This paper attempts to identify some of the components of the information processing system using the current rolling text CD/1046 as a basis. The paper is organized according to the difference types of verification functions outlined in CD/1046, namely verification of initial declarations, routine monitoring of facilities, chemicals and activities covered by the Convention, and extraordinary monitoring required by unforseen circumstances such as those involving challenge inspections.

2.0 Verification of Declarations

Initial declarations would contain information about facilities, chemicals and chemical weapons. Each facility and each National Authority would constitute an information processing node; these nodes and their links to the headquarters or other facilities of the Organization would form the global information processing system of the Organization. Quantitative information about facilities such as location, size, production, or storage capacity, can easily be stored and utilized in an automated information processing system. However, plans, drawings and photographs would be a type of data which would not be easily amenable to automation, although an automated cross-reference system could be implemented.

Verification of facility declarations would involve such activities as: a) manual examination of plans, photographs, and drawings of process lines and storage facilities, b) site visits to confirm the location and layout of the facility, the specifications of process lines and equipment, and the capacities of storage buildings and containers, c) analysis of plant specifications to confirm declared capacities, and possibly, d) analysis of samples taken from the facility to confirm past production of chemicals reported to have been produced at the facility.

Product declarations would contain past production of Schedule 1 chemicals, stored Schedule 1 chemicals in bulk or as weapons, and the identification per facility of past and/or current production of chemicals listed in Schedules 2 and 3. Confirmation of these declarations might involve, at least, examination of the facility records, and at most, collection and analysis of samples taken from each declared facility.

The information processing requirements with respect to the initial declarations and their verification would consist of, inter alia, processing and accounting information about facilities and products. A classification system would store data about chemicals on the basis of the three schedules. It is anticipated that, initially, the most detailed information would be about chemical weapons, chemical weapons facilities, and schedules for the destruction of the weapons. Chemicals would be identified by chemical name, structural formula and Chemical Abstracts Service registry, if available, In the case of declaration of chemicals not already listed in the Schedules, toxicity levels and methods of