



Consolidated Financial Statements

National Research Council Canada

March 31, 2019

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, 2019, 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, 2019 was completed in accordance with the Treasury Board *Policy on Financial Management* and the results and action plans are summarized in the annex.

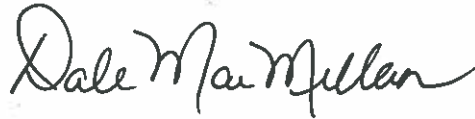
The effectiveness and adequacy of NRC's system of internal control is reviewed by the work of Internal Audit and Financial Monitoring staff, who conduct periodic audits of different areas of NRC's operations, and by the NRC Departmental Audit Committee, which oversees management's responsibilities for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

Ernst & Young LLP has expressed an opinion on the fair presentation of the consolidated financial statements of NRC for the year ended March 31, 2019, which does not include an audit opinion on the annual assessment of the effectiveness of NRC's ICFR.

A handwritten signature in blue ink, appearing to read 'Iain Stewart', with a stylized, flowing script.

Iain Stewart
President

Ottawa, Canada
June 27, 2019

A handwritten signature in black ink, appearing to read 'Dale MacMillan', with a stylized, flowing script.

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

Independent auditor's report

To the National Research Council Canada

Opinion

We have audited the consolidated financial statements of the **National Research Council Canada** ["NRC"], which comprise the consolidated statement of financial position as at March 31, 2019, the consolidated statement of operations and departmental net financial position, the consolidated statement of change in departmental net financial assets and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of NRC as at March 31, 2019, and its consolidated results of operations, and its consolidated cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of NRC in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the 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.

In preparing the consolidated financial statements, management is responsible for assessing NRC's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate NRC or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the NRC's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 NRC's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on NRC's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause NRC to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the NRC to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Ottawa, Canada
June 27, 2019

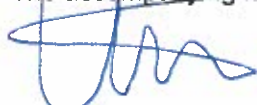
The logo for Ernst & Young LLP, featuring the company name in a stylized, handwritten-style script.

Chartered Professional Accountants
Licensed Public Accountants

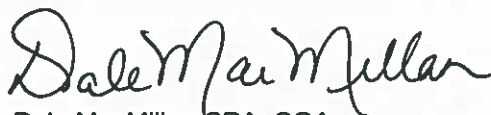
National Research Council Canada
Consolidated Statement of Financial Position
As at March 31

<i>(in thousands of dollars)</i>	<u>2019</u>	<u>2018</u> Restated (Note 4)
Financial Assets		
Due from Consolidated Revenue Fund	333,687	303,546
Accounts receivable (Note 5)	35,955	42,650
Inventory for resale	6,500	6,140
Cash and investments (Note 6)	<u>16,682</u>	<u>11,146</u>
Total gross financial assets	392,824	363,482
Financial assets held on behalf of Government		
Accounts receivable (Note 5)	<u>(39)</u>	<u>(63)</u>
Total financial assets held on behalf of Government	(39)	(63)
Total net financial assets	392,785	363,419
Liabilities		
Accounts payable and accrued liabilities (Note 7)	228,865	197,055
Vacation pay and compensatory leave	30,911	29,746
Lease inducements	27,658	30,206
Deferred revenues (Note 8)	11,140	9,139
Lease obligation for tangible capital assets (Note 9)	343	719
Employee future benefits (Note 10)	<u>45,596</u>	<u>46,636</u>
Total liabilities	344,513	313,501
Departmental net financial assets	48,272	49,918
Non-financial assets		
Prepaid expenses	15,215	15,733
Endowment fund investments (Note 11)	5,313	5,259
Inventory for consumption	7,217	6,747
Tangible capital assets (Note 12)	<u>664,569</u>	<u>626,506</u>
Total non-financial assets	692,314	654,245
Departmental net financial position	<u>740,586</u>	<u>704,163</u>
Contractual rights (Note 13)		
Contractual obligations (Note 14)		
Environmental liabilities (Note 15)		
Contingent liabilities (Note 16)		

