

Managing Access: Warhead Dismantlement Verification



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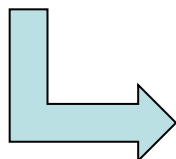
Overview



- ☐ **Disarmament Motivation & Background**
 - **NPT Article VI**
 - **Warhead verification issues**
- ☐ **Managed access on-site inspection**
 - **Disarmament verification tool**
 - **Important elements**
- ☐ **Warhead dismantlement process**
 - **Phases**
 - **Techniques and technologies**
 - **Operations/ access level**
- ☐ **Summary**

Disarmament Motivation

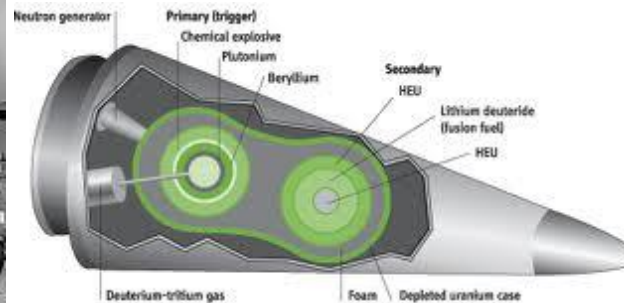
- NPT Article VI - “**Each of the Parties** to the Treaty undertakes to **pursue negotiations** in good faith on effective measure relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on **general and complete** disarmament **under strict and effective international control**”.
- Balancing NPT pillars
- Bridging N-S divide (2005 NPT RevCon)



Managed Access On-Site Verification

Warhead Disarmament Background I

- ❑ Verification challenges
 - NPT Art I & II restrictions
 - Security and safety concerns
 - Sovereignty issues
 - Inspector Expectations



