

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

In the Matter of)
)
New Part 4 of the Commission's Rules)
Concerning Disruptions to Communications) ET Docket No. 04-35
)

**COMMENTS OF
ALLIANCE FOR TELECOMMUNICATIONS INDUSTRY SOLUTIONS**

**THE ALLIANCE FOR TELECOMMUNICATIONS
INDUSTRY SOLUTIONS**
On behalf of its **Network Reliability Steering
Committee and Technical Subcommittee T1A1**

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May 25, 2004

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SUMMARY

ATIS appreciates the opportunity to provide comments, on behalf of its Network Reliability Steering Committee (NRSC) and Technical Subcommittee T1A1, to the Commission's *NPRM* in this proceeding. In these comments, ATIS urges the Commission to recognize the strong commitment of the communications industry to provide reliable services to its customers, as well as the continuing voluntary industry efforts to promote reliability in communications networks. As the Commission correctly identifies, the existing outage reporting approach has worked well and has fostered industry cooperation.

ATIS recommends that the Commission encourage industry cooperation by taking a reasoned approach to outage reporting that considers the technical feasibility of implementing the proposed reporting thresholds. To promote the submission of meaningful outage data, ATIS recommends that the Commission base outage reporting requirements on the performance measurements developed by the industry. ATIS also recommends changes to the Commission's proposed DS3 and Signaling System 7 reporting thresholds, as well as the reporting requirements pertaining to "special office and facilities," to take into account technical issues and to reduce unnecessary burdens on communications providers. ATIS supports modifications to the 911 outage reporting rules, but proposes a less burdensome alternative threshold to that proposed by the Commission. ATIS also supports the Commission's proposal to eliminate the existing reporting requirement for outages caused by fires.

Finally, ATIS proposes that the Commission adopt a three-stage reporting process that reduces the burden on communications providers and protects sensitive outage reporting data. To encourage the filing of accurate and timely outage information, ATIS suggests technical changes to the proposed electronic template to clarify the electronic filing process, eliminate unnecessary fields and add new fields that clarify the information being sought.

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**Comments of
Alliance for Telecommunications Industry Solutions**

The Alliance for Telecommunications Industry Solutions (ATIS), on behalf of its Network Reliability Steering Committee and Technical Subcommittee T1A1, hereby files these comments in response to the Federal Communications Commission's (Commission) *Notice of Proposed Rulemaking (NPRM)* in the above-referenced docket.¹ ATIS' comments address several key aspects of the *NPRM*. First, in Section II of its comments ATIS urges the Commission to recognize the strong commitment of the communications industry to provide reliable services to its customers, as well as the continuing voluntary industry efforts to promote reliability in communications networks. In Section III, ATIS recommends that the Commission encourage industry cooperation by taking a reasoned approach to outage reporting that considers the technical feasibility of implementing the proposed reporting thresholds. To promote the submission of meaningful outage data, ATIS recommends that the Commission base outage reporting requirements on the performance measurements developed by the industry. Finally, in Section IV, ATIS proposes that the Commission adopt a three-stage reporting process that reduces the burden on communications providers and protects sensitive outage reporting data.

¹ *NPRM*, ET Docket No. 04-35, Rel. Feb. 23, 2004.

I. Introduction and Background

The Commission released the *NPRM* on February 23, 2004, seeking comment on proposals to expand the existing communications disruption reporting requirements to “communications providers” that are not wireline carriers and to establish new thresholds for the filing of outage reports. Section 63.100 of the Commission’s rules details the existing outage reporting requirements for local exchange and interexchange common carriers and competitive access providers.² This section requires these carriers to file a notification within 120 minutes of a service outage affecting 50,000 customers for thirty (30) minutes or more, and within 3 days of an outage affecting fewer than 50,000 but more than 30,000 customers and lasting for thirty (30) minutes or more.³ The current rules also provide for the reporting by these carriers of service disruptions of thirty (30) minutes or more to “special facilities” and 911 facilities.⁴

ATIS is a technical planning and standards development organization committed to rapidly developing and promoting technical and operational standards for communications and related information technologies worldwide using a pragmatic, flexible and open approach. Over 1,100 industry professionals from more than 350 communications companies actively participate in ATIS’ open industry committees, forums and “Incubators.”⁵ The ATIS membership spans all segments of the communications industry, including local exchange

² 47 C.F.R. §63.100.

³ 47 C.F.R. §63.100(b)-(c).

⁴ 47 C.F.R. §63.100(e)-(g).

⁵ ATIS Incubators are industry-driven work groups that provide the industry with a "fast-track" process for resolving technical and operational issues. For more information, see the ATIS incubator web site at: <http://www.atis.org/incubator.shtml>.

carriers, interexchange carriers, manufacturers, competitive local exchange carriers, data local exchange carriers, wireless providers, broadband providers, providers of operations support, software developers and internet service providers.

ATIS has significant experience with the Commission's outage reporting requirements. The ATIS Network Reliability Steering Committee (NRSC) was formed at the request of the first Network Reliability Council (NRC-1)⁶ to monitor network reliability. NRSC is a consensus-based industry committee that analyzes the communications industry's reporting of network outages to identify trends, makes recommendations aimed at improving network reliability, distributes the results of its findings to industry and, where applicable, refers matters to appropriate industry forums for further resolution and to help ensure a continued high level of network reliability. The NRSC publishes quarterly and annual reports analyzing outage data and benchmarking this data to previous years' data.⁷

The Industry-Led Outage Reporting Initiative (ILORI) consensus body was formed at the recommendation of the Network Reliability and Interoperability Council VI's (NRIC VI) Focus Group 2 – Network Reliability. The objective of ILORI is to promote a highly reliable public communications infrastructure that addresses the needs of end users in the United States. The purpose of the initiative is to: (1) establish a network reliability monitoring capability for the nation's public communications infrastructure; (2) provide a forum for industry experts to review

⁶ NRC-1, a federal advisory committee organized by the Commission in 1992, was established to study the causes of service outages and to develop recommendations to reduce their number and their effects on consumers. The Council's Charter was revised, and its title changed to the present "Network Reliability and Interoperability Council," by the Commission in 1996.

⁷ The most recent published quarterly report, NRSC Fourth Quarter 2003 Macro-Analysis, can be found on the ATIS web site at <http://www.atis.org/pub/nrsc/4Q03macanal.pdf>.

outage data in a trusted environment to achieve early trend identification and capture key learnings; (3) provide public accountability in the reporting process by recognizing participating companies for their commitment and execution of the process; (4) make effective use of the data gathered from the NRIC VI Focus Group 2 – Network Reliability trial and implement its recommendation for the establishment of a new outage reporting program; and (5) generate summary data analysis reports based on outage data voluntarily submitted by individual companies to ATIS on behalf of the NRSC. The scope of this initiative includes a wide range of networks, including: cable, dial-up, DSL, satellite, and wireless, as well as Internet Service Providers. In March of 2004, ILORI members decided to incorporate this initiative into the ATIS NRSC.

ATIS Technical Subcommittee T1A1 (T1A1) also develops industry consensus on issues related to network outages. T1A1's mission is to: (1) develop and recommend standards, requirements, and technical reports related to the performance, reliability and associated security aspects of communications networks, as well as the processing of voice, audio, data, image, and video signals, and their multimedia integration; and (2) assist the industry in identifying and defining performance parameters and levels for the speed, accuracy, dependability, availability and robustness of connection establishment, information transfer and connection disengagement. T1A1 also develops and recommends positions on, and fosters consistency with, standards and related subjects under consideration in other North American and international standards bodies.

