NRC · CNRC

Consolidated Financial Statements

National Research Council Canada

March 31, 2017

National Research Council Canada

Statement of Management Responsibility Including Internal Control over Financial Reporting

Responsibility for the integrity and objectivity of the accompanying consolidated financial statements for the year ended March 31, 2017, and all information contained in these consolidated statements rests with the management of the National Research Council Canada (NRC). These consolidated financial statements have been prepared by management using the Government's accounting policies, which are based on Canadian public sector accounting standards.

Management is responsible for the integrity and objectivity of the information in these consolidated financial statements. Some of the information in the consolidated financial statements is based on management's best estimates and judgment, and gives due consideration to materiality. To fulfil its accounting and reporting responsibilities, management maintains a set of accounts that provides a centralized record of NRC's financial transactions. Financial information submitted in the preparation of the Public Accounts of Canada, and included in NRC's *Departmental Results Report*, is consistent with these consolidated financial statements.

Management is also responsible for maintaining an effective system of internal control over financial reporting (ICFR) designed to provide reasonable assurance that financial information is reliable, that assets are safeguarded and that transactions are properly authorized and recorded in accordance with the *Financial Administration Act* and other applicable legislation, regulations, authorities and policies.

Management seeks to ensure the objectivity and integrity of data in its consolidated financial statements through careful selection, training and development of qualified staff; through organizational arrangements that provide appropriate divisions of responsibility; through communication programs aimed at ensuring that regulations, policies, standards and managerial authorities are understood throughout NRC; and through conducting an annual assessment of the effectiveness of the system of ICFR.

The system of ICFR is designed to mitigate risks to a reasonable level based on an ongoing process to identify key risks, to assess the effectiveness of associated key controls, and to make any necessary adjustments.

A risk based assessment of the system of ICFR for the year ended March 31, 2017 was completed in accordance with the Treasury Board *Policy on Internal Control* and the results and action plans are summarized in the annex.

The effectiveness and adequacy of NRC's system of internal control is reviewed by the work of Internal audit and Financial monitoring staff, who conduct periodic audits of different areas of NRC's operations, and by the NRC Departmental Audit Committee, which oversees management's responsibilities for maintaining adequate control systems and the quality of financial reporting, and which recommends the consolidated financial statements to the President.

PricewaterhouseCoopers LLP has expressed an opinion on the fair presentation of the consolidated financial statements of NRC for the year ended March 31, 2017 which does not include an audit opinion on the annual assessment of the effectiveness of NRC's internal controls over financial reporting.

Iain Stewart
President

Dale MacMillan, CPA, CGA
Vice-President, Corporate Services
and Chief Financial Officer

Ottawa, Canada
June 28, 2017

June 29, 2017

Independent Auditor's Report

To the National Research Council Canada

We have audited the accompanying consolidated financial statements of National Research Council Canada, which comprise the consolidated statement of financial position as at March 31, 2017 and the consolidated statements of operations and departmental net financial position, change in departmental net financial assets and cash flow for the year then ended, and the related notes, which comprise a summary of significant accounting policies and other explanatory information.

Management's responsibility for the consolidated financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

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We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of National Research Council Canada as at March 31, 2017 and the results of its operations, changes in its net financial assets and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants

National Research Council Canada
Consolidated Statement of Financial Position
As at March 31

(in thousands of dollars)	2017	2016
Financial Assets		
Due from Consolidated Revenue Fund	295,508	282,505
Accounts receivable (Note 4)	41,884	51,167
Inventory for resale	5,271	5,274
Cash and investments (Note 5)	14,182	9,497
Total gross financial assets	**356,845**	**348,443**
Financial assets held on behalf of Government		
Accounts receivable (Note 4)	(130)	(90)
Total financial assets held on behalf of Government	**(130)**	**(90)**
Total net financial assets	**356,715**	**348,353**
Liabilities		
Accounts payable and accrued liabilities (Note 6)	201,062	168,395
Vacation pay and compensatory leave	28,984	27,911
Lease inducements	32,754	35,302
Deferred revenue (Note 7)	8,169	9,010
Employee future benefits (Note 8)	31,317	34,553
Total liabilities	**302,286**	**275,171**
Departmental net financial assets	**54,429**	**73,182**
Non-Financial Assets		
Prepaid expenses	12,707	11,257
Endowment fund investments (Note 9)	5,137	5,070
Inventory for consumption	7,932	6,107
Tangible capital assets (Note 10)	588,945	532,651
Total non-financial assets	**614,721**	**555,085**
Departmental net financial position	**669,150**	**628,267**

Contractual obligations (Note 11)
Environmental liabilities (Note 12)
Contingent liabilities (Note 13)

The accompanying notes form an integral part of these consolidated financial statements.

Iain Stewart
President

Dale MacMillan, CPA, CGA
Vice-President, Corporate Services
and Chief Financial Officer

Ottawa, Canada
June 28, 2017

National Research Council Canada
Consolidated Statement of Operations and Departmental Net Financial Position
For the Year Ended March 31

(in thousands of dollars)	2017 Planned Results	2017	2016
Expenses			
Technology Development and Advancement	374,940	364,991	337,274
Industrial Research Assistance Program	264,667	326,582	290,006
Science Infrastructure and Measurement	124,740	126,103	119,916
Internal Services	259,170	247,115	230,972
Total expenses	**1,023,517**	**1,064,791**	**978,168**
Revenues			
Research services	59,290	55,763	52,084
Technical services	93,995	97,120	88,573
Intellectual property, royalties and fees	7,857	8,613	9,060
Sales of goods and information products	5,349	7,734	6,603
Rentals	6,366	6,880	6,513
Grants and contributions	2,420	17,461	16,587
Lease inducement revenue	2,548	2,548	2,548
Other	-	6,482	3,730
Revenues earned on behalf of Government	(100)	(122)	(100)
Total revenues	**177,725**	**202,479**	**185,598**
Net cost of operations before government funding and transfers	**845,792**	**862,312**	**792,570**
Government funding and transfers			
Net cash provided by Government	816,814	837,933	805,025
Change in due from Consolidated Revenue Fund	-	13,003	(33,424)
Services provided without charge by other government departments and agencies (Note 14)	53,039	52,265	49,173
Transfer of transition payments for implementing salary payments in arrears (Note 15)	-	-	(60)
Transfers from (to) other government departments (Note 16)	-	(6)	(47)
Net revenue from operations after government funding and transfers	**24,061**	**40,883**	**28,097**
Departmental net financial position – Beginning of year	**628,267**	**628,267**	**600,170**
Departmental net financial position – End of year	**652,328**	**669,150**	**628,267**

Segmented information (Note 17)

The accompanying notes form an integral part of these consolidated financial statements.

National Research Council Canada
Consolidated Statement of Change in Departmental Net Financial Assets
For the Year Ended March 31

(in thousands of dollars)	2017 Planned Results	2017	2016
Net revenue from operations after government funding and transfers	**24,061**	**40,883**	**28,097**
Change due to tangible capital assets			
Acquisition of tangible capital assets	(172,282)	(108,596)	(76,380)
Amortization of tangible capital assets	60,000	51,637	55,479
Proceeds from disposal of tangible capital assets	-	264	188
Net loss on disposal of tangible capital assets including adjustments	-	740	1,885
Transfers from (to) other government departments (Note 16)	-	6	47
Other adjustments	1,090	(345)	(929)
Total change due to tangible capital assets	**(111,192)**	**(56,294)**	**(19,710)**
Change due to inventory for consumption	**1,200**	**(1,825)**	**(2,093)**
Change due to endowment fund investments	**(100)**	**(67)**	**(64)**
Change due to prepaid expenses	**-**	**(1,450)**	**(1,626)**
Net change in departmental net financial assets	**(86,031)**	**(18,753)**	**4,604**
Departmental net financial assets – Beginning of year	**73,182**	**73,182**	**68,578**
Departmental net financial assets – End of year	**(12,849)**	**54,429**	**73,182**

The accompanying notes form an integral part of these consolidated financial statements.

