

Legislating to Secure America's Wireless Future

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Chairman Doyle, Ranking Member Latta, and Members of the Subcommittee, thank you for the opportunity to testify about how to secure communications networks while ensuring that wireless services are not cut off in rural America, a result that would be a step backwards on our nation's goal to close the digital divide.

I am John Nettles, the President and CEO of Pine Belt Communications. We are a family owned and operated company with deep roots in rural Alabama. My father established the landline arm of the company in late 1950's shortly after returning to his birthplace of Arlington to establish his medical practice. With no viable telephone system serving the area at that time, he realized that the place was behind times and could greatly benefit from modern telecom services. After a couple of years of trial and error, he launched commercial operations in 1958 filing the organizing documents on October 28th, just 22 days after I was born. Over the course of the following 60 years, we have worked hard to maintain our localized management and operating structure by keeping the company in the family.

We take pride in the economic contributions we are able to make to the communities we serve. We continue to work diligently to keep pace with the rapid advancements in technology and the intense capital requirements that characterize the industry. In doing so, the company has evolved into a state-of-the-art operation providing wired and wireless voice, video and data services to parts of the Alabama Black Belt.

We launched our wireless network in 1995 with three analog sites covering two counties. Today we operate 65 sites over which we provide 4G LTE services in five counties including many areas where ours is the only signal present. Our service footprint is mainly an agrarian area with the pine tree being the dominant crop, thus the name of our company, Pine Belt. The area is completely void of any Federal Interstate road mileage and has only a relatively small amount of four lane US Highways. The population density of our current service area is approximately one-fourth that of both Alabama and the

United States of America. Yet, modern, state-of-the-art coverage is without doubt just as important to the area we serve as it is those areas with above average population densities. This is evidenced by the reality that not only do our retail customers depend on our wireless services, but also by the fact that, on any given day, we will provide connectivity, including access to 9-1-1 emergency services, to as many 30,000 unique visitors, most of which are just passing through.

We have been able to remain relevant to the local telecom landscape, despite our rural footprint, by leveraging assets and private capital from debt markets and availing ourselves to the various federal grant, loan, and support programs when the opportunities presented themselves. And throughout the last 60 years, we have remained true to the mission my father adopted as the company was founded: to enhance the quality of life for our customers and partners by providing the highest quality of service at the best possible price.

To be clear, Pine Belt fully supports efforts to harden today's telecom networks for robust cybersecurity and to protect those networks from potential national security threats. Yet, while the industry buzzes with excitement of the great things that will soon come to bear as 5G networks are built-out, we at Pine Belt and numerous other small companies like us across the country have been all but frozen in our tracks since early last year by the cloud of uncertainty cast over us when the presence of certain vendor equipment in our networks was publicly called into question. In that respect, we greatly appreciate this Subcommittee's work to provide certainty to all carriers regarding what equipment can and cannot be used and, of equal importance, to provide desperately needed resources to allow carriers like Pine Belt to take the steps necessary to secure our networks. It is imperative that all carriers have access to equipment that is secure. And as in Pine Belt's case, when it is determined that equipment previously purchased with government assistance, for the purpose of meeting established public policy objectives using mandated lowest possible cost methodologies, must be removed and replaced for national security reasons due to certain vulnerabilities unknown at the time

of purchase, additional assistance is both in order and necessary, particularly for smaller and rural carriers that lack economies of scale. The Secure and Trusted Communications Networks Act and the Network Security Information Sharing Act take steps towards these goals.

How We Got Here

Pine Belt has significant interest in legislation before the Committee today, as well as proceedings before the Federal Communications Commission (“FCC”) regarding supply chain security along with the Executive Order on Securing the Information and Communications Technology and Services Supply Chain issued by the President earlier this year. This is because our current wireless network was rebuilt in 2014 through 2017 with equipment from ZTE. Prior to our ZTE deployment we were operating a 2G network built with Lucent equipment originally installed in 1999. We relied on this equipment well past its manufacturer supported life keeping it in operation during a time in which there was little emphasis on making cost effective capital available to pure rural market operators such as us. Had it not been for the FCC’s work to create the Mobility Fund Phase I (“MFI”) program pursuant to the 2011 Universal Service and Intercarrier Compensation reform order, it is almost a certainty that we would have had to shutter our wireless business.

