



## FEDERAL COMMUNICATIONS COMMISSION

### 47 CFR Parts 11, 73, and 74

[MB Docket No. 20-401; FCC 24-35; FR ID 213398]

### Program Originating FM Broadcast Booster Stations

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule.

**SUMMARY:** In a Report and Order, the Federal Communications Commission (Commission) finds that allowing FM booster stations to originate content on a limited basis would serve the public interest. The Report and Order adopts rules to allow for the voluntary implementation of program originating FM booster stations, subject to future adoption of processing, licensing, and service rules proposed concurrently in a further notice of proposed rulemaking, published elsewhere in this issue of the **Federal Register**. The rule changes in this document are needed to expand the potential uses of FM booster stations, which currently may not originate programming. The intended effect is to allow radio broadcasters to provide more relevant localized programming and information to different zones within their service areas.

**DATES:** *Effective date:* [INSERT 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Report and Order (R&O), MB Docket No. 20-401; FCC 24-35, adopted on March 27, 2024, and released on April 2, 2024. The full text of this document will be available via the FCC's Electronic

Comment Filing System (ECFS), <https://www.fcc.gov/cgb/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). The Commission published the notice of proposed rulemaking (NPRM) at 86 FR 1909 on January 11, 2021.

### **Paperwork Reduction Act of 1995 Analysis**

This document does not contain new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Pub. L. 104-13. In addition, therefore, it does not contain any new or modified information collection burdens for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Pub. L. 107-198, see 44 U.S.C. 3506(c)(4).

### **Congressional Review Act**

The Commission has determined, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, concurs, that these rules are non-major under the Congressional Review Act, 5 U.S.C. 804(2). The Commission will send a copy of the R&O to Congress and the Government Accountability Office (GAO) pursuant to 5 U.S.C. 801(a)(1)(A).

### **Synopsis**

1. *Introduction.* In the R&O, the Commission expands the potential uses of FM boosters, which are low power, secondary stations that operate in the FM broadcast band. As a secondary service, FM booster stations are not permitted to cause adjacent-channel interference to other primary services or previously-authorized secondary stations. They must operate on the same frequency as the primary station, and have been limited to rebroadcasting the primary station's signal in its entirety (i.e., no transmission of original content). Historically, the sole use of FM boosters has been to improve signal strength of primary FM stations in areas where

reception is poor due to terrain or distance from the transmitter. The R&O amends the Commission's rules to allow FM and low power FM (LPFM) broadcasters to employ FM booster stations to originate programming for up to three minutes per hour. This represents a change from current requirements of 47 CFR 74.1201(f) and 74.1231 which, respectively, define FM booster stations as not altering the signal they receive from their primary FM station and prohibit FM boosters from making independent transmissions.

2. GeoBroadcast Solutions, LLC (GBS), the proponent of the rule changes, has developed technology designed to allow licensees of primary FM and LPFM broadcast stations to “geo-target” a portion of their programming by using FM boosters to originate different content for different parts of their service areas. Prior to proposing rule changes, GBS tested its technology under different conditions in three radio markets and concluded that the technology could be deployed for limited periods of time within the primary station's protected service contour without causing any adjacent-channel interference, and that any resulting co-channel interference (self-interference to the licensee's own signal) would be manageable and not detrimental to listeners. GBS filed a Petition for Rulemaking (Petition) seeking to allow FM boosters to originate programming. The Petition suggested that geo-targeted broadcasting can deliver significant value to broadcasters, advertisers, and listeners in distinct communities by broadcasting more relevant localized information and advancing diversity. Stations might, for example, air hyper-local news and weather reports most relevant to a particular community. Stations also might air advertisements or underwriting acknowledgements from businesses that are only interested in reaching small geographic areas, thereby enhancing the stations' ability to compete for local support. GBS pointed out that many other types of media, such as online content providers, cable companies, and newspapers are able to differentiate their content geographically, but that no such option has existed for radio broadcasting. On April 2, 2020, the Consumer and Governmental Affairs Bureau issued a public notice seeking comment on the Petition. The Petition garnered significant public participation.

3. The Commission released a notice of proposed rulemaking (NPRM) on December 1, 2020, FCC 20-166, to seek comment on the GBS proposal and published a Federal Register summary on January 11, 2021, 86 FR 1909. The NPRM posed questions to determine whether—and if so, how—to change FM booster station rules to permit FM boosters to transmit original geo-targeted content. It asked whether booster program origination may result in self-interference that would be disruptive to listeners and whether there are alternatives to GBS’s proposal. The NPRM also invited comment on whether to require programming originated by the FM booster station to be “substantially similar” to the primary station’s programming, as GBS had proposed, and how to define that term. Additionally, the NPRM sought comment on the potential impact of GBS’s proposal on primary station broadcasts, the Emergency Alert System (EAS), and digital HD Radio broadcasts. Finally, the NPRM asked commenters to address the potential public interest implications of geo-targeted content on localism, diversity, and competition in the media marketplace. GBS clarified in its comments that it was proposing that boosters be allowed to originate programming for up to three minutes per hour.

