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

In the Matter of	**)**	
	)	
Location-Based Routing for Wireless 911 Calls	**)**	**PS Docket No. 18-64**

Comments of the
Alliance for Telecommunications Industry Solutions

The Alliance for Telecommunications Industry Solutions (ATIS) hereby submits these comments in response to the *Notice of Proposed Rulemaking* (*NPRM*), released December 22, 2022, in the above-referenced docket. In the *NPRM*, the Federal Communications Commission (Commission) proposes to require wireless carriers and covered text providers to implement location-based routing (LBR) for 911 calls and texts nationwide. In these comments, ATIS recommends that the Commission: (1) clarify that any LBR requirements apply only to next generation text solutions, not to the interim text solution; (2) not adopt specific location accuracy benchmarks and instead defer to the recommendations regarding the feasibility of location accuracy developed by the industry; (3) not attempt to dictate how validation of caller location information is implemented; and (4) acknowledge that IP connectivity between the Commercial Mobile Radio Service (CMRS) provider and the ESInet/Next Generation Core Services (NGCS) does not guarantee end-to-end IP connectivity to the Public Safety Answering Point (PSAP). ATIS is also pleased to update the Commission on its relevant work programs on LBR, including a new high priority program within ATIS' Emergency Services and Interconnection Forum (ESIF).

I. Background

ATIS is a global standards development and technical planning organization that develops and promotes worldwide technical and operations standards for information, entertainment, and communications technologies. ATIS' diverse membership includes key stakeholders from the Information and Communications Technologies (ICT) industry – wireless, wireline, and VoIP service providers, equipment manufacturers, broadband providers, software developers, consumer electronics companies, public safety agencies, and internet service providers. ATIS is also a founding partner and the North American Organizational Partner of the Third Generation Partnership Project (3GPP), the global collaborative effort that has developed the 4G Long-Term Evolution (LTE) and 5G New Radio (NR) wireless specifications. Nearly 600 industry subject matter experts work collaboratively in ATIS' open industry committees and incubator solutions programs.

ATIS' ESIF develops Next Generation 911 (NG911) and location accuracy requirements and solutions. ESIF works with industry, governmental, standards development, and public safety organizations (including PSAPs) to identify and resolve technical and operational issues to facilitate interconnection of emergency services networks with other networks (e.g., wireline, cable, satellite, Internet, etc.). ATIS ESIF is:

- Examining the application of common IMS for the processing, transport, and/or delivery of Emergency Service calls within the NG911 network to the appropriate PSAP (a joint effort with the ATIS Packet Technologies and Systems Committee (PTSC) and ATIS Wireless Technologies and Systems Committee Systems Network Subcommittee (WTSC SN));
- Developing a set of minimum practical requirements to ensure consistent, valid, verifiable, and reproducible location data in a variety of access environments based on sound engineering and statistical practices;
- Studying how Emergency Services could potentially starve NS/EP NGN-PS communications during network degradation conditions (e.g., congestion and overload conditions during disaster events) and provide guidance to help mitigate the problem (jointly with ATIS PTSC and WTSC's Radio Access Networks subgroup);

- Creating ATIS standards to eliminate VoLTE unnecessary retries to 911 and enhance LBR of emergency calls (jointly with PTSC and WTSC SN); and
- Coordinating emergency services needs and issues with and among industry forums/committees, and developing emergency services standards and other documentation related to advanced emergency services architectures, functions, and interfaces for communications networks.

ATIS ESIF has initiated high-priority work to develop best practices on how to implement LBR and a checklist that would support requests for LBR or IP connectivity by PSAPs. As explained below, this work will provide additional guidance in support of LBR.

II. Comments

In the *NPRM*, the Commission proposes to require covered text providers to use LBR to route all 911 texts originating on IP-based networks, provided that the information used for routing meets the same requirements for accuracy and timeliness that would apply to 911 voice calls.[1] While ATIS ESIF supports the use of LBR for 911 texts, it believes that any LBR requirements should apply only to next generation text solutions as described in ATIS and NENA standards.[2] ATIS ESIF therefore urges the Commission to clarify that only providers of such next generation text solutions are required to use LBR and that providers of the interim text solution, as defined in ATIS J-STD 110[3], are not required to use LBR.