Through MFI, the FCC provided up to \$300 million in one-time support for carriers to preserve and expand service where advanced mobile voice and data services were not available. Importantly, it was also the first mechanism to provide Universal Service Fund (“USF”) Support through a reverse-auction in which winning auction bids were those that had the lowest cost to serve the greatest number of road-miles. Adopted in the spirit of carefully directing scarce USF resources, it is now clear that this mechanism led to some undesirable consequences in that several carriers deployed equipment that is now considered as presenting security risks. It is important to note that at the time, no vendor selections were prohibited in the auction process nor were additional resources available for the

deployment of any specific equipment. Our main performance criterion was to provide as much coverage possible as inexpensively as possible.

As part of Pine Belt's MFI experience, we solicited quotes from five different vendors. ZTE's bid was almost one-third of that of the highest bidder, and 25 percent below the second lowest bidder. With no restrictions in place and facing deployment challenges to serve our sparsely populated area, this equipment selection was a no-brainer. This selection not only enabled us to meet our mandated MFI buildout requirement, but also provided us with a reliable platform on which we could quickly deploy 4G LTE and VoLTE. And, despite the challenges of providing service across our low-density footprint, we were optimistic that this experience would allow us to provide the latest services to our community.

As the uncertainties became public regarding whether we would be able to continue to use deployed ZTE equipment, however, we also began to encounter delays in our routine expansion efforts. One such example comes from last year when we were wrapping up installation of a base station in a small town with a population of 26. As we approached project completion, we were significantly delayed in our ability to turn on LTE at the site due to uncertainty resulting from several Federal sanctions levied on ZTE for things of which we had no prior knowledge and absolutely zero involvement. Another more significant situation concerns our efforts to turn-up VoLTE service. That aspect of our 4G upgrades has essentially come to a complete stand still. A third and even larger example involves the numerous questions we have as to how we will put to use the 600 MHz spectrum we purchased in the FCC Auction 1002 and the millimeter wave licenses we purchased this year in Auction 101 given the fate of our network vendor. So, one could say, much like many other small carriers providing service in rural areas, absent steps from Congress and other Federal agencies, our network strategies are frozen at a time when they should instead be focused on expansion and upgrades to the next generation services. In many areas where Pine Belt provides service, because there is no other provider, this could mean the

loss of service entirely and potential squandering of \$20 million plus in investments in modern wireless services for rural Alabama.

Legislation Before the Committee Is Necessary to Secure Rural Networks

While our experience regarding these issues in recent years has been one of uncertainty and concern, I am optimistic that working with Congress and other Federal agencies we can establish reasonable, sound policies and provide the essential financial resources needed to secure existing communications networks, allowing carriers to return to the work of meeting the exponentially growing demand for wireless services and laying the groundwork for the upgrades needed for rapid and timely deployment of 5G to all corners of the US, both urban and rural. The legislative efforts pending before this Subcommittee take significant steps to doing just that and plot a path to the future, by:

- Establishing the Secure and Trusted Communications Networks Reimbursement Program.

As discussed above, Pine Belt has been able to provide wireless services to our community because of federal grant, subsidy, and loan programs, combined with our own internally generated financial resources. As the business case was challenging even before considering supply chain security issues, and initial network deployments were funded in part through support programs, the new reimbursement program is necessary to assist smaller carriers in replacing covered equipment in order to secure communications without reducing or eliminating coverage in rural areas.

I applaud the Subcommittee for its work to establish the Secure and Trusted Communications Networks Reimbursement Program. With estimates to rip-and-replace covered network equipment as high as a billion dollars or more, financial analysts such as those at CoBank have noted that many rural operators will be unable to secure funding without government support.

The creation of this program is vital to support the national security policies we are discussing today without depriving rural America of the latest technology innovations.

- Determining a List of Covered Communications Equipment or Services.

Smaller carriers serving rural areas require certainty to know what equipment and services can and cannot be deployed without creating risks to communications networks. Additional clarity provided by provisions of legislation before the Committee today will provide needed guidance while replacing covered equipment in the near future and beyond.

