Canada's Verification Research Program

The verification of compliance with arms control and disarmament agreements is a major focus of Canada's efforts in the multilateral arms control and disarmament field. The decision to devote Canadian resources to this issue was made early in the 1980s, when verification was a constant source of disagreement and there was a clear need for innovative approaches to the question.

An initial, modest, cooperative program was developed involving the Operational Research and Analysis Establishment of the Department of National Defence and the Arms Control and Disarmament Division of External Affairs and International Trade Canada. The aim of this program was to study arms control verification in a general, conceptual manner as well as to support specific negotiations. It was an attempt to introduce some gentle leadership and coordination into international discussions, while at the same time leaving the field open to contributions. from other nations in areas of their expertise.

On June 18, 1982, during a speech to the second United Nations Special Session on Disarmament (UNSSOD II), the Right Honourable Pierre Elliott Trudeau, then Prime Minister of Canada, identified verification as one of the arms control and disarmament issues that Canada considered to be of greatest importance. He pledged the Canadian government to substantially increase its research on verification.

On February 20, 1984, formal approval was given for the establishment of the Verification Research Unit within the Arms Control and Disarmament Division of External Affairs and International Trade Canada. This permitted the Verification Research Program (first funded in October 1983) to begin its operations.

The general objective of the Verification Research Program is to contribute to the process of achieving verifiable arms control and disarmament agreements that will increase the security of Canada and its allies. Specifically, the Program seeks to do the following:

- analyze verification issues;
- assess the implications and adequacy of verification proposals;
- investigate ways of improving verification techniques and develop new approaches;
- foster Canadian expertise and capabilities in verification among the academic,
 commercial and government sectors; and
- contribute to improved understanding of verification issues.

Innovative in concept and focused on the multilateral process in application, this unique Program is currently funded at approximately \$1 million per year. It provides a natural framework within which Canadian expertise from government, the business sector and the academic community can be combined to address questions of arms control verification.

Unique program makes Canada verification leader

The results of the work of the Verification Research Unit, and of researchers under contract with the Verification Research Program, are published and distributed widely within Canada and abroad. In many cases, these publications have become standard reference material. Thanks to the Program, Canada is involved in verification discussions and activities across a wide range of arms control and disarmament issues.

Canada is currently playing a key role in sensitive discussions within NATO and at the negotiations in Vienna with the Warsaw Pact regarding verification of an agreement to reduce conventional forces in Europe. Canada will undoubtedly make a significant contribution to NATO verification operations once an agreement is in place.

Canada is also involved in scientific discussions concerning an international seismic data exchange to verify a ban on underground nuclear explosions. A Canadian scientist has been chosen to be coordinator of the second Global Seismic Exchange Technical Test (GSETT-2), to be conducted in 1990.

Work on CFE, CTB, Outer Space, Open Skies and CW verification

On outer space arms control issues, Canada has explored the use of space-tospace remote sensing for verification (the PAXSAT "A" feasibility study), as well as other methods.

The Program has also conducted background research with respect to the use of aerial inspections for verification, and in the context of the "Open Skies" initiative.

Canada has long been active on issues related to the verification of an eventual Chemical Weapons Convention. Technical papers have been provided to negotiators to clarify such matters as the destruction of chemical warfare agents, procedures for verification of allegations of use of chemical weapons (including novel agents), and the categorization of chemicals produced for commercial purposes but also of concern to the Convention. In addition, Canada has examined organizational matters related to the role and functions of the national authority and international authority to verify the Convention. In all cases, work continues and is shared with others as appropriate.

Since its creation, the Verification Research Program has enabled Canada to make a significant contribution to discussions related to multilateral verification. While the Program has achieved a great deal, much remains to be done, particularly with respect to the detailed work of designing verification provisions for specific agreements. Canada will continue to play a key role in promoting solutions to verification problems.