



**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND CABLE**

1000 Washington Street, Suite 820
Boston, MA 02118-6500
(617) 305-3580
www.mass.gov/dtc

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

GREGORY BIALECKI
SECRETARY OF HOUSING AND
ECONOMIC DEVELOPMENT

BARBARA ANTHONY
UNDERSECRETARY
OFFICE OF CONSUMER AFFAIRS AND
BUSINESS REGULATIONS

GEOFFREY G. WHY
COMMISSIONER

By *ECFS*

August 16, 2010

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *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 Providers*, ET Docket No. 04-35; WC Docket No. 05-271; GN Docket Nos. 09-47, 09-51, 09-137

Dear Secretary Dortch:

The Massachusetts Department of Telecommunications and Cable (“MDTC”)¹ respectfully submits this letter as reply comments pursuant to the Public Notice issued by the Public Safety and Homeland Security Bureau (“Bureau”) on June 2, 2010, in the above-captioned proceeding.² The Bureau seeks informational comment on extension of Part 4 of the Federal Communications Commission’s (“Commission’s”) outage reporting rules to broadband Internet Service Providers (“ISPs”) and to interconnected Voice over Internet Protocol (“VoIP”) providers, based on National Broadband Plan (“Plan”) recommendations.³ Part 4 of the

¹ The MDTC is the exclusive state regulator of telecommunications and cable services within the Commonwealth of Massachusetts. G. L. c. 25C, § 1.

² *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, and 09-137, *Public Notice*, DA 10-1245, at 1 (rel. Jul. 2, 2010) (“Public Notice”).

³ *Id.* at 1-2, citing FCC, *National Broadband Plan: Connecting America*, Recommendation 16.6 at 321 (rel. Mar. 16, 2010). The Bureau indicates that it is seeking comment “[i]n advance of a potential Commission proceeding.” *Public Notice* at 2.

Commission’s rules currently require “reporting of [significant] disruptions to communications and to the reliability and security of communications infrastructures[,]”⁴ but are limited to “voice and/or paging communications over wireline, wireless, cable and satellite communications services.”⁵ The Plan reasoned that extending the reporting requirements to broadband ISPs and interconnected VoIP providers “would allow the Commission, other federal agencies and, as appropriate, service providers to analyze information on outages affecting IP-based networks ... [and] that gathering this information would help prevent future outages and ensure a better response to actual outages.”⁶

In response to the initial comments filed and to the Bureau’s inquiries, the MDTC agrees that mandatory outage reporting requirements should be imposed on broadband ISPs and interconnected VoIP providers. However, the MDTC recognizes that current and evolving IP-based network architecture may vary from the communications infrastructure on which the current Part 4 rules are based. Therefore, the Commission will need to ensure that any new outage reporting requirements appropriately address IP-based provider characteristics. Further, the Commission may need to revisit and streamline the existing requirements applied to other communications providers in order to retain a relatively uniform system of reporting. The MDTC also agrees that the Commission should extend the presumption of confidentiality to any outage reporting rules imposed on IP-based providers, but believes that this data should be made available to appropriate state agencies to ensure additional protections for public health and safety. Finally, the MDTC believes that the Commission has sufficient legal authority to extend outage reporting requirements to IP-based providers, but will need to resolve the issue of its legal authority before extending these requirements, in particular, to broadband ISPs.

As the Bureau recognizes, “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 ... for communications.”⁷ Further, “Americans are increasingly relying on broadband and IP-based technologies as substitutes for, or complements to, communications services provided by older, conventional communications technologies.”⁸ Indeed, broadband and IP-based networks are the future of all communications, and “[b]roadband is *the* great infrastructure challenge of the early 21st century.”⁹ Admirably, providers that offer IP-based services have taken and continue to take substantial steps to ensure their networks’ reliability, performance, and sustainability, including such steps as network redundancy, traffic monitoring and management, self-healing, and various security practices.¹⁰ However, the MDTC believes

⁴ 47 C.F.R. § 4.1.

