The technology now utilized by the Department covers a range of information technologies, including:

- microcomputers (IBM PCs, Apples)

- minicomputers (Data General, Microdata, Burroughs),

- mainframe (Dec 20),

- computer service bureaux (IST, Datacrown, Comshare),

- wordprocessors (Wang, AES, Micom),

- facsimile equipment,

- intelligent photocopiers (Xerox, 3M),

- telex,

- telephone (standard Bell issue),

- sophisticated telecommunication systems (NOCAMS - Data General),

- the pilot projects (Mitel Kontacts, Grid Compass).

A diagramatic representation of the computer related equipment is shown in Figure 1.

(1) DEC 20 MODEL 60

The principal computing resource is the DEC 20 system with over 55 on-line terminals. It is used for the Information Storage and Retrieval System (IS&R), the Departmental Personnel Management Information System (PMIS) and the Financial Management System (FMS). The DEC 20 computer operates in a secure environment which requires all its terminals to be hard wired and located in locked rooms. The system provides good on-line processing capability and has been reliable for the installed applications. The problems of sharing a computer holding classified information have, however, inhibited systems development and distribution of terminals to management for access to the PMIS and FMS data bases.

(2) PASSPORT

The passport operation has been extensively computerized, for the most part employing Burroughs minicomputers (13 B80s) and a B8000 minicomputer.

(3) LIBRARY

A turnkey system has recently been installed in the Departmental library employing special purpose equipment known as INOVAQ. It also allows integration with other library systems.

(4) IMMIGRATION

Most of the information necessary for the management of the Immigration Programme is provided by systems operated and maintained by the Canada Employment and Immigration Commission (CEIC). These systems run on Burroughs equipment at CEIC using data derived mainly from the immigration process at the Posts. In addition the I.P. Sharp service bureau is used for various analytic purposes using program-related data.

(5) POSTS

Computerization began at the Posts in London where the automated accounting system was replaced by a Data General C150 minicomputer. A Data