

A CTBT would put an end to the additional contamination of the environment with radioactive substances released by future nuclear explosions.

Non-proliferation aspects

A CTBT would help legitimize increased international pressure on the nuclear threshold countries who have not joined the NPT to forgo the nuclear weapon option. In some cases, regional approaches to a CTBT might be important steps toward this aim.

A CTBT would strengthen the non-proliferation regime by eliminating one element of friction concerning the inequality of the obligations assumed under the Non-Proliferation Treaty by the nuclear haves and nuclear have-nots.

A CTBT would satisfy an important requirement put forward by some non-nuclear-weapon countries for the extension of the duration of the Non-Proliferation Treaty after 1995 - for another lengthy period (or periods) or indefinitely.

In principle, it would be possible for a non-nuclear-weapon State to build a nuclear armoury without testing. This is surely far more feasible than it was in 1945 or during the 1950s. However, in an era in which both a CTBT and the NPT were in force, such an activity would be fraught with political hazards. There is also a high likelihood that a non-tested stockpile would in fact not function.

An important psychological impact, not usually taken into account, would occur through the weapon scientists and engineers of the advanced nuclear States. If nuclear testing is made illegal, the nuclear weapon personnel in the United States and Russia will be extremely vigorous about policing such a ban in the rest of the world, as well as in their own countries.

For these two reasons - the psychological motivation of large numbers of people in the nuclear-weapon establishment in the nuclear-weapon States to police vigorously a CTBT, and the hazards, impediments and uncertainties which a CTBT era would impose on the would-be proliferators - a CTBT would be a major tool to inhibit proliferation of nuclear weaponry.

Military and political implications

A CTBT would be an event with considerable confidence-building effects. It might strengthen the growing conviction about the uselessness of nuclear weaponry for the security of nations.

It might relieve the psychological stress associated with the apocalyptic nature of nuclear weapons.

In so far as concern about "technological surprise" has driven the arms race, a CTBT may remove one of the causes of this apprehension: it would make it unlikely that something completely new, unpredictable and exotic would suddenly emerge in the nuclear field.