

SUPPORTING STATEMENT

A. Justification:

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection.

**Circumstances Necessitating Change to Information Collection:** The Federal Communications Commission (FCC or Commission) is requesting Office of Management and Budget (OMB) approval of a proposed revision of this information collection. The proposed revision pertains to a Notice of Proposed Rulemaking (*Notice*) adopted by the Commission on March 27, 2015, as FCC 15-39.<sup>1</sup> The *Notice* seeks comment on proposed updates and improvements to the Commission's Part 4 rules governing disruptions to communications. We estimate that adoption of these proposed rules would lead to a net increase in the reporting burdens associated with this information collection.

Since 1992, the FCC has required telecommunications carriers (other than cellular and satellite providers) to report significant disruptions to voice and paging communications services.<sup>2</sup> In 2004, by *Report and Order*, the Commission superseded the original reporting requirements, and created a new Part 4 of Title 47 of the Code of Federal Regulations (C.F.R.) to house the modified and expanded outage reporting requirements embodied in the existing service disruption rules.<sup>3</sup> Among other things, the *Report and Order* extended the reporting requirements to include disruptions to wireless and satellite communications. In 2012, the Commission further expanded its Part 4 outage reporting requirements<sup>4</sup> to include interconnected voice over Internet protocol (VoIP) providers.<sup>5</sup>

**Proposed Revisions to Information Collection Requirements:** The *Notice* seeks comments on various proposals to modify and update the Part 4 outage reporting rules. In

<sup>1</sup> See Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications; New Part of the Commission's Rules Concerning Disruptions to Communications, PS Docket 15-80, ET Docket No. 04-35, Notice of Proposed Rulemaking, Report and Order and Order on Reconsideration, FCC 15-39 (rel. Mar. 30, 2015) (*Part 4 Improvements NPRM*).

<sup>2</sup> See former 47 C.F.R. Section 63.100 (2003) (first adopted in 1992). See In the Matter of Notification by Common Carriers of Service Disruptions, CC Docket No. 91-273, *Report and Order*, 7 FCC Rcd 2010 (1992); *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 8 FCC Rcd 8517 (1993); *Second Report and Order*, 9 FCC Rcd 3911 (1994); *Order on Reconsideration of Second Report and Order*, 10 FCC Rcd 11764 (1995).

<sup>3</sup> See In the Matter of New Part 4 of the Commission's Rules Concerning Disruptions to Communications, ET Docket No. 04-35, FCC 04-188, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 16830 (2004) (*Part 4 Order*).

<sup>4</sup> 47 C.F.R. Part 4.

<sup>5</sup> See The Proposed Extension of Part 4 of the Commission's Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers, PS Docket No. 11-82, *Report and Order*, 27 FCC Rcd 2650 (2012).

issuing these proposals, the *Notice* seeks to build on the Commission's decade of experience administering the Part 4 outage reporting rules and the associated Network Outage Reporting System (NORS). The Commission's experience analyzing outage reports has provided perspective on those aspects of the Part 4 rules that might be refined so as to improve the quality and usefulness of the outage data the Commission receives. In particular, the *Notice* considers the following proposed changes to the rules.

- Clarify the requirement to report outages that significantly degrade communications to a Public Safety Answering Point (PSAP);
- Adopt requirements to report widespread call failures that result from wireless radio access network (RAN) congestion;
- Replace the current threshold (based on "DS3 minutes") for reporting major network outages with a threshold based on optical (i.e., OC-3) transmission rates;
- Require reporting of DS3 Simplex outages that persist for less than five days but for more than forty-eight hours;
- Adopt a common, technologically neutral method for calculating the number of wireless users "potentially affected" by an outage;
- Clarify the reporting metric for estimating the number of "potentially affected" wireless users for outages that affect a PSAP;
- Update the requirements that mandate reporting of outages that affect airports and other "special offices and facilities"; and
- Grant NORS access to state government agencies upon request and certification that the state has measures in place to protect the data from public disclosure.

Statutory authority for this collection of information is contained in 47 U.S.C. sections 151, 154(i)-(j) & (o), 201(b), 214(d), 218, 251(e)(3), 301, 303(b), 303(g), 303(r), 307, 309(a), 316, 332, 403, 615a-1, and 615c.

This information collection does not affect individuals or households; thus, there are no impacts under the Privacy Act.

