PUBLIC SAFETY AND HOMELAND SECURITY BUREAU SEEKS COMMENT ON MODIFICATIONS TO NETWORK OUTAGE REPORTING AND 911 RELIABILITY CERTIFICATIONS FOR COVERED 911 SERVICE PROVIDERS

PS Docket Nos. 15-80, 13-75, 11-60

By this Public Notice, the Public Safety and Homeland Security Bureau (Bureau) of the Federal Communications Commission (FCC or Commission) seeks comment on the implementation of new data fields for covered 911 service providers that it will add to the Network Outage Reporting System (NORS) and 911 Reliability Certification System, respectively, to improve the Bureau’s ability to assess 911 reliability. These new fields will aid the Commission in identifying 911 special facilities (such as public safety answering points (PSAPs)) affected by service outages, determining whether alternative measures to circuit diversity are effective in maintaining network reliability, recognizing year-to-year improvements in 911 reliability, and ensuring compliance with existing network reliability requirements.

I. BACKGROUND

Data sets from both NORS and the 911 Reliability Certification System, while separate, contribute to the Commission’s situational awareness regarding 911 reliability.

As to NORS, in 2004, the Commission implemented a framework to evaluate the reliability, redundancy, and resiliency of communications networks, including 911 service. The Commission’s rules require outage reporting for certain communications providers, including covered 911 service providers, to address “the critical need for rapid, complete, and accurate information on service disruptions that could affect homeland security, public health or safety, and the economic well-being of our Nation, especially in view of the increasing importance of non-wireline communications in the Nation’s communications networks and critical infrastructure.” Furthermore, certain service providers must file notifications and initial and final NORS reports for outages, including those that potentially affect 911 service.

1 47 CFR § 9.19(a)(4) (defining a “covered 911 service provider as “[a]ny entity that [p]rovides 911, E911, or NG911 capabilities such as call routing, automatic location information (ALI), automatic number identification (ANI), or the functional equivalent of those capabilities, directly to a . . . [PSAP], statewide default answering point, or appropriate local emergency authority . . . ; and/or [o]perates one or more central offices that directly serve a PSAP”); Improving 911 Reliability; Reliability and Continuity of Communications Networks, Including Broadband Technologies, PS Docket Nos. 13-75 and 11-60, Report and Order, 28 FCC Rcd 17476, 17488-91, paras. 36-43 (2013) (911 Reliability Report and Order) (discussing the definition of a covered 911 service provider); id. at 17529, para. 147 (explicitly declining to apply covered 911 service providers’ obligations to originating service providers).


3 2004 Part 4 Report and Order at 16830, para. 1.
service, that exceed specified duration and magnitude thresholds. In their notifications, service providers must identify, inter alia, the date and time of onset of the outage, a brief description of the problem, the outage’s service effects, and the geographic area affected by the outage. Initial and final NORS reports must include “all pertinent information” on the outage. Under the Commission’s outage reporting rules, these communications providers must notify both the Commission and PSAPs when they experience an outage that potentially affects 911 special facilities.

At the time of the adoption of the NORS rules, the Commission anticipated that its NORS reporting requirements would foster “increased collaboration with the [Department of Homeland Security], state and local governments, and expert industry groups on matters of network reliability,” which would produce insights about network reliability that would “require that adjustments be made to [the] outage-reporting template and filing system on an expeditious basis.” To ensure that these issues were addressed efficiently, the Commission delegated the authority to make necessary changes to NORS to the Chief of the Office of Engineering and Technology. Since then, the Commission has delegated authority to the Bureau to administer its “communications disruption reporting requirements,” and “revise the filing system and template used for the submission of such communications disruption reports.”

Under the Commission’s rules regarding the Reliability Certification System, covered 911 service providers must adhere to further reporting and 911 reliability requirements to enable the Commission to evaluate whether these providers are taking appropriate steps to discharge their additional obligations to ensure 911 reliability. Specifically, covered 911 service providers are required to certify annually that they: (1) take specific measures to ensure critical 911 circuit diversity, the availability of backup power to central offices that directly serve PSAPs, and diverse network monitoring; or (2) implement alternative measures demonstrated to be “reasonably sufficient to mitigate the risk of failure.” Covered 911 service providers can also certify that a certification element is inapplicable to their network,