The Commission proposes to require CMRS providers and covered text providers to use LBR for 911 calls and texts when they have location information at the time the call or text is routed that identifies the caller's horizontal location within a radius of 165 meters at a confidence level of at least 90%.[4] ATIS ESIF urges the Commission not to adopt overly prescriptive,

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[1] *NPRM* at ¶30.
[2] See *ATIS Standard for Implementation of 3GPP Common IMS Emergency Procedures for IMS Origination and ESInet/Legacy Selective Router Termination*, ATIS-0700015v.005, (June 2021) and *NENA i3 Standard for Next Generation 9-1-1*, NENA-STA-010.3b-2021 (October 2021).
[3] *Joint ATIS/TIA Native SMS/MMS Text to 9-1-1 Requirements and Architecture Specification, Release 2*, J-STD-110.v.2 (May 2015).
[4] *NPRM* at ¶37, 42.

arbitrary location accuracy regulations. Such regulations could negatively impact the deployment of and improvements to this new technology, and unnecessarily preclude the use of LBR in circumstances when 911 callers would benefit from it. Instead of establishing specific benchmarks, the Commission should defer to the recommendations regarding the feasibility of location accuracy from industry groups such as ATIS ESIF. ATIS ESIF notes that its *Technical Report on Analysis of Predetermined Cell Sector Routing Outcomes Compared to Caller's Device Location* (ATIS-0500039) does not support a mandate but recommends instead that providers of positioning technologies to be used in LBR solutions "should strive" to produce position estimates with an uncertainty value of 300 meters or less at a 90% confidence level quickly enough to be used for LBR. [5] This industry work continues, including high priority work within ESIF to develop best practices and a checklist to support LBR.

The Commission seeks comment on whether it should require validation of caller location information for purposes of LBR and, if so, what validation steps it should require of CMRS and covered text providers.[6] ATIS ESIF agrees that there is merit in validation, and notes that it is currently being performed where LBR is in use. However, validation protocols are still evolving and, given their recent field deployment, should be left to CMRS providers and covered text providers to refine over time, rather than subject to regulatory restrictions or requirements. For instance, ATIS ESIF notes that it expects to address the validation of caller location information via the best practices it is developing. ATIS ESIF also recognizes the fast-evolving nature of location estimation technologies and policy-based routing mechanisms. Given the

[5].ATIS-0500039 at §8.3.2.
[6] *NPRM* at ¶43.

growing importance of these capabilities, ATIS ESIF recommends that the Commission preserve as much flexibility as possible for innovators across the 911 ecosystem.

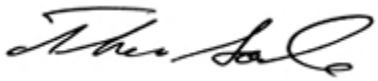
In the *NPRM*, the Commission proposes to define a valid request for delivery of 911 calls in IP format as one made by a local or state entity that certifies that it (1) is technically ready to receive 911 calls and texts in the IP-based format requested, (2) is specifically authorized to accept calls and/or texts in the IP-based format requested, and (3) has provided notification to the CMRS provider or covered text provider via either a registry made available by the Commission or by written notification reasonably acceptable to the CMRS provider or covered text provider.[7] ATIS ESIF supports the Commission's objectives underlying this definition, but notes that, while it is reasonable to pursue IP connectivity from the originating CMRS provider to the ESInet/NGCS, there is no guarantee of IP-based connectivity from the ESInet/NGCS to the PSAP. The Commission also should also not employ a "registry" approach to trigger implementation deadlines; it is necessary for state and local governments to engage directly with individual wireless providers in order to become technically ready and capable to receive and process 911 calls in IP format in the first instance. The ATIS ESIF checklist and best practices under development are expected to provide additional guidance in support of LBR.

[7] *NPRM* at ¶51.

III. CONCLUSION

ATIS appreciates the opportunity to provide its input to the *NPRM* and urges the Commission to consider the recommendations above.

Respectfully submitted,



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