



Failure in Communication = Failure in Response

Continuity of operations planning goes beyond business as usual

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Even in everyday situations, there are miscommunications and misunderstandings. During stressful or crisis situations, these communication breakdowns escalate rapidly. Often these problems are attributed to issues with interpersonal and intergroup communi-

Videoconferencing is becoming an important part of contemporary emergency management. During the recent Strong Angel III exercise in San Diego (CA), Tandberg's videoconferencing technology linked key participants for real-time, face-to-face coordination and management of a pandemic disaster scenario.

cation, personality clashes, and uncertainty as to hierarchy and responsibility. In most cases, these failures can be mitigated with the development of a crisis

communications plan that outlines responsibility, hierarchy, and team roles.

The right communication plan is only one part of the effective crisis-



This Mobile Crisis Communications Unit operated by Anne Arundel County Emergency Management Department is equipped with an integrated videoconferencing system that visually enhances vital communications during emergency response management. The video system also permitted the unit's responders to communicate face-to-face with family and personnel at home during the agency's grueling deployment to Hurricane Katrina.

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response equation. Failures and limitations of communication technology can have an even greater impact. Break-downs in both message and medium can hamper or incapacitate normally effective response teams. Without reliable, integrated, standards-based communication technology, the ability to effectively transmit and retrieve information, as well as maintain effective control and coordination of personnel in a crisis, becomes nearly impossible.

IMPROVING RESPONSE WITH FACE-TO-FACE COMMUNICATIONS

Organizations routinely deploy their most reliable personnel in crisis situations and utilize all information available. Yet these same organizations often revert to lower-quality communication channels, such as email, fax, and audio to send and receive complex messages about a crisis situation. While these tools are effective in sending basic data, other less-measurable information is dif-

ficult to relay, especially given the heightened stress caused by the circumstances. This gap in communications creates tremendous opportunity for failure.

Early research has shown that videoconferencing is an essential aid in the delivery of complicated descriptive messages. Videoconferencing provides a richness and immediacy to crisis communications that other communication tools cannot. By providing "face-to-face" communications via live video connections from central command to the field, as well as regional, state, or national Emergency Operations Centers, or even local hospitals and schools; assessment, response, and recovery operations dramatically improve:

- **Incident Assessment:** Multiple teams can collaborate face to face on the scope of a disaster, regardless of location, and eliminate the risk of contamination from in-person contact. Medical and disease-control experts

can conduct real-time assessment of patients in the field via videoconferencing.

- **Response Coordination:** Live and streamed video allow public information officials to deliver status reports about the crisis's effect on resources such as food and water to remote field offices in real time or to raise community awareness on the crisis and share essential information.
- **Worldwide Collaboration:** In instances such as a pandemic, an unusual disaster, or the need for a coordinated global response, subject matter experts and other high-level decision makers can be tapped in real time for their input and expertise.

RAPID RESPONSE, RAPID RECOVERY

Recently, a major collaborative disaster-response exercise between civil and military organizations, Strong Angel III, was held in San Diego (CA) to demonstrate and practice interoperability and how to establish an effective crisis communications network. The scenario imagined that a pandemic virus, coupled with a wave of cyber attacks, had quickly spread across the globe, isolating U.S. cities from federal assistance and knocking out power, cell-phone service, and Internet access.

Videoconferencing was used to instantly link key participants – including government agencies, private companies, and universities – for real-time

face-to-face communications. Utilizing satellite and Evolution-Data Optimized (EVDO – a wireless broadband standard) connectivity, room-based and mobile video solutions kept participants fully connected when traditional communication technologies were out of service. The seamless interoperability of standards-based communication systems, such as Tandberg's videoconferencing solutions, was recognized as a critical requirement for disaster response. "A picture is worth a thousand words," states Sara Diaz, special projects manager for San Diego's 3C Public Safety interoperable communications project. "We want these agencies to see each other, see the stress on their faces, utilize maps, and work together to make decisions faster."