National Research Council Canada
Consolidated Statement of Cash Flows
For the Year Ended March 31

(in thousands of dollars)	**2017**	**2016**
Operating Activities		
Net cost of operations before government funding and transfers	862,312	792,570
Non-cash items:		
Amortization of tangible capital assets	(51,637)	(55,479)
Net loss on disposal of tangible capital assets	(740)	(1,885)
Services provided without charge by other government departments and agencies (Note 14)	(52,265)	(49,173)
Transition payments for implementing salary payments in arrears (Note 15)	-	60
Other adjustments to tangible capital assets	345	929
Variations in Consolidated Statement of Financial Position:		
Increase (decrease) in accounts receivable (Note 4)	(9,323)	14,391
Increase in inventory for resale	(3)	1,397
Increase in prepaid expenses	1,450	1,626
Increase (decrease) in inventory for consumption	1,825	2,093
Decrease (increase) in accounts payable and accrued liabilities (Note 6)	(32,667)	10,303
Decrease (increase) in vacation pay and compensatory leave	(1,073)	972
Decrease in lease inducements	2,548	2,548
Decrease in deferred revenue	841	126
Decrease in employee future benefits	3,236	1,893
Cash used in operating activities	**724,849**	**722,371**
Capital Investing Activities		
Acquisitions of tangible capital assets	108,596	76,380
Proceeds from disposal of tangible capital assets	(264)	(188)
Cash used in capital investing activities	**108,332**	**76,192**
Investing Activities		
Income from endowment fund investments	165	173
Awards granted from endowment fund	(98)	(109)
Increase in CFHT and TIO cash and investments	4,685	6,398
Cash used in investing activities	**4,752**	**6,462**
Net cash provided by Government of Canada	**837,933**	**805,025**

The accompanying notes form an integral part of these consolidated financial statements.

1. Authority and Objectives

The National Research Council Canada (NRC) exists under the *National Research Council Act* ("NRC Act") and is a departmental corporation named in Schedule II of the *Financial Administration Act*. The mission of NRC is to work with clients and partners to provide strategic research, scientific and technical services to develop and deploy solutions to meet Canada's current and future industrial and societal needs.

In delivering its mandate, NRC reports under the following program activities:

- Technology Development and Advancement: Develops and advances technologies to enhance the prosperity of Canadian industries in support of federal priorities and to bring new and innovative products and processes to the marketplace.

- Industrial Research Assistance Program (IRAP): Provides a range of technical and business-oriented advisory services, as well as financial support for small and medium-sized Canadian businesses engaged in research and development of technological innovations to augment their capacity and capability to innovate, commercialize and generate significant economic activity for Canadian industry.

- Science Infrastructure and Measurement: Manages national science and infrastructure critical to research, development and innovation by Canadian scientific and technological communities and helps clients make the most of this infrastructure by facilitating access to a wide range of Canadian and international user communities and by participating in networks.

- Internal Services: Groups of activities and resources administered to support the needs of programs and other corporate obligations of the organization. Includes only those activities and resources that apply across the organization and not those provided specifically to a program.

2. Summary of Significant Accounting Policies

These consolidated financial statements have been prepared using the Government's accounting policies stated below, which are based on Canadian public sector accounting standards. The presentation and results using the stated accounting policies do not result in any significant differences from Canadian public sector accounting standards.

Significant accounting policies are as follows:

a) Parliamentary authorities

NRC is financed mainly by the Government of Canada through Parliamentary authorities. Financial reporting of authorities provided to NRC do not parallel financial reporting according to generally accepted accounting principles since authorities are primarily based on cash flow requirements. Consequently, items recognized in the Consolidated Statement of Operations and Departmental Net Financial Position and in the Consolidated Statement of Financial Position are not necessarily the same as those provided through authorities from Parliament. Note 3 provides a reconciliation between the bases of reporting. The planned results amounts in the "Expenses" and "Revenues" sections of the Consolidated Statement of Operations and Departmental Net Financial Position are the amounts reported in the Consolidated Future-oriented Statement of Operations included in the 2016-17 Report on Plans and Priorities. The planned results amounts in the "Government funding and transfers" section of the Consolidated Statement of Operations and Departmental Net Financial Position and the Consolidated Statement of Change in Departmental Net Financial Assets were prepared for internal management purposes and have not been previously published.

b) Consolidation

These consolidated financial statements include both NRC and its portion of the accounts for organizations for which it has consolidated operations between January 1st to December 31st 2016. These organizations include the Canada-France-Hawaii Telescope Corporation ("CFHT") and the TMT International Observatory, LLC ("TIO"). The NRC relationship with CFHT and TIO meets the definition of a government partnership under Canadian public sector accounting standards, which requires that its results be proportionally consolidated within those of NRC. All inter-organizational balances and transactions are eliminated as part of the consolidation process. CFHT and TIO have audited financial statements as at December 31, 2016 which has been proportionally consolidated with NRC's March 31, 2017 financial statements.

c) Net cash provided by Government

NRC operates within the Consolidated Revenue Fund (CRF), which is administered by the Receiver General for Canada. All cash received by NRC is deposited to the CRF and all cash disbursements made by NRC are paid from the CRF. The net cash provided by Government is the difference between all cash receipts and all cash disbursements including transactions between departments (including agencies) of the Government.

d) Amounts due from the CRF

Amounts due from the CRF are the result of timing differences at year-end between when a transaction affects authorities and when it is processed through the CRF. Amounts due from the CRF represent the net amount of cash that NRC is entitled to draw from the CRF without further authorities to discharge its liabilities.

e) Revenues

Revenues are recognized in the year in which the underlying transaction or event occurred that gave rise to revenue as follows:

- Research and technical services: Revenues are recognized as services are provided based on percentage-of-completion.
- Intellectual property, royalties and fees: Revenues are recognized over the licence period.
- Sales of goods and information products: Revenue is recognized when goods or information products are delivered to the client.
- Rentals: Revenue is recognized in the period to which the lease or use of property relates.
- Grants and contributions: Revenue is recognized when the transfer payment is authorized and any eligibility criteria are met, except to the extent that transfer stipulations give rise to an obligation that meets the definition of a liability.

Funds received for which NRC has an obligation to other parties for the provision of goods, services or the use of assets in the future are recorded as deferred revenue.

Receipts are deposited to the CRF. Under the NRC Act, money received by NRC through the conduct of its operations is respendable in the current or in subsequent years.

