



DOCKET FILE COPY ORIGINAL

RECEIVED & INSPECTED
AUG 17 2005
FCC - MAILROOM

August 15, 2005

VIA ELECTRONIC FILING AND OVERNIGHT UPS

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
9300 East Hampton Drive
Capitol Heights, MD 20743

Re: Comments of RNK, Inc. d/b/a RNK Telecom in WC Docket No. 05-196

Dear Ms. Dortch:

RNK, Inc., d/b/a RNK Telecom, in addition to the electronically-filed version at the Commission's website, hereby submits one (1) original of the above-captioned document for filing in WC Docket No. 05-196, in response to the *First Report and Order and Notice of Proposed Rulemaking*¹ in that docket. As provided by the Commission's Rules,² please treat the electronic version as the "original, official copy."³

Please indicate your receipt of this filing on the copy of this letter and the additional first page of the filing provided and return it to the undersigned in the enclosed self-addressed, postage-prepaid, envelope.

Should you have any questions related to this filing, please do not hesitate to contact me at 781-613-6000. Thank you for your attention to this matter.

Sincerely,

Leah Williams
Sr. Counsel

No. of Copies rec'd 0
List A B C D E

¹ *IP-Enabled Services and E911 Requirements for IP-Enabled Service Providers, First Report and Order and Notice of Proposed Rulemaking*, WC Docket Nos. 05-196 and 04-36. 2005 WL 1323217, FCC, (rel. Jun 3, 2005).

² See *Electronic filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (1998) at ¶5.

³ *Id.*



RECEIVED & INSPECTED
AUG 17 2005
FCC - MAILROOM

August 15, 2005

VIA ELECTRONIC FILING AND OVERNIGHT UPS

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
9300 East Hampton Drive
Capitol Heights, MD 20743

DUPLICATE

Re: Comments of RNK, Inc. d/b/a RNK Telecom in WC Docket No. 05-196

Dear Ms. Dortch:

RNK, Inc., d/b/a RNK Telecom, in addition to the electronically-filed version at the Commission's website, hereby submits one (1) original of the above-captioned document for filing in WC Docket No. 05-196, in response to the *First Report and Order and Notice of Proposed Rulemaking*¹ in that docket. As provided by the Commission's Rules,² please treat the electronic version as the "original, official copy."³

Please indicate your receipt of this filing on the copy of this letter and the additional first page of the filing provided and return it to the undersigned in the enclosed self-addressed, postage-prepaid, envelope.

Should you have any questions related to this filing, please do not hesitate to contact me at 781-613-6000. Thank you for your attention to this matter.

Sincerely,

Leah Williams
Sr. Counsel

No. of Copies rec'd _____
List A B C D E _____

¹ *IP-Enabled Services and E911 Requirements for IP-Enabled Service Providers, First Report and Order and Notice of Proposed Rulemaking*, WC Docket Nos. 05-196 and 04-36. 2005 WL 1323217, FCC, (rel. Jun 3, 2005).

² See *Electronic filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (1998) at ¶5.

³ *Id.*

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

RECEIVED & INSPECTED
AUG 17 2005
FCC - MAILROOM

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

COMMENTS OF RNK, INC., D/B/A RNK TELECOM

In response to the Federal Communications Commission's (the "Commission") Notice of Proposed Rulemaking issued in the above-captioned proceedings,¹ RNK, Inc. d/b/a RNK Telecom ("RNK") hereby respectfully submits the following comments.

I. INTRODUCTION

RNK, a small, privately-held company, based in Dedham, Massachusetts is an integrated communications provider, marketing local and interexchange telecommunications services, as well as Internet services and IP-enabled voice services. RNK offers "interconnected VoIP services" ("IVS"), as defined by the Commission in its *VoIP E911 First Report and Order*, primarily to independent resellers on a wholesale basis.

RNK is also a certified Competitive Local Exchange Carrier ("CLEC") in the states of Massachusetts, Rhode Island, New York, Florida, New Jersey, New Hampshire, and Connecticut offering residential and business telecommunications services via resale and through its own facilities. In addition, RNK has interexchange ("IXC") authority in Vermont, and Maine, as well as international §214 authority from the Commission.

