

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

In the Matter of)	
)	
Wireless E911 Location Accuracy)	PS Docket No. 07-114
Requirements)	
)	CC Docket No. 94-102
Revision of the Commission's Rules to Ensure)	
Compatibility with Enhanced 911 Emergency)	
Calling Systems)	
)	
Association of Public-Safety Communications)	
Officials-International, Inc. Request for)	
Declaratory Ruling)	
)	WC Docket No. 05-196
911 Requirements for IP-Enabled Service)	
Providers)	

Ex parte communication pursuant to Section 1.1206 of the Rules

COMMENTS OF WIRELESSWERX

WirelessWerx, a provider of precise location determination, including elevation, hereby comments on certain questions pending in Part B of the Notice of Proposed Rulemaking in the captioned proceedings.¹ In the Notice's opening paragraph, the Commission calls for comment on "the methodology for accuracy compliance testing, particularly when wireless phones are used indoors and in rural areas." At ¶12: "Should the standard now include additional information, such as elevation?" and at ¶14: "Should

¹ FCC 07-108, released June 1, 2007 ("Notice"). Information about WirelessWerx may be found at Exhibit A hereto and at www.wirelesswerx.com. By "elevation" we mean the so-called vertical or "z-axis" of a three-dimensional space also containing "x" and "y" lateral coordinates.

the Bulletin specify a certain level of indoor versus outdoor testing in order to reflect the proportion of indoor versus outdoor use?”²

WirelessWerx believes the answer to the two questions above is yes because its methodology for location of wireless callers indoors is so precise as to likely improve, rather than detract from, carrier compliance test results. Exhibit B hereto depicts the Wireless 911 solution and summarizes the results of recent trials.

The “SiteWerx” Solution. At Exhibit C hereto are slides from a recent presentation to a university having high-rise dormitories and other multi-story structures dispersed in a campus setting. The solution is based on Bluetooth-enabled location nodes deployed throughout a chosen location environment.³ If cell phones or other hand-held communications are also Bluetooth-enabled and have access to necessary device software (Exhibit C, slide 10), the SiteWerx solution uses a Selection Algorithm (Exhibit C, slide 13) that produces the kinds of results illustrated by Exhibit B.

WirelessWerx holds or has the use of three patents and seven more patent applications are pending. WirelessWerx is willing to license these proprietary interests on a fair and reasonable basis to parties wishing to use them for locating emergency callers or other legitimate public safety purposes.

In his Statement accompany the release of the FCC’s decision on Part A of the Notice, Commissioner Michael Copps said, in part:

²“ Bulletin” here refers to *Guidelines for Testing and Verifying the Accuracy of E911 Location Systems*, OET Bulletin Number 71 (April 12, 2000)

³ Wikipedia describes Bluetooth as “a wireless protocol utilizing short-range communications technology facilitating both voice and data transmissions over short distances from fixed and/or mobile devices, creating wireless personal area networks (PANs).”

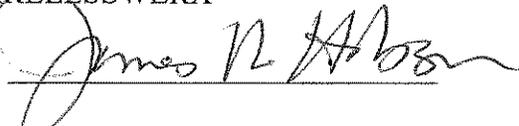
In the discussions surrounding the release of our NPRM earlier this summer, I was pleased that my colleagues accepted my suggestion that we commission two reports from our Office of Engineering and Technology that could put this process on a sound technical footing. These reports were to address the question of how well in-building coverage fares under current technology, as well as the extent to which so-called hybrid technology—the most promising technique out there right now—could help remedy some of the limitations of the existing wireless E911 infrastructure.⁴

Perhaps the means by which SiteWerx can be deployed over the networks of cell phone carriers and other communications service providers makes us a part of that “so-called hybrid technology.”

However WirelessWerx is characterized, we believe we have a workable solution for in-building coverage of wireless calls to 9-1-1 and we look forward to meeting with OET and other FCC staff to respond to questions or supply additional information.

