



## FEDERAL COMMUNICATIONS COMMISSION

### 47 CFR Parts 73 and 74

[GN Docket No. 16-142; FCC 23-53; FR ID 152602]

### Authorizing Permissive Use of the “Next Generation” Broadcast Television Standard

**AGENCY:** Federal Communications Commission.

**ACTION:** Proposed rule.

**SUMMARY:** In this document, the Federal Communications Commission (Commission) seeks further understanding of the current marketplace for ATSC 3.0 Standard Essential Patents (SEPs) and the ability of third parties to develop products that rely upon them. The Commission also seeks comment on the impact on consumers if the Commission were to adopt, or not adopt, rules to require essential patent holders in 3.0 technology to commit to licensing them on reasonable and non-discriminatory (RAND) terms.

**DATES:** Comments are due on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]; reply comments are due on or before [INSERT DATE 90 DAYS AFTER DATE OF PUBLICATIONS IN THE FEDERAL REGISTER].

**ADDRESSES:** You may submit comments, identified by GN Docket No. 16-142, by any of the following methods:

- *Electronic Filers:* Federal Communications Commission’s Web Site: <https://apps.fcc.gov/ecfs/>. Follow the instructions for submitting comments.
- *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing.

- People with Disabilities: Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by e-mail: [FCC504@fcc.gov](mailto:FCC504@fcc.gov) or phone: 202-418-0530 or TTY: 202-418-0432.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION CONTACT:** For additional information on this proceeding, contact Evan Baranoff, [Evan.Baranoff@fcc.gov](mailto:Evan.Baranoff@fcc.gov), of the Media Bureau, Policy Division, (202) 418-7142. Direct press inquiries to Janice Wise at (202) 418-8165.

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Fourth Further Notice of Proposed Rulemaking (FNPRM), FCC 23-53, adopted on June 20, 2023 and released on June 23, 2023. The full text of this document is available electronically via the FCC's Electronic Document Management System (EDOCS) Web Site at <https://www.fcc.gov/edocs> or via the FCC's Electronic Comment Filing System (ECFS) Web Site at <https://www.fcc.gov/ecfs>. (Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.) Alternative formats are available for people with disabilities (Braille, large print, electronic files, audio format), by sending an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or calling the Commission's Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY).

**Synopsis:**

**I. INTRODUCTION**

1. In the Fourth Further Notice of Proposed Rulemaking (*FNPRM*) (accompanying the Third Report and Order, published elsewhere in this issue of the Federal Register), we seek to further our understanding of the current marketplace for ATSC 3.0 Standard Essential Patents (SEPs) and the ability of third parties to develop products that rely upon them. We also seek

comment on the impact on consumers if the Commission were to adopt, or not adopt, rules to require essential patent holders in 3.0 technology to commit to licensing them on reasonable and non-discriminatory (RAND) terms.

## **II. FOURTH FURTHER NOTICE OF PROPOSED RULEMAKING**

2. With this FNPRM, we seek to further our understanding of the current marketplace for ATSC 3.0 Standard Essential Patents (SEPs) and the ability of third parties to develop products that rely upon them. As the Commission has previously observed in this proceeding, the Advanced Television Systems Committee (ATSC), which developed the ATSC 3.0 standard, requires patent owners to disclose that they hold essential patents and to commit to licensing them on reasonable and non-discriminatory (RAND) terms. The Commission decided in 2017 that “[w]ith no evidence of patent licensing issues, ... it [was] premature to impose regulations on the private licensing marketplace.” After reviewing the record developed in response to the *Sunsets FNPRM*, we invite additional comments about both the specific issues raised below and the general state of the market. This will inform the Commission’s consideration of its authority to act on these issues, as well as the need for, appropriateness of, and potential benefits of rules governing the RAND licensing of SEPs.

