Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
IP-Enabled Services	)	WC Docket No. 04-36
	)	
E911 Requirements for IP-Enabled Service Providers	)	WC Docket No. 05-196
	)	

COMMENTS OF QWEST COMMUNICATIONS CORPORATION

Blair A. Rosenthal
Kathryn Marie Krause
Suite 950
607 14th Street, N.W.
Washington, DC 20005
(303) 383-6651

Attorneys for
QWEST COMMUNICATIONS CORPORATION

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Qwest Communications Corporation ("Qwest") takes this opportunity to comment on the Federal Communications Commission's ("FCC" or "Commission") *Notice of Proposed Rulemaking* in the above-referenced dockets.[1]

I. INTRODUCTION AND SUMMARY: NO ADDITIONAL FEDERAL REGULATION IS NECESSARY WITH RESPECT TO E911 DEPLOYMENT BY VOIP PROVIDERS

No additional action needs to be taken with respect to E911 deployments by voice over Internet protocol ("VoIP") providers. The VoIP community had been diligently pursuing a variety of E911 solutions even before the Commission adopted its *VoIP E911 Order.* Primarily because of that predicate work, interconnected VoIP providers will generally be positioned to meet the Commission's very aggressive E911 deployment dates.[2]

VoIP providers have demonstrated an overall willingness to assume "the responsibility to

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[1] *In the Matters of IP-Enabled Services; E911 Requirements for IP-Enabled Service Providers,* WC Docket No. 04-36 and WC Docket No. 05-196, First Report and Order and Notice of Proposed Rulemaking ("*VoIP E911 Order*" or "*Notice*" as the text allows), FCC 05-116, rel. June 3, 2005 (20 FCC Rcd 10245), *pets. for recon. pending, see* Public Notice, DA 05-2277, rel. Aug. 12, 2005. *And see Public Notice*, DA 05-1905, rel. June 29, 2005. *Also see*, 70 Fed. Reg. 37307, June 29, 2005.

[2] *VoIP E911 Order* ¶ 37 (noting that the compliance period under the *Order* "is an aggressively short amount of time").

ensure that public safety is protected."[3] In support of that demonstrated willingness, the Commission should provide industry an opportunity to act upon its public safety responsibilities without government intervention, particularly when there is no evident threat to general public safety.

In framing the scope of any Commission-mandated E911 obligations beyond those applicable to interconnected VoIP providers (where origination and termination from the public switched telephone network ("PSTN") are necessary elements), the Commission need make only modest adjustments to its VoIP E911 rules to accommodate both customer expectations and competitive equity. The Commission should incorporate the logic of the *VoIP E911 Order* -- that interconnected VoIP providers should provide E911 because such providers generally appear to consumers (and, indeed often market their services) as substitutes for traditional landline local exchange service that are offered in competition with local exchange carriers ("LECs") -- into any extension of its promulgated E911 obligations. Where a VoIP provider offers service -- even if in two discrete components -- that can be combined to produce what is the practical equivalent of traditional Plain Old Telephone Service ("POTS") or interconnected VoIP services, E911 obligations should apply. These would include circumstances where (a) by the nature of the offering it is clear that customers would expect E911 functionality or (b) customer behavior demonstrates that calling occurs in any material volumes and (c) application of the obligation is supported by competitive considerations. At the other end of the service spectrum, E911 obligations are not relevant where an IP-enabled service never interacts directly with the PSTN.

Additionally, the Commission should not regulate the fundamental VoIP E911

[3] *Notice* ¶ 56.

infrastructure either from an architectural or manufacturing perspective. Ample opportunity exists for future Commission intervention if demonstrated persistent gaps arise and the public interest is threatened by those gaps. It is clear, for example, that *automatic* location information (or "ALI") functionality is desirable with regard to VoIP E911 services so that no customer interaction is necessary to update such information. Yet the current state of industry investigation, discussion and analysis is in its infancy with regard to technological solutions.

