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CANADA

THE ROYAL COMMISSION ON GOVERNMENT ORGANIZATION

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SUPPORTING SERVICES FOR GOVERNMENT

- 5: REAL PROPERTY
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SUPPORTING SERVICES FOR GOVERNMENT

VOLUME 2

SUPPORTING SERVICES
FOR GOVERNMENT

PUBLISHED BY THE QUEEN'S PRINTER • OTTAWA • CANADA FOR
THE ROYAL COMMISSION ON GOVERNMENT ORGANIZATION

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CANADA

ROYAL COMMISSION ON GOVERNMENT ORGANIZATION

J. GRANT GLASSCO
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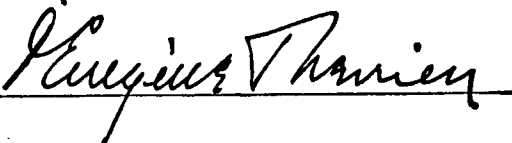
To His Excellency
THE GOVERNOR GENERAL IN COUNCIL

May It Please Your Excellency

We, the Commissioners appointed by Order in Council dated 16th September, 1960 to inquire into and report upon the organization and methods of the departments and agencies of the Government of Canada and to make recommendations concerning the matters more specifically set forth in the Order in Council dated 16th September, 1960: Beg to submit to Your Excellency the following Reports.



CHAIRMAN





October 1, 1962



Elizabeth the Second

BY THE GRACE OF GOD ✠
OF THE UNITED KINGDOM,
CANADA ✠ AND HER OTHER
REALMS AND TERRITORIES

Queen

HEAD OF THE COMMONWEALTH
DEFENDER OF THE FAITH ✠

DEPUTY GOVERNOR GENERAL

DEPUTY ATTORNEY GENERAL

TO ALL TO WHOM THESE PRESENTS SHALL COME
OR WHOM THE SAME MAY IN ANYWISE CONCERN,

Greeting:

WHEREAS pursuant to the provisions of Part I of the Inquiries Act, chapter 154 of the Revised Statutes of Canada, 1952, His Excellency the Governor in Council, by Order P.C. 1960-1269 of the sixteenth day of September, in the year of Our Lord one thousand nine hundred and sixty, a copy of which is hereto annexed, has authorized the appointment of our Commissioners therein and hereinafter named to inquire into and report upon the organization and methods of operation of the departments and agencies of the Government of Canada and to recommend the changes therein which they consider would best promote efficiency, economy and improved service in the despatch of public business, and in particular but without restricting the generality of the foregoing, to report upon steps that may be taken for the purpose of

- eliminating duplication and overlapping of services;
- eliminating unnecessary or uneconomic operations;
- achieving efficiency or economy through further decentralization of operations and administration;
- achieving improved management of departments and agencies, or portions thereof, with consideration to organization, methods of work, defined authorities and responsibilities, and provision for training;
- making more effective use of budgeting, accounting and other financial measures as means of achieving more efficient and economical management of departments and agencies;
- improving efficiency and economy by alterations in the relations between government departments and agencies, on the one hand, and the Treasury Board and other central control or service agencies of the government on the other; and
- achieving efficiency or economy through reallocation or regrouping of units of the public service.

and has conferred certain rights, powers and privileges upon Our said Commissioners as will by reference to the said Order more fully appear.

NOW KNOW YE that, by and with the advice of Our Privy Council for Canada, We do by these Presents nominate, constitute and appoint J. Grant Glassco, Esquire, of the City of Toronto, in the Province of Ontario; Robert Watson Sellar, Esquire, of the City of Ottawa, in the Province of Ontario; and F. Eugene Therrien, Esquire, of the City of Montreal, in the Province of Quebec, to be Our Commissioners to conduct such inquiry.

TO HAVE, hold, exercise and enjoy the said office, place and trust unto the said J. Grant Glassco, Robert Watson Sellar and F. Eugene Therrien, together with the

rights, powers, privileges and emoluments unto the said office, place and trust of right and by law appertaining during Our Pleasure.

AND WE DO hereby direct that the scope of the inquiry shall not extend to the institution of Parliament.

AND WE DO hereby authorize Our said Commissioners to exercise all the powers conferred upon them by section 11 of the Inquiries Act and be assisted to the fullest extent by government departments and agencies.

AND WE DO hereby authorize Our said Commissioners to adopt such procedure and methods as they may from time to time deem expedient for the proper conduct of the inquiry and sit at such times and at such places in Canada as they may decide from time to time.

AND WE DO hereby authorize Our said Commissioners to engage the services of such counsel, staff and technical advisers as they may require at rates of remuneration and reimbursement to be approved by the Treasury Board.

AND WE DO hereby require and direct Our said Commissioners to report their findings to Our Governor in Council, making interim reports as progress is made, with the final report to be made within a period of two years.

AND WE DO hereby require and direct Our said Commissioners to file with the Dominion Archivist the papers and records of the Commission as soon as reasonably may be after the conclusion of the inquiry.

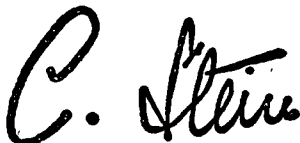
AND WE FURTHER appoint J. Grant Glassco, Esquire, to be Chairman of Our said Commissioners.

IN TESTIMONY WHEREOF We have caused these Our Letters to be made Patent and the Great Seal of Canada to be hereunto affixed.

WITNESS: The Honourable Patrick Kerwin, Chief Justice of Canada and Deputy of Our Trusty and Well-beloved Major-General George Philius Vanier, Companion of Our Distinguished Service Order upon whom We have conferred Our Military Cross and Our Canadian Forces' Decoration, Governor General and Commander-in-Chief of Canada.

AT OTTAWA, this Twenty-seventh day of September in the year of Our Lord one thousand nine hundred and sixty and in the ninth year of Our Reign.

By Command,



UNDER SECRETARY OF STATE

Published by
ROGER DUHAMEL, F.R.S.C.
Queen's Printer and Controller of Stationery
Ottawa, Canada

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Price 

Catalogue No. Z1-1960/4-2

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The series of reports

SUPPORTING SERVICES FOR GOVERNMENT

is continued in Volume 3:

12 ECONOMIC AND STATISTICAL SERVICES

13 PUBLIC INFORMATION SERVICES

GENERAL INTRODUCTION

In the administration of departmental and agency programmes, a wide range of supporting services is required. Buildings and works must be constructed and managed, supplies and equipment procured and their use controlled, people and materials transported, information and decisions transmitted, and large quantities of matter printed. The organization and management of these services is examined in the following reports, together with certain staff functions—economic and statistical services, legal advice and assistance, and information services.

Each of these services is treated in a separate report, and in each the recommendations are designed to meet the particular circumstances. However, these supporting services, as a general rule, show certain common characteristics in their relationship to the primary tasks of the government. Some of these are noted in the report of your Commissioners entitled *A Plan for Management*, but should be restated here in the present context.

First, although the supporting services are essential to the administration of programmes undertaken by the government for the benefit of the public, to departmental administrators they are only a means to an end. Provided the administrators are able to control the level and quality of the supplies and services their programmes require (subject to normal budgetary limitations and any general standards by which they may be governed), the actual management of the supporting services may be left to others. Moreover, there are very real benefits to be achieved by relieving the administrators

of programmes from the task of managing the supporting services they require, and creating specialized organizations for this purpose.

The rising scale of government operations has meant that the practices adopted by government in accommodating and equipping itself may have a significant impact on the Canadian economy and thus become, in themselves, matters of public interest. Consequently, consolidation—or a high degree of co-ordination—of a supporting service under central direction may be warranted to ensure that this public interest receives adequate recognition.

Consolidation may also be justified on grounds of economy. This may arise because of the economies of scale available, for example, in bulk purchasing, or through the pooling and more flexible use of buildings and equipment. Where specialized skills are widely employed, pooling arrangements permit not only the economic deployment of the specialists, but the creation of more attractive professional career opportunities.

Finally, the development of specialized organizations to provide common supporting services may serve to relieve programme administrators from chores that are only incidental to their primary responsibilities and may constitute unwelcome distractions. For smaller operating units, the existence of specialized service agencies may provide the best means of obtaining services of the standard required for fully effective operations.

In circumstances such as those outlined, a possible solution might lie in the creation of an omnibus servicing organization, providing all or many of the supporting services needed in common. Such an organization was created by the United States Government in 1949, as a result of the first “Hoover Commission”. This agency, the General Services Administration, provides a wide assortment of services, including:

- The procurement and maintenance of real property.
- The purchase, supply and maintenance of materials and equipment in common use.
- The purchase or supply management of services such as transportation, freight traffic, telecommunications systems, and certain public utilities.
- The transfer within the public service of property surplus to the needs of particular agencies, or its disposal to the public.
- The promotion of proper records management, including the operation of archives and records centres.
- The purchase and maintenance of stockpiles of strategic materials.

Since its establishment, the General Services Administration has relied on the quality of service offered, rather than on any compulsory power, to promote the use of its services by departments and agencies of the United States Government. By delegating substantial powers to its ten regional offices, it has been able to respond promptly and effectively to the needs of government operations throughout the country. Because of its apparent success, it attracted the attention of your Commissioners at an early point in this inquiry.

In all the circumstances, however, it does not appear that the needs of the Canadian Government can be met economically or effectively by a single organization on the American pattern. It must be recognized that each region of the General Services Administration serves a segment of the United States Government equal to, or exceeding in size, the entire federal public service of Canada. If the American agency were scaled down to the level of Canadian needs, much of its effectiveness would be lost. Under Canadian conditions, some of the services provided by the General Services Administration would require at least an equivalent degree of decentralized administration; others can be managed effectively only on a centralized basis; still others can best be combined, for administration, with other activities which, in the United States, are excluded from the terms of reference of the servicing organization. Moreover, it must be noted that the combination of activities assigned to the General Services Administration is based on administrative convenience, rather than on any essential relevance of one service to another; for example, the operation of vehicle pools has little or nothing to do with strategic stockpiles or records management.

It is concluded, therefore, that the supporting services required by the Canadian Government must be organized in quite a different manner, designed to meet the circumstances of the Canadian situation. In the following reports no uniform pattern emerges, but the variety of solutions is not haphazard. There is an underlying consistency in the adherence, in every case, to certain common principles foreshadowed in the first report.

- First, within the limits of any general standards applicable to the government as a whole, the user department should define its needs and bear the cost of the services received. Only in this way can those charged with the administration of government programmes be held fully responsible for their performance.
- Second, organizations providing supporting services should exercise no control over the users, except within the strict limits of any responsibility laid on them for applying special considerations of public policy.

- Third, the enunciation of any general standards for the guidance of users and service organizations is a collective function of ministers, to be exercised generally through the Treasury Board; the performance of all departments and agencies against these standards should therefore be assessed under the direction of the Treasury Board.
- Fourth, it is appropriate that service organizations be consulted by the Treasury Board for technical guidance in the framing of relevant policies and standards.
- Fifth, to ensure that service organizations do not become inbred and complacent, or unresponsive to the need of users, the senior management should form part of the general rotational programme for the top levels of the public service, and close attention should be paid to the career development and training of specialist personnel.
- Sixth, the organization of each supporting service should be designed to meet the needs of its clientele, with such decentralization as may be required to ensure that all users can be served promptly and effectively throughout the country.

Finally, in each of the supporting services examined in this volume, a common question arises: the choice to be made by the government between maintaining its own internal sources of supply for goods and services, and obtaining them by purchase or hire from external sources. This "make or buy" problem recurs throughout the following reports, and is further examined, in a report by that name, in relation to a wide range of specialized government activities for which commercial sources might be employed. In this regard, your Commissioners have been guided by the general principle set forth briefly in the first report: that, where circumstances permit, the use of outside sources is preferable from the viewpoint of the government and the public alike. For the former, it reduces the distractions from the essential task of defining and attaining the goals of public policy; for the latter, it provides a means of strengthening the private sector of the economy.

5 REAL PROPERTY

SUPPORTING SERVICES FOR GOVERNMENT

REPORT 5: REAL PROPERTY

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ACKNOWLEDGEMENTS

A Project Group, under the direction of Brigadier Jean P. Carrière, E.D., P.ENG., M.E.A.C., M.A.S.C.E., Executive Vice-President, *Franki of Canada Limited*, Montreal, conducted the field investigations for this report.

A number of Project Officers collaborated on the inquiry, and your Commissioners wish to acknowledge the assistance received from those mentioned hereunder:

C.-E. Forest, C.E., P.ENG., M.E.I.C., Consulting Engineer, *Pelletier & Forest*, Montreal.
André L. Lalonde, P.ENG., *Paul Pelletier Engineering Ltd.*, Montreal.
Thomas J. Plunkett, M.A., Municipal Affairs Consultant, Montreal.
Stuart C. Sharpe, C.A., Toronto.
Professor H. J. Spence-Sales, B.ARCH., *McGill University*, Montreal.

An Advisory Committee, under the chairmanship of Richard L. Hearn, LL.D., D.ENG., Consulting Engineer, Queenston, Ontario, was also set up in conjunction with this Project. The Committee members were:

George M. Black, Jr., C.A., Business Consultant, Todmorden, Ontario.
Marcel Faribault, LL.D., F.R.S.C., *Trust Général du Canada*, Montreal.
Philip N. Gross, Westmount, P.Q.
Major-General Howard Kennedy, C.B.E., M.C., E.D., Consulting Engineer, Ottawa.
John C. Machan, *Canadian Pacific Railway Company*, Montreal.
Ralph C. Pybus, *Industrial Development Commission of Greater Vancouver*, Vancouver.
Charles N. Wilson, *The Standard Dredging Company Limited*, Saint John, N.B.

A number of submissions bearing on this topic were received from individuals and organizations: these have been carefully considered and are noted in our final report.

Your Commissioners, in acknowledging the assistance and advice received from the above-named persons, dissociate them from any of the findings and conclusions contained in this report; for these, your Commissioners assume full responsibility.

1

INTRODUCTION

The federal government currently manages an investment in real property having an estimated worth of \$4 billion and is adding to it each year at a rate of over \$300 million. Excluded from this estimate are the lands forming the large public domain in the territories. The real property investment, representing a widely assorted range of lands, structures and engineering works, lies largely within the provinces. Public buildings and office space for government employees form a significant part of the total but substantial properties are held for special purposes, such as military establishments, airports, national parks, canals, marine works and so on. In addition to the property it owns, the government leases a large number of properties which it uses principally for offices, depots and residences, both in Canada and abroad.

In this report the management of real property, including its acquisition and disposal, is considered. The important dimensions of the subject are demonstrated by the fact that, in the fiscal year 1960-61, the construction, acquisition, major repairs and improvements, and the upkeep of federal buildings, lands and works cost \$384.5 million, excluding the outlays of the larger Crown corporations. Of this amount, \$312 million was on capital account, the remainder being repairs, rentals and upkeep. An analysis, by department, follows:

	(\$000)
National Defence and Defence Production	119,500
Public Works	92,900
Transport	73,500
Northern Affairs and National Resources	29,000
Agriculture	18,000
Atomic Energy	15,200
Citizenship and Immigration	13,000
Veterans Affairs	6,300
National Research Council	5,300
Justice—Penitentiaries	2,600
R.C.M.P.	2,300
National Health and Welfare	1,800
External Affairs	1,300
Mines and Technical Surveys	1,300
Fisheries	1,100
Other Departments	1,400
	<hr/>
Total	384,500
	<hr/> <hr/>

If all other agencies are included, the total is increased to \$575 million, of which construction and acquisition represents \$400 million.

Originally the whole property function of the government (excluding the public domain, then consisting of the prairies and more northerly territories) was the responsibility of the Department of Public Works. Over the years, real property operations have been assumed by other departments and grown to the point where today Public Works carries out only forty per cent of new construction and controls only a fraction of the floor space in existing buildings. The other departments which have major activities in these fields are National Defence, Transport, Agriculture, and Northern Affairs and National Resources. A growing volume of owned and leased property outside Canada is principally the concern of the Departments of External Affairs and Trade and Commerce. Government agencies, of which the National Capital Commission is an example, have also developed real property activities of some importance and they, with the exception of Canadian National Railways and other large independent Crown corporations, are embraced in this review.

As a consequence of this growth and proliferation, there is today a diffusion of effort and responsibility for the properties required by the federal government for its own purposes, with an accompanying variation in standards of performance. Your Commissioners are concerned with the lack of effective machinery for the development of common policy and for continuing expert scrutiny of operations to assure uniform standards of economy and efficiency throughout the whole of the complex. Prevailing attitudes in the public service

reflect a widespread lack of understanding of what real property management entails. Some essential functions are, as a consequence, completely ignored. Effective management of real property owned and leased by the government requires:

- Maintenance on a nationwide basis of a complete and accurate record of all properties.
- Property accounting on both a quantitative and monetary basis, using accrual methods of accounting and recognizing depreciation when appropriate.
- Early identification of unneeded property and prompt surplus disposal.
- Organized administration and specific designation of responsibility for carrying out each function.

While several aspects of real property management are touched on in various legislative enactments, no fundamental concept has developed in this area. There is much to be gained in the adoption of a more systematic and business-like approach.

2

LAND

The Government of Canada owns approximately 46 million acres of land within the provinces of Canada, which are put to varying uses in satisfying the objectives of the various branches of government. The approximate breakdown of this total according to major uses is as follows:

	<i>Millions of Acres</i>
National Parks	12
Indian Reserves	6
Defence Installations	6
Miscellaneous use	22
	<hr/>
TOTAL	46
	<hr/> <hr/>

The miscellaneous category consists of everything from urban lots to town-sites, vast airports and forest reserves. Outside provincial boundaries, the Department of Northern Affairs and National Resources administers the public domain comprising 965 million acres, the greater bulk of which is wild land.

LAND ACQUISITION

Land may be acquired by any department or agency provided the funds are available to it, but expenditures in excess of \$15,000 for such purpose require Treasury Board approval. Currently, the departments and agencies most

actively engaged in increasing their holdings are the Departments of National Defence, Public Works and Transport, and the National Capital Commission, each of which maintains a special branch for this purpose. Other departments, with a smaller volume of acquisitions, tend to meet their requirements without the assistance of any specially qualified staff.

Land is acquired by direct purchase and by expropriation. In the latter case the Crown acquires immediate title and if compensation cannot be agreed with the former owner, it is settled in the Exchequer Court. Negotiated prices or settlements are charged to the votes of the acquiring departments, but awards of the Exchequer Court are charged directly to the Consolidated Revenue Fund.

The practice of expropriation or forced possession by the Crown is unobjectionable, provided the exercise of the right is limited to cases of necessity and the representatives of the Crown act with fairness and expedition. There can be no doubt that the dispossessed owner may suffer prejudice which cannot be measured in money but it is generally accepted that the need of the public must prevail over the rights of the individual. There is, therefore, where resort is had to expropriation, the clear duty to spare the former owner any unnecessary additional prejudice. He is entitled to be dealt with promptly and equitably.

Your Commissioners, having reviewed current administrative practice, are less than satisfied that these principles are being observed. There is a noticeable tendency to procrastinate and delay settlement, the dispossessed is too often forced to assume the initiative, the cost of threatened litigation often dilutes his bargaining strength where public servants refuse to disclose their hands in seeking to settle for less than is the true worth of the property. The establishment of proper attitudes and procedures will clearly be easier in departments having specialized property personnel than in units which only occasionally resort to expropriation. Consideration should be given to facilitating prompt out-of-court settlements through an approved process of arbitration.

Land acquisitions outside of Canada, mainly by the Departments of External Affairs and Trade and Commerce, require Treasury Board approval. Recommendations to acquire foreign sites for chanceries and residences are put forward initially by ambassadors or commercial counsellors, and long-term programmes exist for further acquisitions for such purposes.

Experience elsewhere suggests that expenditures for new land acquisitions by federal governments may be substantially reduced by relying more heavily on present holdings and, where possible, effecting interdepartmental transfers,

rearrangements, or divisions of government property to accommodate new needs. A prerequisite to this approach is an accurate and complete inventory of the properties owned, and this the Government of Canada does not possess. Several attempts have been made to accumulate this information, which is essential to efficient management, but without success. Since 1956, some valuable work has been done by the Department of Public Works and an elementary record has been created which covers a substantial proportion of government properties.

Two major deficiencies of this record must be overcome before it has any real utility from a management standpoint. First, it must be complete and all-embracing and, secondly, it must contain a necessary minimum of information with respect to each property. At present, no more than the location of a parcel and a description of its boundaries are shown. Much more information must be recorded, such as the use to which it is being put, the structures standing on it, the cost and date of acquisition, the value assigned, if any, for the purposes of making grants in lieu of taxes, utility services, and the like.

The development of a complete, perpetual inventory is of importance not only in relation to acquisitions but even more so to disposal of property and its administration generally. Your Commissioners accordingly return to this subject later hereunder.

DISPOSALS OF LAND

So far as federal initiative results in disposal of unneeded property there is virtually no activity under this heading. Not even a rough estimate can be ventured of the realizable value of lands now owned which could be disposed of without any prejudice to government programmes. Within the 22 million acres now held for miscellaneous uses there are beyond question a significant number of properties which should be sold. The potential recovery in money is important, probably considerably greater in amount than sums being spent on current acquisitions, but there is added public advantage in restoring such properties to productive use and thereby causing them to assume a share of the tax burden.

That this important opportunity is essentially neglected is attributable to a combination of circumstances. Procedures governing land disposal are cumbersome and archaic; the arrangements under which departments hold lands encourage retention rather than disposal of unneeded property and, most important of all, there is no one responsible for assuming any initiative in the matter.

Disposals of Crown land are effected under two statutes: the *Public Lands*

Grants Act and the *Surplus Crown Assets Act*. The first of these, the *Public Lands Grants Act*, is general legislation which has been on the statute books for many years and provides for the disposal of land "not required for public purposes". Under it, departments may dispose of land without recourse to a declaration of the same as surplus (a procedure referred to below) and the provisions of this Act tend to apply principally to transactions with the provinces.

A noteworthy provision contained in section 8 of the *Public Lands Grants Act* stipulates that "public lands declared by the Governor in Council to be necessary for the defence of Canada shall not be sold, alienated or otherwise disposed of but may be leased or otherwise used as the Governor in Council thinks best for the advantage of Canada". In the absence of a series of systematic declarations under this section, it is difficult to determine what portion of the six million acres in the possession of the Armed Forces may be available for sale. There is no evidence of any serious effort by the Services to dispose of unneeded portions of this huge holding.

