

DRAFT

Statement of The Honorable John H. Marburger, III
Director, Office of Science and Technology Policy
Before the Subcommittee on Science, Technology and Space
Committee on Commerce, Science, and Transportation
United States Senate

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Good Morning Mr. Chairman and Members of the Subcommittee. I am pleased to have this opportunity to testify on the response of the science and technology sector to the war on terrorism. OSTP is playing a significant role in this response that I want to describe for you today.

Outreach

Those of us engaged in the federal response to the terrorist attacks have been impressed by the avalanche of offers to assist from Americans who want to help in any way they can. During my brief tenure as Director of OSTP, I have endeavored to grasp the scope of this volunteered assistance, and to shape a federal interface to mobilize it effectively in support of the nation's war against terrorism. To this end, I have been meeting with industry associations, non-profit groups, umbrella organizations for universities and scientific societies, and the National Academies. OSTP has established well-defined relationships with these entities to receive input from and provide guidance to their own antiterrorism projects and initiatives. At the same time, OSTP has exercised its congressional and executive mandates to coordinate activities within the federal agencies relevant to terrorism issues. OSTP is consequently in a position to call on organizations external and internal to the federal government as we provide technical support to the Office of Homeland Security, and other offices responsible for different aspects of the war against terrorism.

I wish to acknowledge here, with gratitude, that my awareness of the need to reach out in the

way I have described was quickened by your remarks, Mr. Chairman, during my confirmation hearing. I know that you had been thinking about how to enlist the nation's considerable technical expertise to address national challenges – the current war against terrorism and homeland security being the most immediate. Consequently, I have acted on this idea of yours to recruit talent in a systematic way. It has been a topic of discussion in every one of the many meetings I described above.

Some of these organizations are umbrellas for entire sectors of science, industry, and higher education. The American Council on Education, for example, provides a very efficient and rapid means of communicating with the entire higher education sector. Its President, Dr. David Ward, has encouraged positive action by every branch of the complex post-secondary educational system through weekly communications. The American Association of Universities provides more direct access to the leaders of the institutions that perform most of the nation's federally sponsored research. The National Association of State Universities and Land Grant Colleges is a link to the entire set of public universities, which carry out important research and extension services throughout the nation. The National Academies for Science, Engineering, and Medicine provide similar access to the nation's research community, as do the various disciplinary professional societies such as the American Physical Society, the American Chemical Society, etc., and their umbrella organization, the Council of Scientific Society Presidents. The officers of these organizations have expressed a willingness to designate a point of contact for terrorism issues, and in some cases they have formed committees and working groups to address specific issues such as bioterrorism. The National Academies, in particular, have created a committee specifically to interact with federal agencies on terrorism.

As a result of my meetings with these organizations, I concluded that a "virtual science corps" has already come into existence, and that creative use of existing public and private sector mechanisms can help make present networks stronger and more effective.

Interagency Coordination

To take advantage of these mechanisms, I have acted to coordinate federal agency activities related to terrorism, and provide a coherent interface between the federal government and the non-governmental organizations described above.

In October, I called a meeting of chief science officials from more than 15 agencies to discuss the role of science and technology in combating terrorism. Several representative agencies made presentations on their current antiterrorism-related activities, and all were asked for additional input to follow up the meeting. I convened a second meeting of this group in November to discuss current activities of OSTP and the formation of a new antiterrorism task force under the National Science and Technology Council. These meetings gave science officials from various agencies an opportunity to interact and discuss areas of potential cooperation. It also provided a database of contacts that could be immediately contacted when necessary. Representation by other offices in the White House in these and other terrorism-related meetings varies but generally includes: OMB, Office of Homeland Security, Domestic Policy Council, Office of the Vice President, and Cabinet Affairs.

Under the structure of the National Science and Technology Council, I am establishing an interagency Antiterrorism Task Force with several working groups to address broad categories of issues. The four categorical working groups focus on Biological/Chemical Detection and Response; Radiological/Nuclear/Conventional Detection and Response; Protection of Vulnerable Systems; and Social, Behavioral, and Education Sciences. We are establishing a Technical Response Team as a fifth working group. This action-oriented team will establish small subgroups on an ad hoc basis to grapple with emergencies as they arise. The team will serve as a clearinghouse for technical reviews of the many incoming proposals on technologies related to homeland security. It is important that these proposals be assessed for scientific merit and referred, as necessary, to the appropriate agency or organization for further review, feedback, and action as appropriate.

