The Geneva negotiations on a protocol for verifying compliance with the 1972 Biological Weapons Convention (BWC) have so far been unable to produce agreed provisions for visits of inspectors to declared facilities that are especially suited for possible weapons purposes. A significant factor in this lack of agreement has been the qualified United States support for such visits. Although many US officials have indicated support for the visits, according to Marie Chevrier {Washington Post, 21 December 1997} some worry that a strong inspection protocol could create misguided confidence in the compliance of other signatories, thereby undermining budgetary support for military defences. Others are concerned over potential exposure of proprietary information from biological facilities engaged in defence and commercial undertakings.

These issues are not new or unique to the BWC. The "misguided confidence" argument has been part of the debate on every arms control treaty as far back as SALT I. The burden of protecting sensitive information, whether in national security facilities or commercial enterprises, is inherent to the on-site inspection process.

Moreover, the magnitude of the protection burden is directly proportional to the difficulty of distinguishing treaty violations from legitimate activities. The more that there are materials, equipment, human resources and other elements that are common to both legitimate and prohibited activities, the easier it is for a treaty violation to be hidden under the cover of legitimate activities. That is precisely what makes violations of the BWC so difficult to detect. Absent a regime for subjecting legitimate activities to a high degree of transparency, the best way for a violator to carry out a covert programme would be to bury it — piggy-back it — inside a legitimate programme. (As the former Soviet authorities sought to do under their Biopreparat cover.)

Consequently, the more there are common elements between proscribed and legitimate programmes, the more critical is the need for transparency of the legitimate activities. The greater the need for such transparency, however, the greater the challenge to protection of proprietary information. This issue has been confronted in all of the on-site inspection regimes for existing treaties.

The most difficult problems were encountered in the visits required under the Chemical Weapons Convention, where the level of ambiguity between legitimate and proscribed activities is similar in nature to the BWC.

Up to now, the risks to proprietary information have not been judged by US decision makers as sufficient to warrant forgoing the security benefits of incorporating robust verification measures in arms control treaties. Hopefully, the debates on provisions for a strengthened verification protocol for the BWC — whatever the conclusions that result from those debates — will be based on assessments of the benefits and risks to national security rather than parochial concerns.

If this is to occur, however, the strengths and weaknesses of on-site visits have to be addressed in the context of their role in the overall verification architecture. By employing a "legitimate activity" cover, a treaty violator can avoid the need to conceal the various materials, equipment and activities associated with a proscribed weapons programme — they can be sequestered within a legitimate activity. Only the purposes of these elements need be concealed. If the violator can be deprived of the legitimate cover, however, he must conceal the existence of all activities involved in the proscribed weapons effort.

Therefore, the defining objective of on-site verification architecture in the major arms control treaties — whether bilateral agreements limiting nuclear delivery means or multilateral treaties limiting conventional weapons in Europe or eliminating chemical weapons globally — has been to deny a potential treaty violator the means for concealing proscribed programmes under the cover of
legitimate activities. This architecture applied to the BWC would consist of the following requirements:

(1) Each party would be required to submit a “declaration”, identifying by location and description all sites and facilities where there are specified characteristics, such as certain biological agents and equipment and/or activities related to the acquisition, transport and processing of biological materials for legitimate purposes but which could also be especially relevant to possible weapons purposes. A specific intent of this declaration is to establish that the presence of any such specified characteristics, whatever their purpose, at a site that is not declared might represent non-compliance with the basic prohibitions of the treaty.

(2) Each declared site would be subject to “auditing” visits with no treaty right of refusal. There would of course be limitations such as numerical quotas and rules for conduct designed, inter alia, to prevent abuse, but the critical principal should be to make the declared sites “unsafe” for use as cover for proscribed activities. In the current terminology of the Geneva negotiations, such visits would presumably include what are designated as “random” and “clarification” visits, both of which are included in the general category of “non-challenge” visits. In other arms control regimes, non-refusable visits to declared facilities are known as “routine” visits.

(3) Sites that are not declared would be subject to “challenge” visits to resolve issues arising from evidence of the presence of activities that could be part of biological weapons programmes.

The critical element that binds the on-site verification architecture together is that there is no treaty right of refusal for visits to declared sites and that those visits will be carried out in accordance with agreed procedures to meet an agreed minimum level of transparency.

Visits to declared sites are in direct contrast to challenge visits, which are intended for sites not defined in advance. Since any site is technically liable to challenge, such visits must be authorized and conducted under procedures designed to constrain them from being exploited for information gathering outside the bounds of the treaty. These procedures would include requirements for presentation of causal justification for conducting the visit, approval by some treaty-empowered body for adjudicating the case for the challenge, constraints on the amount of transparency that can be imposed, and an ultimate right of refusal by the challenged party.

