series of field trials of Canadian office automation technology within federal departments. The trials are part of the Office Communications Systems (OCS) Program, an initiative of the Department of Communications to give Canadian office automation firms the opportunity to test, evaluate and refine their systems in the largest office environment in Canada. The program is also examining what consequences communications technology will have on tomorrow's offices and office workers and is studying how it can make the office more productive.

The field trials, costing $12 million, will not only benefit industry but also enable government managers to make sound decisions about the introduction of the automated office — what kind of equipment, how fast, at what cost — cutting down on the costly trial and error process.

The research and planning phase of the program began in 1980 and ended in 1982. During the second phase, which will continue until 1985, field trials are taking place within five major government departments, each of which involves different kinds of administration, policy-making and communication methods. The suppliers conducting the trials represent diverse philosophies and emphases and will employ different kinds of hardware, software and media of communications in each department.

The field trials are as follows:

• Systemhouse Ltd., Canada's largest computer software company, is conducting a trial in the Department of National Defence concentrating on the financial services. The aim is to produce an integrated office system which will provide general office support systems and which can interface with present and planned computer-based systems.

• At the Department of National Revenue (Customs and Excise) Bell Northern Research is providing an integrated electronic office system which will involve digital private branch exchanges supporting, at the outset, 100 workstations. The equipment combines voice, text and data allowing employees to communicate with one another and retrieve information easily.

• Officesmiths, a software and business system firm, has been paired with the Department of Energy, Mines and Resources, where it is developing an automated system for storing and disseminating information on policies and procedures.

• At Environment Canada, OCRA Communications Inc. is implementing systems to automate a wide range of tasks. This field trial is the most general in the series, touching many areas and situations. Eventually the trial will involve 200 workstations and 12 000 employees.

• A field trial at the Department of Communications will introduce office communications systems to 70 users, ranging from the minister and deputy minister to support staff.

Electronic Mail

The telephone call, teletype message and mail service have long been the mainstay of office communications, but the pace and competitiveness of today's business world often require more rapid and efficient means of exchanging information. Therefore, more and more Canadian businesses are turning to electronic mail to supplement and, in some cases, replace traditional forms of communications.

The term electronic mail may be used to refer to a wide range of systems and services, including innovations such as voice and computer-based message services. Computer-based message systems allow people to create, edit or send messages to others through computers. The message is instantly transmitted to an electronic "mail box", that is, a file in the recipient's computer, where it can be retrieved and displayed on the video screen at any time. Voice message systems are audio "mail boxes" through which one can send, receive, store or broadcast voice messages to any other user of the system. The spoken word may be converted to a digital form and stored within the computer system for subsequent delivery. During playback, the digital image is reconverted into sound closely resembling the actual voice of the sender. The voice message may also be received as spoken (in analog form) for later delivery.

Electronic messaging has a number of advantages: it reduces time delays; overcomes frustrations such as "telephone tag" and interrupting phone calls; eliminates time-consuming processes such as copying material or labelling envelopes; and it can be a cost effective substitute for long-distance telephone calls or mailing costs.

In large organizations, communicating word processors that allow staff to key in messages from one branch to another or to other locations in a private network are becoming a common medium of information exchange. In this case, the output is usually paper copy.

A number of electronic mail services are now available to the Canadian public through Canada's telecommunications carriers as well as through other firms, thus allowing even small businesses to enjoy the benefits of electronic mail.