BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

Docket No. 070736-TP

Petition of Intrado Communications Inc. Pursuant to Section 252(b) of the Communications Act of 1934, as amended, to Establish an Interconnection Agreement with BellSouth Telecommunications, Inc. d/b/a AT&T Florida

REBUTTAL TESTIMONY OF JOHN R. MELCHER

May 28, 2008

SECTION I - INTRODUCTION

Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A: My name is John R. Melcher. My business address is 1511 Waterside Drive, League City, Texas, 77573.

Q: WHO ARE YOU EMPLOYED BY?

A: I am the founder and president of the Melcher Group – a consulting firm specializing in public safety related activities. I am also a principal in Cyren Call Communications – advisor to the Public Safety Spectrum Trust Corporation. I act as a consultant to many public safety-related companies such as Intrado Communications Inc. ("Intrado Comm").

Q: PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A: My curriculum vitae is attached as Exhibit No. ____ (Melcher, Rebuttal Exhibit JM-1). Prior to joining Cyren Call Communications in 2006, I was

employed by the Greater Harris County 911 Emergency Network for fifteen years in various positions including, most recently, Executive Director and Chief Operating Officer. I was responsible for the design and management of integrated voice and data networks providing emergency number service for over 4.5 million citizens in 48 cities and four counties in the Houston metropolitan areas. The Greater Harris County 911 Emergency Network is the largest regional 911 program in the country. I also managed numerous projects, including an early warning notification system, an automatic crash notification system, and several projects surrounding wireless 911 implementation.

Q: PLEASE DESCRIBE YOUR PROFESSIONAL AFFILIATIONS AND PARTICIPATION IN INDUSTRY ASSOCIATIONS.

A: I am certified as a National Emergency Numbering Association ("NENA") Emergency Number Professional ("ENP"). During my career, I have served as the President, 2nd Vice President, and 1st Vice President of NENA. I have also served as the wireless liaison for NENA working closely with wireless carriers, manufacturer trade associations, the Federal Communications Commission ("FCC") and the Cellular Telecommunications & Internet Association ("CTIA"). I have received six (6) NENA Presidential Citations for contributing to and leading industry and association efforts. I also regularly speak at public safety related conferences.

Q: HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION?

A: No, I have not previously testified before the Florida Public Service Commission ("Commission").

Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A: The purpose of my testimony is to provide information on some of the technical issues raised in this proceeding from an industry perspective.

SECTION II – BACKGROUND

Q: HOW MANY YEARS HAVE YOU BEEN INVOLVED WITH THE PUBLIC SAFETY INDUSTRY?

A: Twenty-nine (29) years.

Q: IN THAT TIME, HAVE YOU SEEN CHANGES IN THE 911 INDUSTRY?

A: Yes.

Q: CAN YOU PLEASE DISCUSS SOME OF THOSE CHANGES.

A: Changes in the emergency services industry have affected every area of 911 operations from technical and political changes to legislative changes. Among these changes, the biggest driver is access to telecommunications. We now have access to telecommunications devices and telecommunications applications far beyond what the original 911 network, its architects, and industry policymakers ever envisioned. As a result, in order to keep up with technological changes, 911 related funding and policy initiatives have and continue to change.

Historically, 911 has been a very specialized niche area provisioned by incumbent local exchange carriers ("ILECs"). Among the ILECs' portfolio of

services, the 911 network and infrastructure have received far too little attention with respect to the modernization and evolutionary design and development compared to their ever-expanding networks. The Commission and its Staff have, to their credit, recognized that 911 services have been overlooked and, through this proceeding and other activities, are beginning to enhance public safety's access to modern technologies, supporting interoperability among PSAPs, and recognizing the overall benefits of competition in the 911 marketplace.

Q: WHAT ISSUES WILL BE CRITICAL TO THE FUTURE OF THE PUBLIC SAFETY INDUSTRY?

A: The most critical issue for public safety is achieving performance parity for the 911 network through technological advancements and synchronizing public safety technologies with those of the rest of the telecommunications industry. There are broad-based consumer applications that do not appropriately incorporate 911 solutions. Public safety is commonly left out of the equation in the development, standardization and promulgation of these modern technologies and applications. As a result, consumers dangerously assume that 911 is part and parcel of all modern telecommunications service offerings. Unfortunately, 911 and citizen access to emergency communications havebecome more of an afterthought than a forethought. Many state commissions, such as Florida's, are left to bat clean-up. The citizens of Florida have the right to expect better performance from their 911 systems, just as they enjoy expanded consumer choice in this modern

competitive environment. This is necessary to continue to serve the public interest. The Commission has the ability to put mechanisms in place to ensure that Florida's citizens enjoy state-of-the-art emergency services and access to those resources that the public has come to expect.