4. After the comment period closed, the Commission granted GBS’s request for experimental authority to conduct additional tests and required GBS to report the results. The reports contained detailed information about the technology’s operation in two additional radio markets, its compatibility with the EAS, and potential impact on digital FM broadcasts. Because this information was not available to the public during the NPRM comment cycle, the Commission issued a public notice on April 18, 2022, DA 22-429, opening the record for additional comments.

5. *Discussion.* The issues raised in this proceeding fall into three broad categories: (1) non-technical matters such as the advantages and disadvantages of program originating boosters from an economic and public interest perspective; (2) technical issues such as whether program originating boosters, if properly engineered, would cause harmful interference to their primary station or adjacent channel stations; and (3) administrative matters the Commission

would need to address in order to authorize program originating boosters and respond to any resulting operational issues. The R&O resolves the first two categories by determining that program originating boosters limited to originating programming for three minutes per hour would serve the public interest and that concerns about the technology's impact on advertising revenue of other broadcasters and harmful interference are speculative. The R&O also concludes that properly engineered program originating boosters will not cause interference to the primary station or adjacent channel stations. Any interference concerns that arise in individual circumstances can be addressed by the Bureau through conditions imposed as part of the authorization process. Thus, the R&O, the Commission finds that it is in the public interest to allow FM and low power FM (LPFM) broadcasters to use FM booster stations to provide booster-originated content on a voluntary, limited basis, subject to certain restrictions described in the R&O, and further subject to the adoption of licensing, interference and service rules proposed in the concurrently adopted FNPRM that would be required to authorize broadcasters to originate programming on boosters on a permanent basis. The ability to originate content will enable broadcasters to serve specific geographic segments within their broadcast areas, could open up more affordable advertising to smaller and minority-owned businesses, and generally provide broadcasters and listeners options for more targeted and varied advertising and content.

6. *Non-technical Matters.* In order to distinguish between a booster station used only to fill in gaps in service and a program originating FM booster station, the R&O adopts a new definition of program originating boosters. As suggested by GBS, the definition provides that program originating boosters may air no more than three minutes per hour of booster-originated content. Commenters, while focusing on the overall pros and cons of booster-originated content, did not raise any concern that a three minute per hour limitation is too long or too short. The Commission believes that three minutes per hour is sufficient to achieve the technology's goals, and provides the best balance between the desire to offer broadcasters the flexibility to originate content on boosters, and the need for safeguards to minimize the risks of

interference as the Commission assesses the rollout of this new technology. Given adoption of this three-minute limit, the Commission finds it unnecessary to further limit the definition of a program originating booster as one airing programming that is “substantially similar” to the main station’s, as GBS had also proposed.

7. In addition, the R&O determines that the potential public interest advantages of program originating boosters outweigh potential disadvantages. It finds that concerns about the impact of program originating boosters on advertising revenue of other broadcasters are not supported by the record. Commenters differ on whether program originating boosters would be beneficial or harmful to stations, advertisers, listeners, the radio industry, and the overall economy. There is general consensus among the commenters that the radio industry has experienced declining revenues over the past decade, and continues to lose advertising market share to other media sources. However, while supporters view program originating boosters as a solution capable of reversing that trend, opponents believe such booster use would exacerbate these financial challenges. The record reflects that the potential costs and benefits of program originating boosters on broadcast revenue will likely vary from station to station and market to market. Because the use of boosters would be voluntary for stations and potentially beneficial to listeners and consumers, the R&O finds that the public interest will be served by providing each individual radio licensee the opportunity to evaluate whether or not program originating booster use would be advantageous under its own unique circumstances.

8. Commenters also differ in opinion on the potential impact of program originating boosters on advertising revenue. Supporting commenters state that program originating boosters can provide advertisers with better opportunities to direct messages to the listeners they want to reach, and may also provide listeners with content that is more relevant and engaging to their areas of interest. Opposing commenters, however, are concerned that targeted programming or advertising could result in intentional or inadvertent socio-economic “redlining,” giving advertisers the means to reach more “desirable” neighborhoods and to overlook others. Some

argue that geo-targeting would make it easier for businesses to avoid advertising to minority and low-income communities. Other commenters dispute these arguments because their review of business and academic literature found no documented redlining by other types local media that can already offer geo-targeted content.

