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

In the Matter of	)	
	)	
Amendments to Part 4 of the Commission's	)	PS Docket No. 15-80
Rules Concerning Disruptions to	)	
Communications	)	
	)	ET Docket No. 04-35
New Part 4 of the Commission's Rules	)	
Concerning Disruptions to Communications	)	
	)	PS Docket No. 11-82
The Proposed Extension of Part 4 of the	)	
Commission's Rules Regarding Outage	)	
Reporting to Interconnected Voice Over	)	
Internet Protocol Service Providers and	)	
Broadband Internet Service Providers		

COMMENTS OF THE ALLIANCE FOR
TELECOMMUNICATIONS INDUSTRY SOLUTIONS

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SUMMARY

ATIS does not support the expansion of outage reporting obligations to Broadband Internet Access Service (BIAS) providers or the notion that BIAS providers should function as a clearinghouse for all broadband network outages. As explained more fully in these comments, ATIS believes that these additional mandates are not necessary.

ATIS also does not support the Commission's proposed definition of "dedicated services" and believes that any additional reporting obligations for network elements would be duplicative and unnecessary. For similar reasons, ATIS also does not support the proposed reporting obligations regarding unintended software/firmware changes or the proposed reporting rules for VoIP providers, wireless Radio Access Networks or non-airport based facilities.

To the extent that the Commission moves forward with its proposals for mandatory BIAS reporting, ATIS proposes an alternative to the Commission's bandwidth-based metric. Under which, an outage event affecting 30,000 broadband users for 30 minutes (900,000 user minutes) or more would be reportable. ATIS disagrees that performance metrics are necessary for broadband, as this data would not necessarily provide a clear indication as to whether an event significantly degrades the ability of an end user to establish and maintain communications.

ATIS recommends that the Commission modify its three-part reporting structure for legacy, VoIP and BIAS service providers by eliminating the requirement that providers submit an Initial Communications Outage Report. ATIS proposes a two-part reporting structure under which Notifications would be filed within 24 hours of the discovery of a reportable outage and Final Report within 30 days. To the extent that the Commission moves forward with a three-part reporting progress, ATIS recommends changes that would reduce unnecessary burdens.

Finally, while ATIS does not support new mandatory reporting requirements for BIAS, if such reporting is nonetheless required, ATIS supports the Commission's proposal to treat these reports filed in NORS as confidential. ATIS does not oppose the sharing of NORS data with states or federal agencies so long as there are appropriate safeguards in place to protect outage-related data and the data is only shared for services and entities over which the state or agency has jurisdiction. If state access to NORS data is provided, ATIS believes that it should be provided only to those states: (1) with reporting obligations that are consistent with Part 4 requirements and that have laws in place to prevent the disclosure of outage data and agree to abide by the confidentiality and other restrictions established by the Commission pertaining to this data; or (2) without reporting regulations and that have laws in place to prevent the disclosure of outage data and agree to abide by the confidentiality and other restrictions established by the Commission pertaining to this data.

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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

Further Notice of Proposed Rulemaking (*FNPRM*), released May 26, 2016 in the above-

referenced dockets. As a key industry stakeholder and one of the primary forums where network

resiliency and reliability issues are addressed, ATIS is pleased to provide its input to the

FNPRM. As discussed in more detail below, ATIS does not believe that new reporting

requirements are necessary for broadband internet access services (BIAS). To the extent that

new requirements are nonetheless adopted, ATIS recommends alternatives that permit the

industry to provide accurate information about significant outages while minimizing unnecessary burdens.

I. BACKROUND

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 using consensus based, industry-driven processes to develop solutions 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 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.

II.   ATIS INPUT TO NOTICE OF PROPOSED RULEMAKING

A. Broadband Network Disruption and Outage Reporting

In the *FNPRM*, the Commission proposes that BIAS providers be required to report outages pursuant to the Commission's part 4 rules and seeks comment on whether BIAS providers could be used as a central reporting point for all broadband network outages.[1] ATIS does not support the expansion of outage reporting obligations to BIAS providers or the notion that BIAS providers should function as a clearinghouse for all broadband network outages. As explained below, ATIS believes that additional mandatory rules are not necessary for numerous reasons.