Respectfully submitted,

WIRELESSWERX

By 

James R. Hobson
Miller & Van Eaton, P.L.L.C.
1155 Connecticut Avenue, N.W., Suite 1000
Washington, D.C. 20036-4320
(202) 785-0600

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ITS ATTORNEY

⁴ Report and Order, FCC 07-166, adopted September 11, 2007, released November 20, 2007.

Established in 1998, WirelessWerx is headquartered in Anaheim California. The founding engineering team's genesis goes all the way back to significant work on Generation I and Generation III GPS satellite constellation system. The company has a long history of developing and deploying end-to-end solutions for the deployment of Mobile Resource Management and Tracking solutions and Location Based Services Systems. The company has been awarded fundamental patents in these fields and development of intellectual property is core to the business.

WirelessWerx is a privately held venture funded company.

Management Team

Chairman Houston Staton is the visionary founder of WirelessWERX. He has provided the financial support and the management guidance to the company since its inception. Mr. Staton has extensive business interests in Latin America, and has held executive positions at Coca Cola. He served as a Member of the Board of Pan American Beverages Inc.; a multi-billion dollar corporation that was the largest bottler of Coca Cola in the world until its recent acquisition by Coca Cola. Currently Mr. Staton serves as the Chairman of the Board for WirelessWERX. Houston holds a degree in Engineering Economic Systems from Georgia Tech and MS in Corporate Finance from Georgia State.

Chief Executive Officer Stephen Artim joins WirelessWerx with over 20 years of software and hardware technology experience spanning multiple Fortune 500 companies, as well as, a number of start-ups. Before joining WirelessWerx, Mr. Artim co-founded and successfully led InnoPath Software. He served as InnoPath's first Chief Executive Officer from inception in 1999 until 2003. From 2003-2007 he held the operations, marketing and sales positions of Executive Vice President, VP and Managing Director of Asia Pacific, and VP for Global Handset sales. Prior to founding InnoPath Stephen helped found and launch the Real Time Visualization Division of Mitsubishi Electric in 1997 which pioneered the commercial deployment of advanced 3D Volumetric Graphics processors for the entertainment, medical and oil & gas visualization markets. He has also held senior marketing and business development positions at Philips and Sierra Semiconductor. He holds an MBA from the University of San Francisco and a BS in Engineering from the University of Mississippi and served as a US Naval Officer from 1987-1991 in the Surface Warfare community.

Prior to the founding of WirelessWERX, **Chief Technology Officer Jim Ashley** provided Administration and Operations Support for the ACES Group. These activities included System Engineering support for I.O.I, Boeing, Rockwell International, Litton, Intraspace and Space Applications, Inc. on programs that included Titan-IV booster qualifications.

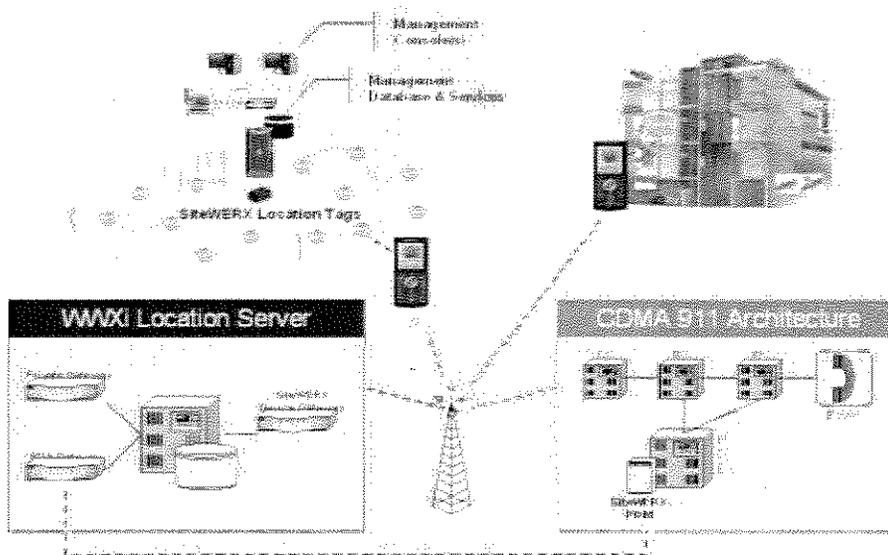
General Manager Patrick Mooney was hired as Software Manager for WirelessWERX in 2001. Since, then, Mr. Mooney has been promoted to the position of General Manager. Mr. Mooney has played a key role in the WirelessWERX software development. Mr. Mooney has over twelve years experience in relational database design and development utilizing Oracle, Microsoft SQL Server, Microsoft Access and MySQL and over ten years experience in full life cycle client/server application development.

