US Under Secretary of State for Arms Control & International Security

John Bolton

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It's a pleasure to be here today. And I really congratulate the Department of Energy and the Ministry of Atomic Energy in Russia and the Kurchatov Institute for putting this program together. It's timely and it's important. I'm honored be here today.

Proliferation threats have long been with us. The threat of terrorism has long been with us. And a certain degree of vulnerability has always been with us. Yet September 11th brought more than human tragedy. It showed that those who attacked the World Trade Center and the Pentagon were much better organized, much more sophisticated and much more capable of acting globally than we had assumed possible. Never again should we underestimate what it takes to assure our security. Our concept of what terrorists are able to do to harm innocent civilians has changed fundamentally. We recognize that nuclear materials hold the greatest capacity for mass destruction. For that reason, ensuring that such materials are not available to wrongdoers has long been a United States priority. In the former Soviet Union, we have spent over $6 billion to ensure that weapons of mass destruction, materials and technology remain secure from both internal and external threats. We are also working closely with the International Atomic Energy Agency, the IAEA, to strengthen its safeguards program, to help prevent the diversion of nuclear materials by states into clandestine nuclear weapons programs.

I would like, however, to focus my remarks this morning on a special lesson of 11th September. The risk that arises from the confluence of two factors. These two factors are the ability of terrorists to plan and stage attacks on the very centers of our societies. and the wide availability of radioactive sources that could make the consequences of an attack more severe. Fortunately there have not been any terrorist incidents resulting in widespread radioactive contamination. However, our experience in decontaminating radioactive accidents shows that the cost to society of such an attack could be severe. For instance when radioactive materials end up with recycled metal and are melted with the scrap the actual cost for decontamination, waste disposal, personnel monitoring and mill shutdowns have averaged $10 million per incident. With one event totaling almost $23 million.

The fact that many of these radioactive sources are poorly secured, presents a real threat to public health and safety. If they fall into the hands of terrorists, they could be used to build a radiological dispersion device. After September 11thwe captured an al-Qaeda operative, Hose Podia, whom we suspected of planning to build such a radiological weapon to harm the public. A dirty bomb could incite panic, cause illness, and bring economic disruption.

While the casualty risk of a dirty bomb is not in any way comparable to that of a nuclear explosive device, the materials and technology required to build a radiological dispersion weapon are much easier to obtain. Terrorists attack to induce fear. And it is our responsibility to ensure that our societies do not live in such fear.

Highly radioactive sources are used in every day life, and herein lies the challenge. They are used to treat cancer patients, as irradiators to preserve food, in industrial radiography to check for welding errors in pipelines and buildings, for thermo electric generation of electricity in remote locations, and for a variety of other purposes. To provide some indication of the magnitude of use of radioactive sources, there are reportedly some 10,000 radiotherapy cancer treatment units worldwide. With many more radioactive sources used throughout industry. Radiological sources are essential to our societies. And we do not have a practical option of trying to secure and control every item, everywhere. We do not have an accurate figure on how many radioactive sources exist throughout the world. Some of the isotopes that we are most concerned about include cobalt 60, strontium 90, cesium 137, and iridium

192. We do know that the huge number of applications of these materials makes them inherently difficult to track and control with even our best efforts. Many of these sources are lost, stolen, or simply abandoned when no longer required. In the United States for example an average of about 375 sources of radioactive material are reported lost or stolen each year. We are especially wary of such orphan radioactive sources. This problem is most acute in countries where civil authority and regulatory oversight are weak. Orphan sources are found worldwide. Earlier this year for example two canisters containing highly radioactive strontium 90 were discovered in the former Soviet republic of Georgia. The three Georgian woodsman who came upon them were severely burned by radiation. The United States, the IAEA, and the Georgian government subsequently worked together to secure these field radioisotope thermoelectric generators. Many more of these generators are in uncontrolled settings, and we are working with other governments to secure them.

We also share the IAEA's concern about significant quantities of cesium 137 that has been used to preserve harvested grain in some countries and become orphaned. To this end the IAEA has worked for over 30 years to improve radiation safety. It took up this issue with heightened concern in the 1990s, through its model project on upgrading radiation protection infrastructure and other initiatives.

Lessons learned from securing nuclear fissile stockpiles are not necessarily applicable to the problem of securing radiation sources. There are key differences. In the case of fissile material, stockpiles are relatively few and are located in only a limited number of countries. In the case of radiation sources, the materials are ubiquitous. For fissile material, locking down or transferring the material often addresses the security problem. For radiation sources, by contrast, there is a constant flow of materials into and out of nearly all countries. We therefore cannot solve the Radiological problem by simply locking down or moving selected sources. None the less, as we work to control and track such radioactive sources, we can look to some parallels in our efforts to control the flow of sensitive dual-use technologies and to ensure the public safety.