3. A number of commenters identify issues with the current ATSC 3.0 patent marketplace and encourage the Commission to “closely monitor” the market or even to immediately adopt Commission rules formalizing RAND requirements for SEPs. The Alliance for Automotive Innovation (AAI), for example, explains that “[t]he ability to license patents declared essential to technical standards on reasonable and non-discriminatory...terms is critical to enabling automotive companies to deploy new technologies.” However, they contend that, despite the ATSC RAND requirement, “some ATSC 3.0 SEP holders have refused to license to some willing implementers on RAND terms.” AAI thus proposes that the Commission not just monitor the market to ensure compliance with the existing ATSC requirements, but also actively inquire into the licensing practices of SEP holders and their representatives. Likewise, other commenters urge the Commission to take an active role. Finally, Public Knowledge/Open Technology Institute (PK) goes further, proposing that the Commission should immediately adopt

enforceable RAND requirements for SEPs. PK argues that reliance on third party enforcement of the ATSC RAND requirement is insufficient. They note that the standard leaves resolution of patent disputes to the courts but contend that third party enforcement may not always be possible or effective, as courts must find that a disclosure and licensing commitment like ATSC's was actually intended to bind members against third parties. Furthermore, courts would look to the intent of the contracting parties, not broader case law, when interpreting the relevant terms in ATSC's policy, meaning the very definition of "reasonable and non-discriminatory" could be up for debate. PK therefore proposes that the Commission adopt rules of its own.

4. On the other hand, several other commenters oppose Commission involvement in what they describe as a still-nascent market showing no signs of market failure. Other commenters contend that adoption of RAND requirements by the Commission is unnecessary at best and potentially even harmful to the consumer market for ATSC 3.0 devices. We seek additional comment on the state of this market, particularly from the perspective of parties, or the representatives of parties, that do not hold SEPs but have licensed or attempted to license them. Are SEP holders complying with the ATSC RAND requirements? If not, how are disputes currently resolved? Are the existing ATSC RAND requirements imposing any adverse economic impacts? Why or why not? Patent pool operator MPEG LA states that it is unaware of any SEP outside of its ATSC 3.0 patent pool, and the Commission is not aware of any similar alternative patent pool. AAI claims that MPEG LA is focused exclusively on "downstream" users of SEPs, which "inhibits upstream suppliers from securing the license rights necessary to develop products, offer them for sale, or even determine whether to enter the market without the ability to know what a license's cost would be." Is MPEG LA or any other party in a position to refute or address these concerns raised by AAI?

5. Some commenters also assert that, regardless of the state of the market, the Commission does not have authority to impose RAND requirements on ATSC 3.0 patent licenses. For example, ONE Media and MPEG LA contend that the Commission may not have jurisdiction over all SEP holders. Other commenters emphasize the lack of explicit statutory authority for the imposition of RAND requirements, while acknowledging that the Commission

has taken action in the past to prevent the abuse of patent rights. We invite comment on the specific arguments raised by commenters regarding jurisdiction.

6. If the Commission were to find problems in the SEP marketplace that—consistent with the Commission’s existing authority—could be ameliorated by the application of RAND requirements, how could those requirements be crafted to minimize any potential adverse economic impact while maximizing the opportunity for participation in the ATSC market? PK proposes that the Commission adopt RAND rules in line with the policy established by the Institute of Electrical and Electronics Engineers (IEEE), which PK argues provide sufficient detail to minimize costly disputes. Other commenters emphasize that in 2019 the Department of Justice expressed concern that the IEEE policy had “dampened enthusiasm for the IEEE process” causing delays in standards adoption,” though PK points out that the Fair Standards Alliance praised the IEEE policy as recently as last year. Commenters also note that the Departments of Justice and Commerce recently endorsed a “case-by-case” approach to addressing patent disputes. Were the Commission to adopt regulations, would the IEEE approach, a case by case approach, or another approach be best suited to administration by the Commission? What are the competitive impacts of these different approaches? If the Commission were to establish specific standards, are there sources instead of or in addition to the IEEE policy to which the Commission should look? Regardless of the approach adopted, if any, how could the Commission ensure speedy resolution of complaints? For example, should resolution of such complaints be delegated to a bureau, office, or administrative judge? Should complaints be deemed denied if not acted upon within a certain time frame? To what extent should any Commission rules consider the non-price terms and conditions of licensing agreements?

