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

In the Matter of	)	
	)	GN Docket No. 09-51
A National Broadband Plan for Our Future	)	

COMMENTS OF INTRADO INC.
AND
INTRADO COMMUNICATIONS

Craig W. Donaldson
Senior Vice President, Regulatory & Government Affairs

Carey Spence-Lenss
Vice President, Regulatory & Government Affairs

1601 Dry Creek Drive
Longmont, CO 80503
720-494-5800 (telephone)
720-494-6600 (facsimile)

June 8, 2009

TABLE OF CONTENTS

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Intrado Inc. and Intrado Communications Inc. (collectively, "Intrado") are pleased to submit their comments in response to the Federal Communications Commission's ("Commission") Notice of Inquiry ("NOI") in the above captioned matter.[1]

I. INTRODUCTION

The Commission's NOI is expansive. It reflects the broad task assigned to it by the American Recovery and Reinvestment Act ("ARRA") to provide:

- an analysis of the most effective and efficient mechanisms for ensuring broadband access by all people of the United States;
- a detailed strategy for achieving affordability of such service and maximum utilization of broadband infrastructure and service by the public;
- an evaluation of the status of deployment of broadband service; and
- a plan for use of broadband infrastructure and services in advancing consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, worker training, private sector

[1] *A National Broadband Plan for Our Future*, Notice of Inquiry, GN Docket No. 09-51 (rel. April 8, 2009).

> investment, entrepreneurial activity, job creation and economic growth, and other national purposes.[2]

The information sought by the NOI in conjunction with a plan for use of broadband by public safety covers many diverse and very serious issues related to improvement of public safety, including inquiries as to necessary services, funding, the role of different technologies, and standards applicable to ensure network security and reliability.[3] However the most important question raised by the Commission may be its query on "how to interpret and implement [the ARRA's] directive."[4] The resolution of these issues in the context of a national broadband plan is dependant upon two events. First and foremost, such a plan can only be developed after the adoption of a "total service" definition of broadband that necessarily includes public safety. Second, there must be a coordinated federal forum to address the myriad and complex public safety issues—federal leadership to coalesce the knowledge, information, and concerns related to a plan for deployment of nationwide next generation 911. To discharge its obligations under the ARRA with respect to a public safety plan, the Commission should adopt the "total service" definition of broadband and it or another federal agency must take steps—through a consolidated proceeding or a dedicated forum—to develop a framework for a nationwide next generation 911 system, identifying what functionality a system should include; critical features associated with the system, such as location accuracy; system security and redundancy; overarching governance through cooperative federal and state regulation; and effective funding models.

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[2] American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2002), Section 6001(k)(2)(A-D).

[3] NOI at ¶ 72-79.

[4] *Id*. at ¶ 72.

II. DEFINING BROADBAND (NOI ¶ 15-28)

Because it is the cornerstone of any national broadband plan, including a plan for public safety, the Commission should specifically resolve in this preceding the threshold question of how to define “broadband." Through this NOI and responses to the Commission’s request for comment regarding its consultative role to the NTIA, the Commission should be fully prepared to offer a definition of broadband capability—one that would apply to classes of users, including public safety. As the NOI reflects, “broadband” will be ultimately used by diverse populations in a variety of applications well into the future. In light of this reality, the definition of broadband must be dynamic and adaptable. Dr. Stagg Newman stated in his public comments before the NTIA that broadband should be thought of as family of services; it should be defined with respect to certain classes of users and the network infrastructure that enables services to those users. He defined broadband as high speed, high performance, mobile, internet protocol (“IP”) access for consumers, businesses and government agencies, with attributes, such as quality, reliability and availability determined by the application of metrics to the various services provided.[5] Professor Susan Crawford, Special Assistant to the President on science, technology and innovation policy, similarly suggested a flexible approach in considering broadband speed requirements. According to Professor Crawford, how fast broadband connections need to be depends on the specific application used. As an

[5] NTIA Public Meeting, March 19, 2009, Transcript, Session 1, *available at* http://www.ntia.doc.gov/broadbandgrants/090319/NTIA_031909_1000-1200 session.txt.

example, she explained that in a medical office high speed would mean at least 100 megabits per second and even 1 gigabit for transmission of CT scans.[6]

Accordingly, broadband must be defined as a total service, an evolvable family of fixed and mobile services for providing IP access to consumers, business and government agencies that are: 1) high speed, 2) high performance, 3) affordable, and 4) competitively neutral in all respects, including technology, governance, and funding.

