

1) Brief history of Cooperative Threat Reduction (CTR), WMD elimination and the NAS CTR 2.0/Global Security Engagement report

I'm honored to have been asked by the National Academies to co-chair the organizing committee for this workshop with Dave Franz. I would like to recognize the insights and inputs of the entire committee in trying to shape an agenda and identify participants who are up to the task at hand.

Before I launch into any substance and the introduction of the panelists, I would like to take a moment to recognize the passing of an unsung champion of CTR. My former boss, Pete V. Domenici, passed away last week in Albuquerque at the age of 85. He was a good man and a great boss and part of a dying breed of legislator. He had convictions and voted accordingly, but he also realized that bipartisanship brought greater public policy dividends for the American people. He also did as much as anyone in expanding, promoting and funding these programs, especially, but not exclusively, those at the Department of Energy.

The primary goal of this workshop is to convene key experts and practitioners from the larger CTR community to address the next ten years and beyond.

The coming day and a half will offer insights on the state of CTR efforts across the U.S. government and consider how they should adapt or possibly be reframed for an ever-changing global security environment.

In addition, to the extent that the CTR 2.0 model has been tried for several years through the bioscience engagement programs at DOD and Department of State, we should examine how these programs are working in light of the convergence of chemistry and biology, the revolution in the life sciences, the needs and interests of the scientific communities in different countries, evolving international political realities, and domestic needs for accountability.

We also hope that you – all participants – will help us identify actionable next steps that might be carried out by the Academies, other NGOs, and the U.S. government.

In addition to these key goals, the Organizing Committee posed a series of questions that we hope to address in this workshop. Allow me to briefly review these questions.

1. What changes have occurred in the threat landscape? How has the identification of future global threats evolved, and how can lessons learned in threat identification be incorporated into CTR programs going forward?
2. What are the core principles and objectives driving CTR programs today and do they need to be changed to respond to current and anticipated contexts?
3. Are the strategies and programs in use today well aligned with the principles and objectives of the CTR programs for the coming decade? What is the right balance of priorities?
4. What actions can the United States take to increase the chance that the improvements made with both past and future U.S. investments are sustained over time?
5. Of those recommendations from the 2009 report that have been implemented, what has been effective, what should be adapted, and what is still to be done?
6. What strategic challenges exist in government? What obstacles have arisen and what strategies might be effective in overcoming them?
7. How can the United States work more effectively bilaterally and through existing multilateral mechanisms? How do we decide with whom to engage? How can the U.S. agencies better partner with NGOs, industry, and international organizations to achieve CTR goals?
8. Have evaluation efforts been effective in informing CTR decision making and assessing project-related and overall results? How should these efforts (such as strategic planning and evaluation efforts) be modified for the coming decade?
9. Changing organizational culture is a key element of achieving many CTR goals, how can we best work with countries to strengthen organizational culture for

security and nonproliferation? How do we strengthen our own organizations' security culture?

Let me turn for a moment to a couple of substantive remarks before I introduce my esteemed co-panelists.

I will start with what has not changed.

CTR has always garnered bipartisan support. Although its founding champions have departed and new champions have yet to emerge, there is no reason to anticipate any precipitous decline of support or partisan political points being scored by attacking these programs. That said, and Ron will speak to this as well, metrics or measures to quantify impact remain a challenge for many of these programs.

In this arena, I would note that on September 7, Representative Banks, a Republican from Indiana, introduced a bill entitled "The Future of the Nunn-Lugar Program Act." (No catchy acronym for this one.) In brief, 30 days after passage of the bill, DOD will direct an FFRDC to assess the current, anticipated and potential future requirements for CTR over the coming 10 years. The bill states, more specifically that the assessment include:

- ✓ The requirements and capabilities necessary for reducing nuclear, chemical and biological threats;
- ✓ identify any capability gaps for current and future CTR;
- ✓ recommendations for actions, including legislative, to modernize CTR;
- ✓ actions to modernize the command and control enterprise and the role of the DTRA Director;

As per usual, the bill calls for an interim report within a year, and grants 18 months for completion the full report. Because this was introduced so recently, I do not have any ground-truth on the likelihood of this bill getting passed. Perhaps participants from the Congressional Research Service that are here would know more regarding its genesis and prospects.

Still on the topic of what hasn't changed.

WMD proliferation is an esoteric threat to a large segment of the global population. Perhaps with the exception of nuclear security garnering greater widespread attention as a result of the Security Summit process, addressing WMD threats is not a top priority for most governments. In the CTR arena, political will translates into a commitment, which then can help equate with sustainment of measures after US funding sunsets.

The critical importance of science and technical engagement. In a broad lessons learned assessment, scientific engagement has frequently been the entry point for expanded cooperation, provided the glue and continuity during different phases of engagement, and the foundation for sustainment of efforts post-engagement. This must not be forgotten.

Lastly, CTR is not elimination versus capacity building versus engagement. It's not either or, it's all of the above. We need threat reduction activities across the spectrum from influence regarding intent to interdiction and crisis response. While implementation of CTR 2.0 is well underway, the most recent larger actions of the USG, including DOD, have harkened back to the elimination days of CTR's legacy. Libya and Syria are the obvious examples. This is, however, a question of emphasis in the portfolio at any given moment based on threats and opportunities.

And, now, what has changed.

The compression of timelines and the increasing degree of uncertainty. This is not a predictable environment within which to do forecasting regarding the future. As one example, I was doing some DOE strategic planning on a 10-year time horizon. In the course of that project, we experienced the Arab Spring, the demise of Osama Bin Laden, and the Fukushima event. Two of these required a bit of a reset regarding trends identified earlier and the future course of those trends as a result of these unanticipated events.

Uncertainty underscores the previous point regarding the spectrum of tools necessary to address the threat. We need all of the above in warm, ready standby.

I'm sure others will touch on changes in science and technology. Yes, these advances are rapidly changing the landscape, but I believe this increases the import of scientific engagement in these efforts.

I believe that, at a minimum, the conceptual framework would entail the following:

Full spectrum capabilities and readiness, including robust scientific and technical engagement.

Connectivity. Inroads with the right people for situational awareness and rapid response.

Accountability. From personal to program to government-wide accountability.

With these introductory thoughts allow me to turn to the real experts.