



Issue Background

The President's National Security Telecommunications Advisory Committee (NSTAC) routinely encourages the Government's effective use of research and development (R&D) to bolster the resilience of telecommunications and information systems that directly or indirectly impact United States national security and emergency preparedness (NS/EP) communications functions. Accordingly, the NSTAC has sought to orchestrate a dialogue between industry, Government, and academia through R&D Exchange (RDX) Workshops, resulting in wider awareness of and support for programmatic enhancements to NS/EP communications capabilities.

History of NSTAC Actions

In 1990, the growing prevalence of hacker incidents led to the formation of the NSTAC's Network Security Task Force, which was tasked to assess the threats to and vulnerabilities of the Public Switched Telephone Network. A key component of the task force's work included examining R&D issues related to security with a particular emphasis on improving commercially applicable tools. To explore security technology R&D issues in greater depth, the RDX Workshop concept first surfaced in 1991. To date, there have been eight workshops:

- **RDX Workshop #1** (1991): the first workshop consisted of two separate Government and industry events intended to provide a forum for key stakeholders to share their unique perspectives on R&D issues.
- **RDX Workshop #2** (1996): the second workshop facilitated a discussion of network security problems affecting NS/EP telecommunications, identified R&D programs in progress to address those problems, and identified future security technology R&D needs.
- **RDX Workshop #3** (1998): held at Purdue University's Center for Education and Research in Information Assurance and Security in West Lafayette, Indiana, the workshop examined collaborative approaches to security technology R&D.
- **RDX Workshop #4** (2000): the fourth workshop, held at the University of Tulsa, in Tulsa, Oklahoma, examined issues of transparent security in a converged and distributed network environment.
- **RDX Workshop #5** (2003): held at the Georgia Tech Information Security Center at the Georgia Institute of Technology, in Atlanta, Georgia, the workshop was themed "*Research and Development Issues to Ensure Trustworthiness in Telecommunications and Information Systems that Directly or Indirectly Impact National Security and Emergency Preparedness.*"
- **RDX Workshop #6** (2004): the sixth workshop, held in Monterey, California, reconsidered the R&D issues associated with trustworthy NS/EP telecommunications addressed at the 2003 RDX Workshop and examined progress made, unfinished work, and new challenges.
- **RDX Workshop #7** (2006): held in Ottawa, Ontario, Canada, the workshop focused on the need for international collaboration in the area of cybersecurity research to better secure networks.
- **RDX Workshop #8** (2008): the most recent workshop, held at Motorola's Corporate Offices in Schaumburg, Illinois, addressed the need to analyze the evolving environment for NS/EP communications as technologies continue to converge and others emerge presenting new challenges.

Recent NSTAC Activities

As a result of the discussions of the 2006 workshop, the NSTAC began to conduct intense analysis of identity management (IdM) security concerns to increase education and awareness of the subject and strengthen collaboration amongst nations in regards to IdM R&D initiatives. The RDTF developed an NSTAC working definition of IdM and an inventory of existing IdM-related activities in the private and public sectors. It also performed a gap analysis that determined the best role for the NSTAC is to continue to monitor and examine the development of IdM standards in the international community.