9. The R&O finds that program originating boosters could further the public interest by enabling radio stations to seek new sources of revenue while providing audiences with hyper-local content. Program originating boosters could enhance the competitiveness of the overall FM radio industry by expanding the range of advertising opportunities available in the relevant geographic areas. The R&O acknowledges the concern in the comments that program originating boosters could drive down advertising rates and thereby could negatively impact radio stations' revenue, but concludes that this concern does not justify rejecting the authorization of program originating boosters. Whether a broadcaster could recoup any lost revenues by selling more spots could vary from market to market and from station to station. It would be up to each broadcaster to weigh its own individual circumstances, market, and needs of its community of license to arrive at a voluntary decision of whether to use boosters for limited program origination. Although the Commission agrees with some comments that the cost of building and operating multiple boosters may be too significant for some broadcasters, it finds that, in many ways, this concern is not different than the decisions that broadcasters routinely make about investment in technologies. The R&O rejects as speculative the argument that stations that would otherwise not adopt program originating boosters will allegedly be forced to do so in order to compete with lower advertising rates offered by those stations in a market that have adopted the technology. The R&O concludes that this theoretical risk does not outweigh the potential public interest benefits of the technology. Although the Commission has considered the concern that some broadcasters and advertisers might have an economic motivation to use program originating boosters to the disadvantage of certain communities or geographic areas, the Commission believes that such an outcome would be unlikely, based on

commenter research finding no documentation of such practices by other local media offering targeted advertising. With respect to concerns that GBS is a single vendor with a proprietary technology, the Commission states that it has no reason to conclude that providers of program originating booster technologies will have a relationship with a broadcast licensee that is materially different from any other technology vendor. Nonetheless, the Commission emphasizes that existing broadcast ownership rules will continue to apply to licensees, including those that use program originating boosters.

10. *Technical Matters/Interference Issues.* With respect to technical issues, the Commission concludes that properly engineered program originating boosters will not cause objectionable co-channel interference to the primary station or adjacent channel interference to other stations. It further determines that such boosters, when properly engineered, are compatible with EAS and HD Radio.

11. *Co-Channel Self-Interference.* The main interference concern in the record is whether program originating boosters will cause self-interference to the primary station associated with the booster. Due to the fact that boosters operate on the same channel as the primary station and within the primary station's coverage area, there always is a risk of self-interference. Existing rules currently take this into account by permitting a booster to cause "limited interference" to its primary station provided it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the principal community of its primary station. Because the purpose of programming originating boosters is to replace the signal of the primary station for limited periods, the R&O considers the extent to which self-interference is acceptable.

12. GBS and supporting commenters argue that program originating boosters can be configured to ensure that any co-channel interference will be brief. They base this assertion on the tests that GBS conducted. They also note that broadcasters have a business incentive to avoid self-interference to the greatest extent possible.

13. Opposing commenters reject these assertions, and are concerned that self-interference might diminish the audience experience and lead to listeners becoming frustrated, tuning away, and suspecting that their car radios are defective. These comments focus primarily on the methodology of the GBS tests, which they contend were optimized to avoid showing interference and inadequate by omitting critical scenarios. Even commenters that do not completely oppose the Petition urge the Commission to proceed cautiously and to require further testing.

14. The R&O finds the test record has shown that properly engineered program originating boosters can be implemented without causing more than a limited amount of co-channel interference. The R&O's decision to limit program origination to three minutes per hour combined with the economic incentive broadcasters have to minimize self-interference will help to reduce any potential for harmful interference from a booster's airing of programming different from that of the primary station. The Commission amends § 74.1203(c) to clarify that a booster's limited origination of programming does not cause interference into or disrupt the service of the primary station solely because it originates programming different from the primary station. The Commission also amends § 74.1203(c) to eliminate the specific prohibition on interference within the primary station's principal community as applied to program originating boosters. The Commission believes a broadcaster's economic incentive to avoid self-interference negates the ongoing need for this restriction as applied to program originating boosters. Retaining the restriction could impede the voluntary deployment of program originating boosters, and the corresponding public interest benefits, even in cases of a well-engineered transition zone located within the primary station's principal community. However, the Commission retains the requirement that all boosters may provide only "limited" interference to emphasize the Commission's expectation that booster stations minimize their impact on their primary station wherever possible. The Commission will not hesitate to address non-compliance if poorly engineered program originating booster systems result in unduly large transition zones

or otherwise cause excessive interference.

15. *Adjacent Channel Interference.* The Commission finds that record does not contain any evidence that allowing boosters to originate programming increases their risk of generating adjacent channel interference. A limited number of commenters address adjacent channel interference. These commenters support the Commission's conclusion that program originating boosters will not cause harmful interference to first-adjacent or second adjacent channel stations.

16. The R&O finds that existing rules provide adequate protection to ensure boosters do not cause adjacent channel interference. These rules include a requirement that booster station signals must be contained within the coverage area of the primary station; operate with a signal 6 dB less than the signal of a first-adjacent channel full-service station; and be subject to a process for addressing any claims of actual interference. As an additional safeguard in this proceeding, however, the Commission adopts a notification requirement so that the Commission and interested parties are able to identify which booster stations are originating content. This will allow the Commission to address more quickly any reports of interference or other issues that may arise through the introduction of program originating boosters.

