

SUMMARY OF TESTIMONY OF MARK SHLANTA

CHIEF EXECUTIVE OFFICER SDN COMMUNICATIONS

Field Hearing to Examine 5G in Sioux Falls October 12, 2018

SDN Communications (“SDN”) is a leading provider of Internet and other networking services in the Upper Midwest. SDN is owned by 17 ILECs in South Dakota and works with dozens of additional ILECs, which collectively serve over 200,000 residential and business customers in over 400 communities in South Dakota, Minnesota, and Iowa. SDN has a history of centralizing services for ILECs and supporting complex solutions for large enterprise customers.

Nearly a decade ago, SDN’s members started delivering fiber to the premise and, in doing so, moved into the Gig era. SDN’s Members have invested nearly \$500 million into the fiber projects since 2013. That includes 2018’s investment of \$100 million in fiber and other capital projects by SDN and the ILECs that own SDN. These efforts have also included expanding service into unserved and underserved communities. There are challenges and high costs associated with building fiber in some rural communities. However, the schools, clinics, businesses, and consumers all benefit when our 6G fiber optic networks are deployed at the core of the broadband infrastructure.

SDN supports the efforts of the wireless carriers, local governments, and the FCC to bring next generation 5G wireless services to the population centers. Larger communities in South Dakota can be outstanding test beds as this technology develops. Consumers will benefit from the enhanced access to faster wireless services and computing power being deployed to support new applications in the Internet of Things (IOT) era. Network security will play an ever-increasing role for consumers and SDN encourages all governments to encourage the development and deployment of secure network assets and services during the growth and deployment of the new 5G wireless networks.

TESTIMONY OF MARK SHLANTA
CHIEF EXECUTIVE OFFICER
SDN COMMUNICATIONS
on
Field Hearing to Examine 5G in Sioux Falls
before the
Committee on Commerce, Science, and Transportation
UNITED STATES SENATE
SIOUX FALLS, SD
Oct. 12, 2018

Thank you, Chairman Thune, for inviting SDN to participate in today's hearing.

The prospect of 5G in South Dakota excites me. We have long been the leading edge of broadband, especially in rural markets, thanks to the progressive approach of SDN's owner companies, the independent telephone companies of South Dakota.

Our companies cover 80 percent of South Dakota's geography, and we're not talking about the population centers. Yet they aggressively combat the digital divide. In fact, SDN and the South Dakota Telecommunications Association recently commissioned a benchmark report. Three things to highlight:

1. 65 percent of SDTA Members' customers are connected by fiber.
2. 76 percent of them have high-speed broadband that meets or exceeds the FCC's broadband definition.
3. In the five years from 2013 to 2017, our members have invested \$400 million in networks that now total 45,000 miles of fiber in South Dakota – enough fiber to circle Earth twice!

That leads me to my primary point: Small cells or 5G – it's still all about the wires and what I refer to as the 6G fiber optic networks that support such advances.

If I'm going to use my smart phone to send a message to my mother across town or my sister, who lives in South Korea, nearly all that communication will travel fiber in the ground or under the ocean; it's only the very last part of the connection - from the handset to the tower - that is wireless. Today's 4G and tomorrow's 5G wireless do not exist without the 6G fiber that empowers them.

SDN has extensive experience in this field. We partner with all the wireless providers here to provide backhaul from the towers and fronthaul to the small cells. SDN played a key role in deploying some of the first small cells in the region. We helped deploy dozens of small cells in places like Aberdeen, Brookings, Sioux City, Sioux Falls, Sturgis and Yankton.

(start slides)

One of best examples is the new SDSU Dana J Dykhouse Stadium in Brookings, which holds 19,000 people. Even a few thousand fans overloaded the mobile data capacity making it impossible to text, pull up a web page, or post to social media. That paralyzes a university and drives away fans, especially younger ones.

SDN worked with a wireless carrier to secure locations, permit and construct the poles. Fans now have a better digital experience there. More importantly, these and other small cells will play a role in public safety.

These small cells represent the pre-cursor to 5G. We will need many of these to make 5G work. And all of them will have to connect to our 6G fiber.

(end slides)

I want to thank you for a lighter regulatory touch, especially shot clocks encouraging local governments to act. In the past, it could take months, and in some cases, the regulatory expenses exceeded \$25,000 per pole. That does not include the monthly fees to cities, campuses or other property owners.

I encourage continued streamlining. However, I also believe the federal and state governments should find balance for local control.

We worked cooperatively with governments in Aberdeen, Brookings, and Sioux Falls to make positive local ordinance changes. I'm pleased to say South Dakota Municipal League is aggressively working to create model ordinances for cities, large and small, to attract 5G services to South Dakota.

One reminder: network security is critical as we advance faster wireless services. 5G will expand the Internet of Things and the IOT devices we will all use, but network security should not be overlooked. Our state's academic resources can assist to discovery vulnerabilities and develop security measures.

In conclusion, our fiber assets run deep into the rural landscape and our early experience in small cells, along with the combination of local governments ready

to embrace 5G not to mention Dakota State University's technical expertise, make South Dakota the perfect test site for everything from driverless vehicles to wearable devices – the applications of 5G. All of it will improve rural quality of life and offer our strikingly independent South Dakotans the opportunity to live, work, and create wherever they please. The diverse weather, culture, and geographic conditions will offer the best test of 5G and leverage the promise of our 6G fiber optic network services.

Thank you.