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

In the Matter of	)	
	)	
Framework for Next Generation 911 Deployment	)	PS Docket No. 10-255
	)	
	)	

COMMENTS OF THE ATX GROUP, INC.

The ATX Group, Inc. (ATX) submits these comments in response to the Federal Communications Commission's (Commission) *Notice of Inquiry (NOI)* addressing the Framework for Next Generation 911 (NG911) Deployment.[1]

ATX commends the Commission for initiating this comprehensive proceeding and advancing the transition to NG911 in pursuit of a clear goal: all Americans must be able to request emergency help irrespective of location or device employed. In addressing this complex challenge of integrating new technologies and applications, the Commission should keep in mind that support for NG911 must occur against a backdrop of constrained state and local public safety agency budgets, making it essential that innovation and efficiency continue to drive improvements in emergency response. Transition to NG911, while gradual, requires private and public collaboration and investment directed to quantifiable improvements. The need is as clear as the goal: proven technologies, some in the market for two decades, must be leveraged to improve emergency response and save lives.

[1] In the Matter of Framework for Next Generation 911 Deployment, *Notice of Inquiry*, FCC 10-200, PS Docket No. 10-255 (December 21, 2010).

Automotive telematics is the gateway through which various forms of connectivity to and from the vehicle must pass, including vital emergency voice and data communications. Because these services have a critical role in NG911, ATX urges the Commission to remain mindful of their unique and important role. As the Commission formulates communications paths for NG911, telematics must be seamlessly interconnected to the NG911 architecture to permit unencumbered and affordable access to all public safety answering points (PSAPs). Just like the home telephone in the wireline era and the cell phone in the wireless era, automotive telematics' link to 911 should be universal, seamless and answered on a priority basis on par with any other location-enabled device.

Table of Contents

Summary..... 1

The ATX Group 4

Emergency Response and Automotive Telematics 5

The Challenges of NG911 8

The Limitations of the Legacy System that NG911 Must Overcome 9

NG911 Can Improve Emergency Response Meaningfully 11

The NG911 Framework Must Promote Public and Private Investment 13

Access and NG911 Effectiveness 13

Interconnecting Vehicle Based Telematics 14

Open Standards and Non Proprietary Technology 15

Affordable Broadband Access 17

Liability 19

Conclusion 19

THE ATX GROUP

ATX provides and integrates connected vehicle, also known as telematics, technology and services to several global automobile manufacturers worldwide.[2] The company was one of the pioneers in telematics, having partnered with Ford Motor Company and Motorola in 1996 to introduce Lincoln RESCU. The technology was one of the first programs to offer in consumer vehicles location-based "SOS or MayDay" buttons, which integrated GPS satellite location and wireless communications technologies to enable motorists in emergencies to be located by emergency responders and roadside assistance providers. It also assisted police in helping to locate stolen vehicles. In 1997, automatic collision notification (ACN), or automatic crash response, technology was added to ATX's telematics offerings, with several other automobile manufacturers soon following. ACN opened a voice communications link and transmitted vehicle location data to telematics response centers anytime a vehicle's airbags deployed or emergency tensioning restraint sensors linked to seat belts were activated.

Together, ATX and its corporate parent Cross Country respond to nearly 6 million roadside emergencies each year, including over 11,000 ACN signals; approximately 2600 of these signals also include crash severity data from the vehicle. Many of these emergencies require rapid and reliable communication with 911 or emergency dispatch. The number of telematics-aided emergency calls is forecast to increase over the next five years as automobile manufacturers expand the number of models with telematics-equipped features.[3]

---

[2] ATX services are provided to vehicle owners through the brand names of its customers: Hyundai, Toyota, Lexus, BMW, PSA Peugeot Citroen, , and Rolls-Royce Motor Cars. ATX is a division of Cross Country Automotive Services (Cross Country), which manages emergency roadside assistance programs in the US on behalf of global automobile manufacturers and US insurance carriers. Services also include post-accident scene management and total loss screening services for US insurance carriers.

[3] The current market for automotive manufacturer lines to fit telematics eCall capability is running about 25% of new car sales in the US market. However, this number rises substantially over the next few years. Isuppli, (February 2011).

