Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

Amendment of Part 11 of the Commission’s Rules Regarding the Emergency Alert System

Wireless Emergency Alerts

PS Docket No. 15-94

PS Docket No. 15-91

COMMENTS OF THE MOTION PICTURE ASSOCIATION, INC.

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COMMENTS OF THE MOTION PICTURE ASSOCIATION, INC.

I. INTRODUCTION AND SUMMARY.

The Motion Picture Association, Inc. (“MPA”) submits these comments to the Federal Communications Commission (“Commission”) in response to the Notice of Inquiry released on March 19, 2021 (the “NOI”) in the above-captioned matter.1 MPA is a not-for-profit trade association founded in 1922 to address issues of concern to the motion picture industry. Since then, MPA has served as the voice and advocate of the film and television industry around the world, advancing the business and art of storytelling, protecting the creative and artistic freedoms of storytellers, and bringing entertainment and inspiration to audiences worldwide.

MPA’s members are Netflix Studios, LLC, Sony Pictures Entertainment Inc., Paramount Pictures Corporation, Universal City Studios LLC, Walt Disney Studios Motion Pictures, and Warner Bros. Entertainment Inc. These companies and their affiliates are the leading producers and disseminators of filmed entertainment, which consumers enjoy via subscription and ad-supported services, by viewing discs or downloaded copies from online retailers, and by visiting theaters.

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In keeping with their commitment to encouraging the creation and dissemination of a wide variety of filmed entertainment through a wide variety of platforms and distributors, the MPA’s members or affiliates have developed and now operate some of the most prominent direct-to-consumer content offerings in the world, including Netflix, Disney+, Hulu, ESPN+, Peacock, Paramount+, and HBO Max.

MPA agrees that delivery of emergency alert information that is timely, accurate, relevant, and potentially life-saving to the public is of paramount importance, and applauds Congress and the Commission for their ongoing efforts to improve such alert systems, including the Emergency Alert System (“EAS”) and Wireless Emergency Alert System (“WEA”). In EAS and WEA, the Commission has established robust programs to ensure that individuals receive timely and relevant emergency alerts, and the Commission is taking important efforts to improve those services in the proceeding initiated alongside the NOI.²

As described more fully below, however, the Commission should advise Congress that it should not seek to expand the class of entities required to participate in EAS to include streaming services. Such a step would (1) unnecessarily and inadvisably depart from Commission practice and precedent in identifying the entities to which emergency alerting obligations apply, (2) impose significant burdens and costs on streaming services despite the fact that such a step would not be likely to meaningfully increase the number of affected people who receive any given emergency alert, and (3) be enormously technically difficult, if not entirely impracticable. As a result, the imposition of such obligations would be unlikely to achieve Congress’s and the Commission’s goals of delivering timely, accurate, and geographically relevant alerts to the maximum number of potentially affected persons in case of an emergency, while avoiding the

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² NPRM at ¶¶ 12-56.
delivery of redundant alerts and creating alert fatigue. MPA therefore urges the Commission to conclude, and to report to Congress, that requiring streaming services to participate in EAS would be both unnecessary and tremendously burdensome, if not entirely impracticable, as a technical matter.

II. IMPOSING EAS OBLIGATIONS ON STREAMING SERVICES WOULD DEPART FROM COMMISSION PRECEDENT AND PRACTICE.

The Commission should advise Congress that it should not focus any prospective EAS obligations on streaming services, for a number of reasons. Fundamentally, such an approach would be inconsistent with the Commission’s prior actions on emergency alerts. Streaming services are, in this context, far more similar to individual broadcast networks, cable channels, and other content providers whose offerings are delivered over the infrastructure operated by the current EAS Participants than they are to such Participants themselves.

Designating streaming services as a provider of EAS alerts would be a departure from the current, longstanding, and successful framework for the delivery of EAS alerts and emergency alerts more broadly. Each of the entities that delivers EAS alerts today—radio and television broadcasters, cable systems, satellite radio and television providers, and wireline video providers—controls the underlying distribution mechanism (e.g., a television station’s broadcast infrastructure or a cable system operator’s network) over which emergency alerts are delivered. Additionally, among the EAS Participants today, and particularly in any geographic area subject

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3 This includes, in addition to the practical and policy considerations set forth in detail herein, the fact that the Commission’s authority to prescribe emergency alerting obligations has been confined to those entities, such as the EAS Participants, that are subject to the Commission’s jurisdiction. See, e.g., 47 U.S.C. §§ 303(r), 544(g), 606; Amendment of Part 73, Subpart G, of the Commission’s Rules Regarding the Emergency Broadcast System, FO Docket Nos. 91-301, 91-171, Report and Order and Further Notice of Proposed Rulemaking, FCC 94-288, at ¶¶ 5-6 (1994).

