



**ATIS-0500048**

**9-1-1 Authority Readiness Guidelines for  
NG9-1-1 Connectivity**

**TECHNICAL REPORT**



As a leading technology and solutions development organization, the Alliance for Telecommunications Industry Solutions (ATIS) brings together the top global ICT companies to advance the industry's most pressing business priorities. ATIS' nearly 200 member companies are currently working to address the All-IP transition, 5G, network functions virtualization, big data analytics, cloud services, device solutions, emergency services, M2M, cyber security, network evolution, quality of service, billing support, operations, and much more. These priorities follow a fast-track development lifecycle — from design and innovation through standards, specifications, requirements, business use cases, software toolkits, open source solutions, and interoperability testing.

ATIS is accredited by the American National Standards Institute (ANSI). The organization is the North American Organizational Partner for the 3rd Generation Partnership Project (3GPP), a founding Partner of the oneM2M global initiative, a member of the International Telecommunication Union (ITU), as well as a member of the Inter-American Telecommunication Commission (CITEL). For more information, visit [www.atis.org](http://www.atis.org).

---

### **Notice of Disclaimer & Limitation of Liability**

The information provided in this document is directed solely to professionals who have the appropriate degree of experience to understand and interpret its contents in accordance with generally accepted engineering or other professional standards and applicable regulations. No recommendation as to products or vendors is made or should be implied.

NO REPRESENTATION OR WARRANTY IS MADE THAT THE INFORMATION IS TECHNICALLY ACCURATE OR SUFFICIENT OR CONFORMS TO ANY STATUTE, GOVERNMENTAL RULE OR REGULATION, AND FURTHER, NO REPRESENTATION OR WARRANTY IS MADE OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS. ATIS SHALL NOT BE LIABLE, BEYOND THE AMOUNT OF ANY SUM RECEIVED IN PAYMENT BY ATIS FOR THIS DOCUMENT, AND IN NO EVENT SHALL ATIS BE LIABLE FOR LOST PROFITS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. ATIS EXPRESSLY ADVISES THAT ANY AND ALL USE OF OR RELIANCE UPON THE INFORMATION PROVIDED IN THIS DOCUMENT IS AT THE RISK OF THE USER.

NOTE - The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights. By publication of this standard, no position is taken with respect to whether use of an invention covered by patent rights will be required, and if any such use is required no position is taken regarding the validity of this claim or any patent rights in connection therewith. Please refer to <https://www.atis.org/policy/patent-assurances/> to determine if any statement has been filed by a patent holder indicating a willingness to grant a license either without compensation or on reasonable and non-discriminatory terms and conditions to applicants desiring to obtain a license.

---

*Published by*

**Alliance for Telecommunications Industry Solutions  
1200 G Street, NW, Suite 500  
Washington, DC 20005**

Copyright © 2024 by Alliance for Telecommunications Industry Solutions  
All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher. For information contact ATIS at 202.628.6380. ATIS is online at < <http://www.atis.org> >.

# **9-1-1 Authority Readiness Guidelines for NG9-1-1 Connectivity**

**Alliance for Telecommunications Industry Solutions**

Approved December 9, 2024

## **Abstract**

This document provides guidelines for 9-1-1 Authorities to use on submitting Valid Requests for NG9-1-1 service under the FCC's new framework adopted and made effective in 2024. It also provides a sample letter request for service, timelines for implementation, and a preparation checklist when preparing Valid Requests. This document does not constitute legal advice. Please consult with your legal and technical personnel in using this guide.

## Foreword

---

The Alliance for Telecommunications Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The Emergency Service Interconnection Forum (ESIF) provides a forum to facilitate the identification and resolution of technical and/or operational issues related to the interconnection of wireline, wireless, cable, satellites, Internet, and emergency services networks.

The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages. The word *may* denote an optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, ESIF, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time of consensus on this document, ESIF, which was responsible for its development, had the following leadership:

- P. McCollum, ESIF Chair (Comtech)
- J. Torres, ESIF First Vice-Chair (Verizon Wireless)
- B. Abley, ESIF Second Vice-Chair (NENA)
- J. Green, ESIF NGESM Co-Chair (T-Mobile)
- V. Ventura, NGESM Co-Chair (Enginuity)
- K. Springer, IMS911 Co-Chair (AT&T)
- E. Amoah, Technical Editor (Verizon Wireless)

The NGESM Subcommittee was responsible for the development of this document.