Revenues that are non-respendable are not available to discharge NRC's liabilities. While the President of NRC is expected to maintain accounting control, he has no authority regarding the disposition of non-respendable revenues. As a result, non-respendable revenues are considered to be earned on behalf of the Government of Canada and are therefore presented as a reduction of the NRC's gross revenues.

f) Expenses

- Expenses are recorded on the accrual basis.
- Contributions are recognized in the year in which the recipient has met the eligibility criteria or fulfilled the terms of a contractual transfer agreement, provided that the transfer is authorized and a reasonable estimate can be made.
- Grants are recognized in the year in which the conditions for payment are met. In the case of grants which do not form part of an existing program, the expense is recognized when the Government announces a decision to make a non-recurring transfer, provided the enabling legislation or authorization for payment receives parliamentary approval prior to the completion of the consolidated financial statements.
- Vacation pay and compensatory leave are accrued as the benefits are earned by employees under their respective terms of employment.
- Services provided without charge by other government departments and agencies for accommodation, employer contributions to the health and dental insurance plans, legal services, workers' compensation and the services related to the email, data centre and network services and the email, data centre and network support unit as well as the acquisition and provision of hardware and software for end user devices are recorded as operating expenses at their estimated cost.

g) Employee future benefits

i) Pension benefits

Eligible employees participate in the Public Service Pension Plan ("the Plan"), a multiemployer pension plan administered by the Government of Canada. NRC's contributions to the Plan are charged to expenses in the year incurred and represent NRC's total obligation to the Plan. NRC's responsibility with regard to the Plan is limited to its contributions. Actuarial surpluses or deficiencies are recognized in the financial statements of the Government of Canada, as the Plan's sponsor.

ii) Severance benefits

Employees entitled to severance benefits under labour contracts or conditions of employment earn these benefits as services necessary to earn them are rendered. The obligation relating to the benefits earned by employees is calculated using information derived from the results of the actuarially determined liability for employee severance benefits for the Government as a whole.

h) Lease inducements

Lease inducements represent incentives received by NRC to enter into lease agreements for property at a nominal cost of one dollar. Lease inducements are deferred and amortized on the same basis as the related tangible capital assets.

i) Accounts receivable

Accounts receivable are stated at the lower of cost and net recoverable value. A valuation allowance is recorded for receivables where recovery is considered uncertain.

j) Contingent liabilities

Contingent liabilities are potential liabilities, which may become actual liabilities when one or more future events occur or fail to occur. To the extent that the future event is likely to occur or fail to occur, and a reasonable estimate of the loss can be made, an estimated liability is accrued and an expense recorded. If the likelihood is not determinable or an amount cannot be reasonably estimated, the contingency is disclosed in the notes to the consolidated financial statements.

k) Environmental liabilities

Environmental liabilities consist of estimated costs related to the remediation of contaminated sites as well as estimated costs related to obligations associated with the retirement of tangible capital assets and other environmental liabilities.

i) Contaminated sites

A liability for remediation of contaminated sites is recognized when all of the following criteria are satisfied:

- an environmental standard exists;
- contamination exceeds the environmental standard;
- NRC is directly responsible or accepts responsibility;
- NRC expects that future economic benefits will be given up; and
- a reasonable estimate of the amount can be made.

The liability reflects NRC's best estimate of the amount required to remediate the sites to the current minimum standard for its use prior to contamination. When the cash flows required to settle or otherwise extinguish a liability are expected to occur over extended future periods, a present value technique is used. The discount rate applied is taken from the Government's Consolidated Revenue Fund monthly lending rates for periods of one year and over. The discount rates used are based on the term rate associated with the estimated number of years to complete remediation.

ii) Asset retirement obligations

A liability for an asset retirement obligation is recognized when all of the following criteria are satisfied:

- there is an agreement, contract, legislation, or a constructive or equitable obligation that obligates NRC to incur retirement costs in relation to a tangible capital asset;
- the past event or transaction giving rise to the retirement liability has occurred;
- it is expected that future economic benefits will be given up; and
- a reasonable estimate of the amount can be made.

These costs are normally capitalized and amortized over the asset's estimated useful life based on NRC's best estimates of the cost to retire the tangible capital asset. The liability reflects the present value of estimated cash flows required to retire the assets where amounts can be reasonably estimated and is expected to be settled as the related sites, facilities or assets are removed from service.

The recorded environmental liabilities are adjusted each year, as required, for present value adjustments, inflation, new obligations, changes in management estimates and actual costs incurred.

If the likelihood of NRC's responsability is not determinable, a contigent liability is disclosed in the notes to the financial statements. If measurement uncertainty exists, it is also disclosed in the notes to the financial statements.

l) Inventories

Inventory consists of parts, materials and supplies held for future program delivery as well as inventory for resale. Inventory for resale is recorded at the lower of cost, using the average cost method, or net realizable value. Inventory for consumption is recorded at cost using the average cost method.

m) Equity investments

Equity investments include shares in public and privately-held companies. Equity investments are typically obtained as a result of debt settlement negotiations or as a result of non-monetary transactions (where financial assistance at better-than-market conditions was provided to firms through access to intellectual property, equipment and incubation space in laboratories). If the estimates of the non-monetary transactions cannot be determined, the equity investments are initially recorded at a nominal value. Otherwise they are initially recorded at fair value based on market prices. If the fair value of equity investments becomes lower than the book value and this decline in value is considered to be other than temporary, the equity investments are written down to fair value.

n) Endowment fund investments

Endowments consist of donations subject to externally imposed restrictions stipulating that the resources be maintained permanently by NRC. Income from the endowment fund investments may only be used for the purposes established by the donors.

Funds received for endowments are invested in bonds and other low risk instruments and are carried at amortized cost. Discounts and premiums arising on the purchase of these investments are amortized over the term of the investments.

o) Foreign currency transactions

Transactions involving foreign currencies are translated into Canadian dollar equivalents using rates of exchange in effect at the time of those transactions. Monetary assets and liabilities denominated in a foreign currency; CFHT and TIO assets and liabilities, are translated into Canadian dollars using the rate of exchange in effect at year end. Gains and losses resulting from foreign currency transactions are included in the applicable line on the Consolidated Statement of Operations and Departmental Net Financial Position according to the activities to which they relate. Net gains and losses relating to the sale of goods or services denominated in a foreign currency are included in revenues. Net gains and losses relating to the purchase of goods or services denominated in a foreign currency are included in expenses. Contractual obligations may contain foreign currencies that are translated into Canadian dollar equivalents using the rate of exchange in effect at March 31, 2017. CFHT and TIO revenues and expenses are translated into Canadian dollar equivalents using the average rate during the fiscal year.

p) Tangible capital assets

All tangible capital assets and leasehold improvements having an initial cost of $10,000 or more are recorded at their acquisition cost. Contributed tangible capital assets are recorded at fair value at the date of contribution. NRC does not capitalize intangibles, works of art and historical treasures that have cultural, aesthetic or historical value. Assets acquired under tangible capital leases are initially recorded at the lower of the present value of the minimum lease payments at the inception of the lease or fair value. Tangible capital assets held for sale are recorded at the lower of their carrying value or fair value less cost to sell and no amortization is recorded once the tangible capital asset is deemed held for sale.

Amortization of tangible capital assets is calculated on a straight-line basis over the estimated useful life of the asset as follows:

Asset Class	Amortization Period
Land	Not applicable
Buildings and facilities	25 years
Works and infrastructure	25 - 40 years
Machinery, equipment and furniture	10 years
Informatics equipment	5 years
Informatics software	5 years
Vehicles	7 years
Aircraft	15 - 30 years
Leasehold improvements	Lesser of the remaining term of the lease or useful life of the improvement
Leased tangible capital assets	In accordance with the asset class

Assets under construction are recorded in the applicable capital asset class in the year that they become available for use and are not amortized until they become available for use.

Where NRC enters into land leases at a nominal value, the transaction is considered as a non-monetary transaction and is recorded at fair value. If the fair value cannot be reasonably determined, the amount of the transaction is recorded at a nominal value.

The tangible capital assets consolidated from CFHT are stated at cost. Amortization is calculated on the straight-line method over the estimated useful lives of the tangible capital assets ranging from 4 to 50 years.

