

Questions

Department owns or leases and those computing services which are purchased from service bureaux or computer utilities.

Owned or leased computers: The Department owns or leases two medium scale computers, both of which are Control Data 3100's, one of which is located in Ottawa, the other at Bedford Institute of Oceanography in Dartmouth, Nova Scotia. A number of other special purpose computers are used by the Department for such purposes as control of scientific experiments and collection of scientific data.

Computer utilities and service bureaux: The Department makes use of a number of service bureaux and utilities for a variety of reasons. Included in these reasons are: (a) the inadequacy of owned or leased equipment to process the required workload; (b) more economical operation of the computing utilities equipment for particular problems; (c) the geographic dispersion of many of the Department's research activities.

2. Over the past several years the Control Data 3100 computer in Ottawa has been operating for three shifts a day, five days a week. At present, it is operating at full capacity, that is three shifts a day, seven days a week. In fact, the computer is being used at a rate in excess of the recommended 20 hours a day.

The Control Data 3100 at the Bedford Institute of Oceanography is operate dat the rate of three shifts a day, five days a week.

3. For the immediate future, no diminution of the workload is anticipated. In the longer term, there will be a substantial growth of workload.

4. It is difficult to state, as asked, the cost of computing services by year from 1960 to 1970. This is partly for the reason that the Department of Energy, Mines and Resources has not existed in its present form for this period, and also, for most of the period, computing costs have been accumulated with general administrative costs. The following estimated costs are available and include personnel costs, computer rental costs, and the cost of computer time purchased from utilities: 1967-68, \$916,367; 1968-69, \$1,705,154; 1969-70, \$2,287,191.

5. Because of the diversified nature of the Department's activities, (that is basically research) it is difficult to state how many programs are in preparation for the computer at any point in time. On the average, it is estimated that between 250 and 350 programs

are in development at any one time. Most of these programs are developed by scientists and are directly related to the scientist's own work. Programs developed affect the efficiency of the Department in several ways: (a) increase the efficiency of the scientist in his research activities; (b) enable the scientist to work on projects where the nature of the problem or data is such that a solution without the use of computers would be impossible or, at best, impractical; and (c) contribute to the efficiency of the Department's administrative and managerial practices.

NATIONAL DEFENCE HEADQUARTERS

Question No. 1,953—Mr. Coates:

1. What was the cost of acquiring the land for the site of National Defence Headquarters?

2. What was the name of the firm of consultants retained to advise the government on the National Defence Headquarters and what are the names of the principal officers of the firm?

3. How much did the consultants receive in fees from the federal government, were these consultants the only firm involved in the reply received to Question Number 1,759 and, if not (a) what other consulting firms were involved (b) what did they receive in fees (c) for what reason were they included in the question regarding the cost of the new National Defence Headquarters?

Hon. Arthur Laing (Minister of Public Works): 1. \$2,937,284.

2. Parkin, Architects, Planners, 1500 Don Mills Road, Don Mills, Ont. There are nine partners: John C. Parkin; James E. Searle; E. J. Smith; E. R. Wilbee; John E. Owen; D. C. Rowland; Dr. H. E. H. Roy; W. J. Neish; D. H. Carter.

3 To September 15, 1970, Parkin received \$943,853 in fees. There were other consultants as listed below:

(a) and (b)	Firm	Amount
	Woods, Gordon & Co.	\$7,042.76
	McRostie Seto Genest	784.63
	Canadian National Institute for the Blind	7,920.00
	Butts, Ross, Magwood & Hall	552.00
	DeLuw, Cather	3,000.00

(c) As a standard procedure in the Department, all expenditures which can be directly charged to a specific project are shown against the cost of that project. All firms listed in (a) and (b) provided a service contributing directly to the construction of the new National Defence Headquarters.