7. Are there other issues the Commission should consider with respect to the possible application of RAND rules to the licensing of SEPs? We invite comment on the questions above and any others related to the current SEP marketplace and possible Commission rules relating to the RAND licensing of SEPs.

8. *Digital Equity and Inclusion.* The Commission, as part of its continuing effort to

advance digital equity for all,<sup>1</sup> including people of color, people with disabilities, people who live in rural or Tribal areas, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty or inequality, invites comment on any equity-related considerations<sup>2</sup> and benefits (if any) that may be associated with the proposals and issues discussed herein. Specifically, we seek comment on how our proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well the scope of the Commission’s relevant legal authority.

### III. PROCEDURAL MATTERS

#### A. Initial Regulatory Flexibility Analysis.

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),<sup>3</sup> 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 proposed in this *Fourth Further Notice of Proposed Rulemaking (FNPRM or Fourth FNPRM)*. 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 *FNPRM* provided on the first page of the *FNPRM*. The Commission will send a copy of this entire *FNPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).<sup>4</sup> In addition, the *FNPRM* and the IRFA (or summaries thereof) will be published in the Federal Register.<sup>5</sup>

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<sup>1</sup> Section 1 of the Communications Act of 1934 as amended provides that the FCC “regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex.” 47 U.S.C. 151.

<sup>2</sup> The term “equity” is used here consistent with Executive Order 13985 as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. *See* Exec. Order No. 13985, 86 Fed. Reg. 7009, Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (January 20, 2021).

<sup>3</sup> 5 U.S.C. 603. The RFA, *see* 5 U.S.C. 601 through 612, was amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. 104 through 121, Title II, 110 Stat. 857 (1996).

<sup>4</sup> 5 U.S.C. 603(a).

<sup>5</sup> *Id.*

### **1. Need for, and Objectives of, the Proposed Rules**

2. In this *Fourth Further Notice of Proposed Rulemaking (FNPRM)*, the Commission seeks to further its understanding of the current marketplace for ATSC 3.0 Standard Essential Patents (SEPs) and the ability of third parties to develop products that rely upon them. As the Commission has previously observed in this proceeding, the Advanced Television Systems Committee (ATSC), which developed the ATSC 3.0 standard, requires patent owners to disclose that they hold essential patents and to commit to licensing them on reasonable and non-discriminatory (RAND) terms. The record developed in response to the *Sunsets FNPRM*, however, raises questions both about whether patentees are respecting these commitments and about the challenges faced in court by third parties seeking their enforcement. In light of these concerns and the limits of the existing record, the Commission seeks additional comments about the general state of the market, particularly from parties that do not hold SEPs but have licensed or attempted to license them. This will inform the Commission's consideration of the need for, appropriateness of, and potential benefits of Commission rules governing the RAND licensing of SEPs.

### **2. Legal Basis.**

3. The proposed action is authorized pursuant to sections 1, 4, 7, 301, 303, 307, 308, 309, 316, 319, 325(b), 336, 338, 399b, 403, 534, and 535 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154, 157, 301, 303, 307, 308, 309, 316, 319, 325(b), 336, 338, 399b, 403, 534, and 535.

### **3. 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 rules adopted herein.<sup>6</sup> The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."<sup>7</sup> In addition, the term "small business" has the same meaning as the term "small business concern" under the Small

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<sup>6</sup> 5 U.S.C. 603(b)(3).

<sup>7</sup> *Id.* 601(6).

Business Act.<sup>8</sup> A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.<sup>9</sup> Below, we provide a description of such small entities, as well as an estimate of the number of such small entities, where feasible.

