COMMITTEE ON
ENERGY & COMMERCE
CHAIRMAN FRANK PALLONE, JR.

MEMORANDUM

November 12, 2019

To: Subcommittee on Communications and Technology Members and Staff

Fr: Committee on Energy and Commerce Staff

Re: Markup of Nine Communications and Technology Bills

On **Thursday, November 14, 2019, at 11:30 a.m. in the John D. Dingell Room, 2123 of the Rayburn House Office Building**, the Subcommittee on Communications and Technology will hold a markup of the following nine bills: **H.R. 4229**, the "Broadband Deployment Accuracy and Technological Availability (DATA) Act"; **H.R. 4427**, the "Mapping Accuracy Promotes Services (MAPS) Act"; **H.R. 5000**, the "Studying How to Harness Airwave Resources Efficiently (SHARE) Act"; **H.R. 4998**, the "Secure and Trusted Communications Networks Act"; **H.R. 4461**, the "Network Security Information Sharing Act"; **H.R. 2881**, the "Secure 5G and Beyond Act"; **H.R. 4500**, the "Promoting United States Wireless Leadership Act of 2019"; **H. Res. 575**, Expressing the sense of the House of Representatives that all stakeholders in the deployment of 5G communications infrastructure should carefully consider and adhere to the recommendations of "The Prague Proposals"; and **H.R. 5035**, the "Television Viewer Protection Act".

I. BROADBAND MAPPING

A. Background

The Federal Communications Commission (FCC) began collecting subscription and connection data for broadband and telephone service using FCC Form 477 in 2000.[1] Since then, these data have become the primary source for many FCC actions, including its publication of statutorily mandated reports to Congress regarding competition among certain service providers, and the availability of advanced communications capability.[2] The FCC has also used these data

[1] *See* Federal Communications Commission, *Establishing the Digital Opportunity Data Collection, Modernizing the FCC Form 477 Data Program*, Report and Order and Second Notice of Proposed Rulemaking, WC Docket No. 19-195 and WC Docket No. 11-10, at ¶ 5 (rel. Aug. 6, 2019) (hereinafter "*FCC Broadband Mapping Order*").

[2] *Id*.

to update its universal service policies, including by excluding certain areas from receiving support.[3] Notably, the FCC collects Form 477 data for both fixed and mobile broadband.[4]

Through Form 477, historically, the FCC has required fixed broadband providers to identify the census blocks in which fixed broadband service is available.[5] The FCC has defined "availability" as whether the provider does—or could within a typical service interval or without an extraordinary commitment of resources—provide service to a single end user in a given census block.[6] As a result, if even a provider could serve a single area in a census block, the FCC has counted the *entire* census block as being served.[7] According to the Census Bureau, in "a city, a census block looks like a city block bounded on all sides by streets[,] . . . but [i]n remote areas, census blocks may encompass hundreds of square miles."[8]

For mobile broadband service the FCC's Form 477 requires providers to report their coverage areas by submitting maps depicting where consumers can expect to receive the minimum advertised services.[9] The FCC does not require providers to use a standardized method with defined technical parameters for determining mobile broadband coverage areas.[10] As a result, according to the FCC, its mobile broadband data cannot be compared across providers.[11]

Earlier this year, the FCC adopted a report and order that will require fixed broadband providers to submit new maps of the areas in which their services are available.[12] As part of this new data collection, the FCC will require providers to submit data using shapefiles—or polygons—rather than on a census block basis, as was previously required.[13] This new collection is similar to the FCC's Form 477 data in that it will allow providers to submit availability data based on where a provider has a current connection or "could provide such a

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[3] *Id*. at ¶ 8.

[4] *Id*. at ¶ 2.

[5] *Id*. at ¶ 8.

[6] *Id*. at ¶ 13.

[7] Government Accountability Office, *Broadband Internet: FCC's Data Overstate Access on Tribal Lands*, Report to Congressional Requesters (Sept. 2018) ("*GAO Broadband Internet Report*"), www.gao.gov/assets/700/694386.pdf at page 17.