**2. Indicate how, by whom and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.**

As stated in previous filings for this information collection,<sup>6</sup> the general purpose of the Commission's Part 4 rules is to gather sufficient information regarding disruptions to telecommunications to facilitate FCC monitoring, analysis, and investigation of the reliability and security of voice, paging, and interconnected VoIP communications services, and to identify and act on potential threats to our Nation's telecommunications infrastructure. The FCC uses this information collection to identify the duration,

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<sup>6</sup> See, e.g., Supporting Statement, OMB Control No. 3060-0484, Section 4.9, Part 4 of the Commission's Rules Concerning Disruptions to Communications at 3 (October 2014) (2014 Supporting Statement).

magnitude, root causes, contributing factors, and preventive measures taken with respect to significant outages, and to take swift remedial action as required in appropriate circumstances. The Commission also maintains an ongoing dialogue with reporting entities, as well as with the communications industry at large, generally regarding lessons learned from the information collection in order to foster better understanding of the root causes of significant outages, and to explore preventive measures in the future so as to mitigate the potential impact of such outages on the Nation and the American public. Collection of such information through NORS has already been approved by OMB, and the *Notice* does not propose rules that would alter the fundamental aims and purposes of the approved collection. The *Notice* seeks comment on incremental adjustments to the Part 4 rules aimed at improving the Commission's ability to monitor the systemic reliability of communications networks and to detect and remediate adverse trends.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g. permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.**

The Part 4 information collection is administered by the FCC's Public Safety and Homeland Security Bureau (PSHSB), which maintains an Internet portal for the electronic submission of NORS reports.<sup>7</sup> This electronic filing requirement entails entering the required information using Commission-approved Web-based outage report templates that are available online at the NORS Internet Web portal. The completion of these online templates results in the information being electronically entered into the Commission's NORS reporting data base in real-time.

**4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in item 2 above.**

The proposals set forth in the *Notice* are aimed at closing gaps in the current rules governing reporting of communications disruptions, and as such the proposed reporting would not be duplicative of information the Commission already receives.

**5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.**

The *Notice* does not propose to relieve small providers, in whole or in part, from any of the proposed rules. That said, the Commission explained in the Initial Regulatory Flexibility Analysis (IRFA) that accompanied the *Notice* its belief "that the magnitude of

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<sup>7</sup> See 47 C.F.R. Section 4.11. In the event of technical impediments to using the Web-based system during the Notification stage, then a written Notification to the Commission by email, Fax, courier, or U.S. mail may alternatively be used.

the outages needed to trigger the reporting requirements are sufficiently high as to make it unlikely that small businesses would be impacted significantly by the proposed rules, and will, in fact, in many instances find their burden decreased by the newly proposed reporting thresholds.”<sup>8</sup> In particular, the proposal to replace a DS3-based reporting threshold for transport facility outages with a higher OC3-based threshold could have a particularly beneficial impact on smaller providers, who may be particularly likely to suffer disruptions that qualify as reportable outages under the current threshold but not the proposed replacement.

**6. Describe the consequences to a Federal program or policy activity, if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reduce burden.**

The FCC has a statutory mandate to “promot[e] the safety of life and property through the use of wire and radio communications,”<sup>9</sup> and Congress has delegated to the Commission specific responsibilities to “designate 911 as the universal emergency telephone number for reporting an emergency to appropriate authorities and requesting assistance.”<sup>10</sup> The Commission’s efforts to ensure that such reports and requests for assistance can reliably be transmitted are “necessary in the public interest to carry out” these provisions of the Communications Act.<sup>11</sup> Outage reporting provides the Commission with timely and reliable data that enables to monitor the reliability of these networks. The fundamental goal of the Part 4 rules, and of the modifications thereto proposed in the *Notice*, is “ensuring the reliability and resiliency of the Nation’s communications system, and in particular strengthening the Nation’s 911 system.”<sup>12</sup>

**7. Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with the criteria listed in supporting statement.**

This revised information collection is consistent with the requirements of 5 C.F.R. § 1320 and the criteria listed in this Supporting Statement. We do not anticipate circumstances that would result in a collection of information in an inconsistent manner.

**8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency’s notice, required by 5 CFR 1320.8(d), soliciting comments on the information prior to submission to OMB.**

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<sup>8</sup> *Part 4 Improvements NPRM* at 37, app. D.

<sup>9</sup> 47 U.S.C. § 151.

<sup>10</sup> 47 U.S.C. § 251(e)(3).