5. *Television Broadcasting.* This industry is comprised of “establishments primarily engaged in broadcasting images together with sound.” These establishments operate television broadcast studios and facilities for the programming and transmission of programs to the public. These establishments also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs to the public on a predetermined schedule. Programming may originate in their own studio, from an affiliated network, or from external sources. The SBA small business size standard for this industry classifies businesses having \$41.5 million or less in annual receipts as small. 2017 U.S. Census Bureau data indicate that 744 firms in this industry operated for the entire year. Of that number, 657 firms had revenue of less than \$25,000,000.<sup>10</sup> Based on this data we estimate that the majority of television broadcasters are small entities under the SBA small business size standard.

6. As of December 31, 2022, there were 1,375 licensed commercial television stations. Of this total, 1,282 stations (or 93.2%) had revenues of \$41.5 million or less in 2021, according to Commission staff review of the BIAKelsey Media Access Pro Online Television Database (MAPro) on January 13, 2023, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates as of December 31, 2022, there were 383 licensed noncommercial educational (NCE) television stations, 383 Class A TV stations, 1,912 LPTV stations and 3,122 TV translator stations. The Commission, however, does

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<sup>8</sup> *Id.* 601(3) (incorporating by reference the definition of “small-business concern” in 15 U.S.C. 632). Pursuant to 5 U.S.C. 601(3), 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).

<sup>9</sup> 15 U.S.C. 632.

<sup>10</sup> The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* [https://www.census.gov/glossary/#term\\_ReceiptsRevenueServices](https://www.census.gov/glossary/#term_ReceiptsRevenueServices).

not compile and otherwise does not have access to financial information for these television broadcast stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of these television station licensees, we presume that all of these entities qualify as small entities under the above SBA small business size standard.

7. *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. Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.<sup>11</sup>

8. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees.<sup>12</sup> Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 5,183 providers that reported they were engaged in the provision of fixed local

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<sup>11</sup> Fixed Local Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, and Other Local Service Providers. Local Resellers fall into another U.S. Census Bureau industry group and therefore data for these providers is not included in this industry.

<sup>12</sup> The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

services. Of these providers, the Commission estimates that 4,737 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

9. *Cable Companies and Systems (Rate Regulation)*. The Commission has developed its own small business size standard for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide. Based on industry data, there are about 420 cable companies in the U.S. Of these, only seven have more than 400,000 subscribers. In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers. Based on industry data, there are about 4,139 cable systems (headends) in the U.S. Of these, about 639 have more than 15,000 subscribers. Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.

10. *Cable System Operators (Telecom Act Standard)*. The Communications Act of 1934, as amended, contains a size standard for a "small cable operator," which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000." For purposes of the Telecom Act Standard, the Commission determined that a cable system operator that serves fewer than 677,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator based on the cable subscriber count established in a 2001 Public Notice. Based on industry data, only six cable system operators have more than 677,000 subscribers. Accordingly, the Commission estimates that the majority of cable system operators are small under this size standard. We note however, that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.<sup>13</sup> Therefore, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

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<sup>13</sup> The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator.

11. *Direct Broadcast Satellite (DBS) Service.* DBS service is a nationally distributed subscription service that delivers video and audio programming via satellite to a small parabolic “dish” antenna at the subscriber’s location. DBS is included in the Wired Telecommunications Carriers industry which comprises 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 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.<sup>14</sup> By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.

12. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that 3,054 firms operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees.<sup>15</sup> Based on this data, the majority of firms in this industry can be considered small under the SBA small business size standard. According to Commission data however, only two entities provide DBS service - DIRECTV (owned by AT&T) and DISH Network, which require a great deal of capital for operation. DIRECTV and DISH Network both exceed the SBA size standard for classification as a small business. Therefore, we must conclude based on internally developed Commission data, in general DBS service is provided only by large firms.

13. *Satellite Master Antenna Television (SMATV) Systems, also known as Private*

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<sup>14</sup> Included in this industry are: broadband Internet service providers (e.g., cable, DSL); local telephone carriers (wired); cable television distribution services; long-distance telephone carriers (wired); closed-circuit television (CCTV) services; VoIP service providers, using own operated wired telecommunications infrastructure; direct-to-home satellite system (DTH) services; telecommunications carriers (wired); satellite television distribution systems; and multichannel multipoint distribution services (MMDS).