First, companies already provide reports on disruption to BIAS under the Commissions Disaster Information Reporting System (DIRS).[2] Contrary to the Commission's assessment that BIAS providers have not "even expressed" an interest in voluntarily reporting disruptions affecting BIAS,[3] service providers do currently provide information regarding "hard down" BIAS disruptions when the Commission activates its Disaster Information Reporting System (DIRS). Furthermore, the industry already voluntarily reports on broadband network resiliency under the Measuring Broadband America program.

Second, apart from a small number of BIAS outages, there is no indication of widespread failures by the industry to address broadband reliability and no indication that the industry has not designed broadband networks to be highly reliable. IP-enabled networks perform error-checking and retransmission functions and use multi-path communications that make these

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[1] *FNPRM* at ¶120, ¶112.
[2] The industry also notes that the Commission has the ability, and routinely does, reach out to individual companies to get information about service disruptions. The industry responds to these inquires to ensure that the Commission timely and efficiently receive requested information.
[3] *FNPRM* at ¶106.

networks more robust, reliable, and resilient than legacy switched networks.

Third, the industry is already highly incented to provide reliable service to its customers. The industry spends billions of dollars annually to improve network capabilities to meet the business needs of individual service providers and their customers. The need to offer reliable service to customers also incents the industry to take steps to proactively address and respond to network reliability issues, and the industry has well-established mechanisms to monitor, analyze and mitigate issues. The networks' continued reliability and resiliency is driven not by regulation but by competition and by the providers' recognition of the importance of meeting or exceeding their customer's expectations. The reporting requirements proposed in this proceeding do not align with the various techniques the broad range of service providers use to gauge customer experience and service availabilities.

Fourth, service providers offer priority restoration during disruptions to circuits designated as critical under the Telecommunications Services Priority (TSP) program. Additional outage reporting requirements are not necessary to bolster this effort in any way or ensure that critical public safety circuits are restored in a timelier manner.

Given the lack of demonstrated need, and that each service provider would have to spend millions to modify its networks to comply with the proposed new BIAS reporting rules, ATIS does not believe that the proposed BIAS reporting rules are warranted, particularly if these new rules require the real-time reporting, and retention of data related to, performance data that can be continuously monitored as proposed by the Commission. Furthermore, these expenses will detract from the resources available to build services that consumers demand. To the extent that the Commission disregards the industry's input in this docket and moves forward with requiring BIAS providers to report outages or to serve as central reporting points, ATIS notes that any

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reporting requirements must be limited only to situations in which the BIAS provider owns, controls and has visibility into its own network(s).

The Commission seeks input on BIAS providers' services relationships with other providers, including the extent to which they share information relevant to outage reporting.[4] ATIS notes that BIAS providers do discuss and/or notify each other in the event of network outages; this sharing may include information regarding the outage and the coordination of recovery efforts, and has little to do with reporting obligations. Where appropriate, service providers also share information with relevant state and federal government agencies and with other critical infrastructure owners, such as electric utilities. The information that is shared is dependent upon the nature of the event and in some cases may be provided periodically (i.e., on a monthly, quarterly or as-needed basis), rather than in real-time. This information sharing is generally governed by intercompany agreements that are considered confidential and proprietary and should not be subject to disclosure under the Commission's outage reporting requirements.

B. Dedicated Services

In addition to proposing new broadband reporting rules, the Commission also proposes to clarify the application of its outage reporting rules to "dedicated services." The Commission seeks input on its proposed definition of "dedicated services" for outage reporting purposes:

> *Services that transport data between two or more designated points, e.g., between an end user's premises and a point-of-presence, between the central office of a local exchange carrier (LEC) and a point-of-presence, or between two end user premises, at a rate of at least 1.5 Mbps in both directions (upstream/downstream) with prescribed performance requirements that include bandwidth, latency, or error-rate guarantees or other parameters that define delivery under a Tariff or in a service-level agreement.* [5]

ATIS does not support this proposed definition and recommends instead that the

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[4] *FNPRM* at ¶112.
[5] *FNPRM* at ¶115.

