## Submitted Testimony Of

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"Science Centers Program"

Before the House Committee on Energy and Commerce Subcommittee on Oversight and Investigations January 23, 2008

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#### Introduction

Thank you for the opportunity to speak with you today about one of State Department's successful programs to prevent proliferation of Weapons of Mass Destruction (WMD)-related expertise. We believe that the Science Centers program has been effective over the years and we appreciate the support we have received from Congress. We work through two multilateral centers in Moscow and Kyiv to redirect the activities of personnel capable of contributing to the development and deployment of weapons of mass destruction. This is an era of global terrorist threats that need to be met, while at the same time dealing with rising costs and budget constraints. These realities require us to continually assess our own efficiency and effectiveness while ensuring that important nonproliferation work continues to get done.

#### **Review of Department of State Cooperative Threat Reduction Programs**

Let me say a few words about our Cooperative Threat Reduction (CTR) programs generally. State's CTR programs have a global mission to redirect weapons of mass destruction (WMD) expertise worldwide. We do this by coordinating and overseeing the U.S. participation in and funding of the Science Centers to engage former Soviet Union (FSU) era biological, chemical, nuclear, and missile expertise through the centers in Moscow and Kyiv, the International Science and Technology Center (ISTC) and Science and Technology Center in Ukraine (STCU), as well as scientist engagement efforts in Iraq and Libya.

State's redirection effort also includes the Bio-Industry Initiative (BII), which creates international commercial opportunities and public-private partnerships for former weapons scientists thereby promoting self-sustainability, reconfigures several large-scale former Soviet biological weapons production facilities for civilian biotechnology purpose, and engages self-identified former weapons personnel in projects aimed at accelerating drug and vaccine development to combat highly infectious diseases. Finally, State coordinates the BioChem Redirect (BCR) Program, which redirects former Soviet chemical and biological weapons personnel into peaceful sustainable civilian work and engages high risk facilities, with participation of U.S. experts from the Department of Health and Human Services (HHS), Department of Agriculture (USDA), and the Environmental Protection Agency (EPA).

Even as we continue to work in Russia and the FSU, State's CTR programs also provide us with the capability to address the new and emerging global WMD threats that we face, including in Asia, the Middle East, and Africa. State's Biosecurity Engagement Program (BEP), which seeks to prevent bioterrorism by reducing terrorist access to potentially dangerous biological materials, equipment and expertise, initially focused on countries and regions outside the FSU where emerging bioscience sectors, highly infectious disease outbreaks, and terrorist threats coexist. Similarly, State's Chemical Security Engagement Program (CSP) engages experts from around the world to decrease the chemical threat by improving chemical threat awareness, improving chemical security and safety best practices in academia and industry, and increasing chemical security and safety by fostering collaborations between chemical professionals in academia and industry.

In addition to meeting critical nonproliferation objectives, these programs advance Department of State efforts toward transformational diplomacy by building and maintaining ties to regions and countries of U.S. national security interest and by helping states, institutes and individuals build the capacity to help themselves. CTR programs also promote economic development and self-sustainability for institutes and individuals while achieving their mission of reducing the threat of WMD proliferation worldwide.

# U.S. Engagement at International Science and Technology Center (ISTC) and the Science and Technology Center in Ukraine (STCU)

The Science Centers program consists of the International Science and Technology Center (ISTC) in Moscow and the Science and Technology Center in Ukraine (STCU) in Kyiv and supports efforts to reduce the risk of WMD terrorism by engaging and redirecting scientists, engineers, and technicians in the FSU who have biological, chemical, nuclear or missile expertise. In addition to redirecting former Soviet WMD personnel, the Science Centers projects also aid civilian scientific research. Our Science Centers program focuses on evolving the Science Centers in Moscow and Kyiv toward partnerships with host governments, and continuing to engage and promote transparency and self-sustainability at high priority former WMD institutes.

The Department of State acts as the U.S. representative in the two international science centers, the ISTC and the STCU, as well as our related redirection efforts, the BioIndustry Initiative (BII) and the Bio-Chem Redirect Program. Under the direction of Acting Under Secretary John C. Rood, each of these State-led efforts meets critical national security goals and is driven by threat information on nonproliferation and counter-terrorism. Thus, we work closely with the entire U.S. interagency to identify the most pressing global threats for all of our Global Threat Reduction (GTR) programs, including the Science Centers in the FSU. State has authorities for the Science Centers Program through the Nonproliferation, Antiterrorism, Demining, and Related programs (NADR): chapter 9 of part II of the Foreign Assistance Act of 1961 (22 U.S.C. 2349bb et

seq.). Additionally, the Science Centers support the objectives of the National Strategy to Combat Weapons of Mass Destruction, the United Nations Security Council Resolution 1540, and the President's National Strategy for Combating Terrorism.