¹ In the Matters of IP-Enabled Services (WC Docket No. 04-36) and E911 Requirements for IP-Enabled Service Providers (WC Docket No. 05-196), FCC 05-116 para. 24 (June 3, 2005) ("*VoIP E911 First Report and Order*").

II. AUTOMATIC CUSTOMER LOCATION IDENTIFICATION

A. *The Commission's Role in the Development of Automatic Customer Location Identification Methods*

RNK believes that the Commission can most effectively support the development and deployment of automatic customer location identification methods by not imposing restrictions on the methods that IVSPs may use. The Commission established its authority in the *VoIP E911 First Report and Order*, in part, by relying on its obligation to make available to all people of the United States a “rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges, for the purpose of the national defense, for the purpose of promoting safety of life and property through the use of wire and radio communications”² To further its mission, the Commission should allow IVSPs the flexibility to take advantage of new technologies and methods to dynamically deliver location information for non-stationary IVS customers, as long as these methods efficiently accomplish the intended goal of accurately identifying the location of a customer in need of emergency services.

To that end, RNK agrees with T-Mobile USA, Inc. (“T-Mobile”) in its Petition for Clarification filed in WC Dockets 04-36 and 05-196. In its Petition, T-Mobile requests clarification from the Commission that it intended in its *VoIP E911 First Report and Order* that IVSPs need only rely on the Registered Location provided by the customer in those instances in which the IVSP has no means of automatically identifying the end user’s physical location.³ In the event a customer is in need of emergency services, RNK believes IVSPs should be permitted to automatically determine an end user’s location through GPS coordinates, Wi-Fi access points, and/or other viable means that are accurate, universally interpretable, and compatible with PSAP systems.

² 47 U.S.C. 151 (emphasis added).

³ Petition of T-Mobile USA, Inc. for Clarification §II (July 29, 2005).

Additionally, if capable, IVSPs should be permitted to utilize existing wireless E911 infrastructure to transmit longitude and latitude coordinates to the PSAPs, and, as such, RNK supports T-Mobile's Petition for Clarification in this regard.⁴ However, to the extent that T-Mobile limits its request for clarification to CMRS providers who deliver IP-enabled services, RNK believes that the Commission should permit IVSPs with GPS automatic location identification capabilities to also transmit geographic longitude and latitude coordinates ("x,y"), to PSAPs whenever available. Likewise, RNK agrees with the joint petition filed by NENA and VON in the above-captioned proceedings that routing a 911 call to the appropriate PSAP via x,y coordinates, even if that PSAP does not yet have dynamic data update capability to support Automatic Location Identification ("ALI") delivery, should satisfy the Commission's requirements in the VoIP E911 Order.⁵ Thus, the Commission should modify and/or clarify its rules so IVSPs are not shackled to the limitations of the legacy wireline E911 network, that is, to the transmission of a self-reported street address of the subscriber to the PSAPs.

While the Commission requires that all IVS 911 calls be routed over the wireline E911 network, the Commission seems open (and rightly so) to permitting IVSPs to use any solution that allows it to provide E911 to their customers in compliance with the *VoIP E911 First Report and Order*.⁶ Unfortunately, though, the Commission may have unwittingly limited the options for IVSPs to interconnect to the existing E911 network. The Commission reaffirmed the obligations of LECs to provide access to 911 databases and interconnection to 911 facilities to telecommunications carriers pursuant to the Telecommunications Act of 1996,⁷ and hinted that this obligation would include all

⁴ Petition of T-Mobile USA, Inc. for Clarification §VI (July 29, 2005).

⁵ See Joint Petition for Clarification of the National Emergency Number Association and the Voice on the Net (VON) Coalition 4 (July 29, 2005) ("Joint Petition of NENAVON").

⁶ *VoIP E911 First Report and Order* paras. 38 and 39.