Commission consider an alternative approach.

ATIS does not believe that the FCC should apply its reporting rules to dedicated services. However, if the Commission nonetheless moves forward with this proposal to require reporting by "dedicated services," ATIS notes that the proposed definition of dedicated services is too broad, especially in situations where customers are purchasing unprotected circuits. Where a customer does not purchase additional protection or redundancies, these circuits should not be considered critical and reporting obligations should not apply.

ATIS further notes that dedicated services are equivalent to "major transport services."[6] Under the Commission's recently-adopted *Report and Order*, disruptions to these major transport facilities must be reported if they affect a minimum of 667 OC3 minutes.[7] ATIS recommends that, if this rulemaking moves forward, that the Commission modify this proposal to ensure that disruptions to dedicated services are treated the same way as transport facility outages and a similar OC3-based threshold should be applied. Reporting dedicated services at a lower rate of 1.5 mbps, rather than based on 667 OC3 minutes, is a step backwards and would vastly increase the number of outage reports that must be filed while at the same time providing little, if any, useful data about the state of the network.

The Commission asks whether, with respect to negotiated terms and conditions for assurance, it is standard industry practice to inform dedicated services customers about the nature of any particular outage or performance issue that triggers assurance guarantees.[8] ATIS notes that providers do generally discuss and/or notify some dedicated service customers in the event

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[6] 47 CFR §4.7(d); *Report and Order* at ¶11 *et seq.*
[7] *Report and Order* at ¶17. The Commission notes in the *Report and Order* that a higher metric will benefit both provider and the Commission through the reduced reporting of minor incidents, allowing an increased focus on meaningful outage reports that have material impact on users. *Report and Order* at ¶18.
[8] *FNPRM* at ¶118.

of disruptions. As noted above, the specific information shared will vary based on the nature of the outage event and is generally governed by agreements that are considered to be confidential and proprietary. ATIS notes that service providers are better incented to share information with customers by market forces then by mandatory reporting rules. Furthermore, while performance statistics may be shared periodically (i.e., on a monthly, quarterly or as-needed basis) under the terms of these agreements, these statistics may not necessarily be shared in real-time. This periodic information sharing provides the customer with relevant information without being overly burdensome to the service provider.

C. Reporting Requirements Concerning Critical Network Elements.

The Commission seeks comment on its expectation that providers include information in their reports concerning: (1) the failure of facilities that might be considered critical network elements; and (2) unintended changes to software or firmware or unintended modifications to a database to the extent relevant to a given outage or service disruption that is otherwise reportable.[9] ATIS does not believe that this proposed new reporting requirement is necessary.

ATIS notes that service providers already report on critical network element outages under the existing Part 4 rules. If a network element causes a reportable event, a root cause analysis that outlines the steps to prevent reoccurrence and applicable Best Practices would be completed and the detailed information would be provided in the NORS report. Therefore, ATIS believes that any additional reporting obligations for these network elements would be duplicative and an unnecessary waste of time and resources.

The Commission proposes that network elements would be deemed "critical" if these elements' failure would result in the loss of any user functionality that a covered broadband

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[9] *FNPRM* at ¶122.

provider's service provides to its end users.[10] ATIS notes that the industry already reports on

critical outages and new requirements are not necessary. Furthermore, by focusing on the loss of

"any" user functionality, the Commission's proposed definition of "critical" would extend well

beyond truly critical functions. Therefore, if the Commission determines to define a new

reporting requirement for critical network element outages it should define this term to include

only those functionalities that enable end users to access 911 services.

The Commission also proposes to modify the NORS interface (i.e., through the use of

"open" fields or drop down menus) to support information regarding outages and disruptions that

are associated with unintended changes to software or firmware or unintended modifications to a

database.[11] ATIS does not believe that additional predefined NORS fields or menus are

necessary. Currently, companies provide information about the cause of the outage in the cause

code fields and further detail is provided in the "Description of Incident" and "Description of the

Cause(s) of the Outage" text fields on NORS reports. If the Commission is intent on moving

forward with this proposal, it should partner with industry to determine what open fields or drop

down boxes could be added to NORS that would not be duplicative and would yield useful data.

