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

In the Matters of)	
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Amendments to Part 4 of the)	PS Docket 15-80
Commission's Rules Concerning)	
Disruptions to Communications)	
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New Part 4 of the Commission's Rules)	ET Docket No. 04-35
Concerning Disruptions to)	
Communications)	

COMMENTS OF THE ALLIANCE FOR TELECOMMUNICATIONS INDUSTRY SOLUTIONS

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July 16, 2015

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SUMMARY

ATIS NRSC supports the initiation of this rulemaking to examine changes to the Commission's communications outage reporting rules but urges the Commission to exercise caution when imposing any new or expanded outage reporting requirements on the industry. The key points of ATIS NRSC's comments on the rulemaking are summarized below.

Proposals to Improve Outage Data. In addition to responding questions raised in the rulemaking, ATIS NRSC provides general recommendations to improve the quality of outage data by: (1) extending the deadline for notifications, other than those for outages to 911 special facilities, from 240 minutes to 24 hours; and (2) eliminating the requirement that service providers submit initial reports within 72 hours of the discovery of an outage. ATIS NRSC also urges the Commission to consider how to modify the existing legacy network regulations and support real measurements from existing service assurance tools.

Call Failures. ATIS NRSC opposes the proposed revision to Section 4.5(e)(1) to provide that any network malfunction or higher-level issue that significantly degrades or prevents 911 calls from being completed constitutes a "loss of communications to PSAP(s)," regardless of whether the PSAP is rendered completely unable to receive 911 calls. ATIS NRSC also urges the Commission not to adopt its proposals to require the reporting of systemic wireless call failures that result from radio access network overloading and of widespread call blockages in non-wireless local access networks that are otherwise not reportable under the Commission's rules. To the extent that the Commission believes that network overloading requires further investigation, ATIS NRSC would recommend that a technical white paper be commissioned to examine the questions posed in the rulemaking on these topics.

Major Transport Facility Outages. ATIS NRSC supports the Commission's effort to identify a more reasonable reporting threshold and metric for major transport facility outages, but does not believe the proposed 667 OC3 metric adequately reflects the evolving use of the network. In addition, ATIS NRSC opposes a reduction in the reporting timeframe simplex outage reporting from five days to 48 hours.

Wireless Outage Reporting. ATIS NRSC recommends the Commission allow service providers flexibility in calculating the number of users potentially affected by an outage, rather than creating a single mandated method. ATIS NRSC also opposes as unnecessary the proposal to establish a reporting requirement based on the geographic scope of an event. ATIS NRSC supports the Commission efforts to provide additional flexibility and guidance to service providers in determining the number of end users potentially affected by an outage affecting a given PSAP by allocating capacity to each PSAP in reasonable proportion to its size in terms of number of users served. While ATIS NRSC supports efforts to provide additional flexibility and guidance to wireless carriers in determining affected end users, it believes that it may be too difficult for wireless carriers to allocate capacity on a proportional basis to each PSAP.

Special Offices and Facilities. ATIS NRSC opposes the proposal to classify as "special offices and facilities" under Section 4.5(b) of the rules those facilities enrolled in or eligible for the Telecommunications Service Priority (TSP) program. Additionally, ATIS NRSC supports

the elimination of Section 4.13 of the Commission's Part 4 and the Commission's proposals to provide further guidance regarding reporting requirements related to outages affecting airports.

State Access to NORS Data. ATIS NRSC does not oppose the sharing, with appropriate safeguards, of NORS data with states. However, if state access is provided, ATIS NRSC believes that it should be provided only to those states that agree to abide by the confidentiality and other restrictions established by the Commission pertaining to this data and that: (1) do not have and agree not to develop separate, inconsistent reporting obligations; (2) agree to permanently sunset or otherwise eliminate any inconsistent state level reporting obligations; and (3) do not have and agree not to develop state-level reporting regulations.

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COMMENTS OF THE ALLIANCE FOR TELECOMMUNICATIONS INDUSTRY SOLUTIONS

The Alliance for Telecommunications Industry Solutions (ATIS), on behalf of its Network Reliability Steering Committee (NRSC), hereby submits these comments in response to *Notice of Proposed Rulemaking*, released March 27, 2015, in the above referenced docket. ATIS NRSC commends the Commission for initiating this rulemaking to examine ways to improve outage reporting. ATIS NRSC supports the initiation of this rulemaking, and as explained in more detail below, believes that there are opportunities to enhance the Commission's outage reporting rules, eliminate unnecessary or duplicative reporting obligations and reduce the burden to the industry. ATIS NRSC also recommends the Commission harmonize the outage reporting requirements of cable, wireline and wireless carriers with those of interconnected VoIP providers.