Q: IS THERE COMPETITION IN THE 911 INDUSTRY TODAY?

A: Yes, but unfortunately it is very limited. There are many examples in the 911 industry where technologies are available to assist public safety, but barriers to access, such as outdated policies, restrict competition. In many states, policies have not changed since the inception of the 911 system. They remain way behind the curve on cost recovery, interoperability, and other issues related to a competitive environment, especially where multiple providers are offering service.

Q: WHAT PROCESS WAS USED TO IMPLEMENT 911 COMPETITION IN THOSE AREAS?

A: Competition in those areas is a new and emerging response to the needs of public safety. Texas, for example, has had competition for selective routing database provisioning since the late 1990s. Only since the inception of competitive local exchange carriers ("CLECs") have we seen the removal of some barriers to competition. Unfortunately, limited efforts were made for 911 competition and it has remained on the tail end. The instant proceeding reflects the challenges to providing a competitive 911 service despite the overall telecommunications revolution that commenced in 1996 with the passage of the federal Telecommunications Act, an Act that was specifically

passed twelve (12) years ago to give competitive providers the tools necessary to enter a market controlled by unwilling ILECs.

Q: HOW HAS COMPETITION BENEFITED PUBLIC SAFETY AGENCIES?

A: The benefits of competition have been limited so far, and it has been an uphill battle for public safety. While we have made some strides in going to a larger cadre of service providers, we have not been able to take advantage of choice and competitive price points enjoyed by the larger telecommunications industry because of the barriers to access and competition. While all telecommunications providers would agree that access for public safety to current and advanced technologies is in the public interest, new entrants are overwhelmingly mired into adversarial processes. The instant proceeding serves as an example of the difficulty in increasing options for public safety.

Q: ARE YOU FAMILIAR WITH THE TERM "NEXT-GENERATION" WITH RESPECT TO 911 NETWORKS?

A: Yes. I continue to work with various committees and standard setting organizations focused on developing Next-Generation E911.

Q: WHAT DOES THAT TERM MEAN?

A: The term is overused, misused and abused. The immediate work for public safety in all states, including Florida, is to bring 911 up to current technical and operational best practices. This work should not be confused with "next-generation" systems or applications. For example, the ability to support 911 calls from Voice over Internet Protocol ("VoIP") service callers or from

wireless callers is based on current technology that would bring Florida to existing standards and requirements. A true multi-provider market requires interoperability among networks. Indeed, the significant changes in the 911 industry to date are centered on a service provider's ability to interconnect its network with the public safety entity and to send the appropriate voice and data and/or location information.

The question then becomes how we take 911 to a place that we have not seen yet. Next-generation architectures assume changes will take place. Their platforms can anticipate advancements, *e.g.*, via scalability. However, these yet-to-be-seen changes have no bearing on public safety's immediate need to access current technologies, open access, and the need for enhanced interoperability.

Q: HOW HAS NENA BEEN INVOLVED WITH THE DEVELOPMENT OF NEXT-GENERATION 911 NETWORKS?

A: NENA continues to focus more on ensuring that public safety has access to current state-of-the-art technologies to fight the disparity in service levels across the country. We know that incumbent providers' customers in other industries have access to state-of-the-art technologies while 911 customers suffer from outdated architectures and service offerings. The 911 community is deprived of modern technologies due to barriers in the marketplace, including the notion that only the incumbents may serve as the designated 911 provider. Incumbent providers ensure that other industry segments have the ability to take calls from all over the world. This global standard has not been

applied to 911. Alternative providers offer current, modern, and off-the-shelf technologies and applications that public safety needs but cannot get due to artificial barriers.

NENA, however, needs to support a vision whereby 911 networks and systems are interoperable. It is not enough to remove barriers to entry. Enhancements to public safety cannot be done in a vacuum. Section 251 interconnection is an existing, viable mechanism whereby a state commission may ensure that interoperability among its 911 service providers is administered efficiently, fairly and in keeping with the public interest. Commercial agreements have previously served as an impediment to a level playing field. Congress recognized this when it passed the 1996 Act. There is little incentive for the incumbent provider to act timely or to price its services as it would in a vibrant competitive market. I have direct experience in Harris County, Texas where we invested millions of dollars into an upgrade that took an exorbitant amount of time and resources due to the "turf battles" of incumbent providers.

Q: WHY IS IT IMPORTANT FOR PUBLIC SAFETY TO ENSURE THEIR NETWORKS CAN SUPPORT CURRENT TECHNOLOGIES?

As self evident as it may seem, technology is not the issue. *Access* to technology is the issue. By examining industries outside of public safety, the disparity is highlighted. For example, the energy, aerospace, and biomedical industries are typically early adopters and are able to enjoy new technologies as they are introduced. The early adopters generally have more current

telecommunications technology platforms and are able to integrate innovative technologies as they are released.

