



press release

Catalyst announces patent award for using artificial intelligence to monitor and analyze mission critical communications to aid on-scene first responders

APCO, San Antonio Texas - August 3, 2026 Catalyst Communications Technologies, Inc., a leading provider of IP-based dispatch, interoperability and incident command solutions, announced today that its patent application 18/670,784 for "COMMUNICATIONS NETWORKS USING SITUATIONAL INFERENCE" has been approved. Catalyst describes a method of synthesizing situational awareness information from multiple sources and historical data. The subsequent patent award continues Catalyst's drive to introduce new technologies to support mission critical communications for the public safety marketplace including interoperability between Push-to-Talk over Broadband (PTToB) services and interworking with land mobile radio (LMR) systems.

The invention implements a method whereby a communication system monitors PTToB services, and, communicating with a second (or more) PTT service (broadband or LMR), infers a community operational situation (e.g., information useful to other first responders on different communications systems), based on data obtained during the monitoring. Based upon the information being monitored, the system analyzes and then alerts and notifies the partner community dispatch system of the necessary information.

A number of monitoring, alert and notification services are covered by the invention. For example, the notification can include meta data extracted from the communications to add relevance to the information being shared. A heat map of relevant audio keywords can be created to help dispatchers interpret the communications, and the information, inferred from the situation monitored by the system, can be shared with broadband push-to-talk networks and legacy LMR systems in use by first responders today.

The technology created by Catalyst represents one of the first practical applications of artificial intelligence to support the mission of public safety communications professionals. This new capability is another tool to help dispatchers, supervisors, analysts and first responders on the scene of a situation understand and predict based upon radio

communications and provide relevant and insightful information to respond to the situation, to accelerate that response, and to assist in their primary mission – to save lives.

In making the announcement, Catalyst President Robin Grier said “Innovation in support of the public safety marketplace is at the heart of what we do at Catalyst, and we are always pushing the envelope forward to develop improved communications for our nation’s first responders. It’s expected that artificial intelligence will have increasing applications which are extremely valuable to the public safety community, and Catalyst leads the effort to apply our technology and industry knowledge to help mission critical communications professionals continuously improve their ability to respond to ever increasing emergencies in our changing world.”

Licensing inquiries from other mission critical communications manufacturers as well as service providers are welcome.

Catalyst Communications Technologies, Inc. markets Radio Control over IP technology for the Critical Communications Industry and is a force for change in the effort to bring Internet-derived technologies into Critical Communications applications. Catalyst focuses on products that leverage standard Windows®-based computers to reduce cost and increase the efficiency of network operators and end users. Catalyst’s extensive product line significantly enhances modern and legacy dispatch communications systems by seamlessly bridging wireless and wireline communications networks for network-based interoperability.

Contact Catalyst at info@catcomtec.com or (434) 582-6146 for additional information.

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