Participating in the ATIS NRSC, ILORI and T1A1 are representatives from the following companies:

Alcatel USA, Inc.	Marconi
ASTRI	MCI
XO Communications / Allegiance Telecom	McLeod
ALLTEL	National Communications System (NCS)
AT&T	National Cable and Telecommunications Association
AT&T Wireless	National Telecommunication and Information Administration (NTIA)
BellSouth Corporation	New Skies Satellites
Cellular Telecommunications & Internet Association	Nextel Communications
CenturyTel, Inc.	Nortel Networks Corporation
Charter Communications	Paix.net, Inc.
Cingular	PanAmSat Corporation
Cisco Systems, Inc.	Qwest Communications
The Corporation for National Research Initiatives (CNRI)	Rural Cellular Corporation
C.S.I. Telecommunications	Savvis Communications Corporation
Comcast Cable Communications, Inc.	Siemens Information & Communications Networks, Inc.
Cox Communications	SBC Communications
Defense Information Systems Agency	Sprint Corporation
US Department of Homeland Security	Telcordia Technologies
Earthlink, Inc.	Tellabs Operations, Inc.
Ericsson Incorporated	Time Warner Cable
Focal Communications Corporation	T-Mobile
Harris Corporation	United States Telecom Association
Illuminet	VeriSign, Inc.
Intelsat	Verizon Communications
Juniper Networks	Verizon Wireless
Level 3 Communications	Western Wireless Corporation
Lucent Technologies	

II. The Commission's Outage Reporting Rules Should Promote Industry Cooperation

Before responding to specific aspects of the *NPRM*, ATIS, as a general matter, submits the following. First, the communications industry has, and always will, work to deliver reliable

communications services to its customers. The existence or absence of mandatory reporting requirements will not change that commitment. Consequently, the industry believes that there is no basis for the assertion that, absent mandatory reporting requirements, the industry's commitment to provide reliable services or to meet its customer service obligations would be jeopardized. Likewise, statements like those made in the *NPRM* suggesting that without changes to the disruption reporting rules thousands of customers could be without service for "decades"⁸ paint an inaccurate picture of the industry and its diligent work in responding to service outages. The industry makes every attempt to restore service to customers as quickly as possible, no matter the size of the outage or the size of the customer.

Second, ATIS supports the Commission's efforts to ensure that the United States has reliable communications. ATIS' comments, submitted on behalf of the industry groups T1A1 and NRSC/ILORI, are aimed at providing equitable and effective alternative methods for outage reporting that will not impose unnecessary burdens on communications providers. The industry is not attempting to evade public scrutiny of its operations or its reliability, but to find a more equitable balance between the perceived benefits of mandatory outage reporting and the costs borne by communications companies of new, more burdensome regulations. As explained in greater detail below, many of the Commission's proposals are not technically feasible or cost-effective to implement. In some cases, the reporting requirements could make communications networks more vulnerable by exposing sensitive critical infrastructure information to those who would misuse it, or result in the submission of less useful outage reporting data. It is imperative,

⁸ *NPRM* at ¶21.

therefore, that the Commission carefully analyze any changes to the outage reporting requirements to ensure that those changes warrant the substantial costs and risks involved.

A. The Existing Outage Reporting Approach Has Worked Well

The Commission states in the *NPRM* that the existing outage reporting approach has worked well and the outage reporting requirements have been successful in permitting the causes of certain types of disruptions to be identified and corrected.⁹ ATIS agrees and urges the Commission to not jeopardize the cooperative, industry-led approach to the analysis of outage reporting and the development of Best Practices.

ATIS notes that the real benefit of the existing reporting requirement has not been public access to outage reports, but the cooperative analysis of the data and the studies performed by the industry in the NRSC. The cooperative analysis by the industry is what has allowed the wireline industry to have “fostered reliability in the telephone network even as the number of competitive, interconnected telephone and data networks has increased...”¹⁰ Working under the auspices of the NRSC and the Network Reliability and Interoperability Council, communications providers have been successful in identifying the root causes of outages and appropriate Best Practices to address these causes. In fact, the NRSC’s Fourth Quarter 2003 Macro-Analysis notes that there is a decreasing trend in total outages since 2000, as well as decreasing trends in Facility outages,

⁹ *NPRM* at ¶6.

¹⁰ *NPRM* at ¶7.

Central Office Power outages, Tandem Switch outages, Common Channel Signaling outages and Digital Cross-Connect System outages.¹¹

Public access to outage reporting data has in the past presented unexpected problems and provided an opportunity for some carriers to make misleading claims of superior service. For example, ILORI members have mentioned a start-up communications company that used data from the outage reports in an advertisement to claim that its service was more reliable than the local telephone company's service. However, according to the ILORI members, this claim could not be verified by consumers or the local telephone company as the new entrant did not meet the criteria for outage reporting and did not have publicly available outage data. As explained more fully in Section IV.B. of these comments, ATIS is also concerned that public disclosure of sensitive outage reporting data may present security problems in the post-9/11 environment.

B. Best Practices Should Be Developed Voluntarily by the Industry

The success of the industry in voluntarily developing and implementing Best Practices is indisputable. As of May 21, the NRIC web site¹² listed 766 Best Practices covering cable, internet/data, satellite, wireless and wireline networks. Representatives from companies operating these networks actively participate in NRIC and have contributed to the development and validation of these Best Practices.¹³ The Best Practices allow the industry to continue to

¹¹ NRSC Fourth Quarter 2003 Macro-Analysis at pp. 2-3.

¹² This site is located at www.nric.org.

¹³ NRIC V and NRIC VI included representation from the wireless, internet service provider, and cable communities, including the Cellular Telecommunications and Internet Association, the National Cable and Telecommunications Association and the Internet Operators Group. Representatives from these industries contributed to the development of Best Practices. NRIC VII also includes representation from these industries.

increase reliability of communications networks and to address new technical challenges. ATIS strongly recommends that the Commission ensure any new reporting requirements do not interfere with the successful voluntary development of Best Practices.

While the Commission correctly identifies in the *NPRM* the importance of the voluntary development and evolution of Best Practices, the Commission is incorrect when it implies that this process “could have not been possible or so successful if service disruption reporting had not been mandatory and those reports available to communications providers, manufacturers, and the public.”¹⁴ In fact, only a small minority of existing Best Practices can be attributed to knowledge gained from the Commission’s outage reporting requirements.¹⁵ The vast majority of all Best Practices have been derived from insights from either individual company technical support experience or from proactively addressing communications infrastructure vulnerabilities in light of Y2K issues and the September 11, 2001, terrorist attacks.

ATIS urges the Commission to continue supporting the development of Best Practices through industry groups, such as ILORI, the NRSC and the Commission’s NRIC. These groups allow industry experts to share their technical and operational expertise, as well as their companies’ existing Best Practices, in a cooperative setting free from regulatory mandates. This process must continue; voluntary industry groups must remain the venue for identifying new Best Practices and evaluating the effectiveness of existing and recommended Best Practices. If

¹⁴ *NPRM* at ¶10.

¹⁵ According to industry experts who have led the development of NRIC Best Practices and who have participated in the NRSC, less than 5% of the Best Practices are attributable to outage reporting. Over 500 of the Best Practices have been developed in the last cycle (NRIC VI).

the development of Best Practices is usurped by the Commission, or any regulatory entity, or the implementation of Best Practices is made mandatory, then the open exchange of information will be stifled, involvement by industry will likely diminish and the successful Best Practice development process will be jeopardized.