Since introduction of these services, ATX has worked closely with 911 Centers, PSAPs and organizations representing all levels of emergency response, to enhance the technical and voice interfaces between private telematics service provider (TSP) centers and 911 emergency dispatch centers. This long history of collaboration between ATX and other telematics providers with organizations such as the National Emergency Number Association (NENA), the Association of Public Safety Communications Officials, International (APCO), the National Association of State 911 Administrators (NASNA), the National Academy of Emergency Dispatch and individual state, county and local agencies should be embraced by the Commission as it charts its roadmap for NG911 deployment.

EMERGENCY RESPONSE AND AUTOMOTIVE TELEMATICS

ATX technology and services provide vehicle owners with enhanced mobile safety, security and driving convenience. ATX's current telematics offering provides safety-related services such as location-specific and data-rich crash, emergency roadside response, stolen vehicle recovery and remote door unlock. In the near future, ATX's offering likely will inform drivers of unsafe driving conditions within their immediate locale or direction of travel, alert them to potential problems with operation of the vehicle and advise them of safety options on their vehicle. The technology provides information via voice technologies or live-operator voice communications specifically designed to help keep drivers' hands on the steering wheel and eyes on the road ahead.

In emergency situations, ATX response specialists, trained on a curriculum based on the APCO Telecommunicator Training Program for emergency 911 and dispatch centers, are available 24 hours a day at redundant call and data centers in Irving, Texas and Sebring, Florida.

ATX also integrates and customizes services to help automobile manufacturers and their dealerships use telematics data and multiple customer contact channels to reduce costs, enhance vehicle servicing and more closely manage customer relationships and contacts with the vehicle.

With every telematics-generated, vehicle emergency signal, ATX receives GPS satellite generated location data link and an open, two-way voice channel into the vehicle. Response specialists screen information from vehicle occupants and assess whether there is an emergency warranting notification of emergency responders[4] and, if so, compile details about the emergency in a structured and coherent format. This critical location and crash scene information is supplemented with customer-owner information about both the vehicle and its owners pulled from ATX servers.[5] The aggregated information is then communicated[6] by the ATX response specialist via interconnected Voice Over IP networks and routed, via Intrado, Inc., into native 911 trunk lines to the appropriate PSAP with jurisdiction of the vehicle's location. ATX is able to transmit to capable PSAPs location data elements and call back information. In circumstances where the voice channel is impaired, ATX is able to obtain and provide location information.

ATX response specialists continue to monitor the accident scene via the in-vehicle audio connection. The technology enables immediate re-connection with the PSAP should new details about the emergency emerge such as congestion at the scene, change in the conditions or weather variations as responders are enroute. Telematics services are able, if the need emerges, to

---

[4] Approximately 12% of all ACN calls and approximately 98.5% of all in-vehicle button activations received by ATX through various vehicle models do not require police, fire, or emergency medical response or notification.

[5] Information is updated by the vehicle owner via a portal to a personal information page on the website associated with the telematics service. The information includes data relating the principal and secondary drivers, emergency contacts, cell phone, and email addresses and relevant medical information.

[6] *This interface is detailed in APCO Recommended Best Practices- Telematics Call Processing* (July 22, 2004), http://www.apco911.org/about/Telematics/TSPFinal.pdf. Only GPS location coordinates and the callback number to the telematics call center is transmitted as data to the PSAP.

conference in a PSAP's emergency medical dispatcher to provide immediate medical advice prior to the responder's arrival.

Since its introduction, ATX's ACN has been designed to accelerate and improve the quality of emergency response to vehicle emergencies by providing response agencies with quicker notification, to affix a more precise location of the accident and the type of vehicle involved, to augment local PSAP response capabilities by filtering incidents not requiring public emergency response and monitoring the accident scene and victims' condition until emergency responders arrive. From its initial deployment, the service has been ubiquitous from coast-to-coast, capable of interfacing with PSAPs regardless of PSAP capability to receive location data.