⁵ Public Notice at 1. *See also* 47 C.F.R. §§ 4.1 *et seq.*

⁶ Public Notice at 2, *citing* Plan Recommendation 16.6 at 321.

⁷ Public Notice at 2.

⁸ *Id.*

⁹ Plan at 3.

¹⁰ *See* Verizon and Verizon Wireless Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 3-6 (filed Aug. 2, 2010) (“Verizon Comments”); AT&T Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 5-6 (filed Aug. 2, 2010); MetroPCS Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 4-8 (filed Aug. 2, 2010) (“MetroPCS Comments”); National Cable & Telecommunications Association

that these voluntary practices do not obviate the need for outage data or reporting from IP-based network providers. In particular, the MDTC agrees with the CPUC's observations that the rationale utilized by the Commission in 2004 when it updated its outage reporting rules and implemented its Network Outage Reporting System ("NORS") database is no less applicable now than it was then.¹¹ Specifically, the Commission determined that "[e]nsuring that the United States has reliable communications requires us to obtain information about communications disruptions and their causes to prevent future disruptions that could otherwise occur from similar causes, as well as to facilitate the use of alternative communications facilities while the disrupted facilities are being used."¹² The Commission pointed to the terrorist acts of September 11, 2001, as "starkly illustrat[ing] the need for reliable communications during times of crisis."¹³ As such, the MDTC firmly believes that the Commission should logically extend an appropriate level of outage reporting requirements to broadband ISP and interconnected VoIP providers for use by federal and state agencies.

Several commenters recommend that if the Commission considers extending outage reporting to IP-based providers, then the reporting should be entirely voluntary.¹⁴ Some argue that existing voluntary efforts by providers and their ongoing involvement in public-private coordination efforts are sufficient to minimize risks to the communications infrastructure.¹⁵ Indeed, these commenters point to private industry's involvement with such entities and groups as the National Coordinating Center for Telecommunications;¹⁶ the Alliance for Telecommunications Industry Solutions;¹⁷ the Communications Sector Coordinating Council;¹⁸ the Communications Security, Reliability, and Interoperability Council;¹⁹ the Partnership for Critical Infrastructure Security;²⁰ the Department of Homeland Security;²¹ etc., and urge the

Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 4-6 (filed Aug. 2, 2010 ("NCTA Comments"); United States Telecom Association Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 2-4 (filed Aug. 2, 2010) ("USTelecom Comments").

¹¹ California Public Utilities Commission Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 7-9 (filed Aug. 2, 2010) ("CPUC Comments"), *citing New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, ET Docket No. 04-35, Report and Order and Further Notice of Proposed Rulemaking, FCC 04-188 (rel. Aug. 19, 2004) ("*New Part 4 Report and Order*").

¹² *New Part 4 Report and Order* at ¶ 11.

¹³ *Id.* at ¶ 10.

¹⁴ See Qwest Communications Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 11 (filed Aug. 2, 2010) ("Qwest Comments"); Alliance for Telecommunications Industry Standards Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 1, 5 (filed Aug. 2, 2010); MetroPCS Comments at 7; NCTA Comments at 12.

¹⁵ See Verizon Comments at 3-6, 9-11; Qwest Comments at 3-8; AT&T Comments at 5-6.

¹⁶ See Verizon Comments at 9.

¹⁷ See MetroPCS Comments at 7.

¹⁸ See Verizon Comments at 9.

¹⁹ See AT&T Comments at 5; NCTA Comments at 11-12.

²⁰ See Verizon Comments at 9.

²¹ See *id.*; Qwest Comments at 7; US Telecom Comments at 3.

Commission, instead, to implement a more collaborative, and voluntary, approach to IP-based network outages.

