Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of

Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs

WC Docket No. 18-89

NOTICE OF PROPOSED RULEMAKING

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By the Commission: Chairman Pai and Commissioners Clyburn, O’Rielly, and Carr issuing separate statements.

I. INTRODUCTION

1. A critical element of our national security is the security of America’s communications networks. Therefore, threats to the security of our nation’s communications networks posed by certain communications equipment providers have long been a matter of concern in the Executive Branch and Congress. And as the supply chain for our nation’s communications networks increasingly reaches far beyond U.S. borders, the need to address these threats has become more pressing.

2. The Federal Communications Commission has a specific, but an important, supporting role to play in these efforts. In keeping with our obligation to be responsible stewards of the public funds used in the Universal Service Fund (USF or the Fund) programs, we propose and seek comment on a rule to prohibit, going forward, the use of USF funds to purchase equipment or service providers identified as posing a national security risk to communications networks or the communications supply chain. Our action today is intended to ensure that universal service funds are not used in a way that undermines or poses a threat to our national security.

II. BACKGROUND

3. Executive Action to Safeguard and Secure Telecommunications Networks. Over the last decade, the Executive Branch has repeatedly stressed the importance of identifying and eliminating potential security vulnerabilities in communications networks and their supply chains. Most recently, in May 2017, the White House released an Executive Order emphasizing the importance of the security of federal networks and critical communications infrastructure. This Executive Order built on the efforts of previous administrations to assess and alleviate weaknesses in the country’s telecommunications networks. For example, in February 2013, the White House issued Presidential Policy Directive 21 (PPD 21), which directed federal agencies to exercise their authority and expertise to partner with other agencies to identify vulnerabilities in communications infrastructure and to work “to increase the security

and resilience of critical infrastructure within the communications sector.”\(^2\) That same year, the U.S. Government Accountability Office (GAO) released a report assessing the potential security risks of foreign-manufactured equipment in commercial communications networks and detailing the efforts of the federal government to address the risks posed by such equipment.\(^3\)

4. **Congressional Concern About the Security of Telecommunications Networks.** Congress has also repeatedly expressed concerns about the potential for supply chain vulnerability, including possible risks associated with certain foreign communications equipment providers, to undermine national security. In October 2012, the House Permanent Select Committee on Intelligence (HPSCI) released a bipartisan report assessing the counterintelligence and security threat posed by Chinese telecommunications companies operating in or providing equipment to customers in the United States.\(^4\) The report “focused on Huawei [Technologies Company (Huawei)] and ZTE [Corporation (ZTE)], the top two Chinese telecommunications equipment manufacturers.”\(^5\) The report noted that both companies have “histories that include connections to the Chinese government.”\(^6\) In addition to recommending that U.S. government agencies and federal contractors “should exclude ZTE or Huawei equipment in their systems,” the report “strongly encouraged” private-sector entities “to consider the long-term security risks associated with doing business with either Huawei or ZTE for equipment or services [and] . . . strongly encouraged [private entities] . . . to seek out other vendors for their projects.”\(^7\)

5. On December 20, 2017, a group of 18 Senators and Representatives reiterated these concerns in a letter to Chairman Pai, which highlighted the 2012 HPSCI report’s finding that “Huawei . . . cannot be trusted to be free of foreign state influence and thus poses a security threat to the United States and to our systems.”\(^8\) They also echoed the report’s recommendation that “the United States . . . view with suspicion the continued penetration of the U.S. telecommunications market by Chinese telecommunications companies,” and that U.S. government systems and contractors “should not include Huawei or ZTE equipment.”\(^9\)

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\(^3\) Mark L. Goldstein, Director, Physical Infrastructure Issues, U.S. Government Accountability Office, Telecommunications Networks: Addressing Potential Security Risks of Foreign-Manufactured Equipment at i, 5 (May 21, 2013), https://www.gao.gov/assets/660/654763.pdf (noting that “other countries – such as Australia, India, and the United Kingdom – are similarly concerned about the emerging threats to their commercial communications networks posed by the global supply chain and have taken actions to improve their ability to address this security challenge”).


\(^5\) Id. at v.

\(^6\) Id. at 8.

\(^7\) Id. at vi.


6. In response to continuing concerns over the purchase and use of communications equipment from certain foreign entities, Congress passed the National Defense Authorization Act for Fiscal Year 2018 (NDAA), which, among other things, bars the Department of Defense from using “[t]elecommunications equipment [or] services produced . . . [or] provided by Huawei Technologies Company or ZTE Corporation” for certain critical programs, including ballistic missile defense and nuclear command, control, and communications.\(^\text{10}\) The NDAA also bars all federal agencies, including the Commission, from using any products or services made “in whole or in part . . . by Kaspersky Lab,” a company with alleged ties to the Russian government.\(^\text{11}\) Reflecting its continued concern about this issue, Congress is also considering pending legislation that would, if adopted, build upon these targeted prohibitions and block all federal agencies, including the Commission, from contracting with any entity that uses “telecommunications equipment or services . . . produced by Huawei Technologies Company or ZTE Corporation” as “a substantial or essential component . . . or as critical technology as part of any system.”\(^\text{12}\)

7. **Targeted Commission Actions to Protect the Nation’s Telecommunications Infrastructure.** For more than 80 years, the Commission has been charged by Congress with promoting a “Nation-wide, and world-wide wire and radio communications service” for the purposes of the “national defense” and preserving the “safety of life and property.”\(^\text{13}\) Consistent with this mission, we have relied on our specific statutory authorities to take a number of targeted steps to protect the nation’s telecommunications infrastructure from potential security threats. For example, pursuant to the Spectrum Act of 2012,\(^\text{14}\) the Commission adopted rules prohibiting persons and entities who have been, for reasons of national security, barred by any federal agency from bidding on a contract, participating in an auction, or receiving a grant, from participating in auctions under the Spectrum Act.\(^\text{15}\)

8. The Commission also considers “national security, law enforcement, [and] foreign policy” concerns in the course of reviewing applications under section 214,\(^\text{16}\) under the Submarine Cable

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\(^{10}\) See Pub. L. 115-91, 131 Stat. 1283, 1762, Sec. 1656.

\(^{11}\) Pub. L. 115-91, 131 Stat. at 1739-40, Sec. 1634.


\(^{13}\) See 47 U.S.C. § 151.


\(^{15}\) See 47 CFR § 1.2204(c)(6). The Commission also adopted rules prohibiting persons and entities who have been, for reasons of national security, barred by any federal agency from bidding on a contract, participating in an auction, or receiving a grant, from participating in incentive auctions conducted under 47 U.S.C. § 309(j)(8)(G)(i). See 47 CFR § 1.2105(a)(2)(xiii).

\(^{16}\) See 47 U.S.C. § 214; 47 CFR §§ 63.01-63.53.
Landing License Act,\textsuperscript{17} and under section 310(b) when an applicant has reportable foreign ownership.\textsuperscript{18} Recognizing that certain Executive Branch agencies have specific expertise in these areas, the Commission seeks input on these applications from Executive Branch agencies that have established an interest in their review.\textsuperscript{19} After the agencies review the application, they may file comments requesting that the Commission condition grant of the application on compliance with a mitigation agreement or deny the application.\textsuperscript{20} The mitigation agreements often include a requirement that applicants submit a list of principal equipment they plan to use to the agencies for approval.\textsuperscript{21}

9. Further, the Commission has established the Communications Security, Reliability and Interoperability Council (CSRIC), which is charged with providing recommendations to ensure the security and reliability of the nation’s communications systems, including telecommunications, media, and public safety networks.\textsuperscript{22} The Commission chartered CSRIC VI on March 19, 2017.\textsuperscript{23} This latest iteration of the CSRIC includes a working group whose mission is to recommend mechanisms to reduce risks to network reliability and security, including mechanisms to best design and deploy 5G networks to

\textsuperscript{17} See 47 U.S.C. §§ 34-39 (“No person shall land or operate in the United States any submarine cable directly or indirectly connecting the United States with any foreign country . . . unless a written license to land or operate such cable has been issued by the President of the United States.”); Executive Order 10530 § 4, 19 Fed. Reg. 2709 (1954) (delegating to the Commission “all authority” under the Cable Landing License Act); 47 CFR § 1.767.


\textsuperscript{19} See Process Reform for Executive Branch Review of Certain FCC Applications and Petitions Involving Foreign Ownership, IB Docket No. 16-155, Notice of Proposed Rulemaking, 31 FCC Rcd 7456, 7457-59, paras. 4-8 (2016) (Executive Branch Process Reform NPRM). The agencies include the Department of Homeland Security, the Department of Justice (including the Federal Bureau of Investigations), the Department of Defense, the Department of State, the Department of Commerce and the National Telecommunications and Information Administration (NTIA), the United States Trade Representative, and the Office of Science and Technology Policy. \textit{Id.} at 7458, n. 16.

\textsuperscript{20} \textit{Id.} at 7459, para. 8.


\textsuperscript{22} See FCC, Communications Security, Reliability and Interoperability Council, \url{https://www.fcc.gov/about-fcc/advisory-committees/communications-security-reliability-and-interoperability-council-0}.


mitigate risks to network reliability and security posed by, among other things, vulnerable supply chains.\textsuperscript{24}

10. \textit{Oversight of Universal Service Fund.} One of the Commission’s central missions is to make “available . . . to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.”\textsuperscript{25} Since its inception, the USF has operated as a mechanism for achieving that mission.\textsuperscript{26} Today, the Commission provides universal service support through four separate programs: (1) the High-Cost Support Program, which provides support to eligible carriers that provide service to high-cost areas, thereby making voice and broadband service affordable for residents living in such regions;\textsuperscript{27} (2) the Low Income Support Program (Lifeline), which assists eligible low income customers by helping to pay for monthly telephone and broadband charges;\textsuperscript{28} (3) the Rural Health Care Support Program, which helps subsidize rates for telecommunications and broadband services to health care facilities in rural areas;\textsuperscript{29} and (4) the Schools and Libraries Support Program, also known as E-Rate, which provides support for telecommunications services, Internet access, and internal connections to eligible schools and libraries.\textsuperscript{30}

11. The Commission has designated the Universal Service Administrative Company (USAC) as the entity responsible for administering the universal service support programs under the Commission’s oversight.\textsuperscript{31} The Commission oversees the Fund consistent with the “[u]niversal service principles” set forth in section 254(b), as well as “other principles” that we “determine are necessary and appropriate for the protection of the public interest, convenience, and necessity and are consistent with” the Communications Act of 1934, as amended.\textsuperscript{32}

III. DISCUSSION

12. Given the Commission’s oversight role with respect to the Fund and increasing concerns about ensuring communications supply chain integrity, we propose to take targeted action to ensure that USF funds are not used in a way that undermines or poses a threat to our national security. We seek

\textsuperscript{25} 47 U.S.C. § 151.
\textsuperscript{26} See 47 U.S.C. § 254.
\textsuperscript{27} See 47 CFR §§ 54.302-54.321.
\textsuperscript{28} See 47 CFR §§ 54.400-54.423. The Commission has on multiple occasions stated that the Lifeline program supports services, not end-user equipment, with the exception of temporary support for handsets in the months following Hurricane Katrina.  \textit{Lifeline and Link Up Reform and Modernization}, Third Report and Order, Further Report and Order, and Order on Reconsideration, 31 FCC Rcd 3962, 4005-4006, para. 125 (2016) (expressly declining to provide a subsidy for consumer premises equipment); \textit{Lifeline and Link Up Reform and Modernization}, Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd at 6804, para. 348 (2012) (noting that “historically the Fund has been used for services not equipment”); cf. \textit{Fed.-State Joint Bd. on Universal Serv. Sch. \& Libraries Universal Serv. Support Mechanism Rural Health Care Support Mechanism Lifeline \& Link-Up}, Order, 20 FCC Rcd. 16883, 16889-90, para. 13 (2005) (adopting temporary rules to include the provision of a free handset along with voice service to those directly impacted by Hurricane Katrina).
\textsuperscript{29} See 47 CFR §§ 54.600-54.680.
\textsuperscript{30} See 47 CFR §§ 54.500-54.523.
\textsuperscript{31} See Changes to the Board of Directors of the National Exchange Carrier Association, Inc.; Federal-State Joint Board on Universal Service, CC Docket Nos. 97-21, 96-45, Report and Order and Second Order on Reconsideration, 12 FCC Rcd 18400, 18415, para. 25 (1997)).  See also 47 CFR § 54.702 (establishing the USF Administrator’s functions and responsibilities).
\textsuperscript{32} 47 U.S.C. § 254(b)(7).
comment on how best to implement such a rule, including the costs and benefits of doing so, as well as on alternative approaches and any other steps we should consider taking.

