. The economics of this program make that less challenging and easier for us to do, so that we can fulfill the requirements and the desires of the states.

Mr. Johnson. Sure, and I am sure I don't have to tell you and the rest of the panel how important first responders being linked in is to a rural community. I mean, it takes a long time sometimes to get from point A to point B when something goes down, whether it is a natural emergency or criminal activity, or whatever, an accident, whatever that may be. Having first responders as a part of that is critically important.

For the entire panel -- and we will go right down the line -- first and foremost, we must provide our first responders with a reliable network and the tools they need to prepare for and respond. We just talked about that. Can you describe the benefits for first responders in rural areas if the state chooses to opt into FirstNet? Let's just go down the line here.

Mr. Poth. Through our exhaustive proposal process, we set out a solution to do just that for public safety, all 56 states and territories where there is rural or urban. And we are absolutely confident that through the solution that we have picked, based on public safety's feedback and the solution
provider, in this case AT&T, we will be able to meet that objective.

Mr. Johnson. Okay. Anybody else care to address that one?

Mr. Sambar. Sure. I will give you 10 seconds of your 17 seconds.

Mr. Johnson. Okay.

Mr. Sambar. The benefits to the state of jobs and infrastructure, the rural broadband benefits to the state, and then, features like priority, preemption, mission-critical voice, all those things that public safety has been asking for for years.

Mr. Johnson. Do you view it as a negative? I mean, if a state chooses to opt out, will it be a negative impact to first responders if a state opts out?

Mr. Sambar. I think there are some significant challenges if a state chooses to opt out. Of course, we will be happy to work with them. That is our charter, and we will do everything we can to be interoperable with that state. But there are some challenges as far as the time it will take them to build it out, the reliability/redundancy of that network, interoperability, security of that network. There are some significant hurdles that they need to get over. Again, we are happy to work with them, but I think there would be a lot of concerns there.

Mr. Johnson. All right. Well, thank you, gentlemen.

Mrs. Blackburn. The gentleman yields back.
Ms. Eshoo, you are recognized for 5 minutes.

Ms. Eshoo. Thank you, Madam Chairwoman.

Thank you to all of the witnesses and to the first responders here. With all due respect to everyone else in the room, including myself, I think you are the most important ones here.

When the 9/11 Commission made its recommendations to Congress, which is a very long time ago now -- we have been at this for some time; it was 16 years ago that the country was attacked -- there was one recommendation that Congress had not made good on, and it was to build a nationwide interoperable public safety network. And I was bound and determined that we would get that done. I am proud of the legislation, proud that we moved ahead, and that the Congress passed it.

But I think that, in light of what the country has undergone in just the last handful of months, and most recently in my home state of California -- I spent last Saturday from 6:30 in the morning until 9:30 at night touring, meeting with the public officials, public safety officials, first responders, victims, in Sonoma and Napa Counties.

I really think that we need to go back to the air raid system because there really wasn't anything that worked or very, very little. And this is the second decade of the 21st century. So, we have a lot of work to do.

In California, relative to AT&T's existing coverage throughout the state and the interoperability of the public safety
broadband network with other cellular networks, how is AT&T dealing with coverage areas where you are not the dominant carrier in that area? Just very quickly.

Mr. Sambar. Yes, Congresswoman.

So, we are in the process of negotiating with California. As you know, they haven't opted in.

Ms. Eshoo. I know that.

Mr. Sambar. We are in the process of negotiating.

Ms. Eshoo. They have some problems with you. But how are you dealing with coverage areas where you are not the optimum and others are?

Mr. Sambar. So, we have given them a significant number of sites that they can move around in the state and give us priority areas, so that we can cover those areas that are not covered today where other carriers are dominant. In those areas where other carriers are dominant --

Ms. Eshoo. Now wait a minute. What does that mean?

Mr. Sambar. That means we are --

Ms. Eshoo. You want the state to tell the ones that are more dominant than you what?

Mr. Sambar. No.

