

## Sam Nunn Co-Chairman, Nuclear Threat Initiative "The Race Between Cooperation and Catastrophe" IAEA Conference March 16, 2005

Thank you, Anita. I thank Baroness Symons for hosting this important conference on behalf of the United Kingdom. I thank you, Director General ElBaradei, for your strong and effective leadership in moving the world to greater action against our greatest threat -- the nuclear threat. I thank you both for inviting me to offer my views here in London.

Former US Secretary of State Dean Acheson, when asked to give a definition of foreign policy, replied: "It's one damn thing after another." Today in our quest to prevent nuclear proliferation and to prevent catastrophic terrorism we are faced with one damn threat after another and one damn change after another.

Our most dangerous threats have changed quickly and our responses are changing very slowly – far too slowly. We are in a race between cooperation and catastrophe, and the threats are outrunning our response.

If a nuclear weapon were detonated here in London, or in any of the world's major cities, it would change our world forever. Beyond the horror and the immediate death – and the lives that would be shortened by radioactive fallout – the casualties could also include civil liberties, privacy, world confidence and the global economy.

With so much at stake, our citizens have every reason to ask: "Are we doing all we can to prevent a nuclear attack?" My emphatic answer is "no, we are not." We have, however, taken some important steps, including:

- The Nunn-Lugar Cooperative Threat Reduction program working since 1991 to secure and destroy weapons and materials in the former Soviet Union. This program helped Kazakhstan, Ukraine and Belarus get rid of all their nuclear weapons a historic achievement.
- The G8 commitment launched three years ago to create and fund the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction.
- The recently launched US-Russian Global Threat Reduction Initiative to remove and secure highly enriched uranium from research facilities around the globe.
- The IAEA Nuclear Security Fund launched to help member states strengthen the security of nuclear materials worldwide.

- The commitment by Libya to give up its nuclear weapons program following skillful diplomacy led by Great Britain and the United States, with important oversight by the IAEA.
- The recent Bush–Putin summit where the President of Russia and the President of the United States each made a personal commitment to enhance and accelerate efforts to secure nuclear weapons and nuclear materials worldwide.

These are all indispensable steps for global security, but we have miles to go before we sleep. We must remove roadblocks – we must provide more resources – we must convert pledges to programs and words to deeds. We must develop a global partnership against catastrophic terrorism that is effective, focused, and truly global. This includes every nation with materials to safeguard and every nation who can contribute to safeguarding them.

Increasingly, we are being warned that an act of nuclear terrorism is inevitable. I am not willing to concede that point. But I do believe that unless we greatly elevate our effort and the speed of our response, we could face disaster.

Let me explain my sense of urgency by describing three nuclear-related threats we face today:

## Threat 1. A terrorist attack with a nuclear weapon

Imagine the following scenario: Under cover of darkness, terrorists slip into a nuclear research reactor in Belarus. Assisted by insiders, they take fifty kilograms of highly enriched uranium and head for a safe house that is equipped with machine tools, chemicals, bomb designs -- everything necessary to turn a terrorist group into a nuclear power.

A few days later, intelligence agents discover the safe house, where they find machine tools with traces of highly enriched uranium – but no bomb. The combined security forces of many governments deploy to guard hundreds of ports and airports and thousands of miles of coastline. Yet the bomb moves through a border crossing – undetected by radiation sensors because it is shielded by a thin layer of lead. At midday in a city of several million people, the world suffers its first nuclear strike in sixty years.

The day after – what would we wish we had done to prevent it?

- We would wish that the world's top security priority had been a global effort based on best practices to upgrade the security of all nuclear weapons and weapons-usable materials and to promote a culture of security at all our facilities. As Graham Allison has said, we must protect this material as well as we protect Fort Knox and the Russians protect the Kremlin jewels.
- We would wish that the G8's Global Partnership had turned its pledges into programs and directed its resources aggressively against the most urgent dangers as it committed to do almost three years ago in Canada.

- We would wish we had moved faster to implement the Global Threat Reduction Initiative to remove and secure nuclear weapons materials from research facilities around the world.
- We would wish we had adopted the recommendations of Director General ElBaradei by putting a moratorium on additional facilities for uranium enrichment and converting existing reactors to low-enriched uranium thereby cutting off the wide distribution of this bomb-making material around the globe.
- We would wish that the US and Russia had insisted on bilateral transparent accountability of tactical nuclear weapons in both the US and Russian arsenals.

The day after – I believe we would wish we had done all those things. Why aren't we doing them now?

## Threat 2. A terrorist attack with a dirty bomb

Now, imagine the following scenario: a terrorist group with insider help acquires a dangerous quantity of cesium-137 from a medical facility. The terrorists use conventional explosives to incorporate the powdered cesium chloride into a "dirty bomb," and detonate it in the financial district of Paris or London or Tokyo or Beijing or Moscow or New York -- dispersing the cesium isotope across a 60-square block area. The explosion kills a couple dozen people and millions evacuate the city in panic. Billions of dollars of real estate is declared uninhabitable. Cleanup is estimated to take years and cost additional billions.

