NON-PROLIFERATION OF WEAPONS OF MASS DESTRUCTION: THE ULTIMATE CHALLENGE?

Dr Jean Pascal Zanders
EU Institute for Security Studies

European Institute of Public Administration seminar on Global Challenges – Security: Multiple Dimensions and Challenges
Brussels, 17-18 October 2012
Core questions

- What are ‘Weapons of Mass Destruction’?
- What does ‘proliferation’ mean?
- What does ‘non-proliferation’ entail?
- Where is the ‘ultimate challenge’?
  - Iran case study
What is a WMD?

- **Used to be synonymous with NW**
  - Since end Cold War, increasingly chemical, biological and radiological weapons too
  - Concept is still expanding (explosives, etc.)

- **Very awkward term to use**
  - No accepted international legal definition
  - Which weapon categories are included; which ones not?

- **Very amorphous concept**
  - Focusses on consequences of use
  - Hides specific characteristics of individual arms categories
  - Seems to blend the destructiveness of one category (NW) with the ease of acquisition of another (e.g., CW) in political discourse
Non-conventional weapons

- Term focuses on specific status, rather than consequences of use
  - Only highest political authorities release weapons for use
  - Authorisation for use not pre-delegated to military commanders (in contrast to ‘conventional’ weapons)
  - First task of arms control is prevention of ‘conventionalisation’

- Difference with ‘unconventional’ weapons
  - Weapons outside of legal regimes
  - Unusual weapons (e.g., designed for very specific role or operation)
Armament versus proliferation

- **Armament:**
  - quantitative or qualitative enhancement of military capacity
  - essentially a domestic process

- **Proliferation:** transfer of technology from a possessor to a non-possessor
  - ‘Horizontal proliferation’: lateral spread
  - ‘Vertical proliferation’: weapon acquisition and improvement (= armament?)
Value judgment

- **Technology diffusion** is a natural process
  - Archaeological evidence from Palaeolithic; Antiquity, …
  - Possibility of multiple original sources for same technology

- **Proliferation** includes judgment about desirability
  - Origin from cell biology: ‘rapid & repeated production’ (often with negative connotation, as in cancer)
  - Security policy:
    - Negative connotation reinforced from the nuclear field
    - Use of term limited to non-conventional weaponry
    - Compare with the more neutral ‘arms trade’
Disarmament / Non-proliferation paradigm shift — 1

- Focus shift from weapon elimination to prevention of capability building
  - Impact on BTWC (Protocol) and CWC
  - Technology itself becomes central concern

- ‘Proliferation’ redefines the threat in function of the dominant power
  - Lack of consensus over threat evaluation
  - Lack of consensus over measures to address threat
  - Tendency to move to national/plurilateral rather than multilateral measures
Objective goals vs. Subjective goals
- Disarmament: goals specified in treaty and apply equally to all parties
- Non-proliferation: Different approaches to different countries based on subjective judgment of intent (the so-called ‘rogues’ vs. rational, law-abiding actors)

Lack of finality in non-proliferation
- Resolution of one proliferation threat does not affect other ones
- Even if all resolved today, there is tomorrow’s threat
**Contexts for ‘dual-use’ debate**

- **Dual-use issues** arise when the attempts to control a particular technology confront the non-military commercial and scientific interests in such technology.

- **Disarmament**
  - Total ban on development, production and possession of *a weapon* and preparations for *its* use in warfare (BTWC, CWC).
  - ‘Dual-use’ issue emerges when
    - Civilian facilities and installations need to be verified.
    - Need to prevent the (inadvertent) assistance to development of banned weapon by another state or non-state entity.
  - Ban of weapon (= single-use technology) is central; control of dual-use technology supports that central goal.

- **Non-proliferation**
  - Control of access to technologies that may contribute to undesired weapon development in another state or non-state entity.
  - Primary policy tool for weapon categories whose use in war or possession has not been wholly delegitimised (e.g., nuclear weapons, ballistic missiles).
Supply-side perspective

- Is the traditional focus of proliferation studies
- Focus traditionally on objects (e.g., weapons, equipment)
  - The fact that the objects exist defines an important part of the threat
- Influence of *regressive* analysis of armament dynamic
  - Possession or determination to possess weapon is assumed
  - All other elements are interpreted in function of the certainty of the final goal
Demand-side perspective

- Focus on internal decision-making processes
  - **Problem**: often little known about these processes

- Appreciation of the complexity of the decision-making process (opportunity costs)
  - Failures
  - Reversals of decisions
  - Importance of the material base

- *Progression* analysis of the armament dynamic is required
Steps in the armament dynamic

Operational guidance (security policies & doctrine)

Bureaucratic policies of resource mobilization and allocation

Initial decision

Research → Development → Testing → Upscaling production → Production & stockpiling → Training

Preparation for use

Target acquisition

Training in function of target

Weapon preparation

Release
Progression analysis

Research

Operational guidance (security policies & doctrine)

Upscaling production

Development

Training

Testing

Bureaucratic policies of resource mobilization and allocation

Target acquisition

Training in function of target

Weapon preparation

Production & stockpiling

Initial decision

Political imperatives
(Resource mobilization & allocation)

Military imperatives
(doctrinal / operational guidance)

Assimilation

Imp(m) \( \omega \)

Imp(m) \( \alpha \)

Imp(p) \( \omega \)

Imp(p) \( \alpha \)
Proliferation in the armament dynamic

Assimilation

Imp (m,p) Material Base

Initial decision

Military imperatives
(doctrinal / operational guidance)

Political imperatives
(Resource mobilization & allocation)

Search for importation
Entrance of the *post-proliferation* era?

- **Nuclear:**
  - Global warming and growing interest in nuclear energy
  - Commercial pressure to access new markets
    - e.g., US-India & US-UAE bilateral agreement; Saudi Arabia forthcoming

- **Biological:**
  - Biology and biotechnology critical to development & health
  - Many developing countries conduct leading-edge research
  - Education expanding everywhere: spread of knowledge to manipulate pathogens, including genetics
  - Biotechnology is essentially information: no physical goods to cross borders
  - Corporate acquisition and sell-offs

- **Chemical:**
  - Similar to biological
  - Many production facilities with potential for CW manufacture now located in developing world
Fragmentation of the global system (*polycentrism*)?

- Different levels of decision making
  - economic units ... governments ... transnational actors ... international organisations

- Values and future impact on international law

- Growing emphasis on the region, including for security dynamics

- Different languages and discourses

- Different organisation and oversight of R&D & production
The post-proliferation governance challenge

- No unified model for governance of weapon control anymore
- States do not drive the processes anymore; they can steer in a limited way
- New stakeholders and security actors
- Increased role of non-state national & transnational actors
- Declining role of states in shaping developments
- Shifting relative balances of powers (economy, politics, military) and multiple power centres
- Geographical decentralisation of business and industry activities
- South-south trade patterns and impact on technology diffusion
- Etc.