The Commission asks in the *FNPRM* whether it would be useful to establish pre-defined

elements in the reporting metrics that would provide the Commission with more consistent

failure information about unintended changes to software and firmware or unintended

modifications to a database that would not otherwise be reported to the Commission (for

example, distributed denial of service (DDoS) attacks).[12] ATIS believes that the new reporting

requirements are unnecessary and would not benefit public safety in any way. The industry takes

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[10] *Id.*
[11] *FNPRM* at ¶124.
[12] *Id.*

cybersecurity very seriously and companies use specialized tools to scan network security and vulnerability incidents as part of their normal operations. If incidents occur, these incidents are then inventoried, investigated and resolved by cyber incident team(s). ATIS notes that there is additional work in the current Communications Security, Reliability, and Interoperability Council (CSRIC V), including Working Group 5: Cybersecurity Information Sharing, Working Group 6: Secure Hardware and Software – Security-By-Design, and Working Group 7: Cybersecurity Workforce. ATIS urges the Commission to allow these groups to complete their work before considering any regulations on this topic. In addition, the Commission's proposals on this topic appear to be inconsistent with Chairman Wheeler's direction regarding a new paradigm "where the Commission relies on industry and the market first" before considering other options.[13]

ATIS also does not support the new reporting obligations regarding these unintended software/firmware changes as DDOS attacks and other cybersecurity-related events that cause network outages because these outages are already reported under the existing Part 4 rules. Currently, companies provide information about the cause of the outage in the cause code fields and further detail is provided in the "Description of Incident" and "Description of the Cause(s) of the Outage" text fields. In addition, malicious cyber events would be captured in the malicious activity drop down by indicating "Yes – Cyber event" on NORS reports. While ATIS does not support new reporting requirement associated with unintended software/firmware changes, if the Commission moves forward with this proposal, it should partner with industry to determine the appropriate fields and/or drop down boxes that could be added to NORS (if any).

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[13] Remarks of Chairman Tom Wheeler to the American Enterprise Institute (June 12, 2014).

D. Proposed Metrics and Thresholds for Broadband Network Outage Reporting

1. "Hard Down" Outage Events Metrics and Thresholds

The Commission proposes a throughput-based metric and threshold for "hard down" outage events.[14] While the Commission has traditionally used DS3s as the unit of throughput for its reporting threshold for major transport facility outages, as noted in the *Report and Order* accompanying the *FNPRM*, the evolution of communications networks has made use of the DS3 metric obsolete and unhelpful.[15] The Commission therefore proposes a new threshold that would use Gigabit as a measure of throughput for high bandwidth service. Under this new threshold reporting criterion for broadband outages, an outage event would become reportable when it resulted in 1 gigabit per second (Gbps) of throughput affected in which the event exceeds 22,500 Gbps user minutes.[16] ATIS does not support a bandwidth-based metric but proposes an alternative metric based on the existing 900,000 user minute metric.

ATIS notes that, because BIAS is typically deployed over a shared resource, a 1 Gbps standard throughput measurement would not be a good measure for outages or disruptions for broadband or VoIP services. Furthermore, this metric is not technology neutral as it will impact certain broadband networks (for example, wireless networks) differently than others, and it will have less of an impact on lower bandwidth customers. ATIS also notes, as it and many others have many times before, that reporting mandates create rigid and stagnant frameworks that are ill-suited to the dynamic nature of today's communications systems. Any reporting mandates can quickly become obsolete as new technologies are developed and implemented, just as some of the reporting obligations established as recently as 2005 have clearly become less relevant to

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[14] *FNPRM* at ¶130.
[15] *FNPRM* at ¶130, ¶11.
[16] *FNPRM* at ¶130.

understanding network reliability today. Once irrelevant or obsolete, these requirements

continue to impose unnecessary burdens. Instead of rigid mandates, ATIS believes that

broadband should remain nimble and innovative through cooperative voluntary efforts.