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 27, 2019

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

<i>(in thousands of dollars)</i>	2019 Planned Results	2019	2018 Restated (Note 4)
Expenses			
Science and Innovation	820,179	967,044	885,276
Internal Services	166,691	156,644	159,584
Total expenses	986,870	1,123,688	1,044,860
Revenues			
Technical services	100,427	98,806	112,673
Research services	56,952	64,264	66,883
Intellectual property, royalties and fees	8,479	6,115	12,292
Grants and contributions	19,907	8,569	10,276
Rentals	7,143	7,290	6,628
Sales of goods and information products	6,779	5,420	6,555
Lease inducement revenues	2,548	2,548	2,548
Other	-	5,217	3,625
Revenues earned on behalf of Government	(135)	(44)	(128)
Total revenues	202,100	198,185	221,352
Net cost of operations before government funding and transfers	784,770	925,503	823,508
Government funding and transfers			
Net cash provided by Government	883,075	897,017	812,949
Change in due from Consolidated Revenue Fund	-	30,141	8,038
Services provided without charge by other government departments and agencies (Note 17a)	55,296	34,772	54,473
Transfers from other government departments (Note 18)	-	(4)	(4)
Net revenues from operations after government funding and transfers	153,601	36,423	51,948
Departmental net financial position – Beginning of year	704,163	704,163	652,215
Departmental net financial position – End of year	857,764	740,586	704,163

Segmented information (Note 19)

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

<i>(in thousands of dollars)</i>	2019 Planned Results	2019	2018 Restated (Note 4)
Net revenue from operations after government funding and transfers	153,601	36,423	51,948
Change due to tangible capital assets			
Acquisition of tangible capital assets	(189,878)	(89,997)	(92,839)
Amortization of tangible capital assets	46,000	51,505	54,003
Proceeds from disposal of tangible capital assets	-	696	173
Net loss on disposal of tangible capital assets including adjustments	-	196	802
Transfers from other government departments (Note 18)	-	4	4
Other adjustments	-	(467)	296
Total change due to tangible capital assets	(143,878)	(38,063)	(37,561)
Change due to inventory for consumption	-	(470)	1,185
Change due to endowment fund investments	-	(54)	(122)
Change due to prepaid expenses	-	518	(3,026)
Net change in departmental net financial assets	9,723	(1,646)	12,424
Departmental net financial assets – Beginning of year	49,918	49,918	37,494
Departmental net financial assets – End of year	59,641	48,272	49,918

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

<i>(in thousands of dollars)</i>	2019	2018 Restated (Note 4)
Operating activities		
Net cost of operations before government funding and transfers	925,503	823,508
Non-cash items:		
Amortization of tangible capital assets	(51,505)	(54,003)
Net loss on disposal of tangible capital assets	(196)	(802)
Services provided without charge by other government departments and agencies (Note 17a)	(34,772)	(54,473)
Other adjustments to tangible capital assets	467	(296)
Variations in Consolidated Statement of Financial Position:		
Increase (decrease) in accounts receivable	(6,671)	833
Increase (decrease) in inventory for resale	360	869
Increase (decrease) in prepaid expenses	(518)	3,026
Increase (decrease) in inventory for consumption	470	(1,185)
Decrease (increase) in accounts payable and accrued liabilities	(31,810)	4,007
Decrease (increase) in vacation pay and compensatory leave	(1,165)	(762)
Decrease (increase) in lease inducements	2,548	2,548
Decrease (increase) in deferred revenue	(2,001)	(970)
Decrease (increase) in lease obligation for tangible capital assets	(49)	(852)
Decrease (increase) in employee future benefits	1,040	1,616
Cash used in operating activities	801,701	723,064
Capital investing activities		
Acquisitions of tangible capital assets	89,997	92,839
Proceeds from disposal of tangible capital assets	(696)	(173)
Cash used in capital investing activities	89,301	92,666
Investing activities		
Income from endowment fund investments	154	149
Awards granted from endowment fund	(100)	(27)
Increase (decrease) in CFHT and TIO cash and investments	5,536	(3,036)
Cash used in (provided by) investing activities	5,590	(2,914)
Financing activity		
Lease payments for tangible capital assets	425	133
Cash used in financing activity	425	133
Net cash provided by Government of Canada	897,017	812,949