Ms. Eshoo. Tell me how that works.

Mr. Sambar. We are going to build big cell towers in the places where we don't have coverage, so that we can cover ubiquitously throughout California to give them the coverage they
are asking for. California has come to us and said, "We need coverage in these areas."

Ms. Eshoo. Okay. All right.

Mr. Sambar. And we said, okay, we will build those areas out.

Ms. Eshoo. How are you going to ensure interoperability with the public safety network with the jurisdictions that use other networks?

Mr. Sambar. So, just like we do today, if you have a different carrier than I have on my phone, we can talk to each other. That is called interoperability. And we will maintain that in the future. This will not be a locked-in proprietary network.

Ms. Eshoo. Why are there penalties? Did the Congress do that or is it part of your contract? It is my understanding that in California's case, I think relative to the RAN, the penalty would be in the area of $15 billion. Who came up with that?

How do you make that determination?

Mr. Poth. No, that --

Ms. Eshoo. And why are there penalties?

Mr. Poth. Excuse me. There aren't any penalties right now. What that $15 billion --

Ms. Eshoo. Well, that doesn't make me feel too good.

Mr. Poth. Right.

Ms. Eshoo. You just said "right now". Are there going to
be? And where did this $15 billion, approximately, come from?

Mr. Poth. So, that was FirstNet's attempt at trying to make
sure in our full transparency. So, in the state of California,
as we talked about earlier, if they opt out and they have a problem
where they have to default and they are not able to continue to
work, the estimates could be as high as that number.

Ms. Eshoo. But I don't understand. Is this a penalty for
not opting in?

Mr. Poth. No, absolutely not.

Ms. Eshoo. Well, what is it for?

Mr. Poth. So, we have tried to share with the states what
we thought, because of this very involved, complex project, if
we had to reconstitute the network from zero after a state,
implementation didn't work, that it could be as high as that.
That is where I have said earlier, and I qualified, we are working
with every state, including California, to minimize any of those
impacts. And hopefully, they would never even get to that point.

So, in our zeal to make sure that --

Ms. Eshoo. But why even talk about penalties? I mean,
obviously, if something doesn't work, the state is going to be
responsible and has to build up a system.

Mr. Poth. That is what that number is. It is not a penalty
or fine if someone opted out and weren't able to complete it.

Ms. Eshoo. Let me just ask -- thank you for your leadership
--
Mr. Poth. Right.

Ms. Eshoo. Did you say, Mr. Sambar, that AT&T does not make any money on this?

Mr. Sambar. No, I --

Ms. Eshoo. You said, "We are not in this for profit."?

Mr. Sambar. We are a --

Ms. Eshoo. It is a wonderful notion, but it is a real --

Mr. Sambar. That would be nice, it would be nice if we were a philanthropist, but --

Ms. Eshoo. It is a stunner to me.

Mr. Sambar. Yes, we have shareholders that we are accountable to. So, yes, we do have to make a profit off of it. So, it is profitable.

Ms. Eshoo. But why did you say it is not -- why did you --

Mr. Sambar. It is a public-private partnership, and our primary commitment going into this wasn't to make money.

Ms. Eshoo. All right. All right. Yes. Well, okay. Good.

It is great to have a Moran here.

[Laughter.]

Either over there or at this part. It is just wonderful. Thank you for your leadership in the state.

Thank you, Madam Chairwoman.

Mrs. Blackburn. The gentlelady yields back.
Mr. Kinzinger, for 5 minutes.

Mr. Kinzinger. Thank you, Madam Chair.

There is nothing wrong with making money. It is capitalism.

I want to thank you, Chair, for yielding and for holding this hearing. And given the events that unfolded yesterday in New York that are currently being investigated as a terrorist attack on our country, I think this hearing is especially timely today.

Broadly speaking, we need to get this system operational and running efficiently, so that we can respond to both natural disasters and, frankly, the next attack that is going to happen in the future. We know this is a generational fight we find ourselves in the middle. It will probably last for the rest of my lifetime.