The tangible capital assets consolidated from TIO are stated at cost. Amortization is calculated on the straight-line method over the estimated useful lives of the tangible capital assets ranging from 3 to 10 years.

q) Measurement uncertainty

The preparation of these consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses reported in the consolidated financial statements. At the time of preparation of these consolidated statements, management believes the estimates and assumptions to be reasonable. The most significant items where estimates are used are percentage-of-completion on revenue from the provision of services, contingent liabilities, remediation liabilities, asset retirement obligations, the liability for employee severance benefits, the allowance for doubtful accounts, the fair value of non-monetary transactions related to leased tangible capital assets and the useful life of tangible capital assets. Actual results could significantly differ from those estimated. Management's estimates are reviewed periodically and, as adjustments become necessary, they are recorded in the consolidated financial statements in the year they become known.

3. Parliamentary Authorities

NRC receives most of its funding through annual parliamentary authorities. Items recognized in the Consolidated Statement of Operations and the Departmental Net Financial Position and the Consolidated Statement of Financial Position in one year may be funded through parliamentary authorities in prior, current or future years. Accordingly, NRC has different net results of operations for the year on a government funding basis than on an accrual accounting basis. The differences are reconciled in the following tables:

a) Reconciliation of net cost of operations to current year authorities used

(in thousands of dollars)	**2017**	**2016**
Net cost of operations before government funding and transfers	862,312	792,570
Adjustments for items affecting net cost of operations but not affecting authorities:		
Revenues	202,479	185,598
Amortization of tangible capital assets	(51,637)	(55,479)
Services provided without charge by other government departments and agencies (Note 14)	(52,265)	(49,173)
Increase in salary accrual (Note 6)	(15,770)	(5,667)
Decrease in employee future benefits	3,236	1,893
Refund of previous years' expenditures	5,074	7,663
Other increase (decrease)	3,178	(66)
Bad debt expense	(1,182)	(298)
Cost of goods sold	(878)	(807)
Loss on disposal of tangible capital assets	(740)	(1,885)
Increase (decrease) in inventory	(1,204)	(846)
CFHT- Contributed personnel services from affiliates	(1,071)	(1,102)
Decrease (Increase) in vacation pay and compensatory leave	(1,073)	972
Increase in accrued liabilities not charged to authorities	(487)	(782)
Increase in remediation liabilities (Note 6)	(2,477)	(71)
Total items affecting net cost of operations but not affecting authorities	85,183	79,950
Adjustments for items not affecting net cost of operations but affecting authorities:		
Acquisitions of NRC tangible capital assets and additions to assets under construction	95,935	66,512
Transition payments for implementing salary payment in arrears	-	60
Increase (decrease) in NRC prepaid expenses	1,392	1,190
Inventory purchases	3,918	4,796
Total items not affecting net cost of operations but affecting authorities	101,245	72,558
Current year authorities used	**1,048,740**	**945,078**

b) Authorities provided and used

(in thousands of dollars)	2017	2016
Authorities provided:		
Vote 1 – Operating expenditures	402,442	397,597
Vote 5 – Capital expenditures	123,186	59,262
Vote 10 – Grants and contributions	398,196	320,780
Statutory amounts:		
Revenues pursuant to paragraph 5(1)(e) of the *National Research Council Act*	328,721	311,632
Contributions to employee benefit plans	54,777	54,189
Proceeds from the disposal of surplus Crown assets	294	230
Collection agency fees	5	-
Loss on foreign exchange	-	275
Less:		
Revenues available for use in future years	(132,883)	(149,566)
Lapsed authorities:		
Frozen allotments – Operating	(14,524)	(11,283)
Frozen allotments – Grants and contributions	(46,580)	(14,962)
Frozen allotments – Capital	(38,129)	(2,500)
Unexpended authorities – Grants and contributions	(8,566)	(3,301)
Unexpended authorities – Operating	(3,050)	(6,183)
Unexpended authorities – Capital	(15,149)	(11,092)
Current year authorities used	**1,048,740**	**945,078**

4. Accounts Receivable

The following table presents details of NRC's accounts receivable balances:

(in thousands of dollars)	2017	2016
Receivables from external parties	34,931	30,044
Receivables from Canada Revenue Agency - GST (Note 14)	2,656	19,122
Receivables from other government departments and agencies (Note 14)	5,415	2,197
CFHT - Accounts receivable	16	283
TIO - Accounts receivable	78	91
Receivable and advances from employees	178	-
	43,274	51,737
Less: Allowance for doubtful accounts on receivables from external parties	(1,390)	(570)
Gross accounts receivable	**41,884**	**51,167**
Accounts receivable held on behalf of Government	(130)	(90)
Net accounts receivable	**41,754**	**51,077**

5. Cash and Investments

(in thousands of dollars)	2017	2016
Cash and investments held by CFHT	2,691	3,089
Cash and investments held by TIO	11,491	6,408
Equity investments	-	-
Cash and investments	**14,182**	**9,497**

Equity investments include shares in two public companies (two in 2016) and one privately held company (one in 2016). These shares were obtained through debt settlement or non-monetary transactions. NRC will consider timely opportunities for divestiture of equity investments by taking into account the interests, market liquidity and expected future growth of the applicable company.

As at March 31, 2017, the book value of the equity investments was three dollars (three dollars in 2016). The fair value of NRC's equity investments in public companies was fifty-three dollars (69 dollars in 2016). The fair value of the privately held companies is not determinable.

6. Accounts Payable and Accrued Liabilities

The following table presents details of NRC's accounts payable and accrued liabilities:

(in thousands of dollars)	2017	2016
Accounts payable – External parties	132,587	114,530
Accounts payable – Other government departments and agencies (Note 14)	10,941	14,967
Accrued wages and employee benefits	47,822	32,052
Contractor holdbacks	2,131	1,295
Remediation liabilities	2,718	241
Sales tax payable	334	374
CFHT – Accounts payable	211	231
TIO – Accounts payable	4,318	4,705
Total accounts payable and accrued liabilities	**201,062**	**168,395**

In *Canada's Economic Action Plan 2012*, the Government of Canada announced savings measures to be implemented by departments over the next three fiscal years starting in 2012-2013. Other savings measures have also been implemented by NRC. As a result, NRC has recorded at March 31, 2017 an obligation for termination benefits for an amount of $ 141,094 ($414,000 in 2016) as part of accrued wages and employee benefits to reflect the estimated workforce adjustment costs.

7. Deferred Revenue

Deferred revenue represents the balances at year-end of unearned revenues stemming from amounts received from external parties that are restricted in order to fund the expenditures related to specific research projects and stemming from amounts received for fees prior to services being performed. Revenue is recognized in the period in which these expenditures are incurred or in which the service is performed. Details of the transactions related to this account are as follows:

(in thousands of dollars)	2017	2016
Opening balance	8,958	9,072
Funds received	45,193	40,263
Revenue recognized	(46,140)	(40,377)
Closing balance	8,011	8,958
CFHT – Deferred revenue	158	52
Total deferred revenue	**8,169**	**9,010**

8. Employee Future Benefits

a) Pension benefits

Eligible NRC employees participate in the Public Service Pension Plan (the "Plan"), which is sponsored and administered by the Government of Canada. Pension benefits accrue up to a maximum of 35 years at a rate of 2% per year of pensionable service, times the average of the best five consecutive years of earnings. The benefits are integrated with Canada/Québec Pension Plans benefits and they are indexed to inflation.

Both the employees and NRC contribute to the cost of the Plan. Due to the amendment of the *Public Service Superannuation Act* following the implementation of provisions related to *Canada's Economic Action Plan 2012*, employee contributors have been divided into two groups - Group 1 relates to existing Plan members as of December 31, 2012 and Group 2 relates to members joining the Plan on or after January 1, 2013. Each group has a distinct contribution rate.