A. Prohibition on Use of USF Funds

13. We propose to adopt a rule that, going forward, no USF support may be used to purchase or obtain any equipment or services produced or provided by a company posing a national security threat to the integrity of communications networks or the communications supply chain. We believe we have a responsibility to ensure that the public funds used in the USF are not spent on equipment or services from companies that present a risk to the supply chain. We believe that this targeted action is therefore necessary. We seek comment on this view, on our proposal generally, and on any potential alternatives.

14. We also seek comment on whether other federal agencies have rules that we should follow as a model for limiting USF recipients’ purchase of equipment or services from companies that trigger national security concerns. Do other civilian agencies that regulate or provide grants, loans or other financial assistance for key components of the nation’s infrastructure, such as the Federal Energy Regulatory Commission, the Nuclear Regulatory Commission, the Federal Housing Administration, the Department of Transportation, the Department of Agriculture’s Rural Utilities Service, the National Telecommunications and Information Administration, the National Science Foundation, or financial regulatory bodies, have rules similar to the ones we have proposed? Would such existing rules serve as a model or be helpful in modifying our proposal? If so, which rules or regulations should we look to, and how should they inform our proposal? Are there any key differences that we should take into account in considering such rules in the context of telecommunications infrastructure? If so, please explain.

15. Types of Equipment and Services. We seek comment on the types of equipment and services covered by our proposed rule. One bright-line approach would be to prohibit use of USF funds on any purchases whatsoever from companies that have been identified as raising national security risks. Would such a rule be most appropriate here? Another approach would be to limit the scope of the proposed rule to equipment and services that relate to the management of a network, data about the management of a network, or any system the compromise or failure of which could disrupt the confidentiality, availability, or integrity of a network. We seek comment on this approach. Alternatively, which components or services are most prone to supply chain vulnerabilities? Are there any reasons to exempt certain categories or types of equipment or services from the scope of the rule? For example, should the rule cover all software or only software that manages the communications network or devices used on the network? Are there any categories of services that would not pose a potential risk to communications networks or the communications supply chain, and for this or any other reasons, should not be covered by the scope of the rule? Additionally, are there existing processes or methods, such as supply chain risk management processes, through which equipment can be certified not to present a supply chain risk, thereby allowing that equipment to be exempted from coverage under our proposed rule? Does the Department of Homeland Security or another Federal entity test communications equipment for supply chain risk? Should the Commission convene an advisory group or voluntary industry panel that would be able to provide such certification? Further, we expect that the proposed rule would extend to upgrades of existing equipment or services, and we seek comment on this view. We also seek comment on any other issues commenters believe are relevant to identifying the types of equipment and services that should be covered by our proposal.

16. Use of Funds. We expect that our proposed rule would limit use of USF funds both directly by the recipient of that funding as well as indirectly by any contractor or subcontractor of the recipient. We seek comment on this view. For example, should there be a limit on how many levels of subcontractors are subject to the proposed rule? Are there different practical or policy questions that necessitate crafting rules on a program-specific basis across the four separate USF programs? Or would an overarching rule for all USF programs better meet the goals of safeguarding USF-funded infrastructure and providing effective USF support? We seek comment on these issues and any related issues of application. Additionally, given the fact that projects supported through the Fund involve both USF funds and non-USF funds, and given that money is fungible, should our proposed rule prohibit the use of any
USF funds on any project where equipment or services produced or provided by a company posing a national security threat to the integrity of communications networks or the communications supply chain is being purchased or obtained?

17. **Effective Date.** We make clear that our proposed rule or any alternative to restricting the use of USF funds that we adopt in this proceeding would apply only prospectively and seek comment on when the proposed rule should become effective. How long would USF recipients need to begin compliance with the rule? Should we consider phasing in the proposed rule for certain USF programs before others? Are there special considerations for schools, libraries, and rural health care facilities, which may not be as well-positioned as a carrier receiving USF support to know whether the services and/or equipment they purchase with USF support are being provided by an entity that pose a supply chain integrity risk? Should we consider a later effective date for smaller USF recipients? Should we consider a phase-in period for certain programs, USF recipients, or equipment or services? If so, please describe. We seek comment on these and other issues we should consider in setting the effective date for our proposal.

18. **Multiyear Contracts.** How should the proposed rule affect multiyear contracts or contracts with voluntary extensions between USF recipients and companies identified as posing a supply chain integrity risk, if any such contracts exist? Should we consider grandfathering contracts that are currently in place for legal, cost, or other reasons? Should the proposed rule apply if a USF recipient has entered into a contract to purchase equipment or services from a company identified as posing a supply chain integrity risk, but the USF recipient has not received installation of equipment at the time that the proposed rule would go into effect? Should these contracts be grandfathered? If we do grandfather contracts, should we only grandfather unexpired annual or multiyear contracts, or also grandfather one-year contracts with voluntary extensions? Do relevant contracts include change-of-law or similar provisions that would cover the new rule we are proposing? Would our adoption of the proposed rule trigger any such change-of-law provisions? While the proposed rule would not apply to equipment already in place, as discussed above, we anticipate that rule would extend to upgrades of existing equipment or services. We seek comment on this approach and whether, as a practical matter, USF recipients will be able to purchase equipment and services from non-covered companies that can interoperate with any existing, installed equipment from covered companies.

B. **Identifying Companies That Pose a National Security Threat to the Integrity of Communications Networks or the Communications Supply Chain**

19. We seek comment on how to identify companies that pose a national security threat to the integrity of communications networks or the communications supply chain for purposes of our proposed rule. How should we define the universe of companies covered by our proposed rule (i.e., a covered company)? We seek comment broadly on possible approaches to defining the universe of companies covered by our proposed rule.

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33 See, e.g., Universal Service Administrative Co., Contracts, http://www.usac.org/sl/applicants/step02/contracts.aspx (explaining the types of contracts into which E-Rate participants may enter); Universal Service Administrative Co., Evergreen Contracts, https://www.usac.org/rhc/telecommunications/health-care-providers/evergreen-contracts.aspx (explaining how health care providers participating in the Rural Health Care Program may, under certain conditions, enter into “evergreen contracts” covering more than one funding year).

34 See Letter from David S. Addington, Senior Vice President and General Counsel, National Federation of Independent Business to Secretary, FCC, WC Docket No. 18-89, at 3 (filed April 5, 2018) (NFIB Ex Parte) (requesting the Commission seek comment regarding existing contracts between small businesses and covered companies).

35 See id.
20. One approach is for the Commission to establish the criteria for identifying a covered company. How should the Commission determine such criteria? One possible option would be to draw from the Spectrum Act of 2012, the NDAA, and pending legislation, and define a company covered by our proposed rule as (1) any company that has been prohibited from bidding on a contract, participating in an auction, or receiving a grant by any agency of the Federal Government, for reasons of national security, or (2) any company from which any agency of the Federal Government has been prohibited by Congress from procuring or obtaining any equipment, system, or service that uses telecommunications equipment or services provided by that company as a substantial or essential component of any system, or as critical technology as part of any system. We seek comment on this potential approach and any alternatives. If we adopt this approach, how would USF recipients learn which companies are covered? Should the Commission or another federal agency maintain a list of companies that meet these criteria? Regardless of which agency maintains such a list, how can we ensure that other federal agencies inform the Commission when a company satisfies the criteria to be a covered company? Would other federal agencies inform the Commission when they prohibit a company from bidding on a contract, participating in an auction, or receiving a grant for national security reasons, or when they remove such a prohibition? Should we assume that such concerns sunset after some period of time (e.g., three years) unless prohibitions are renewed by a federal agency or by Congress? Or should we assume that such concerns remain indefinitely until the relevant agency or Congress has affirmatively reversed course?

21. Another possible approach is for the Commission to rely on existing statutes listing companies barred from providing certain equipment or services to federal agencies for national security reasons. Under such an approach, for example, we could define covered companies as those specifically barred by the National Defense Authorization Act from providing a substantial or essential component, or critical technology, of any system, to any federal agency or component thereof. Or we could define covered companies as those that the National Defense Authorization Act specifically bars from developing or providing equipment or services, of any kind listed in the NDAA, to be used, obtained, or procured by any federal agency or component thereof. What are the advantages and disadvantages of relying on the terms of an existing statute rather than using an approach that necessitates a list of covered companies that may change over time? Does one approach entail lower compliance costs for recipients of USF funds, either in terms of effort or actual dollars spent? Which approach is best suited to ensuring that USF funds are not spent on equipment or services supplied by entities that pose a threat to the integrity of communications networks or the communications supply chain? Which approach best balances that goal with our mission to ensure that all Americans have access to communications services and our desire to minimize compliance costs for recipients of USF support?

22. Another potential approach to identifying the universe of companies covered by our proposed rule is for a federal agency other than the Commission to maintain a list of communications equipment or service providers that raise national security concerns regarding the integrity of communications networks or the communications supply chain. We seek comment on whether a list specifying the companies that should be covered under our proposed rule is already available to the public. If not, we seek comment on which agency or agencies should develop and maintain a publicly

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36 See supra paras. 6-7.

37 See, e.g., Letter from Brian Hendricks, Head of Policy and Government Relations, Americas Region, Nokia to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-89, at 2-3 (filed April 9, 2018) (suggesting the Commission establish criteria for a “trusted vendor” using a “totality-of-the-circumstances approach” utilizing certain criteria including whether the company is publicly traded, whether the company is in good standing with the Committee on Foreign Investment in the United States, whether the company is a Customs-Trade Partnership against Terrorism verified provider, and whether the company has a history of complying with U.S. laws and regulations).

38 We note that the 2018 Act includes such a prohibition for certain entities. See NDAA at Sec. 1656(c)(3)(A) (referencing “Huawei Technologies Company or ZTE Corporation (or any subsidiary of affiliate of such entities).”).

39 See NDAA at Sec. 1634 & Sec. 1656.
available list of such suppliers. For example, should a federal agency within the Executive Branch that regularly deals with national security risks create and maintain such a list? As an alternative, should the Commission or USAC, under the direction of the Commission, do so? What are the benefits and drawbacks of the Commission or another federal agency creating and maintaining such a list?

23. We note that it is not uncommon for federal agencies to maintain a list of prohibited providers. For example, the General Services Administration maintains a public System for Award Management (SAM) database, although it does not include some of the foreign telecommunications equipment providers that Congress has identified as potential threats to national security, and also includes companies barred from federal contracting for reasons other than national security. And while other agencies, including the State Department, the Commerce Department, and the Treasury Department, maintain publicly-accessible databases which may be more focused than the SAM on companies identified as threats to national security, the databases are generally designed for export controls, rather than for domestic considerations. Therefore, are there other sources that would be instructive here?

24. Compliance Matters. Regardless of which approach we adopt, we seek comment on how to ensure that USF recipients (especially smaller USF recipients, including schools, libraries, and rural health care facilities) can learn which companies fall within the scope of our proposed rule. Are there other compliance issues we should consider, particularly for smaller USF recipients?

25. Application of Proposed Rule to Subsidiaries, Parents, and/or Affiliates. Should a covered company’s subsidiaries, parents, and/or affiliates be treated as covered, too? If so, how should we define parents, subsidiaries, and affiliates? What are the arguments for and against treating a covered company’s subsidiaries, parents, and/or affiliates as covered by our proposed rule? How should

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40 General Services Administration, System for Award Management, https://www.sam.gov/. The public SAM database does not list as excluded entities certain entities specifically identified in the NDAA.