But, in that vein, Mr. Sambar, during recent emergencies, cell towers have become overwhelmed by the volume of calls and texts. Will first responders avoid similar communications hurdles using the network that AT&T and FirstNet are planning to deploy?

Mr. Sambar. Thank you, Congressman.

Yes, that is exactly one of the primary purposes of this network. It is so that first responders are not on the typical commercial networks, subjected to the same congestion that they would be otherwise subjected to on a commercial network.

So, there are two features called priority and preemption.
Priority means that their data goes faster than anyone else's. So, if they are trying to get a picture of a subject to another first responder to let them know what is going on, if they are trying to get a picture of a fire to a fire captain, so that he knows the nature of the fire, how many engines he needs to send, that data will go through uninterrupted through the network. That is priority.

Preemption, the next one, means that, if a first responder is trying to get on the network and it is congested, which can happen anytime you have a crowd of people in an area, preemption will actually move someone on our commercial network off to another frequency band on our commercial network, and allow that first responder on immediately. The only call that it won't preempt is a 911 call. So, we will not take regular commercial citizens and kick them off if they are on a 911 call, but it will preempt other users off. So, they will have an uninterrupted network experience.

Mr. Kinzinger. Excellent. That is really good to hear.

Switching gears a bit, Mr. Poth, with regards to the lease terms that FirstNet sent to the states, is there a process for appealing FirstNet's terms or are these effectively "take it or leave it"? And how did you develop those terms?

Mr. Poth. So, the spectrum management lease is just a draft. We tried to provide that information early, so the governors and their teams could review what would be a working document
that we would negotiate probably two years from now. Unfortunately, based on the statute and the regulatory requirements that first go into the FCC for approval of an alternative plan, then to NTIA, literally, it would be probably about two and a half years. So, this was just a draft of some of the concepts that are important as the license-holder, FirstNet, to be able to lease that portion of the spectrum to a state. So, absolutely, we are going to work with the states now and through this entire process to make sure that they feel comfortable and their questions are answered.

Mr. Kinzinger. So, it is not "take it or leave it"? You are saying this is an early draft and --

Mr. Poth. Yes, this is a working draft because we wanted to provide -- we didn't want states to get through a two-and-a-half-year process and, then, start looking at terms and say, "Well, why didn't you tell us this two-and-a-half years ago?"

Mr. Kinzinger. Okay, and I understand that NTIA has yet to issue a Notice of Funding Opportunity, which would, presumably, provide the states with detailed information regarding the process that NTIA intends to use in its review for state applications for spectrum and construction grants. States now have less than two months to make a decision on opting in or opting out, and they are missing some pretty important data. When is NTIA going to release that notice?
Mr. Poth. Talking to NTIA as recent as yesterday, they have published those into the system and it is going through clearance. So, they hope within the next few days it will come out, that guidance.

Mr. Kinzinger. Okay. Hopefully. That would be good.

And last, let me ask you, in the FirstNet press release dated June 19th of this year it stated that the FirstNet state plan "comes fully funded and will require no additional resources for the states to deploy or operate the network." It would seem, then, that opting into FirstNet is more economic for states than opting out. However, there are still some unanswered questions with respect to processes and determinations that have been made.

In order to fully ensure that FirstNet is the best and most economic option, we do need more answers. So, will you commit here today that you will work with Congress, the states, and stakeholders, to provide these answers to the best of your ability?

Mr. Poth. Absolutely.

Mr. Kinzinger. Excellent.

Mr. Poth. We have met with some states over 30 times over this process, and we are going to continue to do that for the life of this program, to make sure that all their questions are answered, no matter what.

Mr. Kinzinger. Great.

And to the five of you, thank you for being in here. Thanks
for giving us your time.

And with that, I will yield back.

Mrs. Blackburn. The gentleman yields back.

Mr. McNerney, you are recognized.

Mr. McNerney. Well, I just want to say to the Chair that I appreciate enforcement of the 5-minute rule, being on the lower end of the committee here.