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4 See 47 CFR § 4.9.
5 47 CFR § 4.11.
6 Id.
7 47 CFR § 4.9(a), (c), (e), (f), (g), (h).
8 2004 Part 4 Report and Order at 16909, para. 158.
9 Id. See also 2004 Part 4 Report and Order at 16914, para. 170 (stating that one of the reasons for delegating the authority to the Chief of the Office of Engineering and Technology to improve NORS was to improve the analytic results that can be gleaned from Commission and State outage reporting systems and to eliminate any unnecessary duplication).
10 47 CFR § 0.392(i). See also 47 CFR § 0.191(g) (stating that the Bureau: “conducts studies of public safety, homeland security, national security, emergency management and preparedness, disaster management, and related issues. Develops and administers recordkeeping and reporting requirements for communications companies pertaining to these issues. Administers any Commission information collection requirements pertaining to public safety, homeland security, national security, emergency management and preparedness, disaster management, and related issues, including the communications disruption reporting requirements … and revision of the filing system and template used for the submission of those communications disruption reports.”)
11 47 CFR § 9.19(c)(1)-(3). These rules spell out what these specific measures entail. Thus, for example, when a covered 911 service provider certifies that it has taken the specified measures to ensure critical 911 circuit diversity, it is certifying that within the past year it has, inter alia, conducted diversity audits of critical 911 circuits or equivalent data paths to any PSAP served. Id. at § 9.19(c)(1)(i)(A).
supported with a brief explanation of why they believe any such requirement does not apply.\textsuperscript{13} In establishing these requirements, the Commission delegated authority to the Bureau, “consistent with the requirements of the Administrative Procedure Act and relevant portions of the Communications Act,” to develop “forms and procedures as may be required to collect and process [911] certifications, and . . . periodically update those forms and procedures as necessary” and “order appropriate remedial action on a case-by-case basis where 911 reliability certifications indicate such actions are necessary to protect public safety.”\textsuperscript{14}

To improve the Bureau’s situational awareness regarding 911 reliability, the Bureau intends to require covered 911 service providers to complete additional fields on the NORS and 911 Reliability Certification System forms. While these systems have distinct and independent reporting requirements, the Bureau believes that modifications to NORS will supply more insight into the representations covered 911 service providers make with respect to 911 reliability certifications. Specifically, supplementing NORS outage reports with information available to covered 911 service providers from their most recent 911 reliability certifications can help to confirm the extent to which any alternative measures they use to ensure circuit diversity are effective.

II. MODIFICATIONS TO NORS REPORTING FORMS

911 Special Facilities. Information about which 911 special facilities are affected by outages, and whether 911 special facilities were notified of outages, facilitates the Bureau’s efforts to better ascertain and analyze the effect of outages required to be reported under the Commission’s part 4 rules, and to enforce those aspects of the rules requiring covered 911 service providers to submit notifications to the Bureau regarding outages that potentially affect 911 special facilities.\textsuperscript{15} The part 4 rules require that “all pertinent information on the outage, including any information that was not contained in, or that has changed from that provided in, the Initial report.”\textsuperscript{16}

In the Bureau’s experience, it has often been required to follow up with covered 911 service providers to determine whether 911 special facilities were affected and whether the relevant PSAPs were appropriately notified. We believe a more efficient approach would be to receive this information in the reports from covered 911 service providers at the outset.

In these regards, the Bureau proposes to modify the specificity of the information requested of covered 911 service providers on NORS notification, initial and final reports submission forms. These forms will be revised to include a checkbox that will enable filers to check “yes” or “no” to indicate whether they are a covered 911 service provider. If the filer indicates that it is a covered 911 service provider, the filer will be prompted to identify which 911 special facilities are affected by an outage, whether they were notified and, if so, how they were notified. Specifically, fields will be added to NORS submission forms for covered 911 service providers to type in appropriate 911 special facility names. As these filers type in a 911 special facility name, a list of matching names will be displayed for filers to choose from.

\textsuperscript{12} 47 CFR § 9.19(b). As is the case with the certification requirements for regarding non-alternative measures, a certification regarding the use of non-alternative measures represents that the provider has fulfilled a specific set of requirements in using alternative measures. In addition, the alternative measures provisions require the provider to submit—as part of the certification—statements explaining each of the three types of alternative measures used.

\textsuperscript{13} Id.

