

Safety and resilience in urban areas



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J L Smither looks at lessons from a major exercise in California last year, which was designed to test the vulnerability of an urban area to a terrorist attack

URBAN AREAS FACE UNIQUE challenges in safety. Because of the high population and amount of commerce moving through urban areas on a daily basis, they are both prone to accidents and are attractive to terrorists.

The state of California sponsors an annual exercise series to test preparedness and response readiness throughout the state. The 2010 Governor's Annual State-wide Golden Guardian Exercise Series was developed, co-ordinated and led by the Governor's Office of Homeland Security Exercise Branch. It focused on the development and testing of emergency operations plans from local, regional, state, and federal levels. Areas of play included many urban sites, such as the City and Port of Oakland along the San Francisco Bay. During the Oakland scenario, a terrorist cell caused several explosions and fires throughout the Bay Area, resulting in the release of hazardous materials.

Exercise evaluators tracked participants' actions and noted both strengths and areas for improvement. The full after-action report, *Oakland Golden Guardian 2010 After-Action report/Improvement Plan (AAR/IP)*, can be viewed on the website provided at the end of this article.

During the exercise, responders in the Oakland area set up an emergency operations centre to manage the event. One of the goals of this centre was to facilitate situational awareness among all responding organisations by keeping representatives from each group in the same physical area with various communications tools.

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■ One of the most valuable situational awareness tools in the emergency operations centre was the availability of a live video feed of the event.

Prior to the exercise, the Oakland Police Department partnered with a private communication company to provide video surveillance of the incident site. The Police Department deployed a reconnaissance helicopter fitted with live video feed technology

and a mobile communications system. In the emergency operations centre, exercise participants were able to watch the real-time response without leaving their posts. This increased situational awareness dramatically. In addition, participants noticed that the continual presence of the Police Department helicopter kept non-authorised flight crafts from entering the exercise area. The exercise after-action report recommends that responders make arrangements for this sort of surveillance to be available during future response operations.

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■ Despite the success of the pre-planned surveillance technology and other aspects of response, the after-action report recommends some areas for improvement.

For example, during the exercise, the Oakland Police Department was not able to provide the appropriate personal protective equipment to all officers. After the initial explosions and release of hazardous materials, the Police Marine Unit arrived to the incident site and set up a perimeter around San Francisco Bay. The Marine Unit responders enforced perimeter security and assisted with response and first-aid efforts effectively. However, the Unit did not have the equipment necessary to protect responders from the HazMat spill. Had this incident been a real-world emergency, these responders could have potentially been exposed to thionyl chloride. The after-action report recommends ensuring that responders not only have the appropriate personal protective equipment, but also that they are trained on the proper use of this equipment.

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■ Both the police and fire departments were affected by communication issues during the exercise.

In addition to the city's police department, the Oakland Fire Department also played a major role in this full-scale exercise. Both departments deployed on-water assets to help with the response, but all these assets lost communication – with each other and with the emergency operations centre – shortly after being launched from the shore.

Although participants in the emergency operations centre could observe the actions of these on-water assets via the live video feed, they had no way to communicate with them. Also, the on-water assets could not provide critical emergency information to the emergency operations centre, which confused situational awareness among all responders.

With more effective interagency communication, the response could have been smoother and more organised. The after-action report recommends creating a dispatcher role to assist in facilitating communications between the field and the emergency operations centre.

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■ Although the Oakland Fire Department deployed on-water assets, these were not fully equipped to conduct waterside fire suppression efforts effectively.

The Oakland Fire Department was able to respond to the HazMat release, but could not address all incident site hazards. However, the department activated a mutual aid agreement with the city of San Francisco to request the use of a fire boat for exercise response operations. The after-action report recommends that all agencies evaluate all hazards upon arrival on-scene and co-ordinate efforts accordingly.

The exercise scenario for the Oakland venue of the 2010 Golden Guardian Exercise Series emphasised the vulnerability of an urban area to a terrorist attack. However, by exercising this scenario in advance, the Oakland area is more prepared and is likely to be more resilient in the face of such an attack. For more information on urban preparedness and resilience, please visit Lessons Learned Information Sharing at www.llis.dhs.gov. **CSJ**

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JL Smither is the outreach and partnerships manager for Lessons Learned Information Sharing, the US Department of Homeland Security's network of lessons learned, best practices, and innovative ideas for the emergency response and homeland security communities. The projects in this article, and others, can be found on the Lessons Learned Information Sharing site: www.llis.gov