U.S. Government funding for cooperative threat reduction activities, including the ISTC and STCU, is appropriated by the U.S. Congress to the Department of State, Department of Defense (DoD), and the Department of Energy (DOE) as the main entities charged with fulfilling the 1992 Nunn-Lugar Cooperative Threat Reduction Program mandate. Under the Nunn-Lugar Program, the three Departments work very closely on complementary efforts to lessen the global threat of WMD materiel and expertise proliferation from the FSU.

#### Focusing Funding to Achieve U.S. Nonproliferation Goals

While we had heavily funded general science projects with nonproliferation and scientific merit in the past, since the beginning of 2007 funding of regular projects has instead been concentrated on a small number of institutes that face the most important proliferation risks. In 2007, State worked closely with other U.S. agencies, including the Department of Energy, to focus Science Center activities on the highest priority institutes in the FSU and to help those institutes become financially self-sustainable. We have engaged with the other funding countries at the ISTC and STCU in a discussion about how to help institutes achieve those objectives and have approved new programs for 2008 at both Centers to achieve institute financial self-sustainability.

Projects under consideration for funding are reviewed in an interagency process to address issues including proliferation risk, consistency with U.S. policy, technical merit, and market potential. These reviews also address the risk that the projects might inadvertently contribute to increasing the military capabilities of the recipient states, including Russia. Reviews are conducted on hundreds of proposals annually and there are also annual financial audits of the Centers' operations and a sample of U.S.-funded projects. The Defense Contract Audit Agency (DCAA) and our scientists also conduct audits of selected projects annually.

# Transformation of the Centers to Meet Global Nonproliferation Goals and Become Self-Sustaining

In order to address new and emerging global WMD threats, State led discussions at the ISTC about exploring opportunities to transform it through joint nonproliferation and counter-terrorism projects, as well as joint projects in countries outside Russia and the CIS. State participated in drafting a Strategic Vision document for the ISTC outlining graduation, global nonproliferation, and efficiency goals. The Russian government is also addressing the question of how to transform the ISTC. In 2008, State intends to continue the discussion about transforming the ISTC to meet the emerging, new proliferation threats and to inaugurate a similar discussion at the STCU, a topic heavily stressed at its September 2007 Advisory Committee meeting.

In addition to funding for regular scientific research and development projects, Partner project funding, both from other U.S. Government agencies and U.S. private industry, is an increasingly important funding component at both Science Centers. Funding for Partner projects from the U.S. and other countries continues to rise and is essential for the future of the Science Centers to sustain their important nonproliferation work. For this reason, we have emphasized the importance of expanding efforts to attract global partners to the Science Centers and have contributed funding to these efforts towards making the Science Centers self-sustainable in the future.

These objectives contribute to our vision of the transformation and evolution of the Science Centers toward a greater partnership between the financing parties, member nations, and the Centers to jointly address emerging, global nonproliferation challenges. Evolving cooperation on the redirection of former Soviet defense industry scientists to peaceful scientific pursuits is an excellent basis for cooperation on joint counter-terrorism nonproliferation programs and nonproliferation programs in other nations outside the FSU.

#### **Host State Cost-Sharing**

State is also engaging host states to increase cost-sharing in the funding of projects. In 2007, the ISTC signed a Memorandum of Understanding with Belarus wherein Belarus contributes funds directly to its institutes for items such as equipment when projects are funded through the ISTC. State also jointly funded Targeted Research Initiative (TRI) projects through the STCU in Ukraine and Azerbaijan, splitting the cost 50/50, between the funding parties and the host state respectively. For 2008, State aims to continue the tradition of joint-funding TRIs with Ukraine and Azerbaijan and hopes to reach an agreement with Moldova on sharing the costs of TRIs. State has also encouraged this kind of scientific and nonproliferation cooperation with host states at the ISTC, specifically by requesting Russian funding for projects and staff salaries.

#### Achieving Institute Financial Self-Sustainability

In place of State's previous levels of regular project funding, the U.S. has focused its funds toward specific institutes to achieve self-sustainability and "graduation" from State project funding. We re-evaluated the emphasis on regular project funding in favor of multilateral partnerships to meet emerging global nonproliferation and cooperative threat reduction challenges and needs. Therefore, we proposed to meet this objective by emphasizing scientific institute self-sustainability and "graduation" from U.S. regular project funding.

Of the thousands of scientific institutes in the ISTC and STCU member nations, we categorized approximately 200 core institutes as "priority" institutes for a self-sustainability/graduation discussion. We determined that many of these institutes were already self-sustainable and have grouped the remaining institutes by the year in which we believe they can reach financial self-sustainability through ISTC engagement,

implementing an institute-specific self-sustainability plan, and by gaining enough funding on their own.

