(Mr. Beesley, Canada)

I want now to focus on some of the research undertaken in Canada which comprises the joint efforts of government, the academic community and the commercial sector. This approach is nowhere better illustrated than in the research relating to outer space. Canadian activities in this regard represent an attempt to develop and pursue an approach which is practical and innovative.

One of the major undertakings of the Verification Research Programme of Canada's Department of External Affairs over the past several years has been to bring together teams of experts from government, universities and industry to focus on Canadian space technology and know-how in its application to the process of arms control verification. A Canadian concept, termed PAXSAT pax being -- with apologies to the Chairman of our Ad Hoc Committee on Outer Space, as he does not need to be told this -- the Latin word for peace -- PAXSAT is the term which has emerged from these investigations. This concept centres on assessing the feasibility of applying space-based remote sensing technology to the tasks of verification in the context of multilateral arms control and disarmament.

Canada's PAXSAT research has concentrated on two potential applications of space-based remote sensing to multilateral arms control verification. The first is space-to-space remote sensing (which we refer to as PAXSAT A), dealing with verification of agreements involving space objects. The second, entailing space-to-ground remote sensing (which we refer to as PAXSAT B), focuses on how to assist in the verification of agreements involving conventional forces. I want to discuss very briefly this somewhat distinctive Canadian concept in very general terms, outlining the context of multilateral arms control verification and some of the major assumptions underlying the Canadian PAXSAT projects.

From the outset, PAXSAT research has recognized the important technical, political and military realities and trends in addressing the outer space issue. As a result, certain themes form core elements of the PAXSAT concept and contribute to the prospects of actually realizing such a multilateral verification system. These include the following:

Firstly, there must be the prospect of a significant multilateral agreement to warrant the level of sophistication of technology and the expenditure of funds required for the actual development of such an advanced technical verification system.

Secondly, parties to such a multilateral agreement should have the option, at least, of participating in its verification procedures.

Thirdly, use of the PAXSAT system should be treaty-specific: it would be used only with respect to the agreements to which it expressly applied, as part of an overall verification process for those agreements alone.

Fourthly, the treaty being verified would establish the requisite political authority for the verification mechanism and its operation.