⁷ *Telecommunications Act of 1996*, Pub. L. No. 104-104, 110 Stat. 56 (codified at 47 U.S.C. §151 et seq, hereafter, "the Act") Specifically codified at 47 U.S.C. §251(a) and (c) and 47 U.S.C. §271(c)(2)(B)(vii) ("We note that the Commission currently requires LECs to provide access to 911 databases and interconnection

databases and facilities necessary for IVSPs to provide NENA's I2 or wireless E911 solutions.⁸ The Commission did not, however, obligate LECs to offer conforming wireline or wireless 911/E911 interconnection upon request.

RNK believes that if an IVSP has the technical capability to develop a robust location information delivery mechanism, or can purchase it from a non-LEC, there is no reason to force the IVSP to use a third-party LEC for the sole purpose of connecting to the databases and selective routers to provide a service that it could provide otherwise. In the *VoIP E911 First Report and Order*, the Commission pointed to its decision in the *Triennial Review Order*⁹ that continued unbundled access to 911/E911 infrastructure was still in the public interest.¹⁰ While the Commission is cognizant that IVSPs may only obtain direct access to E911 from an ILEC if IVSPs are deemed telecommunications carriers providing local exchange services,¹¹ its reliance on the voluntary efforts of ILECs¹² is, in RNK's view, misplaced, and possibly unnecessary. A stronger demonstration of the Commission's commitment to "encourage and facilitate the prompt deployment throughout the United States of a seamless, ubiquitous, and reliable end-to-end infrastructure,"¹³ would be to deem, for the limited purpose of providing 911/E911 services, IVSPs to be telecommunications carriers. This would allow any requesting IVSP to obtain nondiscriminatory access to 911 and E911 databases on an unbundled basis (but without having to evidence CLEC status, as is currently required by certain LECs for ISVPs to gain access to their 911/E911 databases), in accordance with section

to 911 facilities to all telecommunications carriers, pursuant to sections 251(a) and (c) and section 271(c)(2)(B)(vii) if the Act.".

⁸ *VoIP E911 First Report and Order* para. 38.

⁹ *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, 17332, (2003).

¹⁰ *VoIP E911 First Report and Order*, 23 n.128.

¹¹ *Id.*

¹² *Id.* paras. 39-40.

¹³ *Id.* para. 4 (internal footnote omitted).

251(c)(3) of the Act,¹⁴ would promote innovative and more accurate methods of customer location, and would be consistent with the intent of the Commission's soon-to-be-released VoIP CALEA ruling.¹⁵ In this way, LECs would be required to sell E911 services to IVSPs. Further, as a telecommunications carrier for E911 purposes, IVSPs could have enhanced access to PSAPs to be able to remedy E911 call issues, as discussed later herein.

B. *Methods for Automatic Customer Location Identification*

RNK has developed a prototype for an automatic location identification solution named the "Edison," that uses GPS technology to provide E911 service to non-stationary, or nomadic, VoIP customers. RNK believes that GPS is a preferable solution to the other solutions mentioned in the NPRM (e.g., HDTV signal triangulation and access jack inventory), as GPS is a ubiquitously-available, non-proprietary technology that has already been tested by wireless providers and through other commercial applications (such as General Motors' Onestar®), and has proven to provide location information within reasonable proximity of the subscriber's physical location. Further, access jack inventories, DSL circuit identifiers, and the like would require an additional "layer" of translation, possibly including other databases maintained by unaffiliated providers of broadband, cable television services, and Internet access. In addition to the obvious additional costs and complexity associated with maintaining and coordinating such databases with the IVSP subscriber records and PSAP records, it would be unconscionable to delay provision of emergency services when needed because multiple databases did not coordinate or interact properly. GPS provides a direct,

¹⁴ 47 U.S.C. 251(c)(3).

¹⁵ *FCC Requires Certain Broadband and VoIP Providers to Accommodate Wiretaps*, ET Docket 04-295, RM-10865, FCC News, (rel. Aug. 5, 2005).

inexpensive means to locate a subscriber in an emergency, without additional manual or automatic intervention.

