The Accident Measures Agreement requires the parties, *inter alia*, to notify each other immediately of signs of interference with their early warning systems or related communications facilities if such occurrences threaten nuclear war (Article III). Thus interference with early warning systems is considered as a threat which could risk the outbreak of nuclear war.

In the Prevention of Nuclear War Agreement each side undertakes to act in a manner "to prevent the development of situations capable of causing a dangerous exacerbation of their relations, as to avoid military confrontations and as to exclude the outbreak of nuclear war between them and between either of [them] and other countries" (Article I). Article II further requires the parties to refrain from the threat or use of force against the other Party, their allies, or other countries which may endanger international peace and security.

When read together, these two Agreements reveal an implied understanding amongst the parties of the need to avoid interfering with early warning satellites.

Finally, the Hot Line Modernization Agreement requires the establishment of two additional communications circuits between the two parties, using satellite communications systems. The Agreement prohibits interference with communications satellites involved in the Direct Communication Link.

## The ENMOD Convention 1977<sup>17</sup>

This Convention aims at prohibiting the hostile use of potentially disastrous environmental modification techniques (EMT). It is relevant to outer space, chiefly due to the vantage point which earth orbital status imparts.

The dual-use nature of space technology is well exemplified in the area of EMT. This receives recognition in the preamble to the ENMOD Convention in which it is observed that the use of [EMT] for peaceful purposes could improve the interrelationship of man and nature and contribute to the preservation and improvement of the environment for the benefit of present and future generations. However, it is also recognized "that military or any other hostile use of such techniques could have effects extremely harmful to human warfare."

Prohibited techniques are defined as "any techniques for changing –through the deliberate manipulation of natural processes- the dynamics, composition, or structure of the earth, including its biota, lithosphere, hydrosphere, and atmosphere, or of outer space" (Article II). An "understanding" relating to Article II, which is part of the negotiating record, includes among examples of ENMOD techniques "changes in the state of the ozone layer, and changes in the state of the ionosphere".

The Convention has the serious limitation of not banning all environmental modification technologies for military or hostile purposes, but only for those which have "widespread, long-lasting or severe effects." No definition of these terms may be found in the Convention itself. Understandings which accompany the ENMOD Convention, and form part of its negotiating record define: "widespread" as encompassing an area of several hundred square kilometers; "long-lasting" as lasting approximately a season; and "severe" as involving significant disruption or harm to human life, natural and economic resources or other assets. Thus non-hostile

<sup>&</sup>lt;sup>17</sup> The Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques, 31 U.S.T. 333. Opened for signature 18 May 1977; entered into force 5 October 1978.