I. Introduction

ATIS is a global standards development and technical planning organization that leads, 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 and wireline service providers, equipment manufacturers, broadband providers, software developers, consumer electronics companies, public safety agencies, and internet service providers. ATIS is also the North American Organizational Partner of the Third Generation Partnership Project (3GPP), the global collaborative effort that has developed the Long Term Evolution (LTE) and LTE-Advanced wireless specifications. Nearly 600 industry subject matter experts work collaboratively in ATIS' open industry committees and incubator solutions programs.

ATIS' NRSC was formed in 1993 at the recommendation of the first Network Reliability and Interoperability Council. The NRSC strives to improve network reliability by providing timely consensus-based technical and operational expert guidance to all segments of the public communications industry. The NRSC addresses network reliability improvement opportunities in an open environment and advises the communications industry through the development of standards, technical requirements, reports, bulletins, Best Practices, and annual reports. The NRSC is comprised of industry experts with a primary responsibility for examining, responding to, and mitigating service disruptions for communications companies. NRSC participants are the industry subject matter experts on communications network reliability and outage reporting.

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II. Comments

ATIS NRSC appreciates the Commission initiating this rulemaking to consider ways to improve the Part 4 rules. NRSC members are particularly interested in this issue, given the significant resources that these companies have devoted to ensuring the reliability and resiliency of communications networks. While ATIS NRSC believes that there are changes that can and should be made to the Commission's Part 4 rules, ATIS NRSC urges caution when considering imposing new or expanded outage reporting obligations on the industry. The Commission must carefully weigh its interest in collecting and analyzing outage reporting data against the burdens of the data collection on service providers, whose primary responsibility during an outage is the timely restoration of service.

In performing this evaluation, the Commission should accurately consider the burdens of proposed changes to the outage reporting rules on the industry. In the *NPRM*, the Commission estimates that the overall annual burden to the industry of the proposed rules would result in the filing of 339 additional outage reports, representing only \$54,240 in additional cost.¹ While ATIS NRSC has yet not collected data from its members on the costs associated with the proposed rules, it is deeply concerned that the burdens of the proposed rule changes will significantly exceed the Commission's estimates. As ATIS NRSC has previously noted, the Commission has historically substantially underestimated the burdens associated with outage reporting.²

¹ NPRM at $\P 8$.

² See, e.g., Letter from ATIS to Paul de Sa, Chief of the FCC's Office of Strategic Planning and Policy Analysis, dated September 23, 2009; Letter from ATIS to Nicolas Fraser of the Office of Management and Budget and Judith Herman of the FCC, dated May 14, 2010.

A. ATIS NRSC Proposals to Improve the Quality of Outage Data

ATIS NRSC's input on the issues raised in the *NPRM* is below. However, ATIS NRSC believes that there are additional recommendations that the Commission should consider in this docket that could significantly improve the quality of the outage data that is provided to the Commission.

First, ATIS NRSC strongly recommends that the Commission harmonize the outage reporting requirements of cable, wireline and wireless carriers with those of interconnected VoIP providers. Specifically, ATIS NRSC recommends that: (1) the deadline for notifications, other than those for outages to 911 special facilities, should be extended from 240 minutes to 24 hours, similar to the existing reporting requirements for interconnected VoIP providers; and (2) the requirement that service providers submit initial reports within 72 hours of the discovery of an outage should be eliminated. These rules will reduce the burden on service providers, while improving the outage reporting data received by the Commission. For instance, providing more time to submit notifications will allow service providers greater opportunity to evaluate events and their impacts resulting in more accurate, informative and timely notifications. The current 240-minute deadline, along with the threat of fines and penalties from the Commission for failure to provide timely notifications, requires carriers to submit notifications for events before they may have sufficient information to ensure that a reportable outage exists.