- Mitigating Burdens.

As a small business, Pine Belt strongly supports legislative efforts to direct the FCC to take steps to mitigate administrative costs and burdens associated with participation in the Secure and Trusted Communications Networks Reimbursement Program.

- Targeting Network Risks.

The legislation classifies covered equipment as that which is “capable of routing or redirecting user data traffic or permitting visibility into any user data or packets that such equipment or service transmits or otherwise handles.” Pine Belt supports consideration of all efforts to target network risks to eliminate the requirement for unnecessary replacement of network components that do not pose security risks, including radio access network components that are incapable of providing switching services or visibility into user data.

- Supporting Information Sharing.

While nationwide service providers have resources and staff dedicated to information sharing with federal agencies on a day-to-day basis, smaller providers do not enjoy the same luxury of constant communication. Accordingly, I support the efforts through the Network Security Information Sharing Act to ensure that all carriers are provided the information they need to make decisions that support network security and trust in their communications networks.

Congressional Action is an Urgent Need

As Congress considers these critical national security issues, it is important to ensure that steps are taken in a timely manner to support national security. Efforts are currently underway, including through the Executive Order and pending proceedings before the FCC, to prohibit use of covered equipment. As FCC Commissioner Geoffrey Starks noted last week at the Competitive Carriers Association Annual Convention, “This is a national problem that deserves a national solution, and we shouldn’t expect small carriers – who acted legally and in good faith – to replace their insecure equipment on their own.” Swift Congressional action is required to provide resources for replacement of covered equipment, which is particularly needed for carriers who are unable to cover the costs of replacement without financial assistance from the federal government.

With the implementation of the Executive Order looming, Federal policy may prohibit use of covered equipment without providing a way for Pine Belt to continue to provide service to its customers and other wireless users that travel through our service area. There is no time to waste in ensuring that necessary resources are available to remove covered communications equipment and to replace network gear that poses security risks with secure equipment and services, and continued action from Congress to further legislation considered today is needed to support this transition.

Other Bills Under Consideration Today Increase Certainty

In addition to today’s consideration of legislation to secure wireless networks and share information to support that goal, the Subcommittee is also considering other bills that help wireless carriers take steps to confidently invest in existing and future technologies. Specifically, the idea that the Federal government may nationalize the wireless market threatens to upend billions of dollars invested in spectrum and network deployments from the private markets. While there is an appropriate role for regulation and oversight, the Federal government should not be in the business of

competing with the private sector. I appreciate the bipartisan efforts in the Eliminate From Regulators Opportunities to Nationalize The Internet in Every Respect Act, or the E-Frontier Act, to put that prohibition into statute.

Additionally, all carriers require access to sufficient spectrum resources to provide wireless services. That is true for nationwide wireless carriers serving millions of customers as well as smaller carriers serving rural markets. Like all carriers, Pine Belt pursues access to spectrum wherever possible, including participation and placing winning bids in spectrum auctions. It is also true that as a finite resource, policymakers must carefully consider how each spectrum band is allocated and used, including Federal use. I applaud the efforts to promote spectrum efficiency and coordination through the Studying How to Harness Airwave Resources Efficiently Act of 2019, or the SHARE Act, to support research and development around innovative technologies and techniques to facilitate sharing of spectrum, both between Federal entities and, where clearing and reallocation is not possible, with non-federal users. As technologies have evolved, so too should policies regarding spectrum allocations to support continued wireless growth. These and other efforts before the Subcommittee, including standards and strategy developments, all play important roles in securing communications networks.

This Committee has steadfastly worked to ensure that all Americans have access to the social, economic, educational, health, and public safety opportunities that rely on robust wireless services. I commend the steps the Committee has taken to support our wireless future. We at Pine Belt genuinely want to continue to be a part of the business landscape of our small corner of the country by providing the latest services to our neighbors, but we can only turn to our wireless future after removing the uncertainty regarding the equipment in place today and abiding by the many policies that shape our operating and investment environments. Thank you for your focus and leadership on these critical

issues, and I greatly appreciate the opportunity to share our story. I welcome any questions you may have.