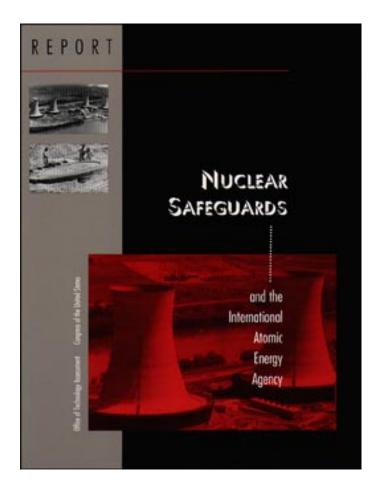
### Nuclear Safeguards and the International Atomic Energy Agency

April 1995

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### $\mathbf{F}_{\mathbf{oreword}}$

he International Atomic Energy Agency, which has primary responsibility for verifying compliance with the nuclear Non-Proliferation Treaty, plays a central role in preventing the spread of nuclear weapons. But the limitations of the IAEA's system of nuclear safeguards were highlighted in the aftermath of the 1991 Persian Gulf War, when it was revealed that Iraq had mounted an extensive, covert nuclear weapon program in addition to, and partly in proximity to, its open nuclear research activities that were under IAEA safeguards. The following year, IAEA investigations in North Korea revealed that the North Korean government was hiding information regarding the extent of its previous nuclear material production.

These cases showed that states could and did violate their Non-Proliferation Treaty commitments, offering concrete examples of what many had previously considered an abstract and distant threat. They also showed that the IAEA's traditional mission of detecting the misuse of safeguarded nuclear materials addressed only part—and probably not the most important part—of the proliferation problem. It became clear that if similar problems were to be avoided in the future, the IAEA would have to assume the task of ensuring that states do not possess covert nuclear facilities, a mission that it had previously not been granted the political support or the resources to conduct. Although the IAEA appears to be winning the political backing it needs to assume this broader responsibility, its member states have so far not granted it the funds to do so without impairing other safeguards functions.

This report analyzes what IAEA safeguards can and cannot be expected to accomplish, identifies areas where they might be broadened and improved, and presents options for doing so. It is the sixth publication of OTA's assessment on the proliferation of weapons of mass destruction, done at the request of the Senate Foreign Relations and Governmental Affairs Committees. That request was endorsed by the House Permanent Select Committee on Intelligence, the (then) House Committee on Armed Services, the Senate Committee on Banking, Housing, and Urban Affairs, and the (then) House Committee on Foreign Affairs.

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**Note:** OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

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