45 See NFIB Ex Parte at 3 (requesting the Commission seek comment on how it can best avail itself of information from other relevant agencies necessary to identify covered companies).

46 For example, in the 2018 NDAA, Congress included “any subsidiary or affiliate” of Huawei and ZTE as a covered entity. See 2018 NDAA, 131 Stat. at 1762, Sec. 1656.

47 See, e.g., 47 U.S.C. § 153(2) (“The term ‘affiliate’ means a person that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership or control with, another person. For purposes of this paragraph, the term ‘own’ means to own an equity interest (or the equivalent thereof) of more than 10 percent.”); 47 CFR § 63.09(e) (stating that for purposes of the Commission’s rules on international section 214 authorizations, “[t]wo entities are affiliated with each other if one of them, or an entity that controls one of them, directly or indirectly owns more than 25 percent of the capital stock of, or controls, the other one”) (emphasis added).
we treat instances of “white labeling,” where a covered company may provide equipment or services to a
third-party entity for sale under that third party’s brand?

C. Enforcement

26. We seek comment on how to enforce our proposed rule. We expect that USF recipients
would comply with the rule and that USAC, through periodic audits, would be able to confirm such
compliance. We also note that all USF recipients are required to maintain records demonstrating that they
use the support in the manner in which it is intended to be used. If a recipient of USF support is found
to have violated our proposed rule, what steps should we take in response? Are there any mitigating
factors we should consider when taking such responsive steps?

27. We seek comment on how USAC should recover funds disbursed in violation of the
proposed rule. While under the High-Cost, Lifeline, and Rural Health Care programs funds are always
disbursed to service providers, support disbursed under the E-Rate program may be distributed to either a
service provider or to an eligible school or library. When USAC determines that E-Rate funding has been
improperly disbursed and should be recovered, USAC must consider which party was in a better position
to prevent a violation of E-Rate program rules, and which party committed the act or omission that forms
the basis for the violation. For some rule violations, the beneficiary and service provider may share
responsibility. We seek comment on which party, in the E-Rate context, is in the best position to
anticipate and prevent violations of our proposed rule, and thus, which party should be held liable for the
recovery of disbursed funds should such a violation occur. Should providers be held liable for the
recovery of disbursed funds in all instances when a violation of our proposed rule has occurred? How can
non-provider recipients of USF support, such as school districts or libraries, determine whether their
service provider has purchased prohibited services or equipment?

28. Upon finding a violation, are there additional penalties we should impose beyond loss of
funding and potential forfeitures under section 503 of the Act? What form would such penalties take?
For instance, should parties who are found to have violated our proposed rule be suspended or
permanently barred from receiving USF support? What other considerations should we take into account
in the context of enforcing our proposed rule?

29. Notwithstanding these safeguards, we seek comment on any other steps we should take to
ensure compliance with our proposed rule. For example, should we make changes to any of the relevant
forms submitted by USF applicants or recipients (e.g., by adding a certification)? Or should we require a
separate certification? Who should make the certification and how often should it be filed? In instances
where an applicant for USF support is not a service provider—such as when eligible schools and libraries
receive discounts under the E-Rate program, or when health care providers receive support via the Rural
Health Care program—should the applicant be required to make such a certification, or should the
certification be made by the service provider that has knowledge of and control over its network? Does it
matter whether the applicant is seeking to purchase and install equipment itself or whether it is purchasing
services from another entity?

30. We also seek comment on how potential bidders complied with the national security
certification required by the Spectrum Act and the Commission’s implementing regulations. While

48 See 47 CFR § 54.320(b); 47 CFR § 54.417(a); 47 CFR § 54.516(a); 47 CFR § 54.619(a); 47 CFR § 54.648(b).
49 See Federal-State Joint Board on Universal Service et al., CC Docket No. 96-45 et al, Order on Reconsideration
Order).
50 See id.
52 47 CFR § 1.2204(c)(6); 47 CFR § 1.2105(a)(2)(xiii); 47 CFR § 27.12.
those provisions do not apply here, the experience of potential bidders may nevertheless be instructive.
Are there practical lessons to be learned from that process? How did the certification requirement affect smaller and first-time bidders? Should we require a certification by USF recipients that they are not using USF support to pay for services or equipment from covered sources, analogous to the Commission’s certification requirements for bidders in the broadcast incentive auction?  

D. Other National Security Steps
31. We also seek comment on other steps we should consider taking to the extent we identify companies that pose a national security threat to the integrity of communications networks or the communications supply chain. Should we consider actions targeted not only at the USF-funded equipment or services of those companies, but also non USF-funded equipment or services produced or provided by those companies that might pose the same or similar national security threats to the nation’s communications networks? Should we consider actions in addition or as an alternative to restricting the use of USF support? For instance, do commenters believe that there are testing regimes, showings, or steps concerning the removal or prospective deployment of equipment that we should consider? If so, we seek comment on the scope and extent of our legal authority to take any such actions to address national security threats to the integrity of communications networks and the communications supply chain.

E. Waiver
32. We seek comment on whether and how applicants for USF support may seek a waiver of our proposed rule. In general, the Commission’s rules may be waived for “good cause.” Should we establish a separate process from our general waiver provision for waivers of our proposed rule? If we provide such a waiver process, how should it function? Should we require a higher standard than good cause for granting waivers, such as “extraordinary circumstances?” Who should have the authority to grant a waiver, and under what circumstances?

F. Costs and Benefits
33. We seek comment on the costs and benefits of our proposed rule. Does our proposed rule promote our goals of ensuring that USF funds are used consistently with our national security interests while simultaneously continuing our universal service mission of making communications services available to all Americans? Does this proposed rule improve our ability to safeguard the country’s telecommunications networks from potential security risks? How can we quantify any such benefit to national security? Are there alternative approaches that would better protect the security of the nation’s communications networks at a lower cost?

34. What are the potential costs associated with our proposed rule to USF recipients, the Fund, end users, consumers, the public safety and law enforcement community, the Commission, or other federal agencies? Does this proposed rule affect our continuing goal of ensuring that all Americans have access to communications services? If so, how? How do covered companies’ equipment and services

53 47 CFR § 1.2204(c)(6) (An applicant must certify “under penalty of perjury that the applicant and all of the [associated] person(s) . . . are not person(s) who have been, for reasons of national security, barred by any agency of the Federal Government from bidding on a contract, participating in an auction, or receiving a grant.”).

54 See, e.g., Letter from Caressa D. Bennet, General Counsel, Rural Wireless Association, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-89 (Apr. 9, 2018) (urging the FCC to adopt a strategy that is “applicable to all communications networks in the United States” rather than communications networks funded in part by USF).

55 47 CFR § 1.3.

56 The Commission has required a higher standard for waiver in certain circumstances. For example, the E-Rate program invoicing rules may only be waived “in extraordinary circumstances.” Modernizing the E-Rate Program for Schools and Libraries, WC Docket No. 13-184, Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Red 8870, 8966, para. 240 (2014).
perform relative to equipment and services of companies unaffected by the proposed rule? What is the
cost difference to USF recipients between equipment and services that may be covered by the proposed
rule and those that are not? How many USF recipients purchase equipment or services from companies
that pose a threat to our national security? Do the potential benefits of our proposal to national security
outweigh any possible costs? How can we achieve our goal of addressing national security threats to
communications networks and the communications supply chain while minimizing the impact on carriers
seeking to deploy broadband to unserved or underserved areas? Specifically, we seek comment on the
impact of our proposed rule on small businesses, as well as any modifications or alternatives that might
ease the burden of this proposed rule on small businesses. We seek comment on the impact of our
proposed rule on small and rural carriers in particular. Commenters should discuss the effectiveness of
the proposed rule or any alternative and provide any quantitative or qualitative data to demonstrate the
potential impact of the proposed rule or any alternative on network deployment and services offered by
small and rural carriers and on their subscribers. Additionally, one important element of our cost-benefit
analysis is understanding how widely the equipment and services that may be covered by our proposed
rule are deployed. Therefore, we seek comment on this issue. For example, to what extent have small
and rural carriers relied on equipment or services from companies that may be covered by our proposed
rule? If so, we seek comment on specific instances and details on the use of equipment or services from
such companies.

G. Legal Authority

35. We believe that sections 201(b) and 254 of the Act provide ample legal authority for the
rule we propose today. Section 201(b) gives the Commission the authority to promulgate “such rules and
regulations as may be necessary in the public interest to carry out the provisions of this Act.”\(^\text{57}\) And
section 254 requires that USF recipients “shall use that support only for the provision, maintenance, and
upgrading of facilities and services for which the support is intended.”\(^\text{58}\) In the USF/ICC Transformation
Order, the Commission interpreted this language as providing it with the authority to designate the
services for which USF support will be provided and to “encourage the deployment of the types of
facilities that will best achieve the principles set forth in section 254(b).”\(^\text{59}\) Among these principles are
“[q]uality services . . . available at just, reasonable, and affordable rates,” “[a]ccess to advanced
telecommunications and information services . . . in all regions of the Nation,” and “other principles” that
are “necessary and appropriate for the protection of the public interest, convenience, and necessity . . . .”\(^\text{60}\)
Moreover, the Commission has the discretion to define the services supported by USF, and to “consider
the extent to which such telecommunications services . . . are consistent with the public interest,
convenience, and necessity.”\(^\text{61}\) As the Tenth Circuit has explained, “nothing in the statute limits the
FCC’s authority to place conditions . . . on the use of USF funds.”\(^\text{62}\) As such, we believe the condition on the
use of USF funds that we propose here is within our authority. We seek comment on this view.


\(^{58}\) 47 U.S.C. § 254(e).

\(^{59}\) See Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates
for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier
Compensation Regime; Federal-State Joint Board on Universal Service, Lifeline and Link-Up; Universal Service
05-337, CC Docket no. 01-92, CC Docket No. 96-45, WC Docket No. 03-109, WT Docket No. 10-208, Report and
Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17685-17686, para. 64 (2011) (USF/ICC
Transformation Order). The Tenth Circuit affirmed this interpretation in In re FCC 11-161, 753 F.3d 1015, 1046-
47 (10th Cir. 2014).

\(^{60}\) 47 U.S.C. §§ 254(b)(1), (2), (7).


\(^{62}\) In re FCC 11-161, 753 F.3d at 1046.
36. We believe that the promotion of national security is consistent with the public interest, and that USF funds should be used to deploy infrastructure and provide services that do not undermine our national security.\footnote{Indeed, Congress similarly determined that promoting the national defense is an important public interest in section 1 of the Act, which describes the development of a “Nation-wide . . . wire and radio communication service, for the purpose of the national defense” as one of the reasons for establishing the Commission. 47 U.S.C. § 151.} Would adopting our proposed rule be equivalent to establishing a new definition of the “evolving level of telecommunications services” that are supported by USF mechanisms under section 254(c)(1)? Are there other statutory provisions that affect USF recipients’ obligations with respect to the security of their networks,\footnote{See, e.g., 47 U.S.C. § 1004 (“A telecommunications carrier shall ensure that any interception of communications or access to call-identifying information effected within its switching premises can be activated only in accordance with a court order or other lawful authorization and with the affirmative intervention of an individual officer or employee of the carrier acting in accordance with regulations prescribed by the Commission.”).} or other sources of legal authority on which we should rely?

IV. PROCEDURAL MATTERS

37. \textit{Ex Parte Rules}.—This proceeding shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s \textit{ex parte} rules.\footnote{47 CFR §§ 1.1200 \textit{et seq.}} Persons making \textit{ex parte} presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral \textit{ex parte} presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the \textit{ex parte} presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during \textit{ex parte} meetings are deemed to be written \textit{ex parte} presentations and must be filed consistent with Rule 1.1206(b). In proceedings governed by Rule 1.49(f) or for which the Commission has made available a method of electronic filing, written \textit{ex parte} presentations and memorandum summarizing oral \textit{ex parte} presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (\textit{e.g.}, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission’s \textit{ex parte} rules.