<sup>15</sup> The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

*Cable Operators (PCOs)*. SMATV systems or PCOs are video distribution facilities that use closed transmission paths without using any public right-of-way. They acquire video programming and distribute it via terrestrial wiring in urban and suburban multiple dwelling units such as apartments and condominiums, and commercial multiple tenant units such as hotels and office buildings. SMATV systems or PCOs are included in the Wired Telecommunications Carriers' industry which includes wireline telecommunications businesses. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. Of this total, 2,964 firms operated with fewer than 250 employees.<sup>16</sup> Thus under the SBA size standard, the majority of firms in this industry can be considered small.

14. *Home Satellite Dish (HSD) Service*. HSD or the large dish segment of the satellite industry is the original satellite-to-home service offered to consumers and involves the home reception of signals transmitted by satellites operating generally in the C-band frequency. Unlike DBS, which uses small dishes, HSD antennas are between four and eight feet in diameter and can receive a wide range of unscrambled (free) programming and scrambled programming purchased from program packagers that are licensed to facilitate subscribers' receipt of video programming. Because HSD provides subscription services, HSD falls within the industry category of Wired Telecommunications Carriers. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated for the entire year. Of this total, 2,964 firms operated with fewer than 250 employees.<sup>17</sup> Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

15. *Open Video Systems*. The open video system (OVS) framework was established in 1996 and is one of four statutorily recognized options for the provision of video programming

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<sup>16</sup> The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

<sup>17</sup> The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

services by local exchange carriers. The OVS framework provides opportunities for the distribution of video programming other than through cable systems. OVS operators provide subscription services and therefore fall within the SBA small business size standard for the cable services industry, which is “Wired Telecommunications Carriers.” The SBA small business size standard for this industry classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. Of this total, 2,964 firms operated with fewer than 250 employees.<sup>18</sup> Thus, under the SBA size standard the majority of firms in this industry can be considered small. Additionally, we note that the Commission has certified some OVS operators who are now providing service and broadband service providers (BSPs) are currently the only significant holders of OVS certifications or local OVS franchises. The Commission does not have financial or employment information for the entities authorized to provide OVS however, the Commission believes some of the OVS operators may qualify as small entities.

16. *Broadband Radio Service and Educational Broadband Service.* Broadband Radio Service systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and “wireless cable,”<sup>19</sup> transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the Instructional Television Fixed Service (ITFS)). Wireless cable operators that use spectrum in the BRS often supplemented with leased channels from the EBS, provide a competitive alternative to wired cable and other multichannel video programming distributors. Wireless cable programming to subscribers resembles cable television, but instead of coaxial cable, wireless cable uses microwave channels.<sup>20</sup>

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<sup>18</sup> The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

<sup>19</sup> The use of the term "wireless cable" does not imply that it constitutes cable television for statutory or regulatory purposes.

<sup>20</sup> Generally, a wireless cable system may be described as a microwave station transmitting on a combination of BRS and EBS channels to numerous receivers with antennas, such as single-family residences, apartment complexes, hotels, educational institutions, business entities and governmental

17. In light of the use of wireless frequencies by BRS and EBS services, the closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (*except* Satellite). The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. Of this number, 2,837 firms employed fewer than 250 employees.<sup>21</sup> Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

18. According to Commission data as December 2021, there were approximately 5,869 active BRS and EBS licenses. The Commission's small business size standards with respect to BRS involves eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of BRS licenses, the Commission adopted criteria for three groups of small businesses. A very small business is an entity that, together with its affiliates and controlling interests, has average annual gross revenues exceed \$3 million and did not exceed \$15 million for the preceding three years, a small business is an entity that, together with its affiliates and controlling interests, has average gross revenues exceed \$15 million and did not exceed \$40 million for the preceding three years, and an entrepreneur is an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$3 million for the preceding three years. Of the ten winning bidders for BRS licenses, two bidders claiming the small business status won 4 licenses, one bidder claiming the very small business status won three licenses and two bidders claiming entrepreneur status won six licenses. One of the winning bidders claiming a small business status classification in the BRS license auction has an active licenses as of December 2021.