<sup>11</sup> 47 U.S.C. § 201(b). See also IP-Enabled Services; E911 Requirements for IP-Enabled Service Providers, *First Report and Order and Notice of Proposed Rulemaking*, 20 FCC Rcd 10245 ¶ 34 (2005), *aff’d sub nom. Nuvio Corp. v. FCC*, 473 F.3d 302 (D.C. Cir. 2007) (*VoIP 911 Order*) (recognizing plenary authority under Section 251(e) to require “network changes” needed to ensure safe, reliable, nationwide 911 system).

<sup>12</sup> *Part 4 Improvements NPRM* at 3.

**-Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.**

The Commission published a Federal Register Notice (80 FR 34350) on June 16, 2015 seeking comments on the information collection requirements contained in this supporting statement. To date, no comments have been received from the public.

**9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

No payment or gift to respondents has been or will be made in connection to this information collection.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.**

Outage reports filed with the Commission pursuant to Part 4 are presumed confidential.<sup>13</sup> The information in those filings may be shared with the Department of Homeland Security only under appropriate confidential disclosure protections. Other persons seeking disclosure must follow the procedures delineated in 47 C.F.R. Sections 0.457 and 0.459 of the Commission's rules for requests for and disclosure of information. The revisions noted here do not affect the confidential treatment of information provided to the FCC through NORS reports.

As noted above, the *Notice* proposes that the Commission grant State governments access to State-specific outage reporting data upon request when the State can demonstrate that confidentiality safeguards are met.<sup>14</sup> The *Notice* proposes that, in order to receive direct access to NORS, a state must certify that it will keep the data confidential and that it has in place confidentiality protections at least equivalent to those set forth in the federal Freedom of Information Act (FOIA).

**11. Provide additional justification for any questions of a sensitive nature.**

This collection of information does not address any matters of a sensitive nature.

**12. Provide estimates of the hour burden of the collection of information. The statement should: indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance.**

<sup>13</sup> See 47 C.F.R. Section 4.2.

<sup>14</sup> See *Part 4 Improvements NPRM* at 17-19.

**Number of Respondents:** The Commission has previously reported that the number of respondents required to submit information under the Part 4 rules would not exceed 1,100.<sup>15</sup> As the proposals considered in this *Notice* involve incremental adjustments to reporting requirements that are already in place, and would not expand the applicability of the rules to cover new classes of entities, we retain the current estimate of 1,100 respondents.

**Frequency of Response:** The Commission previously reported a total of 15,444 responses per year for all existing outage reporting obligations under Part 4.<sup>16</sup> Adoption of the proposals considered in this *Notice* would result in an estimated net increase of 339 responses per year.<sup>17</sup> These estimates derive, in part, from the Commission's analysis of current and historical reporting volumes, which provides an evidentiary basis for estimating the incremental impact of the various proposals considered in the *Notice*. The estimated impact of each proposal breaks down as follows:

- Clarify the requirement to report outages that significantly degrade communications to a PSAP);

The Commission proposes to clarify that significant degradations of communications to a PSAP may be reportable outages even if the PSAP does not experience a *complete* loss of service. The Commission is aware of only a handful of events in recent years that appear to fall in this category, but we estimate conservatively that **10** additional reports would be filed per year under this proposal.<sup>18</sup>

- Adopt requirements to report widespread call failures that result from wireless RAN congestion;

The Commission proposes requiring wireless providers to report on incidents of severe call congestion in their radio access networks, including events that may not involve any network "failure or degradation" that would give rise to a reporting obligation under the current rules. We estimate that **420** reports would be filed per year under this proposal. This estimate derives from an estimate of the annual volume of reporting on interoffice facility outages; we assume that wireless access networks are interoffice networks are engineered to achieve comparably low rates of call failure.<sup>19</sup>

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<sup>15</sup> 2014 Supporting Statement at 8-9.

<sup>16</sup> *Id.* at 9.

<sup>17</sup> *See Part 4 Improvements Item* at 4.

<sup>18</sup> *See id.* at 5-6.

<sup>19</sup> *See id.* at 7.