The 2016-2017 expense amounts to $38,163,026 ($37,352,332 in 2016). For Group 1 members, the expense represents approximately 1.12 times (1.25 times in 2016) the employee contribution and, for Group 2 members, approximately 1.08 times (1.24 times in 2016) the employee contributions.

NRC's responsibility with regard to the Plan is limited to its contributions. Actuarial surpluses or deficiencies are recognized in the financial statements of the Government of Canada, as the Plan's sponsor.

b) Severance benefits

NRC provides severance benefits to its employees based on eligibility, years of service and salary at termination of employment. These severance benefits are not pre-funded. Benefits will be paid from future authorities.

As part of changes to conditions of employment for executives and certain represented and non-represented employees, the accumulation of severance benefits under the employee severance pay program ceased for these employees commencing in 2012. Employees subject to these changes have been given the option to be immediately paid the full or partial value of benefits earned to date or collect the full or remaining value of benefits on termination from the public service. By March 31, 2017, all settlements for immediate cash out were completed. Severance benefits are unfunded and, consequently, the outstanding obligation will be paid from future authorities.

The changes in the obligations during the year were as follows:

(in thousands of dollars)	**2017**	**2016**
Accrued benefit obligation, beginning of year	34,553	36,446
Expense (adjustment) for the year	(309)	2,606
Benefits paid during the year	(2,927)	(4,499)
Accrued benefit obligation, end of year	**31,317**	**34,553**

9. Endowment Fund Investments

This account was established pursuant to paragraph 5(1)(f) of the NRC Act to record the residue of the estate of the late H.L. Holmes. Up to two thirds of the endowment fund's annual net income (maximum of $100,000) is used to finance the H.L. Holmes award on an annual basis. The award provides the opportunity to post-doctoral students to study at world famous graduate schools or research institutes under outstanding researchers. The monetary value and number of awards granted will be established by the H.L. Holmes selection committee.

(in thousands of dollars)	**2017**	**2016**
Endowment fund investments, beginning of year	5,070	5,006
Net income from endowment	165	173
Awards granted	(98)	(109)
Endowment fund investments, end of year	**5,137**	**5,070**

The portfolio for endowment fund investments had an average effective return of 3.56% (3.20% in 2016) and an average term to maturity of 1.01 years as at March 31, 2017 (1.70 years as at March 31, 2016). The fair value of the endowment investments as at March 31, 2017 was $5,262,918 ($5,276,972 in 2016).

10. Tangible Capital Assets

(in thousands of dollars)	Cost					Accumulated Amortization					Net Book Value	
Tangible capital asset class	**Opening balance**	**Acquisitions**	**Adjustments (1)**	**Disposals and write-offs**	**Closing balance**	**Opening balance**	**Amortization**	**Adjustments**	**Disposals and write-offs**	**Closing balance**	**2017**	**2016**
Land	9,812	-	-	(46)	9,766	-	-	-	-	-	9,766	9,812
Buildings and facilities	765,420	18,966	15,992	-	800,378	(516,275)	(18,053)	902	-	(533,426)	266,952	249,145
Works and infrastructure	35,337	525	228	-	36,090	(20,612)	(779)	-	-	(21,391)	14,699	14,725
Machinery, equipment and furniture	513,719	22,649	18,786	(11,481)	543,673	(392,299)	(26,845)	(841)	11,177	(408,808)	134,865	121,422
Informatics equipment	36,402	278	198	(1,074)	35,804	(34,806)	(713)	(27)	1,074	(34,472)	1,332	1,595
Informatics software	17,766	905	1,071	(489)	19,253	(15,624)	(897)	26	488	(16,007)	3,246	2,142
Vehicles	3,196	242	-	(214)	3,224	(2,173)	(221)	-	177	(2,217)	1,007	1,022
Aircraft	17,788	787	278	-	18,853	(10,938)	(309)	(16)	-	(11,263)	7,590	6,850
Leasehold improvements	17,607	-	-	(255)	17,352	(7,194)	(666)	-	2	(7,858)	9,494	10,413
Assets under construction	64,560	51,644	(31,713)	(5,520)	78,971	-	-	-	-	-	78,971	64,560
Assets under construction-NRC/TIO	1,856	6,960	-	-	8,816	-	-	-	-	-	8,816	1,856
Leased tangible capital assets	63,700	-	-	-	63,700	(28,398)	(2,548)	-	-	(30,946)	32,754	35,302
CFHT – Tangible capital assets	23,769	571	436	(46)	24,730	(17,527)	(405)	-	41	(17,891)	6,839	6,242
TIO – Tangible capital assets	7,591	5,069	181	-	12,841	(26)	(201)	-	-	(227)	12,614	7,565
Total	1,578,523	108,596	5,457	(19,125)	1,673,451	(1,045,872)	(51,637)	44	12,959	(1,084,506)	588,945	532,651

(1) Adjustments include assets under construction of $31,713,000 that were transferred to the other categories upon completion of the assets. During the year, NRC transferred machinery, equipment and furniture with a cost of $48,285 and accumulated amortization of $42,249 (net book value of $6,036) to an other government department.

Amortization expense for the year ended March 31, 2017 is $51,636,781 ($55,478,713 in 2016).

At March 31, 2017, NRC held nine land lease agreements (nine in 2016) for a nominal annual cost with universities. In these instances, NRC owns the building on the leased land. The fair value of the land leases for these non-monetary transactions could not be determined at the inception of the lease therefore they are recorded at a nominal value.

On March 21, 1996, NRC entered into a non-monetary transaction consisting of a lease agreement with the University of Western Ontario, whereby leased property was provided to NRC for 25 years (to March 20, 2021) at a nominal cost of one dollar. The property was recorded as a leased tangible capital asset at its fair value of $10,000,000. The annual amortization of $400,000 for the leased tangible capital asset is exactly offset by the amortization of the deferred contribution related to the leased property.

On May 23, 2006, NRC took possession of a new facility and entered into a non-monetary transaction with the University of Alberta at a nominal cost of one dollar per year. The lease provides a one year term with options to renew on 10 sequential occasions, each of the first nine renewals to be for a period of five years and the 10th renewal for a period of four years (to May 22, 2031). The building was recorded as a leased tangible capital asset at its fair value of $44,400,000. The annual amortization of $1,776,000 for the leased tangible capital asset is exactly offset by the amortization of the deferred contribution related to the leased building.

On September 1, 2006, NRC took possession of a new facility and entered into a non-monetary transaction with the University of Prince Edward Island at a nominal cost of one dollar per year. The lease provides a 19 month term with renewal options for seven additional periods of five years, and one additional period of three years and five months (to August 31, 2046). The building was recorded as a leased tangible capital asset at its fair value of $9,300,000. The annual amortization of $372,000 for the leased tangible capital asset is exactly offset by the amortization of the deferred contribution related to the leased building.

11. Contractual Obligations

The nature of NRC's activities can result in some large multi-year contracts and obligations whereby NRC will be obligated to make future payments in order to carry out its transfer payment programs or when the services/goods are received. Transfer payments and significant operating contractual obligations that can be reasonably estimated are summarized as follows:

(in thousands of dollars)	**2018**	**2019**	**2020**	**2021**	**2022 and thereafter**	**Total**
Transfer payments	226,969	95,366	66,803	10,519	6,503	406,160
Operating contracts	40,223	8,971	1,658	493	404	51,749
Total	**267,192**	**104,337**	**68,461**	**11,012**	**6,907**	**457,909**

Transfer payments contractual obligations to CFHT and TIO as shown in Notes 14c) and 14d) have been excluded from the contractual obligations.

