SOLUTION OVERVIEW

CISCO AND CACI TRANSFORM RAPID COMMUNICATION DEPLOYMENT AND RESTORATION WITH TACTICAL COMMUNICATIONS KIT

TRANSFORMING MOBILE COMMAND AND COMMUNICATION
In an emergency or disaster relief situation, “first-in” communications often rely on a combination of satellite phones and land mobile radios (LMRs) to support local and long-range communications. While these legacy solutions can be effective they are often unreliable, inflexible and expensive. Response agencies and aid organizations need a reliable and fast communication solution that can stand up in the harshest of environments. Cisco Systems and CACI International have partnered to develop a tactical communications kit designed to quickly, securely and reliably establish voice, data and video communication over IP networks in any environment.

CACI TACTICAL COMMUNICATION KIT
The tactical communications kit is designed to provide rapidly deployable voice interoperability and data/video information sharing in a matter of minutes. The unique form factor can withstand harsh conditions and is simple to transport and use. Based on proven Commercial Off The Shelf (COTS) technologies, Cisco and CACI provide a tactical, ruggedized solution using open-standard Internet Protocol (IP). Cisco secure Voice over IP (VoIP) technology is integrated with wireless and satellite connectivity to make the tactical communications kit a powerful asset for communication in environments when power is not available, cellular infrastructure is non-responsive and radio networks are unavailable or saturated. The solution includes a rugged mobile communications case containing requisite routing and switching, security, Internet Protocol (IP) telephones, fax/secure phone capability and various antennas and connectors. The system can operate on external battery or generator power (AC or DC) and will interface with a variety of standards-based uplinks including Ethernet, DSL, T-1 and Satellite space-based communications assets providing secure, reliable 24/7 global communications.
To achieve comprehensive communications interoperability, Cisco and CACI have integrated Land Mobile Radio (LMR) into an IP network – LMR over IP (LMRoIP). This capability converges the voice from LMR systems allowing interaction between standard-based IP telephony systems, in essence allowing the IP phone to “call” a radio. LMRoIP’s architectural benefits allows for disparate radio systems (e.g. VHF, UHF, etc) to talk to each other. The IP telephony solution integrates with all commercial satellite platforms and can be configured to operate with other external voice systems. In addition, IP Telephony offers flexibility with multiple egress options:

- IP Communications over Satellite & IPSEC VPN
- GlobalStar / Iridium SatCom Voice Integration
- POTS Integration (on-scene)
- Secure Phone (e.g. STU-III)
- Fax Connectivity
- Standard wireless access for building and wireless access up to 20 miles/32 kilometers (using 802.11a/5.8Ghz Bridging)
- Scalable to 36 IP Phones per Mobile Communication Kit (wired and wireless)
- Optional Integration with Cisco IPICS™ (IP Based Interoperability and Collaboration System)

**FIGURE 1 TACTICAL COMMUNICATION KIT CAPABILITY OVERVIEW**

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IF YOU CAN'T COMMUNICATE YOU CAN'T COORDINATE - MISSION CRITICAL VOICE, DATA AND VIDEO

The tactical communications kit has been designed for deployment by defense agencies, first responders and relief agencies around the world. It was designed as a suitcase size “network-in-a-box” to address the problem faced by many international service organizations and disaster relief agencies operating in areas severely lacking in telecommunications infrastructure. In disaster and humanitarian relief situations there is a need to establish voice and data communications in 72 hours or less. In the initial stages of disaster relief, the first relief workers are highly mobile; they are doing situation assessments, determining what the key needs are and marshaling the resources and the equipment that's necessary to fulfill these needs. Agencies need to have voice and data communications to make that happen. Video is also critical, especially when faced with bio or pandemic hazards. Specifically designed to be deployed to remote field locations; it's ruggedized, can run from a DC battery or generator, and is cooled by multiple fans. The suitcase portability includes a case that can be airline-checked as luggage or be easily transported to the disaster or emergency area.

FIGURE 2 EXTENDING REACH AND CUSTOMIZED DEPLOYMENTS
Using the Tactical Communications Kit, multiple remote deployment scenarios are possible. The kit allows for wireless data, voice, and video and uses spaced-based or terrestrial connectivity allowing users to reach their office or HQ networks, wherever they may be, and the resources housed there. The agnostic uplink capability allows users to connect to out of area network resources using satellite communications from any provider such as iDirect, DVB-RCS, INMARSAT and many others. This capability coupled with satellite bandwidth allows multiple users to access the Internet, file sharing and email simultaneously from a single kit. The VoIP support that the solution provides allows for local wired and wireless IP phone coverage. When combined with the use of a central or distributed VoIP Cisco Call Manager it can significantly reduce per-call satellite and cellular toll charges. The solution can also be configured as a PSTN gateway to provide local off-net call support (VoIP to PSTN).

ABOUT CISCO SYSTEMS
Cisco Systems, Inc. is the worldwide leader in networking for the Internet, this year celebrates 20 years of commitment to technology innovation, industry leadership and corporate social responsibility. Information on Cisco can be found at http://www.cisco.com.

ABOUT CACI INTERNATIONAL INC.
CACI International Inc provides the IT and network solutions needed to prevail in today's new era of defense, intelligence, and e-government. From systems integration and managed network solutions to knowledge management, engineering, simulation, and information assurance, we deliver the IT applications and infrastructures our federal customers use to improve communications and collaboration, secure the integrity of information systems and networks, enhance data collection and analysis, and increase efficiency and mission effectiveness. Our solutions lead the transformation of defense and intelligence, assure homeland security, enhance decision-making, and help government to work smarter, faster, and more responsively. CACI is the IT provider for a networked world. Visit CACI on the web at www.caci.com.

For more details on the Tactical Communication Kit please email: tck-info@external.cisco.com

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on the Cisco Web site at www.cisco.com/go/offices.

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