The *Surplus Crown Assets Act*, dating from the last war, has general application to most forms of Crown property but not to several important classes of Crown lands, including National Parks, Indian and Forest Reserves, land in the territories, various lands under the control of the Department of Transport, and some others. This Act becomes operative only following a declaration by a department that property is surplus to its requirements. Thereupon an agency, known as Crown Assets Disposal Corporation, seeks through newspaper advertising to find a buyer and negotiates the sale. Neither the statute nor the form of organization of Crown Assets Disposal Corporation is particularly suitable for the disposal of surplus real estate.

The major imperfection in the system is that the initiative rests with the department holding surplus land and there are a number of reasons why departments do not in fact take such initiative. The first reason is that in many cases departments have limited knowledge of the properties within their care and no systematic means of identifying unneeded parcels. Further, grants made to municipalities in lieu of taxes are not distributed by charges to the departments holding the land, thus no financial penalty results from continuing to hold unneeded property. When land is sold, departments are not credited with any part of the proceeds. Finally, there exists a general belief by officials that their departments "own" federal property entrusted to their care. There would be advantage in fostering throughout departments a concept of ownership in common under which property allocated to or acquired by a department is not to be forever part of its resources.

Regulations laid down for the guidance of departments in making surplus declarations are virtually inoperative so far as land is concerned. Such declarations as are made are frequently prompted by the urgings of prospective buyers. Crown Assets Disposal Corporation—whose land sales in 1961 approximated \$2 million—may not assume any initiative. In the result, the volume of disposals taking place is insignificant in comparison with the potential.

When a sale has been negotiated, the procedures for passing title to the purchaser are extremely involved and may require the participation not only of the department and Crown Assets Disposal Corporation, but also the Governor in Council, the Secretary of State, and the Department of Justice. In our report on *Legal Staff Services*, a recommendation is made looking to a simplification of these procedures.

Apart from disposal by sale or gift, a procedure exists for the condemnation or abandonment of federal real property. Upon publication of an official declaration that it has ceased to be in occupation of any specified real property, the Crown has no further liability for it. Of particular relevance to certain types of engineering works and structures, very limited use has been made of this method of disposal. As a result, the government is frequently called upon to carry out repairs and replacement of facilities which have long since ceased to have utility in relation to federal programmes.

In summary, the sheer inertia of departments in the matter of disposal of unneeded real property, for which their lack of accountability for performance is in part responsible, can be regarded as a principal reason for the failure of present arrangements. The more fundamental deficiency, however, lies in the unsuitability of the existing system in dissipating responsibility for the performance of the various functions.

LEASING OF LANDS AND DWELLINGS

Across Canada there is a host of federal properties being used by others. Every type of arrangement exists and no consistent policy has been developed in this area. Some strange anomalies arise, such as the fact that the lawn of the Quebec Legislative Assembly is federally owned and part of the Ottawa Exhibition stands on federal property. More generally, dwellings, lands in townsites and National Parks, wharves and wharf rights, water lots, power rights, and the like, are leased to individuals and business enterprises.

A test review of leases disclosed that many are for long periods, often with automatic renewal provisions. Some provide for adjustment of rentals during their term, while the absence of such provision in others has resulted

in unduly low rentals persisting for many years. Charges for land in federally owned townsites appear generally to be low, particularly when the cost of services supplied are taken into account. In general, the revenue potential of this considerable volume of leased property cannot be said to have been actively exploited. Adjustment of rentals to present fair values could produce a significant increase in revenue. As in other aspects of real property management, the efficient conduct of this function cannot be attained until a complete record of federal property is available.

Over the years the government has constructed a large number of dwellings for occupancy of civil servants. Mainly located in the North, in National Parks, on experimental farms, at border points, adjacent to canal locks and other locations of similar nature, these dwellings vary considerably in age and suitability. In remote areas their costs have understandably been considerably higher than those of equivalent houses elsewhere. In an effort to bring about consistency in the rentals charged, an appraisal by Central Mortgage and Housing Corporation of all such properties has been in process for some time and it would be highly desirable to have the same completed as quickly as possible. Where costs and current values dictate a rental out of scale with ability to pay, as may occur in the North for example, the employee is protected by a rule that the rental may not exceed twenty per cent of his salary—when utilities are provided, twenty-five per cent.

The principal objectives, apart from proper maintenance of these properties, are to see that the class of accommodation provided is appropriate to its use and that equitable rents are charged on a consistent basis across the whole public service. The separate activities of a number of departments in this field render consistency difficult to achieve and the special efforts referred to above need to be prosecuted with vigour. However, as an integral part of real property management, the task will be best performed by a single agency organized to carry out this and other parts of the whole function.

LAND USE

In Canada, as a whole, the question of land use has become increasingly a matter of national concern and all levels of government are involved in the conservation and best use of land, in national as well as provincial and local interests. The involvement of the federal government in this matter is inevitable, by reason not only of its impact on the economy, but also because federal property represents by far the largest real estate holding in Canada. Through the exercise of its prerogative, the federal government often influences the physical structure of cities and towns. Equally, the development of rural and

suburban areas, and transportation services required by them, may be significantly affected by federal programmes.

In cities and towns across Canada the various federal departments and agencies are erecting public buildings, office buildings and warehouses. Airports are being constructed, some as federal establishments, others with financial assistance from the federal government. The development and extension of harbours, large and small, is continuing. The problems of larger cities are bringing into focus increasingly the need for slum clearance and urban renewal, in relation to which the location of federal buildings may have particular significance. In rural areas, land reclamation projects, irrigation systems and community pastures are being developed with federal funds. Military establishments covering large tracts of land, roads to resources and other federal highway activities, affect the rural configuration. The construction of wharves with federal funds may profoundly affect the development of coastal areas.

It is not sufficiently appreciated that it is no longer acceptable in the public interest for the federal government to act independently of local or regional planning authorities, because the scale of its projects may be so great, in particular cases, as to distort long-range development planned by local authority. At present, the various federal departments and agencies concerned are proceeding independently. In such circumstances the application of a consistent federal policy with regard to land use, planning and development generally, is virtually impossible. It is evident that the interest and responsibility of the federal government is to play a full and effective part in programmes which are developing, to guide future growth into desirable patterns and reshape older communities to meet modern needs. This responsibility may even extend to assuming some initiative in areas in which the federal government is heavily involved through its real property holdings. Your Commissioners conclude that any plan for real property management should, therefore, include provision for continuing attention to this matter and provide for assigning skilled personnel adequately to discharge this responsibility.

LAND LEGISLATION

Management of federal land, its acquisition, disposal and use, is governed in part by a number of statutes. Mention has been made of the *Public Lands Grants Act* and the *Surplus Crown Assets Act*. Expropriations are made under the *Expropriation Act*. Other statutes such as the *Aeronautics Act*, the *Defence Production Act*, the *Municipal Grants Act*, and the *Public Works*

Act all deal with the subject to some extent. This legislation, taken as a whole, is not always consistent nor are its provisions, many of ancient origin, appropriate or adequate to meet today's needs. A general revision and consolidation would appear highly advantageous.

RECOMMENDATIONS

Before proceeding to a discussion of special purpose lands, there are several recommendations to be made. The following recommendations having general applicability to the entire federal service, only excepting the large proprietary Crown corporations, are offered at this point.

- We therefore recommend that:*
- 1 Consideration be given to consolidating in a single statute land legislation having general application to the acquisition by purchase or lease, and the disposal or leasing to others, of real property in Canada and abroad, by all departments and agencies of the Crown.
 - 2 The Department of Public Works be made responsible for the development of a complete inventory of properties owned or leased by the federal government and its agencies, and its maintenance as a perpetual record by posting to it all future acquisitions and disposals as they occur.
 - 3 The Department of Public Works, in its organization for real property management, assign staff to be responsible for land use aspects of federal property ownership and to consult and co-operate with other levels of government and their agencies for the future development of urban, rural and regional areas.

Your Commissioners are persuaded that real property management, in all its phases, should become the responsibility of a single body, the Department of Public Works. For reasons set out later in this report, it is considered advis-

able, for the time being, to exclude from this consolidation the real property activities of the Armed Services and to confine present reorganization thereof to an integration of the separate operations of the Services into a single defence real property agency within the Department of National Defence.

- We therefore recommend that:*
- 1 The Department of Public Works be constituted the sole authority for real property management outside the defence sector.
 - 2 Except for defence purposes, the acquisition of property by purchase or lease be made by the Department of Public Works and title thereto be held in its name.
 - 3 The disposal of all surplus property of the federal government, including property declared excess to the needs of the Armed Forces, be the responsibility of the Department of Public Works and that under a form of organization appropriate for the purpose, aggressive efforts be made to identify and dispose of unneeded real property.
 - 4 The employment of Crown Assets Disposal Corporation in the disposal of surplus real property be discontinued.

SPECIAL PURPOSE LANDS

The more important types of property holdings dealt with hereunder are the National Parks and government townsites in the Northwest Territories, in respect of each of which administrative requirements differ materially from other real property owned by the government.

The federal government maintains seventeen national parks. With the exception of Wood Buffalo National Park, a buffalo reservation administered separately, these parks, which range in size from 4,200 square miles to less than 200 acres, are the responsibility of the National Parks Service of the Department of Northern Affairs and National Resources. The relative size and scale of their operations is shown by Table 1.

Table 1—PARKS ADMINISTERED BY THE NATIONAL PARKS SERVICE—1960-61

Park	Province	Area-Square Miles	No. of Visitors	Expenditures			Revenue
				Operating	Capital		
			(000)	(\$000)	(\$000)		(\$000)
Banff	Alta.	2,564	1,078	1,766	1,181		703
Cape Breton	N.S.	367	323	308	450		36
Elk Island	Alta.	75	198	269	321		49
Fundy	N.B.	79.5	227	223	351		55
Georgian Bay Islands	Ont.	5.4	20	45	21		5
Jasper	Alta.	4,200	357	918	699		306
Kootenay	B.C.	543	468	453	287		203
Mt. Revelstoke and Glacier	B.C.	621	39	254	706		8
Point Pelee	Ont.	6	546	92	115		36
Prince Albert	Sask.	1,496	138	478	486		141
Prince Edward Island	P.E.I.	7	412	166	525		42
Riding Mountain	Man.	1,148	629	489	549		180
St. Lawrence Islands	Ont.	.2	62	53	34		2
Terra Nova	Nfld.	156	20	114	486		37
Waterton Lakes	Alta.	203	349	319	417		128
Yoho	B.C.	507	65	374	636		49
Park trunk highways					6,663		
Head and Regional Offices*				275	369		
Engineering Services*				534	34		19
		<u>11,978.1</u>	<u>4,931</u>	<u>7,230</u>	<u>14,330</u>		<u>1,999</u>

* Includes costs in connection with Historic Sites.

The *National Parks Act* declares that these lands are “dedicated to the people of Canada for their benefit, education and enjoyment” and further stipulates that they be maintained “so as to leave them unimpaired for the enjoyment of future generations”. This is somewhat of a contradiction in terms, and the provision of amenities and recreational facilities for the five million people annually visiting the parks has, of necessity, brought about physical changes in the countryside which rob it, in part, of its virgin character. These two statutory objectives may well become increasingly irreconcilable as public use increases, with an accompanying further development of the nine existing townsites and continuing construction of roads and trails throughout park areas.

Normally, the management of such large areas might be expected to yield substantial revenues through merely removing annual crops in accordance with good conservation practice. It is observed, however, that half of the total revenues is derived from tourist traffic in the form of motor vehicle charges, amusement fees and licences, and the conclusion is inescapable that the revenue possibilities of the parks' national resources are prosecuted with insufficient vigour. For example, in 1960-61, timber permits and royalties yielded \$21,850, a meagre return indeed from almost 12,000 square miles of park lands.

The administration of townsites is found to have suffered from the fact that it has not been functionally separated from general park administration, and organizational forms have not been established to deal effectively with this highly specialized activity. This, coupled with undue centralization of authority in the Ottawa headquarters and lack of clear-cut policy objectives, explains certain unsatisfactory conditions noted by your Commissioners, which include:

- Inadequate communications between administration and the residents and concessionaires of the townsites.
- An undue involvement of park managers in detailed problems on a day-to-day basis, compounded by delegation to them of insufficient authority to make decisions on the spot.
- Financial records showing expenditures for local services and facilities not used to establish the basis of charges to residents for utilities, garbage collection and other municipal-type services.
- An illogical and inconsistent pattern of rentals for land used for residential and commercial purposes.

Your Commissioners believe that substantial changes are required to achieve the satisfactory operation of the national parks. As a prerequisite, a complete review of national park policy should be undertaken and operational patterns developed which may best harmonize the twin objectives of meeting the recreational needs of the people and preserving the natural beauty and character of the environment. The future policy must also take account of the extreme variations of scale indicated in Table 1 and the existing imbalance in geographical location. (*See Table 1A*)

The three small parks in Ontario, viewed against the background of a growing system of provincial parks and recreation areas, have little in common with other federal parks either in the nature of their operation or their

Table 1A—NATIONAL PARKS BY MAIN GEOGRAPHICAL AREAS

	Number of Parks	Area Sq. Miles	Operating Costs 1960-61 (\$000)
Western Canada			
Rocky Mountain Parks	6	8,638	4,184
Prairie Parks	3	2,719	1,236
	9	11,357	5,420
Central Ontario	3	11.6	190
Atlantic Provinces	4	609.5	811
	16	11,978.1	6,421

utility in terms of conservation or the attraction of tourists. There is much to be said for discontinuing federal activity in this area. The remaining parks fall naturally into two reasonably compact groups which, while varying very considerably in size, have a number of operating similarities.

As the figures suggest, the parks of Western Canada, in particular the mountain parks, represent the core of the problem to which future policy must be adapted. Resource development and tourist potential, both enhanced by greater access, need wise management; the size and close proximity of the six mountain parks raises questions as to appropriate scale and nature of future operations; the management of townsites within park boundaries requires special forms of organization and finance; and, because of the substantial stake of the provinces in the successful operation of these parks, there is need for close collaboration with them.

In the opinion of your Commissioners it is not unreasonable to set as a goal for these parks, in which over \$200 million is now invested, a condition of financial self-sufficiency. To achieve this, however, a degree of acumen and flexibility will be required in those responsible for operations, which will not easily be developed within the framework of a department of government charged with other responsibilities. Your Commissioners believe, therefore, that the operation of the national parks should be vested in an autonomous commission. Its terms of reference should include a clear definition of public policy and its senior management should be appointed on the recommendation of the commissioners. Its headquarters should preferably be close to the principal operations in Western Canada and the parks in the Atlantic provinces should be supervised through a regional headquarters in that area.

In developing its operational patterns, the proposed commission should seek to correct the more obvious faults of the present system. The position of a park superintendent needs to be strengthened and he should have authority

over all operations within his park. To bring some order into the relations between the government and park residents, and to permit the latter to play a proper part in local administration, townsite operations should be separately organized under a modified municipal form. The financing of townsite operations should accord with municipal practice and be budgeted for separately on a self-sustaining basis. Rentals charged for land in townsites and elsewhere should be reviewed and a more rational method of fixing the same established.

The autonomy of the proposed commission would rest upon the delegation to the commissioners of the management responsibility. As an agency of the government, however, the staff should be part of the public service. The common service agencies of the government should serve the commission, but because of the special nature of property transactions within the parks, there should be a delegation by the Department of Public Works to the commission of authority for the leasing of land and other land transactions within the parks.

- We therefore recommend that:*
- 1 A review be made of national park policy and a comprehensive statement of future goals be incorporated in the relevant legislation.
 - 2 The national parks be administered by a commission with members chosen from outside the public service, appointed for specific terms and remunerated for their services.

The foregoing observations with regard to the operation of townsites have equal relevance to similar developments in the North and, as that area develops, undoubtedly administrative needs will arise in connection with new settlements and townsites. Your Commissioners restate their belief that in such cases there should be early recognition of the fact that the development and subsequent administration of a townsite cannot be accommodated within the regular administrative organization of a federal department. Extensive decentralization is necessary and the best way to meet the special requirements will generally be through the establishment of a special type of municipal corporation. A model, which might well be appropriate for use by the federal government, is to be found in the *New Towns Act* of the Province of Alberta.

3

CONSTRUCTION—CIVIL DEPARTMENTS

AND AGENCIES

Construction activities of federal departments and agencies, costing \$312 million in 1960-61, cover virtually the whole field, from tourist facilities to hospitals, from multi-storey office buildings to vast air terminals. They include road construction, from park trails to national highways. The various departments and agencies construct harbours, nuclear power plants, dams and irrigation projects. An endless listing could be made of the big and the small, the special and the common, sorts of construction performed by the federal government.

DEPARTMENT OF PUBLIC WORKS

Reference has already been made to the extent to which the monopoly of construction activity granted at Confederation to the Department of Public Works has been impinged upon by the growing construction activities of other departments and agencies. Today, its construction activity for its own account represents but twenty-five per cent of total government construction and it carries out, as agent for other departments, an additional fifteen per cent. Its principal independent competitors are the Departments of National Defence, twenty-five per cent, and Transport, twenty per cent. Some of this independent activity originates in legislation but more frequently it has received parliamentary sanction by indirect methods. Thus departments, previously entirely dependent on Public Works for their construc-

tion needs, sought appropriations for specific projects or activities involving the need for new construction. Having secured the funds they organized to carry out construction themselves and thereby established a continuing status in the field. The result, discussed more fully below, is a considerable degree of duplication in design and construction personnel within the public service. Since the last war construction for the Armed Services has involved expenditures of major proportions. Most of it has been carried out by the Department of Defence Production with the help of Defence Construction (1951) Limited, and by the individual Services using their own professional and technical staffs. An arrangement exists, however, whereby the provision of certain types of facilities required by the Department of National Defence and the Services, notably office buildings and premises, is undertaken by the Department of Public Works. Your Commissioners regard the existing division of responsibility for these matters as reasonable and appropriate.

The Department of Public Works operates three construction branches, two of which have certain maintenance and operational duties. The Building Construction Branch carries responsibility for the Department's programme of building construction and also supervises building projects for all civil departments except the Air Services Branch of the Department of Transport. Operating through ten field offices, its construction expenditures in 1960-61 approximated \$31 million. The Harbours and Rivers Branch carries out the planning, design and construction of a wide variety of marine works, wharves, harbour improvements and repairs, breakwaters, and sea-walls. It plans and carries out a considerable volume of dredging. Fourteen district offices are maintained, with total expenditures in 1960-61 amounting to almost \$13 million.

The third unit, the Development Engineering Branch, deals with the design and construction of highways, bridges and other structures, water distribution and sewage disposal systems, access roads and parking areas. This branch administers the *Trans-Canada Highway Act*, the "roads to resources" programme and conducts special engineering studies. It operates ten field offices, and in 1960-61 its total expenditures on capital and operating accounts exceeded \$61 million.

Through its several branches the Department of Public Works provides architectural, engineering and other services to other departments and agencies. As previously indicated, it carries out a considerable volume of construction on their behalf, the relevant expenditures being charged to the votes of the departments concerned. The volume of this activity is indicated by Table 2 showing the charges made during 1960-61:

Table 2—DEPARTMENT OF PUBLIC WORKS SERVICE FEES AND CONSTRUCTION EXPENDITURES CHARGED TO OTHER DEPARTMENTS—1960-61

<i>Department</i>	<i>Expenditure 1960-61</i>
Northern Affairs and National Resources	\$13,644,000
Veterans Affairs	4,935,000
Citizenship and Immigration	4,536,000
Transport	3,272,000
National Research Council	2,459,000
Agriculture	1,643,000
National Defence	1,435,000
National Health and Welfare	1,294,000
R.C.M.P.	1,268,000
Mines and Technical Surveys	1,264,000
Fisheries	457,000
Justice	111,000
Others (7 departments)	102,000
TOTAL	\$35,152,000

OTHER DEPARTMENTS ENGAGED IN CONSTRUCTION

The activities of departments independently engaged in construction, with the exception of the Department of National Defence reported on later, are discussed briefly hereunder.

Department of Transport

Both the Air and Marine Services Branches of this Department maintain staffs engaged in construction activity. While considerable work is performed by the Department of Public Works for the Marine Services Branch, the latter makes its own contracts for construction in connection with canals and aids to navigation. Its total construction expenditures amounted to \$11.1 million in 1960-61. The Air Services Branch is responsible for all works related to the civil aviation, telecommunication and meteorology activities of the Department. Its total expenditures during 1960-61 for construction and repairs approximated \$62.4 million.

Northern Affairs and National Resources

This Department maintains two engineering divisions, one in the Northern Administration Branch and the other in the National Parks Branch. During 1960-61 construction expenditures of this Department, carried out with its own resources, exceeded \$13.8 million. Additional construction, involving approximately the same total expenditures, was performed for it by the Department of Public Works.

Department of Agriculture

The total capital costs of this Department during 1960-61 for the construction and acquisition of real property amounted to over \$15 million, of which amount over \$12 million is represented by expenditures under the *Prairie Farm Rehabilitation Act* and the *Maritime Marshland Rehabilitation Act*. The balance, slightly over \$3 million, represented a large number of small projects, the majority of which were supervised by the Department of Public Works.

Department of Citizenship and Immigration

The Indian Affairs Branch of this Department spent \$10.5 million in its construction activities during 1960-61. A number of the projects were actually supervised by the Department of Public Works but all projects under \$50,000 in cost, and some in excess of this amount, were carried out under the direction of the Engineering Construction Division of the Indian Affairs Branch.

Construction Outside of Canada

The two Departments principally concerned in this activity are External Affairs and Trade and Commerce. A ten-year programme of External Affairs for the construction of chanceries and residences in foreign cities envisages an expenditure of \$15 million. The Department of Trade and Commerce, also working to a long-term programme, is constructing one or two foreign residences annually, spending approximately \$70,000 for each such unit. Extra-departmental control of expenditures abroad is provided by a Treasury Board Advisory Committee on Accommodation Abroad which includes in its membership, in addition to representatives of the departments primarily concerned, staff of the Treasury Board and the Department of Public Works. A sub-committee is concerned with architectural aspects of this construction and as a general rule Canadian architects are employed.

PLANNING AND CONSTRUCTION ORGANIZATIONS

Thirteen civilian departments and agencies in 1961 maintained architectural or engineering branches, or both. As shown by Table 3, some consisted of but one or two professionals and supporting staff, but a number are sizeable organizations. In all, nearly four thousand people were so engaged.

Table 3—PERSONNEL EMPLOYED IN ARCHITECTURAL AND ENGINEERING BRANCHES OF CERTAIN CIVIL DEPARTMENTS AND AGENCIES—1961

<i>Department or Agency</i>	<i>Architects</i>	<i>Engineers</i>	<i>Supporting Personnel</i>
Public Works	78	371	471
Transport	35	229	405 ^a
Northern Affairs and National Resources....	6	56	295
Agriculture	1	3	7
P.F.R.A.	—	113	1,052 ^a
M.M.R.A.	—	10	70
National Harbours Board	—	40	117 ^a
Citizenship and Immigration (Indian Affairs)	2	12	78
Veterans Affairs	1	3	13
National Research Council	9	—	281 ^a
Justice (Penitentiaries)	6	4	16 ^b
National Capital Commission	1 ^d	1	3
R.C.M.P.	—	1	18
Northern Canada Power Commission	—	2	—
External Affairs	1 ^c	—	8
Total	140	845	2,834

^a Staff, or part of it, also engaged in repair and maintenance work.

