

In some cases the ambiguities regarding a space operation can be cleared up with a minimum of basic information, i.e., through unilateral monitoring — at least to the extent where it can be established that some operation is inconsistent with a hostile objective. In the absence of more direct knowledge of the hardware used in such space-based operations, it is difficult or impossible to rule out direct space weapon research operations and/or deployment.

## 4.2 Ambiguity Removal

It is here that international treaties and agreements can play a key role. A United Nations agreement, the 1975 *Convention on the Registration of Objects Launched into Outer Space*, requires participating states to maintain national registries of space objects launched into orbit and beyond. This information is submitted to the Secretary General for the purpose of international registration. States are required to provide information such as the date and place of launch, the launching party, a designation of the space object, basic orbital parameters, and the general function of the object.

A major function of this *Registration Convention* is to support the 1972 *Liability Convention* which, with regard to outer space, assigns responsibility for damage caused by a space object to the nation who has ownership of that object. Frequently noted deficiencies in the *Registration Convention* are the lack of requirement for a more specific description of spacecraft function and the absence of a set timetable for notification.

Greater exchange of satellite information could play an important support role in virtually any space weapon treaty. The essential purpose of such an exchange would be openness and timely disclosure. To this end, the mentioned shortcomings of the current *Registration Convention* could be corrected through an upgraded convention, a separate agreement, or by imbedding data exchanges within the space weapons treaty to be supported. A more specific description of the spacecraft function should be required and advance notification given of orbital status provided. For example, a pre-launch notification of the nominal mission timetable could be required.

These improvements are an integral and practical corequisite to any on-site or on-orbit verification procedure. Thus, the verification of the payload of a satellite not constituting an illegal weapon system involves verifying both what the payload is not and what the payload is purported to be.

The pre-launch disclosure of on-station orbital parameters is relevant to the management of any sort of keep-out zone treaty. This would allow participating states to preemptively evaluate the new satellite orbit with regard to possible keep-out zone violations and to initiate a grievance procedure if required.