Testimony of Page O. Stoutland, PhD

Vice President, Nuclear Materials Security Program

Nuclear Threat Initiative

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Managing Interagency Nonproliferation Efforts: Are We Effectively Securing Nuclear Materials Around the World?

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Good afternoon, Chairman Akaka, Ranking Member Johnson, and distinguished members of the Committee. Thank you for the opportunity to testify today about the grave threat posed by nuclear terrorism and the importance of ongoing global and U.S. efforts to mitigate that threat.

My name is Page Stoutland and I'm the vice president for Nuclear Materials Security at the Nuclear Threat Initiative (NTI). NTI is a non-partisan, non-governmental organization founded and co-chaired by former Senator Sam Nunn and CNN founder Ted Turner. Since its inception in 2001, NTI has worked to strengthen global security by reducing the risk of use and preventing the spread of nuclear, biological and chemical weapons. Our work on these important issues includes efforts to secure nuclear materials around the world and catalyze the work of others, particularly governments, to do the same.

My remarks today will focus primarily on the urgent need for leaders to reach a global consensus on priorities for nuclear materials security and on steps the international community and individual countries should take to enhance security.

Because there has been no baseline assessment of nuclear materials security conditions around the world, NTI recently developed a first-of-its-kind Nuclear Materials Security Index. The Index scores the 32 countries that have what we call weapons-usable nuclear materials—the highly enriched uranium or plutonium needed to build a bomb. The Index also scores 144 additional countries that have small amounts or none of these materials, but must not be used as safe havens, staging grounds or transit points for illicit nuclear activities.

Our hope is that the Index will serve as a much-needed basis for a dialogue on security priorities and can be used as a baseline against which progress on materials security can be measured. The 2010 Nuclear Security Summit was in large part responsible for elevating government engagement on the problem, and we hope this month's summit in Seoul and the 2014 summit will build on that progress.

In developing the Index, we found that governments generally are more aware of the threat posed by unsecured nuclear materials and the urgent need to strengthen security and also are more engaged in the effort to develop solutions.

That was the good news.

We also, however, confirmed that there is currently no global consensus on what steps matter most to achieve security. There is no agreed international system or globally accepted practices for regulating the production of, use of, and security requirements for weapons-usable nuclear materials. Further, a deliberate lack of transparency about security measures makes it impossible to hold states accountable for their security responsibilities.

Additionally, stocks of weapons-usable materials continue to increase in a few countries, making global materials security a difficult and moving target. Many countries have incomplete security and control measures in place, and some states lag on joining international agreements aimed at tighter security or following up on their commitments when they do join.

Before I go into more detail about our Index and the security of nuclear materials generally, let me take a few moments to address the threat.

We believe that the potential for nuclear terrorism remains high. There are currently thousands of tons of nuclear materials in the world, and those materials today are stored at

hundreds of sites in over 30 countries. Some of those sites are well secured. Many are not, leaving weapons-usable nuclear materials vulnerable to theft or sale on the black market to terrorist organizations that have publicly stated their desire to use nuclear weapons. As Senator Nunn has said, there is evidence today that the elements of a perfect storm are in place: an ample supply of weapons-usable nuclear materials, an expansion of the knowledge and technical know-how to build a crude nuclear bomb accessible by the Internet or through rogue scientists, and the determination of terrorist organizations to do it.

As you know, the result of a nuclear blast at the hands of terrorists, whether it be here in Washington, D.C., in Moscow or in Tokyo, Tel Aviv or Jakarta, would reverberate around the globe, with tens or hundreds of thousands of casualties, disruptions to markets and commerce, long-term implications for public health and the environment, and risks to civil liberties – not to mention the cost of any response.

That's why all countries with weapons-usable nuclear materials have a responsibility to account for them, to take steps to secure them, and to provide continued assurances to the rest of the world that those materials are not at risk for theft or diversion.

And that is why NTI, working with the Economist Intelligence Unit (EIU) over the course of the last year, undertook the development of this Nuclear Materials Security Index. It scores and ranks countries according to a set of five categories and 18 indicators, and detailed information about that process and the rankings can be found at www.ntiindex.org. I will, however, briefly explain the five key factors we assessed to evaluate security conditions. They are:

- Quantities and Sites. How much material does the country have and at what locations?
- Security and Control measures. What kind of requirements for protection measures are in place?
- Global Norms: What international commitments related to materials security has the country made?
- Domestic Commitments and capacity: What is the domestic capacity of the country to fulfill those international commitments?

- Societal factors. Could a given country's societal factors – such as corruption or government instability – undermine its security commitments and practices?

Taken together, these factors comprise a country's nuclear materials security conditions.

We assessed countries with highly-enriched uranium, separated plutonium and the plutonium in mixed-oxide fuel across the five categories. There are 32 countries with more than 1 kg of these materials. We assessed another 144 countries with less than 1 kg or no weapons-useable materials in three of the categories.

An international panel of experts helped guide our process, EIU gathered data from publicly available sources and we sought to engage the 32 countries with weapons-usable nuclear materials through briefings and by asking them to validate the data we had collected. Ultimately, more than half of the countries validated the data, providing important data confirmations and corrections. We have worked to have the index be as transparent and as objective as possible, so that over time it may be refined and progress on materials security measured.

Let me reiterate an important point: The Index is not merely a rating system. It is not meant to be used to congratulate some countries and chastise others. Rather, it is designed to be used as a resource and a tool for countries and international organizations as we seek to make the world a safer place.

So now let me summarize for you some of our key recommendations, which go directly to the important question you have raised with this hearing: Are we effectively securing nuclear materials around the world?