ATIS NRSC therefore urges the Commission to require only notifications and final reports for all reportable events regardless of the type of provider. Alternatively, if the Commission maintains the requirement that initial reports be filed, ATIS NRSC recommends that these reports be required no earlier than three (3) business days, rather than 72 hours, from the discovery of an outage. This would reduce the burden on service providers, while still providing timely (albeit still unnecessary) initial reports.

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Another issue that should be considered by the Commission, as it considers how to modify the existing regulations in the legacy network arena, is the existing state of the IP transition and the fact that IP networks, like legacy networks, utilize industry standards and service assurance tools that provide service providers with the ability to determine the state of their networks, such as metrics capturing failed calls. Although these tools and capabilities do not enable communications providers to directly correlate outage network events to a number of affected users, as currently defined in the FCC's Part 4 rules (i.e., 900,000 user minutes), they do offer active monitoring capabilities that provide statistics on the health of the network. ATIS NRSC urges the Commission to support measurements and tools service providers normally use to maintain their networks for peak performance, as opposed to making carriers monitor user minute impact that is not used by carriers as a means of ensuring their networks provide the very best service possible to their customer base.

B. Call Failures

In the *NPRM*, the Commission proposes revising Section 4.5(e)(1) to clarify that any network malfunction or higher-level issue that significantly degrades or prevents 911 calls from being completed constitutes a "loss of communications to PSAP(s)," regardless of whether the PSAP is rendered completely unable to receive 911 calls.³ ATIS NRSC does not support this proposed clarification for several reasons. First, it will be difficult, if not impossible, for service providers to determine when a degradation event would need to be reported, particularly as the proposed rule is not contingent upon the inability of the PSAP to receive calls. Second, the proposed rule could impose an obligation for service providers to report events that fall outside of their control and knowledge. Service providers do not control, or have visibility into, the

³ NPRM at ¶12.

portion of the networks owned and controlled by PSAPs or covered 911 service providers. ⁴ Moreover, the proposed new rule would likely degrade the data provided via the Commission's Network Outage Reporting System (NORS) by greatly increasing the number of reports indicating an E911 event, even if the event does not result in the failure of the PSAP to receive calls. This may make the statistics collected under NORS for E911 irrelevant as a tool for assessing trends for the reliability of 911 network elements.

The Commission seeks comment on its proposals to amend the Part 4 rules to require the reporting of systemic wireless call failures that result from radio access network (RAN) overloading and of widespread call blockages in non-wireless local access networks that are otherwise not reportable under the Commission's Part 4 rules. ATIS NRSC urges the Commission not to adopt these rules. Wireless networks, like their wired counterparts, are engineered to be reliable and resilient and to meet consumer needs. However, it is not feasible to engineer networks to have excess capacity in all situations, nor should the Commission attempt to require carriers to do so. During natural disasters or terrorist events, wireline and wireless usage may spike, resulting in congestion. These events are not a failure of communication systems and should not be treated as outages. To the extent that the Commission believes that network overloading requires further investigation, ATIS NRSC would recommend that a technical white paper be commissioned to examine the questions posed in the *NPRM* on these topics.

⁴ Furthermore, it should be noted that some "congestion" is not related to the condition of the underlying service provider's network but instead may related to the capacity of a PSAP to receive calls. Some PSAPs may not have sufficient resources (trunk lines, Emergency Service Routing Keys (ESRKs), or positions available) to handle incoming traffic. These events should also not be considered outages under the Commission's rules.

C. Major Transport Facility Outages

The Commission also seeks input on the appropriate threshold and metric for major transport facility outages. The current Part 4 rules define this threshold in terms of the impact on DS3 circuits. However, the Commission notes in the *NPRM* that increases in bandwidth requirements have shifted most traffic to larger circuits and optical facilities and therefore proposes the use of 667 OC3 minutes as the reporting threshold for transport facility outages.⁵ While ATIS NRSC supports the Commission's efforts to identify a more reasonable reporting threshold that takes into account the continued evolution of communication networks, it believes the proposed 667 OC3 metric does not adequately reflect the evolving use of the network. This proposed metric is based on an assumption that each DS3 is the equivalent of 450 voice-grade users; ATIS NRSC believes that assumption is not correct. A more accurate assumption, as reflected in the ATIS NRSC standard on *Analysis of FCC-Reportable Service Outage Data, Version 2*,⁶ is that each DS3 is the equivalent of 28 voice-grade users.