With some vehicle brands and models, ATX collects information generated from in-vehicle crash sensors – including delta velocity of the impact, the number of impacts, direction of impact, whether the vehicle rolled, and whether seat belts were engaged in occupied seats.[7] Coupled with information collected by ATX response specialists regarding the gender of each occupant and whether any are under the age of 12 or older than 55,[8] this cumulative data (known as advanced automatic collision notification or AACN) is used to calculate the potential risk of severe and potentially life-threatening injury to the vehicle occupants.[9] It is then verbally conveyed to the PSAP.

---

[7] Currently, seat belt engagement determination is limited to front seats.

[8] The importance of age as a critical element in evaluating the level of care required in a vehicle accident is noted by Kononen, D.W., et al., *Identification and validation of a logistic regression model for predicting serious injuries associated with motor vehicle crashes.* Accid. Anal. Prev. (2010), doi:10.1016/j.aap.2010.07.018. The study also addresses the advances to the initial care decision associated with AACN.

[9] Algorithms have been developed by the Lehman Research Center at the University of Miami and the Center for Automotive Medicine at the University of Michigan and are being tested in pilots conducted by BMW North America and General Motors in collaboration with the US Centers for Disease Control and Prevention. *See*

AACN can make a meaningful contribution to crash severity determinations as an element of triage evaluation.[10] NENA notes its belief that AACN represents a significant opportunity to lower crash fatality rates through quicker access by responders to accident scenes, more accurate prediction of injury severity, more efficient deployment of responder equipment and resources and better utilization of hospital facilities.[11]

THE CHALLENGES OF NG911

Given the uniquely valuable contributions made by telematics services, the promise of an interconnected telematics interface with NG911 offers a powerful incentive for further private, automotive and telematics industry investment in developing technology that provides faster and more informed emergency response information. Such an interface would provide a more meaningful ability to reduce the critical time between impact and patient trauma treatment, identify potential injury risks not apparent at the accident scene, and provide additional information to help emergency medical responders make decisions about patient transport.[12] For automobile manufacturers, NG911 provides a data-centric environment to facilitate better and

---

National Center for Injury Prevention and Control, *Recommendations from the Expert Panel: Advanced Automatic Collision Notification and Triage of the Injured Patient,* Centers for Disease Control and Prevention (2008) at 2, 5-6. http://www.cdc.gov/injuryresponse/pdf/AACN%20Report_FINAL-a.pdf.

10 The Center for Disease Control and Prevention report notes that new AACN technology installed in some automobiles can identify vehicle location, measure change in velocity ("delta V"), and detect the crash's principal direction of force, airbag deployment, rollover, and the occurrence of multiple collisions. In recognition that this information might become more available in the future, vehicle telemetry data consistent with a high risk for injury (e.g., change in velocity and principal direction of force) was added as a triage criterion, *supra* at 2.

[11] Comments of the National Emergency Number Association, *National Highway Safety Administration 2010-2015 Strategic Planning,* Docket No. NHTSA 2009-0171 at 2 (January 2, 2009).

[12] *See Children Injured in Motor Vehicle Traffic Crashes*, National Highway Traffic Safety Administration, Ann Emerg Med. 2010;56:687-688, noted by the Department of Emergency Medicine, Center for Injury Prevention and Control, The George Washington University Medical Center, Washington, DC examining accidents involving children under 7 years. Presence of seat belts, booster seat, other restraints and roll over circumstances, in addition to age of the child, contribute to the severity of the injury.

more timely post-crash and injury analysis that can accelerate enhancements in vehicle safety design and emergency medical response protocols.[13]

The Limitations of the Legacy System that NG911 Must Overcome

As the Commission correctly notes, "legacy 911 systems are not capable of receiving or processing (non-voice) communications, and will not be until NG911 is deployed across the country."[14] NG911 must accommodate a full range of IP-based technologies tailored to specific emergency response scenarios. Data generated by telematics-equipped vehicles and ATX's off-board servers is just one of several sources of data/media that can provide critical information to emergency responders. NG911 is the mechanism required to receive, store, evaluate and act upon message-based text, real-time text, still images, Web links and real-time video carrying emergency information.

The gap between the important data generated by current in-vehicle and off-board telematics technology and the ability of emergency responders to receive and act upon such data is profound and grows with each advance in vehicle technology. Today, despite the capability in some vehicle models to transmit critical crash data to the ATX call center so that it can be calculated to discern the likelihood of severe injury to vehicle occupants, and potential links to Web sites posting additional crash or vehicle extrication information, there is no current, uniform means among PSAPs for receiving or connecting to such data/media.

