

**Before the
Department of Commerce and Department of Agriculture
Washington, DC**

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In the Matter of)		
)		
American Recovery and Reinvestment Act)	Docket No 090309298-9299-01	
of 2009 Broadband Initiatives)		
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**COMMENTS OF INTRADO INC.
AND
INTRADO COMMUNICATIONS INC.**

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

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EXECUTIVE SUMMARY

America's current 911 system utilizes a "dedicated" network reliant on antiquated components. It is severely lacking in its capacity to adapt to new technologies and keep up with the high level of emergency service Americans have come to expect. End-to-end broadband connectivity between and among 911 callers and Public Safety Answering Points ("PSAPs") is critically needed to provide forms of next-generation communication and information that will ultimately save lives and property.

In its key objectives, the American Recovery and Reinvestment Act of 2009 ("ARRA") expressly includes access to broadband by public safety agencies. Therefore, the National Telecommunications Information Administration ("NTIA") must place the highest priority on funding the deployment of broadband infrastructure and technologies for modernization of 911 emergency call networks. In order to ensure that broadband deployment to PSAPs continues as a priority through a national broadband plan, the NTIA should also include PSAPs in the mapping effort directed by the ARRA.

Private sector applicants with expertise and experience will be able to develop effective solutions for broadband deployment, implement projects expeditiously, and create jobs. For that reason, Intrado urges the NTIA to devise a public interest rule that allows these companies to participate widely in the Broadband Technology Opportunity Program ("BTOP"). And in order to have "shovel ready" projects and encourage business participation, Intrado proposes that the NTIA allow prior capital investment that is directly related to the project for which a grant is requested count in satisfaction of the applicant's financial obligation. Finally, the NTIA should require companies receiving grants to commit to allow efficient, open, and non-discriminatory interconnection.

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Intrado Inc. and Intrado Communications Inc. (collectively, “Intrado”) are pleased to submit comments in response to the Department of Commerce and the Department of Agriculture’s joint request for information and notice of public meetings published on March 12, 2009 (“Joint Request for Information”)¹.

I. INTRODUCTION

For over a quarter-century, Intrado Inc. has been the nation’s premier provider of integrated data and emergency communications solutions and has played a key role in defining, building, and maintaining core emergency communications infrastructure and 911 technologies throughout the United States. Intrado Communications Inc. is poised to offer the nation’s public safety agencies and public safety answering points (“PSAPs”) a competitive IP-based alternative for meeting their 911 communications needs. Intrado’s experience goes well beyond traditional wireline 911 services; the companies are at the

¹ Department of Commerce, National Telecommunications and Information Administration, Department of Agriculture, Rural Utilities Service, American Recovery and Reinvestment Act of 2009 Broadband Initiatives, Joint Request for Information and Notice of Public Meetings, 74 Fed. Reg. 10716, 10719 (Mar. 12, 2009).

forefront of providing solutions to wireless, VoIP and converged technologies and are committed to making advanced public safety networks a reality.

Public safety communications must evolve to meet technological innovation and public expectations, despite the challenges accompanying a transition to the future. America's current 911 system utilizes a "dedicated" network and antiquated components, thus severely limiting its capacity for keeping up with technological change. Despite these shortcomings, the decades-old, traditional wireline 911 system has set the bar high for basic emergency communications, and Americans have come to expect this level of service. For example, a traditional wireline 911 call allows PSAPs and first responders to know exactly "which door to kick in to render assistance"—because a street address is associated with the caller's phone service. By contrast, the location information transmitted to a PSAP from a wireless or VoIP 911 caller is typically a latitude/longitude coordinate—usually plotted on a map and in some instances translated to a street address equivalent. First responders can often be sent to the wrong house or respond to a location on the next block. Future technologies may well utilize other location methodology. And, there will be new sources and providers of emergency-related data introduced in an open-architected, IP-based next generation environment. Absent careful preservation of the high degree of security currently enjoyed in the closed system, a next-generation 911 system is highly susceptible to cyber attacks which could impair or disable the system. A next generation 911 system that utilizes broadband as one of its central upgrades must not let standards fall just because new technologies are being introduced. Substituting current analog connectivity with broadband won't be a simple matter of unplugging the

old and plugging in the new, but these challenges are readily surmountable by the collaboration of forward-thinking PSAPs and experienced companies, such as Intrado.

The future reliability of public safety and homeland security in the United States depends upon an IP-based public safety infrastructure that is interoperable, accurate, secure, and robust. By year-end 2008, wireless callers initiated more than 60% of the emergency calls delivered to PSAPs, and this upward trend in non-wireline access to 911 will continue as both wireless and VoIP calls replace traditional wireline calling.² VoIP, and increasingly wireless calls, rely on digital packet-switched technology and broadband networks capable of transmitting a wealth of data.³ Currently, however, broadband connectivity is scarcely available for use by public safety agencies in the process of taking emergency calls.⁴ PSAPs still primarily receive emergency calls through last mile local loops, often using outdated and restrictive analog technology for call delivery and access to the automatic location databases.⁵ Thus, the use of this abundant data—which is routinely available in commercial applications—is severely restricted in public safety applications.