RNK's Edison solution will ultimately be a device that is permanently embedded in the customer's CPE—not an “optional” attachment. In the testing phase, however, RNK's Edison prototype does not yet permanently incorporate the GPS device into the CPE, but the device is technically integrated to the extent that RNK is able to determine whether the customer has attached the GPS device. If the Commission requires IVSPs to possess automatic location identification ability in the future, it should allow IVSPs to implement automatic location identification solutions that use either technically or physically integrated GPS devices. Before a permanent solution is implemented, however, the Commission should clarify that IVSPs may meet their obligations when routing 911 calls by relying on either the Registered Location provided by the customer or the automated location procured by a GPS-type device, to prevent IVSPs from facing possible liability associated with an improperly routed 911 call.

Once RNK has completed several stages of testing, its goal is to use Edison to collect GPS coordinates associated with the subscriber CPE, translate those coordinates into a pseudo-ANI, a street address, or approximation thereof, and transmit the calling party information and pseudo-ANI to the proper PSAP, while simultaneously updating the ALI database. To the extent, however, that RNK and other IVSPs are able to transmit raw coordinates (without an actual physical address and without subscriber interaction) directly to the PSAPs to identify subscriber location information, the Commission should not restrict IVSPs from doing so, as a redundant, failsafe method that would provide the location of a 911 caller.¹⁶

¹⁶ In order to achieve Phase I and II wireless E911 capability, many jurisdictions already have a robust GIS infrastructure that will eventually replace traditional Master Street Address Guide (MSAG)-based approaches. See, e.g., State of Rhode Island Uniform Emergency Telephone System, *Rhode Island 9-1-1 System Continues GIS Data Project*, Press Release (July, 2004). <http://www.ri911.state.ri.us/pdf/westwarwick.pdf>; (describing continuing process to produce GPS-based

**C. The Commission Should Base Any Proposed Implementation
Deadline on the Wireless 911 Model**

The June 1, 2006 deadline proposed by the Commission as the date by which IVSPs have an automatic location identification solution in place is dependent upon limitations associated with the various solutions that IVSPs are testing. For example, GPS based solutions must overcome issues such as cloud cover and building structures that may interfere with GPS satellite signals. The Commission should pattern any VoIP 911 implementation guidelines on its wireless E911 rules¹⁷ when establishing similar requirements for implementation of an automatic location identification solution compatible with the wireline E911 network. The Commission adopted its original wireless E911 rules in 1996 (revised in 1999 to incorporate the development of handset-based solutions)¹⁸ and, while Phase II implementation was initially required by October 1, 2001, currently less than 50% of all PSAPs are Phase II capable¹⁹ (and 26.6% are not capable of receiving Phase I data).²⁰ Implementing E911 compliance for IVSPs, too, will take time, and the Commission should encourage discussion and cooperation between IVSPs, wireless providers, PSAPs, state PUCs and ILECs to work toward an automatic customer location identifier solution that best protects the safety of Americans.

Beyond coordinating to create an automatic identification location solution, in the interim before such an automated location solution is required, IVSPs may experience technical limitations associated with routing 911 calls through the wireline network for fixed customers. To address scenarios in which RNK identifies that an IVS customer

map of each address in Rhode Island); CompassCom, Inc., *Casper, Wyoming Contracts CompassCom to Achieve E911 Compliance*, Press Release (February 20, 2003)
<<http://www.compasscom.com/press/casper.htm>>.

¹⁷ 47 C.F.R. 20.18.

¹⁸ Dale N. Hatfield, *A Report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced 911 Services*, 7.

¹⁹ See NENA, *Wireless E9-1-1 Phase II Call Saves Life of Arizona Woman*, Press Release (July 19, 2005)
<<http://www.nena9-1-1.org/Hannah%20Eseke%20E9-1-1%20Release.pdf>>.

