K20(G73)

## Proposal Abstract K20(G73)

1. Arms Control Problem:
Nuclear weapons - comprehensive test ban

## 2. Verification Type:

- (a) Seismic sensors international network
- (b) Remote sensors satellites
- (c) International exchange of information
- (c) On-site inspection selective

non-obligatory

## 3. Source:

Sweden, CCD/PV.614, 19 July 1973.

See also: - "Working paper reviewing recent Swedish scientific work on the verification of a ban on underground nuclear explosions". CCD/405, 10 July 1973.

## 4. Summary:

Seismic monitoring techniques provide sufficient probability of detection, for effective deterrence. But there is a need for more suitably located modern stations, efficient exchange of seismic data and an international centre to receive data, locate events and redistribute information to the parties.

Satellite verification can provide valuable supplementary information to that of the primary verification method (i.e. seismic monitoring). Satellite can monitor small scale activities within selected and limited areas such as known or suspected underground test sites. This adds an extra burden to potential violators. Satellites could play a useful role in avoiding false alarms by confirming the absence of human activities at a suspected test site. Sweden advocates international control over such observation satellites.

On-site inspection should be used not as the primary means of control but as a follow-up methods for events that are detected and located but not identified. The exact nature, and the frequency of inspections required is not clear. Preferably they would be conducted only on invitation. Nevertheless, even without on-site inspection sufficient deterrence can be achieved to prevent violation.