Mr. Poth, we have recently seen a series of natural disasters in California, flooding, earthquakes, and wildfires, including the devastating wildfire we had a couple of weeks ago in which 120 cell phone towers, cell towers, were down and destroyed.

In planning and building out and hardening this system, you know, the resiliency of the system, how does FirstNet plan to account for those types of disasters?

Mr. Poth. We require of AT&T via the contract that the installations are public safety hardened. And how we are measuring that is against reliability and up time. But, even with that, unfortunately, Mother Nature, in particular, no matter what hardening is done, can affect those towers.

One of the other requirements that we have is -- and Mr. Sambar alluded to it -- deployables and the ability to quickly recover into an area. They are contractually obligated throughout the 56 states and territories in those areas where their existing assets go down to restore the network as quickly as possible.
Mr. McNerney. Okay.

Mr. Poth. And we are going to hold them to that.

Mr. McNerney. Thank you.

Mr. Sambar, do you plan to provide ways to ensure that communication continues when cell towers go down during the process, before the minis can be in place?

Mr. Sambar. Absolutely. As Mr. Poth mentioned, reliability and up time on the network is our priority. So, whether that is something happens to the tower, which that will always happen -- you can't keep a tower from burning up, right? That is going to happen. But the deployables, as you mentioned, I actually have a picture of one here in the wildfires in California. So, this is a mobile, 1-ton truck that you pull out --

Mr. McNerney. So, you are saying that that can be in place almost immediately?

Mr. Sambar. Yes, it is. You can see the fire in the background. So, this was actually put up immediately after the fire passed through, burned the tower down. We drove this in, so that the first responders in the area had communications.

Mr. McNerney. Very good.

Mr. Sambar. Thank you, sir.

Mr. McNerney. All right. Device security, which you have already responded to, to a certain degree, to the chairwoman's questions, it is very important to me. I introduced a bill, the
Securing IoT Act, which requires that cybersecurity standards and certifications be established for wireless devices. What cybersecurity or industry standards or guidelines is AT&T in considering in developing FirstNet?

Mr. Sambar. So, similar to my response earlier, just to recap, the cybersecurity starts at the device level, the applications on the device as well as the device itself. So, AT&T will be certifying all the devices. The FirstNet Authority has a lab in Boulder, Colorado. They will certify the devices as well.

Mr. McNerney. So, what standards are they using?

Mr. Sambar. AT&T has our own proprietary standards. FirstNet has developed their own proprietary standards that they will be certifying the devices based on.

Mr. McNerney. So, is there any acceptance of those standards?

Mr. Poth. Yes, and what the FirstNet standards were drawn from is with NIST, the Department of Justice, OMB, DHS, and some of our fellow federal agencies to make sure. We are also capitalizing and requiring that AT&T bring private sector best practices to bear on the cyber approach, too.

Mr. McNerney. Okay. Well, I understand that volunteers, first responders, can bring their own devices?

Mr. Sambar. Yes.

Mr. McNerney. What steps are going to be taken to make sure
those devices are cyber-secure?

Mr. Sambar. So, they can bring their own devices, and it is up to them what device they use. If they are purchasing an AT&T device, again, it will be certified and they will know that. The applications on that device are definitely a point of vulnerability, and we will be certifying all the applications, putting them into a public safety application store, so that they can ensure that an application in that store is secure from a cybersecurity standpoint, as well as it functions correctly.

Mr. McNerney. Thank you.

Mr. LeGrande, do you believe that FirstNet with AT&T can ensure competition at every level?

Mr. LeGrande. I think they have the opportunity to do that. I think we should not treat this like it is, again, a dedicated public safety broadband network. I think we set up a competitive environment, in that FirstNet leverages its position to, again, incent other carriers. To wildfires, to the hurricanes, you know, the bottom line is what is in the best interest of public safety is all the carriers competing to drive down costs and create the best possible environment. So, I think they are in a very good position to do that, yes. That would be my answer.

