Preventing the Proliferation of Biological and Chemical Weapons

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Proliferation

- Lateral spread
- Dual use technology
- CBW dual use policy
  - prevention of realization of dual-use potential of CBW-relevant technologies
  - other technologies: maximization of dual-use potential
  - creates tension and contradiction about fundamental normative behaviour
When proliferation?

- Industrial and technological base?
- R&D?
- Production?
- Stockpiling?
- Operational deployment?

Different criteria lead to different country / agency assessments
Definition

CBW proliferation occurs

when a political entity decides to acquire a CBW capability

where such a capability does not yet exist

provided this decision is followed by a CBW armament dynamic
Measures against CB warfare

- In-kind deterrence / retaliation
- Defence (protection, detection, prophylaxis)
- Restrictions on use of CBW (laws of war)
- Prohibition of possession (law of disarmament)
- Prevention of acquisition (non-proliferation)
Primary impact on the armament dynamic

Non-proliferation (supply-side controls)

Import

[Deterrence
Defence
Restrictions on use]

Disarmament

[Political
Military]

CBW acquisition decision

[Possible] CBW use

CBW assimilation

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Primary impact on the proliferation process
Non-proliferation

Disarmament

Restrictions on use

International norms

Security policies

Societal development

Threat perception

Deterrence?

Defence?

Government priority allocation
- Nature of intervention
- Volume of intervention
- Percentage of total investments

Import dependency

Permitted application
- Chemistry
- Biology
- Biotechnology

Offensive CBW Programmes

Material base
- Political culture
- Education level
- Science base
- Technology base
- Economic development
- Industrial development

Physical base
- Geographical location
- Territorial size
- Population size
- Presence of natural resources
- Easy access to resources abroad

Technology importation

Non-proliferation

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Disarmament vs. non-proliferation?

- **Disarmament**
  - Affects core decision to acquire CBW
  - Objective goal: elimination of all CBW everywhere
  - Multilateral; enhances cooperative security

- **Non-proliferation**
  - Targets only certain stages of the armament process
  - Subjective
    - assessments based on enemy image
    - different policies for different proliferators
  - Threat never eliminated (always another proliferator)
  - Unilateral; confrontational

- Should they be mutually exclusive?
Past experience

- A single norm or rule never sufficed to prevent CB warfare
  - Scope too narrow
  - number of participants restricted or limited
  - principle of equality among belligerents
  - military necessity

- A single measure does not suffice to prevent the acquisition of CBW
Remedies

- System of complementary measures for different security regimes
- Multi-level regulations
  - Transnational
  - National
  - Sub-national
Complementary measures

- Disarmament
- Non-proliferation
- Norm setting and reinforcement by UNSC and UNGA
- Expand restrictions and codes in areas related to CB warfare
- Defence, surveillance and consequence management
- International emergency assistance preparedness
Multi-level regulation

1. Transnational level
   - International criminalization of CB warfare

2. National level
   - National implementation legislation for international rules
   - National criminalization + principle of extraterritoriality
   - Supplier and recipient states adopt matching export and import controls for relevant technology transfers (transparency)

3. Sub-national level
   - Professional codes and ethics in science and industry
   - Licensing system for relevant technology transfers between economic units (firms, laboratories, individuals, etc.)