In the 911 industry, we know the public is using leading edge technologies and applications and they must be able to contact public safety. The 911 authorities committed to responding to 911 callers should be no more restricted than any other consumers in the marketplace. Alternative providers are currently offering solutions that, if integrated into the network now, would permit public safety to be able to support the needs of these 911 callers. Integration into today's modern network is key. Otherwise, public safety is limited to legacy systems that we know lack the capability of supporting current technologies and applications.

To further illustrate public safety's needs, we know that there is an incredible investment on the part of incumbents and competitors alike into broadband and IP-based networks. This evolution is important because it emphasizes that services will not be about voice and data alone; they will be about information and information sharing. The information sent over an IP network could include voice, bursty data, building plans, streaming video, mug shots, fingerprints, etc. The possibilities to enhance public safety's response will grow exponentially. If my thirteen year old niece can send a photo with a text message to her friends, why can't a witness to a crime do the same? IP is the platform upon which all current telecommunications applications reside and all future developments will be deployed. Public safety's inability to integrate IP technologies and infrastructure today is

stifling their progress and making it unaffordable for them to advance to current, off-the-shelf products and services. Public safety will remain behind the curve if it is denied more robust competitive 911 service offerings, which is diametrically opposed to the level of service the public expects and demands and this Commission, Congress, and the FCC have mandated.

SECTION III – UNRESOLVED ISSUES

Issue 2(a): What trunking and traffic routing arrangements should be used for the exchange of traffic when Intrado Comm is the designated 911/E911 Service Provider?

Issue 2(b): What trunking and traffic routing arrangements should be used for the exchange of traffic when AT&T is the designated 911/E911 Service Provider?

Q: CAN YOU EXPLAIN WHAT IS MEANT BY "CLASS MARKING"?

A: I understand the term "class marking," which describes the process used generally to direct calls in split wire center areas or serving central office. However, it is not germane to the 911 multi-provider market, as I further discuss below. The appropriate term is more like "Line Attribute Routing," (Subscriber Data Element Specific) which is the process whereby a subscriber's voice and related data is provided for the appropriate routing of an emergency call.

Q: DO LOCAL EXCHANGE CARRIERS USE LINE ATTRIBUTE ROUTING FOR 911 IN THE INDUSTRY TODAY?

A: Yes, in limited applications.

Q: IS IT TECHNICALLY FEASIBLE TO USE LINE ATTRIBUTE ROUTING TO ROUTE 911 CALLS?

A: Yes. It is similar to the call setup information used when a consumer makes a long distance or 1+ call. By relying on line attributes associated with the end user's service choice and related data elements, the serving switch knows where to send the call.

Q: WHAT OTHER PROCESS CAN BE USED TO ROUTE 911 CALLS WHEN THERE ARE MULTIPLE 911 PROVIDERS?

A: Secondary processing, such as through an incumbent's selective router, is another method. Line attribute routing is preferred since the line attribute data is established prior to call set-up, rather than through secondary processing or switching systems. By relying on line attribute data elements that relate to subscribers' information, the call may be delivered without introducing further complexities or points of failure during call set-up and delivery to the appropriate E911 system. The fewer points of failure introduced into call set-up and delivery, the more accurate call delivery will be.

Q: WHY IS LINE ATTRIBUTE ROUTING A SUPERIOR METHOD?

A: In the 911 industry, generally, we try to avoid multiple links, multiple hops, and the creation of multiple points of failure. By applying options such as Line Attribute Routing at call set-up, we mitigate the potential for failure.

Q: WHO IS USING THIS TODAY?

A: Internet service providers use this process today. Indeed, every call delivery system can use these attributes, similar to the way the functionality is

achieved in other areas, such as 1+ long distance. When a service order is processed for a consumer to receive dial tone, line attributes are encoded into the central office database to depict the consumer's choice of long distance provider. 911 Line Attribute Routing works the same way. The incumbent, as a local telephone exchange provider, has the obligation to direct calls to the customer's pre-subscribed long distance provider; it too has the obligation to deliver emergency calls to the appropriate PSAP. Both use subscriber-based attributes to determine where the call is delivered.

Q: WHY SHOULD INCUMBENTS, AS LOCAL EXCHANGE PROVIDERS, BE REQUIRED TO UTILIZE LINE ATTRIBUTE ROUTING?

A: It is my understanding that there is an obligation on all telecommunications providers of local exchange dial tone services in Florida to deliver 911 calls to the designated E911 Services provider for ultimate delivery to the appropriate PSAP. For example, a CLEC serving Florida today may rely on switching facilities located in New York. The CLEC does not have the option of choosing call delivery to PSAPs in the closest rate center to New York in order to fulfill its 911 obligation in Florida. The CLEC has to make arrangements for the call to be delivered appropriately.