17. *EAS Compatibility.* Consistent with the Commission's findings about overall interference from program originating boosters, the R&O concludes these stations can be implemented without causing harmful interference to the EAS. GBS tests in two markets document successful reception of EAS tones from both the primary station and the program originating booster. Engineering consultants hired by supporting commenters and GBS state that program origination on boosters will have no effect on EAS because the signals and data contained within the EAS tones will override any booster-originated content before it is delivered to the booster.

18. Opposing commenters, however, argue that the EAS tests were optimized and inadequate. Commenters also express concerns that individuals crossing an interference zone at

a slow rate (which may be likely during an emergency situation when traffic would be heavier), could experience longer interruptions to emergency alerts.

19. The R&O notes that no commenter presented definitive evidence that program originating boosters are incompatible with the EAS or any evidence that the booster's substitution of programming caused a dead zone unable to receive an emergency alert. To ensure that listeners to program originating boosters receive timely emergency alerts, the R&O requires program originating boosters to receive and broadcast all emergency alerts in the same manner as their primary station. While the Commission concludes that this requirement will ensure that EAS messages are passed through, it states that in light of the significant concerns that interested parties have expressed about the EAS, and the importance of the EAS to public safety, the Commission will carefully monitor the implementation of program originating boosters and may revisit this issue if it receives reports of interference to EAS tests and alerts.

20. *Impact On HD Radio.* Consistent with findings about self-interference and EAS compatibility, the R&O concludes that it is possible for program originating boosters to minimize disruption to HD Radio. GBS, based on tests at one station airing HD Radio, reports that boosters can originate programming without material degradation of the listener's experience, when deployed with optimal system design and successful synchronization. Xperi, the developer of HD Radio, while having some reservations about the impact on HD due to GBS's limited testing, concludes that the listener experience was "generally good" when characterized by well-designed booster antennas to diminish transition zone size, and absent synchronization issues. Independent engineers specializing in HD Radio agree that when professionally designed and deployed with successful synchronization, the technology causes "no appreciable degradation" to HD Radio signals.

21. Yet, a number of commenters raise concerns that the impact of program originating boosters on digital radio has not been sufficiently examined because the one digital station used for GBS testing was protected by terrain obstructions, and because the test failed to

assess HD3 and HD4 subchannels. Commenters also argue that program originating boosters could cause significant disruption to HD Radio in transition regions between the booster and primary signals, causing listener dissatisfaction. Xperi also asserts that its own testing confirmed signal degradation in transition zones due to frequent switching between main and zone audio programs, and loss of both physical and digital synchronization, resulting in audio outages. Commenters therefore request further testing and propose potential scenarios that have not yet been tested.

22. The Commission concludes that program originating boosters can be designed to minimize interference to or disruption of HD Radio signals. The R&O finds it significant that Xperi, the developer of HD Radio, has not opposed the adoption of program originating boosters even though it has a strong incentive to prevent interference to digital operations. The Commission also based its conclusion on its determination that the only potential interference concern of any significance from program originating boosters is co-channel interference from the booster to the primary station. Broadcasters that find they are unable to engineer boosters to avoid co-channel interference to their HD Radio operations can opt not to implement those boosters. The definition of program originating boosters adopted in the R&O, which limits program origination to three minutes per hour, further reduces the risk of widespread interference to HD Radio broadcasts. Nonetheless, the Commission recognizes commenter assertions that testing to date has not examined many typical digital radio implementations. If the Commission receives reports of significant disruption to digital broadcasts, it may revisit this issue.

23. Since current use of boosters is a response to weak signals caused by terrain, few stations now use multiple boosters. The new ability to originate programming over boosters has the potential to significantly increase the use of booster stations. Accordingly, in the FNPRM, the Commission seeks comment on a program originating booster cap or other measures, and whether they will be necessary to ensure compliance with the Local Community Radio Act of 2010 (LCRA), and its license availability requirements regarding FM translator stations, LPFM

stations, and FM booster stations. During the interim when the Commission is considering these matters proposed in the FNPRM, it will limit to 25 the number of program originating boosters licensed to each full-service FM station.

24. *Part 5 Authorizations.* As of the effective date of the R&O and until the effective date of final service rules based on the proposals in the FNPRM, a licensed FM station may originate programming on a booster under a one-year, renewable experimental authorization obtained pursuant to 47 CFR part 5. The Commission views experimental use of program-originating boosters as an appropriate mechanism during the pendency of the FNPRM because it allows the FCC to closely monitor the rollout of the technology. In the FNPRM, the Commission seeks comment on the proposed processing, licensing, and service rules required to authorize broadcasters to originate programming on boosters on a permanent basis.

25. *Correction of Spelling Error.* The Commission also corrects an error in the spelling of the word “radial” in 47 CFR 74.1235.