Bill Munn, Ph.D., ENP, twice President of the National Emergency Number Association (“NENA”), is Director of 9-1-1 and University Sales. Dr. Munn teaches the Emergency Management and Homeland Security course in the graduate Certificate in Homeland Security program at the George Bush School of Government and Public Service. He served for more than 20 years as executive director of the Tarrant County (Texas) 9-1-1 District, retiring in January 2006.

WIRELESS 911

WIRELESS PROBLEM

There are various methods in place today for locating a cellular caller in an emergency situation. However, if that emergency call is made from inside a multi-story or multi-unit building, such as an apartment complex, locating the caller can become problematic. There are countless news stories about cellular 9-1-1 calls where the caller cannot be located and subsequently the worst case is realized.



SIMPLE SOLUTION

WirelessWERX has developed SiteWERX, an "in-building location" determination technology. "In-Building Location" refers to the ability to attain precise and meaningful location information with a wireless device, such as a cell phone, in an environment where GPS (Global Positioning Satellite) or triangulation location methodologies can have great difficulties performing. An example would be locating someone making an emergency wireless call within a 10-story building with multiple rooms or offices. While GPS or triangulation may be able to locate the building, these methods would fall short of locating precisely where in that building the call is coming from. In this scenario locating the caller quickly can be problematic if he/she has become incapacitated or cannot speak because an assailant is nearby.

IMMEDIATE BENEFITS

- Safety/Security
- Precise location information "Building 100, 3rd Floor, Room 310"
- Accelerate emergency personnel response time
- Location sensor can be deployed through large areas for use in campus directions

Live Hotel Room Deployment

- Rented 3X3X3 block
- 100% Accuracy in "First Responder" Test in exact room
- 100% Accuracy in room message test
- 100% Accuracy in tracking movement through rooms
- Exact room delivered to PDE vs nearest GPS Fix was off by 1,700 meters

Fairfield Inn - Anaheim



Field Tests - Texas A&M University

- Thompson Hall Engineering Building
3-Stories, 80,000 sqft.



- Deployment Results – September 2007
 - Exact positioning within 10 meters
97% of the time



SiteWerx Product Delivering Exact In-Building Location

Indiana University

April 30, 2008



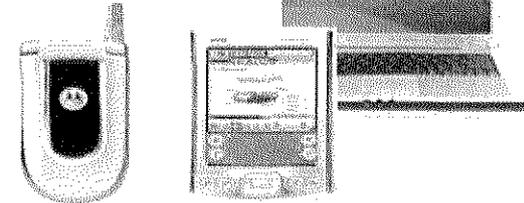
Overview



WirelessWerx's primary product, **SiteWerx**, employs patented technology to give area-specific location information for wireless devices

- Delivers more precise location information than other methods available in the market today such as GPS and Wi-Fi based systems
- Provides location information where GPS fails in - Dense building areas, In-Building, and underground
- Using this solution in a critical situation you will know the building, and the floor or room in which a person is located

