

The Safeguards Systems

Detailed Verification Objectives

The broad objectives of the Agency's safeguards activities were noted at the beginning of this report, as were some operational difficulties in meeting detailed safeguards goals. Problems may also arise in middle-level statements of Agency objectives. While some of the difficulties may be semantic in nature, they can still be important, since they can contribute to misunderstandings of organizational goals and planning, and to ill-founded suspicion or reassurance about the Agency's safeguards.

Two particular problem areas are the relationship between treaty obligations and safeguards, and the phrasing of compliance objectives. Not all treaty obligations may be verified by agency safeguards. For example, non-nuclear parties of the NPT are prohibited from acquiring or manufacturing nuclear weapons, but the Agency can only safeguard declared nuclear materials in peaceful facilities against diversion. Other routes to nuclear explosives are not covered by the safeguard obligations of the Treaty or by the more detailed safeguards agreements under it. Verifying compliance, strictly speaking, like providing positive confirmation of a proposition, is extremely difficult in logical terms: "all swans are white" can be disproven by one black swan, and the statement is only tentatively true until all swans are known to have been seen and to be white. Establishing non-compliance — disconfirming a proposition — is less demanding logically, but it may be very difficult to prove empirically that materials are, for example, being diverted to proscribed rather than to other or merely to unknown purposes.

It should be emphasized that INFCIRC/153 provides for the application of Agency safeguards to all nuclear materials for all peaceful nuclear activities in a state, to verify that this material is not diverted to nuclear explosives (paras. 1, 2). Its more technical statement of objectives, however, adds "or for purposes unknown" (para. 28). Finally, the Agency is authorized to report to its members and to the General Assembly and Security Council of the United Nations when the Board of Governors "finds that the Agency is not able to verify that there has been no diversion" (para 19).

The problems of establishing non-compliance are bypassed in these additional statements, since the Agency need not prove a violation but merely needs to consider that it cannot verify adequately. Difficulties in the application of the safeguards system may be sufficient to count as anomalies requiring further investigation, and the inability to resolve these satisfactorily could trigger such a finding.¹⁰ The ambiguity of an anomaly is thus enlisted on the side of the verification objective rather than against it. The Agency does not verify that no diversions are occurring, but instead satisfies itself that it should not reasonably fear diversion. This shift in wording and requirements should be