38. \textit{Initial Regulatory Flexibility Analysis}.—Pursuant to the Regulatory Flexibility Act (RFA),\footnote{See 5 U.S.C. § 603.} the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and actions considered in this NPRM. The text of the IRFA is set forth in Appendix B. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the NPRM. The Commission’s Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of the NPRM, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.\footnote{See 5 U.S.C. § 603(a).}

39. \textit{Paperwork Reduction Act}.—This document contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget to comment on the information
collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.68

40. **Filing of Comments and Reply Comments.**—Pursuant to Sections 1.415 and 1.419 of the Commission’s rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing the ECFS: https://www.fcc.gov/ecfs/.
- **Paper Filers:** Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission’s Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- **Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.**
- **U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.**
- **People with Disabilities:** To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

41. **Contact Person.**—For further information, please contact John Visclosky, Competition Policy Division, Wireline Competition Bureau, at John.Visclosky@fcc.gov or (202) 418-0825.

V. **ORDERING CLAUSES**

42. Accordingly, IT IS ORDERED that, pursuant to the authority contained in sections 1-4, 201(b), and 254 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-54, 201(b), and 254, this Notice of Proposed Rulemaking IS ADOPTED.

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68 See 44 U.S.C. § 3506(c)(4).
43. IT IS FURTHER ORDERED that the Commission’s Consumer & Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary
For the reasons set forth above, Part 54 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 54 – UNIVERSAL SERVICE

1. The authority citation for part 54 continues to read as follows:

AUTHORITY: 47 U.S.C. 151, 154(i), 155, 201, 205, 214, 219, 220, 254, 303(r), 403, and 1302 unless otherwise noted.

SUBPART A – GENERAL INFORMATION

2. Amend section 54 by adding new subpart 54.9, to read as follows:

§ 54.9 Prohibition on use of funds

No universal service support may be used to purchase or obtain any equipment or services produced or provided by any company posing a national security threat to the integrity of communications networks or the communications supply chain.
APPENDIX B

INITIAL REGULATORY FLEXIBILITY ANALYSIS

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the Notice of Proposed Rulemaking (NPRM). Written comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the NPRM provided on the first page of the item. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the NPRM and IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need for, and Objectives of, the Proposed Rules

2. Consistent with our obligation to be responsible stewards of the public funds used in the Universal Service Fund (USF) programs and increasing concern about ensuring communications supply chain integrity, the NPRM proposes and seeks comment on a rule designed to ensure that USF support is not spent on equipment or services from companies that pose a national security threat to communications networks or the communications supply chain.

B. Legal Basis

3. The proposed action is authorized under sections 1-4, 201(b), and 254 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, 201(b), and 254.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

4. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.⁴ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”⁵ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.⁶ A small business concern is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁷

5. Small Businesses, Small Organizations, Small Governmental Jurisdictions. Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe here,

³ See id.
⁴ 5 U.S.C. § 603(b)(3).
⁶ 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.” 5 U.S.C. § 601(3).
at the outset, three broad groups of small entities that could be directly affected herein. First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the SBA’s Office of Advocacy, in general a small business is an independent business having fewer than 500 employees. These types of small businesses represent 99.9% of all businesses in the United States which translates to 28.8 million businesses.

6. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.” Nationwide, as of Aug 2016, there were approximately 356,494 small organizations based on registration and tax data filed by nonprofits with the Internal Revenue Service (IRS).

7. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.” U.S. Census Bureau data from the 2012 Census of Governments indicates that there were 90,056 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number there were 37,132 general purpose governments (county, municipal and town or township) with populations of

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12 Data from the Urban Institute, National Center for Charitable Statistics (NCCS) reporting on nonprofit organizations registered with the IRS was used to estimate the number of small organizations. Reports generated using the NCCS online database indicated that as of August 2016 there were 356,494 registered nonprofits with total revenues of less than $100,000. Of this number, 326,897 entities filed tax returns with 65,113 registered nonprofits reporting total revenues of $50,000 or less on the IRS Form 990-N for Small Exempt Organizations and 261,784 nonprofits reporting total revenues of $100,000 or less on some other version of the IRS Form 990 within 24 months of the August 2016 data release date. See http://nccsweb.urban.org/tablewiz/bmf.php where the report showing this data can be generated by selecting the following data fields: Show: “Registered Nonprofit Organizations”; By: “Total Revenue Level (years 1995, Aug to 2016, Aug)”; and For: “2016, Aug” then selecting “Show Results.”
14 See 13 U.S.C. § 161. The Census of Government is conducted every five (5) years compiling data for years ending with “2” and “7”. See also Program Description, Census of Governments, https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=program&id=program.en.COG#
15 See U.S. Census Bureau, 2012 Census of Governments, Local Governments by Type and State: 2012 - United States-States. https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG02.US01. Local governmental jurisdictions are classified in two categories - General purpose governments (county, municipal and town or township) and Special purpose governments (special districts and independent school districts).
16 See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States. https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01. There were 2,114 county governments with populations less than 50,000.
less than 50,000 and 12,184 special purpose governments (independent school districts\textsuperscript{18} and special districts\textsuperscript{19}) with populations of less than 50,000. The 2012 U.S. Census Bureau data for most types of governments in the local government category show that the majority of these governments have populations of less than 50,000.\textsuperscript{20} Based on this data we estimate that at least 49,316 local government jurisdictions fall in the category of “small governmental jurisdictions.”\textsuperscript{21}

8. Small entities potentially affected by the proposals herein include eligible schools and libraries, eligible rural non-profit and public health care providers, and the eligible service providers offering them services, including telecommunications service providers, Internet Service Providers (ISPs), and vendors of the services and equipment used for telecommunications and broadband networks.

1. Schools and Libraries

9. As noted, “small entity” includes non-profit and small government entities. Under the schools and libraries universal service support mechanism, which provides support for elementary and secondary schools and libraries, an elementary school is generally “a non-profit institutional day or residential school, that provides elementary education, as determined under state law.”\textsuperscript{22} A secondary school is generally defined as “a non-profit institutional day or residential school, that provides secondary education, as determined under state law,” and not offering education beyond grade 12.\textsuperscript{23} A library includes “(1) a public library, (2) a public school library or secondary school library, (3) an academic library, (4) a research library . . . , and (5) a private library, but only if the state in which such private library is located determines that the library should be considered a library for the purposes of this definition.”\textsuperscript{24} For-profit schools and libraries, and schools and libraries with endowments in excess of $50,000,000, are not eligible to receive discounts under the program, nor are libraries whose budgets are not completely separate from any schools.\textsuperscript{25} Certain other statutory definitions apply as well.\textsuperscript{26} The SBA has defined for-profit, elementary and secondary schools and libraries having $6 million or less in annual

\textsuperscript{18} See U.S. Census Bureau, 2012 Census of Governments, Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. \url{https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01}. There were 12,184 independent school districts with enrollment populations less than 50,000.

\textsuperscript{19} See U.S. Census Bureau, 2012 Census of Governments, Special District Governments by Function and State: 2012 - United States-States. \url{https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG09.US01}. The U.S. Census Bureau data did not provide a population breakout for special district governments.

\textsuperscript{20} See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States - \url{https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01}; Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States–States - \url{https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01}; and Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. \url{https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01}. While U.S. Census Bureau data did not provide a population breakout for special district governments, if the population of less than 50,000 for this category of local government is consistent with the other types of local governments the majority of the 38, 266 special district governments have populations of less than 50,000.

\textsuperscript{21} Id.

\textsuperscript{22} 47 CFR § 54.500.

\textsuperscript{23} Id.

\textsuperscript{24} Id.

\textsuperscript{25} 47 CFR § 54.501(a), (b).

\textsuperscript{26} Id.
receipts as small entities. In funding year 2007, approximately 105,500 schools and 10,950 libraries received funding under the schools and libraries universal service mechanism. Although we are unable to estimate with precision the number of these entities that would qualify as small entities under SBA’s size standard, we estimate that fewer than 105,500 schools and 10,950 libraries might be affected annually by our action, under current operation of the program.

2. Healthcare Providers

10. Offices of Physicians (except Mental Health Specialists). This U.S. industry comprises establishments of health practitioners having the degree of M.D. (Doctor of Medicine) or D.O. (Doctor of Osteopathy) primarily engaged in the independent practice of general or specialized medicine (except psychiatry or psychoanalysis) or surgery. These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers. The SBA has created a size standard for this industry, which is annual receipts of $11 million or less. According to 2012 U.S. Economic Census, 152,468 firms operated throughout the entire year in this industry. Of that number, 147,718 had annual receipts of less than $10 million, while 3,108 firms had annual receipts between $10 million and $24,999,999. Based on this data, we conclude that a majority of firms operating in this industry are small under the applicable size standard.

11. Offices of Physicians, Mental Health Specialists. This U.S. industry comprises establishments of health practitioners having the degree of M.D. (Doctor of Medicine) or D.O. (Doctor of Osteopathy) primarily engaged in the independent practice of psychiatry or psychoanalysis. These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers. The SBA has established a size standard for businesses in this industry, which is annual receipts of $11 million dollars or less. The U.S. Economic Census indicates that 8,809 firms operated throughout the entire year in this industry. Of that number 8,791 had annual receipts of less than $10 million, while 13 firms had annual receipts between $10 million and $24,999,999. Based on this data, we conclude that a majority of firms in this industry are small under the applicable standard.

12. Offices of Dentists. This U.S. industry comprises establishments of health practitioners

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27 13 CFR § 121.201; NAICS codes 611110 and 519120 (NAICS code 519120 was previously 514120).


29 13 CFR § 121.201, NAICS Code 621111.


31 Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $11 million or less.


33 13 CFR § 121.201, NAICS Code 621112.


35 Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $11 million or less.
having the degree of D.M.D. (Doctor of Dental Medicine), D.D.S. (Doctor of Dental Surgery), or D.D.Sc. (Doctor of Dental Science) primarily engaged in the independent practice of general or specialized dentistry or dental surgery. These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers. They can provide either comprehensive preventive, cosmetic, or emergency care, or specialize in a single field of dentistry. The SBA has established a size standard for that industry of annual receipts of $7.5 million or less. The 2012 U.S. Economic Census indicates that 115,268 firms operated in the dental industry throughout the entire year. Of that number 114,417 had annual receipts of less than $5 million, while 651 firms had annual receipts between $5 million and $9,999,999. Based on this data, we conclude that a majority of business in the dental industry are small under the applicable standard.

13. **Offices of Chiropractors.** This U.S. industry comprises establishments of health practitioners having the degree of D.C. (Doctor of Chiropractic) primarily engaged in the independent practice of chiropractic. These practitioners provide diagnostic and therapeutic treatment of neuromusculoskeletal and related disorders through the manipulation and adjustment of the spinal column and extremities, and operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers. The SBA has established a size standard for this industry, which is annual receipts of $7.5 million or less. The 2012 U.S. Economic Census statistics show that 33,940 firms operated throughout the entire year. Of that number 33,910 operated with annual receipts of less than $5 million per year, while 26 firms had annual receipts between $5 million and $9,999,999. Based on that data, we conclude that a majority of chiropractors are small.

14. **Offices of Optometrists.** This U.S. industry comprises establishments of health practitioners having the degree of O.D. (Doctor of Optometry) primarily engaged in the independent practice of optometry. These practitioners examine, diagnose, treat, and manage diseases and disorders of the visual system, the eye and associated structures as well as diagnose related systemic conditions. Offices of optometrists prescribe and/or provide eyeglasses, contact lenses, low vision aids, and vision therapy. They operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers, and may also provide the same services as opticians, such as selling and fitting prescription eyeglasses and contact lenses. The SBA has established

37 13 CFR § 121.201, NAICS Code 621210.
39 Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $7.5 million or less.
41 13 CFR § 121.201, NAICS Code 621310.
43 Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $7.5 million or less.
a size standard for businesses operating in this industry, which is annual receipts of $7.5 million or less.\textsuperscript{45} The 2012 Economic Census indicates that 18,050 firms operated the entire year.\textsuperscript{46} Of that number, 17,951 had annual receipts of less than $5 million, while 70 firms had annual receipts between $5 million and $9,999,999.\textsuperscript{47} Based on this data, we conclude that a majority of optometrists in this industry are small.