Our investigations over the past 10 years into terrorist organizations have turned up efforts by these groups to acquire both Radiological and fissile materials. Interestingly they have been occasions when terrorist groups have fallen prey to scams involving items such as Red Mercury. There is no such thing as red mercury. But illicit traders have successfully played on the demand for fissile and radioactive materials, a demand from people who can only have their eye on an improvised radiological or nuclear weapon. We have witnessed such efforts worldwide, including in Latin America, South and Central Asia, and eastern Europe. Since September 11thUnited States has tightened security measures around radioactive sources, and is bolstering contingency plans for an attack involving radioactive materials. The nuclear regulatory Commission is considering a program to register higher risk radioactive sources. It is also reviewing additional measures to track down missing sources.

In protecting itself from radiological threats, the United States has looked at the problem in layers. That is: what can be done to oversee and secure orphan materials? What can be done at the border? What can be done in transit? And what can be done once Radiological material reaches United States? We see this as a useful construct and have Programs that focus on improving the physical security and safe management of materials and facilities, preventing illicit trafficking, improving border security, stroking the accounting and control of nuclear and other radioactive materials, and enhancing emergency response capabilities.

We see results already. Beyond our borders the US Department of Energy has joined with Russia's Minatom and the IAEA to secure lost, stolen, or abandoned radioactive sources in projects covering both the Russian Federation and the newly independent states of the former Soviet Union. This work has the firm political and financial support of the US Congress. The Department of Energy also has initiated several co-operative projects with Russia, Georgia and Uzbekistan and is preparing to do more. Generally these co-operative efforts involve locating highly radioactive orphan sources, or sources that are no longer in use, and securing them. In addition this program is working to improve security at nuclear waste sites where highly radioactive material has been stored. And we are hopeful as well that the Global Partnership involving radiological materials and weapons announced at the G8

summit at Kananaskis in Canada just a few months ago, will also be a source of new funding for many of these activities.

The Department of State supports a number of export control and border security efforts, including some carried out with the Department of Energy. This assistance funds activities including: in country advisers and a wide variety of border security equipment and training. Our programs help build more effective export control and border control systems including legislation, institutions, Infrastructure and capabilities to prevent, deter and interdict potential proliferation of weapons of mass destruction, missile delivery systems, related technologies and other weapons.

The United States has provided portable monitors to a number of countries in the former Soviet Union, and Europe. Installed at key border crossings, these monitors alarm whenever cars or trucks containing radioactive sources pass through them. In addition, the United States has provided X-ray vans for use at airports, to detect radioactive sources and possible shielded sources in luggage.

In the aftermath of the September attacks, last March the IAEA board of governors approved a multi-year program to substantially expand and strengthen the agency's activities to prevent, detect, and respond to malicious acts involving both nuclear and radioactive materials and facilities. The September 2002 IAEA general conference approved a resolution welcoming the agency's proposal and the actions it has already undertaken as part of this program. Along with almost 20 other states, the United States has made substantial cash and in-kind contributions to the nuclear security fund to support the program's first year. At the September general conference, just a few weeks ago, Secretary Abraham announced an additional $3 million contribution. I would urge all states to contribute to this fund.

International assistance is important, but it is the responsibility of each state to keep radioactive materials located on its soil safe and secure. Because of the very large number of states that use radioactive sources of significance, a common set of ground rules will ensure that all exporters, recipients, and users of sealed sources have a mutually understood basis for ensuring the safety and security of these sources. The IAEA's code of conduct on the safety and security of radioactive sources seeks to prevent the loss or unauthorized access to these sources through the establishment of an effective system of regulatory control, from the production of radioactive sources to their final disposal. It also calls for a system to restore such control if a source has been lost or stolen. The code was initially approved in 2000, and has been updated since that time. In August the code and was revised to address a number of important security concerns that were bought about by the September 11thattacks. Our goal is to ensure that states control the sources within their territory that pose the greatest risks. We must all consider whether there additional steps to help achieve this goal.

The United States is committed to undertake domestic, bilateral and multilateral activities to reduce the risks that Radiological sources could fall into the hands of terrorists. I'm pleased that this conference is already exploring these and other means of up-grading our nuclear and radiological security by bringing together experts and policy makers from around the world.

I wish you well in your very important work. Thank you.