## **PROCEDURAL MATTERS**

### **Final Regulatory Flexibility Analysis**

26. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Amendment of Section 74.1231(i) of the Commission’s Rules on FM Broadcast Booster Stations*, Notice of Proposed Rulemaking (NPRM), released in December 2020 (86 FR 1909, January 11, 2021). The Federal Communications Commission (Commission) sought written public comment on the proposals in the NPRM, including comment on the IRFA. No comments were filed addressing the IRFA. The Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA. See 5 U.S.C. 604.

#### **A. Need For, and Objectives of, the Report and Order**

27. In the Report and Order, the Commission finds that it is in the public interest to allow FM and low power FM (LPFM) broadcasters to use FM booster stations to provide booster-originated content on a voluntary, limited basis, subject to certain restrictions described

in the Report and Order, and further subject to the adoption of licensing, interference and service rules for origination of content on boosters as proposed in the concurrently adopted FNPRM. In order to distinguish between a fill-in station and a Program Originating FM booster station, the Report and Order adopts a new definition of program originating boosters. The ability to originate content will enable broadcasters to serve geographic segments of their broadcast areas, could open up more affordable advertising to smaller and minority-owned businesses, and will generally provide broadcasters and listeners options for more targeted and varied advertising and content that FM stations are not able to provide today.

28. The issues raised in this proceeding fall into three broad categories: (1) non-technical matters such as the advantages and disadvantages of program originating boosters from an economic and public interest perspective; (2) technical issues such as whether program originating boosters, if properly engineered, would cause harmful interference to their primary station or adjacent channel stations; and (3) administrative matters the Commission would need to address in order to authorize program originating boosters and respond to any resulting operational issues. The Report and Order resolves the first category by adopting a rule that determines program originating boosters limited to originating programming for three minutes per hour would serve the public interest. In addition, the Report and Order determines concerns about the technology's impact on advertising revenue of other broadcasters and harmful interference are not supported by the record. It also addresses the second category about interference by concluding that properly engineered program originating boosters will not cause interference to the primary station or adjacent channel stations. The Report and Order also requires that program originating boosters receive and broadcast all emergency alerts in the same manner as their primary station. While stations will not be permitted to install or operate program originating boosters pursuant to these rules until we adopt final service rules in response to the FNPRM and such rules have been reviewed by the Office of Management and Budget, the Commission provides that pending adoption and OMB review of such rules, stations can pursue

experimental authorizations for installation and use of program originating boosters pursuant to part 5 of our rules. In the FNPRM, the Commission seeks comment on the proposed processing, licensing, and service rules required to authorize broadcasters to originate programming on boosters on a permanent basis.

**B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA**

29. Parties that filed comments did not specifically reference the IRFA in their comments. Some commenters, however, expressed concern about increased costs, such as the cost of building and operating multiple boosters, particularly for smaller broadcasters, and the initial outlay to cover infrastructure and maintenance expenses, and additional expenses to hire and train staff, and purchase content management systems to feed secondary programming to the boosters. In addition, commenters claim the GeoBroadcast Solutions (GBS) proprietary technology could ultimately lead to unfavorable rates for small entities that are late adopters of the technology. These and other concerns are discussed in section F of this FRFA.

**C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration**

30. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments. 5 U.S.C. 604(a)(3). The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

**D. Description and Estimate of the Number of Small Entities to Which the Rules Apply**

31. The RFA directs the 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. 5 U.S.C. 604(a)(4). The RFA generally defines the term “small entity” as having the same

meaning as the terms “small business,” “small organization,” and “small government jurisdiction.” Id. 601(6). In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act. Id. 601(3). 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. 15 U.S.C. 632.

32. *Radio Stations.* This industry is comprised of “establishments primarily engaged in broadcasting aural programs by radio to the public.” 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 firms having \$41.5 million or less in annual receipts as small. 13 CFR 121.201. U.S. Census Bureau data for 2017 show that 2,963 firms operated in this industry during that year. Of this number, 1,879 firms operated with revenue of less than \$25 million per year. Id. Based on this data and the SBA’s small business size standard, we estimate a majority of such entities are small entities.

33. The Commission estimates that as of September 30, 2023, there were 4,452 licensed commercial AM radio stations and 6,670 licensed commercial FM radio stations, for a combined total of 11,122 commercial radio stations. Of this total, 11,120 stations (or 99.98 %) had revenues of \$41.5 million or less in 2022, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Database (BIA) on October 4, 2023, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates that as of September 30, 2023, there were 4,263 licensed noncommercial (NCE) FM radio stations, 1,978 low power FM (LPFM) stations, and 8,928 FM translators and boosters. The Commission however does not compile, and otherwise does not have access to financial information for these radio 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 radio station licensees, we presume that all of these entities qualify as small entities under the SBA small business size standard.