[8] United States Census Bureau, *What Are Census Blocks?*, Census Blogs (Jul. 11, 2011), www.census.gov/newsroom/blogs/random-samplings/2011/07/what-are-census-blocks.html.

[9] *FCC Form 477 Instructions* at 24, https://transition.fcc.gov/form477/477inst.pdf.

[10] *GAO Broadband Internet Report* at 15.

[11] *Id*.

[12] *FCC Broadband Mapping Order* at ¶ 10.

[13] *Id*. at ¶ 11.

connection within ten business days of a customer request."[14] As part of its report and order, the FCC also required the Universal Service Administrative Company (USAC) to create an online portal for "local, state, and tribal governmental entities and members of the public to review and dispute the broadband coverage polygons filed by fixed providers."[15] The order leaves the current Form 477 system in place, but requests comment on whether the FCC should sunset some or all of the Form 477 collection.[16] Notably, the FCC did not apply this new collection requirement to mobile broadband providers – it was applied only to fixed providers.[17]

B. Legislation

i. H.R. 4229, the Broadband Deployment Accuracy and Technological Availability (DATA) Act

Reps. Loebsack (D-IA) and Latta (R-OH) introduced H.R. 4229, the "Broadband Deployment Accuracy and Technological Availability Act" ("Broadband Data Act"), on September 6, 2019. The bill would require the FCC to issue new rules to require the collection and dissemination of granular broadband availability data. It would also require the FCC to establish a process to verify the accuracy of such data, including by using data submitted by other government entities or the public. In addition, the bill would require the FCC to use this data to create coverage maps based on a serviceable location fabric map regarding fixed broadband.

ii. H.R. 4427, the Mapping Accuracy Promotes Services (MAPS) Act

Reps. McEachin (D-VA) and Long (R-MO) introduced H.R. 4227, the "Mapping Accuracy Promotes Services Act" (MAPS Act), on September 6, 2019. The MAPS Act specifies that it is unlawful for a person to willfully, knowingly, or recklessly submit broadband service data that is inaccurate.

II. SPECTRUM POLICY

A. Background

Electromagnetic spectrum—often referred to only as spectrum—is used to deliver radio, broadcast television (TV), cellular, and wireless broadband internet services, including 5G wireless technology. There is a finite amount of spectrum available. The FCC manages the

[14] *FCC Form 477 Instructions* at 24, https://transition.fcc.gov/form477/477inst.pdf.

[15] *FCC Broadband Mapping Order* at ¶ 11.

[16] *Id.*

[17] *Id.* at ¶ 2.

commercial use of spectrum[18] while the National Telecommunications and Information Administration (NTIA) manages federal use.[19]

The FCC and NTIA have in the past used innovative techniques to help federal users of spectrum and commercial users coexist. For example, in the 3.5 GHz band a novel, three-tiered, spectrum-use co-existence program is used that automatically coordinates shared federal and non-federal use of the band.

B. Legislation

i. H.R. 5000, the Studying How to Harness Airwave Resources Efficiently (SHARE) Act

Reps. Doyle (D-PA) and Latta (R-OH) reintroduced H.R. 5000, the "Studying How to Harness Airwave Resources Efficiently Act of 2019" or the "SHARE Act," on November 8, 2019, after originally introducing it on September 24, 2019. The SHARE Act would require NTIA, in consultation with the FCC, to establish a spectrum sharing and prototyping program and test bed to explore new ways for federal entities to share spectrum with other federal entities. The legislation would authorize $50 million for NTIA to establish the spectrum sharing prototyping and test bed program. It would also require NTIA and the FCC, in consultation with the National Institute of Standards and Technology, to submit a report to Congress on how to improve and expand the spectrum sharing techniques developed for the 3.5 GHz band, or other spectrum sharing strategies, and consider their applicability to other bands, including 3.1 GHz to 3.55 GHz and 7.1 GHz to 8.4 GHz, among other considerations.

III. SUPPLY CHAIN SECURITY

A. Background

United States communications service providers rely heavily on equipment and services manufactured and provided by foreign companies. The increasingly globalized market for telecommunications equipment and services has increased competition and opened the door to cheaper goods for consumers but poses new challenges for the United States, particularly for ensuring the security of the telecommunications supply chain.