While the MDTC fully supports and recognizes the inherent benefits that derive from ongoing public-private collaborations for critical infrastructure protection and reliability, the MDTC disagrees that outage reporting to the Commission should be purely voluntary. Specifically, the MDTC believes that national security concerns necessitate a single source of federal reporting and uniform standards. In addition, with regard to whether reporting should be entirely voluntary, the MDTC points the Bureau to the Commission's *New Part 4 Report and Order* in which the Commission discussed, and dismissed, voluntary outage reporting based on a fully developed record.²² There, the Commission noted that previous participation in voluntary network-outage reporting "was spotty and that the quality of information obtained was very poor" and that there was "no persuasive evidence in the record that ... *all* covered communications providers would voluntarily file accurate and complete outage reports for the foreseeable future or that mandatory reporting is not essential to the development, refinement, and validation of best practices."²³

Most private sector commenters in the instant proceeding oppose the proposal to extend outage reporting requirements to broadband ISPs and interconnected VoIP providers.²⁴ However, the MDTC notes that these comments, and arguments, are similar to the opposition received by the Commission when it previously extended the scope of mandatory outage reporting.²⁵ Therefore, the MDTC urges the Bureau to be guided by Commission precedent and for the Bureau to encourage the Commission to initiate a rulemaking that extends mandatory outage reporting requirements to broadband ISPs and interconnected VoIP providers.

If the Commission initiates a rulemaking to extend the outage reporting requirements, then the MDTC recommends the Commission continue to implement the general model already utilized within the Part 4 rules. In particular, the Commission should continue to ensure baseline provider-specific threshold criteria that remain as uniform as possible between different types of communications providers.²⁶ However, as pointed out by several commenters,²⁷ and by the

²² See *New Part 4 Report and Order* at ¶¶ 19-47.

²³ *Id.* at ¶¶ 37, 39.

²⁴ See Vonage Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 3-7 (filed Aug. 2, 2010); LARIAT Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 1-3 (filed Aug. 2, 2010); Verizon Comments at 6-9; MetroPCS Comments at 4-8; AT&T Comments at 1-6; Qwest Comments at 3-8.

²⁵ Compare Verizon Comments at 6-9; MetroPCS Comments at 4-8; AT&T Comments at 1-6; Qwest Comments at 3-8, with *New Part 4 Report and Order*, at ¶¶ 26-29.

²⁶ See 47 C.F.R. § 4.9 (listing separate, but similar, threshold criteria for cable communications providers, interexchange carrier/local exchange carrier tandem facilities, satellite communications providers, signaling system 7 communications providers, wireless service providers, and wireline communications service providers). In particular, as NECA notes, interconnected VoIP services and traditional circuit-switched telephony services are "like" services from the end-user's perspective. National Exchange Carrier Association, *et. al.* Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 4 (filed Aug. 2, 2010) ("NECA Comments"). The Commission should ensure that such similar services fall within the same or substantially similar reporting metric.

Bureau itself,²⁸ inherent differences exist between and amongst IP-based communications providers and legacy communications providers and their network designs. As such, these differences will likely necessitate implementation of variations in the existing metric, similar to the approach previously taken by the Commission in the *New Part 4 Report and Order*, based on provider type.²⁹ In addition, the MDTC agrees with AT&T that the Bureau should keep in mind certain principles when assisting the Commission in development of extended outage reporting rules, namely that (1) “[a]ny proposed regulation should *clearly* define the entities obligated to file Part 4 reports;” (2) “[t]he threshold reporting criteria should be unambiguous and easy to apply;” and (3) “[a]ny proposed regulations should not impose unrealistic deadlines for filing reports.”³⁰

If the Commission extends outage reporting requirements to IP-based network providers, the MDTC agrees with several commenters that the Commission should also treat reported information as confidential.³¹ The CPUC’s observation that public disclosure of reported

²⁷ See CTIA Comments at 3; Verizon Comments at 6-8; Qwest Comments at 11. See also MetroPCS Comments at 4 (noting the different types of channels through which consumers “may access the Internet at broadband speeds[,]” such as through: (i) connections through traditional telecommunications companies, such as digital subscriber lines and fiber-to-the-home; (ii) cable broadband; (iii) satellite broadband; (iv) wireless broadband; (v) broadband over power lines; and (vi) Wireless ISPs).