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

National Research Council Canada
Notes to Consolidated Financial Statements
For the Year Ended March 31, 2019

1. Authority and Objectives

The National Research Council is the Government of Canada's largest science and research organization and exists under the *National Research Council Act* (NRC Act). The NRC is a departmental corporation named in Schedule II of the *Financial Administration Act*. The mission of NRC is to have an impact by advancing knowledge, applying leading-edge technologies, and working with other innovators to find creative, relevant and sustainable solutions to Canada's current and future economic, social and environmental challenges.

In delivering its mandate, the NRC reports under the Core Responsibility Science and Innovation, which is to grow and enhance the prosperity of Canada through: undertaking, assisting and promoting innovation-driven research and development; advancing fundamental science and Canada's global research excellence; providing government, business and research communities with access to scientific and technological infrastructure, services and information; and supporting Canada's skilled workforce and capabilities in science and innovation.

Internal Services are those groups of related activities and resources that the federal government considers to be services in support of programs and/or required to meet corporate obligations of an organization. Internal Services refers to the activities and resources of the 10 distinct services that support program delivery in the organization, regardless of the Internal Services delivery model in a department. These services are: Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Material Management Services; and Acquisition Management Services.

2. Summary of Significant Accounting Policies

The Public Sector Accounting Board issued a new accounting standard effective for fiscal years beginning on or after April 1, 2018.

As a result, NRC adopted the new accounting standard for *Restructuring Transactions* (PS 3430). This new Section establishes standards on how to account for and report restructuring transactions by both the transferors and recipients of assets and/or liabilities, together with related program and operating responsibilities. The adoption of this new standard did not result in any financial impact on NRC's consolidated financial statements.

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 2018-19 Departmental Plan. 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 1 and December 31, 2018. 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, 2018 that have been proportionally consolidated with NRC's March 31, 2019 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 revenues as follows:

- Research and technical services: Revenues are recognized as services are provided based on percentage of completion.
- Licences and fees for intellectual property: Revenues are recognized at the point of time when the customer has a right to use NRC's intellectual property and the performance obligation is satisfied.
- Royalties generated from usage or based on customer's sales from licences: Revenues are recognized over the licence period as performance is satisfied and the right to payment is enforceable.
- Sales of goods and information products: Revenues are recognized when goods or information products are delivered to the client.
- Rentals: Revenues are recognized in the period to which the lease or use of property relates.
- Grants and contributions: Revenues are 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 revenues.

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

Revenues that are non-spendable 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-spendable revenues. As a result, non-spendable revenues are considered to be earned on behalf of the Government of Canada and are therefore presented as a reduction of 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 that 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, when estimable.

g) Employee future benefits

i) Pension benefits

Eligible employees participate in the Public Service Pension Plan (the Plan), a multi-employer 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 derived from an actuarial valuation specific to NRC.

iii) Sick leave benefits

NRC employees are eligible to accumulate sick leave until termination of employment. Unused sick leave is not eligible for payment on retirement or termination, nor can it be used as vacation. All sick leave is an accumulating non-vesting benefit. A liability is recorded for sick leave balances expected to be taken in excess of future allotments. The cost of sick leave as well as the present value of the obligation is determined using an actuarial valuation. Any gains and losses are recognized in net results in the period in which they arise.

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 their 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 CRF 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 responsibility is not determinable, a contingent liability is disclosed in the notes to the consolidated financial statements. If measurement uncertainty exists, it is also disclosed in the notes to the consolidated financial statements.

l) Inventory

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 and 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, 2019. 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 financial statements, management believes the estimates and assumptions to be reasonable. The most significant items where estimates are used are percentage of completion on revenues from the provision of services, contingent liabilities, remediation liabilities, asset retirement obligations, the liability for employee severance benefits, sick leave 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