34. We note, however, that in assessing whether a business concern qualifies as “small” under the above definition, business (control) affiliations must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. In addition, another element of the definition of “small business” requires that an entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific radio or television broadcast station is dominant in its field of operation. Accordingly, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and is therefore possibly over-inclusive. An additional element of the definition of “small business” is that the entity must be independently owned and operated. Because it is difficult to assess these criteria in the context of media entities, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and similarly may be over-inclusive.

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

35. The Report and Order adopts rules requiring compatibility between program originating boosters and the Emergency Alert System (EAS) as well as rules limiting program origination to three minutes per hour. Stations that wish to originate programming on a booster station may request experimental authorization pursuant to § 5.203 of the Commission’s rules, which would require an application describing the nature, purpose, and duration of the experimental authorization, and require the station to file any supplemental reports that flow from this authorization. The Commission’s Media Bureau is required to provide expedited treatment for any such requests. As discussed previously, the use of program originating boosters will be voluntary. To the extent that broadcasters choose to use boosters in this way,

they will be required to follow the rules adopted in the Report and Order. We also note the Commission concurrently adopted an FNPRM in this proceeding, which proposes modified reporting requirements for FM booster stations.

**F. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered**

36. The RFA requires an agency to provide, “a description of the steps the agency has taken to minimize the significant economic impact on small entities...including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.” 5 U.S.C. 604(a)(6). In the Report and Order, the Commission adopted measures authorizing program originating boosters to benefit the public by providing broadcasters and listeners with increased options for more targeted and varied advertising and content that many stations are not able to currently provide. We sought to weigh the impact of these measures on small entities against the public interest benefits gained from them and have determined that the benefits outweigh the costs. Commenters have asserted that while booster use causes advertising revenues to increase, the gains may be offset by increased costs. Other commenters claim purchasing program originating boosters will necessitate additional expenses, such as purchasing additional content management systems to feed the secondary programming to the boosters, new sales software to handle sub-areas, and hiring and retraining staff. In contrast, supporters of FM geotargeting claim the technology will enable small and minority-owned broadcasters to become more competitive by attracting new advertisers and listeners, and offer targeted advertisements relevant to the local community.

37. Commenters also raised concerns about the potential of GBS’ proprietary technology to create unfavorable rates for small entities who are late adopters. However, we do not require broadcasters to use the GBS system. Other, more economical solutions that are in compliance with our interference rules may be viable options for broadcasters. Lastly, we

considered concerns regarding the potential impact of program originating boosters on minority and female broadcasters, however, the record does not provide clear evidence concerning the potential impact to these entities. While we acknowledge and have considered these concerns, we have determined that the public interest benefits of localism, diversity, and competition obtained by the adopted rules outweigh those potential risks.

**G. Report to Congress**

38. The Commission will send a copy of the Report and Order, including the FRFA, in a report to Congress pursuant to the Congressional Review Act, 5 U.S.C 801(a)(1)(A). In addition, the Commission will send a copy of the Report and Order, including the FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Report and Order and FRFA (or summaries thereof) will also be published in the Federal Register. Id. 604(b).

39. **Paperwork Reduction Act Analysis.** This document does not contain new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. In addition, therefore, it does not contain any new or modified information collection burdens for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4).

40. **Congressional Review Act.** The Commission has determined, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, concurs that these rules are “non-major” under the Congressional Review Act, 5 U.S.C. 804(2). The Commission will send a copy of the Report and Order to Congress and the Government Accountability Office pursuant to 5 U.S.C. 801(a)(1)(A).

**ORDERING CLAUSES**

41. Accordingly, IT IS ORDERED that pursuant to the authority contained in sections 1, 2, 4(i), 7, 301, 302, 303, 307, 308, 309, 316, 319, and 324 of the Communications Act of 1934, 47 U.S.C. 151, 154, 157, 301, 302, 303, 307, 308, 309, 316, 319, and 324, the Report and

Order IS ADOPTED.

42. IT IS FURTHER ORDERED that the Report and Order and the amendments to the Commission's rules set forth in Appendix B of the Report and Order SHALL BE EFFECTIVE 30 days after publication of a summary in the *Federal Register*.

43. IT IS FURTHER ORDERED that the Commission's Office of the Secretary, Reference Information Center, SHALL SEND a copy of the Report and Order and Further Notice of Proposed Rulemaking, including the Final and Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration, and shall cause it to be published in the *Federal Register*.

44. IT IS FURTHER ORDERED that Office of the Managing Director, Performance Program Management, SHALL SEND a copy of the Report and Order and Further Notice of Proposed Rulemaking in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, 5 U.S.C. 801(a)(1)(A).

### **List of Subjects**

#### **47 CFR Part 11**

Radio.

#### **47 CFR Part 73**

Communications equipment, Radio, Reporting and recordkeeping requirements.