C. The Industry-Led Outage Reporting Initiative Should Continue

ATIS urges the Commission not to expand the outage reporting requirements, but instead to allow the industry to continue through ILORI to develop effective and equitable reporting mechanisms for communications providers, including providers of wireline, dial-up internet, cable, digital subscriber line, satellite, paging, wireless internet and wireless voice services. This effort builds upon the recommendations of NRIC VI Focus Group 2. As NRIC VI Focus Group 2 noted in its *Final Report*, its outage reporting trial validated many of the reporting processes but left room for improvement.¹⁶ NRIC VI Focus Group 2 recommended continuing outage reporting by wireline and non-wireline providers and, based on the concerns raised about the trial process, suggested improvements to be incorporated in a new outage reporting program. Among the recommendations for improvement were the following: (1) develop a process to allow parties to discuss outage reports in a confidential manner; (2) increase the information provided by requiring the completion of currently optional information; (3) improve outage reporting templates and data field descriptions; (4) improve the accountability of participants for completeness of reports; (5) develop effective follow-up procedures; and (6) apply quality process management.¹⁷

¹⁶ NRIC VI Focus Group 2 *Final Report* at p. 49.

¹⁷ *Id.*

ILORI has developed a new outage reporting process that improves the mechanisms used in the NRIC VI outage reporting trial. However, the ILORI reporting process is not simply a continuation of the NRIC VI Focus Group 2 trial. Unlike the NRIC reporting process, the ILORI process holds participants accountable for the submission of timely and accurate information. ILORI will hold open meetings in which the industry, interested members of the public and other interested parties can attend. During these meetings, aggregated and/or other “scrubbed” data will be discussed. The ILORI process also provides for the review of filed reports to ensure that important data fields are completed. The voluntary outage reporting effort also includes mechanisms to assure the submission of accurate, useful and complete reports, even during periods of high service disruption and/or management turnover.¹⁸ The ATIS ILORI process incorporates a mechanism to send “reminders” to participants aimed at assuring the timeliness and quality of outage reporting. If a participant fails to respond to a reminder, a notification is sent to a more senior company representative. In addition, ILORI has implemented process management and controls to ensure the consistency of reporting at all times. ILORI recognizes that consistent and accurate reporting of outages is dependent on the participants’ corporate commitment to the process and has undertaken an educational effort to ensure that participants are aware of the outage reporting process at all levels within the companies.¹⁹

Participants in ILORI include the largest communications providers in the United States.

The ILORI process requires outage reporting for services offered to a substantial portion of the

¹⁸ The Commission seeks information on these mechanisms in the *NPRM* at ¶12.

¹⁹ ATIS notes that any mandatory reporting requirement would be just as dependent on corporate commitment and education to ensure completeness and accuracy during times of high service disruption or management turnover.

nation's end-users and ILORI anticipates that participation in the initiative will continue to grow. The recent implementation of secure data collection procedures through an ILORI-developed web-based computer program is expected to result in greater participation by wireless and satellite companies.

ATIS therefore urges the Commission not to adopt expanded mandatory reporting requirements but to permit the continued work of the industry to develop outage reporting requirements under the auspices of NRSC/ILORI. The existing outage reporting approach has worked well and has fostered industry cooperation, resulting in a decreasing trend in outages. The existing approach has also encouraged the industry to cooperatively develop Best Practices. ATIS strongly recommends that the industry effort to develop equitable and effective outage reporting processes be allowed to continue.

III. Any New Reporting Requirements Must Be Reasonable

The Commission proposes to modify the existing mandatory outage reporting requirements in favor of a new common metric, which would be applicable to all communications providers. Doing away with the existing requirement for the reporting of outages lasting at least thirty (30) minutes and affecting 30,000 customers, the Commission proposes instead to focus on "user minutes," defined as the outage duration, in minutes, multiplied by the number of end users potentially affected by the outage.²⁰ The Commission proposes requiring reports for outages of at least thirty (30) minutes affecting a minimum of

²⁰ *NPRM* at ¶22.

900,000 potential “user minutes.”²¹ According to the Commission, the proposed “user minute” common metric will enable it to better assess the reliability of voice and data communications platforms.²² The Commission notes that under the current reporting rules four-fifths of the wireline switching centers are not reportable because they have less than 30,000 assigned telephone numbers.²³

ATIS believes that the Commission’s reasoning regarding this matter is flawed. The Commission’s calculation regarding the number of switches not subject to the existing outage rules is based on number utilization reports filed under Section 52.15(f) of the Commission’s rules.²⁴ However, these Numbering Resource Utilization/Forecast (NRUF) reports do not reflect working telephone lines, only the number of access lines sold, and are not based on switch data but on numbering resource records. The proportion of switches with fewer than 30,000 lines is actually less because the number of “sold” lines (the figure reflected in the NRUF report) is greater than the number of “actual” lines (the maximum number of lines that can be working at any one time in a switch). The NRUF reports do not take into account: (1) NXX numbers that could be working in different switches that are not in the same rate center; (2) Local Number Portability issues; or (3) multiple numbers assigned to the same working line (for instance, to provide distinctive ring features, etc.).

²¹ *Id.*

²² *NPRM* at ¶23.

²³ *NPRM* at ¶23, Footnote 55.

²⁴ 47 C.F.R. §52.15(f).

Furthermore, the Commission's implication that the new metric will better capture those switches serving a smaller number of end-users is contradicted by the Commission's own statements elsewhere in the *NPRM*. In Appendix C, Section D, the Commission states that it does not expect the change in the reporting threshold to alter the number of outage reports filed by wireline carriers "to a significant degree."²⁵ If the Commission does not expect there to be any significant increase in the reporting, then it does not expect many of these smaller switches to be reported under the proposed rules and there is no reason to change the reporting thresholds for those services currently subject to the outage reporting rules.

The Commission's proposed common metric poses potential problems. First and foremost, the proposed change in the reporting threshold could result in the dramatic expansion of reportable incidents for all types of communications providers, despite the Commission's statement to the contrary. There is no way to accurately estimate the number of additional outage reports that would result from the proposed changes, or what the associated burden would be to communications providers. While the industry believes the proposed rules would result in a substantial expansion, it does not believe that this expansion would necessarily provide a better understanding for the Commission or the industry regarding these outages or relevant Best Practices. If outage reporting becomes routine and pertains to less significant incidents, the industry's focus on developing Best Practices would be diluted. Likewise, the more time that must be spent completing outage reports for less significant incidents, the less time available for developing industry solutions.

²⁵ *NPRM* at Appendix C, Section D.

Second, by focusing on user minutes, ATIS believes that the Commission's proposed common metric would provide an inaccurate portrayal of the affect of outages. To the public, the number of user minutes affected by an outage would appear to describe the actual utilization of the network by end-users. The level of usage, of course, differs greatly depending on the time of day or the day of week. By failing to take into account time of day or time of week, the perceived impact on end-users could be overstated.

ATIS urges the Commission to ensure that any new reporting threshold minimizes the financial impact on communications providers. In making its public policy decision on outage reporting, the Commission must take into account the costs associated with technical and personnel resources, and the effect that these additional costs might have on the providers' ability to provide cost-effective services. Communications providers have spent considerable time and effort in developing processes and procedures based on the existing outage reporting thresholds over the last decade. Changes in these thresholds would certainly require the retraining of personnel and, in many cases, would require substantial capital outlays for new equipment. ATIS' members have indicated that these costs would be significant for many carriers and could require them to redirect funding from newer services. The crucial question becomes: "Is the expansion of mandatory reporting requirements worth the potential impact on providers and their customers?"