Mr. McNerney. Do they need additional incentives to make sure that they assure competition?

Mr. LeGrande. I think that FirstNet has the opportunity to reach out beyond AT&T. They have got their contract with AT&T
continuing. I am not questioning that. But there is an
opportunity to embrace the other carriers and say, "Look, if you
come up with these levels of standards and you bring your networks
up to this, then we can have all of these guys competing."
Because, again, the best thing for public safety is low cost and
greater innovation, and competition is what gets us there.

Mr. McNerney. Thank you, Madam Chairman. Thirteen
seconds.

Mrs. Blackburn. You are doing well.

Mr. Bilirakis, you are recognized for 5 minutes.

Mr. Bilirakis. Thank you, Madam Chair. I appreciate it.
I will stay under the 5 minutes as well. No guarantees, though
I will try. Thank you again for having this hearing.

Governor Scott in my state of Florida has issued a Notice
of Information to review the FirstNet proposal as compared to
other options the state may have. While we do not know the outcome
of this inquiry, I do support the governor's due diligence to
subject the proposal to competition in the marketplace and ensure
it is right for our state.

My question is to Mr. Sambar. I am a representative of a
coastal community in the Tampa Bay area, and it is subject to
hurricanes, as you know, with limited evacuation routes,
unfortunately. I am intrigued by the shifting of first responder
priorities you discuss in your written testimony. Can you
elaborate on the benefits of the selective ability to at-risk
Mr. Sambar. Absolutely, and I believe you are referring to the priority and preemption services. Those are actually features that will be in the network. Priority exists today. We have been providing that to commercial customers for two years now.

Preemption is a new feature that will only be available for first responders, and that will be by the end of this year. Preemption is really the one that first responders have been asking for. And that provides the ability in an area where a network is congested, if it is a coastal community, prior to, during, and after a storm, and there is a significant amount of congestion. Maybe some of the towers aren't working properly.

There is a limited amount of bandwidth. It ensures that first responders have first rights to that bandwidth. So, they can actually move others off of a network, and they will have a seamless network experience wherever the network exists. So, a terrific benefit for first responders who have been asking for it for a long time, and we are going to be providing that to them very soon.

Mr. Bilirakis. Very good. Thank you.

Mr. Stevens, under the 2012 act that authorized FirstNet, Congress directed FirstNet to develop a plan for each state to deploy the network. From your perspective, has there been sufficient engagement from FirstNet with the states?
Mr. Stevens. Yes. We have had good conversations with FirstNet along with AT&T along the process. However, we took advantage of the opportunity that the law provided that we would go down the road by developing an alternative plan. As you said, sir, New Hampshire has done its due diligence and we have two viable plans that we are looking at for comparison.

Mr. Bilirakis. Very good. Thank you.

And I will yield back, Madam Chair. Thank you.

Mrs. Blackburn. The gentleman yields back.

Ms. Matsui, you are recognized.

Ms. Matsui. Thank you, Madam Chairman, and I thank the witnesses for being here today.

As you know, the FirstNet contract requires a 25-year performance period. That means that the life cycle of this contract will see the deployment of next-generation wireless broadband networks for both consumers and first responders.

Mr. Sambar, could you discuss how auctions that would deliver spectrum suitable for 5G networks also could be critically important for the continued upgrades necessary for the first responders on your network?

Mr. Sambar. Thank you, Congresswoman. I appreciate that question because, when the RFP was initially written by the FirstNet Authority, it spoke to the Band 14 spectrum, that one piece of 20-megahertz spectrum that was allocated, and putting up that spectrum and making that available to public safety.
And we changed it around a little bit, and we said, yes, we will do that and we are going to cover a significant percentage of the population with it, but we are also going to make available all of our spectrum bands.

So, as we move into a 5G world, millimeter wave technology, small cells on street corners, the first responder may connect to Band 14 on a tower a quarter mile or a half mile away, but they may connect to the street corner small cell, which is a 5G small cell. It may not be Band 14. It may be something else, but it may give them 10 times the speed that they would have had on the Band 14 connection a quarter or a half mile away. So, we are really opening up our network, so that first responders have the best possible connection.


