overcome these difficulties, Canada proposes a new criterion which would be the product of the concentration in vapour or aerosol form multiplied by the exposure time at the end of which an irritation or incapacitation is observed in 50 per cent of the persons exposed; this is referred to as the average effective Ct. The proposed threshold of 500 mg.min/m^3 would make it possible to resolve the problem; commonly used irritants exceed this level, whereas incapacitants do not.

Determining the average effective Ct is a complex task, since it involves differing techniques depending on the mode of action of the substance in question.

In conclusion, the criterion of destination cannot be used on its own to define a chemical warfare agent; it must at least be combined with the toxicity criterion for lethal substances and the effectiveness criterion for incapacitants or irritants.

In the light of the above, it may be concluded that:

I. The development, production and stockpiling of the following chemical warfare agents must be totally prohibited. The production of limited quantities may be authorized for research in the health field and the development of protective measures:

Organophosphorous compounds, whose structure corresponds to that defined by the Netherlands (CCD/338);

Chemical substances whose inhalation toxicity threshold as evaluated by the Canadian comparative method is below that of a reference agent (to be selected) which has a toxicity threshold of around 2,000 mg.min/m^3 and for which the average lethal percutaneous dose is lower than that of nicotine or whose average lethal dose by injection is lower than that of neostigmine;

Incapacitants whose average effective Ct by inhalation is less than 500 mg.min/m^3.

II. The development, production and stockpiling of the following chemical agents should be authorized only for scientific and industrial needs:

. . Chemical agents whose LCt 50 is between 2,000 and 20,000 mg.min/m^3.

III. The development, production and stockpiling of the following chemical agents should be authorized only for scientific and industrial needs or for training and police needs:

Irritants whose average effective Ct is above 500 mg.min/m^3.

Any new chemical substance whose inhalation toxicity threshold is below 20,000 mg.min/m^3 or whose average effective Ct is below 500 mg.min/m^3 should be declared.