^b Section disbanded 1st April, 1962.

^c Located in Paris.

^d Landscape Architect.

As indicated in the footnote to the foregoing table, the personnel listed are not exclusively engaged upon construction, and operations absorb some of the time of these specialist staffs. While over-all direction is generally from Ottawa, there is considerable dispersal of these staffs across the country. To supplement their own facilities, departments sometimes seek help from other agencies of the government and also retain outside architects and engineers to plan and supervise construction. Information was unavailable with respect to total fees paid for these services but the volume of work so contracted for is substantial.

In the latter part of 1961 steps were initiated to reduce the extent of duplication of professional personnel engaged in construction, employed by

these various departments and agencies. As the foregoing table indicates, the Architectural and Engineering Division of the Penitentiaries Branch was disbanded and the Department of Public Works has now assigned thirteen of its architects to other departments to assist in preliminary planning and to provide liaison. This is a promising development but no more than a start in eliminating undesirable overlapping.

On the basis of the evidence gathered, your Commissioners have come to the view that the continuing dispersal of construction activity throughout the government should be reversed and that, to achieve economy and efficiency in the conduct of public business, responsibility for all construction required by civil departments and agencies should be consolidated in a single construction agency. While it may ultimately prove desirable to add to the duties of such agency the conduct of defence construction, for reasons that are advanced in Chapter 5 of this report, it may be preferable, for the time being, to have such work carried out under the direction of the Department of National Defence. The existing fragmentation of specialist staffs and services described above, has certain obviously undesirable consequences. An even tempo of activity is almost impossible to maintain and individual staffs located throughout a group of departments face periods of relative inactivity, to alleviate which wasteful "make-work" programmes may be undertaken. The career prospects for professional staff are prejudiced by the difficulty and infrequency of interdepartmental transfer. There is, at times, evidence of departmental raiding for competent personnel, which results, in part, from an uneven distribution of professional and technical skills and varying levels of competence throughout the departments.

The foregoing observations have particular relevance to the cities outside Ottawa, where the isolation of small groups of professional and technical personnel in the field may be pronounced. The small size of many units, moreover, has an influence upon the extent to which a proper delegation of responsibility to field offices is made. This, together with a common tendency throughout the public service to make too many minor decisions at headquarters, substantially reduces the effectiveness of field forces. A single construction agency should be able to establish a regional organization in which the major offices across Canada possess substantial staffs and specialist skills, and it should be possible to delegate to such offices a significant degree of responsibility.

A further advantage envisaged by this proposal is that no longer will important public construction projects be mismanaged as the result of unco-ordinated efforts of a group of departments and agencies without clear

leadership. The construction at Port-aux-Basques and related ferry facilities provides an illustration of the delays and waste of public money which have resulted from this condition. In accordance with the terms of union of Newfoundland and Canada, a freight and passenger steamship service is maintained between North Sydney, Nova Scotia, and Port-aux-Basques, Newfoundland. The programme was initiated in 1951 and called for the construction of a ferry and docks and terminal facilities in each province. Three separate agencies of government and several firms of consulting engineers participated in this work which, as a result of a series of costly errors, was not completed until 1959. The ferry, when built, could not be docked at the newly constructed facilities at Port-aux-Basques. The final solution, reached after calling in an experienced adviser from the United Kingdom, required extensive dredging and channel rectification. The total costs exceeded \$20 million. A noteworthy aspect of this programme is that no blame for the result could be laid upon any one of the departments or agencies involved, nor was there any suggestion of non-performance or irregularity of any sort with relation to the execution of the work. The failure is therefore entirely attributable to the lack of co-ordination of various parts of the programme and a system which assigns no clear responsibility for leadership.

In forward planning of public construction, a matter discussed more fully below, the establishment of priorities becomes necessary. In this connection various factors must be taken into account over and beyond the relative urgency of the needs of prospective users. Such matters as the availability of contracting organizations, the relative tempo of construction activity in different areas of the country, possibly the need to deliberately intensify construction in particular parts of the country for economic reasons, the relative load currently borne by the government's own staffs in various regions (as affecting their ability to provide proper supervision)—these and other similar matters a single construction agency can more readily, than is now possible, bring into focus for the purpose of decision-making.

We therefore recommend that: 1 The Department of Public Works be made responsible for the planning and supervision of all construction required by civil departments and agencies and the employment of all professional, technical and supporting staffs needed for such purposes.

- 2 The Department of Public Works be made responsible for the planning and supervision of construction for the Department of National Defence of all classes of property other than those at present provided for through the planning and construction staffs of the Armed Forces.

CONSTRUCTION PROGRAMMING

In the Commission's report on *Financial Management* it is recommended that departments and agencies be required to prepare their estimates showing proposed expenditures on a programme basis. Forward planning for five-year periods ahead is also recommended to facilitate orderly development and provide advance information as to prospective financial requirements of the government as a whole. In a financial sense, public construction is an important element in such forecasting—the more so because it is susceptible of control to a greater degree than other major elements of cost; but in terms only of the efficiency with which public construction needs are satisfied, forward planning has its own particular justification. In large cities, looking ahead for a longer period than five years may be necessary. In the United Kingdom Government, London planning is on a ten-year basis, while five-year forecasts are used in all other areas.

In preparing their expenditure forecasts, as in requesting immediate appropriations for current purposes, the programmes of departments and agencies will include the cost of new construction required. When Parliament approves the Estimates, the construction funds will be voted to the departments and the Department of Public Works will execute the construction as agent, with the costs chargeable to the votes of the departments concerned. Nonetheless, the forward planning of the construction agency must take account of the potential requirements of all departments and agencies so that a comprehensive view of this particular activity may be obtained. There will be, of necessity, a constant process of revision and change in the planning of programmes. Tentative acceptance, as well as rejections, of particular future programmes will be signified by Treasury Board from time to time and it is clear that absolute certainty as to any project can never be reached until Parliament has voted the funds. Forecasts have to be revised each year, to add a further year and discard the current year, so that a five-year forward projection is always available. For these reasons alone,

there will have to be close working arrangements and easy communication between the Department of Public Works and the other departments and agencies which it serves. The developing practice of seconding professional personnel should in this regard be most helpful.

A system of forward planning as described should contribute materially to the efficiency of a common construction agency. Mainly it should minimize construction on an emergency basis and permit both user departments and the Department of Public Works sufficient time to develop plans and complete arrangements in an orderly fashion. With advance knowledge of the volume and location of future requirements, the necessary adjustments in staff and facilities in the various regional offices of the construction agency can more readily be made.

CONTRACTING

Section 36 of the *Public Works Act* applies to all departments with the exception of Defence Production. It reads:

Where a work is to be executed under the direction of a department of the government, the Minister having charge of that department shall invite tenders by public advertisement for the execution of the work except in cases where

- (a) the work is one of pressing emergency in which the delay would be injurious to the public interest,
- (b) the work can be more expeditiously and economically executed by the employees of the department concerned, or
- (c) the estimated cost of the work is less than fifteen thousand dollars, and it appears to the Minister, in view of the nature of the work, that it is not advisable to invite tenders.

The main purposes of this provision are to ensure equal opportunity for all to compete for government business, to establish the prevailing market price for the work, and to prevent favouritism in contract awards. The Department of Defence Production, excepted from the provisions of the section, advertises only certain types of works projects. In contracts made by it, however, some additional protection of the Crown is provided through the continuation of a wartime practice of providing for recapture of profit where the Minister decides that more than a "fair and reasonable profit" has been realized.

The practice among departments in awarding contracts varies considerably. No statutory requirement exists that the lowest tender be accepted and, in fact, such a practice followed automatically is fraught with danger. Price is only one element of a good contract, albeit an important one. The financial responsibility of the contractor, his competence as shown by previous performance, and the adequacy of his plant and equipment are considera-

tions of major importance. However, it was found that some departments automatically accept the low bid; others, perhaps more knowledgeable as to costs, reject bids which are unreasonably low. In some cases bids received are used as a starting point in a process of bargaining.

The attention of your Commissioners was drawn to the lengthy periods required for construction of public works and, in particular, to the starting of many projects so late in the year that winter construction became necessary. Procedural delays resulting from control procedures, in some cases related to delayed parliamentary action and the lapsing of votes at the end of the fiscal year, account for part of this. Lack of efficient planning within departments is another reason. Recommendations made by your Commissioners should bring about improvement, but with the increasing facility developed by the construction industry for winter operation, the future hazard of added cost may be less serious than formerly. No matter what the weather, the main risk of waste and undue delay is faulty performance by the department in the planning, design and contract-letting phases.

In the report on *The "Make or Buy" Problem* your Commissioners discuss the pros and cons of direct operation with government facilities as compared with purchasing or contracting out. The general conclusion that, in the absence of the most compelling reasons, the government should buy rather than make has nowhere greater relevance than in the field of public construction. While the great bulk of such work is today executed under contract, there are discernible tendencies in some departments to get into the business themselves. Unless strictly checked, the practice of buying equipment and recruiting construction personnel for departmental purposes may be expected to grow to serious proportions. Your Commissioners' recommendation for the centralization of construction activity should be interpreted as rendering impossible in future the development of minor construction empires under any guise.

In certain emergencies, but more frequently as a result of inadequate planning procedures, construction of projects has been commenced before the whole project has been completely designed. While the urgency of the need is sometimes the real motive, and justifies assuming the risks involved, the desire to demonstrate that a start has been made sometimes outweighs natural prudence and caution. Two undesirable and costly results of this practice have been observed. When a department with plans in only the initial stage secures an appropriation to start work, Parliament and the government may be buying a pig in a poke. Sometimes a contractor incapable of handling the whole project is the low bidder on the initial contract; and with his plant on the job, he secures a preferred position as plans are devel-

oped, to the detriment of the execution of the whole project.

In other cases, the letting of a series of prime contracts as plans are completed results in no single contracting organization having responsibility for co-ordination of the whole work. The use of separate prime contractors is not unusual where the divisions of the work and the sequential construction of its various parts are clearly defined, as for example where separate contracts are let for the sub-structure and super-structure respectively. All this means is that one contractor completes his work and moves off the job, to be followed by the second contractor who completes his part of it. At all times one single construction authority is in charge of the job. Where, however, because designs are not complete, a number of prime contractors find themselves working on one job at the same time, chaos usually results and the costs are bound to soar.

Such a situation developed in fact in connection with the construction of the Montreal airport. Two architectural firms (acting jointly) and five consulting engineering firms were retained for the planning and supervision of construction. No less than nine prime contracts were let. Construction commenced in August 1955 and the new facilities went into service in December 1960; a longer construction period than was required for the St. Lawrence Seaway. The complete cost was over \$29 million and over \$5 million was spent for accessory facilities, a total many times the original cost estimates.

The practice of inviting public competition is so generally accepted that perhaps too little thought has been given to some of its disadvantages. While it is essential that the public interest be protected from improper influence in the award of public contracts and from possibly exorbitant costs which may result, it has been found in other countries and in some provinces of Canada that other methods of selecting contractors may prove satisfactory. The method adopted is to provide for the pre-qualification of contractors and to limit to such groups the invitations to tender on public work. To be acceptable, a scheme of this sort must be conducted in strict isolation from the political process, access must be open to all who wish to apply, and the standards adopted for the judgment of an applicant's qualifications must be fair and objective.

In the United Kingdom, for example, where these practices have been followed since before the war, experience has been satisfactory and there has been a saving of time in the contracting processes, as well as avoidance of cases where contractors fail to carry out their obligation because of financial inability, incompetence or inadequate facilities. In the face of a large volume of varied work the development of such practice will take time,

and a considerable amount of skill is required to bring the qualification records into readily usable form. Acceptable contractors must be catalogued according to size, location and the particular skills they possess. A firm may be qualified for general building construction but completely unqualified for, say pipe-line construction. The practice in England is to invite tenders from qualified contractors in the area in which the work is to be undertaken, usually adding several outsiders as a check on any form of local collusion.

In their report on *Personnel Management* your Commissioners question the need, before making a civil service appointment, of scouring Canada to investigate the talents of every person who wants to be a civil servant. Your Commissioners take a similar view with respect to the obligation of government to advertise its every need for construction to the farthest corners of the land. While no specific recommendation is here offered with respect to a partial or complete abandonment of public invitations to tender, your Commissioners believe that the subject merits serious consideration and that the Department of Public Works should make objective appraisal of the matter, including a more detailed study than your Commissioners have found possible, of practices and experiences in other jurisdictions.

Finally, the relationships of the proposed common construction agency with its client departments and Treasury Board should be briefly considered. As a service agency, the Department of Public Works will have a basic duty to serve the needs of its clients by securing the efficient and prompt construction of the facilities they require. Planning and estimating by the departments on a programme basis places on Treasury Board the responsibility for deciding whether or not their requests are granted. It is therefore not open to the construction agency to question approved programmes nor challenge the need for the structures which have been approved. The Department of Public Works must have, however, substantial additional responsibilities if waste is to be avoided. First, by playing the part already described in the long-term planning process, it can render valuable advice and assistance to Treasury Board. As the repository of the government's "know how" in construction matters its criticism and suggestions of proposals cannot be ignored.

Further, in the face of the need for consistency, standards must be drawn up to cover such matters as the quality and cost of alternative types of construction, the allowance of floor space to accommodate civil servants of various ranks, the provision of accessory services such as elevators, conveyor systems, communications systems, loud speaker installation; lecture halls and theatres, and air conditioning. Some valuable work has been done

by an Advisory Committee on Accommodation Standards of the Treasury Board, but this field requires more intensive cultivation. The Department of Public Works, because of its experience, should carry the main burden of fact finding and investigation for the Treasury Board. Once standards are established, they can, in respect of new construction at least, be effectively policed only within the central construction agency. It should accordingly be looked to for the enforcement of such standards.

4

PROPERTY OPERATION—CIVIL DEPARTMENTS

The total floor space included in the many buildings owned or leased by the government today totals 180 million square feet, or over four thousand acres. Of this, no less than 140 million square feet, almost 80 per cent of the total, is held for the use of the Department of National Defence and managed by it. The Department of Public Works, with space in 2,850 buildings, manages approximately 30 million square feet (of which 15 per cent is held under lease), while the other civilian departments manage 11 million square feet for their special needs, such as air terminals, hospitals and penitentiaries.

The first set of Estimates for 1962-63 included for the first time information with respect to estimated costs of "accommodation" used by each department, and the costs attributable to properties managed by the Department of Public Works and the user departments, respectively. A summary of these Estimates for the civil departments is shown in Table 4.

STANDARDS OF ACCOMMODATION

The provision of adequate accommodation and congenial working conditions has direct impact on employee productivity and morale. Private business has long recognized this and in the past twenty years great strides have been made in improving working conditions of office and other employees. Improved standards of lighting and ventilation, better design and decoration

Table 4—ANNUAL OPERATING COSTS OF ACCOMMODATION—CIVIL DEPARTMENTS

	<i>In Respect of Property Managed By</i>	
	<i>Public Works</i>	<i>User Departments</i>
	(\$000)	(\$000)
Post Office	23,000	—
National Revenue	9,000	200
Veterans Affairs	2,100	5,800
Transport	1,900	5,300
Unemployment Insurance Commission	5,300	—
Agriculture	2,500	1,400
National Health and Welfare	2,000	1,800
Mines and Technical Surveys	3,500	100
Northern Affairs and National Resources ...	700	2,800
Public Printing and Stationery	2,900	—
Penitentiaries	—	2,800
Citizenship and Immigration	2,000	800
Royal Canadian Mounted Police	1,200	1,500
National Research Council	600	1,800
	56,700	24,300
Total	56,700	24,300

of premises and facilities and, where needed, air conditioning have been the principal means of effecting this betterment. The government, particularly in its new construction, has taken note of this trend, but much of the space occupied by its employees remains, by modern standards, less than satisfactory. The policy with regard to air conditioning is an equivocal one. While new buildings in some areas are being provided with the duct work necessary, air cooling machinery has not been installed. This appears due less to the need to economize than to indecision. Your Commissioners wish only to observe that the widespread introduction of air conditioning in the warmer cities of Canada and the United States is based upon hard business considerations and finds financial justification in the improvement in productivity of employees.

In the Ottawa area the quality of accommodation varies considerably, with that in older government buildings and most leased premises being substantially inferior to that contained in the government's newer structures. In spite of acknowledging the advantages of modern standards of accommodation, as it does in its current construction, the government tends to rent space of medium and sometimes low quality. In view of the greater economy of operation possible in modern structures, as well as implications for employee

morale, the deliberate selection of second class space, because the rental is lower, may well be in many cases false economy. At present there is no single authority for the leasing of property. In Ottawa, the Department of Public Works makes all building leases for civil departments, but not for all Crown agencies. Elsewhere, individual departments lease property to a limited extent; and abroad, apart from London, England, the Departments of External Affairs and Trade and Commerce attend to most leasing operations.

Four and one-half million square feet of space are rented by the Department of Public Works and used principally for office and warehouse purposes. These premises are widely dispersed as shown by the following geographical analysis of rental payments made in 1961. Ottawa, where 27 per cent of the civil service and most of the major office buildings of the government are located, is shown separately.

Table 5—RENTALS PAID—1961

For properties located in:	
Ottawa	\$ 2,680,000
Elsewhere in Ontario	1,640,000
Quebec	1,180,000
British Columbia	500,000
Alberta	450,000
Manitoba	300,000
Nova Scotia	270,000
Saskatchewan	230,000
New Brunswick	170,000
Newfoundland	70,000
Yukon and the Territories	10,000
Prince Edward Island	5,000
London, England	160,000
United States	20,000
	\$ 7,685,000

In discussing the planning of construction, reference was made to the need for standards to be set for such matters as space assigned to employees at varying levels of authority. Consistent adherence to such standards is also a continuing concern of property administration. The standards already established by the Department of Public Works are comparable with those used by major corporations, but efforts to enforce them meet with mixed results. In the nature of the problem a degree of compromise is at times required, but the need for economy as well as consistency renders it essen-

tial that the managing agency possess police power in this matter and exercise it. In cases where, due to changes in programmes, the space requirements of departments decrease, the authority of the management agency to reclaim and re-assign or dispose of the unneeded space must be respected.

A satisfactory solution of these problems requires the establishment of businesslike standards for building quality and amenities, applying to both leased and owned premises, as well as standards of space allocation covering office and other activities. As in construction standards, the final decisions must be made by Treasury Board to apply consistently through the service, but the onus for gathering the pertinent facts and making studies should rest on the Department of Public Works.

ADMINISTRATIVE PROCEDURES

A basic requirement of administration of real property is a good system of records and accounts, and proper financial reporting. A complete inventory of the properties, with additions and disposals promptly reflected therein, is essential. So, too, is an accounting system designed to provide the information needed for management, on a current basis. In addition to monetary records kept on an accrual basis and reflecting depreciation, detailed records are required on a quantitative basis. The elementary records at present in use are totally inadequate for management purposes and even their most serious deficiencies are not made good by alternative procedures. In the matter of vacant space, which needs close supervision, no regular reports are made, and the accounts kept on the usual government cash basis provide no clue as to current cost.

A test carried out for your Commissioners discloses that on a selected date in 1961 there were 2,347,000 square feet of vacant space in the office buildings occupied by the government. About half of this was basement area, but the annual value of the balance was estimated at \$1,600,000. Information of this sort is needed constantly in property assignment and re-assignment and for prompt identification of excess property and surplus disposal.

In other reports of your Commissioners, the principle has been enunciated that the users of major common services should be charged therefor. Only thus will departments be aware of the monetary consequences of their space requirements. Moreover, such information is required for proper costing of their programmes. The inclusion of accommodation cost calculations in the 1962-63 Estimates, already referred to, is a step toward this goal. In the view of your Commissioners, however, an actual accounting distribution of

all elements of cost is required, with the user departments meeting such charges from their own appropriations.

Two operating practices in connection with building operation require brief comment. In your Commissioners' report on *The "Make or Buy" Problem* reference is made to cleaning operations upon which \$9 million are spent annually. For government buildings in the Ottawa area the annual cleaning bill is \$2,600,000 with 2,800 persons employed, mostly part-time. Unit costs of government cleaning operations have been improved considerably in recent years, but investigation shows that further savings, at least a million dollars a year, can be made through contracting out this function. New government buildings are being equipped with automatic elevators which, through savings in labour and power and greater efficiency, generally pay for their added cost in less than ten years. There remain in use over 600 manually-operated elevators in government buildings, the operators of which are currently paid in a scale of \$2850 to \$3300 per annum.

The central conclusion arising from your Commissioners' studies is that the task of managing real property for all civil departments and agencies, and those properties within the Department of National Defence which it can efficiently service, should be entrusted to the Department of Public Works. A delegation of some of its responsibilities for operating details and supervision will be necessary in certain cases, but the ultimate responsibility for the whole function should be carried by Public Works. To discharge this duty satisfactorily a more adequate organizational pattern will be required, including delegation to appropriate groups of responsibility for conduct of specific functions. In the field of record keeping and financial reporting a major effort is required. In certain matters, such as leasing and surplus disposal, land and building aspects can probably be merged. While these proposals represent a major transformation of the existing pattern, the monetary savings to be gained will pay for any added costs many times over.

Because of its relation to real property management and its implications for the costs of property operation, the *Municipal Grants Act* which provides for payments in lieu of municipal taxes on federal property might logically come under the administration of the Department of Public Works, instead of its present location in the Department of Finance.

We therefore recommend that: 1 The Department of Public Works be made responsible for real property management throughout the public service, excepting the management of property held by and presently managed within the

Department of National Defence and by the large independent proprietary corporations.

- 2 The administration of the *Municipal Grants Act* be assumed by the Department of Public Works.
- 3 Departments and agencies be charged for accommodation and real property services rendered them by the Department of Public Works.

FOREIGN OPERATIONS

In London, England, the Department of Public Works manages the property function, and in Washington and, to a lesser degree, Paris where a number of federal departments and agencies maintain offices. Elsewhere abroad the Departments of External Affairs, Trade and Commerce and Citizenship and Immigration are those principally involved. Some important properties are owned but more are leased. At present properties are held under lease in 104 different places outside Canada. Except in London, these leases are negotiated by the individual departments concerned.

