

Melix

The 'emergency services communication system integrator' company

Emergency service organizations are constantly faced with the challenge of dealing with adversities and public safety crisis in the utmost responsive and time critical manner. All organizations have established emergency call centers to receive public distress calls and assistance request calls from other emergency organizations. Apart of handling telephony calls, operators also handle radio communication for dispatching and handling the response resources: police, fire engine, ambulance personnel and vehicles. The emergency service organizations are often equipped facilities for identification of public caller addresses, geographical mapping information and various call dispatch and internal reference and audit systems for use in handling public safety. For each distress call, there is a large amount of data entry, cross communications and transferring information across a number of systems.

All nation's emergency service organisations would naturally want to improve public safety. Improvement of public safety must include achieving a better and more efficient means of communication – voice and data at the emergency service call center and handling of response resources. Starting at the emergency control call center, organizations often want to achieve the scenario of an incoming call be answered immediate at the fingertip. From this action, caller address information from carrier or public electronic white pages can automatically populate the call dispatcher task form and the map showing the caller address presented automatically to the call taker within a second of the call answer. At the same time, conversation with caller can be typed onto the task form and current response resources and historical record relating to the person and location of interest will automatically appear to assist the call taker/dispatcher to handle the incoming calls swiftly and efficiently. All call handling functions, intercom, radio channels selection, monitoring and control functions can be handled from a single touch sensitive screen. While handling incoming call or making direct outgoing calls, the monitored radio channel audio can be automatically split to left and right ears allowing a call taker/dispatcher to handle both telephony traffic and radio communication with response resources much more efficiently. Skill based call routing will allow much more efficient way of handling incoming calls – across multiple agencies, regional based queuing, time of day overflow operation, shared operation and training (yet isolated) environment.



The opportunities are boundless and the efficiency improvements are enormous. There are existing systems with dedicated functions: PABX/Call center, Computer Dispatch System, Radio Control System. The key element of achieving the operational improvement lies in the integration of these isolated systems. Melix is a company with a strong focus in emergency communication system integration. It is positioned to help emergency service organisations improving their public safety by offering **Consultancy, Design, Development** of system integration services and solutions for the emergency call center

Emergency Communication System Integration

Melix staffs have strong background in developing an advanced, integrated communication call center involving Computer Telephone Interface. Melix consulting and software solution team, consists of staff with experience in designing

- WA Police services CADCOM (Computer Aided Dispatch and Communication) – switching system architecture and interfaces
- Integrated radio and telephony call handling, touch sensitive control terminal,
- Caller Data Management system - reception of carrier data and distribution to control consoles and interface with telephony switching system
- Integration with Central Voice Recording system – annotation of digital recorded voice segment with caller identity
- Reverse Electronic White Pages integration with telephone switching system for automatic filling of caller details in the Computer Aided Dispatch's task
- Regional based routing and operator skill based call routing for optimizing call handling resource
- Call center management reporting – with basic data collection design.
- Integrated operation and training environment – yet maintaining isolation of call handling
- Integrated Single-sign on and user profiling.

Melix staff are well versed with Mil standard system development process – requirement analysis, system and critical system design, subsystem and overall testing review and requirement traceability, test readiness review and function and physical certification audits the use of technology, especially wireless.



Ericsson Emergency Centre Solution Design

Melix has experienced staff in designing overall switching solution that involves integration with Ericsson PABX and the Solidus CTI software suites. In this area, Melix's design experience includes

- Customized Human Machine Interface,
- Redundant Solidus server operation
- Customized switching event handling and interface with external systems
- Malicious Call Trace and Real time interface
- Call Data Record data pre-processing and replication



Customised and Specific Implementation

Although all emergency organizations have the same charter of public safety, no emergency organization operates the same way. Melix will assist to design and implement solutions to fit the organization operational requirement and equipment environment.

Wherever required, Melix's staff – hardware and software development staff can undertake "black box" development ranging from software module development to a comprehensive hardware/software product. Our software development team's software skill sets include

Java, JES

C++, VB

Microsoft Visual development tools,

Web servers and development,

Database

Mobile's technology GPRS and SMS (Short Messages Services)

Contact



Melix Pty Ltd
141 Churchill Avenue
Subiaco, WA 6008 Australia
Phone: 08 6380 1121
Fax: 08 9382 2236
Email: melix@melix.com.au