The Limited Test-Ban Treaty (LTBT), the BTWC and the Environmental Modification Convention are treaties with large membership but no provisions for verification other than national technical (and other national) means. Moreover, the provisions in the Outer Space Treaty for OSIs on the moon have yet to be put into practice. None of these, nor the Open Skies Treaty, nor the Antarctic Treaty have multilateral agencies set up to collect and analyze information, although considerable work has been done by nations and by international research organizations to collect data on the detection of nuclear tests and of the use of biological weapons. If a CTBT is negotiated it will require a worldwide network of seismic and other sensor stations, a communications system, and a data centre to collate the data. Fortunately, many seismic stations are in place and working already, installed under national control for the detection of earthquakes, but also able to contribute to monitoring of underground nuclear explosions. It seems probable that verification of a CTBT would best be done by a specialized organization.

The MTCR and similar groups are non-proliferation regimes with limited membership that share information among their members to control international transfer of armaments and related technology. The UN Arms Control Register assembles information voluntarily provided by UN Member States, making it freely available.

As the value of satellite imagery becomes more and more appreciated, and better quality imagery more generally available, there are periodic proposals for a UN agency to operate surveillance satellites for the purposes of arms control verification. CITA could play a key role in such an operation, although during the next few years the UN is more likely to depend on national or commercial agencies to provide satellite imagery.

Finally, there are the very important bilateral arms control treaties on nuclear weapons, drawn up between the United States and the Soviet Union, or, since the dissolution of the latter, the Russian Federation.⁴⁷ The Strategic Arms Limitation Treaty (SALT), Intermediate

The specialized expertise required for monitoring certain categories of technology (such as that required for nuclear and for chemical weapons), and for analyzing the significance of the information, is likely to be best provided by national agencies, or small groupings of allied states (e.g., the Nuclear Suppliers' and Australia groups). Nations may not be as willing to reveal information to a global organization likely to include potential rivals, or to give as much credence to its analysis. Large size is often inconsistent with efficient operation, especially in an international bureaucracy. However, many states should be prepared to make some contributions of both information and personnel to CITA, while many continue to maintain at the same time their participation in smaller treaty-specific groups.

For its own analyses, CITA would benefit from the advice and experience of personnel familiar with the methods developed in the other agencies. Moreover, for countries not members of these smaller specialized groups, one of the incentives to support the creation of CITA and to participate in its activities would be to receive information on verification experiences from the existing groups. Also, the training which CITA would provide to less developed countries would benefit from the co-operation of the more specialized regimes. Such co-operation would help to offset the impression sometimes expressed by many less



Range Nuclear Forces (INF) and Strategic Arms Reduction Talks treaties include increasing and unprecedented degrees of information exchange and intrusive verification regarding strategic and intermediate-range nuclear weapons. The TTBT took similar steps in regard to the limitation of the energy yield of underground nuclear tests. Although the raw information, the technical means by which it is obtained and the analysis are national secrets, most of the ultimate conclusions regarding verification of these treaties are made public by the United States. It should be noted that bilateral arms control treaties also exist between other countries.

⁴⁶ One proposal by France, which drew much interest in the early 1980s, was called ISMA (International Satellite Monitoring Agency).

⁴⁷ Other successor states of the former Soviet Union, in whose territory nuclear weapons were deployed, are undertaking similar obligations.