While ATIS believes that the existing reporting thresholds have worked well and have effectively identified major outages, if the Commission adopts new thresholds, ATIS recommends that the new thresholds more accurately reflect the technical differences among

communications networks and carriers. ATIS does not want the only common aspect of the proposed metric to be the technical infeasibility of compliance. ATIS proposes an alternative performance measurement that accurately measures customer impact while reflecting the technical realities of the communications marketplace. As not all communications providers have the same technological capabilities to capture call data, ATIS believes the outage reporting thresholds should take into account these differences. The industry, through NRSC/ILORI and T1A1, has proposed the following performance measurement for outage²⁶ reporting:

For those communications providers that have the ability to use blocked call counts, ATIS proposes an outage be reported if it: (1) lasts for thirty (30) or more minutes; (2) generates 90,000 blocked calls based on real-time traffic data; and (3) involves a survivable element.²⁷ If real-time traffic data is unavailable, then a communications provider would report an outage if it: (1) lasts for thirty (30) or more minutes; (2) affects 30,000 calls based on historic traffic data; and (3) involves a survivable element. Finally, for those communications providers that do not have the ability to identify blocked call data, a different threshold would be used. For these providers, an outage would be reportable if it: (1) lasts for thirty (30) or more minutes and affects 30,000 or more "lines in service," or lasts for at least six hours and affects 30,000 or fewer "lines in service"; and (2) involves a survivable element.

A. The Reporting Requirements for Outages Affecting Wireline Communications Should Be Based on the Performance Measurement Developed by the Industry

ATIS urges the Commission to adopt reasonable reporting requirements for wireline communications. As explained above, the Commission's proposed common metric poses many

²⁶ ATIS recommends that the Commission revise its proposed/existing definition of "outage." Proposed section 4.5(a) of the rules retains to a significant degree the definition of this term found in 47 C.F.R. §63.100. Both definitions define outage as "a significant degradation" in the ability of an end user or customer to establish and maintain a communications channel due to a failure or degradation in the network. ATIS urges the Commission to eliminate the term "significant degradation" and instead define "outage" as "the total loss of the ability of end users to establish and maintain a channel of communications due to a failure in the performance of a service provider's/network operators network."

²⁷ A "survivable element refers to switching or transmission equipment that has active redundant capability.

problems. ATIS recommends that the Commission look to the performance measurement proposed by NRSC/ILORI and T1A1 as the basis for its wireline reporting requirements.

1. The Commission's Proposed Reporting Threshold for Voice Telephony Ignores Important Technical Issues

For wireline voice communications, the Commission proposes that outages be reportable if they last for at least thirty (30) minutes and potentially affect 900,000 user minutes.²⁸ The Commission further proposes to define the number of end-users as the number of "assigned telephone numbers," which is the sum of the "assigned numbers" and "administrative numbers."²⁹

The Commission's proposed use of "assigned telephone numbers" in the outage reporting threshold for wireline voice communications is particularly troublesome for several reasons. First, the number of "assigned numbers" has little correlation to the number of customers or customer lines in today's environment. It is common for a single access line to have as many as three (3) telephone numbers assigned to it. Customers may associate one line with multiple telephone numbers by assigning distinctive rings to each number. Second, LECs may have difficulty determining the number of "assigned numbers" for the purposes of outage reporting because they are not in control of the assignment or activation of all numbers. Toll-free numbers (8XX), also known as Easily Recognizable Codes (ERCs), are sold and assigned on residential and business lines by Responsible Organizations, including IXCs and other service providers

²⁸ *NPRM* at ¶32.

²⁹ *NPRM* at ¶33.

outside of the control or knowledge of the local service provider. For large business and government customers with their own equipment (e.g., Private Branch Exchanges), the LEC may assign a group of 100 to 10,000 telephone numbers to a customer and this customer would be responsible for number activation. Third, Local Number Portability has made it very difficult to determine the number of telephone numbers that are active in any given office. For these reasons, calculating user minutes based on “assigned telephone numbers” would be misguided.

ATIS recommends the adoption of the performance measurement developed by the industry. Under the industry’s proposal, outages affecting wireline voice communications would be reportable based on the following:

For those communications providers that have the ability to use blocked call counts, ATIS proposes an outage be reported if it: (1) lasts for thirty (30) or more minutes; (2) generates 90,000 blocked calls based on real-time traffic data; and (3) involves a survivable element (i.e., host and remote switches). If real-time traffic data is unavailable, then a communications provider would report an outage if it: (1) lasts for thirty (30) or more minutes; (2) affects 30,000 calls based on historic traffic data; and (3) involves a survivable element (i.e., host and remote switches). Finally, for those communications providers that do not have the ability to identify blocked call data, a different threshold would be used. For these providers, an outage would be reportable if it: (1) lasts for thirty (30) or more minutes and affects 30,000 or more "lines in service," or lasts for at least six hours and affects 30,000 or fewer “lines in service”; and (2) involves a survivable element (i.e., host and remote switches).

2. The IXC/LEC Tandem Reporting Requirements Should Accurately Reflect Outages

In the *NPRM*, the Commission proposes that carriers report outages for interexchange carrier (IXC) and local exchange carrier (LEC) tandems if these outages last for at least thirty

(30) minutes and block a minimum of 90,000 calls (if based on real time data) or 30,000 blocked calls (if based on historic call data).³⁰

ATIS proposes the adoption of a slightly modified blocked call threshold for these outages based on the industry's performance measurement. For IXC and LEC tandem outages, wireline carriers should be required to report outages: (1) lasting thirty (30) minutes or more; (2) affecting 90,000 or more blocked calls based on real-time data (either incoming or outgoing, but not both); and (3) involving a survivable element (i.e., tandem switches). If real time data is not available, carriers would be required to report outages: (1) lasting for thirty (30) minutes or more; (2) affecting 30,000 or more calls processed by the tandem based on historic traffic data; and (3) involving a survivable element (i.e., tandem switches).

ATIS notes that there is an inconsistency between the text of the *NPRM* and the text of the proposed rules regarding IXC and LEC tandem outages. In the *NPRM*, the Commission notes it is modifying the reporting rule regarding IXC and LEC tandem outages to replace the "customer" metric with the "assigned telephone number-minutes" metric.³¹ However, proposed section 4.9(c) of the Commission's rules does not reference "assigned telephone number-minutes," but rather blocked calls. As previously explained, ATIS disagrees with the Commission's proposed reliance on "Assigned Telephone Numbers" in determining the reporting thresholds because: (1) the number of "assigned numbers" has little correlation to the number of customers or customer lines; (2) LECs and IXCs would have difficulty determining

³⁰ *NPRM* at ¶34; proposed section 4.9(c) of the Commission's rules.

³¹ *NPRM* at ¶34.

the number of “assigned numbers” for the purposes of outage reporting because they are not in control of the assignment or activation of all numbers; and (3) Local Number Portability has made it very difficult to determine the number of telephone numbers that are active in any given office. ATIS urges the Commission to resolve this inconsistency by eliminating the reference to “assigned telephone numbers” in the reporting threshold for IXC and LEC tandem outages and instead relying on the performance measurement proposed by NRSC/ILORI and T1A1.

