

DHS Science and Technology Directorate

Responder Technology Alliance Aims for the Responder of the Future

The RTA marshals resources to tackle the toughest challenges

What will first responders of the future look like? Ten years from now, how will responders communicate, receive situational information, sense hazards, and protect themselves? The Responder Technology Alliance (RTA) not only seeks to answer these questions, but also works to turn the answers into practical real-world tools. Established by the First Responders Group within the Department of Homeland Security Science and Technology Directorate, the RTA brings together responders, industry, federal agencies, research institutions, investors, and academia to focus on the most difficult technology challenges along the road to the Responder of the Future.

Existing research and development efforts usually focus on individual technologies that meet specific responder needs rather than suites of technologies or integrated systems. Although this approach steadily advances responder technologies, it falls short of meeting challenges of broad cross-disciplinary scope. The RTA bridges this shortfall.

The Responder of the Future: Aware, Protected, and Networked

The RTA envisions the Responder of the Future as:

- Aware, thanks to a resilient body-worn system of sensors that enhances the individual's situational awareness and aids decision making
- Protected by next generation multi-threat personal protective equipment that incorporates thermal, ballistic, stabbing and penetration, and chemical and biological agent protection
- Networked through secure, integrated voice and data communications technology

Taken together, these technological advances constitute an Integrated Responder Solution (IRS). Developing the IRS requires solving extremely difficult technical challenges beyond the capabilities of any single government or industry entity. Through its alliance of partners from the emergency response community, research and development sector, industry, and investment community, the RTA leverages needed expertise and resources both at home and internationally.

A proven methodology for producing results

The RTA employs a proven methodology that draws on Pro-



The RTA focuses the efforts of three broad sectors on the development of future responder technology.

ject Responder 4, which gathers technology-needs information from hundreds of responders nationwide, to identify responders' needs and requirements. The deliverables for the early phases of the RTA reflect this methodology and include:

- IRS Project Problem Statement that delineates responder needs and provides a vision model
- IRS Technology Market Assessment Reports that evaluate available and emerging technologies and identify potential collaborators — investors, developers, and manufacturers — whose expertise and interests match the project's goals
- IRS Solutions Management Plan to guide systems engineering and solutions modeling
- Improved Voice and Data Communications prototype and an operational test and evaluation report on the prototype's performance

Building a sustainable resource for future technology development

RTA's alliance of responders and technology partners serves as a long-term resource for delivering solutions at market speed and establishes a process for building multi-disciplinary teams capable of accelerating development and commercialization. As a result, the RTA is making possible the elusive goal of integrated solutions necessary for the Responder of the Future.



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To learn more about the Responder Technology Alliance, contact SandT@hq.dhs.gov.