

The Web of Prevention: A Multi-dimensional Approach to Inhibit CBRN Acquisition

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CBW Events

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A project to create a record of events to enable and encourage understanding of how policies on the issues relating to chemical and biological warfare (CBW) are developed.

Outline

- Some “non-proliferation, arms control and disarmament” (NACD) issues
- Nuclear and chemical control issues
- Biological control issues
- Aspects of CBRN acquisition and of control
- Development of the web of prevention concept
- Connecting the web of prevention into governance roles

NACD issues

- Disarmament – the weapons themselves are the problem and so must be eliminated
- Arms control – weapons contribute to problems and so need to be managed
- Non-Proliferation – wrong weapons in the wrong hands, spread of weapons, new acquisitions – historically a loaded term so should be used with care. Often better to talk of preventing acquisition

Layers of controls

Three layers – overarching, domestic and external

Each government should therefore:

- Comply with international regimes
- Enact controls within territory under jurisdiction of that government [i.e., no prohibited weapons within the country]
- Ensure that external entities are not assisted by activities within the jurisdiction of that government [i.e., no help to acquire prohibited weapons in other countries]

Traditional NACD regime measures

- Declarations & information exchanges on material balances and objects of verification
- Evaluation of information provided
- On-site visits to (i) illustrate / demonstrate legitimate activities (ii) uncover non-legitimate activities
- Consultations and clarifications on anomalies and ambiguities
- Examples include CWC/OPCW, NPT/IAEA, CFE, Stockholm/Vienna Document

Traditional internal NACD measures

- Declarations & information exchanges on material and technologies used
- Evaluation of information provided
- On-site visits to (i) illustrate / demonstrate legitimate activities (ii) uncover non-legitimate activities
- Consultations and clarifications on anomalies and ambiguities
- Example agencies include law enforcement, health and safety bodies, education ministries

Traditional NACD export measures

- Declarations & information exchanges on materials and technologies requested
- Evaluation of information provided
- On-site visits to (i) illustrate / demonstrate legitimate activities (ii) uncover non-legitimate activities
- Consultations and clarifications on anomalies and ambiguities
- Agency = export licensing body, but requires input from other branches of government

Why biological is different

- Biological has much wider range of materials & technologies with both peaceful and hostile applications
- Living organisms cannot be subject to reliable material balance monitoring
- The politics are very different, no verification agency
- Interaction between governments, international organizations, industry & civil society very different

Dual-use nature of CBRN issues

- Materials & technologies may have both peaceful and hostile applications
- Technologies and techniques can be tangible or intangible
- No clear definitive boundary between non-legitimate activities and legitimate activities
- New/additional frame of reference:
 - the control of technologies outside of the ownership of governments that have not only peaceful purposes, but also economically significant purposes.

Other dual use areas

- Narcotics
- Money laundering
- Tax arrangements
- Obscene publications
- Small arms

In each of these areas there is no clear definitive boundary between non-legitimate activities and the legitimate systems they operate within

(non-)compliant activities

- If there is no clear dividing line between compliant activities and non-compliant activities, what lies in between?
 - Clearly legitimate
 - Anomalous
 - Suspicious
 - Clearly non-legitimate

Linear model of policy

Traditional methods of analysis of policy assumes a linear set of activities: *problem -> solution -> implementation:*

- The problem is defined
- A solution is identified
- The solution is implemented across government

However, this linear model has limited utility when a problem has many aspects

Problem definition

To reach a consensus on the definition of the problem of CBRN weapons could only be done in the most simple of terms, for example:

- “CBRN weapons are bad, peaceful uses of related science & technology are good”

This requires a broader approach to the control of CBRN weapons

Aspects of acquisition

Logistics

Finances and
resources

Personnel

Tools and
equipment

Materials

Targeting

Engineering

Planning

Doctrine

Example aspects of controls

Legal
prohibitions

Follow the
money

Professional
ethics

Intelligence

Transfer
controls

Vigilance

Material
security

Education &
awareness

Institutional
culture

Web of prevention concept

- In biological realm, with no central implementation body, realisation that basic *problem -> solution -> implementation* model unworkable
- Many web of prevention definitions developed, notably by ICRC
- Growing understanding of usefulness of concept in other areas
- A suitable definition for this seminar:
“multiple overlapping measures to ensure that all potential stages or aspects of research, development and production are protected from misuse”