²⁰ *VoIP E911 First Report and Order* para. 42.

within its existing footprint has attempted to dial 911, but has failed to connect to the PSAP, RNK has devised a method whereby its customer service department (staffed 24 hours a day, 7 days a week), contacts the appropriate PSAP to notify the PSAP of the customer's attempt to dial 911 and the last known Registered Location of the customer. Because RNK is a telecommunications carrier, it has a direct connection to PSAPs within its footprint, and does not have to rely on administrative numbers that are often in operation only between standard business hours (i.e., 9 A.M. to 5 P.M.). RNK urges the Commission to consider various solutions like RNK's to ensure that during the E911 implementation process, IVSPs are able to use various options to ensure that a customer has access to 911 services.

To benefit the as many people as soon as possible, and in consideration of the fact that rural PSAPs have additional challenges beyond those of their urban counterparts, RNK would urge the Commission to limit any early deadline (e.g., June 2006) for an embedded IVSP ALI requirement to the top 50 or 100 Metropolitan Statistical Areas²¹ ("MSAs"), or to any other locations where a PSAP has demonstrated to this Commission that it is capable of receiving such data.²² This requirement would then be gradually broadened to include other locations within a fixed period of time.

III. EXTENSION OF E911 REQUIREMENTS TO OTHER VOIP PROVIDERS

A. *Expanding the Scope of E911 Requirements to VoIP Services with One-Way Functionality Will Foster Equal Competition and Public Safety*

As the Commission has stated, interconnected VoIP services that connect to the PSTN and share similar functionalities of traditional wireline telephony create a

²¹ Standards for Defining Metropolitan and Micropolitan Statistical Areas, 65 Fed. Reg. 82228-82238 (2000); Update of Statistical Area Definitions and Guidance on Their Uses, OMB 05-02 (2005).

²² In order to allay fears that PSAPs might be forced to waste time and resources presenting cases before the Commission, RNK believes that state public utilities commissions, or their equivalent, should be permitted to make qualification determinations subject to federal guidelines. State Commissions could then certify to the FCC that a PSAP has met the criteria. The FCC would then issue a public notice of this certification, while retaining overall responsibility for determining the fitness of PSAPs.

reasonable expectation on the part of the subscriber that he or she could dial 911 and gain access to emergency services.²³ As such, it would be in the interest of public safety for the Commission to require that interconnected VoIP services not fully connected to the PSTN, such as services offering one-way outbound calling services to the PSTN, should also offer emergency services as outlined by the Commission in its *VoIP E911 First Report and Order*. To not require compliance by VoIP providers offering these services would be inequitable and would create arbitrage opportunities, such as separate “call to PSTN” and “calls from PSTN” services offered in tandem by VoIP providers. Providers offering these services not originally contemplated in the *VoIP E911 First Report and Order* would garner all of the economic benefits associated with the service, while avoiding any compliance obligations. This would foist a significant investment of time and money onto full-service IVSPs, adding to the costs of full-service providers’ offerings. At a minimum, the imposition of similar obligations on at least those one-way VoIP services that terminate to the PSTN would level the playing field and bring some measure of protections to users of those services. Inbound-only services might best be treated in a similar fashion as one-way paging devices, or specialized mobile radio (SMR) services, which would exempt them from 911/E911 obligations,²⁴ since there would be no expectation of emergency services access as there is with outbound calls.

Although some form of 911 dialing ability is warranted for one-way outgoing calls, more important is that two-way functionality to the PSTN is an essential characteristic in the deployment of traditional emergency services through IVS. VoIP services limited to

²³ *VoIP E911 First Report and Order*, 12 n.72 (“...consumers would expect a service to offer similar protections as compared to traditional local exchange service if the service uses NANP numbers; utilizes the PSTN in either originating or terminating service; is advertised or used as telephone service or as a replacement service for POTS; and is functionally equivalent to traditional telephony.”).