#### **47 CFR Part 74**

Communications equipment, Radio, Reporting and recordkeeping requirements,  
Research.

FEDERAL COMMUNICATIONS COMMISSION

**Marlene Dortch,**

*Secretary.*

## Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 11, 73, and 74 as follows:

### **PART 11 – EMERGENCY ALERT SYSTEM (EAS)**

1. The authority citation for part 11 continues to read as follows:

**Authority:** 47 U.S.C. 151, 154(i) and (o), 303(r), 544(g), 606, 1201, 1206.

2. Amend § 11.11 by revising paragraph (a) introductory text, table 1 to paragraph (a), and paragraph (b) to read as follows:

#### **§ 11.11 The Emergency Alert System (EAS).**

- (a) The EAS is composed of analog radio broadcast stations including AM, FM, Low-power FM (LPFM), and program originating FM booster stations; digital audio broadcasting (DAB) stations, including digital AM, FM, LPFM, and program originating FM booster stations; Class A television (CA) and Low-power TV (LPTV) stations; digital television (DTV) broadcast stations, including digital CA and digital LPTV stations; analog cable systems; digital cable systems which are defined for purposes of this part only as the portion of a cable system that delivers channels in digital format to subscribers at the input of a Unidirectional Digital Cable Product or other navigation device; wireline video systems; wireless cable systems which may consist of Broadband Radio Service (BRS), or Educational Broadband Service (EBS) stations; DBS services, as defined in § 25.701(a) of this chapter (including certain Ku-band Fixed-Satellite Service Direct to Home providers); and SDARS, as defined in § 25.201 of this chapter. These entities are referred to collectively as EAS Participants in this part, and are subject to this part, except as otherwise provided in this section. At a minimum EAS Participants must use a common EAS protocol, as defined in § 11.31, to send and receive emergency alerts, and comply with the requirements set forth in § 11.56, in accordance with the following tables:

Table 1 to paragraph (a) - Analog and Digital Broadcast Station Equipment Deployment Requirements

EAS Equipment Requirement	AM & FM & Program originating FM booster station	Digital AM & FM & Program originating FM booster station	Analog & Digital FM class D	Analog & Digital LPFM & Program originating FM booster station	DTV	Analog & Digital Class A TV	Analog & Digital LPTV
EAS Decoder <sup>1</sup>	Y	Y	Y	Y	Y	Y	Y
EAS Encoder	Y	Y	N	N	Y	Y	N
Audio message	Y	Y	Y	Y	Y	Y	Y
Video message	N/A	N/A	N/A	N/A	Y	Y	Y

<sup>1</sup> EAS Participants may comply with the obligations set forth in § 11.56 to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device, as specified in § 11.56(b).

\* \* \* \* \*

(b) Analog class D non-commercial educational FM stations as defined in § 73.506 of this chapter, digital class D non-commercial educational FM stations, analog LPFM stations as defined in §§ 73.811 and 73.853 of this chapter, digital LPFM stations, analog LPTV stations as defined in § 74.701(f), and digital LPTV stations as defined in § 74.701(k) of this chapter are not required to comply with § 11.32. Analog and digital LPTV stations that operate as television broadcast translator stations, as defined in § 74.701(b) of this chapter, are not required to comply with the requirements of this part. FM broadcast booster stations as defined in § 74.1201(f)(1) of this chapter and FM translator stations as defined in § 74.1201(a) of this chapter which entirely rebroadcast the programming of other local FM broadcast stations are not required to comply with the requirements of this part. Program originating FM booster stations as defined in § 74.1201(f)(2) of this chapter must comply with the requirements of this part as set forth in table 1 to paragraph (a) of this section. International broadcast stations as defined in § 73.701 of this chapter

are not required to comply with the requirements of this part. Analog and digital broadcast stations that operate as satellites or repeaters of a hub station (or common studio or control point if there is no hub station) and rebroadcast 100 percent of the programming of the hub station (or common studio or control point) may satisfy the requirements of this part through the use of a single set of EAS equipment at the hub station (or common studio or control point) which complies with §§ 11.32 and 11.33.

\* \* \* \* \*

### **PART 73 – RADIO BROADCAST SERVICES**

3. The authority citation for part 73 continues to read as follows:

**Authority:** 47 U.S.C. 154, 155, 301, 303, 307, 309, 310, 334, 336, 339.

4. Amend § 73.860 by:

- a. Removing the word “and” at the end of paragraph (b)(3);
- b. Removing the period at the end of paragraph (b)(4) and adding “; and” in its place; and
- c. Adding paragraph (b)(5).

The addition reads as follows:

#### **§ 73.860 Cross-ownership.**

\* \* \* \* \*

(b) \* \* \*

- (5) Booster stations commonly owned by LPFM stations may conduct transmissions independent of those broadcast by the primary LPFM station for a period not to exceed three minutes of each broadcast hour. This is a strict hourly limit that may not be exceeded by aggregating unused minutes of program origination.