The recommendation for a single agency to perform the real property management function, except in the purely defence sector, is intended to apply to foreign operations as well as domestic. The need for delegation of some functions is somewhat greater in foreign operations because of the remoteness of the locations. Construction, purchase and disposal are susceptible of but a small degree of delegation outside the Department; but certain leasing activity and housekeeping duties such as cleaning, minor repairs, the local purchase of supplies, and so on, should be delegated to the senior officer of the major Canadian element in the locality and carried out under his supervision. In such matters, the local officer would be answerable to the Department of Public Works, not to the department of which he is a member.

5

DEPARTMENT OF NATIONAL DEFENCE

The present organization for real property management in the defence sector is somewhat complex and entails a considerable amount of unnecessary duplication. The dimensions of the task are imposing and involve the management of six million acres of land and some 1,900 properties or groups of properties, exclusive of overseas installations arising from N.A.T.O. commitments. Expenditures of the Armed Forces in 1960-61 for acquisition and upkeep of lands, buildings and works totalled \$118.3 million.

Reference has already been made to the services rendered by the Department of Public Works in attending to the acquisition and operation of office and general purpose type buildings required by the Department of National Defence. Your Commissioners believe that such arrangements should be continued. The following discussion treats exclusively with real property of the types at present in the control of the Department of National Defence.

PLANNING AND CONSTRUCTION

The planning of construction programmes is carried on separately by each of the Armed Forces. A central committee, the Construction Programme Service Committee, of which the chairman is an assistant deputy minister of the Department, scrutinizes the several programmes and recommends to higher authority those which it approves. When projects are finally sanctioned,

plans and specifications are prepared by the individual Services and passed to the construction authority.

There are four separate patterns of construction, with four outside agencies involved in various phases:

- (a) Projects which can be executed by Service personnel and equipment are carried out by the Services themselves, with procurement of materials and equipment by the Department of Defence Production.
- (b) Projects contracted out are handled by the Department of Defence Production, using for the purpose Defence Construction (1951) Limited, a Crown corporation.
- (c) Housing construction is carried out by Central Mortgage and Housing Corporation.
- (d) Aerodromes are built and extended under the direction of the Department of Transport.

Substantial numbers of professional and technical personnel are regularly employed in the several Services and defence agencies, as shown by Table 6.

Table 6—REAL PROPERTY PLANNING AND CONSTRUCTION—DEFENCE AREA, NUMBERS OF PERSONNEL EMPLOYED—1961

	Architects	Engineers	Supporting Staff		Total
			Service	Civilian	
Navy	5	10	5	12	32
Army	12	26	35	44	117
Air Force	31	76	92	122	321
Defence Production and Defence Construction (1951) Limited ..	—	88	—	299	387
	48	200	132	477	857
	48	200	132	477	857

The findings reported in Chapter 3 with respect to the undesirable results of fragmentation of specialist staffs have equal relevance here. The mixture of uniformed personnel and civilians accentuates some of the problems.

OPERATION AND MAINTENANCE

Annual costs of operating 140 million square feet of space in buildings—eighty per cent of all government holdings—amount to approximately \$54 million. This function is performed by the individual Services, employing mixed staffs of which the majority are civilians. The problems of management and housekeeping for this large group of properties—armouries, barracks, colleges, depots, dockyards, hospitals, recruiting centres, training camps—presents few special difficulties and lends itself to economical performance by a single organization. Inevitably, therefore, the employment of three independent groups results in overlapping, duplication and waste. This is particularly noticeable at supervisory and control levels. There is also evidence of a degree of overstaffing and excessive accumulation of materials and supplies.

As in the civil departments and agencies, the need for development of organized administration for this task has hardly been recognized. Procedures generally, accounting, space records, and direct assignment of responsibility for the several functions to be performed, are less than satisfactory. While the relative efficiency of the several Services in this regard varies somewhat, the performance of the best is far from reflecting the businesslike approach which is required.

ORGANIZATION

Your Commissioners have considered several possible methods of bringing about improvement in the management of real property in the defence organization. Having regard to the recommendations already made to constitute the Department of Public Works the common real property agent for other departments, the simplest solution might lie in having that body assume also the responsibility for defence real property. While this may ultimately be done, there are several reasons why a more gradual approach may be preferable. One is the part now played by Service professional and technical personnel, the absorption of whom into an outside civilian agency will not easily be accomplished. Another relates to security aspects of certain construction and existing installations. A third, and perhaps the most telling, is the size of the job and the far reaching nature of the changes required to bring real property management to a state of efficiency.

An alternative which carries a greater hope of success is to unify the activities now carried on separately by the Armed Services by a consolidation of planning, construction, acquisitions, disposals, and operation and mainte-

nance within a single bureau under the administration of the Deputy Minister of National Defence. Under such a plan, the continued participation of the Department of Defence Production in contracting would no longer be appropriate and Defence Construction (1951) Limited could be merged with the new bureau.

In many respects the proposed body would resemble the Department of Public Works. Both would be common service agencies with similar responsibilities to a group of client organizations. Both will have to create a businesslike organization and the comments upon the needs of management in preceding chapters have equal application to the defence real property agency. Like Public Works, it will have to delegate some of its responsibilities to its clients, probably on a more extensive scale. In view of this community of interest, close relations should exist between the two bodies—easy communication and consultation on common problems, and free interchange of information. The duty of keeping Public Works currently advised of changes in property holdings for perpetual inventory purposes will rest with the suggested agency.

One function, the responsibility for which should remain within a single organization if it is to be successfully performed, is disposal of surplus real property. Before property excess to the needs of one department is disposed of, its possible reassignment to other government use should be explored. It is therefore suggested that the responsibility of the defence real property agency in respect of property no longer required should be to identify it promptly and declare it excess to defence requirements. Thereupon, the Department of Public Works, after canvassing reassignment possibilities, would declare it surplus to government requirements and dispose of it.

Special construction requirements such as housing and aerodromes, which are now performed for the Armed Services by other departments and agencies, should continue to be met through non-defence agencies. The responsibility for specialist activities of this sort, however, should be borne by the Department of Public Works. Delegation of any part of this responsibility may be warranted when deliberately undertaken for the purpose of improved performance, but the dangers of unnecessary and wasteful duplication of men or materials should be recognized and avoided.

The Armed Services conduct real property operations overseas in support of their forces stationed abroad. With the proposed centralization of similar operations in Canada under the Deputy Minister of National Defence, consideration should be given to the extent to which the new central agency can usefully participate in foreign operations and what type of organization may be desirable for such purpose.

- We therefore recommend that:*
- 1 A real property organization or bureau be established under the supervision of the Deputy Minister of National Defence to manage the acquisition, construction and operation of real property of the classes now within the control of the Department and the Armed Services.
 - 2 The personnel and functions of Defence Construction (1951) Limited be transferred to the new organization and, unless there is continuing need for a separate corporate body, its charter be surrendered.
 - 3 Total responsibility for contracting for real property construction be assumed by the new organization, without intervention of the Department of Defence Production, but real property services, including construction, now rendered the Armed Services by other departments and agencies be provided through the Department of Public Works.

6

THE NEW ROLE OF THE DEPARTMENT OF PUBLIC WORKS

The recommendations already made in this report will, if adopted, substantially increase the areas of responsibility and scope of operations of the Department of Public Works. To perform its new duties effectively your Commissioners believe that its future activities should be limited to those of a common service agency without conducting, as it does now, certain programmes of its own. The need to create a suitable organization for the conduct of real property management has already been referred to and need not be repeated, but brief reference should be made to the need of the department for authority to delegate part of its functions in certain cases. The principal area in which delegation will be appropriate is in respect to certain maintenance and housekeeping functions of properties in Canada and abroad which are remote from the facilities of the department. In addition, in certain particular cases, it may be wise to delegate specific functions to specialized agencies. An example of this is the recommendation that the National Parks Commission be empowered to lease lands and conduct land transactions within the national parks.

The bodies principally to be affected by your Commissioners' recommendations for centralization of construction are the Department of Transport which now carries on a considerable volume of marine and airport construction, the Department of Northern Affairs and National Resources, and, in respect of the construction of dwellings, Central Mortgage and Housing Corporation. The consolidation of such activities under the Department of

Public Works constitutes an important element of the economies to be achieved.

FUNCTIONS TO BE DISCONTINUED

Among its existing duties the Department of Public Works conducts programmes designed to serve the public rather than other departments of government. Because no other department or agency is directly involved, these programmes can be regarded as being initiated and administered as part of its own responsibility. In this respect they lie beyond the functions properly to be carried out by a common service agency and consideration must therefore be given to the transfer of responsibility for their administration to other departments or agencies. In the summary listing of such activities given below the Trans-Canada Highway functions are omitted because, apart from work in the national parks, construction is carried out by the provincial governments and, in any event, the work is nearing completion. It will be observed that all the under-noted functions have a common character in that they are related to water. The Department, on its own responsibility, conducts the following activities:

- constructs wharves, piers, breakwaters and other harbour facilities;
- dredges channels and harbours and constructs protection works along the banks of navigable rivers;
- constructs and operates graving docks, locks and dams; and
- performs certain functions in connection with interprovincial and international bridges.

In another report your Commissioners refer to the division among various departments and agencies of the responsibility for marine and maritime activities. The St. Lawrence Seaway Authority, the Department of Transport and the National Harbours Board, as well as the Department of Public Works, are all conducting activities of this nature, which results in a degree of overlapping and duplication. A reassignment of the various responsibilities in this field is undoubtedly desirable and should be carried out in such manner as to remove from the Department of Public Works any responsibility for the determination of need or for the administration of such programmes. However, to the extent that the future operations of these various organizations involve acquisition, construction, maintenance, upkeep or disposal of real property, the Department of Public Works, as the exclusive

common service agency, should perform the necessary tasks. Your Commissioners note in passing that in their view dredging operations, while having to some extent the character of engineering works, should not be considered a function of real property management nor, in any respect, a continuing responsibility of the Department of Public Works.

One other present duty of the Department of Public Works, which has no real relationship to real property management, is the purchasing and distribution to departments and agencies of office furniture. It is recommended in the *Purchasing and Supply* report that this function be transferred to a centralized procurement agency to be created through the expansion of the present Department of Defence Production.

DECENTRALIZATION AND FIELD ORGANIZATION

The extent to which future activities of the Department of Public Works should be decentralized cannot be categorically stated at this time. While in general there are obvious advantages in transferring to the field certain operational functions and thereby improving the efficiency with which the needs of client departments and agencies in the field may be met, the extent to which the user departments themselves delegate authority to the field has a direct bearing upon what may be appropriate. Based on experience elsewhere, however, your Commissioners believe that a fairly substantial delegation of authority to responsible officers in the field will be found desirable.

The Department now is organized into four operational branches, three of which are engaged in engineering and construction and the fourth in property and building management. Regional offices are maintained in Montreal and Edmonton and the department has eighteen district offices scattered across the country. Current policy looks to an increasing degree of delegation. The recommendations made herein will bring about not only a significant increase in personnel and facilities but an enlargement of administrative procedures to provide for essential management services not now being performed, such as accounting, scrutiny of space availability and vacancies and aggressive surplus disposal. In these circumstances a pattern of five or more strong regional offices, each with such satellites as may be required, will probably prove most satisfactory.

In setting up such an organization the central problem is the extent to which authority is delegated. Too little delegation can destroy the effectiveness of the organization, create unreasonable delay and inflate costs. Care must be taken, above all, to ensure that the standard of senior field personnel is such that a reasonable degree of autonomy may safely be entrusted

to regional offices. In the field as at headquarters, effective safeguards will be required against improper influence coming to bear on any part of the whole range of real property management. Ideally, subject to established limits, regional offices should be able to arrange leases, negotiate contracts and supervise construction in their areas. They should be of particular value in the disposal of surplus property as well as problems of reassignment. They should be able to deal with the local representatives of user departments in their areas in planning and design of local facilities. In the administration of the *Municipal Grants Act* the need for country-wide consistency in dealing with municipal authority suggests that such function should be reserved to departmental headquarters.

In all the circumstances, your Commissioners believe that the Department should feel its way rather than attempting to blueprint its organization in detail at the outset. The importance of achieving finally a proper organizational structure must not be minimized but the dangers of allowing matters to get out of hand must be guarded against. In conclusion your Commissioners believe that the adoption of their recommendations in the field of real property management can effect very substantial economies in operation and possibly liberate a surprisingly large sum for other government purposes through an effective programme of surplus disposal.

6 PURCHASING AND SUPPLY

SUPPORTING SERVICES FOR GOVERNMENT

REPORT 6: PURCHASING
AND SUPPLY

PUBLISHED BY THE QUEEN'S PRINTER • OTTAWA • CANADA FOR
THE ROYAL COMMISSION ON GOVERNMENT ORGANIZATION

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ACKNOWLEDGEMENTS

The detailed investigation of the purchasing and supply activities of the federal government was undertaken by a Project Group under the direction of Leeds M. Nelson, B.COM., C.A., Partner, *McDonald, Currie & Co.*, Montreal.

A number of Project Officers were associated with this endeavour, and your Commissioners, in recording their names below, wish to acknowledge the assistance received:

Douglas A. Gillespie, *Northern Electric Company Limited*, Montreal.

Robert C. Murdoch, *Canadian Pacific Railway Company*, Toronto.

P. F. Padberg, formerly with *Canadian National Railways*, Winnipeg.

Edward F. Stevens, F.C.A., A.C.W.A., F.R.E.C.S., A.R.Ae.S., Oakville, Ontario.

Hector D. Wright, *The E. B. Eddy Company*, Hull, P.Q.

Your Commissioners also benefited from the views of an Advisory Committee, under the chairmanship of C. R. Snell, Vice-President, Purchasing, *Dominion Steel and Coal Corporation, Limited*, Montreal. The members of the Committee were:

Wilbrod Bherer, Q.C., *Bherer, Juneau & Côté*, Quebec.

Charles Gavsie, C.B.E., Q.C., *Howard, Cate, Ogilvy, Bishop, Cope, Porteous & Hansard*, Montreal.

R. A. Hobday, *Marshall Wells of Canada Limited*, Winnipeg.

A. R. Oliver, *The Steel Company of Canada, Limited*, Hamilton.

W. Dent Smith, LL.D., *Terminal Warehouses Limited*, Toronto.

T. E. Stephenson, *Canadian Pratt & Whitney Aircraft Co. Ltd.*, Montreal.

R. C. Vaughan, C.M.G., D.S.C., *Commonwealth International Corporation*, Montreal.

A number of briefs and submissions bearing on this subject were considered and these are duly recorded in the final volume of your Commissioners' reports.

Your Commissioners, in acknowledging the assistance and advice received, dissociate all those named above from any of the findings and conclusions contained in this report; for these, your Commissioners assume full responsibility.

1

INTRODUCTION

In the year 1960 the Government of Canada spent more than \$1 billion for materials, supplies, equipment and services. In its warehouses across Canada it holds inventories worth between one-half and three-quarters of a billion dollars. The annual costs involved in the purchasing and handling of these vast stores cannot be accurately determined, but the costs of operating the large existing warehouse complex and of financing these huge inventories are substantial. They represent, in fact, a considerable proportion of the \$7 billion total federal budget.

No other organization in Canada rivals the federal government in the wide range of its annual purchases, in the scale of its warehouse requirements, or in the value of its purchases. These vary from paper clips and pencils to icebreakers and jet aircraft, from missiles to school books, and from gasoline to milk. Four-fifths of the huge total is represented by purchases for the Department of National Defence. Among other departments and agencies, those with the largest volume of requirements are the Departments of Transport, Public Printing and Stationery, Public Works, and Veterans Affairs, Atomic Energy of Canada Limited and the National Harbours Board.

At first glance, the purchasing operations of the federal public service appear dispersed and unco-ordinated. The basic pattern is that each department purchases for its own account and, subject to the formal requirements of the *Financial Administration Act* and Treasury Board regulations, each establishes its own machinery and rules. The result is that in 1960-61, 29

departments and agencies carried on their purchasing through 156 offices, located in twenty-eight different centres across Canada.

First appearances are, however, somewhat misleading. Much of the procurement operation is in reality centralized, because almost the whole of the purchases for National Defence—some \$863 million out of government purchase orders totalling \$1,063 million for the calendar year 1960—were placed by the Department of Defence Production, which is the statutory purchasing agent for the Department of National Defence. Moreover, the Department of Public Works and the Department of Public Printing and Stationery perform central purchasing roles for other departments and agencies. The former purchases, supplies, and maintains all office furniture. The latter is the central procurement agency for printing, stationery, office forms, and office machinery of all kinds and, in addition, conducts a maintenance programme for office equipment. In 1960, these two central purchasing agencies accounted for \$34 million of purchases. The numerous and widely dispersed offices of other departments were thus collectively concerned with no more than fifteen per cent of the government's total procurement operations.

The warehousing and materials-handling operations are unduly dispersed and fragmented. In 1960-61, the government operated 248 principal warehouses and 340 sub-stores, located in 79 centres in Canada and a few places abroad. Most of these were operated by civilian departments and agencies but, in value terms, an overwhelming proportion of the total inventories was held in the 37 warehouses of the Navy, Army and Air Force.

OBJECTIVES

The procurement and handling of materials in every large organization offer opportunities for extravagance, waste and inefficiency. Your Commissioners have reached a number of conclusions about the effectiveness of the federal government's operations in these areas but, before they are stated, it will be useful to identify objectives which should guide the government's procurement and materials management operations, and also to note special aspects of the task that are peculiar to government.

As in any other purchasing and materials-handling operation, a primary objective is to have the right materials, supplies and equipment available in the appropriate amounts at the right times and places. A procurement system that fails to pass this test is costly and wasteful. It is equally important to adopt procedures for purchasing and handling materials and supplies that achieve satisfactory results at minimum cost. There are many drains through

which dollars can disappear: purchase prices may be too high; purchase orders may be too small; specifications may be unnecessarily detailed; too much may be paid for transportation; materials delivered unnecessarily into warehouses may have to be handled, stored, and reshipped; warehouses may be wrongly located in relation to supply points or points of ultimate use, or they may be larger than necessary, too costly, insufficiently used (because of low turnover or poor use of space), ill equipped for efficient handling of stocks, or inexpertly or extravagantly manned. High costs may be incurred either in shipment handling in warehouses, in shipping and storage damage, or in excessive losses resulting from deterioration or obsolescence due to overstocking.

Genuine economy demands that each element in the total process—from the initial anticipation of a requirement until the material or equipment is finally in use—be seen not as an isolated operation but as one stage in the process. Efficiency and economy can be measured only in terms of performance at all stages combined. A good price at the supply point can be more than offset if too much freight or too many handling charges are paid, either directly or indirectly, before the materials reach the point of use. A system that focuses on economy at one stage to the neglect of, or even at the expense of, economy at other stages of the process is not only unrealistic but costly and ineffective. A procurement and materials-handling system involving more than 2,000 purchasing officials in 156 purchasing offices, and the movement of materials, equipment and supplies through more than 250 warehouses would be suspect on these grounds, even if only a few static items were handled. The dangers are unquestionably greater when such a complex structure handles a flow of equipment, materials, and supplies of almost every kind produced in the country or abroad.

Large commercial organizations have found that procurement activities can be dealt with effectively only by specialization—most frequently on a basis of partial or complete centralization. They have found that the rationalizing of transportation and warehousing is a business activity having general principles applicable to almost any product or supply situation. The dimensions of a warehouse, the equipment it requires, the utilization of space for aisles and for stock, the determination of economic order quantities and frequencies, and all of the paperwork involved, are matters that demand a specialized knowledge which is applicable to the materials-handling field generally.

Above all, economies and greater efficiency accrue from pooling requirements wherever possible; first at the procurement stage, then in pooling transportation, and finally in warehousing facilities. This pooling may be regional, departmental, or across the entire organization. Its purpose is to obtain the advantages of scale, to minimize or eliminate duplication and over-

lapping of effort, to gain the price advantage that comes from massed purchasing power, and to make use of procurement and materials-handling skills by providing volumes sufficient to justify the employment of specialists.

None of these broad policy objectives necessarily suggests that it is inappropriate for a single department of the federal government to handle its own purchasing and warehousing. However, the question still remains: is this the most appropriate way to ensure that departmental personnel and operations are efficiently and economically furnished with needed materials and supplies? There is also the question whether dispersion of procurement and material-handling bars the employment of properly experienced and qualified specialists.

A department may argue that it dare not relinquish the right to purchase and stock for its own needs because otherwise it would encounter costly delays and unsatisfactory products. But the answer is that a professional purchasing agency, with a genuine service orientation to its clients, can be counted on to do a better job. This has been achieved in almost all large organizations outside the public service, including many whose range of requirements (if not quantities), geographic dispersion, and need for speed, parallel those of the federal government.

The government may occasionally have to consider various extraneous factors when placing orders for equipment, materials and supplies. Once again, however, its position is not unique. Even a private business organization must take into account factors other than its desire to meet its material and equipment needs efficiently and economically. It will, on occasion, have to consider the importance of reciprocal business with its potential suppliers. It may find it advantageous in terms of good public relations or good government relations to consider the effects of its purchasing pattern on the economy—locally, regionally or, where import competition is a factor, nationally. But, where the economic implications of its purchasing pattern are at issue, a private business organization is, in the absence of government direction, rarely expected to make a significant financial sacrifice.

The government's position in respect of these extraneous considerations is not identical with that of private business. First, there is the danger that patronage may enter into purchasing decisions. At all levels of government there is pressure to influence purchasing for the personal advantage of individuals, for electoral advantages in constituencies, and for partisan advantage. This is a special and common hazard in government procurement procedures. In addition, government shares with private organizations the constant hazard that officials may make decisions for their own advantage or that of friends and associates. An effective procurement system

for the public service must be on guard against these hazards without exacting an unnecessarily high price in terms of cumbersome procedures, costly delays, or undue rigidity.

2

PURCHASING—CIVIL DEPARTMENTS AND AGENCIES

REGULATION OF PURCHASING

Until 1951, only procurements for National Defence were regulated by statute. Other departments faced a ceiling of a few thousand dollars with respect to construction contracts, but none with respect to procurement. The *Financial Administration Act* brought all departments within general regulations.

Purchasing controls on departments and agencies stem from Section 39, which provides that:

The Governor in Council may make regulations with respect to the conditions under which contracts may be entered into and, notwithstanding any other Act,

- (a) may direct that no contract by the terms of which payments are required in excess of such amount or amounts as the Governor in Council may prescribe shall be entered into or have any force or effect unless entry into the contract has been approved by the Governor in Council or the Treasury Board . . .