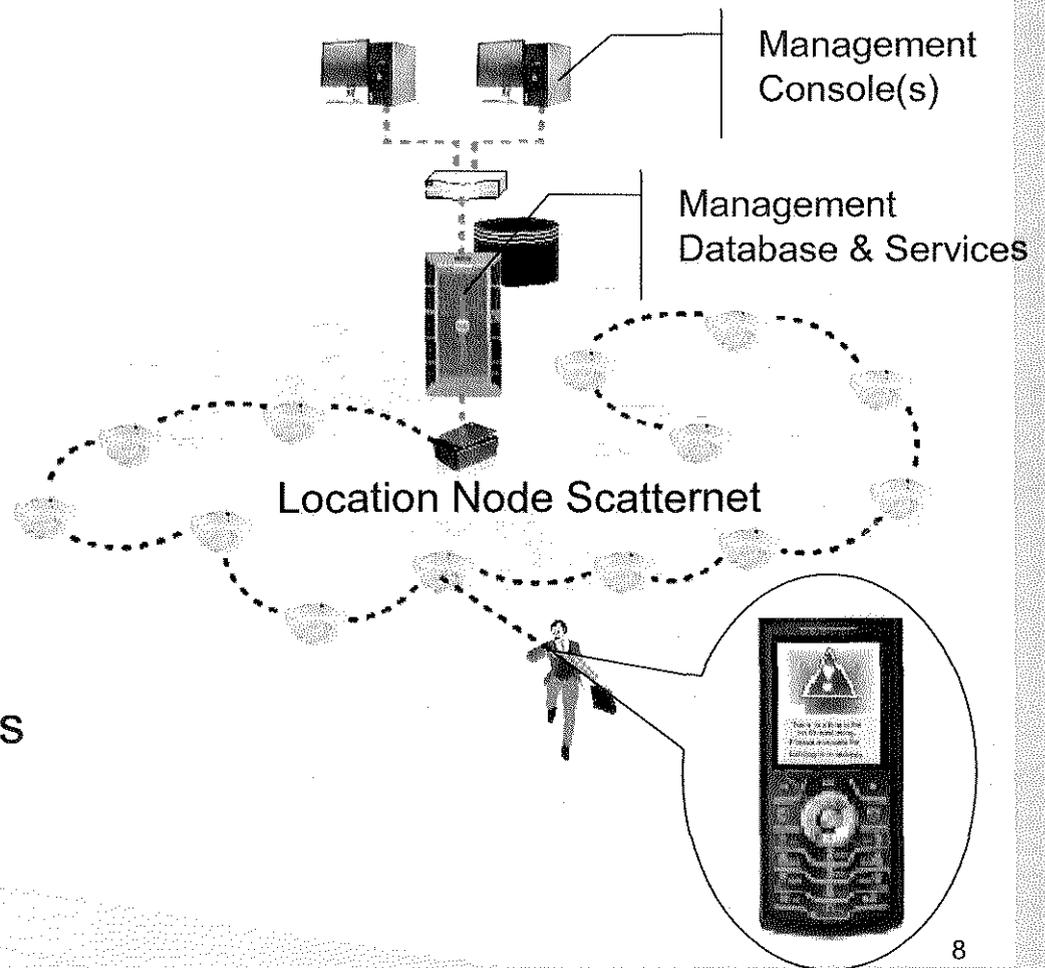
SiteWERX



- An end-to-end solution for providing Bluetooth-enabled cell phones with precise location awareness, as well as, allowing a Head End the ability to locate the cell phone within a SiteWerx enabled environment
- A simple, platform-independent, low-cost and low-power solution targeted at commercially available devices with or without location determination capabilities
- Precise location awareness is achieved by interacting with one or more Bluetooth-enabled location nodes deployed throughout an environment