---

[13] National Center for Injury Prevention and Control, *Recommendations from the Expert Panel: Advanced Automatic Collision Notification and Triage of the Injured Patient. Centers for Disease Control and Prevention* at 1, notes the need for initial decisions addressing the level of care in vehicle accident and the effect on mortality. *See also* MacKenzie EJ, Rivara FP, Jurkovich GJ, Nathens AB, Frey KP, Egleston BL, et al., *A National Evaluation of the Effect of Trauma-Center Care on Mortality,* New England Journal of Medicine 2006;354(4):366-78.

[14] *NOI* at paras 28-29.

This inability to receive data prevents PSAPs from advancing to the next step: transforming the data into actionable intelligence. Algorithms that interpret crash data and alert the PSAP to the likelihood of severe injury to vehicle occupants are defined and being tested in the market today. NG911 should promote the normalization of the various crash severity algorithms as well as a uniform presentation on all 911 call screens. This interface is critical because the alerts from crash algorithms allow emergency dispatchers to respond more effectively. With such interface, decisions regarding the priority of the dispatch, which responders are sent and whether additional resources are notified (eg. air medical rescue placed on standby) are much better informed.[15] The new information enhances the decisions of the emergency medical dispatcher, notifies "downstream" responders of crash information that might be critical to their response or subsequent transfer of victims, and saves lives.

This last point raises another flaw in today's 911 system that NG911 must remedy. There is no uniform means for the PSAP to route the data to other responders: Police and Fire first responders, Emergency Medical Service (EMS) or the trauma center or an emergency room, where such specific information can be used for patient triage, transport and treatment decisions. NENA has commenced designing the mechanisms required in NG911 to accomplish this goal

Another shortfall in today's 9-1-1 system is that there is no uniform capability among PSAPs to identify a telematics call type: whether it is a call activated by an airbag deployment, by activation of an in-vehicle emergency button, whether it is pre-screened by a telematics

---

[15] *See Science Daily, Helicopter Transport Increases Survival for Seriously Injured Patients, Study Finds (Jan. 6, 2011)*, citing a study by the University of Rochester published in The Journal of Trauma: Injury, Infection, and Critical Care relating that severely injured patients transported by helicopter from the scene of an accident are more likely to survive than patients brought to trauma centers by ground ambulance.

center[16] or an automated dial from the vehicle with a pre-programmed voice message. Such an identification would assist emergency responders in sifting through the multiple calls reporting the same accident and identifying the most important generated from the source of impact.

There is a need for NG911 to relate vehicle data with data from other sources to a common incident file. Today, when PSAPs receive multiple calls involving the same incident, 911 call takers must manually link related calls to a common incident number. By contrast, NG911 should be designed to make possible the automatic linking of crash data, photos, video, text messages, health records – and updated information from other responders – to the same incident file and making it accessible in real time.

NG911 must aspire to be a universal platform connecting the patchwork of technical platforms in place today among the 6,000 PSAPs across the country. Undoubtedly this challenge will persist as PSAPs transition to NG911. There does not need to be one single path of migration to NG911 but there cannot be varieties of NG911. ATX seeks to connect to one platform – one ubiquitous interface into all PSAPs - so it can begin investing, designing and deploying its systems toward that end.

NG911 Can Improve Emergency Response Meaningfully

The Commission recognizes that in IP-based network architecture, emergency calls can be placed not only by human beings, but also by a variety of automatically triggered and connected devices.[17] It cites telematics as among the technologies facilitating the ability of device-initiated emergency services to reach PSAPs. Telematics is among the technologies that will use NG911 as a springboard for additional innovations to enhance emergency response.

---

[16] Telematics emergency calls currently are transmitted either from the vehicle to specialized third-party centers where call takers validate calls as true emergencies requiring PSAP notification or from the vehicle via Bluetooth-enabled wireless phone into the PSAP.

[17] *NOI* at para 58.

