## **Nuclear testing**

In 1972, activity in the CCD and in the UNGA First Committee, which has responsibility for disarmament questions, centred on the cessation of nuclear testing and the elimination of chemical weapons. In its present form, the nuclear testing issue has been before the UNGA and the CCD since 1963 when the Partial Test Band Treaty was signed. This treaty prohibits nuclear tests in the atmosphere, in outer space and under water. The ban does not apply, however, to underground tests and this shortcoming has enabled the USSR and the USA to continue active nuclear weapons test programmes, although these must all be carried out below the earth's surface. Moreover, neither France or China has adhered to the treaty, and both continue to test in the atmosphere.

Parties to the Partial Test Ban Treaty undertook, under its terms, to continue negotiations towards "the discontinuance of all test explosions of nuclear weapons for all time", and the achievement of an underground test ban has accordingly been a main objective of the CCD. The two super-powers have declared that they share this objective, but their positions differ sharply on what would constitute adequate verification of an underground test ban. The United States contends that obligatory on-site inspections are needed to clarify ambiguous seismic disturbances that cannot be classified either as earthquakes or tests by teleseismological means alone. For its part, the Soviet Union holds that on-site inspections are unnecessary and unacceptable. Neither has departed in any significant way from the position taken in 1963, and the CCD has accordingly made no progress towards an underground test ban.

The initiative has thus been left to smaller powers. Canada, for its part, has tried to stimulate the resumption of active negotiations on an underground test band by urging the super-powers to adopt more flexible positions, by proposing interim measures which would lead to a reduction in testing, and through contributions to scientific knowledge in the area of seismology, with a view to reducing the verification problem. In this connection, Canada agreed in 1972 with Sweden and Japan on measures to improve tripartite cooperation in seis-

mological verification of underground explosions, and submitted a joint working paper on the subject to the CCD; in addition, Canada and Sweden also tabled a working paper in the CCD on international cooperation in short-period seismological discrimination of shallow earthquakes and underground nuclear explosions. In addition to its efforts to bring about an underground test ban, Canada has repeatedly urged France and China to abandon their atmospheric testing in particular, and to adhere to the partial test ban.

The basic elements of Canadian policy were set down in a resolution which Canada, together with 15 other countries, submitted to the UNGA in 1972. This resolution stressed the urgency of halting all nuclear weapons testing in all environments; urged all states which had not done so to adhere to the Partial Test Ban Treaty; called upon governments testing underground to take unilateral or negotiated steps to suspend or reduce such testing pending the early entry into force of a total ban; requested the CCD to give first priority to this item and to submit a special report to the twenty-eighth session of the General Assembly; and urged governments to develop further their capabilities for the detection and identification of underground nuclear tests. This resolution received wide support in the General Assembly.

## Chemical and biological weapeons

The use of chemical and biological weapons is prohibited by the Geneva Protocol of 1925, but some military powers have nonetheless continued to develop, produce and stockpile them, especially chemical weapons. A major step towards reinforcing the Geneva Protocol was taken on April 10, 1972, when a treaty on the elimination of biological weapons, which had been negotiated in the CCD, was opened for signature; Canada signed the treaty on that day and ratified it on September 18. The Convention will enter into force when 22 countries, including the USA, the USSR and Great Britain have ratified it.

Discussions have continued in the CCD on the contents of a parallel treaty which would prohibit the development, production and stockpiling of chemical weapons. Progress on this issue has been slow, owing