²⁴ *In the Matter of Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102 para. 81 (July 26, 1996) (“...any SMR provider that is not interconnected to the public switched network or does not offer two way voice service would not be subject to E911 requirements.”).

outbound dialing do not possess the call back ability that allows an emergency services operator to learn more information from the 911 caller and provide support during an emergency. Because any outbound residential IVS mimics traditional telephony and may pose a risk to public safety, the Commission should extend its VoIP E911 First Report and Order to cover all VoIP services²⁵ from which customers have a reasonable expectation of access to emergency services.²⁶

B. *The Imposition of E911 Requirements on IP-Based Services Should Not Be Based On The Type of Connectivity Used to Access the IP Network*

RNK believes that the type of connectivity used to initiate the VoIP service should not be dispositive of whether E911 services must be made available.²⁷ Whether a subscriber is using broadband, dial-up, broadband over powerline (“BPL”), Wi-Fi, or other broadband to make calls through his or her IVS, the customer expects that the service will function in many ways like a traditional wireline phone service and, thus, should have access to E911 services.²⁸

IV. ADDITIONAL REQUIREMENTS TO ENSURE REQUIRED LEVEL OF E911 SERVICES

A. *The Commission Must Allow Reasonable Delays between Registered Location Update and 911 Availability*

In those instances when the IVSP must rely on the customer to update his or her Registered Location, the Commission must allow IVSPs a reasonable period of time between when the customer updates the Registered Location and the availability of

²⁵ To the extent that a limited “international only” outbound long distance service with no local functionality might “ride” on a “local” IVSP’s service, RNK would distinguish this type of service from a more general one-way service offering and believes that the requirement for 911 services would fall on the “local” IVSP.

²⁶ Since more emergency services dispatches might result from such services, relevant state authorities might determine that such “outbound only” services might be required to contribute an additional amount for 911/E911 cost recovery. However, this is outside of the Commission’s purview and the scope of this proceeding.

²⁷ See discussion *supra*, II(B) (discussion of how a GPS-based ALI methodology would obviate the need for connectivity-dependent solutions).

²⁸ *VoIP E911 First Report and Order*, 14 n.78 (Level 3 commented that “VoIP providers should be required to provide 911 and E911 (where technically and operationally feasible) for those services that compete with traditional PSTN services and for which consumers have an expectation of such access”).

E911 at the new location. Due to inconsistencies between the manner in which the MSAG stores address information and what an IVS subscriber believes to be his or her physical address, it can take time to resolve these inconsistencies and confirm a customer's new location through the MSAG.²⁹ In RNK's current wholesale model, for example, RNK typically does not have direct contact with IVS customers, but instead, RNK works with independent resellers who communicate with their end user subscribers. Thus, in the event RNK needs to work with an independent reseller to properly register the new Registered Location, it may take several days before E911 is available at the new address. Accordingly, RNK suggests that in those instances in which automatic customer location identification is not possible, and consultation with the customer is required, that five (5) business days should be established as a time frame within which E911 must be provided at the new address. In any event, RNK would urge the Commission to clarify that, in a wholesale situation as described above, that the entity directly serving the customer would bear the responsibility of obtaining and providing (either directly or indirectly) accurate ALI data to the proper PSAP.³⁰

Delayed delivery of emergency services is avoided, however, with an automatic location identifier, such as the Commission anticipates, and the Edison solution that RNK is developing.³¹ In the final stages of development, RNK intends to be able to pinpoint an end user's location within a reasonable proximity without any interaction with the subscriber. Such a solution would also address those scenarios in which the customer's Registered Location is not associated with a street address. A GPS-based

²⁹ This is not a new issue; reconciling "common" notions with the "actual" or "real" street addresses has always been a problem when implementing E911.

³⁰ Insofar as this might be interpreted to be more appropriately styled as a request for clarification or reconsideration, RNK asks that the Commission consider this proposal as part of the *NPRM* it issued, given the expansive nature of the Commission's inquiry.

³¹ See discussion *supra* II(B) (pointing out the other potential time-saving elements that an embedded GPS solution would provide).

automatic location identifier can successfully fill in gaps in the wireline emergency services network that, when established, did not have nomadic IVS in mind.

