

WIRELESS DATA NETWORKING SUPPORT

October Update

Project 36

The Association of Public Safety Communications Officials-International, Inc. (APCO) is sponsoring a standards development project for sharing information through a computer-aided dispatch (CAD) data exchange. This standards development process, titled Project 36, focuses on improving communications for the public safety community by offering an interface for existing CAD systems. For a majority of public safety organizations across the Nation, CAD is an essential tool for recording calls for service and the actions of incident responders. With a CAD-to-CAD interface, the exchange of information between participating organizations, usually neighboring jurisdictions, would become automatic—no longer reliant on human intervention. Project 36 presents a new opportunity for improving interoperable communications between public safety agencies by providing a mechanism for the continuous and reliable transfer of information.

Background

APCO initiated Project 36, at its annual conference in Boston in August 2000. The development of the standard will result from the combined efforts of the Adoption of Standards Work Group, Operations Work Group, Research Work Group, Technical Work Group, and User Work Group. APCO charged these groups with defining requirements, identifying functions of the interface, identifying potential technical ramifications, and developing inclusive documentation. It is not the intention of the work groups to define a database standard, CAD operational guidelines, or CAD product algorithms. Initially, discussions included information sharing opportunities that extended beyond CAD systems, to mobile data applications and other information sources. At this juncture, the primary focus of Project 36 has been limited to setting a standard for the mechanism used to transfer information from one CAD system to another. This transfer mechanism, or interface, will permit each participating agency to operate autonomously yet share information continuously. The shared information may be filtered and displayed according to each CAD system's capabilities and internal agency directives.

Development Approach

Thus far, progress on Project 36 has been slow. Initially, the project team expanded the scope of the project and got bogged down with secondary tasks. However, the project team has recognized the lull in momentum and redirected its efforts using a deliberate and thoughtful approach to the development of a user requirements document. This document will likely identify data elements, evaluation scenarios, and supporting documentation. The team must address several important considerations when identifying data elements, including—

- Incident Creation—The standard must ensure that incident creation for external jurisdictions is filtered according to priority level and agency mission
- Messaging—The standard must recognize that messaging is a critical feature for updating calls for service and/or providing time sensitive information
- Unit Status—The standard must include a requirement that translation tables for unit status be developed by each participating agency
- Incident Status—The standard must include a requirement that translation tables or incident status be developed by each participating agency.

Evaluation testing is a very important component of the development approach and must incorporate all data elements that may be shared between CAD systems. To further complicate the process, evaluation scenarios must be developed that marry data elements across the varied and unique public safety domains. The work groups must ensure that scenarios applicable to each agency type are thoroughly tested.

Development Schedule

The project team has instituted a rigorous schedule to meet the target completion date of August 2002. To do so, the initial draft standard should be compiled by May 2002. To accomplish this task, the working groups arrange a conference call at the beginning of each month. They assemble meeting notes and forward them to the Steering Committee. The Steering Committee holds conference calls at the end of each month, and has tentatively scheduled to meet in a hub city each quarter. The Steering Committee has scheduled its next meeting in Chicago in early November. For more information regarding project team activities, contact Lex Rutter, the Project Chairman, at lrutter@webzone.net or by telephone at (918) 838-5070.

Coordination and Partnerships Efforts

To ensure a smooth transition for this new interoperability solution, strong coordination and partnership agreements are a prerequisite. The project team recommends that a detailed Memorandum of Understanding (MOU) outlining participant responsibilities be instituted in advance of interface implementation. In support of this requirement, the project team intends to develop a comprehensive checklist of issues that should be mitigated before these issues develop into regional challenges, become unmanageable, and drive users to abandon the technology.

Local Impact

According to Steve Souder, Emergency Communications Center Administrator for Arlington County, a number of public safety agencies in the Northern Virginia region view Project 36 as a high priority. To aid in the forward progress, the Fire Communications Subcommittee of the Council of Government (COG) Fire Chief Committee is preparing a document supporting the stance that the scope of Project 36 should be limited to only CAD-to-

CAD communications. Incorporating standards for the transfer of information from mobile data systems and other information sources would then occur in either later phases of Project 36 or would be developed as a separate initiative. Agencies in the Northern Virginia area could serve as a test bed for Project 36. Therefore, input and guidance provided by the region's public safety committees will serve to hasten the development of a valid standard.

Future Impact

The introduction of a CAD-to-CAD interface will impact the public safety and vendor communities as well as non-government entities in a variety of ways. The key operational impact of this interface is the enhancement of communications between participating agencies. Limiting voiced discrepancies and instituting real-time information sharing will reduce the human error rate inherent in information relays. Thus, officer safety and incident response times will improve—an objective of every public safety organization. This new development will also affect the vendor community. As the CAD-to-CAD interface becomes more commonplace, public safety agencies will likely begin to include this feature as a requirement for future CAD procurements. This interface may become a part of every CAD vendor's inventory and product offerings. In addition, this interface could link a non-government entity, such as a call center or third-party dispatch agency, to a region's public safety network. These entities typically provide services to the public such as towing, taxi, and automobile maintenance. It is technically feasible for non-government agencies to take part; however, the access level and information forwarded to their respective databases would be limited in scope and would likely only be specific to the service provided.

Impact for PSWN Program

Representatives from the City of Alexandria Fire Department and the Arlington County Emergency Communications Center are active on the Project 36 committee. It is likely that these organizations will desire to link their respective CAD systems together using the Project 36 standard as a guide. This local venue presents an opportunity for the PSWN Program to support a pilot test of CAD-to-CAD interoperability. Future regional endeavors would then benefit from the lessons learned and best practices identified from the piloted Project 36 initiative.