\textsuperscript{14} 911 Reliability Report and Order at 17534, para. 163. See also 47 CFR § 0.392(j) (stating that the Bureau is delegated authority to administer the Commission’s communications reliability and redundancy rules and policies, develop and revise forms and procedures as may be required for their administration, review certifications filed in connection therewith, and order remedial action on a case-by-case basis to ensure the reliability of 911 service in accordance with such rules and policies).

\textsuperscript{15} See, e.g., 47 CFR § 4.9(a), (h).

\textsuperscript{16} See id. § 4.11.
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select the appropriate response. To reduce burdens on covered 911 service providers and ensure consistency in the information that is reported, the Bureau will offer filers a list of 911 special facility names generated from the list of PSAPs that the Commission receives from covered 911 service providers’ submissions to the 911 Reliability Certification System. The Bureau expects that the vast majority of covered 911 service provider submissions for potentially affected 911 special facilities would match these names. If the names of the affected 911 special facilities are not shown on the list, covered 911 service providers can enter additional facility names in the field. For each affected 911 special facility, the form will provide a drop-down option (i.e., yes/no) for filers to indicate whether the PSAP has been notified. A field will also be added to NORS to enable covered 911 service providers to specify how they notified the affected PSAP (e.g., by phone, by email). By providing these fields, the Bureau believes the revised forms will be a more effective and minimally burdensome way of enforcing the obligation in the rules to notify PSAPs of outages potentially affecting 911 special facilities, records of which in light of this obligation we anticipate that covered 911 service providers already keep.

Service providers that do not serve as covered 911 service providers for the affected 911 special facilities will not be required to complete these fields.

Alternative measures for circuit diversity. The Bureau has also had to follow up with covered 911 service providers about alternative measures they use for circuit diversity when there has been an outage. It would improve the Bureau’s situational awareness if this information were available in NORS reports rather than only pursuant to follow up requests. Collecting this information will improve the Bureau’s ability to evaluate the effectiveness of alternative measures in lieu of certification to physical circuit diversity.

Accordingly, the Bureau proposes to require NORS filers indicating on NORS final report submission forms that they are covered 911 service providers to identify, in a new data field that will be added to NORS final report submission forms, whether alternative measures to circuit diversity were in place for affected 911 special facilities. For each affected 911 special facility, there will be a dropdown option in NORS (i.e., yes/no/Not Applicable) for filers to indicate whether an alternate measure was taken for the affected PSAP. If the response is “yes,” filers will be prompted to specify the alternate measure taken in a new free text field. Service providers that do not serve as covered 911 service providers for the affected 911 special facilities will not be required to complete these fields. The Bureau believes that requiring covered 911 service providers to disclose whether outages occur on network segments that use alternative measures for circuit diversity will impose a minimal burden on covered 911 service providers as they would need only relate information they already prepare for submission to the Commission’s 911 Reliability Certification System to specific outages they report in NORS.18

We note that all service providers, including covered 911 service providers, will still be required to complete the existing NORS fields that collect information on whether an outage could have been prevented or mitigated if physical diversity had been implemented in their network.

The Bureau seeks comment on whether the implementations proposed above are the most effective and efficient ways for the Commission to collect this information from covered 911 service providers in NORS. Are there any alternative approaches to collecting this information that would reduce burdens on covered 911 service providers that are required to file in NORS while achieving the Bureau’s objectives of obtaining accurate and robust data on 911 reliability and ensuring compliance with the Commission’s rules?

17 Id. 47 CFR § 4.9(a)(4), 4.9(c)(2)(iv), (h).

III. MODIFICATIONS TO 911 CERTIFICATION FORMS

Applicability of 911 Certifications. The Commission’s rules require covered 911 service providers to certify whether elements of the 911 reliability certifications are not applicable to their networks. Some certifications submitted to the Commission are ambiguous as to the reasons why their filers believe those elements are not applicable. For example, some covered 911 service providers certify that certification elements regarding critical 911 circuits are not applicable to them because they do not operate selective routers. However, even if these providers do not operate selective routers, the rules may nonetheless be applicable to these providers if they operate a functional equivalent of a selective router or offer other capabilities such as automatic location information or automatic number information to a PSAP, statewide default answering point, or appropriate local emergency authority. The Bureau must then seek information on a case-by-case basis to assess whether covered 911 service providers are complying with the existing rules and to follow up as appropriate.