²⁸ See Public Notice at 3 (noting 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” whereas networks that provide high-speed Internet access “experience different failure modes than traditional TDM-based communications networks”). The Bureau also recognizes differences between interconnected VoIP providers; namely, nomadic versus facilities-based, or fixed, interconnected VoIP providers. *Id.* at n.2. In particular, the Bureau notes:

We estimate that roughly 80-85 percent of interconnected VoIP served are provided by a broadband access service provider. These services are interconnected to the public switched telephone network . . . 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 provides.

Id.

²⁹ The Commission recognized that “although the concept of a uniformly applied common metric is properly based on the number of people potentially affected by, and duration of, an outage, irrespective of the communications system, differences may necessitate variations in developing the metric for these communications networks or even alternative approaches.” *New Part 4 Report and Order* at ¶ 50. Under this rubric, the Commission based its current outage reporting rules on user-minutes potentially affected by an outage. *Id.* at ¶ 51. The MDTC also notes that the Commission would need to update section 4.3 of its rules, which lists and defines the specific communications providers covered by Part 4. See 47 C.F.R. § 4.3.

³⁰ AT&T Comments at 7. Although the MDTC agrees with AT&T’s principle involving unrealistic deadlines, we currently refrain from commenting on what would constitute an unrealistic deadline. Further, the MDTC refrains from comment on AT&T’s fourth principle, which states that “proposed regulations should only require the reporting entity to report on outages directly impacting its own facilities – *i.e.*, facilities over which it can exercise any best-practice remedy.” *Id.*

³¹ See District of Columbia Public Service Commission Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 3 (filed Aug. 2, 2010) (“DC PSC Comments”); New York Public Service Commission Comments, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, and 09-137, at 3 (filed Aug. 2, 2010) (“NY PSC Comments”); CPUC Comments at 9; Qwest Comments at 12-14.

disruption and outage data may create “serious implications for the nation’s critical information [and communications] infrastructure” is entirely accurate.³² Further, the Commission’s existing rules already mandate a presumption of confidentiality for reports filed under Part 4.³³ As such, in the interests of fairness and to ensure continued uniformity, the Commission should extend the confidentiality provisions to any provider filing outage reports under Part 4.

Although the Commission should require confidentiality of the reports filed by broadband ISPs and interconnected VoIP providers, the MDTC takes the same position as certain commenters that state-specific information should also be made available to appropriate state agencies.³⁴ The MDTC agrees that “[o]utage and service disruption data are often necessary to the analysis of infrastructure within states,”³⁵ and that real-time access to such data assists states’ efforts to protect public health and safety.³⁶ In addition, like other state commenters, the MDTC reaffirms its support of the CPUC’s pending petition requesting that the Commission provide state public utilities commissions direct access to its NORS database.³⁷ The MDTC urges the Commission to grant that petition shortly.

Finally, the MDTC believes that the Commission has sufficient legal authority to extend outage reporting requirements to IP-based network providers. With regard to interconnected VoIP providers, the MDTC agrees with NECA that the Commission has sufficient existing legal authority to extend outage reporting requirements to interconnected VoIP providers.³⁸ In particular, based on past precedent and until the Commission makes a final determination about the appropriate regulatory classification of interconnected VoIP services, the Commission may impose these requirements pursuant to its Title I ancillary authority.³⁹ However, with regard to

³² CPUC Comments at 9.

³³ See 47 C.F.R. § 4.2.

³⁴ See CPUC Comments at 6-9; NY PSC Comments at 1, 3-4; DC PSC Comments at 3. In Massachusetts, these entities, at a minimum, would include both the MDTC and the State 911 Department.

³⁵ DC PSC Comments at 3.

³⁶ See NY PSC Comments at 3; CPUC Comments at 7.

³⁷ See MDTC Comments, ET Docket No. 04-35, at 2 (filed Mar. 4, 2010). See also NY PSC Comments at 3; DC PSC Comments at 3; CPUC Comments at 7-8.