4 47 C.F.R. § 11.11.

5 Id.; see also NPRM and NOI at ¶ 3.
to a given emergency alert, there is a relatively small and defined universe of providers. These providers are generally geographically proximate to the population to which they are providing emergency alerts. For example, broadcast television stations serve a community of license and transmit within their signal contour, and cable system operators and wireline video providers serve known service locations within their fixed footprints. Further, with respect to cable television, satellite television and radio, and wireline video service, the end user will generally have a relationship with a single provider, and the number of such entities is thus relatively constrained.

Streaming services, on the other hand, are less like the physical networks and systems that provide EAS today, and are more similar to the providers of content delivered over such systems. In this context, a streaming service is analogous to an individual broadcast network or cable channel. Sensibly, because such content providers do not control the underlying distribution architecture, do not have knowledge of where a particular end user receiving their content over such distribution architecture might be located, and are far greater in number than the EAS Participants, these individual content providers are not responsible for delivery of EAS alerts.

Like cable channels or broadcast networks, streaming services do not generally control the underlying device or network with which the end user interacts to access streaming content. To the contrary, streaming services may be accessed through the Internet via a wide variety of devices and platforms, including smart TVs; devices like Roku’s streaming players, AppleTV, and Amazon’s Fire TV Stick; apps on smart phones and tablets; and through web browsers. Streaming services likewise operate nation- or worldwide, and are accessed over the Internet rather than offered at fixed locations within prescribed geographies, and thus generally do not
have the same knowledge of user locations. Additionally, similar to individual cable channels and broadcast networks, the amount of streaming services available today far outnumber EAS Participants, particularly in a given geographic area, and many users subscribe to or otherwise use multiple streaming services. In fact, J.D. Power reported earlier this year that, as of December 2020, the average U.S. household subscribed to four streaming services, with 13% of survey respondents reporting that they use seven or more streaming services. Moreover, the 3GPP definition of “streaming service” referenced in the NOI would capture an enormous number of services that provide streaming video, which go well beyond the well-known subscription services like Netflix and Disney+ offered by the MPA’s members or affiliates. For example, “streaming services” would include services like YouTube, Vimeo, TikTok, Twitch, Crunchyroll, Funimation, RetroCrush, Kanopy, CuriosityStream, VRV, FuboTV, Plex, Tubi, Allblk, DAZN, MUBI, NFL Game Pass, OVID.tv, Shudder, BritBox, and countless other specialty and niche services. It would also include fitness services like Peloton, Daily Burn, and even the plethora of online yoga classes that stream instructional video to their users.

Just as it would have been inefficient, because of the fundamental characteristics described above and the technical impediments noted below, to require individual cable channels or broadcast networks to be responsible for providing emergency alerts, so too would it be misguided to require the large number and variety of streaming services to participate in EAS.

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7 NOI at ¶ 58. 3GPP defines “streaming” to mean “the ability of an application to play synchronised media streams like audio and video streams in a continuous way while those streams are being transmitted to the client over a data network.” 3GPP, Transparent end-to-end Packet-switched Streaming Service (PSS); Protocols and codecs, TS 26.234 (2020), available at [https://bit.ly/3o6nQed](https://bit.ly/3o6nQed) (last accessed May 11, 2021). This definition is so broad as to effectively encompass any and all live or on-demand audio or video content accessed over the Internet.

Such an approach would increase the risk of redundant alerts being delivered to the same user, leading to alert fatigue. Specifically, given the prevalence of mobile devices, it is highly likely that a streaming service user would receive the same alert through WEA and on the applicable streaming service, frequently on the same device and at the same time or in rapid succession. Moreover, to the extent a consumer uses multiple streaming services—and many consumers do, as noted above—that user could be delivered the same alert multiple times through streaming services alone if he or she switched between services within the prescribed timeframe for delivery of such alerts, or potentially if multiple streaming service applications are running in the background on the user’s device. In addition, imposing EAS obligations on the diffuse, varied universe of streaming services could lead to each participant’s alerts having relatively less effect in comparison to the traditional EAS and WEA approach. That is, in any given geography at the time an alert is generated, the proportion of consumers using a particular streaming service is likely to be comparatively small, especially when compared against the in-market reach of the defined set of entities subject to EAS and WEA today, of which there are only a few.

