

This broader scope would reduce charges of inequity such as those that have arisen as a result of the disparity in the application of IAEA safeguards between nuclear weapons states and non-nuclear weapons states, under the Non-Proliferation Treaty. Those parties with major chemical weapons facilities and relevant chemical industries presumably would bear the greatest burden of safeguards. The broader definition of objectives in this case would strengthen the position of such a chemical weapons treaty, as well as of the agency carrying out the necessary verification activities. Since some chemical warfare activities for protective purposes would still be allowed, since the relevant chemical industry would be larger, more complex and more dynamic than the civilian nuclear industry, and since all parties would be subject to safeguards, the resource requirements of a verification agency under this sort of agreement would be larger than that required for an arms agreement exclusively intended to prevent proliferation.

With respect to the definition of the problems to be managed, Agency safeguards face certain difficulties which could be expected for a similar approach by a chemical weapons verification agency. IAEA safeguards are ultimately directed at preventing one particular end-use of identified facilities, materials and productive processes — for nuclear explosives. The Agency's safeguards approach must be able to distinguish conceptually between permitted civilian and military uses on the one hand and proscribed uses on the other, and to make this distinction operational in its safeguards systems. Monitoring an agreement based on end-use distinctions, because it permits the existence of activities requiring such monitoring, is likely to be inherently more difficult and intrusive than monitoring for the mere presence or absence of a capability. In a chemical weapons agreement, this kind of problem is bound to arise. Although some chemical agents, precursors, plant and technology may have only military purposes and would likely be proscribed under a chemical weapons ban, others have dual capabilities. As well, some military purposes (e.g., for the maintenance of a protective capacity against chemical weapons) may not be proscribed.

Another problem arises from this end-use approach. Nuclear safeguards try to preserve access to the benefits of peaceful nuclear technology while controlling its military uses. At least in the Agency, they do not address problems of "latent" proliferation — the spread of a mere technological capacity to make nuclear explosives. The existence of more than one definition of the proliferation problem — nuclear explosives per se versus a capacity to make nuclear explosives — and the Agency's focus on the narrower problem have had a variety of effects. First, it limits the assurances the Agency can provide through its safeguards. Second, it has led to efforts to pursue the broader definition of the proliferation problem outside the Agency. Third, it affects issues concerning transfers of nuclear goods and services. Each of these difficulties could be replicated for chemical weapons safeguards based on an end-use approach. Applying a latent proliferation approach to parts of the