12. Environmental liabilities

a) Remediation of contaminated sites

The Government has developed a "Federal Approach to Contaminated Sites", which incorporates a risk-based approach to the management of contaminated sites. Under this approach, the Government has inventoried the contaminated sites on federal lands, each site identified is to be classified, managed and recorded in a consistent manner. The systematic approach aides in the identification of the high risk sites in order to allocate limited resources to those sites which pose the highest risk to the environment and human health.

NRC has identified twelve sites (seventeen sites in 2016) where contamination may exist for which an assessment, remediation and monitoring may be required. Of these sites, NRC has identified six sites (four sites in 2016) where action is possible and for which a liability of $2,718,164 ($240,832 in 2016) has been recorded. The estimated liability is based on either external scientific/engineering consultants or NRC environmental officers with contaminated site experience reviewing the results of the assessments and underlying assumptions, and estimating the cost of the most likely remediation or risk management scenario. Two new sites are identified as of March 31, 2017.

The following table presents the total estimated amounts of these liabilities by nature, the associated expected recoveries and the total undiscounted future expenditures as at March 31, 2017 and March 31, 2016. When the liability estimate is based on future cash requirement, the amount is adjusted for inflation using a forecast CPI rate of 2%. Inflation is included in the undiscounted amount. The Government of Canada lending rate applicable to loans with similar terms to maturity has been used to discount the estimated future expenditures. The March 2017 rates range from 0.89% for a 2 year term to 2.55% for a 25 or greater year term. The source of the contamination is associated with the operations and maintenance where activities such as fuel storage/handling, waste sites and use of metal based paint resulted in former or accidental contamination, e.g. metals, petroleum hydrocarbons, polyaromatic hydrocarbons, etc. Sites often have multiple sources of contamination.

Nature of Liability						
Nature	**Number of Sites 2017**	**Estimated Liability 2017**	**Estimated Total Undiscounted Expenditures 2017**	**Number of sites 2016**	**Estimated Liability 2016**	**Estimated Total Undiscounted Expenditures 2016**
Former Mineral Exploration	1	32,660	32,660	1	18,417	18,417
Landfills/Waste Sites	1	7,344	7,344	1	7,200	7,200
Office/Commercial/ Industrial Operations	4	2,678,160	2,678,160	2	215,215	215,215
Total	**6**	**2,718,164**	**2,718,164**	**4**	**240,832**	**240,832**

There were no expected recoveries in 2016 and 2017 and the estimated total undiscounted expenditures equal the estimated liability in 2016 and 2017.

Of the six sites that do not have liabilities, four are considered to be a low priority based on the low level of risk to human health or the environment, and have not yet been assessed. Assessments will be initiated to identify if additional work, remediation or risk management is warranted, or if these site files can be closed. If contamination is found and it exceeds an environmental standard, a liability will be recognized as soon as a reasonable estimate can be made. Further assessment of one site is planned for decommissioning and site closure during 2017-18, and additional sampling will be conducted as a precautionary approach for another site which has a low likelihood of remediation requirement.

b) Asset retirement obligation

NRC has recognized an asset retirement obligation of $318,000 ($304,000 in 2016) in the consolidated financial statements as a result of its legal obligation to retire storage tank systems for petroleum products and allied petroleum products. The undiscounted amount of expected future cash flows required to settle the asset retirement obligation is estimated at $486,000 ($406,000 in 2016). The liability for the expected future cash flows, as reflected in the consolidated financial statements, has been discounted at a weighted average of 1.40% (2.62% in 2016) based on the Government of Canada benchmark bonds. This obligation will be settled over the useful lives of the operating assets. The following table summarizes the changes in the future asset retirement obligation:

(in thousands of dollars)	**2017**	**2016**
Asset retirement obligation, beginning of year	304	300
Obligations decreased (incurred)	7	(9)
Accretion of future asset retirement obligation	7	13
Asset retirement obligation, end of year	**318**	**304**

Other asset retirement obligations, such as the costs associated with the removal and disposal of asbestos and other designated substances located in NRC buildings, have not been recognized in the consolidated financial statements due to the fact that they are subject to several uncertainties. NRC generally incurs the cost of removing and disposing regulated substances during major building renovations; consequently the timing and scope of these renovations cannot be reasonably estimated at this time and therefore fair values cannot be reasonably determined. Changes in these assumptions and uncertainties could materially affect NRC's assets and liabilities as well as the resulting amortization and accretion expenses related to the asset retirement obligation.

The NRC's ongoing efforts to assess contaminated sites and asset retirement obligations may result in additional environmental liabilities. Any additional liabilities will be accrued in the year in which they become known and can be reasonably estimated.

13. Contingent Liabilities

Claims have been made against NRC in the normal course of operations. Legal proceedings for four claims were pending at March 31, 2017 (two in 2016). NRC has one claim that it believes will likely result in a liability where the amount is undeterminable (one in 2016) and three claims that it believes that outcome is undeterminable, as is the liability amount (one in 2016). In 2017, NRC has zero claims that it believes the outcome is unlikely (none in 2016).

14. Related Party Transactions

NRC is related as a result of common ownership to all government departments, agencies and Crown corporations. NRC enters into transactions with these entities in the normal course of business and on normal trade terms. During the year, NRC received common services which were obtained without charge from other government departments as disclosed below.

a) Common services provided without charge by other government departments and agencies

During the year, NRC received services without charge from other government departments and agencies. These services have been recognized in NRC's Consolidated Statement of Operations and Departmental Net Financial Position as follows:

(in thousands of dollars)	**2017**	**2016**
Employer's contributions to the health and dental insurance plans provided by Treasury Board Secretariat	32,837	29,751
Email, data centre and network services and the email, data centre and network support unit as well as the acquisition and provision of hardware and software for end user devices provided by Shared Services Canada	18,822	18,822
Legal services provided by Justice Canada	255	269
Workers' compensation benefits provided by Employment and Social Development Canada	161	155
Accommodation Services provided by Public Services and Procurement Canada (PSPC)	190	176
Total	**52,265**	**49,173**

The Government has centralized some of its administrative activities for efficiency, cost-effectiveness purposes and economic delivery of programs to the public. As a result, the Government uses central agencies and common service organizations so that one department performs services for all other departments and agencies without charge. The costs of these services, such as the payroll and cheque issuance services provided by Public Services and Procurement Canada, are not included in NRC's Consolidated Statement of Operations and Departmental Net Financial Position.