B. Direct Connection to the PSAP

In the event a geographic area is not served by a PSAP connected to a selective router, IVSPs should directly trunk to the PSAP whenever possible, or be permitted to access the PSAP by similar means available to LECs. As stated herein³²— something that the Commission itself pointed out³³--IVSPs should not be tied to the existing E911 infrastructure. Where the technology permits, innovation and cooperation between LECs, PSAPs, and IVSPs should be able to develop local solutions that provide the same level and quality of service. However, the lack of certain technology, such as a selective router, should not be used to deprive IVS customers of vital emergency communications. Rather, the more appropriate standard would be to link the level of required IVSP-PSAP connectivity to the capabilities of the PSAP to handle information. Even remote PSAPs that lack a selective router are still capable of “basic” 911 call handling. There are potential solutions today (at least on an interim basis), that are alternatives to direct trunking, such as the routable, non-dialable access to Selective Routers via a PSTN access method recommended by the National Emergency Number Association (NENA) and the Voice on the Net (VON) Coalition in their Joint Petition submitted in the instant proceedings.³⁴

C. The Commission Should Require Redundancy in IVSPs’ 911 Networks.

Finally, RNK believes that the Commission should require IVSPs to create redundant systems for E911 as such redundancy would maximize the reliability of the emergency services infrastructure. However, RNK urges the Commission not to limit the

³² See discussion *supra* II(A)

³³ *VoIP E911 First Report and Order* paras. 38 and 39.

³⁴ Joint Petition for Clarification of the National Emergency Number Association and the Voice on the Net (VON) Coalition, (WC Docket No. 04-36 and WC Docket No. 05-196), 6-8.

types of redundancy an IVSP may employ (e.g., dedicated ethernet, internet protocol, traditional time division multiplexed ("TDM") trunking). So long as an IVSP creates a redundant system that avoids network failure as intended, the IVSP should be permitted to take advantage of the most cost-effective and technologically superior methods.

V. THE COMMISSION SHOULD RECOGNIZE PRIOR CUSTOMER NOTIFICATIONS REGARDING LIMITATIONS OF IVS SERVICE AND ALLOW IVSPS TO UTILIZE COST EFFECTIVE MEANS OF ACKNOWLEDGEMENT

In its *VoIP E911 First Report and Order*, the Commission required that all IVSPs "advise every subscriber, both new and existing, prominently and in plain language, the circumstances under which E911 service may not be available through the interconnected VoIP service or may be in some way limited by comparison to traditional E911 service."³⁵ Further, IVSPs were required to "obtain and keep a record of affirmative acknowledgement by every subscriber, both new and existing, of having received and understood ..." the advisory provided by the IVSP.³⁶

The Commission did not, however, identify baseline notice and acknowledgement requirements with which IVSPs must comply. For instance, while the Commission required IVSPs to notify end users of limitations associated with their IVS, the Commission did not establish the limitation language that it believed would sufficiently notify end users and rise to the level of compliance. Likewise, the Commission did not identify what types of end user acknowledgement would satisfy its related requirement in the *VoIP E911 First Report and Order*.

Since the release of the *VoIP E911 First Report and Order*, RNK has invested significant time, effort, and money, in complying with the Commission's notice and acknowledgement requirements. As the initial compliance deadline (July 29, 2005) has

³⁵ *VoIP E911 First Report and Order* para. 48

³⁶ *Id.*

passed, and the extended deadline for those IVSPs that sought an extension is fast approaching (August 29, 2005), the Commission should recognize compliance efforts on the part of RNK and other IVSPs that provided notice and received acknowledgement based on the intent of the *VoIP E911 First Report and Order*.

If the Commission chooses to impose specific requirements for proper notice and acknowledgement on a prospective basis, it should focus on the attributes of the notification and acknowledgement document (e.g., clear notice of limitations to the customer and minimization of the possibility of fraud on the part of a third party completing the process without the customer's knowledge), rather than the media (paper, e-mail, web click-through). In this way IVSPs can provide several convenient and cost-effective options to subscribers (e.g., notice via electronic means or by paper, and acknowledgement through electronic signature pursuant to the Uniform Electronic Transactions Act,³⁷ return email, or handwritten signature). Accordingly, RNK requests that the Commission recognize (in non-exclusive fashion) forms of acknowledgement that sufficiently evidence that the subscriber did, in fact, receive notice of the limitations of emergency services associated with their IVS and understood them.