Given the pivotal role that private communications networks play in connecting U.S. critical infrastructure functions, American networks are appealing targets for foreign adversaries. The

[18] Communications Act of 1934, Pub. L. 104–104, title I, § 104, Feb. 8, 1996 (codified at 47 USC § 151 *et seq*.)

[19] National Telecommunications and Information Administration Organization Act, PL 102–538, Oct. 27, 1992, *as amended by* PL 115–141, Mar. 23, 2018 (codified at 47 USC § 901 *et seq*.)

United States, therefore, has a clear interest in mitigating threats posed by vulnerable communications equipment and services.

In particular, the United States identified individual Chinese telecommunications firms, including Huawei Technologies Co. Ltd (Huawei) and its affiliates, as posing significant threats to U.S. commercial and security interests.[20] Their susceptibility to state influence over business operations results in China having "the means, opportunity, and motive to use telecommunications companies for malicious purposes," such as espionage and cyberattacks.[21] In April 2018, the U.S.-China Economic and Security Review Commission found that the Chinese government has "invested significant state capital and influence" on state-owned enterprises to strategically place these companies in the U.S. telecommunications supply chain.[22]

Large telecommunications companies with sophisticated network security operations and significant capital generally have avoided installing and using Huawei and other suspect foreign equipment in their networks.[23] Moreover, federal agencies have actively reached out to large carriers to express concerns when carriers have considered purchasing suspect equipment.[24] In contrast, some smaller carriers with more limited resources and less sophisticated security operations have purchased and installed Huawei, and other suspect foreign equipment, in their networks either because the equipment was less expensive or they were unaware of the security risk, or both.[25]

On May 15, 2019, the White House issued an Executive Order prohibiting “any acquisition, importation, transfer, installation, dealing in, or use of any" information or communications technology involving equipment developed through foreign adversaries.[26] The same day, the

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[20] Department of Commerce, *Department of Commerce Announces the Addition of Huawei Technologies Co. Ltd. to the Entity List* (May 15, 2019) (press release).

[21] House Permanent Select Committee on Intelligence, *Investigative Report on the US National Security Issues Posed by Chinese Telecommunications Companies Huawei and ZTE*, 112th Cong. (Oct. 8, 2012).

[22] U.S.-China Economic Security Review Commission, *Supply Chain Vulnerabilities from China in US Federal Information and Communications Technology* (Apr. 2018).

[23] *See, e.g.*, Paul Mozur, *AT&T Drops Huawei’s New Smartphone Amid Security Worries*, New York Times (Jan. 9, 2018) (www.nytimes.com/2018/01/09/business/att-huawei-mate-smartphone.html).

[24] *See, e.g.*, Todd Shields, *Locke Says Sprint’s Chief Was Called About Huawei Bid Concerns*, Bloomberg (Dec. 7, 2010) (www.bloomberg.com/news/articles/2010-12-07/commerce-s-locke-says-sprint-s-chief-was-called-about-huawei-bid-concerns).

[25] *See, e.g.*, Cecilia Kang, *Huawei Ban Threatens Wireless Service in Rural Areas*, New York Times (May 25, 2019) (www.nytimes.com/2019/05/25/technology/huawei-rural-wireless-service.html).

[26] Exec. Order No. 13873, 84 Fed. Reg. 22689 (May 15, 2019) (published May 17, 2019).

Department of Commerce's Bureau of Industry Security announced it would add Huawei and its affiliates to its Entity List, limiting their ability to access U.S. exports.[27]

On October 29, 2019, the FCC released a draft Report and Order, Further Notice of Proposed Rulemaking, and Order that is tentatively scheduled for consideration at the November Open Commission Meeting. The Report and Order would prohibit the use of universal service funds to purchase equipment or services from companies posing a national security threat to the integrity of the communications supply chain or U.S. communications networks.[28] The Further Notice of Proposed Rulemaking and Order proposes to require recipients of universal service support to refrain from using equipment or services from covered companies, and to require communications providers to remove covered equipment and services from their networks.[29]