III. THE BENEFITS OF REQUIRING STREAMING SERVICES TO PARTICIPATE IN EAS ARE LIKELY TO BE EXTREMELY LIMITED, AND ARE FAR OUTWEIGHED BY THE COSTS.

In addition to the fact that requiring streaming services to participate in EAS would be a stark departure from the established, carefully constructed, and successful EAS framework that the Commission has put in place over decades, it is doubtful that applying additional EAS obligations to providers of streaming video would meaningfully increase the number of people who would receive emergency alerts relevant to their location and circumstances. Given the prevalence of mobile devices, it is highly likely that most users of streaming services would be in the proximity of—if not accessing the streaming content on—a WEA-enabled mobile device,
such that an additional notification through a streaming service would be redundant and unnecessary. In light of the ubiquity of mobile devices in the U.S., and the fact that many consumers access streaming content on their mobile devices, it is likely that any alert received through a streaming service would be duplicative of an alert received through a user’s WEA-enabled device. If this is the case, as both experience and Commission data would seem to indicate, the significant burdens of requiring a broad swath of streaming providers to participate in EAS would far outweigh any theoretical incremental benefits of such regulatory action.

The Commission’s most recent Communications Marketplace report cited data indicating that there were up to 442 million mobile device connections in the U.S. as of the end of 2019, far outnumbering the population of the U.S.\(^9\) CTIA similarly estimates that there are 1.3 mobile devices for every person in the U.S.\(^10\) It is thus unlikely that there exists a substantial subset of the U.S. population that (1) has a streaming service subscription or otherwise streams content online, (2) does not have a mobile device, and (3) does not receive any service from an existing EAS Participant, and therefore would be likely to receive emergency alerts only if streaming services participated in EAS. Indeed, the NOI cites no evidence that such a gap exists. Given that any theoretical benefits appear to be speculative at best, and the costs and burdens associated with delivering such benefits would be so great, MPA urges the Commission to advise Congress that it would be neither sound policy nor, in some respects, technically feasible to take further action with respect to streaming service provider participation in EAS.

The Commission has established robust and effective EAS and WEA frameworks to ensure that timely and relevant emergency alerts are reliably delivered to the greatest possible

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number of potentially affected Americans, and is taking the appropriate actions pursuant to Congress’s direction to further improve and refine these existing frameworks.\textsuperscript{11} As described more fully above, these frameworks successfully leverage the EAS Participants’ and WEA-participating Commercial Mobile Service providers’ ownership of the content distribution infrastructure, geographic proximity to the customer, and knowledge of the customer’s location to ensure that the Commission’s and Congress’s goals for emergency alerts are met. The Commission should therefore report to Congress that these goals would be best served by focusing any efforts on improving the existing systems rather than seeking to expand the classes of entities responsible for delivering emergency alerts to a broad and disparate group of “streaming services.” This is particularly so given that it is unclear that there is any gap in EAS and WEA alert coverage that would be filled by requiring streaming services to participate in EAS, the likelihood that any such theoretical gap is vanishingly small, and in view of the enormous burdens and costs that would be imposed on streaming services across the country to generate speculative and likely infinitesimal benefits.

IV. \textbf{TECHNICAL CHALLENGES RENDER STREAMING SERVICES ILL-SUITED TO PROVIDE EMERGENCY ALERTS.}

Providing emergency alerts over streaming services, including those operated by the MPA’s members or affiliates, would present a number of implementation challenges that make it technically impracticable for them to participate in EAS. These challenges include, among others:

- Streaming services’ relative lack of knowledge as to a user’s precise location;

\textsuperscript{11} \textit{See} NPRM at ¶ 12-56.
• Difficulties in geographically targeting alerts in a service that is provided on a nationwide basis and delivered over the public Internet; and

• The total impracticability of streaming services monitoring for, ingesting, and delivering EAS alerts.