Under the authority of this section, the Government Contracts Regulations were established by P.C. 1954-1971 of December 16, 1954. These regulations set forth the circumstances in which tenders must be called for before purchase contracts may be entered into. The governing direction is:

Before any purchase contract is entered into, the contracting authority shall invite tenders therefor, except where

- (a) the need is one of pressing emergency in which delay would be injurious to the public interest,
- (b) there is only one available source of supply, or
- (c) the estimated expenditure involved does not exceed fifteen thousand dollars and it appears to the contracting authority, in view of the nature of the purchase, that it is not advisable to invite tenders.

The regulations also specify the circumstances in which departments may enter into purchase contracts on their own authority, and those where Treasury Board approval of a contract is required. The general tenor is that Treasury Board approval of a contract is *not* required where:

- . The contract does not exceed \$15,000.
- . At least two tenders have been obtained, the lowest accepted, and the contract does not exceed \$25,000, but any increase thereto may not exceed \$2,500.
- . A contract is approved by the Treasury Board—any increase thereto up to the lesser of (i) 10% of the amount approved by the Board or (ii) \$15,000.

While the foregoing framework is applicable generally, variations apply to Crown corporations, commissions and agencies, many of which have relatively greater freedom from the obligation to obtain Treasury Board approval. The degree of autonomy in procurement enjoyed by such agencies is occasionally set out in the statutes under which they are established or, more frequently, in the Orders in Council applying to them individually.

NUMBER AND LOCATION OF PURCHASING OFFICES

Since many departments have widely dispersed purchasing activities, there is a large number of government buying offices. This is illustrated in Table 1, which indicates that the twenty-three civil departments and agencies used for review purposes by the Commission spend annually about \$180 million from eighty-three purchasing locations. However, nearly all departments also do a certain amount of local buying in the field through offices where no purchasing organization exists.

It will be seen that there are wide variations in the nature of the purchasing organization among the departments and agencies listed in Table 1. Some departments buy their complete requirements (except small or emergency items) through one central purchasing office located in Ottawa, whereas others have as many as seventeen buying offices across the country. The degree to which buying is centralized geographically within some departments that operate from coast to coast is surprising. Examples are the Department of Northern Affairs and National Resources and the Post Office. In the Ottawa-Hull area, twenty out of twenty-three departments surveyed maintain their own buying offices; in addition, some departments have separate buying offices for some of their branches. Centralized buying for

Table 1—ANNUAL PURCHASE ORDERS PLACED BY REVIEWED CIVIL DEPARTMENTS AND AGENCIES, BY LOCATION†
(in millions of dollars)

	Atomic Energy	Citizenship & Immigration	External Affairs	Fisheries	Health & Welfare	Mines & Technical Surveys	Mint	National Capital Commission	National Film Board	National Gallery	National Harbours Board	National Research Council	National Revenue—Customs	Northern Affairs & National Resources	Penitentiaries	Post Office	Public Printing & Stationery	Public Works	R.C.M.P.	Trade & Commerce	Transport	St. Lawrence Seaway	Veterans' Affairs	TOTAL	Number of Offices	
MARITIMES																										
St. John's.....	—	—	—	.2	—	—	—	—	—	—	—	—	—	—	—	—	—	.6	—	—	*	—	—	.8	3	
Charlottetown.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	.1	—	—	.1	—	*	.2	3	
Halifax.....	—	—	—	.2	—	.2	—	—	—	—	.2	—	—	—	—	—	—	—	—	—	.3	—	.4	1.5	6	
Moncton.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	.4	—	—	.4	1	
Saint John.....	—	—	—	—	—	—	—	—	—	—	.2	—	—	—	—	—	—	.1	—	—	.1	—	.5	.9	4	
Total Maritimes.....	—	—	—	.4	—	.2	—	—	—	—	.4	—	—	—	—	—	—	1.0	—	—	.9	—	.9	3.8	17	
QUEBEC (ex HULL)																										
Rimouski.....	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—	—	—	.1	—	—	—	—	—	.1	1	
Chicoutimi.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	1	
Quebec.....	—	—	—	—	—	—	—	—	—	—	.3	—	—	—	—	—	—	.4	—	—	.3	—	.2	1.2	4	
Montreal.....	—	—	—	—	—	—	—	—	1.7	—	1.6	—	—	—	—	—	—	.1	—	—	.7	—	1.3	5.4	5	
Total Quebec.....	—	—	—	—	—	—	—	—	1.7	—	1.9	—	—	—	—	—	—	.6	—	—	1.0	—	1.5	6.7	11	
EASTERN ONTARIO (plus HULL)																										
Cornwall.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.5	1
Ottawa-Hull H.Q.....	1.0	4.5	1.7	—	5.2	5.9	.3	1.0	—	.2	10.4	8.0	1.0	10.4	4.5	3.6	18.0	12.0	3.3	.8	43.5	—	5.3	140.6	20	
" District.....	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—	—	—	.5	—	—	—	—	.1	2.2	3	
Prescott.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	1	
Chalk River.....	16.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.0	1	
Total Eastern Ontario.....	17.0	4.5	1.7	—	5.2	5.9	.3	1.0	—	.2	10.4	8.0	1.0	10.4	4.5	3.6	18.0	12.5	3.3	.8	43.5	3.1	5.4	160.3	26	

WESTERN ONTARIO																									
Toronto.....												1.1	1.6	3											
Port Colborne.....												*	*	2											
Sault Ste. Marie.....												*	*	1											
London.....												.8	.8	2											
Fort William.....												.4	.4	2											
Total Western Ontario.....												* 2.3	2.8	10											
WESTERN																									
Winnipeg.....													.7	2											
Regina.....												*	*	1											
Saskatoon.....												*	*	2											
Edmonton.....												.1	1.3	3											
Calgary.....												.2	.2	1											
Banff.....													.3	1											
Total Western.....												1.2	2.5	10											
PACIFIC																									
Vancouver.....													1.0	2.3	4										
Victoria.....													.2	.3	3										
Total Pacific.....												.6	1.2	7											
NORTHWEST																									
Churchill.....														.3	1										
Fort Smith.....														.5	1										
Total Northwest.....														.8	2										
TOTALS.....	17.0	4.5	1.7	.9	5.2	6.1	.3	1.0	1.7	.2	13.0	8.0	1.0	10.9	4.5	3.6	18.0	15.6	3.3	.8	47.5	3.1	11.6	179.5	83

* Purchasing at these locations amounted to less than \$50,000.00.

† These were the latest available figures reported on a questionnaire but they were not for identical periods.

the government as a whole does not exist, but there is geographical centralization of purchasing activities, with orders placed ranging from approximately \$200,000 to over \$42 million.

The twenty-three departments used in the survey have buying offices in twenty-eight cities and towns. To illustrate, six departments have buying offices in Halifax which purchase about \$1.5 million a year; Quebec City has four, purchasing a total of \$1.2 million annually; five offices in Montreal together make purchases of \$5.4 million; Vancouver, with four such offices, purchases a total of \$2.3 million a year.

DETERMINATION OF REQUIREMENTS

The function of purchasing requires in government the same knowledge, skills and practices as in business but, for a number of reasons mentioned below, government purchasing is handled with a good deal more formality and usually with considerably less speed.

In government the statement of the requirement itself presents greater problems than in industry because, in addition to seeking the most economical purchases, government must also demonstrate impartiality. Therefore buying by brand name is frowned upon and buying by specification encouraged.

Deciding what to buy is simple where items in general use are involved. It becomes difficult when, for example, scientific equipment is involved. The ultimate user must decide what is required, yet he may not be the person best qualified to define needs in terms the supplier can properly understand. Because the determination of the requirement is important, because in some cases the determination itself is difficult, and because in all cases there must be a definition of what is required, various government bodies originate specifications. They include:

- Canadian Government Specifications Board
- Department of Public Works
- National Research Council
- Various departments requiring materials for their own use.

The function of the Canadian Government Specifications Board is solely to define and standardize requirements. The Department of Public Works has a like role, although it also takes part in the decision-making process. The others are concerned mainly in deciding what to buy, and specification is a part of the process.

Because buying by brand is discouraged in the government, there is a need for more precise definitions of requirements than are found in industry, where no such inhibitions exist. In fact, it was the need for impartiality that led to the creation of the Canadian Government Specifications Board in 1934 to:

Undertake at the request of government agencies the preparation of specifications in commodity fields and for materials, processes and equipment in which any of these agencies may be interested. In addition, and as a necessary supplement to this undertaking, the Board may arrange testing and research work to develop information to be used in preparation of specifications and test methods.

The Board is composed of the deputy heads of twenty-five departments and agencies of government, with the President of the National Research Council as Chairman. By the end of 1961, a total of 1,052 specifications were in circulation, but these are not used by all departments. Some departments use government specifications to the greatest possible extent, while others do not make much use of them.

Inspection, which is inherent in the receipt and acceptance of the goods, gives rise to much duplication of expensive facilities, and these are not fully employed. While there is some interdepartmental testing, it was found, for example, that there is much duplication of inspection activities and facilities between the Departments of National Defence (Inspection Services) and Public Works.

Little effort is made to co-ordinate and consolidate for the purpose of minimizing costs. In many cases, one piece of costly testing equipment could serve most, if not all, agencies of government, whereas under present circumstances a number of identical pieces are in use. Steps should be taken to avoid any further build-up of duplicate inspection equipment.

PURCHASING ORGANIZATION

Subject to purchase limits set by the Treasury Board, departments have established their own practices and levels of authority in almost complete independence. There is no uniformity of purchasing authority or practices in the government. For example, a few departments have seventeen buying offices across the country, but fourteen others conduct the entire purchasing function, with the exception of small items, from national headquarters and the extent to which local offices are permitted to buy is strictly limited. In one department which has a large number of operating (not purchasing) offices, the authority of the senior local representative is limited to purchases not exceeding \$25.

THE TENDERING PROCESS

The desire to demonstrate impartiality in purchasing induces the government to require written quotations to a much greater extent than is commonly found in industry. Some departments distinguish between quotations and tenders, but for purposes of this report they are considered to be the same. The tendering process is used for almost every sizeable purchase and for many very small ones. One agency, for example, requires competitive quotations only when the amount exceeds \$200, but some departments require quotations in writing for purchases involving \$1.

Varying procedures are followed by different departments in dealing with tenders. That adopted most commonly may be described generally as follows: when the purchasing branch receives an approved request to purchase, an Invitation to Tender is prepared and may be sent to as many as twenty or thirty possible suppliers; if the amount of the purchase is small, circulation may be limited to suppliers in the area where the article is needed. A few departments sometimes advertise in the press.

The Invitation to Tender describes the articles required in some detail, and may quote government specification numbers if any exist. The possible suppliers are usually given about two weeks to submit quotations. In departments where there is a large volume of purchasing, sealed tenders only are accepted so that each bidder is protected until the moment the tenders are opened. Sometimes bids are opened in public, so that all interested may know the amounts quoted. Other departments merely inform losing bidders that their offers were not accepted.

If the low tender is accepted—as is usually the case—the purchasing branch issues a purchase order or contract. Where the low bid is not accepted for one reason or another—for example, where the bidder does not undertake to meet the specifications exactly—several persons participate in the rejection so as to establish a record demonstrating that the department was neither partial nor careless with public money.

LACK OF STANDARDIZATION

There is no standard government purchase contract. For example, no standard wording is used to place the onus for a possible patent infringement on the supplier and to absolve the government from any responsibility in this respect.

Departments and agencies have such varied policies and practices concerning buying, delegation of authority, and tendering procedures, that each system inevitably bears the stamp of departmental individuality. Procedures and methods range from simple to complex; in some departments there are

as many as thirty-eight steps in processing a purchase order and in others less than twenty. These variations in organization, methods and procedures significantly affect the costs of purchasing.

PURCHASING EXPENSE

A comparison of salary costs in purchasing offices, taken as a proportion of the cost of items purchased, revealed a wide variation between departments. Salary costs varied from a low of 44 cents per \$100 purchased to a high of \$3.85. The average size of orders varied from \$44 in one department to \$1,385 in another. The full range of costs for the departments reviewed is shown in Table 2.

*Table 2—SALARY COSTS OF PURCHASING PERSONNEL**
(Sample of 23 Departments or Agencies)

<i>Department or Agency</i>	<i>No. of Offices in Sample</i>	<i>Purchase Orders Issued Number</i>	<i>Average Value (\$000)</i>	<i>Average Size of Order</i>	<i>Salary Cost per Order</i>	<i>Salary Cost per \$100 Purchased</i>	<i>Total Salaries (\$000)</i>
Veterans Affairs.....	17	58,236	11,646	\$ 199	\$ 7.54	\$ 3.85	439
Trade and Commerce.....	1	6,338	754	119	3.76	3.16	24
R.C.M.P.....	1	4,250	3,250	765	18.69	2.41	79
National Gallery.....	1	1,100	200	182	4.28	2.35	5
National Research Council..	1	39,000	8,000	205	4.77	2.33	186
National Film Board.....	1	6,650	1,740	262	5.51	2.11	37
Mint.....	1	960	285	297	5.91	2.00	6
Fisheries.....	3	20,756	911	44	.76	1.74	16
External Affairs.....	1	5,200	1,664	320	5.56	1.73	29
Post Office.....	1	2,571	3,562	1,385	22.79	1.65	59
Mines and Technical							
Surveys.....	3	21,010	6,130	292	4.76	1.63	100
Penitentiaries.....	1	12,300	4,500	366	5.72	1.56	70
Health and Welfare.....	1	9,096	5,187	570	7.86	1.38	71
Revenue.....	1	1,000	1,000	1,000	13.80	1.38	14
Northern Affairs and							
National Resources.....	2	21,293	10,927	513	6.99	1.36	149
St. Lawrence Seaway.....	3	5,936	3,133	527	7.00	1.32	42
Public Printing and							
Stationery.....	1	44,000	18,000	400	4.50	1.09	198
Transport.....	13	63,712	44,505	746	7.27	.97	463
Public Works.....	17	32,809	15,774	481	4.30	.89	141
Atomic Energy.....	2	28,000	17,000	601	4.85	.79	136
Citizenship and							
Immigration.....	1	4,123	4,440	1,077	7.54	.70	31
National Capital							
Commission.....	1	7,500	1,000	133	.75	.56	6
National Harbours Board....	9	13,330	12,974	973	4.24	.44	57
TOTAL.....	83	409,170	176,582	\$432	\$5.76	\$1.34	2,358

* These were the latest available figures reported on a questionnaire but they were not for identical periods.

With one exception, all departments purchasing over \$10 million had a salary cost per \$100 purchased of \$1.36 or less, whereas only three out of sixteen departments purchasing less than \$10 million a year had a comparable salary cost. The Department of Veterans Affairs, purchasing more than \$10 million and having a cost higher than \$1.36 per hundred dollars purchased, maintains seventeen buying offices across the country with an average order of only \$129. For the civil departments, the average salary cost was \$1.10 per \$100 purchased at Ottawa, and \$2.50 elsewhere. Departments that can buy relatively large quantities are best able to keep costs within reason—a factor of some significance in seeking the most economical regional purchasing arrangements.

EXCEPTIONS TO DEPARTMENTAL PURCHASING

The Department of Defence Production does substantially all the buying for the Department of National Defence, and its operations are reviewed in a separate section of this report. The Department of Public Works purchases office furniture and fixtures and the Department of Public Printing and Stationery fulfils stationery, printing and publishing requirements and purchases office equipment of various kinds for other departments.

There is an important difference between the methods used. The Department of Public Works distributes furniture and fixtures without charge and the cost is borne by a Vote of Public Works. Stationery and printing, on the other hand, is “bought” by individual departments from the Department of Public Printing and Stationery and the cost is charged to their Votes.

Special conditions apply to the acquisition by one department of goods that belong to another, which can be obtained either through the Crown Assets Disposal Corporation or by transfer, lease or loan.

The operation of the Crown Assets Disposal Corporation is discussed in the section of this report dealing with Materials Management. Here, the concern is the machinery provided by the *Surplus Crown Assets Act*. Any department may tender for materials offered for sale by the Corporation. There is no standard procedure for notifying surpluses, although attempts are made to advise departments known to require certain types of supplies. If a department's bid is high, it will receive the goods, but under some circumstances a low bidder will be advised and given an opportunity to meet the best competitive price.

Departments do not pay the Corporation directly for surplus assets purchased originally from public funds; invoices of the Corporation covering such materials are charged to the relevant departmental appropriations so as to ensure that no department secures more resources than Parliament intended.

The transfer or loan of materials or supplies from one department to another is of such potential importance that it is pertinent to quote an extract from the applicable section of the manual of the Comptroller of the Treasury:

TRANSFER, LEASE OR LOAN

Parliament has an interest in the ultimate disposition of property of any kind purchased from public funds to the end that it is used for the purpose for which the purchase money was provided, or is otherwise disposed of pursuant to parliamentary authority. The general statutory authority governing disposition (other than disposal of surpluses) is section 97 of the Financial Administration Act which reads:

"Subject to any other Act of Parliament, no transfer, lease or loan of property owned by Her Majesty in right of Canada shall be made to any person, except in accordance with regulations or on the direction of the Governor in Council".

There are also a number of other statutes which govern transfer or lease of stores and equipment. It should be noted however that any authority relating to the transfer of stores and equipment does not apply where they are surplus to the requirements of the department since all surpluses must be disposed of under the Surplus Crown Assets Act. Property is prima facie surplus to the requirement of a department if it has discontinued permanently the operation or activity which involved the use of the property or has substituted other property therefor, or if for any other reason it is in a position permanently to transfer the administration and control of any property to another department or to dispose of it in any other way. (Justice Ruling 167957, 25-2-54).

Where any duties or functions of the public service are transferred by the Governor in Council pursuant to the Public Service Rearrangement and Transfer of Duties Act, the Governor in Council, as proprietor, has the authority under the Act to order the transfer of any equipment and supplies (other than a "public work" within the meaning of the Public Works Act). (J.R. 169679, 31-5-54). No equipment is transferred unless the Order so states.

There is no general prohibition against the transfer or loan to another department on a replacement basis of equipment or supplies which are not immediately required. If, however, the quantity or value is substantial, the transaction should be authorized by the Executive.

Where government-owned equipment is leased to some other person, the lessee should be required to furnish insurance policies or bonds for such amounts as afford, in the opinion of the department concerned, reasonable protection to the Crown.

It was found that loans of equipment or materials may occasionally be made by one department to another, but that the procedure for transferring goods from one department to another is seldom used and there is no regular exchange of materials and supplies.

APPRAISAL OF CIVIL PURCHASING

The requirements of some departments are large enough to permit them to buy many items at the best possible price. Some items are used in sufficient quantity to make economic bulk buying possible, but not by any one department or branch, and, with the large number of separate buying offices, cannot be purchased at bulk prices. Effective mass buying depends on the degree of skill exercised by buyers, and purchasing offices buying in large volumes generally have the greatest skill in making purchases.

There appears to be no government policy, and consequently no uniformity of practice, with respect to accepting cash discounts offered by suppliers. Savings from this source might be substantial and the possibilities should be explored.

There is considerable variation in the prices paid by different departments for automotive vehicles. Bulk purchasing produces significant savings up to \$500 or \$600 per vehicle, but is seldom possible with the present organization of departmental purchasing.

Prices paid for fuel and lubricants have a wide range. The cost of oil in some departments is averaging as high as \$2.00 a gallon, but one department is buying at 47 cents to 58 cents a gallon in drums and 68 cents to 80 cents a gallon in quart cans under bulk contracts.

Historically, tire discounts have shown very wide variations, and substantial differences were found in prices paid by departments. Some endeavour to obtain maximum discounts within the range of their purchasing potential, while others seem to be unaware of the discounts that may be obtained by skillful purchasing. One government agency purchases tires at the service station that services its vehicles. A department purchases tires in quantity, under a blanket order for delivery f.o.b. various depots across Canada, on an "as and when" basis. A comparison of the respective prices paid indicates sizeable potential savings:

<i>Type of Tire</i>	<i>Agency X</i>	<i>Department Y</i>
	\$	\$
670 x 15—6 ply	21.56	12.37
670 x 15—4 ply	18.25	10.08
750 x 14—4 ply	18.25	11.53
710 x 15—6 ply	24.44	12.94

APPRAISAL OF REQUIREMENT DETERMINATION

It was found that merchandise procured by government departments is generally of good quality; exceptions usually stem from the acceptance of low tenders where specifications are not—and perhaps cannot be—set to ensure satisfactory quality. In such circumstances, however, corrective measures are usually taken on later orders by specifying a brand name or equivalent. It would appear that the government often pays a higher price than necessary for the quality obtained.

The large number of departments making purchases limits the effectiveness of the Canadian Government Specifications Board in standardizing merchan-

dise items. Moreover, not all departments choose to follow the common specifications, that have been established. A certain amount of voluntary standardization exists. For example, the specification issued by the Post Office for shirts for mail carriers is identical with that issued by the Directorate of Interservice Development for use by the Royal Canadian Air Force. In general, however, no effective method of standardizing large groups of items was found to exist.

The Canadian Government Specifications Board and the Directorate of Interservice Development have a combined total of about 3,000 current specifications outstanding and other departments have an indeterminate number of their own. The total is negligible when it is observed that a single large Canadian mail order catalogue contains about 14,000 items with about 64,000 variations in colour and size. The conclusion cannot be avoided that, statistically at least, government specification-setting bodies are not accomplishing their purpose, although many of the specifications issued have proved exceptionally useful.

It was found that there was some duplication of specifications developed by different departments and, in some of these cases, the Canadian Government Specifications Board had not been asked to prepare a specification. Significant gaps exist in the provision of specifications for even relatively simple and regularly used items. Your Commissioners note in another report that no department has ever prepared a satisfactory guide describing the characteristics of the more commonly used office supplies and equipment, and that the Canadian Government Specifications Board has established standards for fewer than one hundred such items in twenty-seven years.

The apparent weakness in the performance of the Canadian Government Specifications Board is that neither the Board nor any other central body is charged with responsibility for screening the requests for specifications according to degree of importance. Currently, the Board has a backlog of 450 requests for specifications.

APPRAISAL OF DELIVERY INTERVALS

Lapse of time between initiation of a requisition and delivery of the goods to the required location is generally longer for government than industry. In most departments delays do not appear to be serious at headquarters but are more pronounced at district offices, particularly when requisitions must be routed through headquarters before purchase. Numerous cases were noted where, in attempts to anticipate requirements, orders were placed far in advance and for larger quantities than could ordinarily be justified.

In the judgment of many administrators, operation of the control functions of the Treasury Board tends to hamper efficient purchasing. A study of purchasing practices suggests that the procurement process is lengthened less by Treasury Board activity than by the combination of other factors mentioned in this report. By sampling some typical cases, it was found that the time required for preparing submissions to the Treasury Board was about two days, and that the average time consumed at the Treasury Board offices was seven working days. Since Treasury Board approval is required only for large expenditures, this delay is relatively small compared with the total time now taken to make purchases. The real problem is not delays in procurement but the added cost of inventory storage and handling occasioned by purchase of greater than normal quantities to provide against slow or late deliveries. This point is considered in a later section of this report.

