

## Communications Foundation to Host Major Events as a Strategy for Economic Development

Cisco® IP IPICS facilitates collaboration among multiple public safety agencies, an important capability for hosting major events that stimulate the economy.

### Executive Summary

Local economies receive a boost from major events such as sports tournaments, concerts, and conventions, which generate revenue from lodging, dining, and other visitor spending. To safely host major events, cities need a communications infrastructure that allows all participating public safety agencies to collaborate. Cisco IPICS enables personnel from all participating agencies to join the same channel, using any radio as well as IP phones, cell phones, regular phones, or the Cisco Push-to-Talk Management Console (PMC) software, which emulates a push-to-talk (PTT) radio.

### Challenge

During major events, populations can increase from hundreds of thousands to one million or more, requiring collaboration among multiple public safety agencies. The challenge is that the various agencies - local public safety agencies, highway patrol, and sometimes the FBI and Secret Service, among others - use incompatible radio systems. The traditional solution has been for the hosting city to purchase additional radios to be handed out to collaborating agencies, a large capital expense for assets that are rarely used. Another solution has been to deploy a large team of dispatchers to relay communications between agencies. This approach, however, does not scale well for large events, introduces delays, and opens the possibility of misinterpretation that can compromise effective response.

### Business Benefits

By enabling interoperable communications among all public safety agencies involved with major events, Cisco IPICS provides the following benefits:

- **Economic growth:** Cities can confidently host public events - and gain a competitive advantage with event sponsors - when they have a scalable, interoperable communication and collaboration system.
- **Enhanced public safety:** During event planning, the Cisco IPICS administrator creates one or more virtual talk groups that personnel from all agencies can join using any communications device. Enhanced interagency collaboration increases situational awareness and enables more informed decision making.
- **Cost avoidance:** The local government does not need to maintain a cache of extra radios for the use of collaborating agencies. It also avoids the need to hire additional, temporary dispatchers to relay communications between people using different radio systems.
- **Extended reach:** City executives and other personnel who do not have radios, or who are outside the reach of the radio network, can join the channel using IP phones, cell phones, regular phones, or PCs with the Cisco PMC software.

- More complete coverage: With Cisco IPICS, personnel in areas with poor or no radio coverage can communicate using other communications devices, such as PTT radios.
- Enhanced command and control: The incident commander or chief of communications can use the Cisco PMC to monitor all channels simultaneously. Lights indicate which channels are active.
- Reliability and resiliency: By using Cisco IPICS, local governments gain the inherent benefits of IP networks, including resiliency, scalability to accommodate the public safety requirements of large events, and management using widely available skills and tools.

## Solution

The Cisco IPICS portfolio of products and applications provides cost-effective and comprehensive communications interoperability between push-to-talk (PTT) radio systems and devices such as mobile phones, IP phones, public switched telephone network (PSTN) phones, and PC clients. Based on proven IP standards, Cisco IPICS takes advantage of ubiquitous IP networks to extend the reach of traditional communications networks and also to provide notification using email, pager notification, and Short Message Service (SMS). Using Cisco IPICS, public sector agencies and enterprises can intelligently apply resources to streamline operations and rapidly respond to routine events as well as emergencies.

A typical Cisco IPICS solution for hosting major events includes:

- Headquarters: Cisco IPICS server
- Branches and mobile command vehicles: Cisco integrated services router with Land Mobile Radio (LMR) feature set, which converts radio signals from analog to IP, and supports tone control at each district office
- Dispatch centers: Cisco PMC

Municipalities can also create mobile emergency operations centers by deploying Cisco IPICS in mobile command vehicles. The mobile Cisco IPICS server connects to the IP network over the radio network, a wired connection, satellite, or outdoor wireless mesh network.

## Intelligent Networking

Cisco IPICS takes advantage of the Cisco Service-Oriented Network Architecture (SONA), an architectural framework that enables organizations to maximize the value of their network services and resources. The Cisco SONA framework makes it possible to centrally manage all radio systems, other voice systems, and data over a common, unified platform, increasing efficiency and the value of the city's network assets while lowering capital and management costs.

## Why Cisco?

- Financial stability: Radio systems have very long life spans, and municipalities look for a vendor with the financial health and stability to provide continued support.
- Independence from radio vendors: Cisco IPICS works with any vendor's radio system, giving municipalities the flexibility to deploy the system that best meets its business needs at the time.
- Availability of local partners for support: Local governments that deploy Cisco IPICS can receive deployment assistance and ongoing support from Cisco Advanced Services or local Cisco Advanced Technology Partners.

- Integrated IP: Whereas other vendors have approached radio interoperability by layering an application on top of the IP network, Cisco designed Cisco IPICS from the beginning to take full advantage of the inherent advantages of IP, including open standards, availability, redundancy, resiliency, and scalability. Integrated IP makes Cisco IPICS a comprehensive communications interoperability platform that is faster and has a longer life than interoperability systems that use IP for transport alone.

### For More Information

For more information, go to: <http://www.cisco.com/go/ipicssolution>.



**Americas Headquarters**  
Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
[www.cisco.com](http://www.cisco.com)  
Tel: 408 526-4000  
800 553-NETS (6387)  
Fax: 408 527-0883

**Asia Pacific Headquarters**  
Cisco Systems, Inc.  
168 Robinson Road  
#28-01 Capital Tower  
Singapore 068912  
[www.cisco.com](http://www.cisco.com)  
Tel: +65 6317 7777  
Fax: +65 6317 7799

**Europe Headquarters**  
Cisco Systems International BV  
Haarlerbergpark  
Haarlerbergweg 13-19  
1101 CH Amsterdam  
The Netherlands  
[www-europe.cisco.com](http://www-europe.cisco.com)  
Tel: +31 0 800 020 0791  
Fax: +31 0 20 357 1100

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

©2007 Cisco Systems, Inc. All rights reserved. CCVP, the Cisco logo, and the Cisco Square Bridge logo are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, IQ Expertise, the IQ logo, IQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networking Academy, Network Registrar, Packet, PIX, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0701R)