ATIS agrees with the Commission that the term "blocked calls" is not currently well defined under the existing rules.³² This ambiguity has led to inconsistency in outage reporting. However, ATIS disagrees with the Commission’s proposal that blocked call counts include both originating and terminating calls.³³ Combining incoming and outgoing traffic measurements would double the actual number of blocked calls. ATIS recommends that providers determine the number of blocked calls based on the Tandem Peg Count measurement and only incoming or outgoing calls be counted in a tandem.³⁴

In the *NPRM*, the Commission suggests that historical data may be used for outages in which the failure prevents the counting of blocked calls in either the originating or terminating direction, or in both directions. The Commission recommends that three times the actual number of carried calls for the same day of the week and the same time of day should be used as a

³² *Id.*

³³ *Id.*

³⁴ ATIS also suggests replacing the terms “originating” and “terminating” with “incoming” and “outgoing.” Originating and terminating traffic refers to traffic between access lines and their end offices, but is not used to describe traffic between switches. Pure tandem switches do not have originating or terminating calls. For this reason, the terms “incoming” and “outgoing” are more appropriately used to describe traffic between switches.

surrogate for the number of blocked calls that could not be measured directly.³⁵ If only originating or terminating blocked call counts are available, the Commission recommends doubling the available count in order to determine whether the reporting threshold has been satisfied.³⁶

ATIS disagrees with the Commission regarding these recommendations. Tripling the number of calls based on historical data in cases where neither incoming nor outgoing real-time call data is available would almost certainly overstate the number of calls that were blocked. Instead, ATIS recommends that actual historical numbers be used as the basis for determining the impact on users.³⁷ In those rare cases where the real-time data is available for only incoming or outgoing traffic, a doubling of this figure would be inappropriate as calls are pegged in both measurements only if they are successful. If a call is blocked on the incoming side, there would be no resultant switched call to generate a blocked outgoing call. ATIS suggests that, if real-time data is not available for either incoming or outgoing traffic, historical call data would be a more accurate replacement for the missing measurement.

³⁵ *NPRM* at ¶35.

³⁶ *Id.*

³⁷ There is yet another discrepancy in the *NPRM* on this matter. While the text of the *NPRM* recommends tripling the number of calls in situations where the failure prevents blocked call counts, Section 4.9(c) of the Commission's rules does not include this recommendation. ATIS recommends that the reference to tripling the number of calls be eliminated.

B. Outage Reporting for Major Infrastructure Failures Should Take Into Account Technical Capabilities of Providers

1. The Proposed DS3 Outage Reporting Requirements Should Be Modified

The *NPRM* also includes a proposal to apply the outage reporting requirements to the failure of communications infrastructure components based on the number of DS3 minutes. Specifically, the *NPRM* provides for the reporting of all outages of at least thirty (30) minutes that potentially affect at least 1350 DS3 minutes.³⁸

ATIS recommends any reporting threshold for DS3 minutes be based on the technical capabilities of the provider and on generally acceptable engineering principles. An outage should be reportable if it: (1) lasts for thirty (30) minutes or more, affects forty-eight (48) working DS3s³⁹ or more, does not switch to protect mode within a service provider's network and the service provider owns, operates and maintains the electronic terminal equipment at both end points; or (2) lasts for six (6) hours or more, affects at least twenty-four (24) (but less than forty-eight (48)) working DS3s, does not switch to protect mode within a service provider's network and the service provider owns, operates and maintains the electronic terminal equipment at both end points.⁴⁰ For a "mid-span meet," defined as the point where two carriers have transport facilities (copper or fiber cable) that are connected for continuity of service, the

³⁸ *NPRM* at ¶47.

³⁹ ATIS recommends that the reporting threshold be based on 48 DS3s, as this is a more common denomination of capacity than the 45 DS3s proposed in the *NPRM*.

⁴⁰ The six (6) hour figure for outages affecting more than twenty-four (24) DS3s is based on NRSC/ILORI participants' experience with a National Association of Regulatory Utility Commissioners (NARUC) reporting requirement and on independent company studies. NARUC has developed a reporting requirement for DS3s that are out of service for six (6) or more hours.

provider whose infrastructure transport component causes a reportable outage, as determined pursuant to the thresholds described above, should be required to submit the outage report.

2. The Proposed SS7 Outage Reporting Threshold Is Unduly Burdensome

The *NPRM* also proposes to expand outage reporting to Signaling System 7 (SS7) service and its equivalents. SS7 outages would be reportable under the proposed rules if these disruptions last at least thirty (30) minutes and result in at least 90,000 blocked or lost ISDN User Part (ISUP) messages.⁴¹

ATIS believes that the *NPRM*'s proposed reliance on lost or blocked ISUP messages is unduly burdensome for most communications providers. Most signaling transfer points (STPs) and end offices do not capture ISUP messages as existing equipment was never intended for this purpose. Changing the functionality of existing equipment would involve extensive software and hardware development and deployment costs. The cost of retrofitting traditional technology could not be justified by the proposed benefits. If the Commission were to mandate the proposed outage reporting requirement for SS7, the industry would be forced to seek cost recovery by whatever means available.

ATIS recommends that the outage reporting threshold for SS7 services take into account whether these services are provided by the network operator or by a third party. If SS7 signaling is within a service provider's network and the service provider is responsible for maintenance of

⁴¹ *NPRM* at ¶49.

the SS7 links at both end points, ATIS recommends that the reporting criteria be based on the performance measurement proposed by NRSC/ILORI and T1A1.⁴² However, if a third party is providing SS7 services, then the third party must submit reports for SS7 outages upon notification from an impacted network services operator that outage reporting thresholds have been met or exceeded.

C. Reporting Requirements for Outages Affecting Special Offices Should Be Clarified

In the *NPRM*, the Commission proposes a significant change to the existing outage reporting requirement for “special offices and facilities.” Under the existing reporting requirements, providers must report outages lasting thirty (30) minutes or more affecting “special offices and facilities,” which were defined to include “major airports, major military installations, key government facilities and nuclear power plants.”⁴³ The Commission proposes in the *NPRM* to expand this definition to require outage reporting to outages that potentially impact all airports.⁴⁴

ATIS believes that the expansion of this outage reporting requirement to all airports is unnecessarily burdensome. According to the Federal Aviation Administration’s most recent statistics on passenger boarding, there are approximately 1987 passenger airports in the United

⁴² As detailed in Section III above, this performance measurement would require reporting for outages: (1) lasting thirty (30) or more minutes; (2) generating 90,000 blocked calls based on real-time traffic data; and (3) involving a survivable element. If real-time traffic data is unavailable, then an outage would be reported if it: (1) lasts for thirty (30) or more minutes; (2) affects 30,000 calls based on historic traffic data; and (3) involves a survivable element. For those communications providers that do not have the ability to identify blocked call data, an outage would be reportable if it: (1) lasts for thirty (30) or more minutes and affects 30,000 or more "lines in service," or lasts for at least six (6) hours and affects 30,000 or fewer “lines in service”; and (2) involves a survivable element.

⁴³ 47 C.F.R. §63.100(a)(3).

⁴⁴ *NPRM* at ¶24.