IP-based solutions are necessary for reliable call location in connection with today's technologies, as well as future technologies that may well utilize other location

² Source: Intrado internal data on national wireless calling patterns.

³ 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”); see also, CTIA—The Wireless Association, *Wireless Broadband: High Speed Goes Mobile*, (April 2006), available at http://www.ctia.org/advocacy/position_papers/index.cfm/AID/10298. (“[B]y June 2005, half of all US wireless customers had phones capable of browsing the Internet and one-third of all US wireless customers were using wireless data applications.”).

⁴ The National Emergency Number Association found that “more than 90% of 9-1-1 networks use outdated analog technology...delivering calls...” NENA, *Report Card to the Nation: The Effectiveness, Accessibility and Future of America's 9-1-1 Service*, at 16 (Released September 11, 2001).

⁵ 9IA Report, *supra*.

methodology. Moreover, without broadband connections to and among PSAPS, public safety agencies are severely limited in their ability to respond to emergency calls from new communications technologies, such as text messaging, and to receive life-saving information, such as pictures, floor plans, maps, and medical records of the caller.⁶ These forms of communications are not luxuries and should be considered critical, fundamental information that public safety emergency response agencies need to do their important work. Text messaging has been lauded as an effective tool for individuals with disabilities and should be readily perceived and accepted as an effective form of communicating emergencies.⁷ In addition, maps provide superior information for fire department responders and will enable more refined dispatch and safer rescue operations in critical hazardous conditions. The transmission of personalized medical information assists first responders and hospital emergency personnel in providing life-saving treatment, while at the same time allowing public safety officials to provide appropriate third-party notification. 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.⁸

The federal government has made clear its commitment to the modernization of public safety communications. Congress mandated nation-wide movement to an IP-enabled emergency network through the New and Emerging Technologies (NET) 911

⁶ *Id.* at 10.

⁷ See Linda K. Moore, Congressional Research Service, *Emergency Communications: the Future of 911*, 11-12 (January 13, 2009), available at <http://openocrs.com/document/RL34755>.

⁸ See, e.g., 9IA Report, *supra*.

Improvement Act of 2008;⁹ the American Recovery and Reinvestment Act (“ARRA” or “the Act”)¹⁰ specifically recognizes the need for grants from the Broadband Technology Opportunity Program (“BTOP”) for public safety’s much needed access to broadband. Indeed, the BTOP provides a unique opportunity to advance the innovation and investment necessary to finally transcend the limitations of the nations’ legacy 911 infrastructure and to make new applications and services available to public safety entities. In order to meet Congress’s directives, the National Telecommunications and Information Administration (“NTIA”) should place the highest priority for BTOP grant awards on applications that will advance broadband deployment for public safety communications. Accordingly, Intrado provides the following responses focused on NTIA BTOP subjects in the Joint Request.

II. INTRADO RESPONSES

A. Request No. 1: Purposes of the Grant Program

Public safety’s access to broadband is a key focus of the ARRA. The Act expressly identifies improved “access to, and use of, broadband service by public safety agencies” as one of the five enumerated purposes of the BTOP.¹¹ The importance of public safety’s access to broadband is further highlighted by the fact that the Act specifically allows for competitive grants under the BTOP to “construct and deploy broadband facilities that improve public safety broadband communications services.”¹²

⁹ New and Emerging Technologies 911 Improvement Act of 2008, Pub. L. No. 110-283, 122 Stat. 2620; *See generally*, *e.g.*, Moore, *supra* at 8, 27-28.

¹⁰ American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2002).

¹¹ ARRA § 6001(b)(4).

¹² ARRA § 6001(g)(5).

In addition to the Act’s express attention to public safety in these provisions, funding of broadband deployment for public safety communications is also supported by the Act’s intent to provide access to “unserved” areas and improved access to “underserved” areas.¹³ In defining unserved and underserved, the NTIA should consider—not just whether the facilities are physically available through a provider in a geographic area—but whether other impediments, such as financial considerations, impede adoption by a population. The unserved and underserved may be found in populated urban areas. Indeed, the ARRA Conferencees made clear their intent that “the NTIA award grants serving all parts of the country, including rural, suburban, and urban areas.”¹⁴

As a whole, the nation’s PSAPs and public safety networks are unserved in that they are reliant on outdated architecture and protocols. Those that are arguably served are underserved. The high capital cost to upgrade the emergency call path to allow life-saving, data-rich communications deters deployment, even in urban areas. State and local funding mechanisms designed to pay for public emergency communications systems on an ongoing basis have only recently begun to address the gap between traditional support mechanisms for outdated analog systems and the level of support needed for advanced communications technologies. While addressing the need to be self-funded once a next-generation 911 communications and network infrastructure is in place, state and local governments simply cannot be expected to fund the cost of the

¹³ ARRA § 6001(b)(1) & (2). Public safety agencies should also be considered “community support organizations” and within the purposes of Section 6001(a)(3)(A).