III. DEVELOPMENT OF A PUBLIC SAFETY PLAN (NOI ¶¶ 72-79)

A broadband plan for public safety must equate to modernization of the public safety network between end users and Public Safety Answering Points ("PSAPs"). End-to-end broadband connectivity between and among callers who dial 911 and PSAPs (as distinguished from radio interoperable communications among first responders after the call is received by the PSAP) does not exist today in the vast majority of the United States, yet it is essential to providing forms of communication and information that will ultimately save lives and property.[7] Analysts and industry experts agree that public safety networks must be updated to keep pace with advances in communications technology.[8] The time is ripe for a consolidated federal forum; the federal government

[6] *White House Aides Says Broadband Is and Remains Obama Priority*, *available at* http:// www.braodbandcensus.com/2009/05t/whites-house-aide-says-broadband-is-and-remains-obama-priority; *see also* Telecommunications Reports, TRDaily (May 14, 2009), *available at* http://www.tr.com/online/trd/2009/td0d1409/index.htm.

[7] *See, e.g.*, 9-1-1 Industry Alliance, *Health of the US 9-1-1 System*, 30-32, *available at* http://www.911alliance.org/9IA_Health_of_US_911%20_2_.pdf ("9IA Report").

[8] *See Id.* at 6 ("[O]ur emergency communications networks are unable to accommodate what is increasingly viewed as basic functionality inherent in many of today's advanced technologies…This chasm between the capabilities of modern networks and today's 9-1-1 system needs to be bridged…[i]t is a grave policy failure that, compared to state-of-the-art commercial networks, our emergency communications networks are less efficient, less technologically advanced, and as a consequence, less able to provide the public with the level of protection it deserves."); *See also, CRS Report For Congress, Emergency Communications: the Future of 911*, Linda K. Moore, 1 (January 13, 2009) ("Systems for 911, unable to accommodate the latest advances in telecommunications technology, are increasingly out-dated, costly to maintain, and in danger of failure."), *available at* http://www.opencrs.com/document/RL34755; *NENA: A Policy Maker Blueprint for Transitioning to the Next Generation 9-1-1 System, Issues and Recommendations for State and*

must exercise leadership by bringing together the relevant issues and establishing a definitive framework for achieving next generation 911 call networks and services. As the National Emergency Numbering Association ("NENA") aptly stated, "[a]ll the technology in the world will only be as effective as the policies and rules that enable NG9-1-1."[9]

Achieving this goal will require unprecedented coordination and consolidation of issues and stakeholders. Chairman Copps noted in the Commission's recent Report on a Rural Broadband Strategy:

> The nation will need to overcome many obstacles in ensuring that every American citizen, American business, Tribal and local government, and public safety entity has full access to broadband services. Success in this endeavor will require the input and cooperation of many different entities—individual consumers, businesses and organizations, as well as federal agencies and Tribal, state, and local governments. We must marry the dynamic innovations and flexibility of the private sector with the policy vision of the public sector to create a model of how government and industry can partner to ensure ubiquitous broadband access. [10]

Many of the issues related to modernization of the public safety communications network and services are currently being considered; however, the activity is relatively splintered among and within federal agencies. For example, as the Commission notes in its NOI, the National Telecommunications and Information Administration ("NTIA") is already fully engaged in preparing a report for Congress on the national deployment of IP-enabled next generation 911 services. The New and Emerging Technologies 911

Federal Policy Makers to Enable NG 9-1-1 ("NENA BluePrint"), 2 (September 2008) ("[O]ur nation's 9-1-1 system is being pushed to the edge and is increasingly falling behind as technology in the hands of consumers rapidly advances past the capabilities of the current E9-1-1 system."), *available at* http://www.nena.org/sites/default/files/NG9-1-1PolicyMakerBlujeprintTransitionGuide-Final.pdf

[9] *A Policy Maker Blueprint for Transitioning to the Next Generation 9-1-1 System, Issues and Recommendations for State and Federal Policy Makers to Enable NG9-1-1*, 3 (September 2008), *available at* http://www.nena.org/sites/default/files/NG9-1-1PolicyMakerBlujeprintTransitionGuide-Final.pdf

[10] *Bringing Broadband to Rural America, Report on a Rural Broadband Strategy*, Michael J. Copps, Acting Chairman, Federal Communications Commission, 2 (May 22, 2009).