The activities related to the email, data centre and network services unit and the email, data centre and network support unit were transferred to Shared Services Canada (SSC) on November 15, 2011. Additionally, the activities related to the acquisition and provision of hardware and software for end user devices were transferred to SSC on April 3, 2013. The services provided after these transfer dates are recognized without charge.

b) Other transactions with related parties

(in thousands of dollars)	2017	2016
Accounts receivable from other government departments and agencies	8,071	21,319
Accounts payable to other government departments and agencies	10,941	14,967
Expenses – Other government departments and agencies	73,721	67,982
Revenues – Other government departments and agencies	62,227	51,503

Expenses and revenues disclosed in b) exclude common services provided without charge, which are already disclosed in a).

c) Canada-France-Hawaii Telescope Corporation

NRC has a related party relationship with the following non-federal government entity:

NRC was a founding member of the Canada-France-Hawaii Telescope Corporation, a tax-exempt, not-for-profit organization established under Hawaii state law to design, construct and operate a large optical telescope near the summit of Mauna Kea, Hawaii, USA, along with laboratories, equipment and associated installations. The Corporation was established in 1974 by a Tripartite Agreement among the NRC, the Centre National de la Recherche Scientifique of France and the University of Hawaii. NRC makes annual contributions to fund its 42.5% share of the cost of operations of the telescope and receives no direct benefit in return. However, as a result of NRC's contributions, Canada receives access to telescope observation hours for Canadian astronomers. As a founding member, NRC can appoint four of the 10 members of the board of directors. The NRC relationship with CFHT is considered a government partnership for accounting purposes and CFHT results are proportionally consolidated in these statements. In 2017, NRC contributed $4,1 million to CFHT ($3.9 million in 2016). These contributions are eliminated upon consolidation. CFHT's condensed financial information for the period ended December 31 is as follows:

(in thousands of dollars)	December 31, 2016	December 31, 2015
Total assets	23,705	25,130
Total liabilities	1,671	1,586
Total unrestricted net assets	22,034	23,544
Total revenues	14,585	15,525
Total expenses	16,095	14,868
Net operating results	(1,510)	657

NRC's future contractual obligations to CFHT are not included in the transfer payment contractual obligations (Note 11) and are as follows:

(in thousands of dollars)	2018	2019	2020	2021	2022 and thereafter	Total
CFHT	4,523	4,626	4,697	4,790	4,886	23,522

d) TMT International Observatory, LLC

NRC has a related party relationship with the following non-federal government entity:

NRC is a member since April 2015 of the TMT International Observatory, LLC ("TIO"), a tax-exempt, not-for-profit organization established under the state law of Delaware, USA. TIO was incorporated in May 2014 and formed for the purpose of the execution of the Thirty Meter Telescope Project through the construction, commissioning and operation of an observatory. The Corporation was established in 2014 by the Regents of the University of California ("UC"), the California Institute of Technology ("Caltech"), the National Institutes of Natural Sciences (Japan) ("NINS") and the National Astronomical Observatories of the Chinese Academy of Sciences ("NAOC"). The Department of Sciences of Technology, Government of India ("DST") and the NRC subsequently became members in 2014 and 2015 respectively. The NRC relationship with TIO is considered a government partnership for accounting purposes and TIO results are proportionally consolidated in these statements.The NRC membership participation was 19.5% as of 31 December 2016 based on the aggregate pledged by all current parties. In 2017, NRC contributed $6,9 million for TIO's Assets Under Construction. TIO's condensed financial information for the period ended December 31 is as follows:

(in thousands of dollars)	**December 31, 2016**	**December 31, 2015**
Total assets	127,773	79,015
Total liabilities	23,479	25,636
Total unrestricted net assets	104,294	53,379
Total revenues	77,366	77,084
Total expenses	24,661	19,040
Net operating results	52,705	58,044

NRC's future contractual obligations to TIO are based on Parliamentary authorities granted in 2015. NRC is aware of delays in the project, but no impact to future obligations has been identified at the completion of these financial statements. These contractual obligations for TIO are not included in the transfer payment contractual obligations (Note 11) and are as follows:

(in thousands of dollars)	**2018**	**2019**	**2020**	**2021**	**2022 and thereafter**	**Total**
TIO	44,167	48,520	18,335	13,907	25,043	149,972

15. Transfer of the transition payments for implementing salary payments in arrears

The Government of Canada implemented salary payments in arrears in 2015. As a result, a one-time payment was issued to employees and will be recovered from them in the future. Employees that were on leave without pay when the initial one-time transition payments were issued will receive the transition payment shortly after their return to work from their leave without pay. The transition to salary payments in arrears forms part of the transformation initiative that replaces the pay system and also streamlines and modernizes the pay processes. This change to the pay system had no impact on the expenses of NRC. However, it did result in the use of additional spending authorities by NRC. Prior to year end, the transition payments for implementing salary payments in arrears were transferred to a central account administered by Public Services and Procurement Canada (PSPC), who is responsible for the administration of the Government pay system.

16. Transfers from/to other government departments

Transfer of tangible capital assets between other government departments and NRC have occurred in 2016 and 2017.

The transaction is as follows:

(in thousands of dollars)	**2017**	**2016**
Net tangible capital asset transfers	6	47
Total	**6**	**47**

17. Segmented Information

Presentation by segment is based on the NRC's program alignment architecture (PAA). NRC allocates transactions over the PAA in accordance with stewardship principles, based on the Portfolios, Branch or IRAP that is responsible for managing the resource.

The presentation by segment is based on the same accounting policies as described in the Summary of significant accounting policies in Note 2. The following table presents the expenses incurred and revenues generated for the main program activities, by major object of expenses and by major type of revenues. The segment results for the period are as follows:

(in thousands of dollars)	Technology Development and Advancement	Industrial Research Assistance Program	Science Infrastructure and Measurement	Internal Services	**2017 Total**	**2016 Total**
Transfer payments						
Grants and contributions	-	264,651	64,169	560	329,380	292,837
Total transfer payments	-	264,651	64,169	560	329,380	292,837
Operating expenses						
Salaries and employee benefits	248,657	52,370	39,620	108,161	448,808	423,054
Utilities, material and supplies	38,868	506	4,790	36,741	80,905	73,047
Amortization of tangible capital assets	27,011	24	3,782	20,820	51,637	55,479
Professional services	28,871	4,979	8,500	40,960	83,310	68,334
Repair and maintenance	9,680	16	530	11,224	21,450	20,835
Payment in lieu of taxes	-	6	-	14,905	14,911	12,418
Transportation and communication	8,658	2,425	3,129	2,397	16,609	14,790
Rentals	1,223	1,485	366	6,291	9,365	8,370
Awards	20	1	-	2,021	2,042	2,136
Loss (gain) on disposal of tangible capital assets	794	-	31	(84)	741	1,885
Costs of goods sold	374	-	504	-	878	807
Information	834	119	345	952	2,250	1,924
Bad debts	-	-	-	1,182	1,182	298
Other	1	-	337	985	1,323	1,954
Total operating expenses	364,991	61,931	61,934	246,555	735,411	685,331
Total expenses	364,991	326,582	126,103	247,115	1,064,791	978,168
Revenues						
Research services	50,984	-	4,779	-	55,763	52,084
Technical services	81,917	1,668	4,368	9,167	97,120	88,573
Intellectual property, royalties and fees	717	-	-	7,896	8,613	9,060
Sales of goods and information products	5,802	-	1,920	12	7,734	6,603
Rentals	307	-	-	6,573	6,880	6,513
Grants and contributions	362	-	14,849	2,250	17,461	16,587
Lease inducement revenue	-	-	-	2,548	2,548	2,548
Other	(506)	(875)	2,676	5,187	6,482	3,730
Revenues earned on behalf of Government	-	-	-	(122)	(122)	(100)
Total revenues	139,583	793	28,592	33,511	202,479	185,598
Net cost of operations before government funding and transfers	**225,408**	**325,789**	**97,511**	**213,604**	**862,312**	**792,570**

18. Financial Instruments

NRC's financial instruments consist of due from CRF, accounts receivable, investments and accounts payable and accrued liabilities. Unless otherwise noted, it is management's opinion that NRC is not exposed to significant interest, currency or credit risk arising from these financial instruments. Unless otherwise disclosed in these consolidated financial statements, management estimates that the carrying values of the financial instruments approximate their fair value due to their impending maturity.

Annex to the Statement of Management Responsibility including Internal Control over Financial Reporting (Unaudited)

For the year ended March 31, 2017

1. Introduction

This document provides summary information on the measures taken by NRC to maintain an effective system of internal control over financial reporting, including information on internal control management, assessment results and related action plans.