Dr. Eric Frost, executive team member and co-director of San Diego State University's Homeland Security Masters program, described the impact of visual communications and its reliability during Strong Angel III. "During most emergencies, critical communications are done by radio, IM, or maybe, on the high-end, email," notes Frost. "One of the things that profoundly doesn't work with these technologies is that there is almost no trust capability. In a major disaster you often have very little understanding of whom you are really talking to, especially as you communicate across agencies. This impacts your willingness to make a decision that may cost lives and that will greatly impact other people. That's the power of visual communication – you forget about the fact that you're not right there, because you're talking to a person. This gets you into mode of thinking, 'We're going to do something; we're going to make a decision,' and from that lives are going to be impacted."

ADDING MOBILITY EXTENDS THE REACH

Anne Arundel County (MD) is a large and complex region, which creates unique challenges in coordinating effective crisis response. Jim Weed, director of the Anne Arundel Emergency Management Department, understood that in addition to having a hierarchical, responsibility-specific communication plan and integrated communications network, the network had to include a visual element, as well as the ability to send and receive voice, video, and data.

His county needed a communications solution that could address his unique needs and could reach the entire county, regardless of location.

To address this challenge, Anne Arundel County created a unified communications network, which included integrated voice, data, and standards-based videoconferencing systems. The fire department, EOC, public health department, and police were equipped with visual communications to enable county-wide collaboration. In addition, Anne Arundel also equipped its Mobile Crisis Communications Unit (MCCU) with a rugged, mobile videoconferencing system designed for use in field operations. So, regardless of the location of a crisis, the MCCU can send and receive data and live visual images of the situation as it unfolds directly to the crucial decision-making team at central command. Information is delivered in real time, and decisions are made by experts with the most accurate data possible.

Beyond assessment and recovery, video communications is making an impact on the emotional health of Anne Arundel County's first responders, as was seen during the Katrina crisis. The county deployed its emergency response team and MCCU to Louisiana to help with disaster-recovery operations. This grueling, sometimes emotionally draining effort was helped by the video capabilities of the MCCU. The Anne Arundel response team used the video units to talk to their families back at the EOC, providing the responders with much needed face-to-face time with their families, improving their outlook, and boosting their self-esteem. According to Director Weed, "This situation demanded that our guys perform at their very best, and the ability for the team to use the Tandberg solution to communicate with their families was critical to the success of the operation."

INNOVATIVE TECHNOLOGY


New video technology developments such as high-definition (HD) video, portable Web cameras, and streaming and archiving solutions are dramatically improving the video experience and helping first responders and disaster preparedness professionals around the world explore innovative techniques in crisis communication. HD videoconferencing is one of the most promising of

these emerging technologies. Significant improvements in video quality and the level of detail in the picture are helping first responders more accurately communicate, assess, and respond in a crisis. HD also establishes a more "in-person" feeling for users, for a more lifelike, real-time experience.

New server-based PC video solutions enable users of laptop computer to participate in videoconferences from any location. Organizations can expand their reach by adding an additional level of mobility that leverages existing technology investments – in effect, visually enabling entire communities with a simple click of a button.

Streaming and archiving solutions are also making an impact. By capturing, and/or using Web technologies to stream video, organizations increase their ability to share important information with a larger audience, leverage existing knowledge resources, and improve response by enabling on-demand viewing of archived content anywhere, anytime. In crisis situations, live videoconferences can be captured and distributed to both local and national decision makers quickly through a Web browser.

EFFECTIVE COMMUNICATION = EFFECTIVE RESPONSE AND RECOVERY

Ultimately, effective crisis management is about saving lives and ensuring the safety and well-being of our communities. The right communication plans, along with the ability to collaborate visually, regardless of location, provide first responders with the tools they need to better coordinate assessment, response, and recovery operations. Emergency operation plans such as that of Anne Arundel County have allowed first responders to discover how powerful video is to their operations. In a crisis situation, it ensures everyone in their community is informed – from those on the front lines responding, to the citizens they are sworn to protect. 

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