Mr. Moran, what is the importance of deploying next-generation wireless broadband networks to states?

Mr. Moran. Well, it is critically important, as has been noted throughout this hearing, to provide our first responders the latest and greatest technology. It is critical to responding to what is an expanding and even more dangerous threat environment. Being in this position, recognizing whether it be natural disasters or hurricanes and tornadoes, to now more manmade disasters, if we can provide our first responders with the technology, and the firefighters the location technology, they can be in a building and be located immediately, as well as the
victims that might be present. I mean, it is critically important.

So, that is why we opted in, because we just saw the positive benefits and with no cost. And so, though we thoroughly reviewed the decision, we think it is the right decision.

Ms. Matsui. Okay. Thank you.

Mr. McNerney talked about the wildfires that cut through northern California, which we visited this last weekend. In my district we also have quite a few flooding risks also. And California is currently in a review process and considering how to evaluate its decision.

Mr. Poth, what network assets will FirstNet be able to provide that will assist first responders in my district to meet such a diverse set of emergencies, such as fires and extreme flooding? I mean, we have both.

Mr. Poth. Right.

Ms. Matsui. And maybe in earthquakes, too. So, you never know.

Mr. Poth. And that is part of the process that the state is looking at right now and the proposals that we have on the table that AT&T is working with. The state has also identified those areas that are high risk to them because they are responding to those areas. Based on that feedback from public safety, the people that are actually having to do the work, is what is informing AT&T's solution as to where to put fixed assets or to
ensure that there is closer responsive deployables.

Ms. Matsui. All right. Okay. Thank you.

Now, with FirstNet having delivered plans to states at the end of September, governors and state single points of contact are currently reviewing FirstNet's maps of wireless broadband coverage. A critical piece in the success of FirstNet is its ability to provide public safety officials and first responders with access to communications in even the most rural and remote areas of our states and districts. These maps must represent where coverage does and doesn't exist, so these areas are not left behind.

Mr. Poth, what steps did FirstNet take to ensure these coverage maps are accurate? And is it possible to use the lessons learned from that effort to furnish the committee's larger efforts to gather more accurate broadband data?

Mr. Poth. Yes. So, we have been, for the last three years, in particular, but since the inception of FirstNet, working with all the states to understand their coverage, their perception of coverage, and what the actual coverage they believe. Now, with the plans, we delivered earlier, three months prior to the actual September date, drafts of those plans with the coverage, so that they could start seeing it to validate against what they know. And that is what has been driving a lot of the conversations as to where they want it to go and what they need to do.

We are using those coverages, and, ultimately, it will be
a buildout. It is not going to be day one where all the coverage needs are met. It won't even be met by year five, but it will continue to grow. And that is what the states are looking at.

Ms. Matsui. Okay. Thank you very much.

And I yield back.

Mrs. Blackburn. Ms. Walters, you are recognized for 5 minutes.

Mrs. Mimi Walters of California. Thank you, Madam Chairman. Thank you to the subcommittee for holding this hearing and for our witnesses for their testimony,

My home state is California as well, and I know that many of my colleagues have discussed that we are particularly susceptible to widespread natural disasters, including wildfires, earthquakes, and flooding. As you all know because we have been discussing it in recent weeks, California experienced the most devastating wildfires in the state's history. Forty-three people died, nearly 9,000 structures were destroyed, and it will take years for the areas impacted by the fires to fully recovery. Canyon Fire 2, which occurred in my district, required the evacuation of thousands of residents.

California is vulnerable to both natural disasters and terrorist attacks. Given the size of the state and its large population, it is critical that California's first responders have a reliable public safety network.

And one of the problems of sitting in this front row is that
many of your questions get asked already because you are low man
on the totem pole. So, I am going to ask Mr. Sambar, do you have
any comment on the testimony you have heard here today from your
colleagues or the statements filed by others in this hearing?