Telematics research has identified the potential for enhanced data pertaining to location, vehicle occupancy, integration with medical records and faster removal of the crashed vehicle from the accident scene. The Commission correctly envisions such improvements: "NG911 could permit the simultaneous transmission of critical health data along with a 911 call for help…and that a vehicle's Automatic Collision Notification System could automatically call for help while conveying other relevant information such as the vehicle's location and the severity of the crash. NG911 will enable 911 call routing based on caller characteristics, not just the location of the call."[18]

The ability to intelligently process data – the hallmark of NG911 – will facilitate quicker analysis into the causes of vehicle accidents and by extension, accelerated improvements in vehicle design and safety systems, highway infrastructure improvements, emergency response, driver warnings and advisories and traffic flow management. These advances will mark a dramatic turning point in emergency response and vehicle safety and accelerates the need for a more data-centric emergency response network capable of transmitting and managing such functions.

---

[18] ATX is currently working with a joint APCO-NENA working group as well as with the National Academy of Emergency Dispatch to develop standards and protocols that will require all sources of telematics information to be transmitted to the PSAP in a common format. *See Vehicular Emergency Data Set (VEDS), Recommendation, Version 2.0* Prepared: (March 2004) by the ComCARE Alliance ACN Data Set Working Group, Version 3.0 Prepared: (February 2011) by the Advanced Automatic Crash Notification (AACN) Joint APCO/NENA Data Standardization Working Group.

THE NG911 FRAMEWORK MUST PROMOTE PRIVATE AND PUBLIC INVESTMENT

Access and NG911 Effectiveness

To facilitate more effective emergency response, NG911 must encourage private and public investment in advanced emergency response technology. It must show a path to meaningful improvements that allows pervasive access. The Commission's framework must embrace an architecture that promotes technologies generated by the private sector that deliver meaningful improvements to the quality and speed of response and governance models embracing such technologies. In addition, the Commission should ensure that no marketplace or regulatory barriers emerge during the transition to NG911 that would stifle innovation and competition.

As a provider of vehicle-based emergency assistance, ATX believes the following foundation is critical to NG911 being a catalyst for other technology advances:

- Investment in PSAP infrastructure and operations
- Seamless communications interface into the PSAP and within the emergency response "chain"- call handling/routing, dispatch, police, fire and EMS response, advanced medical response, trauma or emergency room medical treatment, including links to State and adjacent jurisdictions
- Capability to receive voice and a variety of non-voice communications or "media types" and to discern the source and value of each
- Links to public and private databases
- Open and non proprietary technical standards
- Ubiquitous nation-wide coverage through affordable broadband capacity
- Capability during the transition to NG911 to continue interface with legacy-based systems in PSAPs

Consumers, today and in the future, view the telematics-equipped vehicle and all other connected communications devices as a node on an emergency network. NG911 must be the hub between public safety and all types of communications and connected devices that facilitate

the delivery of information that can be useful in facilitating emergency response without impediment. The foundation of NG911, outlined above, is necessary to meet these consumer expectations. Vehicle-based telematics must be an integral element of that NG911 foundation.

The Commission inquires as to how NG911 can facilitate disaster planning and recovery and how it will interact with existing and future public alerting systems.[19] During wide-scale emergencies, natural disasters or extreme adverse weather, telematics-equipped vehicles can present a supporting role to the NG911 network "hub". Telematics vehicles can be transformed into a "fleet of field observers or Good Samaritans" that provide emergency response managers with real-time snapshots of evolving emergency situations at both an overview and detail level. This will contribute to enabling 911 centers to focus on immediate risk and/or injury incidents.

In order to achieve this vision, the following elements must be present in the framework for NG911:

Interconnecting Vehicle-Based Telematics

- Ability to identify automatically at the NG 911 gateway whether the source of the signal is from an embedded vehicular unit, whether it is an automatic airbag deployment or a manually activated in-vehicle button
- The information coming into the NG 911 gateway must identify its transport mechanism—e.g., whether it is a Bluetooth-enabled cell phone paired to the vehicle, a call that has been preliminarily filtered through a private call center or other device.
- The above interfaces should be consistent across all makes and models of vehicles. Variations in data quantity and types among manufacturers and models is inevitable, but all should come into NG911 through the same pipe and presented to 911 centers in a common format. Standardization is key. PSAPS should not have to interpret as many variations of an emergency crash signal or crash severity rating as there are automobile manufacturers. Standards should address minimum payload of information (voice and/or data), location accuracy and call back information that must be transmitted by a telematics device regardless of its pathway. PSAPs should have the ability to identify and block unscreened, automated signals from a vehicle or any other device overloading the system with signals.