There's no question that to do so is a very big challenge – but it is not impossible. The tools, technology and know-how exist for governments to keep dangerous materials secure – and it is urgent that governments act to mitigate the threat. Because no single country can address the threat alone, all countries have a responsibility to work collectively and individually to reduce the threat. In addition, coordination between technical, policy and diplomatic communities – within countries and among international partners is critical.

NTI's Index offers recommendations both for the global community and for individual countries.

An overarching recommendation is that all states must work together to build a system for tracking, protecting, and managing nuclear materials in a way that builds confidence that each state is responsibly fulfilling its obligation. A necessary part of developing such a system will be establishing an international entity or significantly strengthening an existing entity, such as the International Atomic Energy Agency (IAEA), to play a stronger role in developing standards and conducting peer reviews. Specific recommendations include:

- Establish an international dialogue on priorities for materials security. A global consensus on the highest-priority actions needed for robust nuclear materials security does not yet exist. States should begin, through the Nuclear Security Summit process or some other high-level intergovernmental process, to build a common framework for action. Establishing and prioritizing the actions needed to strengthen nuclear materials security is essential, particularly for states with limited capacity and resources.

- Benchmark progress and hold states accountable for security. Over the past 20 years, there have been pockets of progress on securing and eliminating weapons-usable nuclear materials. For future accountability and to track progress around the globe over time, however, it is critical that governments provide official and accurate inventory declarations of weapons-usable nuclear materials as well as the current status, or baseline, of their nuclear materials security conditions.

- Build appropriate transparency to increase international confidence. We understand, of course, that many details about security for sites where materials are stored are – and should be – protected. But other information, such as the general approaches to materials security and broad descriptions of materials security regulations and materials holdings, could be made public and could greatly enhance international confidence in a country's security measures.

Individually, countries can do more as well, including the United States. The U.S. ranked 13th overall, among countries with weapons-usable nuclear materials. That rating was affected, in

part, by the quantity of materials and number of sites where they are stored—if, however, the quantities and sites were not included, the U.S. would rank second, indicating high scores in the other areas. In the future, the U.S. could improve its ranking by ratifying relevant international agreements critical for reinforcing U.S. leadership in this area.

Individually, countries can:

- Stop increasing stocks of weapons-usable nuclear materials.
- Eliminate stocks of weapons-usable materials completely where possible.
- Strengthen security and control measures, including physical protection, control and accounting, and personnel measures at facilities and during transport of nuclear materials.
- Bring all civilian production facilities under international safeguards.
- Ratify and implement negotiated treaties.
- Target assistance to states with urgent needs.

Great progress has been made in securing dangerous nuclear materials since the end of the Cold War, but we all know that new and dynamic threats have emerged. Although the risk of all-out nuclear war between superpowers has faded, the risk of a terrorist attack with a nuclear device has increased.

We urge the international community and individual countries to act because we know that in order to build a bomb, terrorists must get access to nuclear materials, and that makes global nuclear materials security only as strong as the weakest link in the chain.

There's no question that the best defense against catastrophic nuclear terrorism begins with securing weapons and materials in every country and at every facility where they are stored, and it continues with ensuring that materials cannot be illicitly shipped or traded or sold on the black market.

Again, as Senator Nunn often says: As we consider the unthinkable – one of the world's great cities devastated at the hands of terrorists with a crude nuclear bomb – we must ask ourselves: What could we have done, what should we have done, to prevent it?

We are encouraged by the reactions to our new Index, by progress on President Obama's goal of eliminating all vulnerable nuclear material around the world and by ongoing attention to

these issues through the Nuclear Security Summit process. To build a global system for nuclear materials security, we must establish an international consensus on priorities and construct a framework so that progress can be measured and tracked – and so that countries can be held accountable for their role in keeping the world safe from the devastation that could be wrought by determined and capable terrorists.

Within that context, it is incumbent on the United States today to continue to play a leadership role – and there are important steps Congress should take toward that end.

Looking back for a moment, it is clear that U.S. leadership has made a real difference on nuclear security in the 25 years since the end of the Cold War. And for a number of key programs, bipartisan support from Congress has been crucial, beginning with passage of the Nunn-Lugar legislation in 1992 by a vote of 86-8. That groundbreaking law, which fostered a joint U.S.-Russian effort to help Moscow keep control of its weapons, materials and know-how in the face of the Soviet Union's collapse, established the Cooperative Threat Reduction Program (CTR) to secure, deactivate and destroy weapons of mass destruction. Bipartisan congressional support for CTR's Material Protection Control and Accounting Program also has fostered additional work to upgrade and better secure nuclear weapons and materials at sites across Russia and former Soviet states.

Today, it is imperative that Congress continue to support these critical programs and continue to support U.S. leadership on this issue. We also strongly urge the Senate to complete ratification steps on the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM) and the International Convention on the Suppression of Acts of Nuclear Terrorism (ISCANT). Doing so would set a powerful example for the world and reinforce the United States' role as a leader on nuclear security.

Great progress has been made on nuclear security in recent years. But the threat remains, and there is much work to be done if we are to prevent a catastrophic act of terrorism on U.S. soil or elsewhere. We welcome the U.S. leadership provided through the summit process, and we are optimistic about continued progress and commitments coming out of the Seoul summit. We believe our Nuclear Materials Security Index can help inform that process and serve as a

valuable tool for governments and international organizations as they engage in the important work of setting priorities to better secure and protect some of the world's deadliest materials.

I would like to take the opportunity again to thank this committee for your work and attention to these important issues. I very much appreciate the opportunity to testify before you today, and I am happy to answer any questions.