



PUBLIC NOTICE

Federal Communications Commission
445 12th St., S.W.
Washington, D.C. 20554

News Media Information 202 / 418-0500
Fax-On-Demand 202 / 418-2830
TTY 202 / 418-2555
Internet: <http://www.fcc.gov>
<ftp.fcc.gov>

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PUBLIC SAFETY AND HOMELAND SECURITY BUREAU SEEKS COMMENT ON WHETHER THE COMMISSION'S RULES CONCERNING DISRUPTIONS TO COMMUNICATIONS SHOULD APPLY TO BROADBAND INTERNET SERVICE PROVIDERS AND INTERCONNECTED VOICE OVER INTERNET PROTOCOL SERVICE PROVIDERS

ET Docket No. 04-35
WC Docket No. 05-271
GN Docket Nos. 09-47, 09-51, 09-137

Comments Due: August 2, 2010

Reply Comments Due: August 16, 2010

Communications services delivered to end users over broadband technologies have grown in importance and now carry some of our most vital communications. Today, every sector of our Nation's economy, including the financial market, operations of most enterprises, and all levels of government, rely on broadband and Internet Protocol (IP) for communications. Americans are increasingly relying on broadband and IP-based technologies as substitutes for, or complements to, communications services provided by older, conventional communications technologies. However, the Commission's current rules regarding reporting of disruptions to communications services are limited to voice and/or paging communications over wireline, wireless, cable and satellite communications services.¹ The current rules do not apply to disruptions of interconnected Voice over Internet Protocol (VoIP) or to broadband Internet services.² The National Broadband Plan (NBP) recommended that the

¹ See 47 C.F.R. §§ 4.1-4.13. In 1992, the Commission established network outage reporting requirements for wireline providers. *Notification by Common Carriers of Service Disruptions*, Report and Order, CC Docket No. 91-273, 7 FCC Rcd 2010 (1992); see also Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, CC Docket No 91-273, 8 FCC Rcd 8517 (1993); Second Report and Order, CC Docket No. 91-2739, FCC Rcd 3911 (1994); and Order on Reconsideration of Second Report and Order, CC Docket No. 91-273, 10 FCC Rcd 11764 (1995). In 2004, the Commission extended these reporting requirements to providers of wireless and satellite communications. *New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, Report and Order and Further Notice of Proposed Rulemaking, ET Docket No. 04-35, 19 FCC Rcd 16830 (2004) (*Part 4 Report and Order*). The Commission uses the outage information submitted pursuant to Part 4 of its rules to, *inter alia*, address communication system vulnerabilities and help prevent future disruptions.

² In its *Part 4 Report and Order*, the Commission did not include Broadband Internet Service Providers (ISPs) or interconnected Voice over Internet Protocol (VoIP) service providers among the providers subject to the Part 4 outage reporting rules.

Commission initiate a proceeding to extend the Part 4 outage reporting rules³ to broadband Internet Service Providers (ISPs) and to interconnected VoIP service providers.⁴ The NBP reasoned that such reports would allow the Commission, other federal agencies and, as appropriate, service providers to analyze information on outages affecting IP-based networks.⁵ The NBP also suggested that gathering this information would help prevent future outages and ensure a better response to actual outages.⁶

In advance of a potential Commission proceeding, the Public Safety and Homeland Security Bureau (“PSHSB” or Bureau”) seeks comment and information on a variety of issues related to whether, and if so how, the Commission should expand its Part 4 rules so that they also apply to interconnected VoIP service providers and broadband ISPs.⁷ The Bureau wishes to better understand the issues related to these subject areas and anticipates using the data and other information gathered in response to this Public Notice to possibly prepare a Notice of Proposed Rulemaking for full Commission consideration and/or to recommend other action, as appropriate.

Interconnected VoIP Service⁸

We seek comment on whether there should be reporting requirements for interconnected VoIP service providers to promptly inform the Commission of major outages of interconnected VoIP services that significantly affect customers of those services, and to inform the Commission of the causes of such outages. Should the Commission extend Part 4 service outage reporting requirements to apply to interconnected VoIP services provided by broadband access providers and/or other interconnected VoIP services that are provided by a third

³ In this Public Notice, “outage” and “disruption” are treated as synonymous and used interchangeably.