Industry and standards committees are working steadfastly to improve VoIP E911 services and on additional technological functionality that would reduce the need for end-user/subscriber involvement in location identification. It is critical that the Commission allow industry time and opportunity to develop a solution (or a variety of solutions) without regulatory intervention, at this stage of the development process. Modest regulatory oversight is sufficient and aligned with the Commission's overall "commit[ment] to allowing [IP-enabled] services to evolve without undue regulation."[4] Accordingly, the Commission should refrain from acting in a premature fashion that could stifle technological or manufacturing innovation or operate to drive such innovations in one direction over another.

II. "COMPARABLE" SERVICES TO LOCAL EXCHANGE AND INTERCONNECTED VOIP SERVICES SHOULD HAVE COMPARABLE E911 OBLIGATIONS

Under the *VoIP E911 Order*, interconnected VoIP providers have an obligation to provide E911. Extension of these obligations should be confined to those VoIP offerings that clearly or predictably would involve customer expectations that E911 would be offered -- essentially services that appear (or are advertised) to incorporate significant outbound calling functionality and could be deemed substitutes for local exchange or interconnected VoIP services. These are

[4] *VoIP E911 Order* ¶ 4 and n.95. *See also* 47 U.S.C. § 230(b)(2).

also the services that would likely compete with those of interconnected VoIP providers and traditional landline services of the LECs.

Under the current rules, the term "interconnected VoIP provider" has a particular definition that ties such providers to "real-time, two–way voice communications" (*see* 47 C.F.R. § 9.3). The *Notice* seeks comment on whether these obligations should be extended to VoIP providers that offer one leg or the other of a "two-way voice communication" and "tentatively conclude[s] that a provider of a VoIP service offering[s] that permits users generally to receive calls that originate on the PSTN and separately makes available a different offering that permits users generally to terminate calls to the PSTN should be subject to the rules" the Commission adopted for interconnected VoIP providers "if a user can combine those separate offerings or can use them simultaneously or in immediate succession."[5]

Qwest is concerned that an "automatic" application of the interconnected VoIP E911 rules to service providers offering two single services that might be combined could result in either an overbroad or underbroad application of those rules.[6] For this reason Qwest recommends the Commission continue to be guided by its previously articulated four criteria in determining whether some form of E911 obligation should append to a service provider and its attendant offering: "(1) the entity offers real-time . . .voice service, interconnected with the public switched network, either on a stand-alone basis or packaged with other

[5] *Notice* ¶ 58.

[6] *See, e.g., ex parte* of pulver.com, to Marlene H. Dortch, FCC, WC Docket Nos. 04-36, 05-196, June 10, 2005 where pulver takes the position that E911 obligations should not apply when "a consumer kluged together an inbound VoIP service with a separately offered outbound VoIP service." Qwest disagrees that E911 obligations should *never* apply in such context, but it is not apparent that all of the situations described in the pulver.com e*x parte* reflect situations where customers would expect E911 functionality.

telecommunications services; (2) customers using the service or device have a reasonable expectation of access to 911 and E911 services; (3) the service competes with traditional CMRS or wireline local exchange service; and (4) it is technically and operationally feasible for the service or device to support E911."[7] Assessing the need for E911 functionality utilizing these guidelines should prove helpful with respect to analyzing offerings that deviate -- though perhaps not in a material fashion in the context of E911 -- from those offered by interconnected VoIP providers.[8] This should capture VoIP services where customers would expect the provider to offer E911 service and competitors would expect parity of obligation.[9]

III. VOIP E911 FUNCTIONALITY SHOULD BE PERMITTED TO DEVELOP UNENCUMBERED BY REGULATORY INTERVENTION

A. The Development of "Automatic" Location Information Updates is Complex and Should be Permitted to Proceed Unencumbered by Regulatory Intervention

Currently, customers must actively participate to keep their location information up-to-

[7] *See VoIP E911 Order* n.58 (The ellipsis substitute for the words "two-way switched."). *See also id.* n.16.

[8] *Ex Parte* of Skype Communications, S.A., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 04-36, May 10, 2004 at 2 ("consumers buying phone service that is marketed as, and intended to be used as, a replacement for fixed-line wireline telephone services" should be subject to E911 obligations"). Qwest takes no position at this time regarding whether the Skype services described in its *Ex Parte* would be affected by the Commission's recently promulgated E911 rules.

