

Clarity Communication Systems  
Public Safety Solution

**Submission to Stevens Institute of Technology**  
**Next Great Idea in Wireless Evolution**

**Clarity Communication Systems**  
Subsidiary of ISCO International

Clarity of Idea

Clarity's new Public Safety Solution delivers an advanced set of people deployment, resource tracking and communication capabilities for Homeland Security departments, Federal agencies, State & Local municipalities, and universities along with other educational institutions needing to improve security and responsiveness.

The integrated solution combines location based services with push to talk over cellular and interoperability with existing Land Mobile Radios (LMRs), allowing cellular users and LMR users in public safety organizations to all communicate and track each others whereabouts. With Clarity's Public Safety Solution, Police personnel can talk to Fire personnel and both can talk to personnel using push to talk cellular devices.

Value Proposition

Users of Clarity's Public Safety solution realize immediate quantifiable benefits:

1. Reduces the cost of expanding the number of connected PTT users. The typical cost of a PoC cell phone is 10% of that of a traditional LMR mobile unit, while also delivering more capability.
2. Provide situation awareness allowing leadership to most efficiently deploy the right resources to an incident in a managed way, reducing the number of personnel required and the time to respond. By coupling LBS with Clarity TalkGroups centrally managed conference bridges, leadership can identify the location of key resources, direct them to the target of interest and establish focused communications with that group.
3. Increase coverage nationwide. By using intelligent PoC devices over a Clarity Public Safety managed network, users can communicate anywhere throughout the United States. With LMRs, users are typically limited to their specific network.
4. Using more capable 3G cellular and broadband devices versus Land Mobile Radios enables agencies to send more information to the field staff and enable field staff to retrieve the information they need. This speeds up operations as well as eliminates some level of supporting staff.

There are approximately 3.3M public safety personnel in the US<sup>1</sup> working in the 30,000 State & Local municipalities along with a variety of Federal agencies such as DoJ, Treasury and DHS. Within these organizations, 1.1M of those qualify as first responders<sup>2</sup> and have an average communications spend of \$4000 per year<sup>3</sup>. The Clarity Public Safety Solution could reduce that per user cost to \$1,000 per year.

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<sup>1</sup> Bureau of Labor Statistics

<sup>2</sup> Bureau of Labor Statistics

<sup>3</sup> Computer Business Review

## Clarity Communication Systems Public Safety Solution

### Credibility

Clarity Communication Systems, a wholly-owned subsidiary of ISCO International, was founded in 1998 to develop products for Cellular Mobile Network Operators. Clarity's team of engineers is highly experienced, many of them with greater than 20 years of experience in cellular technologies. Clarity's PoC enterprise solution has been deployed by seven mobile operators in the US, Caribbean and APAC.

Clarity's Public Safety Solution has been selected by the US Department of Homeland Security to be piloted in 3G Mobile Networks to demonstrate the features and advantages of applying Clarity's products and 3G Networks to solve many of the key communication challenges facing Public Safety and Homeland Security organizations.

(<http://www.safecomprogram.gov/SAFECOM/press/releases/1324.htm>)

Clarity has recently entered into a Joint Marketing Agreement with Raytheon JPS, a \$20B company with a 70% share of the radio interoperation gateway market. Clarity's Public Safety Solution is uniquely capable of integrating location, cellular PTT, and radio interoperation into a single managed offering. The alliance with Raytheon will further enable Clarity to offer the solution to Public Safety Agencies and Homeland Security Organizations on a broad basis.

Clarity's intellectual property includes low-latency push to talk on cellular, TalkGroups allowing conferencing to be managed on a real-time centralized basis, graphical management software mapping the location of PoC users and allowing the TalkGroups to be established through a point & click interface, and gateway software allowing the managed interoperability of Land Mobile Radios with PoC cell phones.

For more information please contact Bill Jenkins at [bjenkins@claritycsi.com](mailto:bjenkins@claritycsi.com).