**Table of Contents**

---

**ABSTRACT .....I**

**1 SCOPE, PURPOSE, & APPLICATION .....1**

1.1 SCOPE.....1

1.2 PURPOSE.....1

1.3 APPLICATION.....1

**2 REFERENCES .....2**

2.1 INFORMATIVE REFERENCES .....2

**3 ACRONYMS & ABBREVIATIONS .....2**

3.1 ACRONYMS & ABBREVIATIONS .....2

**4 OVERVIEW .....4**

**5 FCC ACTIVITY RELATED TO NG9-1-1 CONNECTIVITY.....4**

5.1 REPORT AND ORDER IN THE MATTER OF FACILITATING IMPLEMENTATION OF NEXT GENERATION 911 SERVICES (NG911) .....4

5.2 WHEN TO MAKE A VALID REQUEST.....6

5.3 WHAT TO FILE WITH WHOM.....6

5.3.1 *Prepare and transmit to the FCC*.....6

5.3.2 *Prepare and transmit to the OSP*.....6

5.3.3 *Prepare Internally*.....7

**6 OVERVIEW OF TRANSITIONAL AND END-STATE NG9-1-1 ARCHITECTURES.....7**

6.1 COMMONLY ACCEPTED STANDARDS.....7

6.2 END-STATE NG9-1-1 ARCHITECTURE .....8

6.3 TRANSITIONAL NG9-1-1 ARCHITECTURES ..... 10

**7 CONCLUSIONS ..... 13**

**A 9-1-1 AUTHORITY READINESS CHECKLIST FOR VALID REQUESTS..... 14**

**B 911 AUTHORITY NEXT GENERATION 9-1-1 (NG9-1-1) VOLUNTARY EARLY VALID REQUEST FORM 19**

**Table of Figures**

---

FIGURE 6-1: END-STATE NG9-1-1 SERVICE ARCHITECTURE .....8

FIGURE 6-2: TRANSITIONAL NG9-1-1 SERVICE ARCHITECTURES..... 10

**Table of Tables**

---

TABLE A.1: 9-1-1 AUTHORITY READINESS CHECKLIST FOR VALID REQUESTS – NG9-1-1 INTERCONNECTION..... 14

ATIS Standard on –

# 9-1-1 Authority Readiness Guidelines for NG9-1-1 Connectivity

## 1 Scope, Purpose, & Application

### 1.1 Scope

This Technical Report provides 9-1-1 Authorities<sup>1</sup> and Originating Service Providers (OSPs) with a set of guidelines to support the implementation of IP-based Next Generation 9-1-1 (NG9-1-1) connectivity from OSPs to one or more in-state Emergency Services IP Network (ESInet)/NG9-1-1 Core Services (NGCS) interconnection point(s), or other NG9-1-1 interconnection point(s), as designated by the 9-1-1 Authority and per mutual agreement by the 9-1-1 Authority and OSP, based on a service request from a 9-1-1 Authority. These recommendations are relevant under the FCC’s Valid Request framework it adopted in 2024 for 9-1-1 Authorities to make Valid Requests to OSPs.

NG9-1-1 PSAPs will be capable of receiving NG9-1-1-compatible IP-based 9-1-1 communications, including emergency (9-1-1) calls that have been routed from an IP-capable originating network or legacy originating network (via an appropriate gateway system), directly from an ESInet/NGCS. Legacy PSAPs will also be able to receive emergency (9-1-1) calls from IP-based originating networks via appropriate gateway systems. This Technical Report will provide guidelines for NG9-1-1 connectivity from OSPs to NG9-1-1 ESInets/NGCS to support emergency call delivery to both NG9-1-1 PSAPs and legacy PSAPs. Preferably, PSAPs served by 9-1-1 Authority ESInets/NGCS should be NG9-1-1 capable.

This information is informative only and not to be considered a comprehensive guide. This document is not a standard or specification. 9-1-1 Authorities **must** understand the implications of making a Valid Request and retain sufficient technical expertise to ensure that their certifications made under a Valid Request are correct and have been validated through testing. The intent of this guide and appendices (sample letter and checklist) are intended to assist in preparation of a Valid Request, but the documents also provide helpful guidance to stakeholders voluntarily moving forward with NG9-1-1 deployment in good faith independent of the Valid Request process.

This guide is complementary to any further guidance from the FCC on its FCC Report and Order in the Matter of Facilitating Implementation of Next Generation 911 Services (NG911) (PS Docket No. 21-479) (“The Order”) [Ref 100]. As of the publication of this document, The Order and associated proceedings are ongoing. If there is any deviation from this guide and The Order, The Order prevails.

This document does not constitute legal advice. Please consult your legal counsel on any provisions of implementing The Order.

### 1.2 Purpose

As regulatory measures focused on facilitating implementation to NG9-1-1 move forward, it is important that 9-1-1 Authorities prepare themselves to receive 9-1-1 calls that are delivered to NG9-1-1 PSAPs via IP-based NG9-1-1 connections from ESInets/NGCS and to legacy PSAPs via gateway systems, and that they inform OSPs of their readiness to do so. The Order creates a consistent NG9-1-1 transition framework comprised of a two-phased approach that supports the delivery of 9-1-1 traffic from originating networks in IP-based basic Session Initiation Protocol (SIP) format (Phase 1) and NG9-1-1 Commonly Accepted Standards compatible format (Phase 2) to interconnection points designated by a 9-1-1 Authority, upon receipt of a valid request from the 9-1-1 Authority.

This document provides guidelines to 9-1-1 Authorities regarding support for NG9-1-1 interconnection to set expectations and improve communications among the parties involved in the deployment of such capabilities.

### 1.3 Application

This Technical Report is applicable to Public Safety entities, including 9-1-1 Authorities, PSAP equipment vendors, NG9-1-1 Core Services providers, as well as Commercial Mobile Radio Service (CMRS) providers, wireline service

---

<sup>1</sup> A 9-1-1 Authority’s jurisdiction may include only a single PSAP. In this case, the PSAP and the 9-1-1 Authority are functionally the same entity.