[9] The *Notice* does not specifically inquire into the application of E911 rules in those cases where a VoIP provider offers only an outbound calling service. While an inbound-only VoIP service would not implicate E911, an outbound service -- although it was not "two-way voice" -- could implicate E911 dialing depending on how the service is marketed, customers' independent understanding of the service and their associated expectations, and the similarity of the one-way outbound calling to similar calling functionality of POTS. For this reason, Qwest believes a similar test should apply to outbound-only types of services. We express no opinion at this time, however, regarding whether customers might have an expectation of E911 service functionality with respect to such services.

date for a reliable interconnected VoIP E911 infrastructure to operate.[10] The *Notice* seeks comment on alternative technological mechanisms that would remove the customer from the location information update process.[11] The *Notice* appears to envision a location information-tracking environment resembling the "wireless E911 model." There a wireless subscriber's location is capable of being located within a range of 50 to 300 meters, depending on whether the location information functionality is in the handset or the network.[12]

This "automatic identification" feature of wireless E911 was years and years in the making from development to deployment. Moreover, as the Commission is aware, wireless E911 proceeded in Phases, migrating from a location identification associated with a cell site to one associated with a handset.[13] The intelligence built into wireless handsets is quite sophisticated such that it incorporates an "always on" element with respect to 911-dialing but offers customer choice regarding whether location information is "on" or "off" with respect to other services or products. This feature functionality assures the wireless customer that he/she will have access to critical public safety resources without suffering reduced privacy expectations.[14]

The Commission has noted that "one of the central customer benefits of portable

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[10] *VoIP E911 Order* ¶ 46.

[11] *Notice* ¶¶ 56-59.

[12] *VoIP E911 Order* n.41

[13] *Id.*

[14] *Compare* the Federal Trade Commission's ("FTC") two-day workshop in December 2000, "Inquiry into Location Technology and Use of Such Information (Telematics, Automatic Crash Notification, Highway Tracking" where the FTC hosted discussions on wireless data technologies pertaining to location information.

interconnected VoIP services is the lack of geographic restrictions."[15] Any location tracking technology that seeks to incorporate intelligence into VoIP customer-provided equipment will obviously raise privacy and confidentiality concerns for the users of the service. Such intelligence would necessarily have to offer customer choice similar to that incorporated into wireless handsets. For this reason, not only do designers and manufacturers need to envision and design the tracking functionality but they also need to simultaneously develop the functionality to allow the mechanism to operate all the time *only* with respect to a single application. This is a very complex design and fabrication challenge.[16]

This type of complicated design and development work should be permitted to germinate in an open provocative atmosphere at this time. As solutions wend their way forward as being "better than the other," service providers will begin to demonstrate some inclinations as to their preferences. This would be the more appropriate time for the Commission to inquire into the need for federal regulation. Right now, however, there is simply nothing to regulate since all is in the state of investigation, challenge and debate. The Commission should allow the current processes to continue unencumbered. Such action would be in line with the Commission's long-

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[15] *Notice* ¶ 57 (footnote omitted).

[16] As the Commission observed in the wireless E911 context, "there is no single perfect ALI solution. Each has its advantages and limitations. Each may be improved in the future. Under these circumstances, . . . the public interest and public safety will best be served by allowing a broad range of technologies . . . a reasonable opportunity to compete in providing 911 ALI." *In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Third Report and Order, 14 FCC Rcd 17388, 17404-05 ¶ 33 (1999). *And see In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Memorandum Opinion and Order, 12 FCC Rcd 22665, 22725 ¶ 124 (1997) (articulating a goal of technology neutrality with respect to its wireless E911 rules, such that they would not "hamper the development and deployment of the best and most efficient ALI technologies and systems.").

standing policy of promoting competition among technologies, vendors, and solution providers.[17]

B. <u>There Should be no Mandated Timeframes for Registry Updates</u>

The Commission declined to adopt performance "standards" with regard to location updates in its *VoIP E911 Order*.[18] But the *Notice* seeks comment on whether there should be performance standards regarding "the length of time between when an end user updates Registered Location information and when the service provider takes the actions necessary to enable E911 from that new location."[19] The answer is no.

