

definition of military significance. NTM/MTM/ITM will remain the foundation for effective verification, although co-operative measures, aerial inspections/Open Skies and CBMs will continue to play increasingly important roles.

New requirements for verification will be generated by emerging areas of concern and possible future agreements such as lower thresholds for the TTBT and limits on the number of tests, naval arms control, more effective measures to control the transfer of advanced weapons and associated technologies, the clarification of the ABM Treaty, ASAT limitations and agreements to reprocess and control materials from eliminated warheads. It is assumed that the maintenance of stable nuclear deterrence will remain the cornerstone of the security policy of the major powers, requiring verified controls over strategic defensive as well as offensive forces.

Verification regimes in the near future will be recognized as mechanisms for providing more than just "effective verification"; they will provide early warning and enhanced predictability, and they will offer indirect benefits in the fields of peacekeeping support, environmental monitoring and detection of drug smuggling. Future verification regimes will require new technologies for the sensors associated with NTM/MTM/ITM, seals and tags, and CW/BW sniffers, sensors and detectors. The OSI technologies, however, will have to be practical, reliable, durable, robust, stable and user friendly.

These evolving verification trends suggest several profitable areas for further research. They include:

- the identification and evaluation of possible complementary roles for verification regimes (combining, for instance, arms control, resource and environmental monitoring);

- the evaluation and formulation of potential forums (including multilateral bodies) for implementing multilateral arms control agreements and fulfilling their verification requirements;
- the assessment and enhancement of the relationship between verification regimes and the confidence-building process;
- the evaluation of the synergistic effects among NTM/MTM/ITM, co-operative measures, OSI, and CBMs within and among arms control agreements; and
- the identification of the unique verification requirements associated with
 - maritime arms control,
 - limits on space weapons (including ASATs),
 - the development of defensive doctrines and deployments,
 - nuclear materials cut-off and destruction, and
 - the transfer of advanced weapons and their associated technologies.

Effective verification will be the key to acceptance of future arms control agreements, a means of maintaining peace, a method of surveillance of less co-operative nations and a means to extend control over natural as well as man-made threats. In circumstances where international relations are friendly and co-operative, verification should proceed with a minimum of friction. If relations deteriorate, however, it is possible for an unco-operative state to use the provisions of verification as a pretext for a series of accusations that would make relations worse. Because the arms control process is both an essential part of international relations and a reflection of those relations, verification to the year 2000 will provide both significant opportunities and major challenges.