Moreover, these difficulties do not exist in a vacuum. For example, even assuming a streaming service could determine a user’s location with the requisite precision at the time an EAS alert is generated, that would do nothing to affect the potentially insurmountable obstacles to geotargeting alerts for delivery to only potentially affected users of that service. Each of these obstacles alone demonstrates the degree to which streaming-service participation in EAS is likely not viable, and the combination illustrates just how impracticable such an approach would be.

A. Streaming Services Do Not Possess Accurate Information on the Real-Time Location of End-Users for the Purposes of Delivering Relevant Emergency Alerts.

Due to the Internet-based nature of streaming services, users can generally access them over any network and at any location. As such, a streaming service provider does not always—or even often—have accurate information regarding the user’s current location, and generally does not need such information to provide the service.\(^\text{12}\) Additionally, potential solutions to this issue would generate their own problems. For instance, IP address-based location could be frustrated due to the lack of precision inherent in this system, as IP addresses are not themselves tied to a particular end-user location, but rather belong to a user’s Internet service provider, and thus may well reflect the location of an ISP data center rather than a user’s location.

\(^{12}\) In certain circumstances, a particular type of streaming service may have certain location information for its users. TV Everywhere and virtual MVPD services may, for instance, have location information that, upon authentication of the user as a valid subscriber of the service and user opt-in to the provision and use of such location data, is used to provide access to local broadcast stations in the user’s market. In these implementations, however, MPA notes that the stream is generally a retransmission of the associated linear content, and thus any EAS alerts displayed by the local broadcast stations would be passed through to the user.
Furthermore, to the extent a user accesses a streaming service through a VPN, any efforts to deduce the user’s location by reference to an IP address could be frustrated completely, because use of a VPN transmits encrypted traffic from the user’s location to the VPN provider’s server, where the traffic is then decrypted and routed to the public Internet, with the IP address of such traffic shown as the IP address of the VPN server.

To the extent streaming services have actual address data for users today, such data is limited to billing address information for subscription services. Given the “watch anywhere” nature of streaming services, there is obviously no guarantee that a billing address corresponds to a user’s location at the time of viewing, and thus could not be relied upon for purposes of identifying the users to whom an alert should be delivered based on the location of the related emergency. And, of course, billing address information is only available to streaming services for which a user has a subscription. This information is not available to free, ad-supported streaming services.

User-reported locations for streaming services or other “opt-in” mechanisms would have negative consequences for the user experience and could raise privacy concerns. Given that many users likely interact with many streaming providers, this would require an initial update with several different providers, unduly burdening consumers and increasing the risk that different streaming services would have different location data for the same user. This, in turn, would create a greater risk of the user either missing relevant alerts or receiving irrelevant alerts, which could, respectively, undermine confidence in the alerting system and lead to alert fatigue. In this circumstance, in fact, alert fatigue may represent the best-case scenario—the Commission and Congress know all too well the concern and panic that could be caused if consumers receive
an irrelevant or inaccurate emergency alert. Further, every time a user changed his or her location, the user would have to again manually update the EAS location for each of their streaming service accounts, further decreasing the likelihood that streaming providers would have consistent, accurate information. This would be particularly inconsistent with the customer experience of ad-supported and free streaming services that do not require users to establish an account with the service provider, and where there would thus be no user profile or other account information to configure to provide location information. Additionally, requiring users to disclose location information to a broad swath of streaming services, which may not otherwise collect any location information, could raise privacy concerns for consumers, once again creating risk that any information gathered may not be as accurate as needed.

Other theoretical approaches, such as solutions relying on precise geolocation information gathered through the use of GPS, are not necessary to the provision of streaming services. Such approaches therefore are not incorporated in many streaming devices and would impose significant additional costs in the development of these devices, which in turn would raise costs for the consumer. In addition, collection of the user’s location data at the granularity provided by GPS, particularly when such data is not necessary to the provision of the service, would raise significant privacy concerns and could subject streaming service providers to substantial compliance burdens and risks under domestic and international law. As demonstrated above, it is clear that the need to obtain location information with the accuracy and granularity necessary to identify the users to whom an emergency alert should be presented constitutes a significant—and possibly determinative—obstacle to streaming service

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13 See NPRM and NOI at ¶¶ 10-11 (describing the mistaken issuance of a false emergency alert warning the public of a non-existent inbound ballistic missile attack on Hawaii).

participation in EAS, and the obstacles are particularly apparent when comparing these
difficulties to the relative ease with which current EAS Participants are able to identify
potentially affected customers at known service locations within fixed geographic footprints.