VI. REPORTING OBLIGATIONS

RNK believes that beyond the compliance letter required by the Commission, it would be appropriate for IVSPs to update the Commission on their automatic location identification solutions at regular intervals. The frequency and timing of these updates would depend on when the Commission determines that IVSPs must implement an automatic location identification solution.

³⁷ *Uniform Electronic Transactions Act*, National Conference of Commissioners of Uniform State Laws (approved and recommended for enactment in all states, July 23-30, 1999).

RNK also recommends that the Commission require ILECs to submit an initial report on or before October 1, 2005, and a second on or before November 1, 2005, identifying efforts they have made to provide access to their infrastructure to IVSPs so that IVSPs can comply with the requirements set forth in the VoIP E911 Report and Order. The Commission reiterated that ILECs are subject to sections 201 and 202 of the Act and that the Commission would closely monitor the cooperation of ILECs with IVSPs in deploying VoIP E911 solutions.³⁸ Mandatory reports would enable the Commission to monitor cooperation on the part of the ILECs and determine whether November 28, 2005 remains a viable deadline by which IVSPs must provide E911 service to their VoIP subscribers.

VII. STATE ROLE

RNK agrees with the Commission's position that states have played an important role in developing and regulating wireline and wireless emergency services. As state authorities will be implementing the IVS E911 services mandated by the Commission, these authorities should be consulted by the Commission, especially to the extent that states wish to tailor solutions that mesh with their existing emergency services infrastructure.³⁹

VIII. CUSTOMER PRIVACY PROTECTION

Section 222 of the Telecommunications Act applies only to telecommunications carriers⁴⁰ and, since the Commission has not yet classified IVS as a telecommunications service, IVS is not subject to the requirements related to the privacy of customer information set forth therein. To the extent that RNK is in favor of protecting the privacy

³⁸ *VoIP E911 Order* para. 40.

³⁹ See Comments of the Public Utility Commission of Texas (WC Docket No. 05-196).

⁴⁰ 47 U.S.C. 222.

of IVS customers, however, it would not be opposed to the development by the Commission of requirements that parallel those existing in Section 222 of the Act.

IX. DISABILITY ACCESS REQUIREMENTS

While RNK fully supports the goals of Section 255 of the Telecommunications Act⁴¹ to make telecommunications services fully accessible to individuals with disabilities, until such time as the Commission determines whether to classify IVS as a telecommunications or an information service, IVS is not subject to the regulatory requirements of Section 255. Should the Commission decide, however, that it has authority pursuant to Sections 151 of the Act⁴² to develop rules requiring IVSPs to make IVS (and E911) fully accessible to those disabilities, then the Commission must provide ample time to IVSPs to meet the requirements established by the Commission.

If the Commission develops requirements, and they closely mimick those set forth in Section 255 of the Act,⁴³ then IVSPs will have to evaluate whether the IVS and/or CPE can be developed or designed to be used by individuals with disabilities in an economic fashion, and, if not, whether the service or CPE can be made compatible with "existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities to achieve access, if readily achievable."⁴⁴ The term "readily achievable" is defined as "easily accomplishable and able to be carried out without much difficulty or expense."⁴⁵ In the event the Commission requires IVSPs to comply with rules similar to those set forth in Section 255, it must allow IVSPs the

⁴¹ 47 U.S.C. 255.

⁴² 47 U.S.C. 151.

⁴³ 47 U.S.C. 255.

⁴⁴ 47 U.S.C. 255 (d).

⁴⁵ 42 U.S.C. 12181 (9) (In determining whether an action is readily achievable, factors to be considered include--(A) the nature and cost of the action needed under this chapter; (B) the overall financial resources of the facility or facilities involved in the action; the number of persons employed at such facility; the effect on expenses and resources, or the impact otherwise of such action upon the operation of the facility (C) the overall financial resources of the covered entity; the overall size of the business of a covered entity with respect to the number of its employees; the number, type, and location of its facilities; and (D) the type of