Additionally, because the proposed BIAS threshold is based on a typical user's

requirement (currently set at 25 Mbps), the number of users impacted by a 1 Gbps/12,500 Gbps

user minute threshold is expected to change over time. ATIS notes customer demand for

bandwidth is expected to continue increasing at an exponential rate. As customer bandwidth

usage and expectations increase, the proposed bandwidth-based metric would require reporting

under NORS for outages impacting fewer and fewer customers. As an initial matter, the 25 Mbps

threshold, based on the 2015 Broadband Progress Report:[17] (1) is a proxy for households, not

"users;" (2) was applied only to wireline networks; and (3) is based on consumer demand for

entertainment streaming and downloads – hardly the services on which consumers rely in

emergencies. Even so, if the average speed based on the requirements of a typical user were to

increase from 25 Mbps to 1 Gbps, the user minute ratio would decrease (utilizing the 12,500

Gbps threshold) from 30,000 impacted customers for 30 minutes to only 750 impacted customers

for 30 minutes being reportable. There is no public safety benefit or proven need for this level of

reporting, which would ultimately be time-, cost-, and resource-intensive for service providers

and the Commission.

Instead, if the Commission moves forward with mandatory BIAS reporting, ATIS

recommends that the reporting threshold be based on the impact of the outage, not on the speed

of the customer's connection. ATIS recommends that the reporting threshold should be based on

the 900,000 user minute approach currently used as the threshold for other reportable events.

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[17] *2015 Broadband Progress Report,* GN Docket 14-126 (released Feb. 4, 2015).

This approach is reasonable and has proven to be a good metric for voice outage reporting and has withstood the test of time. Under this approach, an outage event affecting 30,000 broadband users for 30 minutes (900,000 user minutes) or more would be reportable.

Comment is also sought in the *FNRPM* on the Commission's 2011 proposal to use potentially-affected IP addresses as a proxy for the number of potentially affected users.[18] ATIS does not support the use of IP addresses as a proxy for potentially affected users and believes that, because IP addresses cover a wide variety of products and services today, these addresses will overstate the impact of an outage. Instead of IP addresses, ATIS recommends that hard down BIAS outages should be reported based on the number of customers in "out of service" condition. Using customer impact would provide a more meaningful indication of affected users. Thus, under ATIS' recommended threshold based on the existing 900,000 user minute metric, an outage affecting broadband networks would be reportable if it results in 30,000 customers being in "out of service" condition for at least 30 minutes.

2. Performance Degradation Outage Events Metrics and Thresholds

a. "Generally Useful Availability and Connectivity"

The Commission seeks comment on whether covered broadband providers should be required to report disruptions that significantly degrade communications, including losses of "generally useful availability and connectivity" as measured by specific metrics and tentatively concludes that outage events experiencing significantly degraded communications include those events with a loss of generally useful availability and connectivity.[19] ATIS disagrees that performance metrics are necessary for broadband.

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[18] *FNPRM* at ¶132.
[19] *FNPRM* at ¶134.

ATIS notes that such performance data would not necessarily provide a clear indication as to whether an event significantly degrades the ability of an end user to establish and maintain communications. While diminished bandwidth may disrupt the throughput speed, it may not impact customers or disrupt user services, particularly for applications that are less susceptible to buffering and would ultimately be transparent to the customer.[20] If broadband outage reporting rules are mandated, the "hard down" user-minute approach recommended by ATIS would be the most consistent and effective reporting metric.

b. Metrics for and Measurement of Performance Degradation

The Commission seeks comment on two potential broadband outage reporting metrics to measure significant performance degradation in communications: (1) a throughput metric; or (2) an alternative metric based in a combination of throughput, packet loss, and latency.[21] ATIS does not support either proposal.

