International Partnership for Nuclear Disarmament Verification

An ongoing initiative that includes more than 25 countries with and without nuclear weapons. Together, the Partners are identifying challenges associated with nuclear disarmament verification and developing potential procedures and technologies to address those challenges.

THE CHALLENGE

Arms control agreements have generated an extensive set of procedures to monitor and verify limits on nuclear weapons and delivery systems. Today, however, there are no procedures to verify and monitor nuclear weapon dismantlement or destruction of weapon components.

TAKING ACTION

The Partnership’s first phase of work addressed one of the most important, complex, and challenging topics related to future arms control reductions: monitoring and verifying the physical dismantlement of a nuclear weapon, which is just one element of a broader disarmament process.

Phase II of the Partnership will build on the results as well as the national capacities and expertise from Phase I. It will focus on the verification of nuclear weapons declarations and reductions as well as identify and demonstrate a select number of key verification technologies identified in Phase I.

BUILDING BLOCKS

The Partnership’s work builds on previous verification and monitoring initiatives:

- U.S.-Russia Monitoring and Verification Experience
- U.S.-UK Program on Nonproliferation and Arms Control Technology
- UK-Norway Initiative on Nuclear Warhead Dismantlement Verification

The outcomes of Phase I are integrated into a step-by-step interactive on the IPNDV website. Visitors can walk through a notional nuclear weapon dismantlement process.

Participants take a hands-on practical approach in identifying and demonstrating technologies that can be used to verify nuclear disarmament.

Activity Prior to Dismantlement Facility

The nuclear weapon dismantlement process starts with the nuclear weapons being removed from delivery systems (a missile, for example). Eventually the nuclear weapon is transported to a dismantlement facility (Step 5), where we will start our work.

1. Nuclear weapon removed from delivery system at the deployed site
2. Nuclear weapon in storage at the deployed site
3. Transport of nuclear weapon from deployed site to long-term storage
4. Nuclear weapon in long-term storage prior to dismantlement
5. Transport of nuclear weapon to dismantlement facility
IMPACT

The IPNDV is building and diversifying international capacity and expertise on nuclear disarmament monitoring and verification. Its work helps to increase understanding of the complexities involved with nuclear disarmament and to address the significant technical challenges that must be overcome.

At the same time, the Partnership helps lay a foundation for the development of technologies and procedures needed for the verification of future reductions of nuclear weapons.

At the end of Phase I, IPNDV partners concluded that while tough challenges remain, potentially applicable technologies, information barriers, and inspection procedures provide a path forward that should make possible multilaterally monitored nuclear warhead dismantlement, while successfully managing safety, security, nonproliferation, and classification concerns in a future nuclear disarmament agreement.

PARTICIPANTS

The IPNDV, through a unique public-private partnership between the U.S. Department of State and the Nuclear Threat Initiative, brings together more than 25 countries, with and without nuclear weapons, in a collaborative environment. Three technical working groups were developed for both Phase I and Phase II. With experts from all participating countries and co-chairs from Australia, the Netherlands, Poland, Sweden, the United Kingdom, and the United States, these working groups serve as the backbone of the Partnership.

LEARN MORE

For reports, analysis, and a step-by-step nuclear dismantlement interactive, visit: www.ipndv.org