For simplex outage reporting, the Commission proposes in the *NPRM* to shorten the reporting timeframe from five days to 48 hours.⁷ ATIS NRSC opposes the proposed reduction in the reporting timeframe for these events. ATIS NRSC believes that the proposed change would significantly increase the number of outage reports while providing no useful data pertaining to network reliability or customer-impacting communications outages. ATIS NRSC also disagrees with the Commission's suggestion that the failure of a service provider to address simplex outages within 48 hours would contravene an established industry best practice.⁸ The Best

⁵ *NPRM* at ¶¶19-22.

⁶ Analysis of FCC-Reportable Service Outage Data, Version 2 (ATIS-0100021), published December 2012. All ATIS standards are publically available from ATIS' Document Center at < https://www.atis.org/docstore/default.aspx >.

⁷ NPRM at ¶24.

⁸ NPRM at $\P29$.

Practice on the restoration of simplex events, 9-8-0782, does not provide a specific deadline but rather states that such events should be detected and restored "expeditiously by executing appropriate incident response and escalation processes."⁹ ATIS NRSC notes that there are numerous reasons that it may take longer than 48 hours to restore a complex event, including safety concerns (down power lines, flooding, etc.), the existence of a larger outage event (natural disasters, terrorist events, etc.), major roadwork projects (bridge, overpass, etc.), access and right-of-way issues and prioritization of outages involving total loss of connectivity.

D. Wireless Outage Reporting

The Commission observes in the *NPRM* that wireless service providers use different methods to calculate the number of users "potentially affected" by an outage. It therefore proposes to adopt a more standardized method for calculating the number of users potentially affected by an outage that can be used by all reporting wireless providers, regardless of underlying technology, such as by calculating the total number of users potentially affected by an outage by multiplying the number of cell sites disabled as part of the outage by the average number of users it serves per site.¹⁰

ATIS NRSC appreciates the Commission's efforts to create a more standardized method for calculating potentially affected users and supports enhanced guidance from the Commission on this issue. However, ATIS NRSC recommends that the Commission not mandate a single method but continue to allow service providers flexibility to accurately calculate the number of

⁹ See ATIS Industry Best Practices website at < http://www.atis.org/bestpractices/Search.aspx >. Even if there was an unwritten best practice regarding the repair timeframe for simplex events, ATIS would not support the creation of a regulatory mandate based on this voluntary practice. As it has said many times in many different contexts, ATIS is concerned with the chilling effect that mandating best practices would have on voluntary industry collaborative efforts and on the creation of new best practices.

¹⁰ NPRM at ¶31-33.

impacted users through other methods. Such methods may include the ability to capture failed call metrics.

The Commission also seeks comment on whether to adopt a separate and additional wireless outage reporting requirement based on the geographical scope of an outage, irrespective of the number of users potentially affected.¹¹ ATIS NRSC opposes this proposed new reporting requirement, which would inappropriately impose a Disaster Information Report System (DIRS)like approach to outage reporting. Such an approach is unnecessary given the existing reporting requirements and could substantially increase the number of duplicative reports as many of the reports under this new requirement may also be reportable if they meet or exceed the existing reporting 900,000 user minute thresholds.

In the NPRM, the Commission solicits input on an issue raised in a petition for reconsideration of the 2004 Part 4 Report and Order pertaining to Section 4.9(e)(5) of the Commission's rules. This section provides that a reportable outage affecting a 911 special facility/PSAP occurs when: (1) there is a loss of communications to a PSAP potentially affecting at least 900,000 user-minutes; (2) the outage is not at the PSAP; (3) a complete reroute is not possible; and (4) the outage lasts 30 minutes or more.¹² The Commission proposes to allow wireless service providers to determine the number of end users potentially affected by an outage affecting a given PSAP by allocating capacity to each PSAP in reasonable proportion to its size in terms of number of users served.¹³ While ATIS NRSC supports efforts to provide additional flexibility and guidance to wireless carriers in determining affected end users, it believes that it may be too difficult for wireless carriers to make the proper allocations. If the

¹¹ *NPRM* at ¶34. ¹² 47 CFR §4.9(e)(5).

¹³ *NPRM* at ¶37.

Commission believes that the allocation of capacity to each PSAP in the U.S. in reasonable proportion to the number of users served can and should be done, ATIS NRSC proposes that the Commission consider taking on responsibility for calculating this metric and for sharing methodology and results with the PSAP community, service providers and other stakeholders.