ATIS believes that service degradation is an impractical measurement given how packet loss/latency/throughput issues are handled by higher level systems. BIAS providers rely on metrics for packet loss and latency generally to determine how well the network and, at times, specific circuits are performing, and look at throughput measurements for capacity planning. None of these metrics are measured today and cannot be used to determine whether a particular customer, or even a particular set of customers, can reliably access the Internet. In fact, some packet loss, latency, and decay in throughput are expected for BIAS and likely would not affect end users at all. That is because providers use mechanisms to minimize the impact of service-

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[20] The most popular applications used by consumers are not related to public safety or to critical communications and access to these applications need not be subject to the Commission's outage reporting rules. *See* Top Web Application Website (Top 10) http://www.toptenz.net/top-10-web-applications.php (last viewed August 15, 2016); http://www.ebizmba.com/articles/most-popular-websites (last viewed August 15, 2016); 2015 Top Ten downloaded Apps http://time.com/4156902/most-popular-apps-2015 (last viewed August 15, 2016).
[21] *FNPRM* at ¶137.

quality issues on the customer experience. Finally, degradation in service-quality metrics may also be attributable to third parties sending traffic over broadband circuits, such as cloud providers or transit networks.

Finally, there are no established industry standards that would indicate to BIAS providers that certain markers of network performance could or should be read to indicate an outage, let alone a reportable outage under the Commission's Part 4 regulations. Developing such a standard, given the factors discussed above, would be nearly impossible. Therefore, establishing a regulation requiring the filing of outage reports based on service quality markers, even when BIAS providers guess that such outages are reportable based on their network performance indicators, would provide the Commission with information that is not reliable and not relevant to responding to outages that prevent consumers from contacting emergency services. Due to the nature of IP traffic, it is not technically practical to measure from the customer premise to destination host or source to destination as detailed in the *FNPRM*. Furthermore, it is neither a valid measure for outage reporting, nor a necessary measure given the mechanisms already in place by the Commission via its Measuring Broadband America program. The Commission should utilize this resource rather than creating new regulatory mandates.

The Commission also seeks comment on the end points from which covered broadband providers would measure whether there is performance degradation, suggesting that for BIAS providers these metrics be measured from customer premises equipment to the destination host.[22] ATIS believes this is technically impractical and economically infeasible as this would require millions of endpoints to be measured and infinite combinations of customer premise equipment and destination hosts.

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[22] *FNPRM* at ¶143.

E. Proposed Interconnected VoIP Outage Metrics and Thresholds

The Commission proposes to require interconnected VoIP providers to report outages that reflect losses of "generally useful availability and connectivity" as defined by specific metrics based on performance degradation on packet loss and latency for any network facility used to provide interconnected VoIP service.[23] ATIS does not believe that these new reporting rules are necessary.

VoIP service providers use advanced service assurance tools to monitor and maintain IP-based networks, such as Element Management Systems (EMS) and Service Assurance Monitoring (SAM) tool suites. These readily-available and widely-deployed systems use reality-based reporting metrics to monitor the state of the network's performance and allow the production of high quality, relevant technical and engineering metrics that influence the way the IP networks are designed, used, and managed. Reality-based reporting metrics monitor a variety of factors to enable management and performance optimization of VoIP services within its design capabilities and engineering limits. These metrics are used to determine if an authorized user has accessed the network and established a session to the network's edge and/or possibly the requested terminating end. These metrics can also highlight performance issues across the network that can identify problem areas within an IP-based VoIP network.

F. Call Failures in the Radio and Local Access Networks

The Commission proposes that, for wireless Radio Access Networks (RANs), a cell site would be considered to be "out" whenever a cell tower operates at full capacity (i.e., is unable to process any additional calls) for 75 percent of the time during a period of at least 30 minutes.[24]

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[23] *FNPRM* at ¶166.
[24] *FNPRM* at ¶178.

For non-wireless local access networks, the Commission proposes to consider a loop carrier system or remote switch to be "out" whenever a remote terminal or the group of channels connecting a remote switch to a host operates at full capacity (i.e., is unable to process any additional calls) for 75 percent of the time during a period of at least 30 minutes. For both RAN and non-wireless LAN, outages would be reportable if the number of user-minutes exceeds 900,000.[25] ATIS does not believe that this new reporting requirement is necessary because these conditions are not indicative of customer impact or an outage situation. Due to the self-healing capabilities inherent in the new technologies, to the extent there is any path degradation, it may not be noticeable at the consumer's end and should not be considered an outage condition.