To ensure that the Bureau can more efficiently evaluate whether covered 911 service providers are in compliance with the Commission’s 911 reliability certification rules, the Bureau proposes to make necessary updates to the 911 Reliability Certification System to reduce ambiguity in certifications. The Bureau will modify the 911 Reliability Certification System to prompt covered 911 service providers to explain with greater specificity how the certification elements apply to their network. Specifically, the Bureau will add drop-down fields to 911 reliability certifications that will require covered 911 service providers to indicate whether they provide the following services: (1) 911, E911 or NG911 call routing through a selective router or its functional equivalent; (2) automatic location information or automatic number information database lookup capability or its functional equivalent; and (3) direct service to a PSAP by one or more central offices it operates, including administrative lines to a PSAP, statewide default answering point, or appropriate local emergency authority. The Bureau believes that this information will assist in corroborating certifications that certain elements are not applicable, which will save time and resources of covered 911 service providers by reducing the number of questions they receive from Bureau staff about their certifications.

911 Network Upgrades. Additionally, the Bureau recognizes that some covered 911 service providers continue to make improvements to their networks that improve the reliability of 911 but are not currently captured in the 911 Reliability Certification System. Collecting information about these improvements will help the Bureau’s efforts to assess the extent and scope of providers’ initiatives to enhance 911 service nationwide and identify industry practices and standards that will help inform the Bureau’s recommendations to the Commission for future Commission action consistent with its rules.

In order to allow covered 911 service providers an opportunity to update the Commission as to their efforts on 911 reliability, the Bureau proposes to revise 911 reliability certifications to include a data field that enables covered 911 service providers to highlight network upgrades completed within the past year that have resulted in improvements to 911 reliability and/or performance. To implement this change, a new text field will be added to the 911 Reliability Certification System for filers to provide a summary of major network upgrades and improvements they completed within the past year. This data field would be optional and therefore would not impose burdens on covered 911 service providers who choose not to use the field.

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19 See e.g., 47 CFR § 9.19(c)(1)(ii) (“If a covered 911 service provider does not conform with all of the elements . . . with respect to the 911 service provided to one or more PSAPs, it must certify with respect to each such PSAP” . . . “[w]hether it believes that one or more of the requirements of this paragraph are not applicable to its network, in which case it shall provide a brief explanation of why it believes any such requirement does not apply.”).


The Bureau seeks comment on whether these proposed modifications are the most effective and efficient way to validate the certifications that indicate that one or more elements are inapplicable to their networks and capture additional information on yearly 911 improvements. Are there any alternative approaches to collecting this information that would reduce burdens on covered 911 service providers while achieving the Bureau’s objectives of obtaining accurate and robust data on 911 reliability and ensuring compliance with the Commission’s rules?

IV. IMPLEMENTATION

Following the receipt of comments, the Bureau will release a Public Notice to specify the changes that will be implemented in the Network Outage Reporting System (NORS) and 911 Reliability Certification System and address issues and alternative approaches raised by commenters. The Bureau will then seek Office of Management and Budget (OMB) approval of the modifications to the extent required under the Paperwork Reduction Act. Upon receipt of OMB approval, and the Bureau’s completion of all necessary changes to the systems, the Bureau will announce that the modifications are effective. Moreover, the Bureau understands that NORS filers may need the Bureau’s technical assistance to ensure that their existing systems are compatible with any resulting modifications to the NORS Application Programming Interface (API). Therefore, the Bureau will work with system filers prior to the effective date of these new modifications to ensure that no API issues impede their compliance.

Paperwork Reduction Act. This document contains proposed modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the OMB to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

V. PROCEDURAL MATTERS

Interested parties may file comments in response to this Public Notice on or before the date indicated on the first page of this document. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://apps.fcc.gov/ecfs/.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701 U.S.
- Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

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22 To the extent necessary, these changes may be made without prior notice-and-comment under the Administrative Procedure Act as “rules of agency organization, procedure, or practice.” See 5 U.S.C. § 553(b)(A).

• Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.  

• During the time the Commission’s building is closed to the general public and until further notice, if more than one docket or rulemaking number appears in the caption of a proceeding, paper filers need not submit two additional copies for each additional docket or rulemaking number; an original and one copy are sufficient.

• People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

This proceeding has been designated as a “permit-but-disclose” proceeding in accordance with the Commission’s ex parte rules. Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the ex parte presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission’s ex parte rules.

For further information, contact Kenneth Mallory, Attorney Advisor, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau, at (202) 418-7785 or kenneth.mallory@fcc.gov.

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25 See 47 CFR §§ 1.1200(a), 1.1206.