

Transparent and Irreversible Dismantlement of Nuclear Weapons

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Key Judgments

- Prohibition of nuclear weapons will require the dismantlement of some 25,000 nuclear weapons that currently exist in nine states. While this dismantlement will pose major operational challenges, facilities and procedures are in place that can accomplish it.
- The nuclear weapons to be eliminated must be: (a) secured and accounted for; (b) committed to dismantlement; (c) placed under bilateral or international monitoring; and (d) verifiably dismantled. The fissile materials from these warheads must then be: (a) placed in secure storage subject to bilateral or international monitoring; (b) committed never to be returned to weapons; and (c) used or disposed of in a way that would make it impossible or very costly to ever return them to weapons use.
- Technologies and procedures are available which, with some refinement and negotiation can make it possible to build confidence that these warheads have been placed in secure storage and then dismantled as agreed, without compromising sensitive nuclear weapon design information. Technologies and procedures are also available to confirm secure storage and disposition of the fissile materials from these weapons.
- Many nuclear weapons can also be rapidly, verifiably, and per-

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manently disabled pending dismantlement. This would contribute to both arms reduction and theft prevention.

- Building confidence in nuclear arms reductions as they proceed to very low levels will require making these reductions transparent and difficult to reverse. A comprehensive “transparency and irreversibility” approach would include: verifiable dismantlement of delivery systems (and modification of remaining systems to ensure that they could not carry many more than the agreed number of nuclear weapons); verifiable dismantlement of nuclear weapons themselves; disposition of all fissile material beyond the amounts required to support the remaining warheads, along with any agreed remaining purposes (such as naval fuel); and dismantlement or conversion of facilities for producing more delivery vehicles, nuclear weapons, and weapons-usable material.
- If managed appropriately, large-scale nuclear weapon dismantlements and disposition of excess fissile material could reduce the threat of nuclear theft and terrorism. If stringent security measures are not maintained throughout these processes, however, they could *increase* the risk of nuclear terrorism, by removing weapons and materials from secure vaults, shipping them from place to place, and processing them.
- Some approaches could make it possible to place thousands of especially dangerous nuclear weapons under internationally monitored lock and key, commit them to eventual verifiable dismantlement, and begin permanently disabling them within months of a decision to do so.