19. The Commission's small business size standards for EBS define a small business as an entity that, together with its affiliates, its controlling interests and the affiliates of its

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offices. The range of the transmission depends upon the transmitter power, the type of receiving antenna and the existence of a line-of-sight path between the transmitter or signal booster and the receiving antenna.

<sup>21</sup> The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

controlling interests, has average gross revenues that are not more than \$55 million for the preceding five (5) years, and a very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$20 million for the preceding five (5) years. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

20. *Incumbent Local Exchange Carriers (Incumbent LECs)*. Neither the Commission nor the SBA have developed a small business size standard specifically for incumbent local exchange carriers. Wired Telecommunications Carriers is the closest industry with an SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees.<sup>22</sup> Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 1,227 providers that reported they were incumbent local exchange service providers. Of these providers, the Commission estimates that 929 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, the Commission estimates that the majority of incumbent local exchange carriers can be considered small entities.

21. *Competitive Local Exchange Carriers (LECs)*. Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange

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<sup>22</sup> The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

services. Providers of these services include several types of competitive local exchange service providers.<sup>23</sup> Wired Telecommunications Carriers is the closest industry with a SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees.<sup>24</sup> Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 3,956 providers that reported they were competitive local exchange service providers. Of these providers, the Commission estimates that 3,808 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

22. *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. 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. The SBA small business size standard for this industry classifies businesses having 1,250 employees or less as small. U.S. Census Bureau data for 2017 show that there were 656 firms in this industry that operated for the entire year. Of this number, 624 firms had fewer than 250 employees.<sup>25</sup> Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

23. *Audio and Video Equipment Manufacturing.* This industry comprises establishments primarily engaged in electronic audio and video equipment for home

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<sup>23</sup> Competitive Local Exchange Service Providers include the following types of providers: Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

<sup>24</sup> The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

<sup>25</sup> The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

entertainment, motor vehicles, and public address and musical instrument amplification.

Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems. The SBA small business size standard for this industry classifies firms with 750 employees or less as small. According to 2017 U.S. Census Bureau data, 464 firms in this industry operated that year. Of this number, 399 firms operated with less than 250 employees.<sup>26</sup> Based on this data and the associated SBA size standard, we conclude that the majority of firms in this industry are small.

#### **4. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements.**

24. The Fourth FNPRM considers whether to adopt rules governing the RAND licensing of SEPs. The Fourth FNPRM does not propose any new reporting or recordkeeping requirements. In assessing the cost of compliance for small entities, at this time the Commission cannot quantify the cost of compliance with any of the potential rule changes that may be adopted. Further, the Commission is not in a position to determine whether, if adopted, the proposals and matters upon which we seek comment in the *Fourth FNPRM* will require small entities to hire professionals to comply. We expect the information we receive in comments including where requested, cost information, to help the Commission identify and evaluate relevant compliance matters for small entities, including compliance costs and other burdens that may result from potential changes discussed in the *Fourth FNPRM*.

#### **5. Steps Taken to Minimize Significant Impact on Small Entities and Significant Alternatives Considered.**

25. The RFA requires an agency to describe any significant 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,

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<sup>26</sup> The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that the U.S. Census Bureau withheld publication of the number of firms that operated for the entire year and the number of firms that operated with 5 to 9 employees, to avoid disclosing data for individual companies (see Cell Notes for “Firms operated for the entire year” and “Firms operated for the entire year with 5 to 9 employees”). Therefore, the number of firms with employees that meet the SBA size standard would be higher than noted herein.

consolidation, or simplification of compliance or reporting requirements under the rule for such small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for such small entities.”<sup>27</sup>