¹⁴ Conf. Rep. 111-16, 774.

transition. Given these funding limitations, grants such as the BTOP are critical to supporting the initial upfront cost of achieving advanced IP-enabled 911 systems.¹⁵

It is also fair to say that jobs will be created to undertake the significant effort to move from a 1970's public safety technology to a twenty-first century system, thereby satisfying another key objective of the ARRA.

B. Request No. 3: Eligible Grant Recipients--Private Sector and Public Interest

The ARRA contains “a broad definition of private entities that are eligible to receive BTOP grants.”¹⁶ The NTIA may award a grant to any private sector entity so long as to do so would be in the public interest.¹⁷ The NTIA must determine what is in the public interest by promulgating a rule that—to the extent practicable—promotes the purposes of the Act in a technologically neutral manner.¹⁸

Given the Act's broad prescription, the NTIA should create a rule that invites private sector participation in the BTOP, with reasonable threshold qualifications. Companies, such as Intrado, have significant knowledge and experience and have contemplated the problems and possible solutions to outdated public safety communications. The public interest rule should, therefore, embrace the contributions private sector entities can make to advancing Congressional goals. As articulated by US Telecom and other industry associations, existing companies have demonstrated their technical, financial, and managerial experience and should be capable of executing their

¹⁵ See *CRS Report For Congress, Emergency Communications: the Future of 911*, Linda K. Moore, at 10 (January 13, 2009) (“Through grant programs, the federal government can both encourage and guide the funding of 911 system improvements without diminishing state or local decision making and authority.”).

¹⁶ Conf. Report 111-16, 775.

¹⁷ ARRA § 6001(e)(1)(C).

¹⁸ *Id.*

proposed projects efficiently and in compliance with applicable laws.¹⁹ To that end, Intrado supports a public interest rule that allows any existing entity “that holds an FCC license, state certificate of public convenience and necessity, cable franchise of similar government authorization, or which is otherwise providing broadband service under applicable federal, state, and local laws,” to be eligible for BTOP grants.²⁰ This criterion ensures that NTIA will consider applications of companies that are prepared and qualified to act, but does not unnecessarily or arbitrarily exclude innovative proposals.

In addition, among the private sector applications that meet the above requirement, private entities that propose projects advancing the expressly enumerated purposes of the Act—such as the improvement of broadband to public safety agencies—should receive priority consideration. Finally, in order to afford fair treatment to all entities entitled to compete for ARRA grants, the NTIA should act expeditiously in articulating its public interest rule, so that private sector applications—either alone or in partnership with states—can be considered in the earliest round of grant awards.

C. Request No. 8: Broadband Mapping

The ARRA requires the NTIA to develop a map of existing broadband service capability and availability in the United States.²¹ In order to achieve end-to-end IP connectivity for 911 calls, the location of every PSAP in each state must be included in this mapping effort.

D. Request No. 9: Financial Contributions by Grant Applications

¹⁹ NTIA Public Meeting, March 16, 2009, Transcript, Session 1, 3 available at http://ntia.doc.gov/broadbandgrants/090316/NTIA_031609_1000-1130%20session.txt.

²⁰ *Id.* at 4.

²¹ ARRA § 6001(l).

The ARRU provides for BTOP funding of up to 80% of a proposed project, requiring the private sector applicant to fund the remainder.²² Intrado proposes that the NTIA allow prior capital investment by the applicant that is directly related to the project for which grant is requested count in satisfaction of the applicant's financial obligation. Requiring large future cash commitments from all applicants in every circumstance may unnecessarily eliminate small and medium size business from participating in the program. Moreover, some innovative projects may be partially developed but still in need of funding. Indeed, many projects could not be "shovel-ready" without some prior development. It would be reasonable and productive to allow the value of certain prior capital expenses already made toward the development of advanced broadband infrastructure to account for a private entity's financial obligation, so long as the investment (or the amount allocated for the project) is not being recouped by the private entity from other revenue generating uses.

E. Request No. 13: Definitions--Nondiscrimination and Network Interconnection Obligations of Grantees

Next generation IP 911 networks must handle numerous 911 call types, regardless of technology: wireline, wireless, Internet or other emerging forms of communications, including convergence of several technologies. These networks will provide access to voice as well as data—or even streaming video. Intrado has developed the infrastructure and technology to provide the necessary connectivity between the traditional access network's customer who initiates an emergency 911 call and the PSAP receiving the call, including interoperability between and among the PSAPs for emergency call transfer.

²² ARRA § 6001(e)(5).

Deployment of innovative and competitive solutions requires interconnection among carriers, including interconnection with the public switched telephone network (PSTN) facilities of incumbent providers. In order to achieve modernization of public safety communications, Intrado urges the NTIA to embrace public policy and existing federal laws and rules applicable to interconnection as a condition of BTOP grants. All recipients must be held to technology neutral interconnection policies and be required to commit to allow efficient, open, and non-discriminatory interconnection.

III. CONCLUSION

By awarding BTOP grants for public safety, the NTIA will accelerate the much needed modernization of emergency communications networks, which will in turn create jobs and further stimulate our nation's economy. Intrado respectfully requests that the NTIA adopt the positions and recommendations provided herein.

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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