15. \textit{Offices of Mental Health Practitioners (except Physicians).} This U.S. industry comprises establishments of independent mental health practitioners (except physicians) primarily engaged in (1) the diagnosis and treatment of mental, emotional, and behavioral disorders and/or (2) the diagnosis and treatment of individual or group social dysfunction brought about by such causes as mental illness, alcohol and substance abuse, physical and emotional trauma, or stress. These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers.\textsuperscript{48} The SBA has created a size standard for this industry, which is annual receipts of $7.5 million or less.\textsuperscript{49} The 2012 U.S. Economic Census indicates that 16,058 firms operated throughout the entire year.\textsuperscript{50} Of that number, 15,894 firms received annual receipts of less than $5 million, while 111 firms had annual receipts between $5 million and $9,999,999.\textsuperscript{51} Based on this data, we conclude that a majority of mental health practitioners who do not employ physicians are small.

16. \textit{Offices of Physical, Occupational and Speech Therapists and Audiologists.} This U.S. industry comprises establishments of independent health practitioners primarily engaged in one of the following: (1) providing physical therapy services to patients who have impairments, functional limitations, disabilities, or changes in physical functions and health status resulting from injury, disease or other causes, or who require prevention, wellness or fitness services; (2) planning and administering educational, recreational, and social activities designed to help patients or individuals with disabilities, regain physical or mental functioning or to adapt to their disabilities; and (3) diagnosing and treating speech, language, or hearing problems. These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers.\textsuperscript{52} The SBA has established a size standard for this industry, which is annual receipts of $7.5 million or less.\textsuperscript{53} The 2012 U.S. Economic Census indicates that 20,567 firms in this industry operated throughout

\textsuperscript{45} 13 CFR § 121.201, NAICS code 621320.
\textsuperscript{47} \textit{Id.} The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $7.5 million or less.
\textsuperscript{49} 13 CFR § 121.201 NAICS Code 621330.
\textsuperscript{51} \textit{Id.} The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $7.5 million or less.
\textsuperscript{53} 13 CFR § 121.201, NAICS Code 621340.
the entire year. Of that number, 20,047 had annual receipts of less than $5 million, while 270 firms had annual receipts between $5 million and $9,999,999. Based on this data, we conclude that a majority of businesses in this industry are small.

17. **Offices of Podiatrists.** This U.S. industry comprises establishments of health practitioners having the degree of D.P.M. (Doctor of Podiatric Medicine) primarily engaged in the independent practice of podiatry. These practitioners diagnose and treat diseases and deformities of the foot and operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers. The SBA has established a size standard for businesses in this industry, which is annual receipts of $7.5 million or less. The 2012 U.S. Economic Census indicates that 7,569 podiatry firms operated throughout the entire year. Of that number, 7,545 firms had annual receipts of less than $5 million, while 22 firms had annual receipts between $5 million and $9,999,999. Based on this data, we conclude that a majority of firms in this industry are small.

18. **Offices of All Other Miscellaneous Health Practitioners.** This U.S. industry comprises establishments of independent health practitioners (except physicians; dentists; chiropractors; optometrists; mental health specialists; physical, occupational, and speech therapists; audiologists; and podiatrists). These practitioners operate private or group practices in their own offices (e.g., centers, clinics) or in the facilities of others, such as hospitals or HMO medical centers. The SBA has established a size standard for this industry, which is annual receipts of $7.5 million or less. The 2012 U.S. Economic Census indicates that 11,460 firms operated throughout the entire year. Of that number, 11,374 firms had annual receipts of less than $5 million, while 48 firms had annual receipts between $5 million and $9,999,999. Based on this data, we conclude the majority of firms in this industry are small.

19. **Family Planning Centers.** This U.S. industry comprises establishments with medical staff primarily engaged in providing a range of family planning services on an outpatient basis, such as contraceptive services, genetic and prenatal counseling, voluntary sterilization, and therapeutic and

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55. *Id.* The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $7.5 million or less.


57. 13 CFR § 121.201, NAICS Code 621391.


59. *Id.* The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $7.5 million or less.


61. 13 CFR § 121.201, NAICS Code 621399.


63. *Id.* The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $7.5 million or less.
medically induced termination of pregnancy. The SBA has established a size standard for this industry, which is annual receipts of $11 million or less. The 2012 Economic Census indicates that 1,286 firms in this industry operated throughout the entire year. Of that number, 1,237 had annual receipts of less than $10 million, while 36 firms had annual receipts between $10 million and $24,999,999. Based on this data, we conclude that the majority of firms in this industry are small.

20. **Outpatient Mental Health and Substance Abuse Centers.** This U.S. industry comprises establishments with medical staff primarily engaged in providing outpatient services related to the diagnosis and treatment of mental health disorders and alcohol and other substance abuse. These establishments generally treat patients who do not require inpatient treatment. They may provide a counseling staff and information regarding a wide range of mental health and substance abuse issues and/or refer patients to more extensive treatment programs, if necessary. The SBA has established a size standard for this industry, which is $15 million or less in annual receipts. The 2012 U.S. Economic Census indicates that 4,446 firms operated throughout the entire year. Of that number, 4,069 had annual receipts of less than $10 million while 286 firms had annual receipts between $10 million and $24,999,999. Based on this data, we conclude that a majority of firms in this industry are small.

21. **HMO Medical Centers.** This U.S. industry comprises establishments with physicians and other medical staff primarily engaged in providing a range of outpatient medical services to the health maintenance organization (HMO) subscribers with a focus generally on primary health care. These establishments are owned by the HMO. Included in this industry are HMO establishments that both provide health care services and underwrite health and medical insurance policies. The SBA has established a size standard for this industry, which is $32.5 million or less in annual receipts. The 2012 U.S. Economic Census indicates that 14 firms in this industry operated throughout the entire year. Of that number, 5 firms had annual receipts of less than $25 million, while 1 firm had annual receipts

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65 13 CFR § 121.201, NAICS Code 621410.


67 Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $11 million or less.


69 13 CFR § 121.201, NAICS Code 621420.


71 Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $15 million or less.


73 13 CFR § 121.201, NAICS code 621491.

between $25 million and $99,999,999.\textsuperscript{75} Based on this data, we conclude that approximately one-third of the firms in this industry are small.

22. **Freestanding Ambulatory Surgical and Emergency Centers.** This U.S. industry comprises establishments with physicians and other medical staff primarily engaged in (1) providing surgical services (e.g., orthoscopic and cataract surgery) on an outpatient basis or (2) providing emergency care services (e.g., setting broken bones, treating lacerations, or tending to patients suffering injuries as a result of accidents, trauma, or medical conditions necessitating immediate medical care) on an outpatient basis. Outpatient surgical establishments have specialized facilities, such as operating and recovery rooms, and specialized equipment, such as anesthetic or X-ray equipment.\textsuperscript{76} The SBA has established a size standard for this industry, which is annual receipts of $15 million or less.\textsuperscript{77} The 2012 U.S. Economic Census indicates that 3,595 firms in this industry operated throughout the entire year.\textsuperscript{78} Of that number, 3,222 firms had annual receipts of less than $10 million, while 289 firms had annual receipts between $10 million and $24,999,999.\textsuperscript{79} Based on this data, we conclude that a majority of firms in this industry are small.

23. **All Other Outpatient Care Centers.** This U.S. industry comprises establishments with medical staff primarily engaged in providing general or specialized outpatient care (except family planning centers, outpatient mental health and substance abuse centers, HMO medical centers, kidney dialysis centers, and freestanding ambulatory surgical and emergency centers). Centers or clinics of health practitioners with different degrees from more than one industry practicing within the same establishment (i.e., Doctor of Medicine and Doctor of Dental Medicine) are included in this industry.\textsuperscript{80} The SBA has established a size standard for this industry, which is annual receipts of $20.5 million or less.\textsuperscript{81} The 2012 U.S. Economic Census indicates that 4,903 firms operated in this industry throughout the entire year.\textsuperscript{82} Of this number, 4,269 firms had annual receipts of less than $10 million, while 389 firms had annual receipts between $10 million and $24,999,999.\textsuperscript{83} Based on this data, we conclude that a majority of firms in this industry are small.

24. **Blood and Organ Banks.** This U.S. industry comprises establishments primarily engaged in collecting, storing, and distributing blood and blood products and storing and distributing body

\textsuperscript{75} Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $32.5 million or less.


\textsuperscript{77} 13 CFR § 121.201, NAICS Code 621493.


\textsuperscript{79} Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $15 million or less.


\textsuperscript{81} 13 CFR § 121.201, NAICS Code 621498.


\textsuperscript{83} Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $20.5 million or less.
organs. The SBA has established a size standard for this industry, which is annual receipts of $32.5 million or less. The 2012 U.S. Economic Census indicates that 314 firms operated in this industry throughout the entire year. Of that number, 235 operated with annual receipts of less than $25 million, while 41 firms had annual receipts between $25 million and $49,999,999. Based on this data, we conclude that approximately three-quarters of firms that operate in this industry are small.

25. **All Other Miscellaneous Ambulatory Health Care Services.** This U.S. industry comprises establishments primarily engaged in providing ambulatory health care services (except offices of physicians, dentists, and other health practitioners; outpatient care centers; medical and diagnostic laboratories; home health care providers; ambulances; and blood and organ banks). The SBA has established a size standard for this industry, which is annual receipts of $15 million or less. The 2012 U.S. Economic Census indicates that 2,429 firms operated in this industry throughout the entire year. Of that number, 2,318 had annual receipts of less than $10 million, while 56 firms had annual receipts between $10 million and $24,999,999. Based on this data, we conclude that a majority of the firms in this industry are small.

26. **Medical Laboratories.** This U.S. industry comprises establishments known as medical laboratories primarily engaged in providing analytic or diagnostic services, including body fluid analysis, generally to the medical profession or to the patient on referral from a health practitioner. The SBA has established a size standard for this industry, which is annual receipts of $32.5 million or less. The 2012 U.S. Economic Census indicates that 2,599 firms operated in this industry throughout the entire year. Of this number, 2,465 had annual receipts of less than $25 million, while 60 firms had annual receipts

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85 13 CFR § 121.201, NAICS Code 621991.


87 Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $32.5 million or less.


89 13 CFR § 121.201, NAICS Code 621999.


91 Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $15 million or less.


93 13 CFR § 121.201, NAICS Code 621511.

between $25 million and $49,999,999. Based on this data, we conclude that a majority of firms that operate in this industry are small.

27. **Diagnostic Imaging Centers.** This U.S. industry comprises establishments known as diagnostic imaging centers primarily engaged in producing images of the patient generally on referral from a health practitioner. The SBA has established size standard for this industry, which is annual receipts of $15 million or less. The 2012 U.S. Economic Census indicates that 4,209 firms operated in this industry throughout the entire year. Of that number, 3,876 firms had annual receipts of less than $10 million, while 228 firms had annual receipts between $10 million and $24,999,999. Based on this data, we conclude that a majority of firms that operate in this industry are small.

28. **Home Health Care Services.** This U.S. industry comprises establishments primarily engaged in providing skilled nursing services in the home, along with a range of the following: personal care services; homemaker and companion services; physical therapy; medical social services; medications; medical equipment and supplies; counseling; 24-hour home care; occupation and vocational therapy; dietary and nutritional services; speech therapy; audiology; and high-tech care, such as intravenous therapy. The SBA has established a size standard for this industry, which is annual receipts of $15 million or less. The 2012 U.S. Economic Census indicates that 17,770 firms operated in this industry throughout the entire year. Of that number, 16,822 had annual receipts of less than $10 million, while 590 firms had annual receipts between $10 million and $24,999,999. Based on this data, we conclude that a majority of firms that operate in this industry are small.