B. Legislation

i. H.R. 4998, the Secure and Trusted Communications Networks Act

Reps. Pallone (D-NJ), Walden (R-OR), Matsui (D-CA), and Guthrie (R-KY) reintroduced H.R. 4459, the "Secure and Trusted Communications Networks Act," on November 8, 2019, after originally introducing it on September 24, 2019. The Secure and Trusted Communications Networks Act instructs the FCC to develop and maintain a list of communications equipment and services that pose an unacceptable risk to national security and prohibits the use of funds made available by FCC programs to purchase, rent, lease, or otherwise obtain such equipment and services. The bill also establishes the Secure and Trusted Communications Reimbursement Program to assist communications providers with the costs of removing prohibited equipment and services from their networks and replacing prohibited equipment with more secure communications equipment and services.

ii. H.R. 4461, the Network Security Information Sharing Act

Reps. Kinzinger (R-IL) and Doyle (D-PA) introduced H.R. 4461, the "Network Security Information Sharing Act," on September 24, 2019. The Network Security Information Sharing Act directs the Secretary of Homeland Security, in cooperation with the Director of National Intelligence (DNI), the Director of the Federal Bureau of Investigation, NTIA, and the FCC, to establish a program to share supply chain security risks with advanced communications service providers and trusted suppliers of telecommunications equipment and services.

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[27] Department of Commerce, *Department of Commerce Announces the Addition of Huawei Technologies Co. Ltd. to the Entity List* (May 15, 2019) (press release).

[28] Federal Communications Commission, *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, Report and Order, Further Notice of Proposed Rulemaking, and Order, WC Docket No. 18-89, at ¶ 26 (rel. Oct. 29, 2019) (hereinafter "*FCC Supply Chain Order*").

[29] *FCC Supply Chain Order* at ¶ 112.

iii. H.R. 2881, the Secure 5G and Beyond Act

Reps. Spanberger (D-VA), Brooks (R-IN), O'Halleran (D-AZ), Stefanik (R-NY), Slotkin (D-MI), and Rooney (R-FL), introduced H.R. 2881, the "Secure 5G and Beyond Act," on May 21, 2019. The Secure 5G and Beyond Act directs the President to develop the "Secure Next Generation Mobile Communications Strategy" in consultation with the heads of the FCC, NTIA, and Department of Homeland Security, as well as the DNI and Secretary of Defense.

The Secure Next Generation Mobile Communications Strategy is intended to: (1) ensure the security of 5G communications systems and infrastructure in the United States; (2) assist mutual defense allies and strategic partners in maximizing the security of 5G networks and infrastructure in their countries; and (3) protect the competitiveness of U.S. companies, the privacy of American consumers, and the integrity of standards-setting bodies against political influence.

iv. H.R. 4500, the Promoting United States Wireless Leadership Act of 2019

Reps. Walberg (R-MI) and Dingell (D-MI) introduced H.R. 4463, the "Promoting United States Wireless Leadership Act," on September 26, 2019. The Promoting United States Wireless Leadership Act directs NTIA to encourage participation by trusted American companies and other stakeholders in standards-setting bodies, and to offer technical assistance to such stakeholders that elect to participate, in the course of developing standards for 5G networks and future generations of communications networks.

v. H. Res. 575, Expressing the sense of the House of Representatives that all stakeholders in the deployment of 5G communications infrastructure should carefully consider and adhere to the recommendations of "The Prague Proposals"

Reps. Flores (R-TX) and Soto (D-FL) introduced H. Res. 575 on September 24, 2019. This resolution expresses the sense of the House of Representatives that stakeholders involved in the deployment of 5G communications infrastructure should consider adherence to the international security recommendations adopted at the Prague 5G Security Conference in May 2019, known as "The Prague Proposals." The resolution also encourages the President and federal agencies to promote trade and security policies on the international stage that are consistent with "The Prague Proposals."