Mr. Sambar. Generally speaking, I appreciate the dialog.
There was some testimony submitted by Verizon at the beginning,
and I know it was not read out today. But there are a couple
of points in there that I think are important to address in front
of this committee.

One is the interoperability of core networks. I think we
have beat that horse to death. But serious reasons why
cybersecurity becomes an issue when you interoperate the cores.
And that won't be allowed, it doesn't sound like, not by our
rules, but by others, including the original legislation.

There is also a portion of this testimony where -- and I
will quote from it real briefly here -- "The FirstNet RFP was
established as a spectrum deal". And further quoting, "We have
never had an interest in FirstNet's spectrum and could not justify
the investment required to build out spectrum that we had no
intention of using commercially." So, this is from Verizon's
testimony.

I personally take exception to this. So, it was noted
earlier my military service. I spent 23 years between active
and Reserves in the military. This job and this task is personal
to me. This is not a spectrum deal.
To the Congresswoman's point earlier, AT&T is going to make money off of it. We are a for-profit company. I am not trying to hide that fact. But this isn't about the spectrum and a spectrum deal. This is about serving first responders, the folks that are behind me. We are building something really special here, and we are giving them something they haven't had in a long time, that the 9/11 Commission said that they needed, that you said that they needed. And that is what we are doing here.

So, I just want to set a level playing field and let everyone know this isn't a spectrum deal. That is really not the right way to talk about this. We feel very passionately about that.

Mrs. Mimi Walters of California. Okay. Thank you.

Mr. Sambar. Yes.

Mrs. Mimi Walters of California. Mr. Poth, in addition to having to cover termination fees, in the case of California, as it was reported, to spend $15 billion, are there any potential risks of a state opting out of FirstNet?

Mr. Poth. The risk is not whether they opt out or opt in. If they opt out, we are going to do everything we can to make them successful. The risk is that the state that pursues an opt-out truly has a robust solution with financial sustainability. Twenty-five years is a long time, and this is a very complex project. Billions of dollars are being spent. We are investing; the Congress has allowed us to invest $6.5 billion in the spectrum. So, this is not a trivial exercise.
And the length of the program and the complexity create a risk, but it is something that FirstNet realizes and we will work with the state, whether they opt in or opt out, for the next 25 years to make them successful. But the integration and the complexity and the delays of an opt-out state just by statute complicate matters certainly.

Mrs. Mimi Walters of California. Thank you.

And I yield back the balance of my time.

Mrs. Blackburn. The gentlelady yields back.

Mr. Engel, you are recognized for 5 minutes.

Mr. Engel. Thank you, Madam Chairman.

Thank you to all the witnesses.

And let me start with Secretary Moran. Virginia was the first state to opt into FirstNet. And Virginia, like New York, has withstood some devastating and high-profile disasters over the years. So, let me ask you, now that Virginia has opted in, what additional tools will it have to respond to these disasters?

Mr. Moran. Well, I referenced the ability of Fairfax County and their fire, when they went to Houston to respond to Hurricane Harvey, and some of the additional technological benefits that are obtained from the FirstNet opt-in.

But I would say, I very much appreciate this hearing because it has brought to mind all of the issues with respect to our opt-in decision, all the things we discussed. But we need to maintain vigilance, and I say "we" in terms of Congress has to be vigilant
because this hearing has identified a number of ongoing discussions we are having with AT&T.

And I would second Mr. Stevens' point that their access, their availability to us has been excellent. And we have had those discussions, the rural concerns. But having access to what they are offering is critical to being able to respond to the ever-increasing and emerging threats. So, we just have to make sure that relationship with AT&T remains robust, so that we can have access to all what they have promised.

Mr. Engel. Well, talking about the various tools, when would you expect to see those tools come online?

Mr. Moran. Congressman, one of the reasons we adopted so quickly in July is because Fairfax and other localities that already had access to AT&T could immediately gain access to the expanded broadband capabilities. And so, some of that has gone on.