Detailed information on NRC's authority, mandate and program activities can be found in the 2016-17 Departmental Results Report [HYPERLINK] and the 2017-18 Departmental Plan.

2. Departmental system of internal control over financial reporting

2.1 Internal control management

NRC has a well-established governance and accountability structure to support departmental assessment efforts and oversight of its system of internal control. A departmental internal control management framework, approved by the Deputy Head, is in place which includes:

- Organizational accountability structures as they relate to internal control management to support sound financial management, including roles and responsibilities of senior managers in their areas of responsibility for control management;
- Values and ethics;
- Ongoing communication and training on statutory requirements, and policies and procedures for sound financial management and control; and
- At least semi-annual monitoring of and regular updates on internal control management, as well as the provision of related assessment results and action plans to the Deputy Head and departmental senior management and, as applicable, the Departmental Audit Committee.

The Departmental Audit Committee provides advice to the Deputy Head on the adequacy and functioning of NRC's risk management, control and governance frameworks and processes.

2.2 Service arrangements relevant to financial statements

NRC relies on other organizations for the processing of certain transactions that are recorded in its financial statements as follows:

Common arrangements

- Public Services and Procurement Canada (PSPC) centrally administers the payments of salaries and the procurement of goods and services in accordance with NRC's Delegation of Authority, and provides some accommodation on behalf of NRC;
- The Treasury Board of Canada Secretariat provides NRC with information used to calculate various accruals and allowances, such as the accrued severance liability;
- The Department of Justice Canada provides legal services to NRC; and

- Shared Services Canada provides information technology (IT) infrastructure services to NRC in the areas of data centre and network services. The scope and responsibilities are addressed in the interdepartmental arrangement between Shared Services Canada and NRC.

3. Departmental assessment results during fiscal year 2016-17

The key findings and significant adjustments required from the current year's assessment activities are summarized below.

3.1 New or significantly amended key controls

There were three significant changes impacting NRCs Key Financial Controls during 2016-17:

Firstly, the implementation of Phoenix required substantial resources. Although the NRC is an "Integration Department" and as such is not a fully serviced department with regards to payroll, there was still a significant impact on the organization with regards to the implementation. NRC formally reviewed, documented and assessed business processes and controls regarding key integration points and the impact of Phoenix. Furthermore, NRC proactively implemented the use of data analytics and an updated S.33 approach to payroll for continued payroll analysis.

Secondly, it should be noted that a formalized external assessment of the Delegation of Authority Application was conducted prior to the launch of electronic authorizations in order to assess the controls within the financial system.

Thirdly, NRCs contribution management system was formally integrated with NRCs financial system; resulting in additional system controls and operational efficiencies for electronic approvals. Post launch, additional operational effectiveness testing was conducted on key controls and is being performed on an ongoing basis.

3.2 Ongoing monitoring program

As part of its rotational ongoing monitoring (OGM) plan, NRC completed its reassessment of financial controls within procurement to payment, transfer payments, capital assets, inventory, payroll administration, revenues/receivables as well as entity level controls and information technology general controls (ITGC).

For the most part, the key controls tested performed as intended, with remediation required as follows:

- *Procurement to payment*: Consistent with last year's assessment, inconsistencies remain regarding the application of expenditure initiation and section 34 for expenses with payments made to other government departments through interdepartmental settlements. NRC is in the process of developing and implementing electronic approvals for purchases, including goods or services received from other government departments, which will address these inconsistencies (in progress);

- *Transfer payments:* Assessment of contribution files demonstrated compliance with most of the existing policies and business processes. However, consistent with last year's assessment, the application of established Section 34 and Section 33 account verification procedures was not applied consistently. Observations and deficiencies were communicated to management and to the responsible parties. Results are expected to improve with the continued system integration and electronic approvals. Necessary remediation measures have been or are currently being implemented by NRC (in progress);

- *Capital assets:* Some minor improvements were noted with regards to key financial controls identified from the previous review (2015-16), as it related to lower level custodianship accountability issues. As well, fiscal year 2015-16 ongoing monitoring activities detected a change in business process for infrastructure capital projects which required the implementation of specific remediation activities, and the 2016-17 follow up review noted positive results. A complete review of strengthened business processes surrounding the administration of capital assets is underway (in progress) and we expect to see additional positive results in the next fiscal year;

- *Payroll:* Payroll testing results remain consistent with last year's findings with minimal impacts on financial controls and the identification of minor improvement opportunities in relation to some lower level business processes. Following the implementation of the new Federal pay system Phoenix, NRC conducted a full review of all NRC payroll business processes. It should be noted that the implementation of Phoenix had a significant impact on the organization as an integrated department (in progress);

- *Master data:* A periodical review plan is currently in progress;

- *Electronic Workflow Approvals*

  - *Delegation of Authority Application (DAA):* NRC's DAA is the foundation for the implementation of electronic authentication and authorization. The final phase of the DAA was the implementation of electronic workflows approval of financial signing authority delegations and financial system access.

  - *Purchase to Pay (P2P):* Approval workflows utilize the DAA to ensure the approval is routed to the appropriate delegated authority based on the approved financial signing authorities matrix and delegated authorities. Auto approvals of three components of the P2P business process were implemented in 2016-17: online requisitioning for goods and services (expenditure initiation and section 32), Section 34 contribution payments, and requests for information prior to section 34.

  In conjunction to this, a formalized external control assessment was conducted which yielded positive results leading to the implementation of section 34 invoice certification in 2017-18. This should eliminate improper segregation of duties at the transaction level, if conflictual roles are assigned. An interim monitoring plan of conflicting roles is in progress; and

- *Revenue*: There continue to be some elements of the business process that are not fully entrenched in operations and thus not consistently followed. A complete review of the revenue management framework business processes was conducted and has resulted in some additional changes that are currently being implemented. In order to ensure that operational effectiveness was fully assessed, alternate testing was conducted to ensure that revenues were appropriately recorded (in progress).

4. Departmental action plan

4.1 Progress during fiscal year 2016-17

NRC continued to conduct its ongoing monitoring according to the previous fiscal year's rotation plan as shown in the following table.

Previous year's rotational ongoing monitoring plan for current year	Status
Entity level controls, information technology general controls and payroll administration	Completed as planned and no remedial actions required.
Procurement to payment, transfer payments, capital assets and master data	Completed as planned with some remedial actions complete and some underway. Master data has been postponed to the new year.
Revenues, receivables and receipts	Some operating effectiveness testing delayed or alternatively tested due to delays in fully operationalizing the management action plan.

4.2 Action plan for the next fiscal year and subsequent years

NRC's rotational ongoing monitoring plan over the next three years, based on an annual validation of the high risk processes and controls and related adjustments to the ongoing monitoring plan as required, is shown in the following table.

Key control areas	Fiscal year 2017-18	Fiscal year 2018-19	Fiscal year 2019-20
ELCs	√	√	√
ITGCs under departmental management	√	√	√
Procurement to payment	√	√	√
Transfer payments	√	√	√
Capital assets	√	√	√

Inventory		√	
Payroll administration	√	√	√
Revenues, receivables and receipts	√	√	√
Master data – customers / vendors	√		

In addition to the ongoing monitoring rotational plan, NRC also plans to review remediation actions completed in 2017-18 in all areas in which issues were noted in Section 3. NRC also plans to continue remediation of adjustments identified during its assessments. When new business processes are introduced, or significant internal control process changes occur, NRC will proactively identify, document and test key controls based on associated risks. The results will be incorporated into the assessment plan and the ongoing monitoring program.