The Commission also proposes to require wireless providers serving rural areas to file outage reports whenever one-third or more of their macro cell sites serving that areas are disabled such that communications services cannot be handled through those sites, or are substantially impaired due to the outage(s) or other disruptions affecting those sites.[26] ATIS does not support this approach and does not believe a change to the rules is necessary. The Commission has just adopted in the *Report and Order* new rules pertaining to reporting of wireless outages. For reporting purposes, these new rules treat macro cell outages in rural areas the same as in urban areas. Therefore, there should be no difference in reporting between rural and urban area. Additionally, Under the Commission's order on rural call completion,[27] service providers, including commercial mobile service providers, must identify and report on call completion issues affecting a rural LEC using the rural area designation (OCNs). There is no reason that the Commission should create separate duplicative reporting requirements under Part 4 for these same issues. Moreover, ATIS does not believe that the additional regulatory burdens

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[25] *Id.*
[26] *FNPRM* at ¶186.
[27] *Report and Order*, WC Docket No. 13-39 (rel. November 8, 2013).

associated with reporting outages that may impact only small numbers of customers would outweigh the benefits to consumers, particularly given the existing reporting requirements that are already in place.

G. Refining the Definition of 'Critical Communications' at Airports

The Commission seeks comment on requiring reporting of outages affecting critical aviation information facilities that are not airport-based, either as a function of their Level 3 or 4 status under the Telecommunications Service Priority program or upon some other basis.[28] ATIS does not believe that this expansion of the Commission's outage reporting rules is warranted, particularly in light of the Commission's acknowledgment that none of the 117 reports of airport-related outages received by the Commission appeared to have implicated critical communications under the first version of Part 4 rules.[29] While applying outage reporting rules to these off-airport facilities is not necessary, ATIS notes that these critical aviation information facilities could qualify for priority restoration under the TSP program.[30]

H. Outage Reporting Process

The Commission proposes to apply the existing three-part reporting structure used to report most outages under Part 4 to BIAS providers.[31] The Commission also proposes to modify the existing VoIP reporting structure to "harmonize" it with this same three-part reporting structure.[32] Under this structure, providers would be required to submit a Notification to the Commission within 120 minutes of discovery of the outage; Initial Communications Outage

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[28] *FNPRM* at ¶192. ATIS also recommends that the Commission consider enhancing its recently-adopted definition of "critical" communications in 47 CFR 4.5(c) to limit "critical" communications outages to TSP 1 and 2 circuits.
[29] *Report and Order* at ¶71.
[30] It is incumbent on relevant organizations to enroll in the TSP program and to identify circuits warranting priority restoration.
[31] *FNPRM* at ¶121.
[32] *FNPRM* at ¶161.

Reports would be required within 72 hours of discovery and Final Communications Outage Reports within 30 days.[33] ATIS believes that the Commission should consider a different approach and should apply a streamlined two-part structure for broadband, VoIP and legacy outage reporting.

Specifically, ATIS recommends that the Commission eliminate the Initial Communications Outage Report and provide additional time to submit Notifications from 120 minutes to 24 hours from the point of discovery. While ATIS understands the Commission's desire for timely outage-related information, it strongly disagrees that the current three-part structure is necessary for the Commission to "direct emergency response efforts."[34] As ATIS has said many times, during an emergency the primary focus of a service provider is appropriately on the restoration of service to consumers. Eliminating the requirement that providers submit Initial Communications Outage Reports will reduce the burdens of the Commission's rules and, by providing additional time to provide Notifications, will allow providers to better investigate the root cause of, and more importantly take steps to restore service from, an outage. Moreover, because it is often difficult to identify the root cause or even validate that a reportable event has occurred within the existing 120-minute Notification period, providing additional time for the filing of the Notification will allow carriers to provide more accurate information about the outage in the Notification. Extending the Notification period would also reduce the number of reports that are filed and later withdrawn, while providing timely and more accurate data.

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[33] *See* 47 CFR §4.9.
[34] *FNPRM* at ¶161. ATIS does not believe that the Commission's "direction" is necessary in the immediate aftermath of a reportable event, particularly given, as noted above, that service providers are already well incented to restore service quickly to customers.