APPRAISAL OF TENDERING PRACTICES

The practice of inviting written quotations for small items is carried to extremes. One Invitation to Tender sent to motor manufacturers covered a horn button, four windshield wiper blades, and three air cleaner elements for carburettors. The paperwork alone cost more than the articles at retail. Further, since the horn button was required for a particular vehicle, it could be supplied by one manufacturer only.

The fault rests not so much in government policy as in its application within departments. Because of the fragmentation of the buying process, there is a complete lack of uniformity in establishing practices. Complaints from suppliers are frequent and reveal bewilderment at the inconsistency of practices and the elaborate formalities observed by different departments. In one department, thirteen separate steps in the tendering process were noted for purchase contracts under \$1,000, while purchases over \$25,000 require thirty-eight steps.

It is the practice of some departments to hold the three lowest tenders, together with a ten per cent security deposit, until a contract is awarded. Where this is done, the three low tenderers, including necessarily two unsuccessful ones, sometimes have their deposits tied up for weeks or months while it is being decided which tender to accept. This practice sometimes results in reluctance or refusal by potential suppliers to tender.

APPRAISAL OF PURCHASING EXPENSE

Table 2 indicates the wide variation in relative salary costs for purchasing. The real cost is considerably more, for it would include the cost of office

space, furniture, equipment and supplies, and all other items of overhead expense. Salary costs have been used for purposes of comparison because many elements of overhead cost were not readily ascertainable.

In a medium-sized manufacturing industry, a purchasing department salary cost of 50 cents per \$100 purchased is considered reasonable. The weighted average salary cost in the departments in Table 2 is \$1.34. Some of this large differential may be unavoidable if demonstration of impartiality by government is regarded as imperative, but the greater part is due to the wide variety of practices, the range of sizes of purchasing operations, and the small segments into which government buying is divided by the organization of the purchasing function on a departmental basis.

APPRAISAL OF EXISTING CENTRAL PURCHASING AGENCIES

The departments that buy for other departments and agencies (Public Works and Public Printing and Stationery) operate with relative efficiency in purchasing.

Table 2 shows that the Department of Public Works has a salary cost of 89 cents per \$100 purchased. Assessment of the figure must appreciate that Public Works, to a much larger degree than some other departments, deals in standard items bought on a repetitive basis, but indicates that bulk buying centrally organized can contribute to lower purchasing costs.

Departments are, on the whole, satisfied with the supply of furniture and office fixtures, but several complained of long delays. One department observed that it got better service from the Department of Public Works on office desk requirements in Vancouver than in Ottawa. Two reasons for delays are:

- Furniture supplied is not charged to the receiving departments; the cost is borne by a Department of Public Works Vote and buying is influenced by the state of the Vote.
- When departments develop unanticipated needs not included in the estimates, delays are inevitable. In some instances there is lack of planning on the part of user departments but often requirements could not have been anticipated sufficiently far in advance to be included in the estimates of the Department of Public Works.

Table 2 shows that the Department of Public Printing and Stationery also has a salary cost per \$100 purchased which is considerably lower than the average for the government as a whole. Again, many departments expressed

themselves as satisfied with the service received in meeting printing and stationery requirements, although many were dissatisfied with the service provided in procuring and repairing specialized office equipment. A special study of the operations of the Department of Public Printing and Stationery was made by your Commissioners and the findings are contained in a separate report.

When government sources (for example, experimental farms or penitentiaries) are used as suppliers of goods for government, production is a secondary operation and is therefore likely to be less efficient than outside sources. Nevertheless, improvement can be made in communication with the user departments; for example, there is generally only the sketchiest knowledge of what the penitentiaries can produce or of the prices they will charge.

The efficiency with which these "supplying" departments produce the articles they sell to other departments is not considered here, but it is apparent that they should seek to improve deliveries as well as the quality of some products.

LACK OF ROUTINE TRANSFER METHODS

Failure to explore existing government inventories of materials and supplies before purchasing from outside sources is a serious defect of the present system. Large gaps exist in the application of the transfer mechanism under the *Surplus Crown Assets Act* because departments are not always aware of surpluses available, and others hesitate to declare items surplus if there is any possibility of future need. Sometimes as much as five years may elapse before a surplus declaration is made.

The procedure by which one department can transfer goods and supplies to another without declaring them surplus is so cumbersome that it is really inoperative. The result is that from time to time departments buy supplies that other departments possess and could well relinquish. At present, the relinquishing department is not given credit, nor is the acquiring department charged. Little incentive exists to dispose of surplus stocks. There is no legislation in Canada comparable with the *Economy Act* in the United States, which provides for the purchase of goods and services by one department from another and encourages government purchasing agents to exhaust every possibility of obtaining goods from internal sources before looking elsewhere.

CONCLUSIONS

Your Commissioners are of the opinion that civil purchasing by government can be improved in several important respects.

Significant improvement could be made in the determination of requirements. It is not suggested that there be written specifications for everything the government buys or is likely to buy. To the degree that specifications are developed, the purchasing process will be simplified, but, if carried to excess, any savings in purchasing cost would be more than offset by increases in the cost of maintaining the specifications system.

The fact that the National Research Council, which spends a total of \$8 million a year on consumable materials and supplies, does not use the specifications of the Canadian Government Specifications Board, for which it is responsible, reflects a belief that the cost in time and money of developing specifications is worth while only where a large number of items, with large total value, are purchased annually. Improvements could be achieved if the Canadian Government Specifications Board and other specification-setting bodies concentrated on items that imperatively require specifications. These include important purchases where the dollar amounts involved are large, or where the nature of the article to be bought (for example, chemicals of a certain minimum purity) cannot be adequately described without a detailed specification. Expense should not be incurred in setting specifications for items of secondary importance.

The setting of specifications is not so much a problem of developing a large number of specifications as of selecting those that are important, either from the standpoint of size or from the character of the article to be bought. Concentration is not being achieved at present because of the wide dispersal of the various buying and specifying departments and a lack of knowledge of the total value of various types of items being purchased.

A reorganization of the Government Specifications Board alone will not bring optimum results—the answer lies rather in the organization of the purchasing function for government as a whole.

It is interesting to note the experience of one department in consolidating its purchasing arrangements. The purchasing branch of the Department of Transport was, until recently, so organized that there was a purchasing representative to handle the requirements of each branch of the department. This resulted in duplication of work when two purchasing agents were buying identical goods for two different branches. The purchasing branch has now been reorganized on a “commodity” basis instead of on a “branch” basis. For example, one buyer is responsible for purchasing builders’ hardware, regardless of which branch of the department is the user. The new form of organization is much more effective. A consolidation of purchasing practices between departments would be an extension of this principle.

Your Commissioners accordingly conclude that it is desirable to overcome

the fragmentation of the purchasing function so as to achieve more efficient procurement of equipment, material, supplies and services.

It is further concluded that standardization of various elements of the purchasing function would be beneficial, not only in the development and use of specifications, but in levels of authority, methods and procedures, including tendering, standardization of contracts, and development of statistical information to assist government in the economical conduct of procurement.

3

MATERIALS MANAGEMENT—CIVIL DEPARTMENTS AND AGENCIES

Any organization that purchases large quantities of materials has a specialized problem in managing them after delivery, particularly when there are many widespread users. In the civil departments and agencies, the management of materials, like purchasing, is generally the individual responsibility of each unit.

In view of the vast quantities of materials, their extraordinarily wide geographic dispersal, and the large number of organizational units by which they will be used, it is not surprising that materials management in the government often presents substantial problems.

Responsibility for the management of materials is assigned to departments and agencies by Section 57 of the *Financial Administration Act*:

Every department shall maintain adequate records of stores and the appropriate Minister or such other authority as the Governor in Council may direct may make rules and give directions governing the acquisition, receipt, custody, issue and control of such stores.

Notwithstanding this enactment, some extremely diverse methods of materials management are followed.

DESCRIPTION OF CIVIL MATERIALS MANAGEMENT

Some idea of the complexity of the materials management problem in government may be gained from the large number of warehouses and locations in which the government stores consumable inventory of various types. Your Commissioners' inquiries revealed that, aside from the Armed Forces, the government had 249 warehouse locations and 340 sub-stores across the country (*see* Tables 3 and 3A).

Table 3—PRINCIPAL WAREHOUSE LOCATIONS OF MAJOR DEPARTMENTS AND AGENCIES

*See Table 3A for Sub Stores		Agriculture	Atomic Energy	Canadian Arsenals	Canadian Broadcasting	Central Mortgage & Housing	Citizenship & Immigration	Crown Assets	Defence Production	Dominion Bureau of Statistics	Eldorado Aviation	Eldorado Mining & Refining	External Affairs	Finance—Comptroller Treasury	Fisheries	Forestry
		1	St. John's, Nfld.....													
2	Gander, Nfld.....															
3	Charlottetown, P.E.I.....															
4	Summerside, P.E.I.....															
5	Halifax, N.S.....				1										1	
6	Sydney, N.S.....															
7	Amherst, N.S.....	1														
8	Dartmouth, N.S.....															
9	Port Hastings, N.S.....															
10	Gagetown, N.B.....															
11	Saint John, N.B.....														1	
12	Fredericton, N.B.....															
13	Moncton, N.B.....															
14	Dorchester, N.B.....															
15	Valleyfield, P.Q.....			1												
16	Quebec.....			3												
17	Montreal, P.Q.....				2											
18	St. Paul L'Ermite, P.Q.....			1					1							
19	Beauharnois, P.Q.....															
20	St. Lambert, P.Q.....															
21	Carillon, P.Q.....															
22	Chambly, P.Q.....															

Table 3—PRINCIPAL WAREHOUSE LOCATIONS OF MAJOR DEPARTMENTS AND AGENCIES—Continued

		*See Table 3A for Sub Stores													
		Agriculture	Atomic Energy	Canadian Arsenals	Canadian Broadcasting	Central Mortgage & Housing	Citizenship & Immigration	Crown Assets	Defence Production	Dominion Bureau of Statistics	Eldorado Aviation	Eldorado Mining & Refining	External Affairs	Finance—Comptroller Treasury	Fisheries
23	St. Anne, P.Q.....														
24	Sorel, P.Q.....														
25	Hull, P.Q.....	1													
26	Rimouski, P.Q.....														
27	Chicoutimi, P.Q.....														
28	Lindsay, Ont.....			1											
29	Ottawa, Ont.....	1*	2*		1	1	1		1			1	1	1	
30	London, Ont.....	1													
31	Belleville, Ont.....	1													
32	Toronto, Ont.....				1										
33	Port Hope, Ont.....										1				
34	Prescott, Ont.....														
35	Port Colbourne, Ont.....														
36	Dunville, Ont.....														
37	Cornwall, Ont.....														
38	Port Weller, Ont.....														
39	Scarborough, Ont.....			1											
40	Sault Ste. Marie, Ont.....														
41	Thorold, Ont.....														
42	Iroquois, Ont.....														
43	Cobourg, Ont.....														
44	North Bay, Ont.....														

Table 3—PRINCIPAL WAREHOUSE LOCATIONS OF MAJOR DEPARTMENTS AND AGENCIES—Continued

*See Table 3A for Sub Stores		Agriculture	Atomic Energy	Canadian Arsenal	Canadian Broadcasting	Central Mortgage & Housing	Citizenship & Immigration	Crown Assets	Defence Production	Dominion Bureau of Statistics	Eldorado Aviation	Eldorado Mining & Refining	External Affairs	Finance—Comptroller Treasury	Fisheries	Forestry
		45	Chalk River, Ont.....		1*											
46	Hamilton, Ont.....															
47	Parry Sound, Ont.....															
48	Peterborough, Ont.....															
49	Kingston, Ont.....															
50	Joyceville, Ont.....															
51	Collins Bay, Ont.....															
52	Long Branch, Ont.....			1												
53	Winnipeg, Man.....				1											
54	Churchill, Man.....															
55	Shilo, Man.....															
56	Stony Mountain, Man.....															
57	Regina, Sask.....	1														
58	Moose Jaw, Sask.....	1														
59	Swift Current, Sask.....	1														
60	Prince Albert, Sask.....															
61	Saskatoon, Sask.....															
62	Beaver Lodge, Sask.....											1				
63	Calgary, Alta.....															
64	Edmonton, Alta.....										1					
65	Vauxhall, Alta.....	1														
66	Namao, Alta.....															

Table 3—PRINCIPAL WAREHOUSE LOCATIONS OF MAJOR DEPARTMENTS AND AGENCIES—Concluded

*See Table 3A for Sub Stores		Agriculture	Atomic Energy	Canadian Arsenals	Canadian Broadcasting	Central Mortgage & Housing	Citizenship & Immigration	Crown Assets	Defence Production	Dominion Bureau of Statistics	Eldorado Aviation	Eldorado Mining & Refining	External Affairs	Finance—Comptroller Treasury	Fisheries	Forestry
67	Vancouver, B.C.....				1										1	
68	Victoria, B.C.....															
69	Prince Rupert, B.C.....															
70	Esquimalt, B.C.....							1								
71	William Head, B.C.....															
72	New Westminster, B.C.....															
NORTHERN POINTS																
73	Waterways, Alta.....															
74	Bushell, Sask.....															
75	Fort Smith, N.W.T.....															
76	Bear River, N.W.T.....															
77	Baffin Island, N.W.T.....															
78	London, England.....															
TOTALS.....		9*	3*	8	7	1	1	0	2	1	1	2	1	1	5	0

Because inventory methods vary widely, departments and agencies could not compile the information necessary to give your Commissioners a complete statistical summary of the stocks held or of their rates of usage. A sample was accordingly developed from the records of 20 departments and agencies operating 120 warehouse locations (excluding sub-stores) throughout the country. These departments employ 1,116 people for materials handling, at a salary cost of \$4,284,000 a year. Average inventories of consumable items are worth about \$21.9 million, and annual issues from stock approximately \$42 million. Total warehouse space is over 1.5 million square feet.

Table 3A—NUMBERS AND LOCATIONS OF SUB-STORES

	<i>No. of Sub-Stores</i>	<i>Location</i>
Agriculture.....	4	Ottawa
Atomic Energy.....	1	Deep River
	10	Chalk River
Penitentiaries.....	20	Dorchester
	30	Montreal
	27	Prince Albert
	20	New Westminster
	13	William Head
	19	Collins Bay
	19	Joyceville
	24	Kingston
	22	Stony Mountain
Labour.....	1	Ottawa
Mines and Technical Surveys.....	12	Ottawa
National Capital Commission.....	6	Ottawa (2 shacks) " 2 Gatineau Park
National Film Board.....	2	Montreal
	1	Ottawa
	1	New York
National Harbours Board.....	6	Halifax
National Research Council.....	15	Ottawa
Queen's Printer.....	4	Hull
	11	Ottawa
	7	Other
Trade and Commerce.....	2	Ottawa
Transport.....	47	Various
Northern Affairs.....	16	"
	340	

Departments that keep adequate records of inventories are more likely to be efficient than those that operate in the dark. Thus the sample probably

reflects conditions more efficient than the average—some departments stated frankly that they do not maintain sufficient information to make a proper tabulation of inventories and issues for their own use.

Table 4 illustrates the distribution of inventories across the country, but does not present the complete picture, for the sample includes only 120 locations out of a total, including sub-stores, of 589. It does, however, include the major storage depots of the selected departments.

Table 4—DISTRIBUTION OF GOVERNMENT CIVIL STORAGE BY REGIONS*
(Sample of 20 departments and agencies)

Region	Number of Depart- mental Locations	Stock Averages			Stores Staff		Salaries per \$100 of Issues
		Inventory	Annual	Annual	Number	Salaries	
		Main- tained (\$000)	Issues (\$000)	Stock Turn (Times)		(\$000)	
Atlantic Provinces.....	22	2,090	3,402	1.6	115	411	12.08
Quebec (ex. Hull).....	19	3,776	7,192	1.9	166	635	8.83
Eastern Ontario (plus Hull).....	26	9,631	19,753	2.1	481	1,826	9.24
Western Ontario.....	13	2,322	5,145	2.2	125	455	8.84
Western Canada.....	26	2,672	4,338†	1.6	134	514	11.85
Pacific.....	8	1,148	2,073	1.8	75	366	17.66
Northwest.....	6†	280	573†	2.0	20	77	13.44
TOTAL.....	120	21,919	42,476	1.9	1,116	4,284	10.09

* This is the number of known locations in the sample, and is not the complete total. The figures do not cover precisely the same periods.

† Not including some issues by Department of Public Works, the value of which is unknown.

Much of the material and supplies bought by several departments goes into use without passing through a government warehouse, and without being received into and issued out of stores. For example, in one large department annual issues from stores amounted to only slightly over thirty per cent of the consumable materials purchased by the department, the remainder having gone directly into use.

In general, departments warehouse only those items not needed immediately. Sometimes materials are bought in anticipation of requirements because there are economies in placing large orders, but the prime purpose of storage is to ensure availability rather than to achieve economy.

RECEIPT AND ACCEPTANCE

Verification of quantities is usually a simple matter, carried out by count, weight or measurement, by a clerk at the place of delivery. Establishment of quality is more difficult and methods depend on the complexity of the verification process. Most quality verification or inspection is by the user department, even when procedures are relatively complex, but some is done centrally—for example, building materials by the Department of Public Works.

Although most inspection is done by user departments, a number of different inspection facilities may be employed for specialized requirements. Testing facilities are available for a wide range of products. For example, one department reported using the following extra-departmental facilities for quality verification:

- Department of Mines and Technical Surveys (laboratories and technical staff).
- Department of National Health and Welfare (Food and Drug Laboratories).
- Department of National Defence (Inspection Services).
- Department of Transport (Telecommunications Branch and Marine Division).
- Department of Public Works (testing laboratories).
- Department of Agriculture (Science Services).
- Department of Forestry (Forest Products Laboratories).
- Provincial governments (testing laboratories).
- Canadian Standards Association (electrical testing laboratories, Toronto).

STORAGE AND ISSUE

Procedures vary widely in storing and issuing materials and supplies. Some departments have detailed systems for pricing goods received into stores, inventories, and issues out of stores, and the value of inventory on hand can be readily ascertained. Others have little or no control over stores. In one department, branch requirements for items falling within a general classification are purchased as and when required, while no records are maintained for items used immediately. Another department has branches that make fairly large purchases but has neither set aside stores space and facilities nor

assigned staff to stores work on a full-time basis; a clerk or assistant technician is given the part-time duty of managing stores.

There is much variation in the length of time elapsing between preparation of requisitions and issue of material. In most departments this ranged from two or three days to two or three weeks, but in some the average elapsed time was as long as thirty days.

Methods of pricing vary widely, several departments using average prices but most the latest prices. In one department, the unit prices of receipts are recorded, but not the monetary value of receipts and issues. In another department, withdrawals are not priced but the annual inventory is priced, at latest cost; still another uses average prices for inventory valuation.

Some variation was also noted in departmental practice for issuing stock. Most departments attempt to withdraw and use the oldest stock first, but in others the stock at the bottom of the heap may be years old.

The extent to which departments in the same location store identical goods in different warehouses could not be ascertained because no standard classification system is in use. A test sample indicates, however, that the same general *kinds* of inventory are frequently carried by more than one department at the same location.

Table 4 shows that the departments included in the sample have a stock turn of 1.9 times a year—that is to say they stock an average of 6.3 months' requirements. However, at some locations stock is equal to only two months' issue, while at others it is over three years'. Not all materials are used at once, and materials are often not all used within thirty days after issue from stores. If this time lag were taken into account, the average age of inventory on hand would be somewhat increased. The average stock turn shown is favourably influenced by certain short-life or perishable items in the inventory. For example, motion-picture film is replenished on a month to month basis because of deterioration, and the inclusion of this kind of material in the sample helps to improve the average.

Although departments buy many specialized items, the great majority of purchases are common commercial articles in everyday use and supply. The average of 6.3 months' stock carried by departments therefore appears to be much too high.

DISTRIBUTION

A large part of materials management in government or industry may be called "distribution management", which involves the storing of goods for future use and their most economical shipment to the place where they will be used. Costs of distribution involve not only the cost of transport but also

the cost of storage and handling. This aspect of materials management is intimately associated with transportation policies and procedures, and for that reason is reviewed in the report on *Transportation*.

DEPARTMENTAL WAREHOUSING ORGANIZATION

Many departments use central warehouses supplemented by district sub-stores. Much of the material is delivered initially to the central warehouse, where it is unpacked and shelved and then either issued over the counter or repacked for shipment to subsidiary warehouses.

Departments do not ordinarily store office furniture and fixtures, which are owned and controlled by the Department of Public Works and issued to departments only as required. Any surplus items of office furniture are repossessed by the Department of Public Works upon notification.

A different method is followed with stationery, printing, publications and office supplies. Departments buy their requirements from the Department of Public Printing and Stationery, and many have large central stocks for reissue to branch offices in various locations. Table 5 analyzes the stocks at headquarters warehouses of ten sample departments.

Table 5—DEPARTMENTAL STORAGE OF STATIONERY, PUBLICATIONS AND OFFICE SUPPLIES IN THE OTTAWA AREA†

Department	Stock Averages			Stores Staff		Salaries
	Inventory	Annual	Annual	Number	Annual	per
	Main- tained	Issues	Stock Turn			
(\$000)	(\$000)	(Times)	(\$000)	\$		
Citizenship and Immigration.....	255	257	1.0	9	34	13.23
Defence Production.....	38	180	4.7	3	11	6.11
External Affairs.....	200	200	1.0	10	37	18.50
Labour.....	61	70	1.1	9	31	44.29
Unemployment Insurance Commission (Hull).....	527	912	1.7	20	66	7.24
Northern Affairs and National Resources.....	65	49	.8	4	15	30.61
National Revenue.....	362	804	2.2	20*	74*	9.20
Trade and Commerce.....	46	42	.9	7	26	61.90
Bureau of Statistics.....	37	240	6.5	5	16	6.66
Transport.....	121	502	4.2	11	42	8.33
	1,712	3,258	1.9	98	352	10.80

† These were the latest available figures reported on a questionnaire but they were not for identical periods.

* Estimated.

A certain portion of these inventories consists of materials peculiar to a single department, such as departmental publications. The balance is represented by items which are commonly used by all or many departments. The size of inventory is related to the methods by which stationery and printing are distributed to district offices.

The handling of stationery, printing and office supplies illustrates that the duplication and waste result from the present organizational pattern for materials management. In some departments, nearly all packages received from the Department of Public Printing and Stationery are shelved and repacked for shipping to branches. In others, direct shipments are made to field points, with up to ninety per cent being handled in this way in some cases.