While I cannot make an apples-to-apples comparison with wireless providers because they do not rely on line attributes, they perform call sorting on their side of the network prior during call set-up to ensure 911 calls are delivered to the appropriate 911 system.

As discussed above, incumbent providers of dialtone services have the obligation to send their 911 calls to the appropriate E911 System for delivery to a PSAP. Incumbent providers in Florida have impressed consumers with their global presence, earnings, acquisition of other telecommunications providers, bundled product offerings across multiple affiliates, and corporate partnerships. It is unacceptable, especially in light of their profitable growth to continue to deny current state-of-the-art technologies to public safety. Best practices and policies to ensure their application across all providers will ensure that emergency calls are delivered to the appropriate PSAP in the most efficient and reliable manner. The Commission appropriately determined it was acceptable for toll competition. The same should be adopted for 911.

Q: DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?

A: Yes.

John R. Melcher, ENP
Curriculum Vitae

Corporate History

Mr. Melcher is the founder and president of The Melcher Group – a consulting firm specializing in public safety related activities. Activities include corporate mergers, acquisitions and strategy. Mr. Melcher is also a principal in Cyren Call Communications – advisor to the Public Safety Spectrum Trust Corporation (PSST). Cyren Call is led by veterans of the wireless industry and Public Safety communications, who will assist the PSST in the creation of a nationwide, wireless broadband network that will carry priority Public Safety communications. Cyren Call is headed by Morgan O'Brien, a co-founder of Nextel and a long-time champion of improving public safety communications.

9-1-1 and Public Safety Management/Related Activities

Cyren Call Communications 2006 – Present
Executive Vice President, Office of the Chairman
Managed external corporate communications, legislative, regulatory, lobbying and all outreach efforts to achieve favorable public policy positions for Cyren. Maintained relationships with various industry and public safety organizations such as APCO, IAFC, IACP, NENA to advance these public policy positions. An external presenter and speaker for Cyren at key public safety conferences as well as regulatory and legislative venues.

Greater Harris County 9-1-1 Emergency Network 2004 - 2005
Executive Director
Responsible for design and management of integrated voice and data networks providing emergency number service for over 4.5 million citizens in 48 cities and four counties in the Houston metropolitan area. Greater Harris County 9-1-1 Emergency Network is the largest regional 9-1-1 program in the country.

Chief Operating Officer - 1990 – 2004

Early Warning System Implementation, 2002

- Project Director, implementation of nation's largest early warning notification system for municipalities within coverage area.

Automatic Crash Notification Project (ACN), 2002 -present

- 2000 – Project Director of first proof-of-concept demonstration combining telematics technology within the native 9-1-1 communications infrastructure.
- 2002 – Project Director of first implementation of ACN technology in the public safety environment.
- 2005 – Expansion to include demonstration of mobile threat notification for chemical and bio-hazard.
- Total of 800 police cars across two technology platforms

Wireless 9-1-1 Implementation, 2002

- Project Director for first implementation of wireless 9-1-1 technology for major metropolitan area in the country. The first major deployment of location technology, allowing 9-1-1 call-takers and first responders to pinpoint location of wireless devices calling 9-1-1. Now a national mandate by the Federal Communications Commission.

Texas Wireless Integration Project (WIP), 1996

- Co-chaired the first proof-of-concept demonstration utilizing location technology for routing and delivery of wireless 9-1-1 calls.

Inventor - patented 9-1-1 emergency communications system solutions

National Emergency Number Association (NENA) -16-Year Member

- President of NENA June 2002 – 2003
- 2nd Vice President of NENA 2001 – 2002
- 1st Vice President of NENA 2000 – 2001
- Numerous Testimonies before the United States Congress
- Wireless Liaison for NENA working closely with wireless carriers manufacturer trade associations, the FCC and CTIA, TR45
- ENP certification 1999

Pasadena Police Department - Pasadena, Texas
Technical Director, Dispatch Supervisor 1986 - 1990
Dispatcher, 1982 – 1986
Paramedic, 1984 - 1990

City of Pasadena – Office of Emergency Preparedness
Radio Officer 1978 – 1980
Communications Manager 1980 - 1982

Recognitions:
Presidential Citation, NENA 1995, 1996, 1997, 1998, 2002, 2006
APCO 1993, 1994, 1995, 1996

Recognition by Radio Resource magazine, Most Influential People in Public Safety, 1998 and 1999

Innovator Award from Computerworld Smithsonian for Visionary Use of Information Technology, (organizational award) 1995

Presidential Award, APCO Project 31, 1992 and 1993

Other Endeavors:
President, Pasadena Rotary Club 1992-1993
Licensed Pilot – Instrument Rating
Regular keynote speaker at public safety related conferences