Many of these proposals have come directly from individuals, and many individuals have volunteered their services to assist in the war against terrorism. In this connection, we have been working closely with the National Coordination Office for Information Technology R & D (NCOITRD) in the Department of Commerce to respond to these offers. The NCOITRD will be developing a repository/database of non-government people that have offered their expertise to help the federal agencies counter terrorism. Contact information and relevant expertise will be available on a password-protected website for access by authorized persons in the Federal government to connect critical human resources to the important work of both agencies and the National Academies.

Homeland Security Technical Support

As a case study of how a “virtual science corps” can work within the context of the federal agencies is the technical support OSTP is providing to the Office of Homeland Security. During the fourth week in October, Governor Ridge called me to ask that OSTP provide technical support for the treatment of US mail potentially contaminated by *Bacillus anthracis*. The day after his phone call I convened an interagency meeting with chief science officials and the U.S. Postal Service to ascertain the technical issues that the Postal Service was encountering. This led to formation of an interagency technical team that within days began evaluating the irradiation facilities at Lima, Ohio, and Bridgeport, New Jersey. The key point is that when the request came to OSTP, we were able to assemble an interagency team quickly and formulate a plan of attack that has worked. In this case, most of the needed expertise existed within federal agencies and the US Postal Service. Some of our meetings on the mail issue have included experts from higher education identified by the participating agencies. In the future, I expect it will be necessary to reach out beyond the agencies through the network of non-governmental organizations to tap the immense reservoir of talent that exists in the private sector.

Congress has mandated that OSTP establish partnerships across federal, state, and local levels,

as well as fostering public-private partnerships in general, and this role may be of special value in meeting the diverse challenges of homeland security. OSTP does not play an “operational” role that would compete with agencies, and we do not duplicate agency expertise. Rather we act as coordinators and recruiters of technical expertise in the service of governmental policymakers and line managers. Because of our historical cross cutting role, we can do this rapidly and efficiently.

Preparedness

Last month, the President signed an Executive Order to establish a Presidential Task Force on Citizen Preparedness in the War on Terrorism. This task force is co-chaired by the heads of the Office of Homeland Security and the Domestic Policy Council and is to identify, review, and recommend appropriate means by which the American public can enhance the nation's defenses against terrorism through voluntary actions. I have taken the President's message forward in meetings with the scientific and technical community and found especially strong interest in supporting State and local public health and safety officials in combating possible terrorist attacks within the United States.

Mr. Chairman, I know you have been an articulate advocate of the idea that there should be a national volunteer organization of trained and well-coordinated IT professionals from U.S. technology companies. And that they would stand ready with computer equipment, satellite dishes, wireless communicators and other resources to recreate and repair compromised communications and technology infrastructures.

While there are many associated issues that will need to be considered, let me however suggest the following:

- 1) It seems logical to have a diversity of means for ensuring communications, e.g., satellites as well as land lines;
- 2) We should encourage voluntary preparedness, such as the IT disaster recovery procedures,

which helped so many firms return to business quickly after September 11th;

- 3) We should promote voluntary standards that enhance the effective coordination of disaster responses, such as the U.S. National Grid map standard for geospatial information systems;¹ and
- 4) We need to pay attention to protecting our “invisible infrastructure,” the radio spectrum, which enables public safety services like the Global Positioning System and E-911 for wireless communication².

I believe that having a diverse portfolio of communication choices, common sense preparedness, standards and protocols for working together, and reliable public safety services will help enable us to weather and defeat any terrorist attacks on our IT infrastructure.

Conclusion

An overarching goal for all of the efforts I have described is coordination of the activities of all those who can contribute to ensuring that our nation is safer. We are drawing upon the technical expertise housed in our science and technology agencies, making sure that relevant information and test results are disseminated to the appropriate parties, and preventing duplication of effort.

In the short time I have been in this position, I have been impressed with the breadth and depth of scientific and technological resources available within the federal government to address the major challenges we are facing today – great as they are. But I am just as certain that those resources will not be used to their greatest effect unless we join forces and resolve the technical issues together.

¹ The USNG standard for uniform presentation of geospatial information is now being voted on for adoption as part of the National Spatial Data Infrastructure by the FGDC Steering Committee.

² E-911 enables emergency services to locate mobile phones placing 911 emergency requests.