States, not including Cargo, Reliever and General Aviation airports.⁴⁵ The smallest of the passenger airports has fewer than 2600 passenger enplanements per year. ATIS recommends that the Commission retain the current definition of “special offices and facilities” to include only “major” airports, but to expand the existing definition of “major airports” to include the large, medium and small passenger hub airports. The expansion of this definition to include small hub airports would make the outage reporting requirements applicable to the nation’s busiest 136 airports,⁴⁶ which account for the vast majority of all passenger enplanements. In fact, according to the Federal Aviation Administration’s 2001 National Airspace System Performance and Aviation Activity report, the 100 busiest airports (as ranked by passenger enplanements) accounted for ninety-six percent (96%) of all passenger enplanements.⁴⁷

The Commission also proposes to change the definition of an outage which “potentially affects” a major airport as found in Section 63.100(a)(6) of the Commission’s rules. The Commission would define such as an outage as one which:

(i) disrupts 50% or more of the air traffic control links or other FAA communications links to any airport; or (ii) has caused an Air Route Traffic Control Center (ARTCC) or airport to lose its radar; or (iii) causes a loss of both primary and backup facilities at any ARTCC or airport; or (iv) affects an ARTCC or airport that is deemed important by the FAA as indicated by FAA inquiry to the provider’s management personnel; or (v) has affected any ARTCC or airport and that has received any media attention of which the communications provider's reporting personnel are aware.⁴⁸

⁴⁵ See FAA’s CY 2002 Passenger Boarding and All-Cargo Data, <http://www.faa.gov/arp/planning/stats/#apttype>. General Aviation airports comprise the largest single group of airports in the US airport system.

⁴⁶ See FAA’s CY 2002 Commercial Service Airports in the US, <http://www.faa.gov/arp/planning/stats/#apttype>.

⁴⁷ National Airspace System Performance and Aviation Activity report at p. 20.

⁴⁸ Proposed section 4.5(c) of the Commission’s rules.

ATIS notes that the proposed definition, like the existing definition for outages potentially affecting airports, would make outage reporting dependent in some cases on circumstances outside a communications provider's control (i.e., media attention) and may result in inconsistent reporting. Identical incidents may not result in identical outage reports as it could depend solely on the existence of media attention (or lack thereof) and on the provider's awareness (or lack thereof) regarding the media attention. ATIS proposes instead that the Commission adopt the more objective definition recommended by the NRIC VI Focus Group 2 in its *Final Report*. Focus Group 2 recommended that an outage affecting an airport be reportable if it is deemed to be "air traffic impacting," defined as:

the loss of greater than 50% of telecommunication services at a critical air traffic control facility including airports Terminal Radar Approach Control (TRACONS) or Air Traffic Control Towers (ATCTs) or a FAA Air Route Traffic Control Center (ARTCC) that impacts the ability of the air traffic facility to control air traffic as determined by the FAA Air Traffic Supervisor at the Air Traffic Systems Command Center (ATSCC). This may include loss of critical telecommunications services that transmit radar data, flight plan data or controller-to-pilot and controller-to-controller voice.⁴⁹

The adoption of this definition of "air traffic impacting" will result in more consistent reporting of significant outages affecting air traffic and will provide the industry with a better basis on which to develop appropriate Best Practices.

D. The Outage Reporting Requirements Regarding 911 Facilities Should Be Modified

Existing Commission rules provide for the reporting of outages affecting 911 services.

The threshold reporting requirements are based on a variety of factors, including the length of the

⁴⁹ NRIC VI Focus Group 2 *Final Report* at p. 47.

outage, the number of lines affected and the particular 911 functions affected.⁵⁰ The Commission proposes to require reporting for an outage that “potentially affects the ability of a communications provider to complete 911 calls (including associated name, identification, and location data).”⁵¹ The Commission notes that such outages would include:

- (1) isolation of one or more Public Service Answering Points (PSAPs) for at least 30 minutes duration;
- (2) the loss of call processing capabilities in one or more E911 tandems for at least 30 minutes duration; or
- (3) isolation of one or more end office switches or host/remote clusters for at least 30 minutes duration.⁵²

ATIS agrees that modifications to the existing 911 outage reporting rules may be appropriate. For instance, ATIS notes that under current regulations 911 outages impacting less than 30,000 customers would require reporting only if the outage lasts for twenty-four (24) hours or more.⁵³ Permitting a 911 outage of up to twenty-four (24) hours to go unreported is unacceptable given the importance of 911 in our society. However, moving the reporting threshold for all 911 outages to thirty (30) minutes is not an equitable solution as this would greatly increase the reporting burden imposed on carriers. ATIS proposes a more equitable balance between the Commission’s desire to expand the outage reporting requirements for these outages and the burden on carriers:

- (1) PSAP outages affecting less than 30,000 users would be reportable if: (a) the outage is caused by a failure in the communications provider’s network; (b) no reroute was available; and (c) the outage lasts six (6) hours or more;

⁵⁰ 47 C.F.R. §63.100(h)(1); *NPRM* at ¶25.

⁵¹ Proposed section 4.5(e) of the Commission rules.

⁵² *Id.*

⁵³ 47 C.F.R. §63.100(h)(1).

(2) PSAP outages affecting 30,000 or more users would be reportable if: (a) the outage is caused by a failure in the communications provider's network; (b) no reroute was available; and (c) the outage lasts for thirty (30) minutes or more;

(3) The loss of all call processing capabilities in one or more E911 tandems/selective router for at least thirty (30) minutes duration would be reportable; or

(4) The isolation of one or more end office switches or host/remote clusters would be reportable if: (a) the outage caused 30,000 or more subscribers to be isolated from 911 for thirty (30) minutes or more; or (b) the outage caused less than 30,000 subscribers to be isolated from 911 for six (6) hours or more.

The impairment of automatic number identification (ANI) and automatic location identification (ALI) should not require reporting as an "outage." An "outage" is defined under proposed section 4.5(a) of the Commission's rules as "a significant degradation in the ability of an end user to establish and maintain a channel of communications as a result of failure or degradation in the performance of a communications provider's network."⁵⁴ The delivery of associated name, identification, and location data is not necessary to complete a 911 call. The loss of this data therefore is not a "significant degradation to establish or maintain a channel of communication" and does not meet the Commission's existing or proposed definition of an "outage."⁵⁵ ATIS also notes that some PSAPs have chosen not to purchase the Enhanced 911 service. ANI/ALI therefore is not provisioned. In these cases, the absence of ANI/ALI does not degrade the 911 services.⁵⁶

⁵⁴ This definition is substantially similarly to the existing definition of this term in section 63.100(a)(1) of the Commission's rules.

⁵⁵ See 47 C.F.R. §63.100(a)(1), proposed section 4.3(g) of the Commission's rules.

⁵⁶ If the Commission were to adopt its proposal regarding ANI/ALI, those PSAPs that do not deploy E911 would be perpetually suffering from an "outage."

Finally, ATIS notes that the recently-adopted NRIC VII Charter has identified a Focus Group responsible for identifying appropriate reporting requirements for outages affecting E911 services. This Focus Group, NRIC VII Focus Group 1.C. – Network Outages and Best Practices (NRIC VII Focus Group 1C), will analyze E911 outages reported pursuant to the established reporting rules and determine which Best Practices most clearly apply to these outages. NRIC VII Focus Group 1C will also present recommendations on ways to reduce E911 outages and to improve the relevance of the outage data for improving emergency communications. This group will present its interim report by September 25, 2004, and its final report by December 16, 2005. ATIS urges the Commission not to interfere with the work of NRIC VII, but to instead permit the industry to develop recommendations under NRIC VII Focus Group 1.C. regarding E911 outage reporting.