29. **Ambulance Services.** This U.S. industry comprises establishments primarily engaged in providing transportation of patients by ground or air, along with medical care. These services are often provided during a medical emergency but are not restricted to emergencies. The vehicles are equipped with lifesaving equipment operated by medically trained personnel. The SBA has established a size standard for this industry, which is annual receipts of $15 million or less.

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95 *Id.* The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $32.5 million or less.


97 13 CFR § 121.201, NAICS Code 621512.


99 *Id.* The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $15 million or less.


101 13 CFR § 121.201, NAICS Code 621610.


103 *Id.* The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $15 million or less.


105 13 CFR § 121.201, NAICS Code 621910.
Census indicates that 2,984 firms operated in this industry throughout the entire year.\textsuperscript{106} Of that number, 2,926 had annual receipts of less than $15 million, while 133 firms had annual receipts between $10 million and $24,999,999.\textsuperscript{107} Based on this data, we conclude that a majority of firms in this industry are small.

30. \textit{Kidney Dialysis Centers}. This U.S. industry comprises establishments with medical staff primarily engaged in providing outpatient kidney or renal dialysis services.\textsuperscript{108} The SBA has established a size standard for this industry, which is annual receipts of $38.5 million or less.\textsuperscript{109} The 2012 U.S. Economic Census indicates that 396 firms operated in this industry throughout the entire year.\textsuperscript{110} Of that number, 379 had annual receipts of less than $25 million, while 7 firms had annual receipts between $25 million and $49,999,999.\textsuperscript{111} Based on this data, we conclude that a majority of firms in this industry are small.

31. \textit{General Medical and Surgical Hospitals}. This U.S. industry comprises establishments known and licensed as general medical and surgical hospitals primarily engaged in providing diagnostic and medical treatment (both surgical and nonsurgical) to inpatients with any of a wide variety of medical conditions. These establishments maintain inpatient beds and provide patients with food services that meet their nutritional requirements. These hospitals have an organized staff of physicians and other medical staff to provide patient care services. These establishments usually provide other services, such as outpatient services, anatomical pathology services, diagnostic X-ray services, clinical laboratory services, operating room services for a variety of procedures, and pharmacy services.\textsuperscript{112} The SBA has established a size standard for this industry, which is annual receipts of $38.5 million or less.\textsuperscript{113} The 2012 U.S. Economic Census indicates that 2,800 firms operated in this industry throughout the entire year.\textsuperscript{114} Of that number, 877 has annual receipts of less than $25 million, while 400 firms had annual receipts between $25 million and $49,999,999.\textsuperscript{115} Based on this data, we conclude that approximately one-quarter of firms in this industry are small.


\textsuperscript{107} Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $15 million or less.


\textsuperscript{109} 13 CFR § 121.201, NAICS Code 621492.


\textsuperscript{111} Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $38.5 million or less.

\textsuperscript{112} See U.S. Census Bureau, 2012 NAICS Definitions, NAICS Code 622110 “General Medical and Surgical Hospitals”, \url{https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=622110&search=2012+NAICS+Search&search=2012}.

\textsuperscript{113} 13 CFR § 121.201, NAICS Code 622110.


\textsuperscript{115} Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $38.5 million or less.
32. **Psychiatric and Substance Abuse Hospitals.** This U.S. industry comprises establishments known and licensed as psychiatric and substance abuse hospitals primarily engaged in providing diagnostic, medical treatment, and monitoring services for inpatients who suffer from mental illness or substance abuse disorders. The treatment often requires an extended stay in the hospital. These establishments maintain inpatient beds and provide patients with food services that meet their nutritional requirements. They have an organized staff of physicians and other medical staff to provide patient care services. Psychiatric, psychological, and social work services are available at the facility. These hospitals usually provide other services, such as outpatient services, clinical laboratory services, diagnostic X-ray services, and electroencephalograph services.\(^{116}\) The SBA has established a size standard for this industry, which is annual receipts of $38.5 million or less.\(^{117}\) The 2012 U.S. Economic Census indicates that 404 firms operated in this industry throughout the entire year.\(^{118}\) Of that number, 185 had annual receipts of less than $25 million, while 107 firms had annual receipts between $25 million and $49,999,999.\(^{119}\) Based on this data, we conclude that more than one-half of the firms in this industry are small.

33. **Specialty (Except Psychiatric and Substance Abuse) Hospitals.** This U.S. industry consists of establishments known and licensed as specialty hospitals primarily engaged in providing diagnostic, and medical treatment to inpatients with a specific type of disease or medical condition (except psychiatric or substance abuse). Hospitals providing long-term care for the chronically ill and hospitals providing rehabilitation, restorative, and adjustive services to physically challenged or disabled people are included in this industry. These establishments maintain inpatient beds and provide patients with food services that meet their nutritional requirements. They have an organized staff of physicians and other medical staff to provide patient care services. These hospitals may provide other services, such as outpatient services, diagnostic X-ray services, clinical laboratory services, operating room services, physical therapy services, educational and vocational services, and psychological and social work services.\(^{120}\) The SBA has established a size standard for this industry, which is annual receipts of $38.5 million or less.\(^{121}\) The 2012 U.S. Economic Census indicates that 346 firms operated in this industry throughout the entire year.\(^{122}\) Of that number, 146 firms had annual receipts of less than $25 million, while 79 firms had annual receipts between $25 million and $49,999,999.\(^{123}\) Based on this data, we conclude that more than one-half of the firms in this industry are small.

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\(^{117}\) 13 CFR § 121.201, NAICS Code 622210.


\(^{119}\) Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $38.5 million or less.


\(^{121}\) 13 CFR § 121.201, NAICS Code 622310.


\(^{123}\) Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $38.5 million or less.
34. **Emergency and Other Relief Services.** This industry comprises establishments primarily engaged in providing food, shelter, clothing, medical relief, resettlement, and counseling to victims of domestic or international disasters or conflicts (e.g., wars). The SBA has established a size standard for this industry which is annual receipts of $32.5 million or less. The 2012 U.S. Economic Census indicates that 541 firms operated in this industry throughout the entire year. Of that number, 509 had annual receipts of less than $25 million, while 7 firms had annual receipts between $25 million and $49,999,999. Based on this data, we conclude that a majority of firms in this industry are small.

3. **Providers of Telecommunications and Other Services**

a. **Telecommunications Service Providers**

35. **Incumbent Local Exchange Carriers (LECs).** Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The closest applicable NAICS Code category is Wired Telecommunications Carriers and under the SBA size standard, such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 indicates that 3,117 firms operated during that year. Of this total, 3,083 operated with fewer than 1,000 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our actions. According to Commission data, one thousand three hundred and seven (1,307) Incumbent Local Exchange Carriers reported that they were incumbent local exchange service providers. Thus using the SBA’s size standard the majority of Incumbent LECs can be considered small entities.

36. **Interexchange Carriers (IXCs).** Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to providers of interexchange services (IXCs). The closest NAICS Code category is Wired Telecommunications Carriers and the applicable size standard under SBA rules consists of all such companies having 1,500 or fewer employees.

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125 13 CFR § 121.201, NAICS Code 624230.


127 Id. The available U.S. Census data does not provide a more precise estimate of the number of firms that meet the SBA size standard of annual receipts of $32.5 million or less.


129 Id.


131 Id.

data for 2012 indicates that 3,117 firms operated during that year. Of that number, 3,083 operated with fewer than 1,000 employees. According to internally developed Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services. Of this total, an estimated 317 have 1,500 or fewer employees. Consequently, the Commission estimates that the majority of interexchange service providers that may be affected are small entities.

37. Competitive Access Providers. Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to competitive access services providers (CAPs). The closest applicable definition under the SBA rules is Wired Telecommunications Carriers and under the size standard, such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 indicates that 3,117 firms operated during that year. Of that number, 3,083 operated with fewer than 1,000 employees. Consequently, the Commission estimates that most competitive access providers are small businesses that may be affected by our actions. According to Commission data the 2010 Trends in Telephone Report, 1,442 CAPs and competitive local exchange carriers (competitive LECs) reported that they were engaged in the provision of competitive local exchange services. Of these 1,442 CAPs and competitive LECs, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive exchange services are small businesses.

38. Operator Service Providers (OSPs). Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The appropriate category for Operator Service Providers is the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census Bureau data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Thus, under this size standard, the majority of firms in this industry can be considered


134 Id.

135 See Trends in Telephone Service at Table 5.3.

136 Id.

137 See 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. See https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017.


139 Id.

140 See Trends in Telephone Service at Table 5.3, page 5.5.

141 Id.

142 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. See https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017.

143 See U.S. Census Bureau, 2012 Economic Census of the United States, Information: Subject Series - Estab & Firm Size: Receipts Size of Firms for the U.S.: 2012,
small. According to Commission data, 33 carriers have reported that they are engaged in the provision of operator services.\textsuperscript{144} Of these, an estimated 31 have 1,500 or fewer employees and two have more than 1,500 employees.\textsuperscript{145} Consequently, the Commission estimates that the majority of OSPs are small entities that may be affected by the rules proposed.

39. \textit{Local Resellers.} The SBA has not developed a small business size standard specifically for Local Resellers. The SBA category of Telecommunications Resellers is the closest NAICS code category for local resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual network operators (MVNOs) are included in this industry.\textsuperscript{146} Under the SBA’s size standard, such a business is small if it has 1,500 or fewer employees.\textsuperscript{147} 2012 Census Bureau data show that 1,341 firms provided resale services during that year. Of that number, all operated with fewer than 1,000 employees.\textsuperscript{148} Thus, under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services.\textsuperscript{149} Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees.\textsuperscript{150} Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by the rules adopted.

40. \textit{Toll Resellers.} The Commission has not developed a definition for Toll Resellers. The closest NAICS Code Category is Telecommunications Resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. MVNOs are included in this industry.\textsuperscript{151} The SBA has developed a small business size standard for the category of Telecommunications Resellers.\textsuperscript{152} Under that size standard, such a business is small if it has 1,500 or fewer employees.\textsuperscript{153} 2012 Census Bureau data show that 1,341 firms provided resale services during that year.

\textit{(Continued from previous page)}

\textit{http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN\_2012\_US\_51SSS2Z2\&prodType\=table.}

\textsuperscript{144} \textit{Trends in Telephone Service}, tbl. 5.3.

\textsuperscript{145} \textit{Id.}

\textsuperscript{146} U.S. Census Bureau, 2017 NAICS Definition, 517911 Telecommunications Resellers, \textit{https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517911&search=2017%20NAICS%20Search.}

\textsuperscript{147} 13 CFR § 121.201, NAICS code 517911.


\textsuperscript{149} \textit{See Trends in Telephone Service} at Table 5.3.

\textsuperscript{150} \textit{See id.}

\textsuperscript{151} U.S. Census Bureau, 2017 NAICS Definition, 517911 Telecommunications Resellers, \textit{https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517911&search=2017%20NAICS%20Search.}

\textsuperscript{152} 13 CFR § 121.201, NAICS code 517911.

\textsuperscript{153} \textit{Id.}
year. Of that number, 1,341 operated with fewer than 1,000 employees.\textsuperscript{154} Thus, under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services.\textsuperscript{155} Of this total, an estimated 857 have 1,500 or fewer employees.\textsuperscript{156} Consequently, the Commission estimates that the majority of toll resellers are small entities.

41. \textit{Wired Telecommunications Carriers}. The U.S. Census Bureau defines this industry as “establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.”\textsuperscript{157} The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees.\textsuperscript{158} U.S. Census data for 2012 show that there were 3,117 firms that operated that year.\textsuperscript{159} Of this total, 3,083 operated with fewer than 1,000 employees.\textsuperscript{160} Thus, under this size standard, the majority of firms in this industry can be considered small.