- Replace the current threshold (based on “DS3 minutes”) for reporting major network outages with a threshold based on optical (i.e., OC-3) transmission rates;

The Commission proposes replacing the current reporting threshold for transport facility outages, which is based on the DS3 circuits that were standard in 2004, with a higher threshold based on higher-capacity OC3 circuits. We estimate that adoption of this proposal would *reduce* the number of reports filed annually by **2,835**. This is based on an estimate of the volume of reports filed in recent years that would be reportable under the current threshold but not the proposed replacement.<sup>20</sup>

- Require reporting of DS3 Simplex outages that persist for less than five days but for more than forty-eight hours;

The Commission proposes requiring that “simplex” outages, which are outages that involve the failure of a backup path in a high-capacity circuit, be reportable when they persist for at least forty-eight hours. This proposal is based on evidence that providers are not adhering to the best practice of timely repairing simplex outages during daily maintenance windows. The Commission estimates that this proposal will result in the filing of an additional **1,020** reports per year. This is based on an assumption that reducing the reporting threshold from five days to forty-eight hours would approximately double the volume of simplex outages reports to 1,250 per year, except that 230 of these would not be reportable were the Commission also to adopt its proposed OC3-based reporting metric threshold.<sup>21</sup> These figures derive from 2013 NORS data.

- Adopt a common, technologically neutral method for calculating the number of wireless users “potentially affected” by an outage;

The Commission proposes clarifying the methodology by which providers calculate the number of users potentially affected by a wireless outage. We do not expect this proposal to have any appreciable cost impact. We also propose a separate reporting threshold for wireless outages based on geographic scope, irrespective of the number of users potentially affected. This could provide the Commission with valuable information on the reliability of wireless service in less densely populated areas. We estimate that adoption of this latter requirement would result in the filing of an additional **1,841** reports per year. To derive this estimate, we first estimate that geography-based reporting would generate additional reports in counties where a company has fifteen or fewer cell sites. The number of

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<sup>20</sup> See *id.* at 9.

<sup>21</sup> See *id.* at 11.

counties with fifteen or fewer cell sites represents 2.7 percent of the total number of cell sites nationwide. Using as a guide counties with fifteen or fewer cell sites, a disruption to communications would be reportable under a geographic coverage standard if one or two cell sites in the county are down. We next estimate, based on historical NORS data, that each cell site has a 22.6 percent chance of experiencing an outage within a given year. Finally, we adopt CTIA's estimate that 301,779 cell sites were in operation nationwide as of the end of 2012.  $(301,779 \times .226 \times .027 \approx 1,841)$ .<sup>22</sup>

- Clarify the reporting metric for estimating the number of “potentially affected” wireless users for outages that PSAPs;

The Commission proposes clarifying how to calculate the number of users potentially affected by a wireless outage that affects only a subset of the PSAPs that subtend the affected mobile switching center. It is not expected that this proposal will have any appreciable cost impact.<sup>23</sup>

- Update the requirements that mandate reporting of outages that affect airports and other “special offices and facilities”; and

The Commission seeks comment on how to define and classify “special offices and facilities” for purposes of Part 4, including whether or not to retain separate reporting requirements pertaining to airports. The Commission proposes to clarify that the reporting requirements that pertain to airports apply only with respect to critical communications outages. We estimate that adoption of this latter proposal would *reduce* the number of reports filed annually by **117**. This estimate derives from the number of reports filed in 2013 that would not have been reportable under the proposed rule clarification.<sup>24</sup>

- Grant NORS access to state government agencies upon request and certification that the state has measures in place to protect the data from public disclosure.

The Commission proposes granting State governments access to NORS data, with appropriate confidentiality safeguards. This proposal is not expected to have an appreciable cost impact.<sup>25</sup>

In sum:  $10 + 420 - 2835 + 1020 + 1841 - 117 = 339$

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<sup>22</sup> See *id.* at 13.

<sup>23</sup> See *id.* at 14.

<sup>24</sup> See *id.* at 15-16.

<sup>25</sup> See *id.* at 19.

**Annual Hour Burden:** The existing information collection already approved by OMB includes three components: a Notification that an outage has occurred, an Initial Report containing detailed information on the outage, and a Final Report containing detailed information concerning the outage and how it was resolved. We have previously estimated that reporting entities will require 15 minutes to file a Notification with the Commission and that the more detailed Initial Report will ordinarily not take more than 45 minutes to complete and submit to the Commission. We further estimated that respondents will ordinarily not need more than one hour to complete and submit electronically a Final Report to the Commission within 30 days after the outage was discovered. Thus, the total time needed to file all reports pertinent to each outage that meets or exceeds the reporting threshold criteria were estimated to be less than two (2) hours as follows:

$$15 \text{ minutes [Notification]} + 45 \text{ minutes [Initial Report]} + 1 \text{ hour [Final Report]} \\ = 2 \text{ hours maximum}^{26}$$