APPRAISAL OF CIVIL MATERIALS MANAGEMENT

Varying methods employed result in widely differing degrees of efficiency. Procedures in some departments are quite informal but others have lengthy directives and manuals. Some minimum-maximum inventory controls were found but elsewhere a year's stock may be purchased and warehoused *en bloc*.

The existing organization pattern also results in a serious duplication, not only of inventories, but of warehousing and distribution facilities. As an illustration, nine departments have goods in store at Fort Smith, Northwest Territories. Less startling, but more representative, is the situation revealed by Table 6, showing the number of warehouses and the size of stores-handling

Table 6—DISTRIBUTION OF GOVERNMENT CIVIL STORAGE AT MAJOR LOCATIONS
(Sample of 20 departments and agencies)

	<i>Depart- mental Stores</i>	<i>Stores Personnel</i>	<i>Annual Salaries</i> (\$000)	<i>Inventories</i> (\$000)	<i>Annual Issues</i> (\$000)
Saint John.....	4	24	89	248	692
Halifax.....	4	25	89	288	562
Quebec.....	4	26	93	437	1,336
Montreal.....	7	102	399	2,923	4,799
Ottawa-Hull.....	18	415	1,558	7,600	15,583
Toronto.....	3	73	263	1,544	3,536
London.....	3	29	106	247	1,136
Winnipeg.....	3	31	108	425	797
Edmonton.....	4	14	57	633	342
Vancouver.....	5	53	190	772	1,552
	57	792	2,952	15,117	30,335

staff in ten major locations for twenty departments and agencies. In the Ottawa-Hull area, different departments were found holding stores in the same building separated by a wire fence, each with its own personnel in charge.

A wide variation was noted in the accommodation used by various departments. Storage areas are well planned and adequate in a few cases, but in many others facilities do not lend themselves to efficient and economic handling. In one large warehouse, for example, structural limitations precludes the use of fork-lift trucks and pallets. In another instance, departmental stores are on three separate floors of a building. In some departments, dispersal of stores to a large number of small storage areas precludes the use of modern, efficient equipment, and excessive handling expenses cannot be avoided.

Many new warehouses are well designed and constructed, but others recently erected or now being planned are not designed to permit the most efficient handling of goods. Three of the nine departments with separate storage facilities in Fort Smith provide individual branches with storage facilities. Three departments are constructing or have just completed large permanent warehouses in this location, although required supplies are stocked by other departments. But no authority exists for one department to requisition goods from another, except for the rarely used procedure outlined earlier in this report. The practice in remote locations is therefore to borrow supplies informally and make returns to the lending department in due course.

A further example was noted in Halifax, where an agency of a department moved into a new building in the summer of 1961 while the parent department was constructing a new two storey building with basement for itself one hundred feet away from the other. In the absence of special considerations, a single storey warehouse, large enough to house both the department and the agency, would have been more efficient.

Those responsible for maintaining adequate stocks in warehouses have a natural tendency to over-estimate requirements in order to avoid "run-outs". In industry, this tendency is counter-balanced by arranging inventory and ordering patterns so as to minimize costs and immobilized capital. Several different techniques have been developed to indicate appropriate levels at which stock should be carried. In government, where accounting and administrative practices do not give adequate guidance for cost control and the economic use of capital and the profit motive is absent, the tendency to over-build stocks is not inhibited and there has been little incentive to adopt industrial practices aimed at keeping stock at proper levels.

In any circumstances, the multiplication of facilities for what is really a single service results in substantial excess inventory investments and duplica-

tion of warehouse personnel. These are aggravated by the lack of machinery by which one department might requisition or "buy" stock from another. Furthermore, as a department gets no credit for the value of supplies declared surplus, there is no incentive to be concerned with disposing of unneeded stocks.

CONCLUSIONS—CIVIL MATERIALS MANAGEMENT

Your Commissioners are of the opinion that major changes in materials management are necessary. It is estimated that the total cost of carrying inventory in a warehouse for a year varies from fifteen per cent to forty per cent of the value, depending upon relative bulk, keeping qualities, price, weight, and other factors. Thus savings within reach are large, not only within the warehousing function itself, but also within the distribution function where improvements in warehousing would result in improvements in traffic management.

There is a need for a gradual consolidation of materials management throughout the government. Efficient co-ordination will permit bulk handling and the use of stores records, stores accounting, and economic ordering techniques which contribute to more effective materials management. The development in recent years of electronic equipment for both the communication and computation of data opens new possibilities of economy in both materials management and purchasing.

4

PROCUREMENT AND MATERIALS MANAGEMENT FOR DEFENCE

The Department of Defence Production is responsible for all procurement for the Armed Forces. Its predecessor, the Department of Munitions and Supply, was created during World War II to further a number of objectives: first, to eliminate inter-Service competition for materiel and industrial capacity; second, to establish an independent procurement agency that could reconcile the needs of the Services with those of the civil sector of the economy in a period of scarcity; and, third, to consolidate in a single agency the expertise needed for the development of a strong industrial base for the defence programme.

Defence concepts have changed radically. There is now less emphasis on the maintenance of a large industrial mobilization base to be activated on the outbreak of war. While the concepts have changed, the statutory basis of the Department has not, although new functions arising from developing problems of defence have been added.

Under the Department of *Defence Production Act*, the Minister has:

exclusive authority to buy or otherwise acquire defence supplies and construct defence projects required by the Department of National Defence, except

- (a) defence projects to be constructed by persons in the employ of Her Majesty, and
- (b) such defence supplies or defence projects as the Minister of National Defence or any other Minister designated by the Governor in Council may procure or construct at the request of the Minister.

In addition, the Minister may act for any associated government in the same way as for the Department of National Defence. The Minister has the

supervision and direction, among other agencies, of Canadian Arsenals Limited, Defence Construction (1951) Limited and Canadian Commercial Corporation.

THE NATURE OF DEFENCE PROCUREMENT

By no means all procurement for the Armed Forces is of a specialized character, for they require a wide range of goods indistinguishable from those purchased by civil departments. The Services use motor vehicles of standard types, and fuel and components for them; a wide variety of clothing and of textile products generally; meat, dairy products and food of all kinds. Table 7, which summarizes defence procurement contracts by categories, demonstrates that total annual purchases outside the specialized weapons category amount to more than \$100 million per annum.

Table 7—TOTAL CONTRACTS PLACED FOR DEPARTMENT OF NATIONAL DEFENCE AND RELATED EXPENDITURES

Net value of total Canadian government defence contracts placed by the Department of Defence Production and Defence Construction (1951) Limited on behalf of the Department of National Defence

<i>Programme</i>	<i>1959</i>	<i>1960</i>	<i>1961</i>
	(\$000)	(\$000)	(\$000)
Aircraft.....	218,225	363,210	113,194
Armament.....	19,049	19,703	11,311
Electronics and communication equipment.....	82,300	133,617	122,593
Ships.....	25,989	84,657	26,585
Tank-automotive.....	7,893	6,947	10,981
Fuels and lubricants.....	57,768	50,496	48,972
Clothing and equipment.....	18,808	6,284	11,897
Construction.....	67,141	51,571	90,671
Other.....	94,383	87,800	92,569
TOTAL.....	591,556	804,286	528,773

Nevertheless, the Department of Defence Production is concerned less with commonplace items than with aircraft, armament, electronics and communication equipment, ships and tanks, and components for all of these. During the past decade, as weapons systems have become more sophisticated and complex, military procurement has become progressively more specialized and involved, and the relationships between military personnel and suppliers of highly specialized equipment more and more intimate. Highly complex

weapons, rapidly changing technology, and an accelerated rate of obsolescence lengthen lead times between original conception and ultimate production. Design changes have become numerous and continuous, while the number of units required has declined. A parallel development has been the enhanced role in the procurement process of research and development, undertaken partly by the Services and the Defence Research Board, partly by private defence contractors, and sometimes jointly. This adds to the complexity of defence procurement and requires close and intricate working relationships among the Services, the Department of Defence Production, and suppliers. Thus, an important part of the defence procurement job cannot be reduced to standard, routine procurement processes.

Defence procurement by the Government of Canada cannot be properly assessed without an appreciation of special Canadian problems, which differ from those of the United States and, although in lesser degree, from those of the United Kingdom. These differences are accentuated rather than diminished by the high degree of integration between United States and Canadian Forces for the defence of North America.

During the build-up of the N.A.T.O. defence organization, Canada made important and relatively independent contributions to international defence production. Although increasingly moving toward United States standards in the equipping of its Forces, Canada achieved economic production runs for much of its military requirements by adding some production, as mutual aid, for European members of the alliance. This situation no longer holds. Weapons and weapons systems have steadily and rapidly become more complex and more sophisticated. Costs have mounted astronomically and, at the same time, discouragingly high rates of obsolescence have reduced the volume requirements for each new weapon or weapons system. The Canadian economy can support production facilities for the major weapons upon which its Forces are increasingly dependent only under production-sharing agreements whereby it sells to its allies some part of their requirements. In response to this challenge, Canada has integrated both its military "hardware" requirements and their production with those of the United States. In the result, military procurement in its major aspects is now more generally an involved economic and inter-governmental process than a simple national operation with requirements established by the Services.

Another significant factor is the impact of defence procurement on the international balance of payments. With defence expenditures at a high level, Canada is necessarily concerned about the share of the defence dollar spent abroad, particularly in the United States. This has formed the base of agreements between Canada and the United States, dating from the Hyde Park

Declaration of April 20, 1941. As the possibility of a wholly independent Canadian programme of research, development, and weapons production has progressively diminished, the balance-of-payments impact of defence procurement has become more critical. It is no longer a simple matter of establishing the dimensions of the needs of Canada's own Armed Forces and then procuring in the most expeditious way possible; in today's situation, defence procurement can be afforded only when integrated with defence production undertaken jointly with allies.

Furthermore, defence research, development, and production now constitute collectively one of the major stimuli to technological progress, and thereby to the competitive strength and growth potential of a nation's industrial economy. If defence research, development, and production on the North American continent should be wholly or largely a prerogative of the United States, Canada would inevitably fall behind in creating and retaining those skills in frontier fields, such as electronics, nuclear physics and space technology, that may have major impact on our future economic strength.

Those responsible for defence procurement must therefore be more than skilled purchasing agents. The procurement effort must be guided by an adequate appreciation of the present and future potentials of the economy in fields of research, development, and technology which can, by proper stimulation and support, underpin the country's economic strength and potential economic growth. This may call for the placing of research and development contracts with industry without any assurance that acceptable end-products may emerge, but with the certainty that, unless the Canadian economy possesses the scope and means for such work, Canada will be unable to hold skilled scientists and engineers she can ill afford to lose. Thus there is an additional incentive, over and above that provided by balance-of-payments considerations, for fostering and promoting Canada's role in production-sharing agreements with its allies, and for ensuring a strenuous sales effort on behalf of Canadian-developed and Canadian-produced military equipment.

These considerations must therefore be consciously taken into account in the development and continuing execution of Canada's defence procurement policies. They are not, as in the United States, factors automatically taken care of in the normal and natural approach to defence procurement. The United States, alone among the western allies, has an economy large and strong enough to produce the whole range of defence needs. Any country comparable to Canada knows in advance that its volume of requirements can support economic levels of production for only a few of today's weapons and weapons systems. Even for these, its research, development and production efforts may need to be part of an integrated production-sharing

programme. Canada has, therefore, a problem of selection and, in a sense, of economic planning which the United States does not have. A defence procurement mechanism appropriate for Canada will be acceptable only if it meets a general need. Defence procurement in the United States has been a responsibility of the Defence Department and, until recently, largely a responsibility of the individual Services, but this does not imply that Canada should or can afford to follow a similar pattern. Even in the United States, there is now a significant trend toward centralizing the defence procurement activities of the various Services and, particularly in the research and development fields, under a greater degree of civilian direction and control.

The United Kingdom may be regarded as representing a mid-way point between Canada and the United States. The problem of choice arises because, even in the United Kingdom, the economy cannot support the full range of defence production but can afford to choose more broadly than in Canada. It is significant, therefore, that defence procurement in the United Kingdom is not a prerogative either of the Services or of a centralized, civilian-manned purchasing agency. Each of the three Services undertakes its own procurement in certain defined fields (and in some cases undertakes procurement for the other Services) but the Ministry of Aviation—a civil department—has exclusive procurement authority for aircraft, sophisticated electronic equipment, and the growing area of missiles and space technology. The net effect is that much of the defence procurement effort is centralized, with almost the whole of defence technology development and sophisticated weapons procurement in the hands of a civil purchasing department.

DEFENCE PROCUREMENT

The Department of Defence Production is thus compelled to go beyond normal purchasing routines and functions; it must take into account the Canadian economy. It must implement government policy by wise selection of the areas in which procurement should be directed to foster Canadian productive facilities, by far-seeing stimulation of research and development effort in Canada, and by active promotion and support for production-sharing programmes and resale of military equipment to allied governments. It is, then, something more than a service agency for its principal client, the Department of National Defence. Even as a purchasing agency, it has other clients, being responsible for purchasing defence equipment in Canada for other governments.

As of December 31, 1961, the Department of Defence Production had 1,538 employees, of whom 169 were located at 14 district purchasing offices in Canada and 78 with the N.A.T.O. delegation in Paris and in offices in the

Table 8—NET VALUE OF CONTRACTS PLACED BY DEPARTMENT OF DEFENCE PRODUCTION AND DEFENCE CONSTRUCTION (1951) LIMITED

	1960	1961
	(\$ millions)	
On behalf of the Department of National Defence:		
Placed in Canada.....	719.0	502.6
Placed in the United States.....	70.4	16.7
Placed in the United Kingdom.....	11.7	5.0
Placed elsewhere.....	3.2	4.5
	804.3	528.8
On behalf of foreign governments:		
United States.....	75.4	97.5
Britain.....	*	2.1
Others.....	*	1.0
	75.4	100.6
Contracts to assist Canadian defence industries.....	4.5	16.0
D.D.P. Revolving Fund contracts†.....	1.3	40.6
On behalf of other Canadian government departments and agencies.....	25.7*	15.4
	911.2	701.4

* 1960 purchase contracts on behalf of foreign governments (other than the United States) are included with the figure for purchase on behalf of other Canadian government departments and agencies.

† Material and equipment bought for subsequent use in defence production contracts or for resale.

United States and Europe. The offices located outside Canada are principally concerned with the Canada-United States production-sharing programme, the N.A.T.O. research development and production programme, and the fostering of sales of Canadian-produced military equipment abroad. Offices are located at eight points in the United States: Washington, D.C.; Wright-Patterson Air Force Base, Ohio; New York City; Rome, N.Y.; Bedford, Mass.; Philadelphia; Detroit; and Los Angeles; and at four points in Europe: London, Paris, Koblenz, and Prestwick. The Department also has representation at N.A.T.O. Paris headquarters and in the Canadian embassies at Paris and Bonn.

During the fiscal year ended May 31, 1960, net purchase orders placed on behalf of the Department of National Defence totalled \$863.7 million. Of this amount, contracts totalling \$802 million were placed in Ottawa, and the balance represented orders placed by the fourteen district offices. The district offices purchase from regional suppliers mainly the fresh food, stores and

services, required for immediate use by military establishments in their areas. The Department delegates to the Armed Forces authority for local purchase of emergency and small items, which amount annually to approximately \$13 million.

Role of the Department of National Defence

The Armed Forces use many commonly available commodities including food, clothing, furniture, office equipment and supplies, motor vehicles and some electronic equipment. Other requirements are highly specialized and involve technically complex components: missiles, fighter aircraft, and electronic communication and control systems cannot be ordered off the shelf. Their acquisition involves processes of analysis and evaluation of needs, time-consuming research and development phases, frequent design changes during both development and production, and close consultation with our allies.

In any industrial or commercial organization, there is always risk of disagreement and friction between the purchasing department and the user departments for which it acts. The opportunities for irritation and for dissatisfaction are greater in government, because the two departments involved respond to different ministers. It is not surprising to find, at some levels and in some sectors, discordant relationships between personnel of the departments and dissatisfaction in the Services with the way in which the Department of Defence Production fulfils its role. In some cases, this extends to a questioning of the role itself, and to the conclusion that purchasing for the Armed Forces should be a responsibility of the Services, or at least of a specialized group within the Department of National Defence.

Small irritations tend to exacerbate the situation. The Services have a natural desire to obtain the equipment or material that appears exactly designed to meet their needs. This often gives rise to specifications drawn in such terms as to exclude standard, commercially-produced items, even when they could serve the purpose adequately. Even minor departures from a commercially available product may result in a cost disproportionately high in relation to advantages gained. For instance, a manufacturer of electric light bulbs was producing until recently a bulb to the special specifications of one of the Services, although the company's standard item would have met the need equally well and more cheaply.

One role of a purchasing department is to know what is available and advise users how to tailor specifications economically and effectively. The Department of Defence Production sometimes attempts to provide this kind of service, with limited success. The Department of National Defence has a Directorate of Interservice Development, which is responsible for establishing

common specifications for the three Services: Some useful work has been done, but it is evident that the process has been scarcely more than started.

Design changes are another source of irritation and, when they occur, cause trouble in the Departments and to the supplier. Some changes are inevitable, particularly in the development and production of complex weapons systems with long lead times and a high obsolescence factor. Formal design change procedures have been established by the two departments, but do not satisfy either the departments or suppliers. Changes under consideration aim to reduce the average time required for a design change from forty-five days to not more than two weeks.

In principle, since a design change is really an amendment to a purchase contract, responsibility for giving effect to the change should be borne by the purchasing authority. Accordingly, the Department of Defence Production generally takes responsibility but, while sound in principle, this arrangement does not work well in practice because:

- A large proportion of the changes are small—eighty-five per cent are estimated to involve less than \$5,000—and do not demand the same processing as costly modifications.
- The Department of Defence Production seldom, if ever, refuses to approve a design change request; therefore its approval is little more than a formality.
- Due to paperwork and consumption of time, cases frequently occur where the design authority and the contractor give effect to the change in advance of approval.

While the Services are, not unreasonably, dissatisfied with what appears to be a cumbersome and unnecessary procedure, the Department of Defence Production is statutorily unable to relinquish responsibility for approving any design change that necessitates a contract revision.

As the user department, the Department of National Defence is responsible for verifying the quantity and quality of goods received to ensure that they meet stated requirements. This procedure is overdone, and ninety-eight per cent of the inspection work is performed at the source of production. A general condition of defence purchase contracts is that the approval stamp of an authorized inspector appear not only on the finished product but, wherever practicable, on all component parts and materials as well. The inspector must have access to the work at all times and to plants and premises where any part of the work is being carried on; he may inspect and make tests of the work, of parts, of materials, and of working processes as he sees fit; he is the sole judge of the meaning or intention of the specifications; and

delivery is not deemed to have been made until after acceptance by him of the work, part, or finished product.

Furthermore, there is significant duplication in inspection activities between the Department's Inspection Services and of those of the R.C.A.F., as well as some duplication of inspection resources and facilities between each of these and the Department of Public Works. The very high cost of inspection of defence purchases is reflected in the fact that the Department of National Defence (Inspection Services) and the R.C.A.F. employ 1,500 people who are engaged full-time on inspection. As the range of required skills is wide, and the volume of work in any area highly fluctuating, there is under-utilization of manpower and the overall cost is out of all reason.

Department of Defence Production Procedures

To assess the effectiveness of general purchasing procedures in the Department, a number of individual purchase contracts were scrutinized at each stage from the original definition of need to final delivery. The time required to process four typical cases through the Department of National Defence, the Department of Defence Production, and the supplier is shown in Charts 1, 2, 3 and 4. Chart 5 depicts in detail the sequence of steps required. A number of conclusions emerge.

An important part of the time consumed is absorbed within the Department of National Defence itself, in the development and definition of specifications and in the development of design changes. This is inevitable, particularly for specialized requirements, but it seems likely, on the basis of observation, that time is often wasted in unnecessary elaboration of specifications.

The documentation required to support every buying decision may be justified but undoubtedly slows down the purchasing operation and makes the administrative overhead higher than in a private undertaking. It is occasionally carried to the extreme of calling for tenders where it is known that the equipment can be obtained from only one supplier. An example of this is shown in Chart 3, which depicts the time sequence for procurement of two voltage regulator testers. The contract demand noted that only one supplier existed for this equipment, but competitive tenders were called for anyway, thus introducing the relatively modest delay of two weeks in the total purchase and delivery schedule.

The procedures of the Department of Defence Production are designed to ensure that a reasonable and defensible procurement job is done, but cumbersome and time-consuming procedures result. The possibility of outside

review is regarded as a more continuing and fearsome hazard than any dissatisfaction by another department with the speed of service. Nevertheless, the Department does, within the requirements of procedures established for its own protection and the protection of the public interest, attempt to keep delays to a minimum. On occasion, it has demonstrated that it can act quickly when the need is great. For instance, it was observed that when an important training device was lost in 1961, a replacement was obtained in six days.

There is an inclination on the part of both departments to cite Treasury Board intervention in the contract approval process as a significant source of delay. The interest of the Treasury Board in the nature of the requirements as well as in the proposed expenditure level for important purchases has increased, and in some cases approval of contracts has been withheld for considerable periods. Usually, in such cases, the decision involved was one of real significance for the government as a whole. Treasury Board approvals generally take about two weeks of working time, including two days for the Department of Defence Production preparation of submissions. As approvals are required only for major outlays, the time lapse is not unreasonable.

Your Commissioners have come to the following conclusions:

- The procurement of defence supplies, even of the simplest kind, often takes longer than is necessary.
- There are too many routine steps in the procurement process and no flexibility where procurement problems require less complex procedures.
- Excessive concern is directed to ensuring that acts and decisions can be defended should they ever be publicly scrutinized.
- Since neither department has control of the entire process, tendency is for procedures to develop and persist without adequate justification.
- There is little evidence that departmental boundaries contribute in any major way to delay, and there is even less justification to assume that a specialized procurement group within the Department of National Defence would achieve a measurable improvement—particularly if the same functions are to be discharged.