42. \textit{Wireless Telecommunications Carriers (except Satellite)}. This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services.\textsuperscript{161} The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.\textsuperscript{162} For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year.\textsuperscript{163} Of this total, 955 firms had employment of 999 or

\begin{footnotesize}

\textsuperscript{155} \textit{Trends in Telephone Service} at tbl. 5.3.

\textsuperscript{156} \textit{Id.}

\textsuperscript{157} See 13 CFR § 120.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. See, https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017.

\textsuperscript{158} \textit{Id.}


\textsuperscript{160} \textit{Id.}


\textsuperscript{162} 13 CFR § 121.201, NAICS code 517210.

\end{footnotesize}
fewer employees and 12 had employment of 1,000 employees or more.\textsuperscript{164} Thus under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

43. The Commission’s own data—available in its Universal Licensing System—indicate that, as of October 25, 2016, there are 280 Cellular licensees that will be affected by our actions today.\textsuperscript{165} The Commission does not know how many of these licensees are small, as the Commission does not collect that information for these types of entities. Similarly, according to internally developed Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) Telephony services.\textsuperscript{166} Of this total, an estimated 261 have 1,500 or fewer employees, and 152 have more than 1,500 employees.\textsuperscript{167} Thus, using available data, we estimate that the majority of wireless firms can be considered small.

44. \textit{Common Carrier Paging.} As noted, since 2007 the Census Bureau has placed paging providers within the broad economic census category of Wireless Telecommunications Carriers (except Satellite).\textsuperscript{168}

45. In addition, in the \textit{Paging Second Report and Order}, the Commission adopted a size standard for “small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.\textsuperscript{169} A small business is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $15 million for the preceding three years.\textsuperscript{170} The SBA has approved this definition.\textsuperscript{171} An initial auction of Metropolitan Economic Area (“MEA”) licenses was conducted in the year 2000. Of the 2,499 licenses auctioned, 985 were sold.\textsuperscript{172} Fifty-seven companies claiming small business status won 440 licenses.\textsuperscript{173} A subsequent auction of MEA and Economic Area (“EA”) licenses was held in the year 2001. Of the 15,514 licenses auctioned, 5,323 were sold.\textsuperscript{174} One hundred thirty-two companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs, was held in 2003. Seventy-seven bidders claiming small or very small business status won

\textsuperscript{164} Id. Available census data does not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

\textsuperscript{165} See \url{http://wireless.fcc.gov/uls}. For the purposes of this IRFA, consistent with Commission practice for wireless services, the Commission estimates the number of licensees based on the number of unique FCC Registration Numbers.

\textsuperscript{166} See \textit{Trends in Telephone Service} at Table 5.3.

\textsuperscript{167} See \textit{id}.


\textsuperscript{170} \textit{Paging Second Report and Order}, 12 FCC Rcd at 2811, para. 179.


\textsuperscript{172} See 929 and 931 MHz Paging Auction Closes, Public Notice, 15 FCC Rcd 4858 (WTB 2000).

\textsuperscript{173} See \textit{id}.

Currently, there are approximately 74,000 Common Carrier Paging licenses. According to the most recent Trends in Telephone Service, 291 carriers reported that they were engaged in the provision of “paging and messaging” services. Of these, an estimated 289 have 1,500 or fewer employees and two have more than 1,500 employees. We estimate that the majority of common carrier paging providers would qualify as small entities under the SBA definition.

Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. The closest applicable SBA category is Wireless Telecommunications Carriers (except Satellite) and the appropriate size standard for this category under the SBA rules is that such a business is small if it has 1,500 or fewer employees. For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year. Of this total, 955 firms had fewer than 1,000 employees and 12 firms has 1000 employees or more. Thus under this category and the associated size standard, the Commission estimates that a majority of these entities can be considered small. According to Commission data, 413 carriers reported that they were engaged in wireless telephony. Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. Therefore, more than half of these entities can be considered small.

Satellite telecommunications. This category comprises firms “primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.” Satellite telecommunications service providers include satellite and earth station operators. The category has a small business size standard of $32.5 million or less in average annual receipts, under SBA rules. For this category, U.S. Census Bureau data for 2012 show

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175 See Lower and Upper Paging Bands Auction Closes, Public Notice, 18 FCC Rcd 11154 (WTB 2003). The current number of small or very small business entities that hold wireless licenses may differ significantly from the number of such entities that won in spectrum auctions due to assignments and transfers of licenses in the secondary market over time. In addition, some of the same small business entities may have won licenses in more than one auction.

176 2010 Trends Report at Table 5.3, page 5-5.

177 Id.

178 13 CFR § 121.201, NAICS code 517210.

179 Id.


181 Id. Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

182 See Trends in Telephone Service at Table 5.3.

183 Id.


185 13 CFR § 121.201, NAICS code 517410.
that there were a total of 333 firms that operated for the entire year.\textsuperscript{186} Of this total, 299 firms had annual receipts of less than $25 million.\textsuperscript{187} Consequently, we estimate that the majority of satellite telecommunications providers are small entities.

49. \textit{All Other Telecommunications}. The “All Other Telecommunications” category is comprised of establishments that are primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation.\textsuperscript{188} This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.\textsuperscript{189} Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry.\textsuperscript{190} The SBA has developed a small business size standard for “All Other Telecommunications,” which consists of all such firms with gross annual receipts of $32.5 million or less.\textsuperscript{191} For this category, U.S. Census Bureau data for 2012 show that there were 1,442 firms that operated for the entire year.\textsuperscript{192} Of these firms, a total of 1,400 had gross annual receipts of less than $25 million and 42 firms had gross annual receipts of $25 million to $49,999,999.\textsuperscript{193} Thus, the Commission estimates that a majority of “All Other Telecommunications” firms potentially affected by our action can be considered small.

b. \textit{Internet Service Providers}

50. \textit{Internet Service Providers (Broadband)}. Broadband Internet service providers include wired (e.g., cable, DSL) and VoIP service providers using their own operated wired telecommunications infrastructure fall in the category of Wired Telecommunication Carriers.\textsuperscript{194} Wired Telecommunications Carriers are comprised of establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies.\textsuperscript{195} The SBA size standard for this category classifies a business as small if it has 1,500 or fewer employees.\textsuperscript{196} U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than


\textsuperscript{187} Id.

\textsuperscript{188} See U.S. Census Bureau, 2017 \textit{NAICS Definitions}, NAICS Code “517919 All Other Telecommunications”, \url{https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517919&search=2017+NAICS+Search&search=2017}.

\textsuperscript{189} Id.

\textsuperscript{190} Id.

\textsuperscript{191} 13 CFR § 121.201; NAICS Code 517919.


\textsuperscript{193} Id.

\textsuperscript{194} See 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311. See 2017 \textit{NAICS Definition}, 517311, \url{https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017}.

\textsuperscript{195} Id.

\textsuperscript{196} Id.
1,000 employees. Consequently, under this size standard the majority of firms in this industry can be considered small.

51. Internet Service Providers (Non-Broadband). Internet access service providers such as Dial-up Internet service providers, VoIP service providers using client-supplied telecommunications connections and Internet service providers using client-supplied telecommunications connections (e.g., dial-up ISPs) fall in the category of All Other Telecommunications. The SBA has developed a small business size standard for All Other Telecommunications which consists of all such firms with gross annual receipts of $32.5 million or less. For this category, U.S. Census Bureau data for 2012 show that there were 1,442 firms that operated for the entire year. Of these firms, a total of 1,400 had gross annual receipts of less than $25 million. Consequently, under this size standard a majority of firms in this industry can be considered small.

c. Vendors and Equipment Manufacturers

52. Vendors of Infrastructure Development or “Network Buildout.” The Commission has not developed a small business size standard specifically directed toward manufacturers of network facilities. There are two applicable SBA categories in which manufacturers of network facilities could fall and each have different size standards under the SBA rules. The SBA categories are “Radio and Television Broadcasting and Wireless Communications Equipment” with a size standard of 1,250 employees or less and “Other Communications Equipment Manufacturing” with a size standard of 750 employees or less. U.S. Census Bureau data for 2012 show that for Radio and Television Broadcasting and Wireless Communications Equipment firms 841 establishments operated for the entire year. Of that number, 828 establishments operated with fewer than 1,000 employees, 7 establishments operated with between 1,000 and 2,499 employees and 6 establishments operated with 2,500 or more employees. For Other Communications Equipment Manufacturing, U.S. Census Bureau data for 2012 show that 383 establishments operated for the year. Of that number 379 firms operated with fewer than 500 employees and 4 had 500 to 999 employees. Based on this data, we conclude that the majority of Vendors of Infrastructure Development or “Network Buildout” are small.

53. Telephone Apparatus Manufacturing. This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger system. Examples of products made by these

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198 13 CFR § 121.201; NAICS Code 517919.


200 13 CFR § 121.201, NAICS Code 334220.

201 13 CFR § 121.201, NAICS Code 334290.


203 Id.

establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways.205 The SBA size standard for Telephone Apparatus Manufacturing is all such firms having 1,250 or fewer employees.206 According to U.S. Census Bureau data for 2012, there were a total of 266 establishments in this category that operated for the entire year.207 Of this total, 262 had employment of under 1,000, and an additional 4 had employment of 1,000 to 2,499.208 Thus, under this size standard, the majority of firms can be considered small.

54. **Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.** This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment.209 Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.210 The SBA has established a small business size standard for this industry of 1,250 employees or less.211 U.S. Census Bureau data for 2012 show that 841 establishments operated in this industry in that year.212 Of that number, 828 establishments operated with fewer than 1,000 employees, 7 establishments operated with between 1,000 and 2,499 employees and 6 establishments operated with 2,500 or more employees.213 Based on this data, we conclude that a majority of manufacturers in this industry are small.

55. **Other Communications Equipment Manufacturing.** This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone equipment).214

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206 13 CFR § 121.201, NAICS code 334210.

207 U.S. Census Bureau, 2012 Economic Census of the United States, Table EC1231SG2, Manufacturing: Summary Series: General Summary: Industry Statistics for Subsectors and Industries by Employment Size: 2012, NAICS Code 334210, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/31SG2//naics~334210. The number of “establishments” is a less helpful indicator of small business prevalence in this context than would be the number of “firms” or “companies,” because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census data for firms or companies only gives the total number of such entities for 2012, which was 250. See also https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/31SG1//naics~334210.

208 *Id.* An additional 4 establishments had employment of 2,500 or more.


210 *Id.*

211 13 CFR § 121.201, NAICS Code 334220.


213 *Id.*
apparatus, and radio and television broadcast, and wireless communications equipment). Examples of such manufacturing include fire detection and alarm systems manufacturing, Intercom systems and equipment manufacturing, and signals (e.g., highway, pedestrian, railway, traffic) manufacturing. The SBA has established a size for this industry as all such firms having 750 or fewer employees. U.S. Census Bureau data for 2012 show that 383 establishments operated in that year. Of that number 379 operated with fewer than 500 employees and 4 had 500 to 999 employees. Based on this data, we conclude that the majority of Other Communications Equipment Manufacturers are small.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

56. The NPRM proposes a rule that no universal service support may be used to purchase or obtain any equipment or services produced or provided by any company posing a national security threat to the integrity of communications networks or the communications supply chain. We seek comment on this proposal, and its likely costs and benefits, as well as on alternative approaches and any other steps we should consider taking. The NPRM also seeks comment on how broadly this proposed rule should apply, and how it should be implemented. We seek comment on how to enforce the proposed rule, including who should be held liable for the recovery of disbursed funds, and whether and how applicants for USF support may seek a waiver to purchase or continue to use equipment or services provided by a covered entity. Lastly, we seek comment on whether sections 201(b) and 254 provide legal authority for the proposed rule.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

57. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.”

58. In this NPRM, we propose to adopt a rule that no universal service support may be used to purchase or obtain any equipment or services produced or provided by any company posing a national security threat to the integrity of communications networks or the communications supply chain.

