

Statement by Congressman Adam Schiff
Hearing on H.R. 2631, the Nuclear Forensics and Attribution Act
House Committee on Homeland Security
Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology
October 10, 2007

Mr. Chairman, Members of the Subcommittee, thank you for having me here today to speak about the Nuclear Forensics and Attribution Act.

Nuclear terrorism is a threat so serious in its consequences that we often shrink from contemplating it. A medium-sized weapon detonated in downtown Manhattan would destroy every building across the width of the island and destroy houses as far away as Brooklyn and Hoboken. Hundreds of thousands of lives would be lost, and the area would be uninhabitable for decades. But ignoring the problem will not make it go away -- in fact, ignoring the possibility of terrorists getting hold of a nuclear device makes that awful prospect more likely to happen. Illicit nuclear material has been intercepted in transit many times since the end of the Cold War, and the material we catch is probably a small fraction of the total trafficked.

President Bush has declared a nuclear terrorist attack on the United States the number one national security threat facing the country. This Congress and this Subcommittee have made it more difficult to smuggle a weapon into the United States in the ongoing effort to strengthen our border. However, given the difficulties of securing our extensive border, we must take a layered approach to the problem.

During the Cold War, we deterred the Soviet Union with the threat of overwhelming nuclear attack. Unfortunately, the decentralized, flexible terror networks that we face today are not as easily deterred. There is little doubt that if Al Qaeda acquired a nuclear weapon, they would attempt to use it against us. Osama bin Laden has termed the acquisition of weapons of mass destruction "a religious duty" and there is no question that using such a weapon against America is consistent with the group's contempt for human life.

Although Al Qaeda may not be deterred, there are other groups and nations that can be dissuaded from helping them, but only if their participation can be traced back to them. This bill is designed to help shut down the international trade in nuclear material by deterring those parts of the trafficking network that can be deterred.

Nuclear attribution would allow us to identify the provenance of nuclear material intercepted in transit, or, God forbid, in the aftermath of a detonation. That knowledge would help us decide how to respond and it would also provide a deterrent. If nations around the world knew that they could be identified as the source of material used in a nuclear attack, even irresponsible nations would be disinclined to proliferate. For the more responsible nations, it would be a strong incentive to improve their security. Individuals would know that they could be found and prosecuted if they tried to help

terrorists acquire nuclear materials. By developing a robust attribution capability, we can usher in an era where proliferation is not just discouraged, but deterred, because those responsible would be found and punished.

The bill you are considering today supports our nuclear attribution capability by strengthening our nuclear forensics ability. Nuclear forensics involves studying the mix of isotopes and other features of nuclear material that give it a particular "signature." There can also be information in the packaging and accompanying materials that could allow an expert to pinpoint a source.

Nuclear forensics activities have historically taken place at a variety of government agencies, but primarily in the Departments of Defense and Energy. The new National Technical Nuclear Forensics Center in the Department of Homeland Security will support and coordinate these efforts. Experts in this office will consider how to develop a database of information on nuclear material that can assist in tracing trafficked technology or material, organize the forensic response to a nuclear detonation, ensure that the right research is being done to counter threats to our security at home, and make certain that enough scientists and engineers are entering fields like radiochemistry which are the key to our forensic capability.

When a detective finds fingerprints, they must be matched against a database to identify possible culprits—nuclear attribution works similarly, but there is no database of nuclear fingerprints. It can be difficult to obtain the needed information because it is considered sensitive in many countries, including ours. However, little of this information is of direct use to adversaries, and in many cases the risk of not sharing the data is much greater than risk of sharing it. Certainly, in the wake of a nuclear terrorist attack, no one will be reassured to hear that we couldn't shut down the smuggling networks because we didn't trust our allies. In addition, new and innovative approaches may allow countries to confidently match samples without having direct access to sensitive information.

This bill asks the President to negotiate agreements with other nations to share information on the makeup of their nuclear materials. These could be bilateral agreements with our allies or multilateral treaties through the International Atomic Energy Agency (IAEA). We could even begin the database with just civilian reactor materials, where security is less of an issue. The important thing is to get started now. The National Technical Nuclear Forensic Center should play a key role in the negotiations, since in the end, the data we obtain must be the data that the experts need.

Nuclear terrorism is a threat of paramount danger and uncertain probability. It is not a threat we can measure in brigades, ships or warheads, but it is no less pressing for that. I believe that this bill is a modest but effective effort to reduce the risk of attack at the root of the problem, and I am confident that after hearing from the experts, you will agree.