We believe these estimates remain valid. Although we recently estimated that compliance with the enhanced PSAP notification rule recently adopted for Covered 911 Service Providers could increase the reporting burden of these entities by as much as thirty minutes per report,<sup>27</sup> we believe the reports filed under the rules proposed in this *Notice* would, on average, require no more than 2 hours to file. For the most part, the additional reports that would be filed under the proposed rules do not necessarily pertain to outages potentially affecting a 911 special facility that would be subject to the enhanced PSAP notification requirement. To the extent they are, we think any additional time above 2 hours required to complete any such reports could be offset by factors that enable other reports to be filed in less than 2 hours, namely “advances in information technology that have permitted providers to streamline processes and providers’ increasing familiarity with the NORS outage reporting process.”<sup>28</sup> Indeed, we noted previously that the two-hour estimate was conservative and that time required to file each report was, “more likely, estimated to be approximately 1 to 1.5 hours.”<sup>29</sup>

**Additional Burden hours:** 339 additional reports filed annually \* 2 hours per report = 678 hours annual burden.

**Additional In-House Cost:** 339 additional reports filed annually \* 2 hours per report \* one technician at \$80.00/hour = \$54,240.

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<sup>26</sup> See 2014 Supporting Statement at 9.

<sup>27</sup> See *id.* at 10.

<sup>28</sup> See *Part 4 Improvements Item* at 6.

<sup>29</sup> See, e.g., Supporting Statement, OMB Control No. 3060-0484, Sections 4.1 and 4.2 and Part 4 of the Commission's Rules Concerning Disruptions to Communications (NORS) at 11 (September 2012).

We previously estimated a total of 29,870 annual burden hours and \$872,840 in annual in-house costs for all existing outage reporting obligation under Part 4.<sup>30</sup> The proposed revisions discussed here would increase those estimates by 678 annual burden hours for a total of 30,548 hours and \$927,080<sup>31</sup> in annual in-house costs.

**Method of Calculating Burden:** We explain above how we calculated the impact on reporting burdens associated with the various proposals considered in the *Notice*.

**Variance in Burden:** We expect the limited impact of the proposed revision to be shared widely among entities that are subject to Part 4, although we expect that larger entities will continue to be more likely than smaller ones to experience outages of sufficient scale to trigger a reporting obligation.

**Summary of Respondents and Burden:**

**Total Number of Respondents: 1,100.**

**Total Number of Annual Responses: 15,783.**

**Total Annual Burden Hours: 30,548 hours.**

**Total Annual In-House Costs: \$927,080.**

**13. Provide estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden shown in items 12 and 14).**

We previously estimated no capital and startup costs, no purchases of additional equipment, or operation, maintenance, and purchase of services costs associated with existing Part 4 outage reporting obligations. The proposed new requirements will not result in additional operating and maintenance expenses. Therefore, the total remains \$0.

**14. Provide estimates of annualized costs to the Federal government. Also provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expenses that would not have been incurred without this collection of information.**

We previously estimated \$454,542.40 in total annual costs to the Federal government for administration of all Part 4 outage reporting requirements.<sup>32</sup> Adoption of the proposed requirements would result merely in an incremental increase in the number

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<sup>30</sup> See 2014 Supporting Statement at 10.

<sup>31</sup> \$872,840 + \$54,240 = \$927,080.

<sup>32</sup> See 2014 Supporting Statement at 12 .

of reports reviewed by Commission staff each year. We do not believe the projected increase of 339 additional reports per year would have any appreciable impact on the costs of the Federal government in administering the network outage reporting program. We therefore retain the current estimate of \$454,542.40.

**15. Explain the reasons for any program changes or adjustments for this information collection.**

If the Commission adopts the information collection requirements as proposed in a final rule making, the following burdens/increases will be added to OMB's inventory. The total number of responses increased from 15,444 to 15,783 (339) and the total annual burden hours increased from 29,870 to 30,548 (678).

**16. For collections of information whose results will be published, outline plans for tabulation and publication.**

The FCC does not plan to publish this information.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

The Commission does not intend to seek approval not to display the expiration date of the revisions to this information collection.

**18. Explain any exceptions to the Certification Statement identified in Item 19, "Certification of Paperwork Reduction Act Submissions."**

There are no exceptions to the Certification Statement.

**B. Collections of Information Employing Statistical Methods:**

The revisions to this information collection do not employ any statistical methods.