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Matthew Meselson (USA)
J P Perry Robinson (UK)

Working Paper

Outline for an Integrated Approach to the Problem of Biological Weapons

This workshop needs no reminder of the danger of biological weapons as widely accessible instruments of immense potential for terror and mass killing, both in war and in the hands of sub-state parties.

Yet, it is remarkable that despite the fact that the knowledge and the materials required to make devastating BW weapons have been accessible and affordable to a large number of states for nearly half a century; despite assessments by various intelligence organizations throughout this period that some states have produced or are seeking BW weapons; despite the well-known BW weapons programs of the US, the UK and Canada before 1970 and the Soviet program that appears to have continued beyond the 1980's; and despite Iraq's secret production of anthrax bombs and the Aum cult's interest in Ebola hemorrhagic fever before the nerve gas attacks in Matsumoto and the Tokyo subway -- during the past half-century, with its many wars and other conflicts, there has been no established episode of biological warfare or devastating act of biological terrorism. Why not?

The design of effective policies and measures for dealing with the threat of BW weapons requires an integrated enquiry and analysis -- one that takes into account not only the attributes and accessibility of possible BW weapons, their means of delivery and the possibilities and limitations of protection against them -- but also the factors that determine the presence or absence of the ***intent*** to acquire and use them.

A lack of such enquiry and analysis leaves policy prey to misleading anecdotal information and to the adoption of measures inappropriately imitative of measures developed to deal with quite different threats, for example nuclear ones, and to programs that may be more responsive to bureaucratic, political and commercial pressures than to the menace of biological weapons.

This paper represents a draft outline of issues and questions such an analysis should address. It is an outline in need of discussion and revision: needs that Pugwash Workshops are intended to serve.

Seldom considered in specialist discussions of the BW problem but nevertheless of fundamental importance to it are certain general conditions of international and social relations that may promote so extreme a measure as the acquisition of BW weapons. Careful examination of these conditions must be a part of any overall analysis. So should awareness of where such conditions prevail. They include:

1) Instability and perceived inequity of international and social relations, as they foster extremes of hostility, fanaticism and alienation.

These conditions are particularly relevant to the possible terrorist acquisition and use of BW weapons. Peacemaking, as presently promoted in the Middle-East, Bosnia and Northern Ireland may do as much to avert terrorist BW as will national and international police measures more specifically directed at the problem.

2) Perceptions of extreme national insecurity, leading to interest in weapons of mass destruction for purposes of strategic deterrence.

3) Aggressive expansionism.

While it may be partly rooted in the factors listed above, aggressive expansionism in its most virulent form requires collective deterrence. An extremely grave situation would arise if aggressive expansionism were combined with a serious threat of BW, a situation so dangerous as to merit the most careful advance consideration and discreet international consultation so as not to be completely unprepared in case such a contingency arises.

Operating in opposition to conditions that might promote interest in having BW weapons, there are both internal and external influences that disfavor their acquisition. Each deserves careful research and analysis. In balanced combination, facilitated and enhanced by soundly-based national and international policies and measures, they can form a formidable nexus of self-restraint, disincentive and deterrence. They include at least the following:

a) self-imposed restraint and renunciation, based on personal aversion or moral scruple;

b) self-interest, to avoid provoking the proliferation of BW weapons to others;

c) disinterest, resulting from perceived mismatch between the capabilities of BW weapons and recognized military requirements;

d) disinterest, resulting from lack of assimilation of what might be called the culture of BW and the allied and overlapping culture of chemical weapons;

e) disincentive, resulting from perceived effectiveness of the anti-biological protection of potential target populations;

f) deterrence, including the perceived likelihood and costs of political, economic, penal or military sanctions; and

g) inaccessibility of requisite knowledge and materials, factors of low and declining importance for a state determined to acquire BW weapons, but possibly more relevant to the activities of sub-state groups in countries with effective policing.

If successful, the projected analysis should be able to provide effective guidance in dealing with specific policy questions that national and international officials and other responsible individuals actually encounter. Moreover, the analysis should be designed from the outset with specific policy questions in mind. These might include:

What priority should be given to averting the acquisition and use of BW weapons? How should such priority be determined in specific cases? If the possessor or perpetrator is the enemy of an enemy? An ally?

In what circumstances should deterrence be explicit, implicit, unilateral or multilateral? What forms of deterrence could be counterproductive? What forms of deterrence would threaten minimal harm to innocent parties but would nevertheless be credible?

What international sanctions are desirable and are available or should be made available for what BW-related infractions of international law?

How should a state or the international community respond to a BW attack if the attacker is known? Only suspected? Unknown?

What kinds of information and intelligence can detect and characterize BW weapons programs? What are the more relevant indicators and caveats? How can detection of BW programs be enhanced by international cooperation?

How might publicity for BW-related concerns and activities actually create dangerous interest in the possibilities of BW weapons? How can this be minimized?

What are the realistic goals of BW defense for military forces? For civilian populations?

How can states demonstrate the lack of a BW weapons program?

What aspects of a BW defensive program should be kept secret? What should not be kept secret? How should arguments for secrecy be weighed against arguments for transparency? If secrecy is necessary, how can it be made non-provocative?

What types of work should be out of bounds for BW defensive programs?

What parts of a BW defensive program can be made international?

What forms of civilian oversight and accountability are appropriate for a BW defensive program?

What can be accomplished by denial and licensing regimes? How can their effectiveness be measured? Should an enhanced BWC attempt to restrict access to sensitive materials and track their movements? If so, how?

How should the BWC next be strengthened? A dedicated inspectorate to investigate allegations of use? Short-notice on-site investigations of suspicious activities? Short-notice on-site visits to validate declarations? And if so, declarations of what? Political or economic sanctions for non-membership?

A point to stressed, in conclusion, is the danger of pursuing solutions to one part of the problem that may impede or preclude solutions to other parts.