

## SUPER COMPUTER FOR GOVERNMENT

The Central Data Processing Service Bureau, a branch of the Treasury Board of Canada, has recently been authorized to call for tenders on a system designed to provide a multiple-access computing and data-processing service for Canadian Government departments and agencies. The central feature of this system is a large, flexible computer installation with the capability of processing a variety of computing and data-processing tasks. The size of this installation has been determined in part by the expected demand from users. However, because of the rapid growth expected in computing and data-processing requirements, the capability of the central installation will be considerably greater than that required to meet the initial demand. Moreover, the capacity of the installation will be reviewed from time to time and, if necessary, additional equipment will be acquired to ensure ready access by subscribers.

The equipment specified for the central-service installation is such as to provide facilities for both scientific computation and data-processing. It includes high-capacity memory devices suitable for storage of data, such as library-accession lists, personnel records, financial and accounting records, file contents, etc. Facilities will be provided for bringing these records up to date and for retrieving information by subscribers as required.

### METHOD OF ACCESS

Access by departments to the central facilities will be by "pick-up-and-delivery" service or by direct-communication links. The choice of the method of access will be at the discretion of the users. The pick-up-and-delivery service will be available to all subscribers to facilitate delivery of such items as card decks, printed output and data that may be required in hard-copy form. Users requiring more immediate access to the Bureau's facilities may install direct-communication links, which will allow passage of programming instructions and data for automatic processing, and the return of output to the user. The capacity of individual communication links can be chosen in accordance with the requirements of the user, and could range from an ordinary teletype line through voice-grade lines and Telpak-like facilities to links capable of passing data at extremely high rates.

Subscriber departments and agencies will install in their own data centres equipment suitable to their own computing and data-processing needs, taking into account services that can be obtained from the central installation. Some departments will require local facilities by virtue of the nature of the tasks they must undertake. Many users will find it more useful and economic to install minimal terminal equipment in their own departments and to take service as they require it from the central facilities, which will be much more powerful than those that could be supported by their requirements alone.

### RETENTION OF LOCAL CONTROL

The organization of the central service will be such that users will be able to maintain the same control

over their work as they would in their own installations. Furthermore, the central facilities will be readily available to all those requiring service, and users will be able to achieve the same, or better, "turn-around" time on tasks as they might enjoy on a local facility. With guaranteed access and user control over the task to be performed, the use of the central facility via a communication link will be virtually indistinguishable from operations at a local installation. Provision of additional communication links will make computer service directly available to officers in dispersed locations not immediately adjacent to the local data centre.

While the majority of initial users of the central service will probably be within the Ottawa area, direct-communication links to the central facility from other centres in Canada can be foreseen. Present government-leased lines between Ottawa, Toronto and Montreal (soon to be extended to Quebec City and Halifax) will provide an immediate capability in this regard. Present plans to extend the coverage of leased lines will improve access from other regional centres. The choice between direct-communication links from these centres and the delivery of data by other means (such as air freight) will be dictated by the nature of the application and considerations of cost. Should the requirement arise, facilities will be set up in other centres to operate like the Ottawa installation.

The Bureau's role will be that of custodian of the central equipment, with the task of providing equal service to all users according to their requirements. Departments will be encouraged to retain their staffs of analysts and programmers to process departmental workloads, using the central computer as an extension of their local facility. The Bureau will provide programming assistance to departments that have not had the opportunity to build up sufficient local staff for this purpose.

The Bureau will establish rates for the use of the central-service installation in a manner similar to other government and commercial facilities. The very great power of the computer specified for the installation will ensure that these rates will be most advantageous to the user in terms of computing and data-processing accomplished per dollar.

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## AIR-LINE LOWERS BAGGAGE COSTS

Air Canada will substantially increase free-baggage weight allowances on North American flights, all but eliminating excess-baggage collections, it was announced recently in Montreal. The air-line will permit economy and first-class passengers to carry three pieces of luggage free of charge on all North American flights, provided that the outside dimensions of the largest piece does not exceed 62 inches and that the other two are within smaller but liberal dimensions. In effect, the new free-baggage weight allowances will permit each passenger to carry baggage equivalent to one man's three-suitcase, one two-suitcase and a large attaché case or overnight bag, provided the latter can be stowed under the passenger's seat.

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