Warhead Disarmament Background II

❑ Technical studies

1967 Field Test FT-34



1996-1997 DOE Study

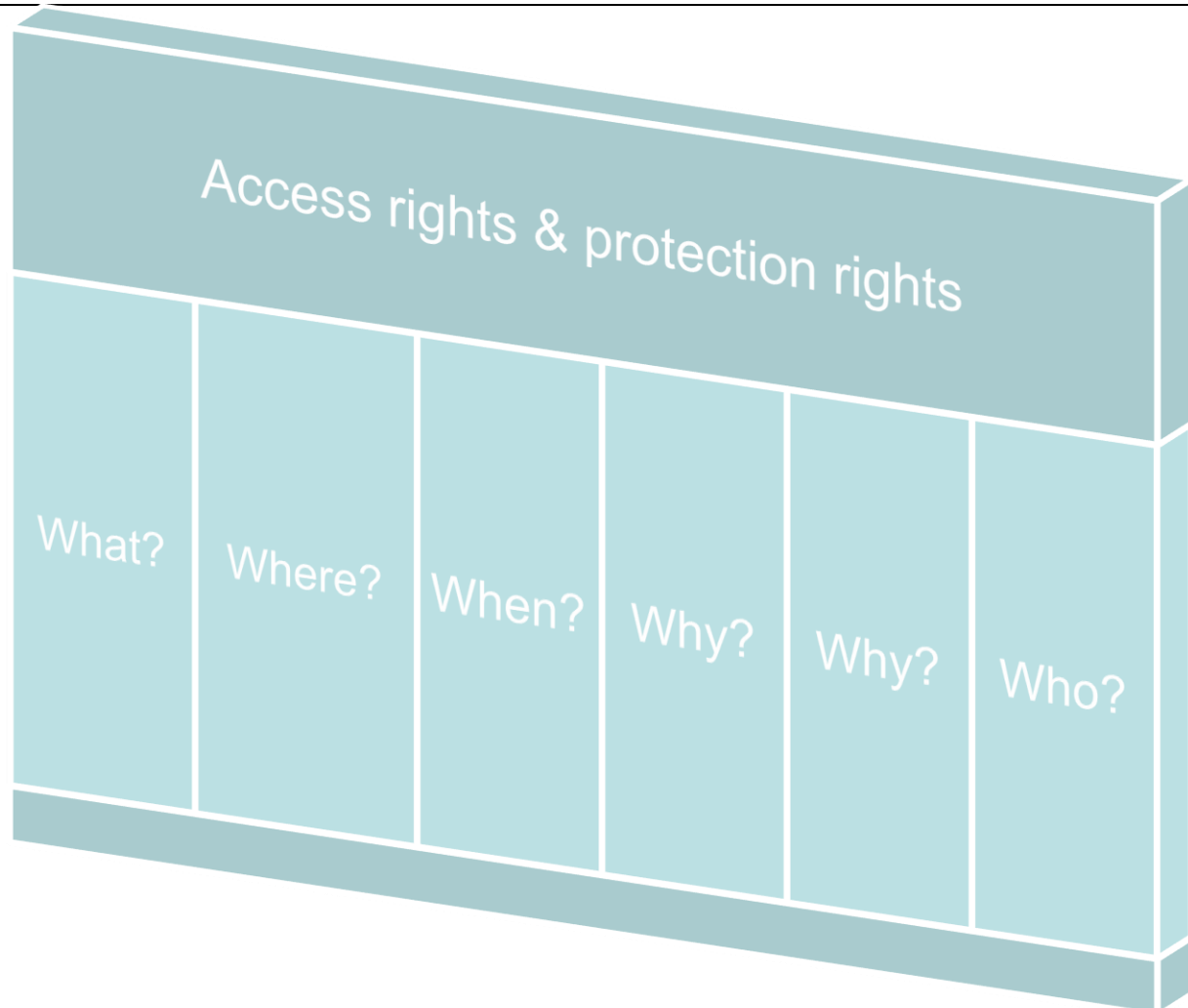


1996-2002 Trilateral Initiative

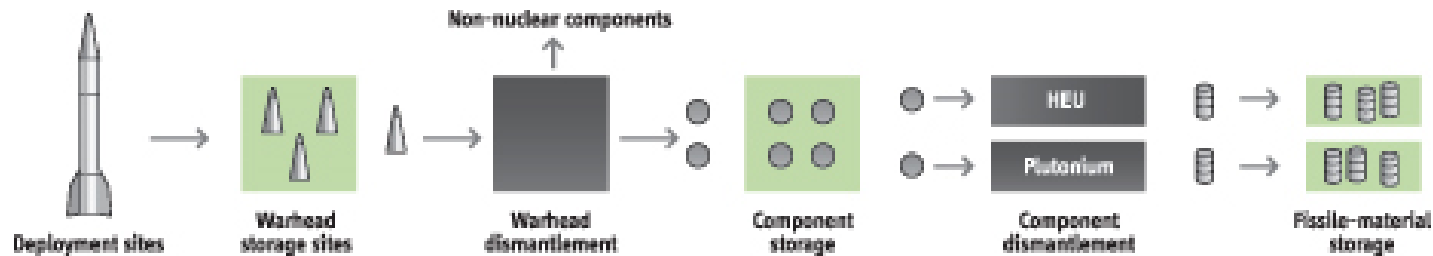


2006-2009 United Kingdom-Norway Initiative

Managed Access



Warhead Dismantlement Phases



- ☐ Retirement and transportation
- ☐ Mechanical disassembly
- ☐ Disassembly of phys package
- ☐ Waste streams and disposition

Inspection Techniques & Technologies



- ☐ Portal perimeter control
- ☐ Tags and seals
- ☐ Closed circuit television cameras
- ☐ Documentation & electronic records
- ☐ Information barrier
- ☐ Managing inspector movement
- ☐ Communication procedures
- ☐ Dispute resolution



Operations

☐ Direct Visual Observation



☐ Make notes and sketches



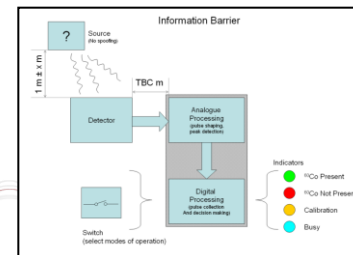
☐ Take Geiger counter measurements



☐ Take Photographs



☐ IB measurements



Respice Prospice



“We acknowledged that to unite the international community against proliferation, the nuclear-weapons states needed to be seen to push forward on disarmament, and we reiterated the **critical necessity of transparent verification** to the process of **eliminating nuclear weapons**.”

— Lord Browne of Ladyton
UK Secretary of State for Defence (2006–2008)

Summary

- ❖ **Disarmament legal foundation – NPT Article VI**
 - **negotiate multilateral treaty or convention**
 - ✓ **verification & monitoring procedures**
- ❖ **Verification goals**
 - **confirms state compliance**
 - **adds legitimacy to disarmament**
- ❖ **Addressing proliferation & security concerns**
 - **human factors and technological fixes**
- ❖ **Managed access on-site monitoring and verification**
 - ❖ **inspectors + techniques + technologies + facilities**
- ❖ **Uniqueness of the UKNI**
- ❖ **Joint R & D**
 - **promote understanding**
 - **encourage discussions**
 - **Allow NNWS contribution**