E. The Commission Should Eliminate the Special Outage Reporting Requirement for Fires

In the *NPRM*, the Commission proposes to eliminate the existing requirement pertaining to the reporting of outages caused by fires.⁵⁷ This requirement, set forth in Section 63.100(d), required carriers to report fire-related incidents that affect 1,000 or more service lines for a period of thirty (30) minutes or more.⁵⁸ The Commission notes that only a few minor outages have been reported pursuant to this rule and that major fire outages have met the more general outage reporting criteria. ATIS agrees with the Commission that this reporting requirement is no longer necessary and supports the Commission's proposed elimination of this requirement.

⁵⁷ *NPRM* at ¶26.

⁵⁸ Section 63.100(d) of the Commission's Rules, 47 C.F.R. § 63.100(d).

As described above, ATIS urges the Commission to take a reasoned approach to outage reporting. The Commission should adopt the performance measurement proposed by NRSC/ILORI and T1A1. This performance measurement provides an effective and equitable alternative for the common metric proposed by the Commission. ATIS also recommends changes to the Commission's proposed DS3 and SS7 reporting thresholds, as well as the reporting requirements pertaining to "special office and facilities," to take into account technical issues and to reduce unnecessary burdens on communications providers. ATIS supports modifications to the 911 outage reporting rules, but proposes a less burdensome alternative threshold to that proposed by the Commission. Finally, ATIS supports the Commission's proposal to eliminate the existing reporting requirement for outages caused by fires.

IV. The Outage Reporting Process Must Be Practical and Address Industry Concerns for the Safeguarding of Sensitive Outage Information

ATIS advocates the implementation of an outage reporting process that reduces the burden on communications providers, protects sensitive data from public disclosure and takes into account the industry's concerns with the proposed electronic filing template.

A. The Commission Should Adopt a Three-Stage Outage Reporting Process

In the *NPRM*, the Commission proposes to streamline the existing outage reporting process. The existing rules provide different initial outage reporting deadlines depending on the number of customers affected. If an outage potentially affects at least 30,000, but fewer than 50,000, customers, the report must be filed within three (3) days of the carrier's first knowledge

of the outage.⁵⁹ If the outage potentially affects 50,000 or more customers, the report must be filed within 120 minutes of the carrier's first knowledge of the outage.⁶⁰ The Commission proposes a new two (2) step process that provides the filing of an Initial Report within 120 minutes of the carrier's first knowledge that a reporting threshold has been met, and a Final Report within thirty (30) days of the Initial Report.⁶¹ The Commission further proposes that these reports be filed online using an electronic filing template.⁶²

While ATIS agrees that streamlining the outage reporting rules would be in the public interest and make it easier for new communications providers to comply with the outage reporting requirements, ATIS believes that the proposed two-step process would be unduly burdensome on providers and could frustrate the Commission's goal of obtaining timely and accurate information. The completion of a detailed initial report form would distract important personnel from the resolution of the incident and could prolong the duration of the outage. In addition, ATIS notes that the short timeframe for the filing of an initial report (120 minutes) would make it nearly impossible for carriers to accurately provide the information on the Proposed Electronic Filing Template attached to the *NPRM* in Appendix B. It is unreasonable to expect a provider to file a report within two hours of an incident attesting to all causes of an incident, the method used to restore service, the Best Practices involved in the incident, etc. Within this initial timeframe, very little may be known about the incident and yet the proposed rules would require a communications provider to attest that this information is "true, correct,

⁵⁹ 47 C.F.R. §63.100(c).

⁶⁰ 47 C.F.R. §63.100(b).

⁶¹ *NPRM* at ¶30.

⁶² The Commission has attached the proposed electronic template to the *NPRM* as Appendix B and has specifically sought comment thereon.

and accurate to the best of his/her knowledge and belief.”⁶³ Few providers could attest to completeness of an initial report filed within two (2) hours of an outage.

ATIS recommends that the Commission instead adopt a three-step reporting process. This process would require the prompt notification of an outage, promote accuracy and completeness in initial reports and eliminate unnecessary burdens on communications providers.

Step One -- Notification. Within 120 minutes of a provider’s knowledge of an outage, a provider must notify the Commission of the outage. The provider would notify appropriate Commission personnel via e-mail, facsimile or telephone that a potentially reportable incident has occurred or is occurring.⁶⁴ The outage notification would not be accompanied by the attestation referenced in proposed section 4.11 of the Commission’s rules.⁶⁵ Given the short timeframe for the filing of this notification, ATIS believes that it will not be uncommon for a communications provider to file a notification concerning an incident that, upon further investigation, did not meet the Commission’s minimum thresholds for outage reporting. In such cases, ATIS recommends that an informal mechanism be established for providers to withdraw these “false positives.” If a notification is withdrawn, it should be removed from public view and not included in Commission summaries or analyses.

Step Two – Initial Report. Within seventy-two (72) hours of the outage, the provider would be required to submit an initial report. This report would provide more information on the extent of the incident, such as the impact of the event, the resolution (if available) and the known causes. As full and complete information on the incident may not be available at this point, the Initial Report would be filed by a representative of the provider, but without the Commission’s proposed attestation.⁶⁶ ATIS notes that there will be instances where Initial Reports will be filed for outages that, upon further investigation, did not meet the Commission’s minimum thresholds for outage reporting. The Commission should permit providers to file formal retraction letters regarding these “false

⁶³ Proposed section 4.11 of the Commission’s rules.

⁶⁴ ATIS urges the Commission to work with the industry to develop appropriate notification mechanisms, such as an abbreviated electronic filing template that could be used for outage notifications.

⁶⁵ Proposed section 4.11 of the Commission’s rules would require Initial Reports to be “attested by the person submitting the report that he/she has read the report prior to submitting it and on oath deposes and states that the information contained therein is true, correct, and accurate to the best of his/her knowledge and belief.”

⁶⁶ *Id.*

positives.” Initial Reports that are withdrawn should be removed from public view and not included in Commission summaries or analyses.

Step Three – Final Report. Within thirty (30) days of the outage, the carrier would submit a Final Report form providing all necessary information about the incident, its cause and resolution. The Final Report would include the proposed attestation specified in proposed section 4.11 of the Commission’s rules.

B. Sensitive Outage Reporting Data Must Be Protected

As the Commission notes in the *NPRM*, “[t]he terrorist acts of September 11, 2001, starkly illustrate the need for reliable communications during times of crisis.”⁶⁷ These terrorist acts also illustrate the need to protect sensitive data regarding the nation’s critical infrastructure from those who would do harm.⁶⁸ The industry is concerned that the public dissemination of outage reporting data filed pursuant to the Commission’s reporting requirements could be misused by those seeking to attack our nation’s interests. Public access of this outage data could, in fact, make these communications systems more vulnerable to attack. Therefore, while the existing outage reporting requirements, adopted in 1994, allow for the public dissemination of these reports to the public, ATIS urges the Commission to now establish more stringent protections for sensitive outage reporting data.

ILORI has developed an effective mechanism to protect this information and ATIS advocates that this process be allowed to continue. Under the auspices of ILORI, a web-based computer program was developed and implemented in March 2004 for wireline, wireless,

⁶⁷ Proposed section 4.11 of the Commission’s rules.