Relations with Suppliers

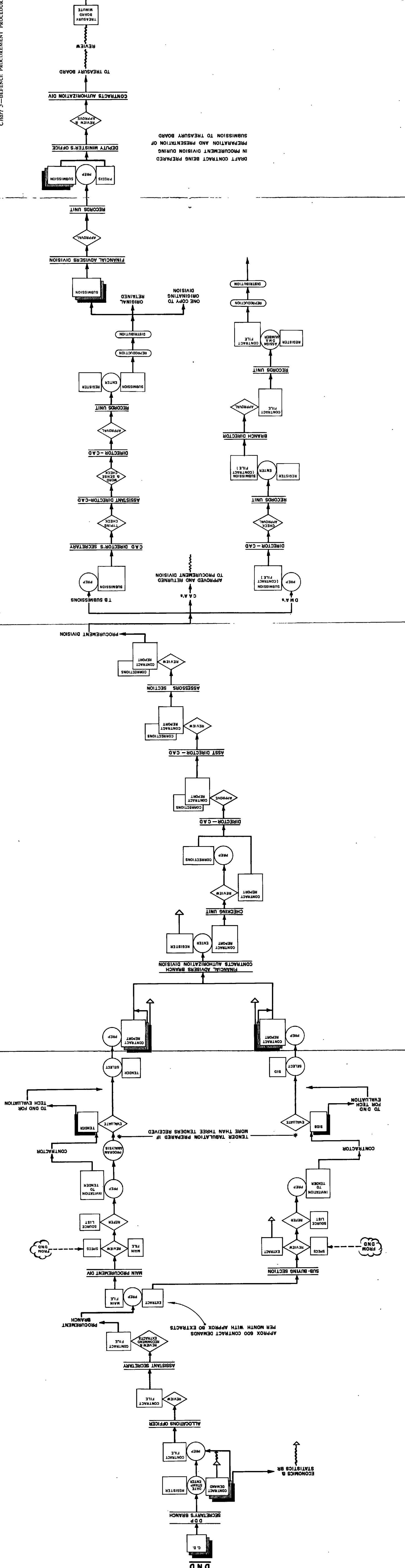
Efficient purchasing for government, as for private undertakings, turns not only on proper decisions about requirements, but also on the proper selection of suppliers and on safeguards to ensure that price is consistent with the value of the goods and services and the conditions of supply. In government pur-

Charts 1, 2, 3 and 4; TIME SEQUENCE IN PROCUREMENT OF EQUIPMENT

EQUIPMENT	DEPT.	1959						1960								
		JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL		
<i>Chart 1</i> Loaders	DND															
	DDP															
	SUPPLIER															
	TOTAL															
<i>Chart 2</i> Storage batteries	DND	■	■	■	■	■	■	■	■	■	■	■	■	■		
	DDP		■		■	■	■	■	■	■	■	■	■	■	■	■
	SUPPLIER			■		■		■		■	■	■	■	■	■	■
	TOTAL															
<i>Chart 3</i> Voltage regulator testers	DND															
	DDP															
	SUPPLIER															
	TOTAL															
<i>Chart 4</i> Waste receptacles	DND										■	■	■	■		
	DDP											■	■	■	■	■
	SUPPLIER												■	■	■	■
	TOTAL															

1961												1962		CALENDAR TIME IN DAYS					
AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	
█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█				331
█	█						█						█	█	█				87
	█							█					█	█		█	█		134
																			552
																			198
																			110
																			56
																			364
				█															43
					█	█													13
					█	█	█	█	█	█	█								119
																			175
																			46
																			19
																			34
																			99

Chart 5 - DEFENCE PROCUREMENT PROCEDURES



DRAFT CONTRACT BEING PREPARED IN PROCUREMENT DIVISION DURING PREPARATION AND PRESENTATION OF SUBMISSION TO TREASURY BOARD

APPROVED AND RETURNED TO PROCUREMENT DIVISION

ECONOMICS & STATISTICS BR.

chasing, tenders are most commonly relied upon as the guarantee that the public does not pay an excessive price. The Department of Defence Production maintains source-of-supply records, and buying units are given lists for use in inviting tenders. Requirements are not advertised, but firms listed as potential suppliers are invited to tender and be put on the appropriate list; a firm need only provide the Department with some evidence of its capability. Departmental buyers are not rigidly bound by the source lists, and may add or delete on the basis of their buying experience and knowledge of the suppliers' capabilities.

Contracts fall into five classes: (1) competitive tender; (2) target price; (3) ceiling price; (4) cost plus fixed fee; (5) cost plus a percentage of cost. The aim is to have as many contracts as possible in the first two classes and few in the other three. It is a standard condition of contracts that Her Majesty be granted a non-exclusive, irrevocable, royalty-free licence on inventions, methods and processes developed by the supplier in the course of carrying out the work. Where the contract is on a cost-reimbursement basis, the supplier is directed to take advantage of all trade discounts, rebates, refundable taxes and similar items which may be available to him, and his costs are closely scrutinized by the Department before final payment. Suppliers are invariably required to use Canadian labour and materials to the fullest extent possible. Preference is frequently given not only to Canadian suppliers but especially to Canadian suppliers who offer higher proportions of Canadian content.

APPRAISAL OF DEPARTMENT OF DEFENCE PRODUCTION

No standard exists for the determination of the efficiency of the Department, but it can be said that there is a thorough and detailed system and that controls are meticulously observed. The salary cost incurred in handling contracts was 7 cents per \$1 purchased for contracts negotiated by Ottawa headquarters, and 1 cent per \$1 purchased by the district offices. No useful comparison can be made in this regard, either with other departments or with industry. The highly specialized character of much of the equipment purchased tends to raise purchasing costs; the large dollar volume tends to reduce them.

The Department of Defence Production has always had a role going beyond procurement in the conventional sense. It has a responsibility for looking to the general capabilities of the Canadian economy in defence production and to the contribution that defence production may make to the general strength and vitality of the economy as a whole. Thus it is the arm of government concerned with stimulating sales of Canadian-produced

military equipment and supplies to Canada's N.A.T.O. allies. During the past four years, Canada's decision to co-ordinate the development and production of weapons systems with the United States, and to abandon the development of certain major systems of her own, has led to specific programmes with a number of Canadian defence suppliers. As an adjunct to the defence production-sharing programme, the Department of Defence Production administers production-sharing assistance funds. Under a Vote for the establishment of production capacity, funds have been made available for use in the advanced technology of aeronautical, electronic, and weapons production. These funds are designed to offset the substantial advantage enjoyed by United States firms which have been able to write off pre-production and tooling costs under earlier contracts with the United States government. The funds are used to defray a portion of the Canadian firms' pre-production and tooling costs, thereby permitting them to compete on more even terms for production contracts with the United States Department of Defence.

Another Vote is aimed at sustaining and enhancing technological capability in the Canadian defence industry. Whereas the programme described immediately above is temporary, this second programme is viewed as a long-term defence development project. It is aimed at maintaining scientific and technical ability in the defence industry at a level that will enable it to participate effectively in future joint production programmes with the United States. Substantially larger funds have been made available under this programme for administration by the Department of Defence Production.

More recently still, the Defence Industrial Research Programme was established in mid-1961 to promote and strengthen the research capability of the Canadian defence industry, so as to increase Canada's ability to participate in the development and supply of defence equipment to meet North American and N.A.T.O. requirements. As the agent primarily responsible for defence research, the Defence Research Board has been given the chief responsibility for this programme, acting in consultation with the Departments of Defence Production and Finance. It has established the Directorate of Industrial Research within the Chief Scientist's Branch to discharge this responsibility. Contracts negotiated by the Department of Defence Production are on a non-profit basis and require financial participation by the industrial firm—preferably to a level of at least fifty per cent.

The Department of Defence Production obviously plays a very important role which goes far beyond normal purchasing activities and has great significance for the current and future strength of the economy. This is true despite the fact that the total value of allied purchases and United States production-sharing contracts placed in Canada, together with special expendi-

tures in support of Canadian industrial capability, represents but a modest sum in relation to similar expenditures elsewhere. Because these expenditures are concentrated in areas where research and technological skills have great significance for the future, their relatively small dimensions are no adequate gauge of their importance. It is vital, therefore, that the Department's responsibility should be well handled.

These activities must be closely linked to the job of defence procurement and demand, among other things, a detailed knowledge of the defence capacities, present and potential, of Canadian industry. Defence procurement decisions should be taken in the light of this knowledge and in harmony with production-sharing agreements with allies, with the object of ensuring that defence production in Canada contributes, as it should, to the current and future strength of the economy. Defence procurement and this broader role should therefore be handled in close conjunction.

It is evident that the Department of Defence Production devotes a great deal of energy to this broad responsibility, but less evident that it is equipped with the knowledge and skills for an undertaking of these dimensions. The enthusiasm and imagination of its officers, tempered by a pragmatic approach founded on Canadian capabilities, have succeeded in obtaining an adequate opportunity for Canadian suppliers to produce under the defence production-sharing programme and to obtain orders from European allies. There is less evidence of serious studies of the Canadian economy upon which confident judgments could be made about the significance of particular segments in relation to future strength and growth. Equally, little evidence has been found that this need is met elsewhere in the government. The degree of success thus far attained has been dependent, to an uncomfortable degree, on the common sense and *ad hoc* judgments of practical men, rather than on a fundamental analysis of the needs of the Canadian economy and of the ways in which defence production, including Canada's share in allied requirements, could most effectively contribute.

MATERIALS MANAGEMENT IN THE DEFENCE SECTOR

Once delivered, defence equipment, materials and supplies become the responsibility of the Service for which they have been purchased. The Services, therefore, are individually responsible for warehousing and distribution, either direct from the supplier or from their own depots and warehouses to the point of use. The Services' accounts, as currently kept, do not record the value of stocks held, but the level is estimated at between \$500 and \$750 million—probably closer to the higher figure. In addition to substantial

volumes of equipment and supplies distributed to N.A.T.O. allies under the Mutual Aid Programme, equipment costing more than \$1,000 million has been declared surplus and handed over to the Crown Assets Disposal Corporation since the end of World War II.

The inventories of the Services—clothing, motor vehicle equipment and parts, and a wide range of other material and equipment—are stored in major depot points and regional Army ordnance depots. The management of these huge stocks, their storage, their size, and the extent to which the financial cost of deterioration and obsolescence in storage are controlled, have to be taken into calculation in measuring the cost of defence. Approximately 40,000 people are involved in the materials management function of the Armed Forces, at a total annual salary cost of about \$175 million. For every three members of the Armed Forces, one person works in a materials management function, of whom 68% are civilians. Details are shown in Table 9. Elsewhere, your Commissioners report on the relationship between Service supply systems and their traffic management arrangements. This report summarizes the results of a study undertaken to determine whether purchasing and inventory control of defence equipment, materials and supplies are well designed to hold purchasing and storage costs to a desirable minimum.

The general conclusions are both disturbing and encouraging. A check of 40,054 items (specialized to the needs of the Armed Services) disclosed that, for 73 per cent, stocks on hand exceed five years' requirements and that, assuming no further purchases, 29% of present inventories would still be on hand at the end of twenty-five years. The Royal Canadian Navy, for example, has eighty-five years' supply of a particular size of boot, more than nine years' supply of small kitbags, and enough wool and cotton union suits of one size to last more than a thousand years. The Army inventory of technical stores contains forty-two years' supply of radio oscillators, eighty-three years' supply of No. 4 flashlights, one hundred and ninety-seven years' supply of men's plain black cotton overalls, size 1, and fifty-one years' supply of motor transport separate clutch oil seal rings. The Royal Canadian Air Force has in store eighty-one years' requirements of a particular wool sock, twelve years' requirements of pneumatic tires, and two hundred and seventy years' requirements of lamp G bulbs. To be fair, in some cases remaining stocks of World War II materials and equipment are the cause.

On the other hand, one per cent of the more than 40,000 checked items accounted for 50% of the annual usage, in dollar value, while 10% of the inventory items accounted for 86% of the annual usage. Obviously, by concentrating attention on the relatively small number of the total inventory lines for which they are responsible, the Services can make major improve-

ments in the effectiveness of their materials management. Hitherto, the tendency has been to give equal attention to each type of inventory item, but this is obviously not good business.

Table 9—MATERIALS MANAGEMENT PERSONNEL—CANADIAN ARMED FORCES

	RCN	Cdn. Army	RCAF	Total
Number of personnel in the Services at March 31, 1961	20,655	48,051	51,349	120,055
Number of DND personnel working in material management functions at Dec. 31, 1961*				
Service.....	928	6,684	4,383	11,995
Civilian.....	9,701	11,900	3,519	25,120
	10,629	18,584	7,902	37,115**
Percentage of civilian personnel engaged on material management functions.....	91%	64%	45%	68%
Ratio of total number of personnel in the Services to the number of personnel in the material management function.....	1.9	2.6	6.5	3.2

* Includes personnel concerned with purchasing, control, traffic, warehousing, storekeeping, receiving, inspection, audit, repair, disposal, salvage, packaging, expediting and materials handling aspects of integrated material management functions.

** To this figure should be added 1,317 D.N.D. personnel under the Assistant Deputy Minister—Requirements and Inspection. The estimated cost of these personnel is approximately \$169 million per annum or 11% of the annual Defence budget. In addition, a major portion of the 1,538 employees of the Department of Defence Production and the 100 employees of Crown Assets Disposal Corporation should be added to this total.

The general purport of existing Service inventory rules is:

- maintain a safety stock of three months' requirements, and
- place orders annually for twelve months' requirements.

Little attempt is made to balance the incremental costs of placing an order against the incremental costs of holding unneeded inventory. To illustrate, on the 3,895 inventory items (out of the total sample of 40,054 items studied) for which orders were placed during the year under review, \$540,000 could have been saved by economic ordering. More orders would have been placed, at an additional cost of about \$20,000 for procurement, but average inventories would have been held at lower levels, thus reducing holding costs by \$560,000. The net potential saving, from this source alone, amounted to 5%

of the total value of the actual purchases. Moreover, as orders were placed during the year for only 3,895 items out of the sample total of 40,054, 90 per cent of the items in the total sample were presumably either obsolete or had been overbought in previous periods.

A simulation study on a larger part of the sample of 40,054 items showed a likelihood of annual savings of more than 10% of present inventory values without any change in existing stock safety rules. It indicated that the average levels of inventories for the more than 13,000 items studied could be reduced by 85%. The adoption of more appropriate stock safety rules would increase potential savings still further. Equally important in the long run would be the accompanying savings due to reduced requirements for warehouse space. The techniques used do not permit extrapolation of the results with any confidence to the \$500 to \$750 million worth of stocks held in total by the Services, but they do suggest that savings of the first magnitude could be achieved.

Your Commissioners would not wish to leave false impressions. There are many explanations of this state of affairs which do not reflect adversely on the Service personnel responsible for materials management. Concepts of military necessity play some part in the approach to control of inventory levels. The Services, too, have in stock today large quantities of equipment and supplies which reflect past policies and past situations. Surplus stocks of some items date back to World War II, the Korean expedition, and the rapid build-up for N.A.T.O. during the early 1950's. Until defence plans became based on "the forces in being" concept, there was reason to have larger supplies of many items in readiness than is now appropriate. Some part of the surplus stocks reflect, therefore, inadequate disposal procedures. Other contributing factors could be mentioned. As a general conclusion, however, your Commissioners feel that, while there is some awareness in the Forces of the kinds of procedure that could markedly improve inventory control and costs, far too little has so far been done to secure the possible benefits.

Improvement in the management of defence equipment material and supplies is only the first step toward realizing the maximum benefits obtainable. Interservice co-operation in the storing and distribution of equipment, materials and supplies is the obvious long-range solution. Even where similar items are not identical between the Services—for example, clothing and some types of motor vehicles—there could be major advantages in centralizing or otherwise rationalizing the storage of similar types of supplies for all three Services. In many cases where there are identical requirements—for example, spare parts for motor vehicles and much electronic equipment—the scope for savings in warehouse space and staff, transportation charges and related expenditures should be even greater.

The objectives to be achieved in the management of so vast an enterprise as the orderly purchasing, transporting, and storing of the materials, equipment and supply requirements of Canada's Armed Forces are such that progress should be sought by stages. It may therefore be much more profitable, as well as wiser, to concentrate initially on techniques for reducing warehousing, transportation, and stock-loss costs of each Service.

5

CONCLUSIONS AND RECOMMENDATIONS

On the basis of the foregoing appraisal of the purchasing and materials management activities of the federal government, your Commissioners have reached the following conclusions:

1. The purchasing function in the civil departments and agencies is so dispersed and fragmented that it is too often left in the hands of individuals with inadequate knowledge and skills for the task. There are exceptions, but this generalization is applicable to the function as a whole. Duplication of personnel and effort is everywhere apparent because of the multiplicity of purchasing offices, purchasing personnel, and of storage facilities and warehousing personnel at many points across the country. While only some departments have regional purchasing organizations, others should have reduced the cost and complexity of their procedures by similar decentralization.

Individual departments and agencies have specialized requirements, but the great weight of procurement comprises types of goods commonly needed by many departments, including the Armed Forces. This, in itself, suggests the advantages to be derived from establishing a central purchasing organization to provide skilled and informed purchasing services for all departments and agencies. The Department of Defence Production is already organized and operating in this capacity for the Armed Forces. In doing so, it is responsible for procurement orders each year amounting to several times the combined purchase volume of the civilian departments and agencies; the civilian-

type items and equipment purchased for the Armed Forces alone approximate in value the annual requirements of all civil departments and agencies.

2. Purchasing processes and procedures are often unnecessarily complicated and time-consuming, and consequently expensive. Wherever government spends money, there is a need for safeguards against improper influence in the choice of supplier or in the payment of an excessive price.

This is the reason for the Treasury Board review of major contracts, even though that body has already participated in the Estimates review which makes funds available for the purpose. However, protection would be adequate if this second check were limited to large contracts. A centralized purchasing agency, in whose approaches and procedures the Treasury Board had confidence, could be given greater latitude than the present multiplicity of purchasing departments.

Within the Department of Defence Production and throughout the public service, there is a too meticulous adherence to buying by formal tender. When need is urgent, the public interest can be adequately protected by an able purchasing agent. There are also circumstances where calling for tenders is farcical—for example, where there is only one possible supplier or when the amount involved is petty.

A central purchasing agency could make much greater use of bulk purchase contracts, thereby simplifying and reducing the costs of ordering procedures. Annual tenders for a wide variety of common-use items required in large quantities could be obtained and supply contracts established with several suppliers strategically located across the country, or with a single supplier whose own distribution facilities would meet the same need. User departments and agencies could then, either centrally or through their regional offices, place direct orders against these contracts as their needs arose, thereby eliminating a great deal of requisitioning from the central purchasing agency, avoiding frequent calling of tenders for small quantities, and reducing the size of inventories.

3. Inadequate use of standard specifications and, in many cases, over-specific definition of requirements tend to make government procurement more expensive than it need be. A centralized purchasing agency, armed with proper skills and having good working relationships with client departments, should be able to achieve improvements. Purchasing agents who know their fields and keep up with developments in the use of materials and in the designs of products can advise user departments on the products and materials that will meet requirements most effectively and economically. In addition, a central purchasing organization can aid in establishing common standards for mate-

rials and equipment required by several departments and agencies. A purchasing agency should not preempt the right of user departments and agencies to order and obtain products and materials to exact specifications, provided that they are prepared to pay the price involved and, when required, justify the additional cost to the Treasury Board.

4. Warehousing and inventory management of materials, equipment, and supplies are, in many cases, less efficient and more costly than they should be. To a large extent, this is because of the duplication and fragmentation resulting from operation by individual departments and agencies to meet their own needs alone. A further important cause of the relative inefficiency of many government warehouse and inventory handling operations appears to be inadequate attention to the improved techniques that are spreading rapidly in industry. These defects could be remedied appreciably if warehousing and materials management were made the responsibility of a single service agency. Common-use articles should be regionally stocked across Canada for civil departments and agencies. The Department of National Defence should have access to these stocks and be encouraged to make maximum use of them so as to reduce Service inventories. Correspondingly, there should be less need for departmental warehouses in the regions, many of which could be merged with those operated by the common procurement agency. A net saving of space should result.

5. Disposal of surplus equipment, materials and supplies by government departments and agencies through the medium of Crown Assets Disposal Corporation is less effective and less economical than it should be. The major weaknesses are inadequate incentive to departments to declare surpluses and the ineffective procedures governing transfers. Incentives should be reinforced by procedures which are not unduly cumbersome and time-consuming, and by financial arrangements which permit the disposing department to use the funds recouped, or to be credited, in such a way as to improve its record of performance. Similarly, other departments which could make use of government surpluses should be given a financial inducement to do so rather than to purchase outside.

6. The first step in the transfer of purchasing and warehousing responsibility to a central service department should be to transfer the regional purchasing functions of departments and agencies to the existing fourteen district purchasing offices of the Department of Defence Production. Equally appropriate for early transfer would be the responsibility for purchasing and supplying office furniture, office machinery, printing and stationery.

7. In a few special cases, acquisition of specialized items could not be appropriately undertaken by a common purchasing agency: works of art for the National Gallery or an accession to the collection of the National Museum are obvious examples. And, even for the items in general and common use, for practical reasons it seems prudent for the central purchasing agency (to be known as the Department of Purchasing and Supply) to assume purchasing responsibilities, department by department, at an appropriate pace. The Treasury Board, with an overriding interest in the whole situation, should supervise the transfer and, where necessary, issue instructions.

8. The proposed Department of Purchasing and Supply should be a service organization. It should not be permitted to control decisions of user departments about the kinds of equipment, materials and supplies needed to meet requirements. On the other hand, as a specialized and competent purchasing agency, it should be in a position to advise. As a service organization, the Department of Purchasing and Supply should not absorb purchase or transportation costs of any item supplied to user departments. Each department should pay for what it receives out of its own Votes and be required to justify them in the usual way through the Estimates process as essential elements of its programmes.

- We therefore recommend that:*
- 1 A central purchasing agency be established to serve all departments and agencies (civilian and military) of the federal government, other than the commercially oriented Crown corporations.
 - 2 To this end, the existing Department of Defence Production be renamed the Department of Purchasing and Supply, and its responsibility be extended to include procurement for civilian departments and agencies.
 - 3 The Department of Purchasing and Supply be given responsibility to develop, in conjunction with user departments and agencies, standard specifications for all appropriate items and to assume the functions of the Canadian Government Specifications Board, including representa-

tion on the Directorate of Interservice Development of the Department of National Defence.

- 4 The Department of Purchasing and Supply develop warehousing, stocking and materials-handling services across Canada for all departments, other than the Department of National Defence.
- 5 The Department of National Defence, in consort with the Department of Defence Production, initiate studies of economic ordering patterns, minimum safe inventory levels, joint stocking and disposal of obsolete or surplus stocks, for each of the three Services, with the object of reducing warehousing, transportation, and other costs of materials management.
- 6 The financing of the procurement and warehousing activities of the Department of Purchasing and Supply be placed on a revolving fund basis.
- 7 Crown Assets Disposal Corporation be operated as a division of the proposed Department of Purchasing and Supply, and its personnel and methods of operation be integrated as closely as possible with other functions of the Department.
- 8 A vigorous programme to dispose of surplus inventory be undertaken and, to permit a freer flow of interdepartmental business, current procedures for the declaration of surplus materials and supplies be amended.