³⁸ NECA Comments at 3-4.

³⁹ Citing to its ancillary authority, the Commission has extended numerous common carrier requirements to interconnected VoIP providers, including E-911, federal USF contributions, CPNI, disability rights access, payment of federal regulatory fees, local number portability, FCC Form 477 data reporting, and discontinuance. See *IP-Enabled Services; E911 Requirements for IP-Enabled Service Providers*, WC Docket Nos. 04-36, 05-196, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, FCC 05-116, at ¶¶ 22, 26-35 (rel. Jun. 3, 2005), *aff’d*, *Nuvio Corp. v. FCC*, 473 F.3d 302 (D.C. Cir. 2006); *Universal Service Contribution Methodology*, WC Docket No. 06-122; CC Docket Nos. 96-45, 98-171, 90-571, 92-237; NSD File No. L-00-72; CC Docket Nos. 99-200, 95-116, 98-170; WC Docket No. 04-36, Report and Order and Notice of Proposed Rulemaking, 21 FCC Rcd 7518, FCC 06-94, at ¶¶ 35, 46-49 (rel. Jun. 27, 2006), *aff’d in part, vacated in part sub nom. Vonage Holdings Corp. v. FCC*, 489 F.3d 1232 (D.C. Cir. 2007); *Implementation of the Telecommunications Act of 1996: Telecommunications Carriers’ Use of Customer Proprietary Network Information and Other Customer Information; IP-Enabled Services*, CC Docket No. 96-115, WC Docket No. 04-36, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 6927, FCC 07-22, at ¶¶ 54-59 (rel. Apr. 2, 2007); *IP-Enabled Services*, WC Docket No. 04-36, WT Docket No. 96-198, CG Docket No. 03-123, CC Docket No. 92-105, Report and Order, 22

broadband ISPs, the MDTC simply offers agreement with the CPUC’s observation that “the Commission should first resolve the issue of its [legal] authority [] before it extends the Part 4 reporting requirements” to broadband ISPs.⁴⁰

The MDTC thanks the Bureau for this opportunity to comment.

Sincerely,

/s/ Geoffrey G. Why
Geoffrey G. Why, Commissioner
Massachusetts Dept. of
Telecommunications and Cable

FCC Rcd 11275, FCC 07-110, at ¶¶ 1, 21-24 (rel. Jun. 15, 2007); *Assessment and Collection of Regulatory Fees for Fiscal Year 2007*, MD Docket No. 07-81, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 15712, FCC 07-140, at ¶¶ 12-14 (rel. Aug. 8, 2007); *Telephone Number Requirements for IP-Enabled Services Providers; Local Number Portability Porting Interval and Validation Requirements; IP-Enabled Services; Telephone Number Portability; Numbering Resource Optimization*, WC Docket Nos. 07-243, 07-244, 04-36, CC Docket Nos. 95-116, 99-200, Report and Order, Declaratory Ruling, Order on Remand, and Notice of Proposed Rulemaking, 22 FCC Rcd 19531, FCC 07-188, at ¶¶ 21, 24-29 (rel. Nov. 8, 2007); *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscriber Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscriber Data*, WC Docket No. 07-38, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 9691, FCC 08-89, at ¶¶ 27-29 (rel. Jun. 12, 2008); *IP-Enabled Services*, WC Docket No. 04-36, Report and Order, 24 FCC Rcd 6039, FCC 09-40, at ¶¶ 9-13 (rel. May 13, 2009).

⁴⁰ CPUC Comments at 6. See also *Comcast Corp. v. FCC*, 600 F.3d 642 (D.C. Cir. 2010) (“*Comcast*”); *Framework for Broadband Internet Service*, GN Docket No. 10-127, Notice and Inquiry, FCC 10-114, at ¶¶ 1-2 (stating that the *Comcast* decision “appears to undermine prior understandings about the Commission’s ability under the current framework to provide consumers basic protections when they use today’s broadband Internet service” and, as a result, seeking comment on the appropriate legal framework for broadband Internet service).