⁴ See FEDERAL COMMUNICATIONS COMMISSION, NATIONAL BROADBAND PLAN: CONNECTING AMERICA, Recommendation 16.6 at 321 (rel. Mar. 16, 2010).

⁵ *Id.*

⁶ *Id.*

⁷ In its 2005 *Wireline Broadband ISP NPRM*, the Commission sought comment on whether network outage reporting requirements should be extended to include broadband Internet access service providers. Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, *Report and Order and Notice of Proposed Rulemaking*, CC Docket No. 02-33, 01-337, 95-20, 98-10; WC Docket Nos. 04-242, 05-271, 20 FCC Rcd 14853, 14933 ¶ 154 (2005) (*Wireline Broadband ISP Order and NPRM*), *aff’d sub nom. Time Warner Telecom Inc. v. FCC*, 507 F.3d 205 (3d Cir. 2007). However, there was virtually no record created by comments filed regarding thresholds, types of outages to be reported or information to be collected, or how the data would assist operators in learning from one another’s experiences and inform the Commission on an industry basis whether the number of major failures is decreasing or increasing.

⁸ The Commission defined the term “interconnected VoIP service” as a service that: (1) enables real-time, two-way voice communications; (2) requires a broadband connection from the user’s location; (3) requires Internet protocol-compatible customer premises equipment (CPE); and (4) permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone number. 47 C.F.R. § 9.3; *see also IP-Enabled Services and E911 Requirements for IP-Enabled Service Providers*, First Report and Order and Notice of Proposed Rulemaking, WC Docket Nos. 04-36 and 05-196, 20 FCC Rcd 10245, 10257-58, ¶ 24 (2005) (*VoIP E911 Order*), *aff’d sub nom. Nuvio Corp. v. FCC*, 473 F.3d 302 (D.C. Cir. 2006). We estimate that roughly 80-85 percent of interconnected VoIP services are provided by a broadband access service provider. These services are interconnected to the public switched telephone network (PSTN) using a connection provisioned independently by the broadband access service provider, not the Internet. Other interconnected VoIP services are provided by a third party that is not the broadband access service provider and they do run over a high-speed Internet service such as that provided by a broadband access service provider.

party who is not the broadband access service provider (sometimes referred to a “non-facilities based interconnected VoIP service provider”)? What constitutes outages for a service provided by an interconnected VoIP provider? For example, we know anecdotally that interconnected VoIP service users can collectively experience an outright loss of service comparable to the loss of service experienced by traditional time division multiplex (TDM)-based users. Are there also levels of service degradation specific to interconnected VoIP service that should be considered?

Communications service providers currently subject to the Part 4 outage reporting requirements are not required to report every communications disruption. Rather, they are required to report outages that reach a certain threshold. Would an outage reporting requirement based on some threshold also be appropriate for interconnected VoIP service providers? If so, what would be a reasonable reporting threshold? For example, would the 900,000 potentially-affected user-minute outage reporting threshold (*e.g.*, loss of service by 30,000 users for 30 minutes) that applies to other voice service providers be an appropriate reporting threshold for providers of broadband-enabled interconnect VoIP services? If not, what should be considered an analogous threshold for the providers of interconnected VoIP service?

Are there independent third-party sources of outage information that we should consider that might obviate the need to obtain the information directly from interconnected VoIP providers? If so, what are they and what sorts of data would be available through these means? How would the Commission obtain access to this information and how could we guarantee its accuracy?

Broadband Internet Service Providers

We seek comment on whether there should be requirements for broadband ISPs to promptly report to the Commission on major broadband Internet service outages when they significantly affect customers of such services, and to inform the Commission of the causes of such outages. We are aware that networks providing high-speed Internet access experience different failure modes than traditional TDM-based communications networks. For example, IP-based network services can experience degradations in quality of service. How should the differences between traditional networks and the packet switched Internet alter what constitutes a reportable ISP outage in the Commission’s Part 4 rules? Should the Commission alter its view of a reportable outage to include events that result in significant degradations to performance as perceived by end-users? What special considerations should be given to services provided via Internet access to Public Safety Answering Points (PSAPs)?