Once interconnected VoIP providers begin to operate under the National Emergency Numbering Association ("NENA") I2 (or wireless E911-like solution sometimes referred to as E2), their ability to do location updates quickly becomes established.[20] Until that time, however,

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[17] *See In the Matter of 1998 Biennial Regulatory Review – Amendment of Parts 2, 25 and 68 of the Commission's Rules to Further Streamline the Equipment Authorization Process for Radio Frequency Equipment, Modify the Equipment Authorization Process for Telephone Terminal Equipment, Implement Mutual Recognition Agreements and Begin Implementation of the Global Mobile Personal Communications by Satellite (GMPCS) Arrangements*, Report and Order, 13 FCC Rcd 24687, 24688-89 ¶ 3 (1998) ("Part 68 was enacted more than two decades ago to facilitate competition in the telecommunications equipment industry); *In the Matter of The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010; Establishment of Rules and Requirements For Priority Access Service*, First Report and Order and Third Notice of Proposed Rulemaking, 14 FCC Rcd 152, 163 ¶ 14, 173 ¶ 38 n.99 (1998); *In the Matter of 2000 Biennial Regulatory Review of Part 68 of the Commission's Rules and Regulations*, Report and Order, 15 FCC Rcd 24944, 24947 ¶ 7 (2000) ("rules have facilitated a vibrant, competitive market for terminal equipment, reducing prices and resulting in a proliferation of new equipment and capabilities available to consumers").

[18] *VoIP E911 Order* ¶ 44 and n.143 (noting that updating location information regarding VoIP subscribers can take between 24 and 120 hours. Qwest understands it can actually take up to 14 days in some cases depending on system capabilities and functionalities.).

[19] *Notice* ¶ 59.

[20] The Commission makes reference to such updates being able to be done "in 'real time'." *VoIP E911 Order* n.143. It is Qwest's understanding that even in this environment the update would take 15 to 20 minutes. Still, compare this to landline E911 updates that can take up to 72 hours to accomplish. The E2 materially shortens the update timeframe.

interconnected VoIP providers are tied to their existing systems. They most likely are incapable of reducing the location update timeframe below what they currently accommodate without changing out their operations support systems. To tackle the removal of embedded or legacy systems at the same time that current resources are being commandeered to deploy E911 on a substantive basis would be burdensome at a minimum and overwhelming for some providers.

The Commission should track the movement to NENA I2 and assess the marketplace to determine the penetration of services by interconnected VoIP providers utilizing such technology before it intervenes to mandate timelines for registry updates. It is quite possible that the timeframe for registry updates will decrease as a matter of provider efficiency and overall operations. The wireline industry, for example, has a long history of E911 provisioning without any timeline mandates regarding the updating of location information. Accordingly, the Commission should be restrained in changing the regulatory model with respect to interconnected VoIP providers which the Commission deems a form of market "substitution" for local exchange service. So long as interconnected VoIP providers clearly and conspicuously advise their customers how long a location update will take (assuming the provider allows movement of the service in the first instance), there should be no consumer surprise. Consumers that find the time lag unacceptable have other competitive choices available to them that would better meet their needs.

IV. REPORTS HAVE THEIR PLACE IF CAREFULLY FRAMED AND FOCUSED ON IDENTIFICATION OF GAPS AND POTENTIAL NON-REGULATORY SOLUTIONS

The *Notice* seeks comment on whether VoIP providers should be compelled to provide reports to the Commission "to monitor implementation of its E911 rules."[21] Reports can be

[21] *Notice* ¶ 60.

valuable sources of information for the Commission in terms of assessing progress toward a regulatory objective or goal. In this context, Qwest can support the imposition of reporting requirements on businesses where: (a) the reports are authored by industry or standards bodies representing a range of viewpoints and optimally striving for consensus; (b) the reporting obligation is time limited; and (c) the contents of the reports are understood to be predictive not factual representations.

Reports regarding impending or emerging E911 technological developments associated with registry updates and automatic location tracking, for example, could provide helpful information to the Commission about the state of technology from both a design and fabrication viewpoint. These types of reports are best authored and submitted by standards bodies and industry associations. Individual businesses are not the best vehicle for this kind of summary industry information, although individual businesses can always file "exception" reports.