IV. STELA REAUTHORIZATION

A. Background

The FCC grants licenses to broadcast stations to serve a specific community. Each community is assigned to a Designated Market Area (DMA). Currently, there are 210 DMAs;

broadcast stations are assigned to a DMA based on a station's community of license.[30] Television stations broadcast content to households within their local markets.

The Communications Act established a regulatory framework for the carriage of broadcast programming by a multichannel video programming distributor (MVPD) service (e.g., cable or satellite TV). Generally, when an MVPD wants to negotiate the carriage of a broadcast station, it must obtain retransmission consent from the broadcaster.[31]

In some situations, satellite MVPDs may also transmit "distant signals"—stations outside of a subscriber's DMA—without having to negotiate a retransmission agreement. In that case, the Communications Act currently allows satellite MVPDs to import distant signals outside of the DMA to ensure that subscribers in these markets have access to programming from all of the networks. As of October 2018, satellite MVPDs reported that 870,000 subscribers receive at least one distant broadcast signal.[32]

In addition to the retransmission consent regime established by the Communications Act, statutory licenses codified outside of the Communications Act permit satellite MVPDs to retransmit copyrighted programming content without first having to negotiate royalties with each copyright owner.[33]

Congress set expiration dates on certain provisions of this framework. The most recent extension of these provisions came in the STELA Reauthorization Act of 2014 (STELAR).[34] Specifically, they are:

- Section 325(b)(2)(C) of the Communications Act, which allows satellite MVPDs to import distant signal licenses to unserved households without retransmission consent from the stations. This provision expires December 31, 2019. If this provision expires, satellite MVPDs will be required to negotiate retransmission consent agreements to provide broadcast stations to unserved households.

- Sections 325(b)(3)(C)(ii) and (iii) places an obligation on MVPDs and broadcasters to negotiate retransmission consent agreements "in good faith." Broadcasters are also prohibited from engaging in exclusive contracts for carriage of their content. These requirements expire on January 1, 2020. Currently, FCC regulations implementing

[30] Congressional Research Service, *Cable and Satellite Television Issues in the 116th Congress*, IF11053 (Dec. 20, 2018).

[31] 47 U.S.C. § 325 (b).

[32] Broadcasting & Cable, *SCBA Pushes Permanent STELAR Renewal* (Oct. 17, 2018).

[33] 17 U.S.C. § 119.

[34] STELA Reauthorization Act of 2014, Pub. L. No. 113-200.

these provisions set forth several standards that violate this obligation.[35] The FCC can receive and adjudicate complaints, if a MVPD or broadcaster believes these standards are being violated.[36]

- The satellite distant signal statutory license in 17 U.S.C. § 119, which expires December 31, 2019. If this provision expires, satellite MVPDs would be required to negotiate a license—or licenses—to carry all the content available through an individual television broadcast in order to transmit distant signals as opposed to using the existing statutory license and making payments to the Copyright Royalty Board.

B. Legislation

i. H.R. 5035, the Television Viewer Protection Act

Rep. Doyle (D-PA) introduced H.R. 5035, the "Television Viewer Protection Act" on November 12, 2019. This bill extends for five years the "good faith" negotiation provisions and allows for the importation of distant signals to unserved households as authorized under the statutory license in Section 119 of the Copyright Act. The Television Viewer Protection Act allows smaller MVPDs to collectively negotiate for retransmission consent with large broadcasters. Additionally, it requires MVPDs, internet service providers, and telephone providers (both fixed and mobile) to include all charges in the prices they advertise and bill for services. Lastly, the bill requires greater transparency in electronic bills and provides remedies to consumers for certain increases in charges.

[35] *See* 47 C.F.R. § 76.65 (b).

[36] 47 C.F.R. § 76.65 (c). The FCC recently granted a complaint filed by DIRECTV, LLC and AT&T Services, Inc. against 20 broadcast stations, all of whom have a relationship Sinclair Broadcast Group. The complaint alleged the stations failed to negotiate in good faith, and the FCC, for the first time, found there was a *per se* violation of the "good faith" rules. *DIRECTV, LLC; AT&T Services, Inc., v. Deerfield Media, Inc., et al*, Memorandum Opinion and Order, DA 19-1159 (Nov. 6, 2019).