\* \* \* \* \*

### **PART 74 – EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTIONAL SERVICES**

5. The authority citation for part 74 continues to read as follows:

**Authority:** 47 U.S.C. 154, 302a, 303, 307, 309, 310, 325, 336 and 554.

6. Amend § 74.1201 by revising paragraph (f) to read as follows:

**§ 74.1201 Definitions.**

\* \* \* \* \*

(f) *FM broadcast booster station*—(1) *In general.* A station in the broadcasting service operated for the sole purpose of retransmitting the signals of an FM radio broadcast station, by amplifying and reradiating such signals, without significantly altering any characteristic of the incoming signal other than its amplitude. Unless specified otherwise, an FM broadcast booster station includes LPFM boosters as defined in paragraph (l) of this section.

(2) *Program originating FM booster station.* An FM broadcast booster station that retransmits the signals of an FM radio broadcast station or a low-power FM broadcast station, and that may replace the content of the incoming signal by originating programming for a period not to exceed three minutes of each broadcast hour. This is a strict hourly limit that may not be exceeded by aggregating unused minutes of program origination. A program originating FM booster station is subject to the same technical and interference protection requirements as are all FM broadcast booster stations, including but not limited to those set forth in §§ 74.1203 through 74.1262.

\* \* \* \* \*

7. Amend § 74.1203 by revising paragraph (c) to read as follows:

**§ 74.1203 Interference.**

\* \* \* \* \*

(c) An FM broadcast booster station will be exempted from the provisions of paragraphs (a) and (b) of this section to the extent that it may cause limited interference to its primary station's signal, *provided* it does not disrupt the existing service of its primary station or

cause such interference within the boundaries of the principal community of its primary station. A program originating FM booster station will be exempted from the provisions of paragraphs (a) and (b) to the extent that it may cause limited interference to its primary station's signal. A properly synchronized program originating FM booster station transmitting programming different than that broadcast by the primary station, subject to the limits set forth in § 74.1201(f)(2), is not considered to cause interference to its primary station solely because such originated programming differs from that transmitted by the primary station.

\* \* \* \* \*

8. Amend § 74.1231 by:
  - a. Revising paragraph (i);
  - b. Removing the note following paragraph (i); and
  - c. Adding paragraph (j).

The addition reads as follows:

**§ 74.1231 Purpose and permissible service.**

\* \* \* \* \*

- (i) FM broadcast booster stations provide a means whereby the licensee of an FM broadcast station may provide service to areas in any region within the primary station's predicted authorized service contours. An FM broadcast booster station is authorized to retransmit only the signals of its primary station which have been received directly through space and suitably amplified, or received by alternative signal delivery means including, but not limited to, satellite and terrestrial microwave facilities. The FM booster station shall not retransmit the signals of any other station nor make independent transmissions except as set forth in § 74.1201(f)(2), and except that locally generated signals may be used to excite the booster apparatus for the purpose of conducting tests and measurements essential to the proper installation and maintenance of the apparatus.

(j) In the case of an FM broadcast station authorized with facilities in excess of those specified by § 73.211 of this chapter, an FM booster station will only be authorized within the protected contour of the class of station being rebroadcast as predicted on the basis of the maximum powers and heights set forth in that section for the applicable class of FM broadcast station concerned.

9. Amend § 74.1232 by revising paragraph (f) to read as follows:

**§ 74.1232 Eligibility and licensing requirements.**

\* \* \* \* \*

(f) An FM broadcast booster station will be authorized only to the licensee or permittee of the FM radio broadcast station whose signals the booster station will retransmit, to serve areas within the protected contour of the primary station, subject to § 74.1231(j).

\* \* \* \* \*

10. Amend § 74.1235 by revising paragraph (b) introductory text to read as follows:

**§ 74.1235 Power limitations and antenna systems.**

\* \* \* \* \*

(b) An application for an FM translator station, other than one for fill-in service which is covered in paragraph (a) of this section, will not be accepted for filing if it specifies an effective radiated power (ERP) which exceeds the maximum ERP (MERP) value determined in accordance with this paragraph (b). The antenna height above average terrain (HAAT) shall be determined in accordance with § 73.313(d) of this chapter for each of 12 distinct radials, with each radial spaced 30 degrees apart and with the bearing of the first radial bearing true north. Each radial HAAT value shall be rounded to the nearest meter. For each of the 12 radial directions, the MERP is the value corresponding to the calculated HAAT in the following tables that is appropriate for the location of the translator. For an application specifying a nondirectional transmitting antenna, the specified ERP must not exceed the smallest of the 12 MERP's. For an application

specifying a directional transmitting antenna, the ERP in each azimuthal direction must not exceed the MERP for the closest of the 12 radial directions.

\* \* \* \* \*

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