E. Special Offices and Facilities

In the NPRM, the Commission proposes a number of revisions to the outage reporting requirements related to special offices and facilities. For example, the Commission proposes to classify as "special offices and facilities" under Section 4.5(b) of the rules those facilities enrolled in or eligible for the Telecommunications Service Priority (TSP) program.¹⁴ ATIS NRSC opposes this revision. ATIS NRSC believes that TSP should not be included in the "reason reportable" criteria of "special offices and facilities" and that only circuits that are enrolled in the TSP program would then be identified by checking the existing NORS TSP drop down box on the outage report.

The Commission also proposes to delete as redundant Section 4.13 of its Part 4 rules.¹⁵ This section provided for reports by the National Communications System (NCS) and by special offices and facilities (other than 911 special offices and facilities). ATIS NRSC agrees that this information is unnecessary and supports the proposed deletion.

In the NPRM, the Commission also proposes certain changes to its rules pertaining to the reporting of outages affecting airports. Specifically, the Commission proposes to: (1) limit reporting to outages that are related to critical communications, defined as one that: (i) disrupts 50 percent or more of the air traffic control links or other FAA communications links to any

 ¹⁴ NPRM at ¶39.
¹⁵ NPRM at ¶41.

airport; (ii) has caused an Air Route Traffic Control Center (ARTCC) or airport to lose its radar; (iii) has caused a loss of both primary and backup facilities at any ARTCC or airport; or (iv) has affected an ARTCC or airport that is deemed important by the FAA as indicated by FAA inquiry to the provider's management personnel; ¹⁶ and (2) amend its definition of "special offices and facilities" to exclude all airports other than those designated "primary commercial service" airports in the National Plan of Integrated Airport Systems (NPIAS).¹⁷ ATIS NRSC supports both proposals but notes that, in order to allow the effective implementation of these changes, service providers will need to be able to determine when an outage impacts critical communications (such as primary and secondary backup facilities or 50 percent of the air traffic control links).

F. State Access to NORS Data

Finally, the Commission asks for input on granting states read-only access to those portions of the NORS database that pertain to communications outages in their respective states.¹⁸ ATIS NRSC does not oppose the sharing, with appropriate safeguards, of NORS data with states. However, if state access is provided, ATIS NRSC believes that it should be provided only to those states that agree to abide by the confidentiality and other restrictions established by the Commission pertaining to this data and that: (1) do not have and agree not to develop separate, inconsistent reporting obligations; (2) agree to permanently sunset or otherwise eliminate any inconsistent state level reporting obligations; and (3) do not have and agree not to develop state-level reporting regulations.

¹⁷ NPRM at ¶43. ¹⁸ NPRM at ¶51.

Additionally, prior to granting access to NORS, states should be required to certify that they have in place appropriate confidentiality protections and that any public disclosure or misuse be subject to the same or more stringent penalties that would apply to the misuse of numbering data. The protection of data must include prohibitions against states' sharing of such data with: any governmental body that has not certified that it can protect such data; and any private entity, including private contractors that may be working on behalf of state agencies. ATIS NRSC believes that there should be a limit to the number of personnel that may access the data and that the identities of those with such access should be kept on file with the Commission. The Commission also should: (1) create and maintain an audit log for NORS to record what data was accessed, when and by whom; and (2) audit all NORS accounts granted to State Commissions and shut down those that have not been used in the past six months.

States that receive access to NORS data also must have laws in effect that would apply criminal penalties for misuse of NORS data and have in place adequate policies and computer protections to ensure that outside parties are unable to procure access to such information from their servers or computers. Limitations must be in place to restrict access to such information to persons with a need to know such information, along with limitations on copying and distributing such information and the Commission should establish a process by which service providers can seek redress from the Commission for any state misuse of outage reporting data. States should be required to inform the Commission and all affected NORS filers of any breach or suspected breach of data.

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III. Conclusion

ATIS NRSC appreciates the opportunity to respond to the issues raised in the *NPRM*. As noted above, ATIS NRSC believes that there are opportunities to enhance the Commission's outage reporting rules, eliminate unnecessary or duplicative reporting obligations and reduce the burden to the industry.

Respectfully submitted,

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Date: July 16, 2015