

Third session
Geneva, 27 November - 8 December 1995

Discussion Paper on Declarations:

LIST OF AGENTS AND COMBINATIONS OF CRITERIA

INTRODUCTION

1. The Ad Hoc Group has been considering a list of pathogens and toxins (P&T) in relation to declarations that may be required in the context of the Biological and Toxin Weapons Conventions (BTWC). Also mentioned in the Ad Hoc Group, although not yet discussed at any length, is the extent to which other criteria may help refine or focus the declaration process so as to minimize the expenditure of energy in the collection and reporting of information of uncertain relevance to the Convention.

2. A study was undertaken of the declaration requirements that might ensue **in Canada** from a list of agents similar to that now being considered by the Ad Hoc Group, and the declaration requirements that might ensue from a set of “declarable” activities. Finally -- and this was by far the most important aspect of the study -- we examined the way in which a list of P&T might be used **in combination with** certain activities to provide additional focus to the declaration process while reducing the declaration burden at the same time, and we have concluded that such an approach merits further consideration.

LIST OF AGENTS, STAND-ALONE

3. Beginning with a notional list of P&T similar to that being considered by the Ad Hoc Group, we estimated that we might be required to make at least **750 separate declarations** on the basis of storage or retention or work with any of the P&T appearing on the list. (The list itself is not particularly important to this report, recognizing that numbers may change considerably depending on the list.) Working from the list alone, some 750 government, industry and academic facilities would be obliged to submit declarations, and even then it would be difficult if not impossible for a government office to be able to state with any assurance that it had compiled all of the data. The difficulties in determining who has any of the P&T at an initial starting point, then ensuring that this data is augmented by all facilities newly acquiring any of the P&T, would be a daunting task and should not be underestimated.

ACTIVITIES, STAND-ALONE

4. Other criteria considered for the submission of declarations included the following:

- Level of biocontainment;
- Military microbiology;
- Aerobiology;
- Work with listed P&T;
- Production microbiology; and
- Genetic engineering/biotechnology.

5. **Biocontainment** is a subject that has received considerable attention over the years, and we recognized that there may be a separate rationale for the declaration of BL4 facilities, although in Canada we do not yet have any such facility operating. We also took into consideration that in a number of countries, including in Canada, there is no obligatory licensing or registration process that applies to BL3 or BL2 facilities. Implicit in the use of “biocontainment” as a declarable activity would be the need for a national registry that would provide reliable information to respond to an obligatory declaration requirement; and this needs further examination. We are also contemplating whether any such facilities of interest to the BTWC would be captured in relation to other declarable activities or combinations of criteria/activities. If captured due to other declarable activities, a facility might then be required to provide information on biocontainment. Following this same logic might be the way to address **equipment**, perhaps with a few notable exceptions. In other words, equipment *per se* should not drive declarations; but rather, once a facility is captured for declaration purposes for whatever reason, descriptive data requirements might logically include various types and sizes of equipment.

6. **Military microbiology** could be a reasonably straight-forward declarable activity if approached from the point of view that all military department-funded microbiology work, whether domestic or foreign, should result in a declaration. This would include military microbiology conducted by any military facility, or by any non-military facility on behalf of the military department. Thus, in Canada, this would result in one military facility being declared as well as 19 non-military facilities doing microbiology work on behalf of the Canadian military. In addition, there was one non-military facility doing microbiology work that was funded by a foreign military department. It is possible that one way of approaching such a declaration requirement would be to have the military department submit one declaration on behalf of its own facility and on behalf of its (19) contracting facilities; with a separate declaration being submitted by any facility doing microbiology work for a foreign military department; in this case, for a total of two declarations, albeit comprising 21 facilities. It has already been mentioned during Ad Hoc Group discussions that “work with listed P&T” by military facilities for purely health-related diagnostic purposes may conceivably be excluded from the declaration requirement, as indeed it may be excluded more generally in regard to health-related diagnostic purposes. This needs to be examined further, also bearing in mind the need to avoid creating a potential loophole.

7. **Aerobiology** is also an area of activity that has received some attention as a stand-alone reporting requirement. In so far as it may be conducted by or on behalf of a military department, it should be captured under the heading “military microbiology”. Again in Canada, if grouped as in the previous paragraph, there would be one declaration from the military department, comprising its own plus four other facilities; and a separate declaration by an academic institution (although not involving work with listed P&T); for a total of two declarations. However, this statement must be immediately qualified to the effect that other aerobiological activities for health research, agricultural or environmental purposes need to be more fully explored before firm conclusions can be drawn about the utility of such a stand-alone reporting requirement and about its implications.

8. Under a more general heading of **work with listed P&T**, our own data analysis double-counted facilities that were already captured under other activity headings, so one would want to define activity categories in a way that would minimize this pitfall. If one specifically eliminates the overlap with other headings; and, furthermore, if one treats production microbiology and genetic engineering/biotechnology as separate activities; then the number of declarations in Canada under this heading might number between 20 and 30. In this case, there were government, industrial and academic facilities captured under this heading.

9. The headings “production microbiology” and “genetic engineering/biotechnology”, it was found, generated overlapping data. By distinguishing the two, under the heading of “**production microbiology**” we captured mainly pharmaceutical companies engaged in making certain human and/or veterinary products. Some 30 such facilities were identified in Canada.

10. A search of various data bases and publications revealed that many hundreds of facilities -- perhaps between 600 and 700 government, industrial and academic facilities -- might have to be declared if one were to require declarations solely on the basis of doing **genetic engineering/biotechnology** work.

COMBINATIONS

11. When the activities “military microbiology”, “aerobiology”, “work with listed P&T”, “production microbiology” and “genetic engineering/biotechnology” were examined in combination, we came to the following conclusions:

- **Military microbiology as a stand-alone criterion**, and hence **also in combination with any other activity**, would result in declarations having to be made. We could, with confidence, compile the required data;
- **Any activity in combination with listed P&T** (for example, production microbiology) would result in declarations having to be made. It remains to be considered whether certain types of work with listed P&T (e.g. health-related

diagnostic work and/or certain types of academic work) need be excluded explicitly from the declaration process, or whether this would simply follow from a variant of this combination approach.

12. After analyzing the results to avoid double-counting, it was thought that there might only be some 6 declarations comprising, however, many more facilities. For example, as discussed under the heading of “military microbiology”, we estimated 2 declarations comprising 21 facilities. Similarly, one might see a single industrial entity or university involved in a number of activity combinations at a number of facilities which may or may not be co-located. In Canada, we estimated that the 6 declarations would, in fact, provide details on between 30 and 50 facilities. Once required to submit a declaration, then the details of that declaration might logically require information on biocontainment and certain equipment holdings.

13. Concerning biocontainment, we believe that further consideration needs be given to whether this should constitute a “declarable activity” and what might be its possible interaction with other criteria.