If the Commission nonetheless applies the existing three-part structure to BIAS, VoIP and legacy services, ATIS recommends that certain changes be considered. First, ATIS recommends that the Commission extend the time for the filing of Notifications from 120 minutes to 240 minutes from the discovery of an outage. Allowing an additional two hours for these reports will afford providers additional time to investigate these outages, will ensure that the data reported is representative of an actual network issue, and will reduce the strain on service provider personnel, many of whom may be the same personnel that have responsibilities for coordinating their organizations' responses to outages. Second, ATIS recommends that the Commission require the submission for an Initial Communications Outage Report within three (3) business days, rather than 72 hours, from the filing of a Notification. Setting a three business day deadline for these reports would not significantly delay the filing of these reports but would minimize the burden on providers by not requiring the filing of these reports on weekends or on holidays. Third, ATIS believes that the deadline for the filing of Final Communications Outage Reports should be based on date/time on which the Notification was filed rather than based on the time of discovery. This change, while relatively minor, would afford additional time for providers to complete reports, thereby minimizing errors in submissions and reducing the overall burden on communications personnel.

I. Broadband Reporting Confidentiality and Part 4 Information Sharing

The Commission proposes that any broadband outage reports filed in NORS would be withheld from routine public inspection and treated with a presumption of confidentiality.[35] While ATIS does not support new mandatory reporting requirements for BIAS, if such reporting is nonetheless required, ATIS supports the Commission's proposal to treat these reports as

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[35] *FNPRM* at ¶145.

confidential. ATIS notes that such protection is critical for the sensitive information that is

provided in outage reports. As was noted when the Commission adopted its Part 4 rules in the

2004, the public disclosure of information in outage reports could present an unacceptable risk of

terrorist activity and could provide information that could be used by hostile parties to attack

communications networks.[36]

The Commission also seeks input on how to facilitate the sharing of outage reporting data

with other federal agencies and states while protecting proprietary information, and directs the

Public Safety and Homeland Security Bureau to develop proposals on how such information

could be shared.[37] As noted previously, ATIS does not oppose the sharing of NORS data with

states or federal agencies so long as there are appropriate safeguards in place to protect outage-

related data.

ATIS recommends that, prior to granting access to NORS, states/federal agencies should

be required to certify that they have in place appropriate confidentiality protections. For

example, states that would receive access to NORS data must have laws in effect that would

prevent the public disclosure of outage data and must 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, along with limitations on copying and distributing such information. States and federal

agencies should be required to inform the Commission and all affected NORS filers of any

breach or suspected breach of data. The protection of NORS data must also include prohibitions

against states' agencies' sharing of such data with: any governmental body that has not certified

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[36] *Report and Order and Further Notice of Proposed Rulemaking*, ET Docket No. 04-35 (rel. August 4, 2004) at ¶3.
[37] *FNPRM* at ¶¶147-148.

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that it can protect such data; and any private entity, including private contractors that may be working on behalf of state or federal agencies.

ATIS also recommends that the Commission: (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 states/federal agencies and shut down those that have not been used in the past six months. Any data shared with regulatory agencies and states should also be limited to services and entities over which the state/agency has jurisdiction. For instance, states should not have access to NORS data pertaining to outages that do not affect that state. Moreover, states should not have access to data pertaining to outages for services/entities for which the state does not have authority to regulate.
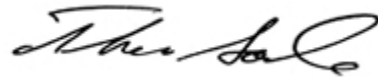
Finally, ATIS urges that, if state access to NORS data is provided, it should be provided only to those states: (1) with reporting obligations that are consistent with Part 4 requirements and that have laws in place to prevent the disclosure of outage data and agree to abide by the confidentiality and other restrictions established by the Commission pertaining to this data; or (2) without reporting regulations and that have laws in place to prevent the disclosure of outage data and agree to abide by the confidentiality and other restrictions established by the Commission pertaining to this data.

III. CONCLUSION

ATIS appreciates the opportunity to provide input to the *FNPRM*. As noted above, ATIS does not believe that new outage reporting rules are required for BIAS. To the extent that new rules are adopted, ATIS recommends that the Commission consider the recommendations in these comments to minimize unnecessary burdens associated with outage reporting.

Respectfully submitted,

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