[19] *NOI* at paragraph 62.

- As location-identification technology proliferates across various communications devices and vehicle brand and model lines, NG911 must be capable of matching various sources of signals from a single incident. In the NG911 environment, a crash between two vehicles generates vehicle emergency calls, calls from passersby and calls from vehicle occupants. All should be identified and placed into an accessible common incident file. The information becomes vitally important to police, fire and emergency medical dispatch as they converge on an incident with updated information on the evolving emergency and response.
- The need for data security standards means there should be mechanisms within NG911 that control who has access to specific data.

Open Standards and Non Proprietary Technology

While the need for separate and secure networks for emergency response and other public safety agencies will remain, NG911 will require interface with larger systems, public and commercial, that must be interconnected more effectively than legacy 911 networks. ATX's mission is to serve as a bridge between public 911 information and proprietary and personal information associated with the vehicle manufacturer, vehicle owner, vehicle occupants and the vehicle itself. ATX also serves as a positioning agent to ensure connectivity between 911 and an array of different electronic architectures developed by a variety of automobile manufacturers. ATX is also positioned as an auxiliary support system for PSAPs (i.e. screening calls for non-emergencies, providing supplemental information, continually monitoring the vehicle until responders arrive, assisting in accident scene management).

ATX's goal is to discern what circumstances involving a vehicle emergency requires emergency response and to present the relevant data in a way that best serves the PSAP and other emergency responders. In order to be most effective in improving emergency response, automotive telematics will need access to the NG911 platform without hindrance.

Open standard architecture and non-proprietary technology must also be embedded in NG911's framework. In this sense, telematics' experience and circumstance since 1996 should be considered.

Expansion of automotive telematics has been market driven. Its use in vehicles is not mandated by the government; yet its ability to locate a vehicle meets or exceeds the Commission's E911 standards. Automotive telematics also has not required pervasive access to and use of the public switch network. It creates one communications link between the vehicle and the telematics call center, and this link is only used when the need arises, as in emergencies.

Telematics technology must be integrated into the vehicle's electronics and crash detection safety systems. Its alignment within the vehicle's internal platform is complex. Yet, within the parameters of the cellular network, it has been able to communicate with the vehicle and transmit expanded and refined information relating to an incident. This evolution is largely attributed to the technical flexibility and openness of the network. The ability to transmit better quality information in the broadband environment will, once again, depend on an open NG911 architecture.

If proprietary technology, closed standards or high costs become *de facto* gateways to NG911, fragmentation will prevail. If fragmentation occurs, the tow truck driver and insurance adjuster may likely have quicker access and more information regarding an incident than what is received by emergency medical responders, and owners of luxury vehicle models, with a greater ability to pay the higher costs, will likely receive more enhanced access to emergency response than owners of mass-market or entry-level models. Open standards foster innovation, promote quicker and broader deployment across consumer income levels and facilitate market and end-user driven solutions. The more robust and effective NG911 envisioned by the Commission requires open and non-proprietary standards and technology.

Affordable Broadband Access

The *NOI* also asks how a more competitive environment for 911 services can emerge[20] and what federal, state and local barriers need to be examined to promote such an environment.[21] ATX suggests that a more fundamental and broader challenge lies in the promotion of a competitive environment to bring about affordable and meaningful broadband choices.

The FCC's National Broadband Plan recommended that the Commission address "how NG911 can accommodate communications technologies, networks and architectures beyond traditional voice-centric devices" and "explore how public expectations may evolve in terms of the communications platforms the public would rely upon to request emergency services." [22] Adequate and affordable broadband capacity is critical to a future of advanced emergency response. The *NOI* recognizes the possible benefits: the transmission of greater amounts of data, particularly more emergency data – including photos and streaming video -- from vehicle accident scenes to the various levels of emergency medical response, police fire, EMS, air medical, hospital or trauma center emergency room.[23]

In terms of maximizing the benefit of in-vehicle telematics technology, particularly regarding ACN and AACN, the technology's most optimal use primarily overlaps where broadband deployment appears least profitable – rural areas. Over half of all U.S. highway

---

[20] *NOI* at para 67.