A case in point demonstrates the limitations of individual carriers filing "progress" reports subject to counter-advocacy of the carrier's representations: the E911 progress reports that the FCC mandated be filed by wireless carriers.[22] The reports were filed, but they were "supplemented" by multiple manufacturer and distributor filings that often took issue with the carriers' representations regarding the "readiness" of technology or products.[23] Ultimately, those

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[22] *Id.*

[23] Qwest characterized the filings "responsive" to those filed by carriers as follows, in its July 23, 2001 Waiver Petition: "This kind of public grousing does nothing to advance the Commission's E911 objectives. What it does is confuse those who are not direct parties to the deployment activities, strain relationships between suppliers and their customers and divert resources from the task of product delivery to regulatory lobbying. It also creates a fundamental mistake in focus[,]" given that it is the retail service provider burdened by the regulatory obligation, not its predicate suppliers. *See Qwest Wireless, LLC and TW Wireless, LLC Petition for Extension of Time or Waiver of Section 20.18 of the Rules,* filed July 23, 2001 at 9-10, *In the Matter of*

reports set up a "point/counterpoint" series of filings that ultimately led the Commission to secure the aid of an independent analyst (Mr. Hatfield) to wade through and make sense of all the narrative.[24]

The better approach is to have industry associations made up of businesses, manufacturers and product distributors do the reporting. From the reported narrative, the Commission is well equipped to ask questions and frame issues. In the E911 context, Qwest recommends that the Commission ask the Alliance for Telecommunications Industry Solutions ("ATIS"), as well as NENA and the VON Coalition (the latter either separately or together) to provide a report to the Commission regarding industry progress on pending and emerging VoIP E911 issues.

Not only is the matter of who authors progress reports important; so too is the question of how long the reports must be filed and the practical application of reports in the regulatory environment. Reporting obligations often lack sunsetting provisions which means that businesses may be burdened by the reporting obligation long after the regulatory or market need has passed. With respect to VoIP E911 reports, Qwest proposes the Commission request such reports twice in the next year (*i.e.*, every six months for a year). At that time the Commission can reassess the frequency of such reports, perhaps reducing the frequency to annually. At the time of the adoption of any reporting requirement, the Commission should adopt an automatic sunset of the requirement three years out. If the Commission believes the need for reports continues at the three-year period, it can require continuation of the reports with a renewed

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Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102.

[24] Mr. Hatfield's Report is cited in the *VoIP E911 Order* at n.16.

inquiry into the content and future frequency.

Finally, reports describing a "state of affairs" with regard to technological developments or deployments should not be characterized as factual representations or promises of the authors. The reports should not be treated as "admissions" of the author if future facts or arguments result in a reassessment of the state of affairs. The wireless reports, for example, were largely predictive in nature, estimating how certain technology *would operate* once it was manufactured and deployed and providing *estimated* timeframes for certain activities that were highly dependent on the actions of others (manufacturers, for example). Yet those reports were sometimes treated by the Commission as though they were carrier promises of performance that had been made and were later breached. Regulators should not treat reports of a predictive nature similarly to reports that outline past facts or occurrences. The former is based on facts available at the time, as well as judgments as to the materiality of certain facts and their continued accuracy. The latter have the benefit of hindsight and operate more as narratives of events as they happened. Just as the nature of the two kinds of reports are different, so should the Commission consider them differently.

Respectfully submitted,

QWEST COMMUNICATIONS CORPORATION

By: /s/ Kathryn Marie Krause

Blair A. Rosenthal
Kathryn Marie Krause
Suite 950
607 14th Street, N.W.
Washington, DC 20005
(303) 383-6651

Its Attorneys

August 15, 2005

CERTIFICATE OF SERVICE

I, Richard Grozier, do hereby certify that I have caused the foregoing **COMMENTS OF QWEST COMMUNICATIONS CORPORATION** to be filed with the FCC via its Electronic Comment Filing System, and served via e-mail on Ms Janice Myles at Janice.myles@fcc.gov and also via e-mail on the FCC's duplicating contractor, Best Copy and Printing, Inc. at fcc@bcpiweb.com

/s/Richard Grozier

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