59. The NPRM specifically seeks comment on the impact of such a rule on small entities, particularly small and rural carriers. The NPRM also seeks comment on whether there are any compliance issues we should consider, particularly for smaller USF recipients. The NPRM seeks
comment on whether, as a practical matter, USF recipients will be able to purchase equipment and services from non-covered companies that can interoperate with any existing, installed equipment from covered companies.

60. As the Spectrum Act and its implementing regulations included similar provisions, the NPRM seeks comment on how small businesses complied with those regulations in the context of spectrum auctions administered by the Commission.

61. The NPRM asks whether there are modifications to our proposed rules that would achieve similar national security objectives, while reducing burdens on small entities. For example, the NPRM asks whether there should be a later effective date for the rule as applied to smaller recipients of USF support. We seek comment on any potential modifications and alternatives that would ease the burden of our proposed rules on small entities.

62. We expect to take into account the economic impact on small entities, as identified in comments filed in response to the NPRM and this IRFA, in reaching our final conclusions and promulgating rules in this proceeding.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

63. None.
STATEMENT OF CHAIRMAN AJIT PAI

Re: Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs, WC Docket No. 18-89

America’s communications networks have become the indispensable infrastructure of our economy and our everyday lives. That makes safeguarding those networks vitally important to our national security, economic security, and personal security. An important part of that security is the integrity of the communications supply chain—that is, the process by which products and services are manufactured, distributed, sold, and ultimately integrated into our networks.

For years, U.S. government officials have expressed concern about the national security threats posed by certain foreign communications equipment providers in the communications supply chain. Hidden “backdoors” to our networks in routers, switches, and other network equipment can allow hostile foreign powers to inject viruses and other malware, steal Americans’ private data, spy on U.S. businesses, and more.

These threats persist today. Just two months ago, the Director of the Federal Bureau of Investigation testified before Congress about the “the risks of allowing any company or entity that is beholden to foreign governments that don’t share our values to gain positions of power inside our telecommunications networks.”1 These risks include “the capacity to maliciously modify or steal information” and “conduct undetected espionage.”2 And according to the Director of the National Security Agency, “this is a challenge that . . . is only going to increase, not lessen, over time for us.”3

To be sure, the FCC doesn’t have the authority or capacity to solve this problem alone. But it does have a role to play in meeting this challenge. Specifically, given the Commission’s responsibility for overseeing the almost $9 billion Universal Service Fund (USF), we must ensure that the money in the USF—which comes from fees paid by American consumers—isn’t used in a way that undermines our national security. And we must take this action now, especially as we stand upon the precipice of the 5G future.

That’s why we’re proposing a rule that, going forward, prohibits universal service support from being used to purchase or obtain any equipment or services produced or provided by any company posing a national security threat to communications networks or the communications supply chain. We seek public input on how best to implement this proposal, including the costs and benefits of doing so. We also ask what types of equipment and services should be covered by the proposed rule, how we should identify which suppliers are covered, and how USF recipients can learn who those suppliers are. I am confident that the record we compile will allow us to do our part to help protect America’s national security.

This Notice was clearly a team effort. I would therefore like to thank the following staff across the Commission’s Bureaus and Offices: Liz Drogula, Madeleine Findley, Aaron Garza, Jodie Griffin, Christian Hoefly, Daniel Kahn, Radhika Karmarkar, Alex Minard, Kris Monteith, Ramesh Nagarajan, Ryan Palmer, Eric Ralph, and John Visclosky of the Wireline Competition Bureau; Charles Mathias, Alok Mehta, Dana Shaffer, and Don Stockdale of the Wireless Telecommunications Bureau; Chris

2 Id.
Anderson, Merritt Baer, Justin Cain, Lisa Fowlkes, Jeff Goldthorp, Deb Jordan, Nikki McGinnis, Vern Mosley, Anita Patankar-Stoll, and David Plotinsky of the Public Safety and Homeland Security Bureau; David Krech, Thomas Sullivan, and Troy Tanner of the International Bureau; Rosemary Harold and Keith Morgan of the Enforcement Bureau; Ashley Boizelle, Tom Johnson, Doug Klein, Frank Inserra, Rick Mallen, Linda Oliver, Bill Richardson, and Chin Yoo of the Office of General Counsel; Maura McGowan of the Office of Communications Business Opportunities; Kevin Holmes, Jennifer Schneider, and Tim Strachan of the Office of Legislative Affairs; Deena Shetler and Mark Stephens of the Office of Managing Director; and Jerry Ellig, Paul Lafontaine, and Wayne Leighton of the Office of Strategic Planning and Policy Analysis.

I’m also grateful to the bipartisan group of Senators and Representatives that has urged the FCC to take action on this issue. Led by Senator Tom Cotton, these members have been strong advocates for protecting our communications networks from national security threats, and I look forward to working with them toward that goal.
STATEMENT OF
COMMISSIONER MIGNON L. CLYBURN

Re: Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs, WC Docket No. 18-89

Just like transport, energy, and water, communications networks are an integral part of our daily lives. These networks are now – in most quarters – considered critical infrastructure, which is why protecting them from national security threats is such a top priority.

Communications networks not only support a wide variety of services that underpin the social and economic dynamics of our country, next generation networks, such as 5G and the Internet of Things, promise to rapidly transform industries such as healthcare, education, public safety, transportation and manufacturing.

While we must take the responsibility of securing this critical infrastructure seriously, we have the added challenge of doing so in a way that is cost effective. Getting it wrong will not only do little to safeguard national security, but hamper our efforts to close the digital divide and not serve the public interest.

Our dual responsibilities, enshrined in statute, are clear: to protect both the integrity of our nation’s communications networks and ensure that all Americans have access to communications services. But we can ill-afford to slow down the progress of innovation and investment when it comes to these communications networks or to raise the cost of deployment or adoption of services for those who need connectivity the most.

In this Notice of Proposed Rulemaking, we seek comment on whether we should prohibit Universal Service Funds (USF) from being used to purchase any equipment or services by any company posing national security threat to the integrity of communications networks. In being good stewards, we must carefully assess all costs and benefits of any proposed approach, and evaluate all viable alternatives to determine the best next step.

We must minimize national security threats, while avoiding putting undue burdens on small and rural communications service providers, and those living in high-cost areas where connectivity is either lacking or needs improvement. More pointedly, we must consider whether this proposal could ultimately increase equipment or service costs for consumers and providers benefiting from USF funds.

As we identify and eliminate possible security vulnerabilities, we need the participation of stakeholders so that we may strike the proper marketplace balance. Quantitative and qualitative data would be especially helpful to demonstrate the potential impact of any proposal on national security and the goals of USF, to include network deployment and services offered by small and rural businesses that receive USF support.

I would like to thank my colleagues for agreeing to my request to seek additional comment on these issues and on the costs and benefits of any proposed actions. This Notice is a combined effort so I thank the team from various Bureaus for briefing me and for their dedicated work on this item.
STATEMENT OF
COMMISSIONER MICHAEL O’RIELLY

Re: Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs, WC Docket No. 18-89

There is little doubt that several foreign nations present geopolitical problems for the United States. From state sponsored terrorism and military aggression outside their borders to economic espionage and market manipulation, we certainly have our fair share of international challenges. Certain nations do everything possible to evade accepted processes for purposes of improving their economic position, harming American companies, and/or helping spread their morally bankrupt view of acceptable government. Their deceit does not go unnoticed and their desire to artificially prop-up their “companies” should not be allowed to stand.

In the communications arena, our concerns are many. It’s why I have called for greater U.S. leadership and engagement to prevent harmful outcomes in international organizations, such as the International Telecommunication Union (ITU), the Internet Cooperation for Assigned Names and Numbers (ICANN), and the various multi-stakeholder standard setting bodies. Moreover, we rightly should be concerned and act against efforts by foreign governments to capture dominant positions and global market share in the communications equipment sector using illegal and underhanded practices. At the same time, we need to be concerned about the infiltration of potentially nefarious equipment within our networks.

That gets us to today’s item. I appreciate the Chairman bringing it forward for our consideration. Substantively, while I firmly believe that there are significant potential threats to our nation’s communications networks from foreign suppliers, I do have some concerns regarding the proposed solution to cut off USF support under select circumstances. However, it is my opinion that this NPRM process is the correct vehicle for discussing and resolving such debates. Commenters can highlight what exact benefits this decision could bring, whether money is, of course, completely fungible, and whether other actions should be taken instead. The accumulated record should help frame views on any final action in this matter. I realize that this may create uncertainty for USF recipients, but we are discussing issues and actions affecting national security, and that must be given due consideration.

Along those lines, it is critical that the FCC revise our dealings with what is known as “Team Telecom.” The item raises a host of issues in which the Commission will need to work with those in the Executive Branch on matters involving what equipment poses national security risks, potential waivers and other critical decisions. That means we are going to need to have a better process than the opaque and unnecessarily lengthy one that exists under the current Team Telecom structure. I am pleased that the Chairman agrees with me on this point, and I look forward to moving a related Team Telecom order in the very near future.
STATEMENT OF
COMMISSIONER BRENDAN CARR

Re: Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs, WC Docket No. 18-89

Americans benefit from world-leading communications networks thanks to our country’s exceptional commitment to the free market. To be sure, the government has a role in promoting network deployment by reducing regulatory barriers and auctioning spectrum. But it was the private sector that put over $1.6 trillion in capital at risk and built the next generation networks that are now the envy of the world.

Our reliance on the free market has many benefits for consumers. We don’t impose utility-style regulations on the Internet, which sacrifice competition for government control. We don’t impose mandatory unbundling obligations, which skew investment decisions and deter network deployment. And we certainly don’t have a nationalized communications network.

But unleashing the private sector to build and operate networks means that private companies are also charged with defending critical infrastructure. And the private sector is deploying substantial resources to secure their networks from attack—whether those attacks stem from an individual effort, a company, or a state actor. I visited Cable Labs outside Boulder, Colorado, two months ago and saw some of the good work industry is doing to help secure our communications infrastructure.

The federal government also has a role to play. Indeed, the federal government has been engaged in a decades-long effort to enhance the security of communications networks and their supply chains. In 2013, for example, the White House directed federal agencies to work together to increase the security of communications infrastructure. In 2017, Congress passed legislation prohibiting federal agencies from using any products provided by certain companies. And just yesterday, the Commerce Department banned the export of components to a foreign manufacturer that was found to have repeatedly evaded sanctions aimed at strengthening our national security.

Over the years, the FCC has taken targeted actions, as well. We have prohibited companies that have been barred from bidding on federal contracts for national security reasons from participating in our spectrum auctions. We consider national security and foreign policy concerns in evaluating a company’s application to operate communications infrastructure in the U.S. And we have established CSRIC as an advisory council charged with providing recommendations to ensure the security of our communications networks, among other actions.

As threats continue to evolve, we must continue our work on this front—that means supporting the private sector’s efforts, coordinating with our fellow agencies, and exercising our own authority, however limited, to advance the security of communications networks.

We do that through this Notice by proposing to cut off Universal Service Fund subsidies for the purchase of equipment or services from companies that pose a national security threat to communications networks or their supply chains. That’s a very reasonable proposal. Americans should not be paying for equipment that undermines our national security.

But I am also glad that my colleagues have agreed to broaden the scope of this proceeding in two important respects.

First, we now seek additional information that will allow us to more fully assess the scope and nature of any threats and thus the costs and benefits of our decisions.

Second, the Notice now explores a broader set of options for remedying any threats that we identify. For instance, we now ask about more than just USF-funded equipment. And the Notice now tees up additional remedies from testing regimes (which have been employed by some of our closest
allies) to actions related to the removal or prospective deployment of equipment. I want to thank the Chairman and my colleagues for agreeing to put all of these options on the table.

Strengthening our national security will continue to be a top priority for the FCC. Doing so requires timely, accurate information concerning the threats we face and a holistic discussion of potential responses. I believe this Notice, as revised, will continue this important discussion, so I am glad to support it today.

Thank you to the staffs of the Wireline Competition Bureau and the Public Safety and Homeland Security Bureau for their diligent work on this item. It has my support.