[21] *NOI* at paras 83-86.

[22] Connecting America: The National Broadband Plan, Federal Communications Commission at 326 (March 2010). http://www.broadband.gov/plan/

[23] *NOI* at paras 32-38.

fatalities occur in rural areas.[24] This metric reflects the reality that crash notifications are much slower in those areas, and that it takes much longer in those areas to locate the victim's vehicle, respond to the accident, transport patients to local hospital emergency rooms and transfer them, where needed, to trauma centers. It is in these rural areas where ACN and precise location information can dramatically accelerate and improve the quality of emergency response. Quicker knowledge about the crash severity and likelihood of severe injuries enables faster decisions about the dispatch of advanced air medical response and direct transport to a level one trauma. Thus, effective access to this information can dramatically increase the chances that a rural crash response falls within the "golden hour"[25] during which a trauma patient must receive treatment after impact before facing dramatically increased risk of death or long-term disability.

As the Commission has recognized, additional commercial spectrum will stimulate a more competitive mobile broadband marketplace. In addition, however, such spectrum should be assigned so that it can be swiftly deployed to serve broadband networks, especially in rural and underserved areas, and is accessible by automotive telematics. Current generation telematics services have few competitive options that provide true nation-wide coverage. ATX urges, as 4G evolves, that the Commission continue to seek ways to promote a more competitive marketplace to make mobile broadband access ubiquitous and affordable throughout the country.

---

[24] *See Contrasting Rural and Urban Fatal Crashes 1194-2003*, US Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, DOT HS 809 896 (December 2005). http://www-nrd.nhtsa.dot.gov/Pubs/809896.PDF

[25] *See* Champion, Howard R. *et seq.*, *New Tools to Reduce Deaths and Disabilities by Improving Emergency Medical Care: Urgency Software, Occult Injury Warnings and Air Medical Services Database*, addressing Research by the US Department of Transportation, Federal Highway Administration research relating to transport and treatment of crash victims, Paper Number 05-0191 (2005). http://www-nrd.nhtsa.dot.gov/pdf/esv/esv19/Other/Print%2022.pdf

Liability

An important element for attracting investment to NG911 is liability protections paralleling those initially afforded legacy wireline access providers and later extended to wireless and interconnected VoIP providers. These protections must apply equally to the broader set of entities providing emergency response information in NG911 including, where not covered currently, automotive telematics providers that screen and process emergency calls. Congress should modify 47 U.S.C. § 615a to provide comprehensive liability protection subject to compliance with NG911 responsibilities obligations for any provider engaged in the process of an emergency RFA, irrespective of technology used for assistance.[26]

CONCLUSION

The NG911 *Notice of Inquiry* recognizes the communications link to the vehicle as a key element for improving emergency response. The prevalence of highway and roadway incidents generating police, fire or EMS dispatch indicates how critical the Commission's NG911 framework is to improving the quality and speed of response and to highway and vehicle safety.

[26] Suggested changes would amend subsection (a) of section 615a liability protection for carriers, or carrier-like entities, providing transmission or delivery of a 911 request for emergency service and any entity providing emergency response services. Additionally, subsections (b) and (c) providing for user and PSAP parity should be modified to include protection when the user is using any device capable of placing a 911 request for emergency service.

Automotive telematics technology can provide information today that can meaningful contribute to these improvements. By interconnecting automotive telematics seamlessly and universally, the NG911 framework can deliver tangible improvement at each level of emergency response thereby enhancing how public safety agencies assist the citizen needing help.

Respectfully submitted,

The ATX Group, Inc.

Gary Wallace
Vice President, Corporate Relations
ATX Group, Inc.
8550 Freeport Parkway
Irving, Texas 75063-2547
972.753.6230

John E. Logan
Attorney for the ATX Group, Inc.
1050 Connecticut Avenue, NW
Tenth Floor
Washington, D.C. 20036
202.772.1981

February 28, 2011