



The objective of the round table was not to produce accurate conclusions about a future arms control verification system for an agreement to control conventional weapons in Europe. Rather, the central aim was to sensitize Canadian industry representatives to the complexities of the verification issue and to identify potential markets for Canadian technology. As they worked through the simulation exercise, however, the groups identified some points which are of general interest.

1. A basic verification system including ground-, air-, and space-based components would probably not be cheap.

A first rough estimate was in the order of \$1.5 billion including \$1 billion for a specialized satellite system.

2. Installing adequate systems integration for the system would likely push up the price.

Participants felt that a more thorough study of systems integration issues would be desirable. Most felt that the cost implications of doing the job well would be considerable.

3. Any verification system would probably have to be implemented progressively in stages, simply because different elements of the system would require different periods for development.

For example, it was suggested that the implementation might run as follows: ground-based systems (1-3 years), air-based systems (5 years), space-based systems (10 years). As a consequence, the overall system would have to be phased in over time.

4. Arms control measures would probably have to be phased in as well, and be coordinated with the progressive implementation of a verification system.

5. People and technology must both be used in a verification system.

People are often the most reliable sensors. Moreover, the presence of human observers and inspectors helps

to build confidence. Nonetheless, technology provides an essential background monitoring and archival function.

6. Canada is capable of providing much of the required technological and operational services for a multilateral verification system in Europe.

However, other Western countries have many of the same capabilities as Canada.

The Next Step

Most industry participants saw a need for the Canadian Government to become actively involved in further measures to stimulate industry activity in this area. Two types of study were suggested:

How to Verify It, According to One Newspaper

The Canadian Government's Verification Research Programme has received considerable attention recently. The following article by Jeffrey Simpson appeared in the Toronto Globe and Mail on February 25, 1988.

"Let's assume that both superpowers could agree to reduce their arsenals of nuclear weapons. The question would then become how each could verify the other's compliance with the treaty.

That issue — verification — has been among the knottiest in arms control. Just this week, U.S. Secretary of State George Shultz and Soviet Foreign Minister Eduard Shevardnadze admitted that the problems of verification are the most difficult in the negotiations to reduce long-range ballistic missiles.

For decades, the Soviets resisted on-site inspections, describing them as legalized espionage. But the arrival of Soviet leader Mikhail Gorbachev changed all that. The proposed treaty eliminating intermediate-range nuclear weapons in Europe provides for teams of observers to verify the dismantling of

1. an in-depth feasibility study covering essentially the same ground as the round table, but in much more detail;

2. a practical field trial designed to test the different elements of a verification system and to determine how to operate it effectively.

The participants felt that the round table was very successful as an awareness-raising exercise. The majority of industry participants felt that they had learned a great deal about verification, and expressed their intention to remain involved with the field. For their part, government participants learned more about Canadian industrial capabilities, and established much-needed contacts with the private sector.

missile installations and the destruction of the weapons.

Canada, which has no nuclear weapons of its own and is only a small player in the Western military alliances, has nonetheless become exceedingly active in promoting new techniques for verification. It is a suitable role for the country, one aggressively pursued by Canadian diplomats in a variety of international forums.

Any superpower agreement would be monitored by the United States and the Soviet Union, relying on their own satellites, sensors, intelligence and on-site inspections. But what about conventional force reductions in Europe, whose negotiation would involve many countries, including Canada?

Here the problems of verification become mind-boggling. We are talking not just about one weapons family — missiles — but about a variety of military means including troops, tanks, planes, helicopters and artillery.

This week in Toronto, some of the best minds in Canadian industry and the