

Order Number 610B

### The U.S.-IAEA Additional Protocol: An Overview of Nuclear Safeguards

On March 31, 2004 the U.S. Senate gave its advice and consent to ratification of the U.S.-International Atomic Energy Agency (IAEA) Additional Protocol (AP). The U.S. AP grants IAEA inspectors greater access to U.S. information and locations relevant to the nuclear fuel cycle. All access, however, is subject to the United States' right to exclude activities having national security significance and to manage access at declared sites. To help security officers, treaty compliance officers, Department of Defense (DoD) program managers, and site personnel be prepared for implementation of the U.S. AP, this bulletin provides an overview of the purpose and provisions of this new inspection protocol.

The U.S. AP is a product of several years of negotiation among the United States, other governments, and the IAEA. During Nuclear Non-Proliferation Treaty (NPT) negotiations in the late 1960s, the United States advocated mandatory safeguards at all peaceful nuclear activities in non-nuclear weapon states who were party to the NPT. As a nuclear weapon state, the United States was not required to accept these safeguards. However, non-nuclear weapon states argued that the imposition of safeguards on their activities would place them at a competitive commercial disadvantage with nuclear weapon states. In response to these concerns, the United States offered to allow the IAEA to apply the same safeguards to U.S. nuclear activities, barring only those activities with direct national security significance. Subsequently, the United States concluded the U.S.-IAEA Safeguards Agreement (INFCIRC/288), which entered into force (EIF) on December 9, 1980.

Thirteen years later, the IAEA began work on the 93+2 Program, which sought measures to increase the Agency's ability to detect undeclared nuclear material and activities. The Program was approved in 1995. Some 93+2 Program measures that could not be implemented under existing IAEA legal authority were incorporated into the Model Additional Protocol (INFCIRC/540), a proposed supplement to each non-nuclear weapon state's individual safeguards agreement. Each non-nuclear weapon state party to the NPT concludes its own AP based on the Model. As of June 2004, 84 countries had signed APs with the IAEA and 58 countries had also ratified their agreements.

The United States signed its AP on June 12, 1998. Now that the Senate has given its consent to ratification, the U.S. AP will enter into force when the President signs and submits the instruments of ratification. With this agreement, a condition of ratification is that the President must be able to certify that all regulations governing the application of the U.S. national security exclusion (NSE) and managed access provisions will be in place, and that all necessary security and counterintelligence training will be completed not later than 180 days following EIF. To reach these goals, vulnerability

assessments at potentially affected sites will be conducted to determine the level of access and types of security countermeasures to be employed to protect DoD equities.

Like non-nuclear weapon states, the United States will be required to declare a wide range of nuclear fuel cycle-related activities, including treaty specified activities not involving nuclear material. These activities include those carried out in both the U.S. Government and private sectors—e.g., research and development, manufacturing, uranium mining and concentration plants, locations using source materials, and those importing or exporting non-nuclear, dual-use material and equipment.

As a result of the United States removing all DoD equities from the possibility of inspection, none of the potential sites are DoD-owned, yet many host DoD or DoD-contracted programs. Under the AP's complementary access provisions, the IAEA could request access to these co-located activities—including DoD equities—for the purpose of resolving an ambiguity. Should these activities have national security significance, the United States reserves the right to invoke the NSE.

The AP does not affect U.S. or IAEA rights or obligations at any of the 200-plus U.S. facilities currently under the scope of the U.S.-IAEA Safeguards Agreement. These facilities have already been declared to the IAEA. Instead, the AP will extend the IAEA's access to all buildings on the "site" where a declared facility is located. A "site" is defined as the area delimited by the United States in its declared design information for a facility selected for the application of safeguards. The "site" boundary for a Nuclear Regulatory Commission (NRC)-licensed facility should include all installations co-located with the facility for the provision of essential services. The U.S. AP will grant the IAEA access to all buildings on the "site" of a selected NRC-licensed facility. The boundary of a listed facility not licensed by the NRC will be determined when and if the facility is selected by the IAEA for the application of safeguards.

New, location-specific verification measures allowed under the AP include environmental sampling and, if approved by the IAEA Board of Governors, wide-area environmental sampling. In addition, although not part of the AP, the IAEA is using advanced surveillance technology, such as digital surveillance cameras, electronic seals, and other remote monitoring techniques.

To obtain additional information about the U.S. AP, other arms control agreements, vulnerability assessments, and the application of security countermeasures, contact the DTIRP Outreach Program coordinator at 1-800-419-2899 or dtirpoutreach@dtra.mil, your local Defense Security Service (DSS) Industrial Security Representative, or your government sponsor.



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