Our over-arching goal to redirect FSU WMD expertise includes giving these and other institutes the tools to become self-sustainable – to be able to conduct peaceful world-class research and development by attracting national and international funding independent of regular project grants from the U.S. (and perhaps other financing parties) via the ISTC or STCU. We define this as "graduation" from U.S. regular project funding. We will look to the ISTC and STCU to help us to implement this vision, but we will continue to work closely with individual institutes and the Science Centers to develop individual sustainability plans and a systematic approach to self-sustainability.

One self-sustainability component has been, and will continue to be, commercialization in its largest sense, meaning greater emphasis on national and international industrial partnerships to develop technologies and entities with market potential. Aspects of commercialization are already in place at the ISTC via its commercialization program know called Innovation Initiatives (formerly the Commercialization Support Program) and at STCU through the Targeted Research Initiatives. For both these commercialization initiatives, State has worked with and drawn from the Department of Energy's own commercialization efforts in the Initiatives for Proliferation Prevention program.

Regarding the GAO's recommendation to work with the Administrator of the National Nuclear Security Administration and the Secretary of Energy to develop a joint plan to better coordinate the efforts of DOE's Initiatives for Proliferation Prevention Program (IPP) and the ISTC's Innovation Initiatives, State concurs with the recommendation to more closely coordinate these program elements and will consult with DOE on implementing this recommendation. We expect that self-sustainability for many institutes will be achieved through contribution to host government peaceful priorities – leading to increased host government funding for the institutes.

In 2007, State led discussions on creating institute sustainability programs at both Centers. A presentation on the need to graduate institutes to self-sustainability was given to both Centers' at their fall Governing Board meetings in 2006, and the U.S. hosted a multilateral discussion with participants from both Centers and the funding parties on how to create and implement an institute sustainability program, as well as discussed what the measures for success would be. For FY2008, State has made it a priority to advance the Center's newly approved programs for institute financial self-sustainability and to contribute significant funding for these programs. For example, the U.S. has added a day of meetings to a routine Coordination Executive Committee meeting this March in order to discuss how institute-specific sustainability plans at the ISTC will be implemented by the funding parties. Similar discussions will also be held at upcoming STCU meetings. In this spirit, State is working with the Centers to focus all remaining and additional activities on improving the financial self-sustainability of scientists and institutes.

#### **Exit Strategy**

We have developed an exit strategy for leaving the scientists engaged and the institutions that employ them better prepared to sustain themselves in peaceful work. The ISTC and STCU are now major nonproliferation implementation platforms and complement other USG programs, including the U.S. Department of Energy's IPP and the U.S. Department of Defense's Cooperative Threat Reduction (CTR) program, and programs of other governments. These coordinated programs engage WMD or dual-use scientists in peaceful research and also design and fund services, training, and competency building to guide former Soviet WMD/missile and dual-use experts toward economic self-sustainability and a permanent transition to stable and peaceful civilian employment.

The Department of State seeks to "graduate" to financial self-sustainability approximately 20 former Soviet defense-related institutes across the biological, chemical, nuclear, and missile spectrum per year up to 2012. Also, our discussion on transformation of the Centers to address global nonproliferation goals is based on the need to position the Centers so that they may continue to sustain themselves in their important work as well as engage host states in global nonproliferation aid and activities without direct foreign aid from the U.S. and other funding parties. Further, by expanding the Partners Program, we hope to increase private investment in the Centers as State gradually reduces funding in order to redirect resources to other State programs which aim to address new and emerging global proliferation threats.

#### Challenges

While the Science Centers program has been successful in many areas, State faces a challenge as we seek to strategically transform the two centers and our redirection efforts through those centers. Our current efforts are targeted at transforming the centers to focus on graduation and sustainability, joint nonproliferation and counterterrorism programs, greater financial responsibility on the part of host states, and working cooperatively to address the worldwide terrorist threat. State is working hard with all the stakeholders, partners, and funding countries to accomplish these goals.

#### Conclusion

We will continue to carefully review DCAA audit reports, taking special note of recurring problems, and will follow up with the Centers about those issues. Also, we will continue to ensure that 50% of scientists on a project have WMD expertise as a guideline for funding decisions. We are also working with the science advisors from the national labs to improve the effectiveness of our programs.

We believe that better cooperation and partnership on nonproliferation issues between all U.S. agencies redirecting expertise in the FSU, and specifically between Science Center parties, deepens the bonds between all constituent parties, thereby strengthening the shared nonproliferation mandate and contributing to global betterment as well.

As we continue to address proliferation concerns in Russia and the former Soviet Union (FSU), we also must address new and emerging proliferation threats in regions with high terrorist presence and/or activity through other threat reduction programs of the Department of State that address chemical, biological, radiological, and nuclear (CBRN) threats reduction worldwide.

Thank you.

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