Improvement Act of 2008 ("NET 911 Act") mandated interconnection obligations for IP-enabled voice service providers and charged the Commission with regulatory oversight.[11] However, it also gave the E911 Implementation Coordination Office ("ICO") (jointly administered through NTIA and the National Highway Safety Administration) responsibility to "develop and report to Congress on a national plan for migrating to a national IP-enabled emergency network capable of receiving and responding to all citizen-activated emergency communications and improving information-sharing among all emergency response entities."[12] The NET 911 Act requires a comprehensive plan, including an outline of the benefits of migration, the barriers to overcome, funding mechanisms to address those barriers, the identification of location technology for nomadic devices and for office buildings and multi-dwelling units, a proposed timeline and outline of costs and potential savings, specific legislation or legislative changes necessary to achieve the plan, and solutions for providing 911 and enhanced 911 to those with disabilities.[13] The legislation also required the ICO to "assess, collect, and analyze the experiences" of PSAPs and related public safety authorities "who are conducting trial deployments of IP-enabled emergency networks."[14] To that end, the ICO will take into consideration the Department of Transportation's ("DOT") Next Generation 9-1-1 Initiative, a "research and development project" that defines proposed 911 system architecture and identifies responsibilities, costs, schedule and benefits for deploying

[11] P.L. 110-283; 122 Stat. 2620 (2008).

[12] P.L. 110-283, Section 102(3).

[13] *Id.*, Section 102(3).

[14] *Id.*

nationwide IP-based emergency services.[15] The work of the DOT entails substantial information developed from subject matter experts and national research. For example, the DOT produced its *Final Analysis of Cost, Value, and Risk*, which identifies the value of moving to next generation 911 and proposes a national 911 next generation architecture that will "enable the general public to make a 9-1-1 call from any wired, wireless, or IP device, and allow the emergency services community to take advantage of enhanced call delivery and advanced functional and operational capabilities through new internetworking technologies based on open standards."[16] This research is valuable and has the potential to form the framework of a next generation 911 system; however, it is entirely unclear what will happen after the plan is presented to Congress—how the plan will be vetted and implemented and what the impact will be to related matters under the Commission's jurisdiction.

The Commission, itself, is addressing standards that impact the deployment of 911 services. Over the last several years, the Commission has grappled with, but has yet to resolve, location accuracy and auto location standards for wireless and IP enabled calls. Recognizing that wireless and VoIP technology do not have the same level of location reliability as wireline technology, the Commission opened PS Docket 07-114 (and consolidated other location accuracy proceedings) where the Commission's primary objective was to "advance policies, rules and initiatives that support the efficient and reliable transmission of meaningful automatic location information for wireless cell

[15] *Next Generation 9-1-1 (NG-9-1-1) System Initiative, Final Analysis of Cost, Value, and Risk*, 3, *available at* http://www.its.dot.gov/ng911/pdf/USDOT_NG911_4-A2_FINAL_FinalCostValueRiskAnalysis_v1-0.pdf.

[16] *Id.* at 19. The term 'call' means "any real-time communications—voice, text or video—between a person needing assistance and a PSAP call taker." "Internetwork" means going between one network and another; a large network made up of a number smaller networks. *Id.* It should be noted that Intrado strongly maintains that "open standards" should not equate to an unconditionally open network; America's emergency communications network should be managed so that citizens are assured of reliability and security.

phone users and users of interconnected VoIP service to Public Safety Answering Points ("PSAPs") to better ensure rapid emergency response and save lives."[17] In its filed comments, Intrado stressed the importance of promulgating autolocation rules that set the ultimate policy goal for caller location information and established clear expectations of all stakeholders. The Commission has also addressed access to emergency and public safety agencies by individuals with speech and hearing disabilities. Recently it issued an order ensuring that Internet-based Telecommunications Relay Services ("TRS") can be called in the same manner as voice telephone users (using a ten-digit telephone number) and that emergency calls placed by Internet TRS users will be routed automatically to emergency services agencies.[18] Very recently, Telecommunications for the Deaf and Hard of Hearing, Inc. and other interested parties filed comments asking the Commission to require emergency 711 calls placed from a TTY over an interconnected VoIP service to be automatically connected to appropriate PSAPs or, alternatively, seeking a rulemaking proceeding in which the Commission would "enable the use of real-time text technology" for emergency communications, allowing "text communications to be sent directly to PSAPs as part of the next generation 9-1-1 system."[19]

It is imperative that 911 service standards be in sync with a nationwide next generation 911 framework—however that is developed. At a minimum, with the

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[17] Washington, DC, Federal Communications Commission News Release, *FCC Adopts Notice of Proposed Rulemaking Seeking Comment On Enhanced 911 Location Accuracy and Reliability Requirements For Wireless Carriers and Interconnected VOIP Provide* (May 31, 2007).