The day after a dirty bomb attack – what would we wish we had done to prevent it and to mitigate the damage if it occurs?

- We would wish that we had worked harder to develop a risk-based global inventory of vulnerable radioactive sources and better prioritized our efforts to secure them through a partnership effort around the globe.
- We would wish that we had worked harder to secure radioactive sources at each stage of their lifecycle from their production through their shipment, use, and disposal a cradle to grave approach to dangerous nuclear materials.
- We would wish that we had ensured that first responders had plans, protective gear and decontamination equipment in place to respond to an attack, and that we had mounted a serious public education and training program to mitigate the consequences of the attack.

The day after – I believe we would wish that we had done each of these things. Why aren't we doing them now?

## Threat 3. A sharp increase in the number of nuclear weapons states.

Imagine the following scenario: North Korea continues to turn its spent nuclear fuel into bomb-grade plutonium and manufacture nuclear weapons, and then suddenly tests a weapon – as India

and Pakistan did in 1998. Nationalists in Japan and South Korea push their governments to develop nuclear weapons. China, in response, expands its own nuclear weapons arsenal and joins the US and Russia by putting its weapons on a hair-trigger state of readiness. Iran continues playing cat and mouse, until it has developed enough highly enriched uranium to build several nuclear weapons.

As Iran and North Korea become nuclear weapons states, other nations re-examine their options. Before a decade passes, Egypt, South Korea, Japan, Saudi Arabia, Brazil, Argentina and Indonesia have become nuclear powers – provoking greater regional tensions, greater pressure on other nations to go nuclear, greater chance of nuclear accidents, and greater danger that weapons or materials could fall into terrorist hands. The Nuclear Non-Proliferation Treaty becomes an artifact of history.

After this occurs, what would we wish that we had done to prevent it?

- We would wish that we and our allies had developed a time-urgent, coordinated, and
  direct diplomatic approach with North Korea and Iran to end their nuclear weapons
  programs, using both carrots and sticks. I am pleased that last week's announcement of
  the US-European initiative on Iran seems to be moving in that direction. At this stage, I
  would call it creeping cooperation.
- We would wish we and other nations had insisted on a system of stronger rules and stronger enforcement, or as the Carnegie Endowment termed it "Universal Compliance" to prevent nations from acquiring nuclear weapons capability.
- We would wish that we had created a nuclear cartel made up of states with fuel cycle facilities that would guarantee nuclear fuel at favorable market rates to other states, thereby removing any pretext for new states to develop enrichment capabilities of their own.
- We would wish that the nuclear weapons states, especially the US and Russia, had visibly and steadily reduced their reliance on nuclear weapons at a time when we were asking others to renounce nuclear weapons. In other words, we would wish we had set an example of devaluing rather than enhancing the importance of nuclear weapons. As Director General ElBaradei has said, it's hard to tell people not to smoke when you have a cigarette dangling from your mouth.

How do the nuclear powers get the cigarettes out of their mouths after five decades of chain smoking? I have a few suggestions:

- 1. The US and Russia could follow the Treaty of Moscow with other substantive actions by adding benchmarks for progress, mechanisms for verification, timetables for reductions and a mutual pledge to eliminate warheads, not just delivery mechanisms.
- 2. The US could move forward with the Comprehensive Test Ban Treaty and work toward ratification of this Treaty along the lines that former Chairman of the Joint Chiefs General Shalikashvili outlined in 2001.

- 3. The US and Russia could recognize that our very survival depends on the accuracy of each other's early warning systems. We could follow through on the initiative begun in 1998 to develop a joint early warning center to prevent false warnings and greatly reduce the danger of a catastrophic mistake. (Who knows? This concept could spread to other nuclear states, perhaps India, Pakistan and China).
- 4. The US and Russia could remove our weapons from hair-trigger alert so that both leaders would have more time to gather data, exchange information, gain perspective, discover an error and avoid an accidental, mistaken, or unauthorized nuclear launch.

The day after we wake up and discover several new nations with their fingers on the nuclear trigger and with dramatically increased opportunity for terrorists to gain nuclear material – I believe we would wish that we had done all of these things. Why aren't we doing them now?

No matter where you call home, the central organizing security principle of the 21st century should be preventing the spread or use of nuclear and other weapons of mass destruction. For this mission, we need all the tools in all of our collective arsenals. The IAEA is front and center in this quest. We must strengthen your mission, your authority and your resources.

We know what it looks like when the leaders of the world unite – when they listen to each other - when they work as a team in confronting common threats. We will recognize it when we see it, but the clock is ticking. We are in a race between cooperation and catastrophe. If we have a nuclear disaster, the world will demand immediate action. Why wait until the day after? We must do it now.