If the Commission were to determine significant performance degradations to be outages that should be reported by broadband ISPs, how should the Commission define a significant degradation so as to trigger the reporting requirement? For example, would a threshold for Internet service based on “generally useful connectivity” be an appropriate construct? If so, how should the Commission define “generally useful connectivity” so that an objective reporting threshold can be established? Could the loss or serious degradation of the needed related services such as authentication, authorization and accounting or domain name service, constitute a service outage even though some of those services could be acquired from alternative service providers? What parameters should be monitored, and how should the Commission distinguish between moderately degraded service and a reportable outage?

Are there independent third-party sources of outage information that we should consider that might obviate the need to obtain the information directly from broadband ISPs? If so, what are they and what sorts of data would be available through these means? How would the Commission obtain access to this information and how could we guarantee its accuracy?

Legal Issues

If the Commission chooses to adopt an outage reporting scheme for interconnected VoIP service providers and/or broadband ISPs, the Bureau seeks comment on the strongest sources of authority, if any, for doing so. The Bureau also asks commenters to address whether different sources of authority would be necessary for the different types of communications providers that would be required to participate in the revised collection and reporting process.

For example, we seek comment on whether the proposed collection and reporting information process would fall within specific grants of authority in Title II⁹ and/or Title III.¹⁰ In addition, we seek comment on whether the Commission could, if necessary, exercise ancillary authority to create the revised process.¹¹ With regard to broadband Internet services, the Commission has begun a proceeding to seek comment on the best legal framework to support effective implementation of broadband policies.¹² In a Notice of Inquiry released on June 17, 2010, the Commission asked about the possible sources of authority to adopt measures addressing issues of cybersecurity, public safety, and related data reporting if the Commission maintains the current “information service” classification of broadband Internet service.¹³ The Commission also asked about classifying broadband Internet service as a “telecommunications service,”¹⁴ whether in that case the Commission should forbear from applying most provisions in Title II to broadband Internet service,¹⁵ and whether it should exclude from any forbearance those provisions that may be necessary to implement public safety objectives.¹⁶ Comments on that Notice of Inquiry are due July 15, 2010, and replies are due August 12, 2010. Commenters addressing the Legal Issues section of this Public Notice may (1) incorporate their respective Notice of Inquiry pleadings in their filings in response to this Public Notice or (2) file comments specific to this Public Notice. Commenters choosing Option 1 must explicitly reference their Notice of Inquiry pleadings in their Public Notice responses.

⁹ For example, *see* sections 201(b), 214 (d), 215(a) and 218 of the Communications Act of 1934, as amended (Act). 47 U.S.C. §§ 201(b), 214(d), 215(a), 218. We note that section 218 casts a relatively wide net, permitting the Commission to obtain such information from a broad range of entities affiliated with carriers subject to the Act.

¹⁰ Under Title III, the Commission has the authority to establish operational obligations for licensees that further the goals and requirements of the Act if the obligations are in the public interest and do not contradict any basic parameters of the agency’s authority. *See, e.g.*, sections 301, 303(b), 303(r), 307(a), 309(a), 309(j)(3), and 316(a) of the Act. 47 U.S.C. §§ 301, 303(b), 303(r), 307(a), 309(a), 309(j)(3), 316(a). *See also Schurz Communications, Inc. v. FCC*, 982 F.2d 1043, 1048 (7th Cir. 1992). Title III of the Act also empowers the Commission to regulate devices capable of causing “harmful interference to radio communications.” 47 U.S.C. § 302(a).

¹¹ The Commission may exercise ancillary authority over a matter when it falls within the agency’s general statutory grant of jurisdiction under Title I and the regulation is reasonably ancillary to the effective performance of the Commission’s statutory responsibilities. *United States v. Southwestern Cable Co.*, 392 U.S. 157, 172–73 (1968); *accord United States v. Midwest Video Corp.*, 406 U.S. 649, 662 (1972). *See also American Library Ass’n v. F.C.C.* 406 F.3d 689, 691-92 (D.C. Cir. 2005); *but see Comcast Corp. v. F.C.C.*, 600 F.3d 642, 646 (D.C. Cir. 2010)(*Comcast*).