In combination, these mutually supporting visitation provisions seek to create a synergistic force that presents only bad choices to a state wishing to produce biological weapons:

(1) Carrying out the weapons programme at a declared site — a site that is subject to visits that cannot within the provisions of the treaty be refused. This requires ensuring that all signs of the programme be concealed from the visiting team. Some opponents of a rigorous regime for non-challenge visits argue that the nature of biological weapons programmes is such that this concealment is easily done. Maybe. But how much confidence is the violator to have that this can be done? To what extent is the violator prepared to stake a weapons programme on this gamble?

(2) Another way to avoid these risks would be to attempt to carry out the weapons programme at a site that is not declared and is therefore not subject to random or other “auditing” visits. This, however, would require perfect secrecy — a “leak-proof” operation. Being perfectly leak-proof means all signs of acquisition, transport, storage, processing, and the related communications, safety, security and personnel actions must be totally concealed. Again, that may be technically possible, but history has demonstrated that total secrecy is seldom if ever maintained indefinitely. The more complicated the activity the more likely that some indications will be exposed, especially when concerted efforts, including advanced technologies, are devoted to discovering them. Any snippets of information indicating, for example, the acquisition or presence of certain biological materials and/or equipment, or employment of biological technicians at an undeclared site, however ambiguous the information, could result in the site being subjected to a challenge investigation. Refusal privilege could ultimately be invoked to block the investigation, but not without causing the activity to be a publicized focus of scrutiny. The more evidence presented to support the challenge the greater is the political burden of refusal, as the challenged site becomes a permanent entry on the “suspect target” list. Given the choices, most producers of weapons of mass destruction prefer to avoid the challenge of “perfect secrecy” by burying the activities under the cloak of an ostensibly legitimate activity, so long as the claim of legitimate activity is not itself at risk of being shown to be false by a “non-challenge” visit.

(3) The third option would be to simply avoid both sets of problems by refusing to become a party to the treaty protocol. That carries its own burden, and helps remove some of the ambiguity for planning countermeasures and designing military target options. The rogues have declared themselves.

It is important to note that the effect of these on-site verification regimes comes from their complementary
nature. The utility of one type of regime is severely reduced — arguably marginalized — if it is not complemented by the other.

Within this architecture the effectiveness of visits to declared sites does not have to be measured against the likelihood that such visits would "catch" a treaty-prohibited weapons programme. Such "catches" have occasionally been made in the routine inspections carried out in other treaties, and they always remains a possibility. Nonetheless, the instances when this has occurred have resulted mainly from slip-ups by the treaty violator — reflecting carelessness, incompetence, hubris, or all three — in allowing the activity to take place under the risk of exposure from the visits. As a practical objective the most important contribution of non-refusable visits to declared facilities is to impede a potential violator’s ability to mask signs of a prohibited weapons programme behind the cover of legitimate activities.

To achieve this effect, however, visits to declared sites must be complemented by the possibility of challenge visits. Otherwise, a weapons programme can be shielded from the risk of exposure to visits simply by carrying it out at undeclared sites. While the violator would still attempt to keep all signs of prohibited biological activity totally secret, the costs of failing to meet this requirement would be reduced by the absence of the threat of a challenge visit. With no treaty provision for challenge, the violator could simply fall back as a last resort on a public denial stonewall, without the burden of having to refuse a challenge visit.

Conversely, the constraints that must be imposed on challenge visits to prevent them from being exploited for critical security and commercial information undercuts their potential for exposing — by themselves — a proscribed programme. But complemented by a no-refusal visit regime for declared sites, the effectiveness measure for a challenge visit to an undeclared site does not have to depend solely on its likelihood of proving the existence of a weapons programme. It only has to demonstrate, through evidence, that the challenged site meets the requirements for being on the declared list. In that case, the challenged party has been shown to be in non-compliance with the treaty. Compliance could be restored by making an appropriate declaration, placing the site in the "declared" category and thereby automatically subjecting it to non-refusable “auditing” visits from then on. Of course, there is the further possibility that the challenge visit will produce other information relevant to the concerns that gave rise to the challenge.

There have been suggestions (e.g., Zelikoff) that challenge investigations by themselves are the only kind of visits that are needed. Given the potential for abuse of challenge investigations, however, how are they going to be designed to achieve the ability to ferret an illegal programme from the noise level of a legitimate programme without sacrificing the necessary protection of proprietary information? How will the evidential threshold for justifying a challenge investigation be defined for a site already declared to be engaged in legitimate biological activity? Such evidence cannot rest on discovery of the presence of materials and activities arguably engaged in permitted biological activities, since that is what the facilities are declared to be doing.

In the end, all of these considerations have to be balanced against costs and risks. Such cost–risk assessments would be fundamentally flawed, however, if they attempted to evaluate the impact of non-challenge visits and challenge visits separately, rather than as the two halves of an integral structure. This is an architecture within which the weakening or elimination of one pillar has a major impact on the remaining pillar.

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