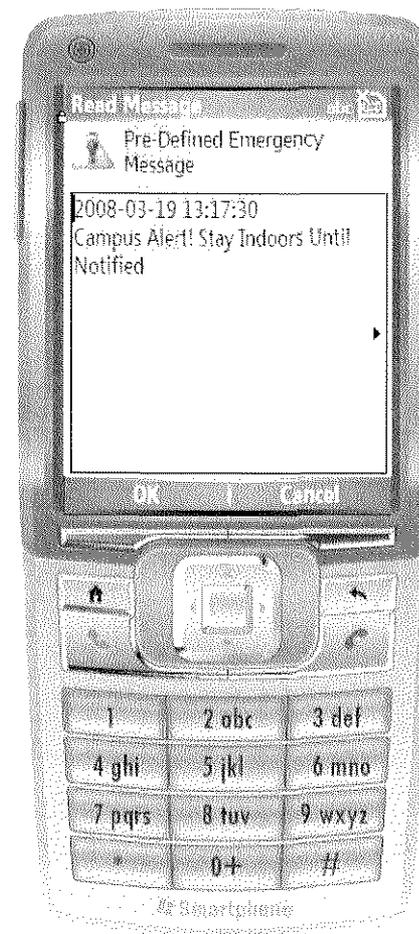
System Monitoring and Tracking

- **Managed System**
 - Location Nodes used to form a scatternet
 - Performs health checks and validity tests on location Nodes
 - Identifies and warns of missing, moved and tampered Nodes
 - Track users as they pass through the network

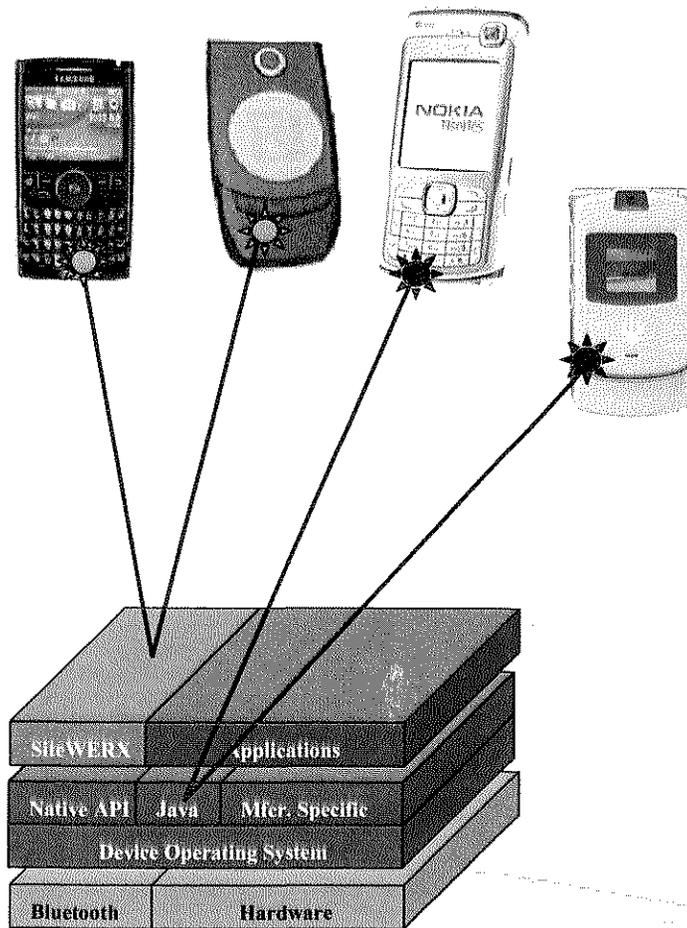


Area Specific Messaging

- Area-specific messaging to SiteWerx enabled devices
- Specific areas can be defined by a location Node or an entire SiteWerx enabled environment
- Everything from Rich video to text can be delivered



Device Software



- **Lightweight Software Component**

- Downloaded and installed over carrier networks or when connected to host a computer
- Launches automatically and runs unobtrusively in background requiring no user intervention
- Can monitor Nodes continuously, periodically or be event driven (perhaps when 911 dialed) to minimize power consumption
- Clients exist for more than 80% of all global cell phones: Java, Brew, Windows Mobile, Linux

Selection Algorithm

- Acquires a device's location when within a SiteWERX-enabled environment

- Based on a process of elimination
 - Enables the selection of the **correct Node** when within range of multiple overlapping location Nodes
 - Quick acquisition by minimizing/eliminating the use of connections and need of signal strength