¹² *See Framework for Broadband Internet Service*, GN Docket No. 10-127, FCC 10-114, Notice of Inquiry (rel. June 17, 2010).

¹³ *See id.* para. 41.

¹⁴ *See id.* paras. 52-66.

¹⁵ *See id.* paras. 67-97.

¹⁶ *See id.* para. 88.

Outage Notifications/Reporting Process

What type of reporting process should the Commission consider if it chooses to pursue expansion of its Part 4 rules to also apply to interconnected VoIP service providers and broadband ISPs? For example, under the Part 4 rules, communications providers are required, in the event of a reportable outage, to submit a notification two hours following discovery of the outage, an initial report 72 hours after discovering the outage and a final report 30 days after discovering the outage.¹⁷ The rules also set forth the information required to be submitted in the notification, initial and final reports. Would this process be a reasonable process for interconnected VoIP service providers and broadband ISPs? If they should be applied, should they be applied in modified form? Should the outage information submitted by interconnected VoIP service providers and broadband ISPs be treated as presumptively confidential just as it is for those currently subject to the rules? If so, what would be the basis for doing so? If not, why not? The Commission shares the outage information it currently receives with the U.S. Department of Homeland Security, albeit on a confidential basis.¹⁸ If the Commission collects outage information from interconnected VoIP service providers and broadband ISPs, should it follow a similar approach? Should it share the information with other Federal agencies? Should it share the information with state governmental agencies?

What are the regulatory options for implementing outage reporting for interconnected VoIP service providers and broadband ISPs? Should outage reporting for interconnected VoIP service providers and broadband ISPs be mandatory, as it is today for services covered under our Part 4 rules?¹⁹ As an alternative, should the outage reporting regime be voluntary? If the latter, what changes to reporting processes and systems would be necessary to enable the Commission to know that participating communications providers are reporting completely and accurately? What are the advantages and disadvantages of mandatory reporting and voluntary reporting? What other regulatory alternatives should we consider for interconnected VoIP service provider and broadband ISP outage reporting?

Procedural Matters

This matter shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules. See 47 C.F.R. §§ 1.1200, 1.1206. Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one- or two-sentence description of the views and arguments presented generally is required. See 47 C.F.R. § 1.1206(b). Other rules pertaining to oral and written *ex parte* presentations in permit-but-disclose proceedings are set forth in section 1.1206(b) of the Commission’s rules, 47 C.F.R. § 1.1206(b).

All comments should refer to ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, 09-137. Comments in response to this Public Notice will also be filed in appropriate pending proceedings. Please title comments responsive to this Public Notice as “Comments—Public Safety and Homeland Security Bureau Seeks Comment on Whether the Commission’s Rules Concerning Disruptions to Communications Should Apply to Broadband Internet Service Providers and Interconnected Voice over Internet Protocol Service

¹⁷ See 47 C.F.R. § 4.9(a)-(f).

¹⁸ See 47 C.F.R. § 0.442; See also *Part 4 Report and Order*, *supra* note 4 at 16855.

¹⁹ See 47 C.F.R. §§ 4.1-4.13.

Providers.” Further, we strongly encourage parties to develop responses to this Public Notice that adhere to the organization and structure of the questions in this Public Notice.

Comments may be filed using (1) the Commission’s Electronic Comment Filing System (ECFS), (2) the Federal Government’s eRulemaking Portal, or (3) by filing paper copies.²⁰ Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/cgb/ecfs/> or the Federal eRulemaking Portal: <http://www.regulations.gov>.²¹ Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, “get form.” A sample form and directions will be sent in reply. Parties who choose to file by paper must file an original and four copies of each filing.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- The Commission’s contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, S.W., Washington, D.C. 20554.

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For further information about this Public Notice, please contact Jeffery Goldthorp at (202) 418-1096.

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²⁰ See Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24,121 (1998).

²¹ Filers should follow the instructions provided on the Federal eRulemaking Portal Web site for submitting comments.