[18] *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, GC Docket No. 03-123; E911 *Requirements for IP-Enabled Service Providers*, WC Docket NO. 05-196, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 11591 (2008).

[19] *Reply Comments and Petition for Rulemaking of Telecommunications for the Deaf and Hard of Hearing, Inc.; Association of Late-Deafened Adults, Inc.; National Association of the Deaf; Deaf and hard of Hearing Consumer Advocacy Network; California Coalition of Agencies Serving the Deaf and Hard of Hearing; American Association of the Deaf-Blind; and Hearing Loss Association of America*, WC Docket No. 04-36, WT Docket No. 96-198, CG Docket No. 03-123 and CC Docket No. 92-105, 5 (May 28, 2009).

initiation of the instant proceeding and in an effort to achieve a consistent approach, the Commission should consolidate all of the 911 issues within its jurisdiction (pending or new) into a "master" next generation 911 docket.

Issues which have not been previously comprehensively addressed by policy and lawmakers, but which are clearly on the horizon, are those related to 911 network security and reliability. The recent outbreak of influenza virus type H1N1 demonstrates the need to ensure that networks are robust, reliable, secure, interconnected, and interoperable in order to manage traffic congestion caused by workers quarantined at home. President Obama has declared protection of the nation's digital infrastructure a national security priority and vowed to develop a new comprehensive strategy to keep America's information and communications networks "secure, trustworthy and resilient"—an undertaking that will most certainly impact 911 networks. A consolidated federal forum should bring together the industry standards and practice-setting organizations, such as ATIS and NENA, as well as organizations related to national security, such as the Department of Homeland Security and the National Communications Systems (in coordination with the "Cybersecurity Czar"), in order to promulgate essential reliability and security standards for next generation 911 networks and services.

A next generation 911 framework will necessarily require the support of state and local authorities that will be responsible for deploying next generation systems. A coordinated federal forum should provide both clear guidance and incentives for states and localities to move forward in addressing the legal, policy, and governance changes

needed in their jurisdictions to implement the framework and bring the advantages of broadband deployment to their citizens.

While funding for 911 services will remain largely at the state level, it would be appropriate for federal leadership to analyze 911 funding issues in light of a specific national framework—to consider whether funding exists in order to support an identified next generation 911 system and consider possible funding models, including whether state funding can support both capital costs and recurring costs, based upon technologically neutral rationally based principles.[20] Of course, funding models would be futile without continued safeguards to ensure that state 911 funds are used for the purpose for which they were collected. The Commission is already in the process of developing a statutorily required report to Congress providing the status of each State's collection and distribution of 911 fees and identifying instances in which revenues are expended for purposes other than that for which they were collected.[21] The growing threat of raiding was recently highlighted by the CTIA and NENA's joint letter to Wisconsin Governor, Jim Doyle urging the Governor to stop a proposal to transfer $20 million in 911 funds to the state's general fund. The letter also identified three other states that have recently transferred monies collected for 911 usages to the state's general fund. The letter appropriately complained that this type of activity will defeat any ability for states to fund next generation 911 systems.[22] A federal framework should consider effective means of protecting 911 funds.

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[20] 9IA Report at 78-79.

[21] P.L. 110-283, Sec. 101, Sec. 6(f)(2).

[22] Letter from Patrick Haley, Government Affairs Director, National Emergency Number Association and K. Dane Snowden, Vice President of External and State Affairs, CTIA-The Wireless Association to the Honorable Jim Doyle, 1 (May 19, 2009), *available at* http://www.wispolitics.com/1006/090520.

IV. CONCLUSION

For the foregoing reasons, the Commission should adopt a threshold adaptable definition of broadband and then take action toward establishing and advancing a consolidated federal forum to a achieve comprehensive broadband plan for public safety—one that modernizes the public safety network between end users and PSAPs with nationwide next generation 911 communications networks and services. At a minimum, the Commission should consolidate into one 911 "master" docket the issues before it that are related to or will impact a next generation 911 emergency communications system.

Respectfully submitted,

INTRADO INC.
INTRADO COMMUNICATIONS INC.

/s/
Craig W. Donaldson
Senior Vice President,
Regulatory & Government Affairs

Carey Spence-Lenss
Vice President, Regulatory & Government Affairs

1601 Dry Creek Drive
Longmont, CO 80503
720-494-5800 (telephone)
720-494-6600 (facsimile)

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