⁶⁸ Sensitive data would include information that could be used to identify the company completing the report, including company name, the name of the individual filing the report, etc. ATIS is concerned that those looking to do harm could use publicly-available reports to learn where vulnerabilities in the systems exist. These vulnerabilities could then be exploited in an attempt to cripple the nation’s critical infrastructure.

satellite, cable, data, ISP, DSL service providers to voluntarily report service disruptions. This web-based computer program is managed and maintained on a secure communications vendor's server and public access to the raw data is prevented.

C. Substantive Changes to the Outage Reporting Template Must Be Made Only Through Notice and Rulemaking Procedure

The Commission proposes to delegate authority to the Chief of the Office of Engineering and Technology to make revisions to the filing system and template.⁶⁹ According to the Commission, modifications to the template may be necessary to maximize reporting efficiency and minimize the providers' time to prepare, and the Commission staff's time to review, outage reports.

While ATIS agrees with these goals, it strongly urges the Commission to clarify that the delegation of authority is limited only to non-substantive, editorial changes to the template or filing system.⁷⁰ All substantive changes, including such changes as adding or deleting fields, renaming or otherwise changing field names, changing the method of entering, and updating or removing data, must be adopted through the Commission's formal notice and comment procedure. Any substantive changes made without the opportunity for industry comment may frustrate the Commission's goals in seeking outage data. Data collection requests that are

⁶⁹ *NPRM* at ¶51, proposed section 0.241 (a)(1) of the Commission's rules.

⁷⁰ See *Sprint Corporation v. Federal Communications Commission*, 315 F3d 369, 374 (DC Cir. 2003) (clarifications to existing rules may be exempt from notice and comment proceedings, but new rules making substantive changes to existing regulations are subject to the Administrative Procedures Act's notice and comment procedures.)

unclear or which seek information that is impossible or impracticable to collect could result in inaccurate or incomplete submissions.

ATIS agrees, however, that the Commission should delegate authority to make editorial changes to the template or filing system, including correcting misspellings and web coding, moving data fields, changing Commission contact information or filing instructions. As an alternative to the delegation to the Office of Engineering and Technology, ATIS suggests that the Commission consider delegating the authority to an industry body such as NRIC, to recommend non-substantive, editorial changes to the template as necessary.

The Commission should establish procedures to ensure that the filing template and system is not a “moving target.” Any change to the outage reporting process will require communications providers to modify their internal reporting processes and to reeducate their personnel on the new procedures, especially those personnel that will be attesting to the completeness of the reports. ATIS recommends that the Commission provide no less than 120 days between the announcement of a non-substantive change to the template and its implementation and to ensure that the implementation of changes would not be applied retroactively to providers.

D. The Commission Must Clarify Aspects of the Outage Reporting Template

In addition to the issues raised above, the outage reporting template proposed by the Commission poses other issues for communications providers. These issues are summarized below.

- “Absence of Physical or Logical Separation” Field. ATIS recommends that the Commission not include a separate field in the proposed template regarding diversity and redundancy. If applicable to the outage, such information would be provided in the fields regarding Best Practices. The additional field regarding diversity would result in the unnecessary duplication of information in the outage reporting form. ATIS notes that the question of whether to deploy diversity cannot be easily broken down into a “yes” or “no” question. The decision to deploy diversity in a competitive environment is based on a number of complex issues, including the impact of diversity costs on customers and a business continuity/risk assessment for a specific service and network.
- “Root Cause(s)” Field. ATIS notes that, even if there are multiple causes for an outage incident, there is only one “Root Cause.” Therefore, ATIS recommends that the template field entitled “Root Cause(s)” be changed to “Root Cause” (singular) and a new field be added to the electronic template to request information on relevant “Contributing Cause(s).”
- Printing/Saving Reports. In light of the industry practice of maintaining records of outage reports for a period of six (6) years, ATIS recommends that the Commission ensure that users can print or download copies of filed reports, as well as receipts acknowledging the submission of these reports.
- Informal Withdrawal of Notifications. As explained more fully in Section IV.A. above, ATIS recommends that the Commission establish informal mechanisms to withdraw, or mark as withdrawn, an outage notification. Given the extremely short timeframe in which a notification may have to be filed (120 minutes), there will be instances where these notifications will be submitted in reaction to some event that, upon later review, did not meet the reporting criteria. Without a mechanism in place for a provider to withdraw the notification, the provider would be forced to file a report (the next step in the three step process proposed by ATIS) for an otherwise unreportable incident and the Commission’s outage reporting data would include numerous “false positives.” Notifications that are withdrawn should not be included in Commission summaries or analyses.
- Formal Retraction of Initial Reports. ATIS notes that there will be instances where Initial Reports will be filed for outages that, upon further investigation, did not meet the Commission’s minimum thresholds for outage reporting. The Commission should permit providers to file formal retraction letters regarding these “false positives.” Initial Reports that are withdrawn should be removed from public view and not included in Commission summaries or analyses.
- Data Security. ATIS is concerned about the protection of sensitive data provided on the form. There is no indication in the *NPRM* as to how the Commission will protect this data from unauthorized third party access or what methods the Commission will use to protect this information from electronic or human errors. The provision of data pertaining to communications outages must be kept secure and backup copies must be

regularly maintained. In addition, to protect against the unauthorized or fraudulent reporting of outage reports, the Commission should provide for the inclusion of an electronic signature on the electronic filing template.

- Data Backup. The Commission should clarify its back-up and maintenance procedures for this information. ATIS recommends that the electronic template allow users to print a hard-copy or download an electronic copy for their records to protect against lost reports due to electronic "accidents" or human errors.
- "Best Practice Used" Field. The Commission should eliminate the template field entitled "Best Practices Used." This field appears to ask for the Best Practices employed by a filing entity, not specifically those related to the outage. As providers employ an extensive number of Best Practices in numerous categories, this data request would be tremendously burdensome. Moreover, the data request provides little, if any, information pertinent to the analysis of the outage being reported.
- Initial/Final Report Indicator. ATIS recommends that the Commission revise its proposed template to add a field for users to indicate whether they are filing Initial Reports or Final Reports or, alternatively, to establish a different template for the filing of these two reports.

ATIS recommends that the proposed reporting process and template be modified to minimize the burden on communications providers and protect sensitive data. ATIS advocates a three (3) step reporting process that includes the filing of a notification, an Initial Report and a Final Report. ATIS urges the Commission to ensure that any future substantive changes to the reporting process and electronic template are made through appropriate rulemaking processes. Finally, to encourage the filing of accurate and timely outage information, ATIS suggests technical changes to the proposed electronic template to clarify the electronic filing process, eliminate unnecessary fields and add new fields.

V. Conclusion

ATIS urges the Commission to recognize the strong commitment of the communications industry to provide reliable services to its customers, as well as the continuing voluntary industry efforts to promote reliability in communications networks. ATIS recommends that the Commission encourage industry cooperation by taking a reasoned approach to outage reporting that considers the technical feasibility of implementing the proposed reporting thresholds. To promote the submission of meaningful outage data, ATIS recommends that the Commission adopt the performance measurements for reporting developed by the NRSC/ILORI and T1A1 industry committees. Finally, ATIS proposes that the Commission adopt a three-stage reporting process that reduces the burden on communications providers and protects sensitive outage reporting data.

THEREFORE, THE PREMISES CONSIDERED, ATIS respectfully submits these comments in response the Commission's *Notice of Proposed Rulemaking* in this proceeding.

Respectfully submitted by:

**The Alliance for Telecommunications
Industry Solutions** on behalf of its
Network Reliability Steering Committee
and Technical Subcommittee T1A1

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May 25, 2004