B. Geotargeting EAS Alerts in Streaming Content is Not “Technically Feasible and Appropriate.”

Even if streaming services could ascertain reliable and accurate user location information,
it is not, as the Commission asks in the NOI, “technically feasible and appropriate for streaming
services to differentiate between market areas they serve when determining what kinds of EAS
alerts to support.”\footnote{NOI at ¶ 59. Notwithstanding that certain broadcasters may have ownership interests in streaming
services, such streaming services are generally structurally separate, and are accordingly operated separately, from
any broadcast operations of their owners or affiliates.} Given the nationwide nature of most streaming services, many such services
generally have no need or capability to target particular content to particular geographies at
particular times.\footnote{See supra n.12. Additionally, in certain circumstances, if location data is provided by the user and the
user opts in to the service provider’s use of such data, some streaming services may leverage user-provided location
data to serve targeted advertising to the user. Of course, such capability would only exist for a subset of streaming
services, and this is not the case for the many pure subscription and ad-free streaming services available to, and used
by, millions of consumers, including a number of such services operated by MPA’s members or affiliates.} As a result, and assuming it were even feasible, any such capability would
have to be developed, tested, and implemented anew, within the confines of the unique
architecture of each individual streaming service, at great expense across the expanding universe
of such services. In fact, an EAS alert could not be inserted into or overlaid on the content in the
same manner as it is in broadcaster, cable, and other EAS Participant implementations, as such
an approach may well be fundamentally incompatible with the manner in which streaming
content is delivered over the Internet, particularly because the use of distributed content
distribution networks (“CDNs”) and cached content is foundational to the way in which
consumers access streaming content. Legacy EAS alerts are generally inserted into broadcast
transmissions, enabled by providers of specialty hardware that translate signaling mechanisms into video which is encoded and inserted into live television or radio broadcasts. IP video delivery scales via CDNs which distribute static, file-based video to the edges of the network, even for live streams. User playback is fundamentally time-shifted, and users are at any moment playing replicated content back from potentially any place in the media, and from anywhere in the country. As such, inserting EAS alerts into the stream as was done for previous EAS implementations is not a technically feasible solution.

Moreover, attempting to develop the capability to signal, geolocate, and otherwise convey EAS messages and/or media in an accessible format in accordance with user preferences would require widespread coordination across a wide range of devices that enable video and audio streaming experiences, managed by a diversity of operators. Thus, although an EAS alert could theoretically be presented by the streaming service outside of the content stream, doing so would impose coordination and other burdens that are not warranted given the limited public benefit.

C. Monitoring and Passing on Legacy Broadcast Alerts is Not Technically Feasible for Streaming Services.

Streaming services do not “own or operate over-the-air broadcast technology as part of their core businesses.”\(^\text{17}\) These services thus cannot “monitor for EAS alerts initiated in the EAS Protocol at the federal, state, local, Tribal, or territorial level”; nor can they decode, format, and deliver to users in the relevant geography such legacy EAS alerts.\(^\text{18}\) In addition, streaming services are generally available nationwide and do not have a local presence in every user’s jurisdiction. Accordingly, obligating streaming services to monitor broadcast alerts would

\(^{17}\) *Id.* at ¶ 63.

\(^{18}\) *Id.* at ¶ 60.
require each streaming service to deploy and operate multiple listening devices in every state, and to develop interfaces to allow them to receive, format, and distribute alerts as required. In any event, as a technical matter, this would be effectively impossible to implement. This extreme burden would then be multiplied across the great and growing number of streaming services operating in the U.S., many of which are fairly small and likely lack both the resources and the technical capability to engage in such activity.

V. CONCLUSION.

MPA believes that the delivery of timely, accurate, and relevant emergency alerts to the greatest number of potentially affected persons is of the utmost importance, and fully supports the Commission and Congress in their efforts to ensure that the emergency alerting system fulfills this goal. However, as demonstrated in detail above, requiring streaming services to participate in EAS would (1) be inadvisable as a departure from longstanding and effective policy, (2) produce little—if any—benefit with respect to these goals and at tremendous cost, and (3) be impracticable as a technical matter. Therefore, for the foregoing reasons, MPA respectfully requests that the Commission conclude and report to Congress that it would be inadvisable, if not technically infeasible, for streaming services to participate in EAS, and to terminate its inquiry accordingly.

Respectfully submitted,

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