26. The Commission has authorized television broadcasters, including small entities, to use the Next Gen TV (ATSC 3.0) standard on a voluntary, market-driven basis, allowing them to decide whether (and if so when) to deploy ATSC 3.0 service and bear the costs associated with such deployment. All stakeholders, including small entities, will need to undertake any costs or burdens associated with ATSC 3.0 service should they choose to do so. The Advanced Television Systems Committee (ATSC), which developed the ATSC 3.0 standard, requires patent owners to disclose that they hold essential patents and to commit to licensing them on RAND terms. In furthering our understanding of the current marketplace for ATSC 3.0 SEPs, we consider whether patentees, including small entities, are respecting these commitments and the challenges faced in court by the third parties seeking their enforcement. Among the alternatives we seek to consider is the degree to which the Commission should simply monitor the market or actively respond to license abuse and formalize RAND requirements for those who hold SEPs, including small entities. Where there are problems in the SEP marketplace that could be improved, we consider if the Commission were to adopt rules requiring RAND licensing of SEPs, where such rules would facilitate licensing by equipment manufacturers. We further consider how to minimize any adverse economic impact on the market, including small entities.

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

27. None.

**B. Initial PRA Analysis.**

9. This *FNPRM* may result in new or modified information collection requirements. If the Commission adopts any new or modified information collection requirements, the Commission will publish a notice in the Federal Register inviting the public to comment on such

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<sup>27</sup> 5 U.S.C. 603(c)(1) through (4).

requirements, as required by the Paperwork Reduction Act of 1995 (PRA).<sup>28</sup> In addition, pursuant to the Small Business Paperwork Relief Act of 2002,<sup>29</sup> the Commission will seek specific comment on how it might “further reduce the information collection burden for small business concerns with fewer than 25 employees.”

**C. Ex Parte Rules – Permit-But-Disclose.**

10. The proceeding this Notice initiates shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.<sup>30</sup> Persons making *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 *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 *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 *ex parte* meetings are deemed to be written *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 *ex parte* presentations and memoranda summarizing oral *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 (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this

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<sup>28</sup> The Paperwork Reduction Act of 1995 (PRA), Pub. L. 104 -13, 109 Stat 163 (1995) (codified in Chapter 35 of title 44 U.S.C.).

<sup>29</sup> The Small Business Paperwork Relief Act of 2002 (SBPRA), Pub. L. 107-198, 116 Stat. 729 (2002) (codified in Chapter 35 of title 44 U.S.C.); *see* 44 U.S.C. 3506(c)(4).

<sup>30</sup> 47 CFR 1.1200 *et seq.*

proceeding should familiarize themselves with the Commission's *ex parte* rules.

**D. Filing Requirements—Comments and Replies.**

11. Pursuant to sections 1.415 and 1.419 of the Commission's rules,<sup>31</sup> 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).<sup>32</sup>

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <https://apps.fcc.gov/ecfs/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent 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.
  - 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 45 L Street NE, Washington, DC 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.<sup>33</sup>

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<sup>31</sup> *Id.* 1.415, 1419.

<sup>32</sup> *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

<sup>33</sup> FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, 35 FCC Rcd 2788 (OMD 2020). See <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

12. *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](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

#### IV. ORDERING CLAUSES

13. **IT IS ORDERED**, pursuant to the authority found in sections 1, 4, 7, 301, 303, 307, 308, 309, 316, 319, 325(b), 336, 338, 399b, 403, 534, and 535 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154, 157, 301, 303, 307, 308, 309, 316, 319, 325(b), 336, 338, 399b, 403, 534, and 535, this Fourth Further Notice of Proposed Rulemaking **IS HEREBY ADOPTED**, effective thirty (30) days after the date of publication in the *Federal Register*.

14. **IT IS FURTHER ORDERED** that, pursuant to 47 U.S.C. 155(c), the Chief, Media Bureau, is granted delegated authority for the purpose of amending FCC Form 2100 as necessary to implement the licensing process adopted herein.

15. **IT IS FURTHER ORDERED** that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, **SHALL SEND** a copy of this Fourth Further Notice of Proposed Rulemaking, including the Initial and Final Regulatory Flexibility Analyses, to the Chief Counsel for Advocacy of the Small Business Administration.

Federal Communications Commission.

**Marlene Dortch,**  
*Secretary.*