Now, in full disclosure, AT&T does not have the coverage of other providers in Virginia. And so, it has to be a significant buildout of the AT&T services in Virginia for all of our localities to be able to benefit.

Mr. Engel. Thank you.

Mr. Poth, I have a few questions for you. For states that decide to opt out, I understand that FirstNet will require those states to meet certain subscriber targets. I guess that is true, right?
Mr. Poth. Yes. What we are trying to achieve is the purpose of this is for public safety, and we are not requiring the states, but the state's contractor to make sure that the solution that they provide will meet public safety's needs in that state and that they adopt to be able to take advantage of this nationwide interoperable network.

Mr. Engel. How closely do the state requirements mirror AT&T's requirements in the national contract?

Mr. Poth. They are very comparable, absolutely.

Mr. Engel. Comparable with what?

Mr. Poth. We are not asking the state any more than what we require of AT&T currently, but it is under contract.

Mr. Engel. What if a state falls short? What penalties will they face?

Mr. Poth. We had the discussion a little. That is impossible for us right now to try to determine. We have tried to place a range, but we don't know what the nature of a state that would have a default. We don't know what the technology will even be, say, in year 12. So, the only thing that I can absolutely say for sure is that we will be working with the states during that entire time, and if there is a problem or a default, then we will work with them quickly to try to recover and restore that network at the minimal impact to all, on behalf of that state and public safety.

Mr. Engel. Now FirstNet was started within the National
Telecommunications and Information Administration, which is part of the Department of Commerce. Am I correct about that?

Mr. Poth. Yes. Yes, sir.

Mr. Engel. Yes. So, the legislation that created FirstNet envisioned it being spun off to operate independently at some point in the future, is that true?

Mr. Poth. Well, I am not sure it was ever intended to be completely spun off, but we are an independent authority and we work very effectively with our partners at NTIA and Commerce and all the other federal agencies.

Mr. Engel. So, can you briefly discuss the pros and cons of FirstNet operating as an independent entity?

Mr. Poth. Well, we have had a lot of flexibility and speed to deployment that we like to say because of this procurement. Although people may argue it has been impossibly long since the statute was passed, we have accomplished a great deal in a short time, and we attribute a lot of that to the independence, that we are able to work within the rules and requirements in the federal government, but in a much more quick and nimble way.

Mr. Engel. Are we reaching that point in the near term as an independent entity?

Mr. Poth. I don't see a particular need right now because I think we are addressing all the needs to make the states and public safety successful, and we are certainly in a position to make AT&T successful within the constrains of the contract.
Mr. Engel. So, what needs to happen first if we are not there yet?

Mr. Poth. I think the thing that we need to do is we have got to execute. We have got to make sure, on behalf of the federal government and public safety throughout this country, that the promise is actually fulfilled. And we think we have a good way of achieving that through this contract.

Mr. Engel. Thank you.

Thank you, Madam Chairman.

Mrs. Blackburn. The gentleman yields back.

Before I conclude, I ask unanimous consent to enter a list of documents into the record: an op-ed from Thomas Manger; a letter that was submitted by Mr. Doyle by Verizon; a letter from Governor Sununu of New Hampshire to his fellow governors; Governor Sununu's First Executive Order; a letter from the Competitive Carriers Association; chairman and ranking member's statements for the record; Mr. Sambar's picture -- we need that -- of the mobile tower in front of the wildfire, and the International Association of Fire Chiefs' letter. Without objection, so ordered.

[The information follows:]

*********** INSERT 7***********
Mrs. Blackburn. Seeing there are no further members wishing
to ask questions for the panel, I want to thank all of you for
being here today.

Pursuant to committee rules, I remind members that they have
10 business days to submit additional questions for the record.
And I ask that witnesses submit their responses within 10
business days. Seeing no further business before the
subcommittee today, without objection, the subcommittee is
adjourned.

[Whereupon, at 12:31 p.m., the subcommittee was adjourned.]