<i>(in thousands of dollars)</i>	2019	2018 Restated (Note 4)
Net cost of operations before government funding and transfers	<u>925,503</u>	<u>823,508</u>
Adjustments for items affecting net cost of operations but not affecting authorities:		
Revenues	198,185	221,352
Amortization of tangible capital assets	(51,505)	(54,003)
Services provided without charge by other government departments and agencies (Note 17a)	(34,772)	(54,473)
Decrease (increase) in salary accrual	16,670	(4,700)
Decrease (increase) in employee future benefits	1,040	1,616
Refund of previous years' expenditures	5,243	3,228
Other decrease (increase)	(712)	(54)
Bad debt expense	(876)	(55)
Loss on disposal of tangible capital assets	(196)	(802)
Decrease (Increase) in vacation pay and compensatory leave	(1,165)	(762)
Decrease (increase) in remediation liabilities (Note 7)	(234)	(506)
Portions of accounts of CFHT and TIO (Note 17c and 17d)	<u>4,068</u>	<u>(7,858)</u>
Total items affecting net cost of operations but not affecting authorities	135,746	102,983
Adjustments for items not affecting net cost of operations but affecting authorities:		
Acquisitions of tangible capital assets and additions to assets under construction	83,267	88,041
Increase (decrease) in prepaid expenses	(518)	3,026
Increase (decrease) in inventory	830	(316)
Decrease (increase) in lease obligations for tangible capital assets	<u>376</u>	<u>(719)</u>
Total items not affecting net cost of operations but affecting authorities	83,955	90,032
Current year authorities used	<u>1,145,204</u>	<u>1,016,523</u>

b) Authorities provided and used

<i>(in thousands of dollars)</i>	2019	2018
Authorities provided:		
Vote 1 – Operating expenditures	461,018	410,248
Vote 5 – Capital expenditures	81,657	107,122
Vote 10 – Grants and contributions	517,708	377,821
Statutory amounts:		
Revenues pursuant to paragraph 5(1)(e) of the <i>National Research Council Act</i>	325,009	339,147
Contributions to employee benefit plans	59,717	52,205
Proceeds from the disposal of surplus Crown assets	718	192
Collection agency fees	1	2
Loss on foreign exchange	-	105
Less:		
Revenues available for use in future years	(129,745)	(131,666)
Lapsed authorities:		
Frozen allotments – Operating	(809)	(127)
Frozen allotments – Grants and contributions	(111,634)	(76,115)
Frozen allotments – Capital	-	(16,800)
Unexpended authorities – Grants and contributions	(16,856)	(7,669)
Unexpended authorities – Operating	(21,634)	(17,230)
Unexpended authorities – Capital	(19,946)	(20,712)
Current year authorities used	1,145,204	1,016,523

4. Accounting Changes

During 2018-2019, NRC began recognizing accumulated employee sick leave entitlement as a liability. The recognition of this liability was adopted to reflect Canadian public sector accounting standards as prescribed by PS 3255 - *Post Employment Benefits, Compensated Absences and Termination Benefits*. The significant changes to NRC's consolidated financial statements are described below. These changes have been applied retroactively and comparative information for 2018 has been restated.

An accrued benefit obligation has been recognized with an ending value of \$16,935,000 in 2017. As a result, the opening equity balance has decreased by \$16,935,000 and has been restated for 2018.

In 2018, accrued benefit obligation expenses of \$1,832,000 and an estimated pay out of related benefits of \$2,412,000 resulted in a decrease of the accrued benefit obligation by \$580,000. Employee future benefits expenses have been restated for 2018.

The effects of the accounting change on comparative figures are illustrated in the table below.

<i>(in thousands of dollars)</i>			
	2018 As previously stated	Effect of change	2018 Restated
Consolidated Statement of Financial Position			
Employee future benefits	30,281	16,355	46,636
Total liabilities	297,146	16,355	313,501
Departmental net financial position	720,518	(16,355)	704,163
Consolidated Statement of Operations and Departmental Net Financial position			
Total expenses	1,045,440	(580)	1,044,860
Departmental net financial position – Beginning of year	669,150	(16,935)	652,215
Departmental net financial position – End of year	720,518	(16,355)	704,163

5. Accounts Receivable

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

<i>(in thousands of dollars)</i>	2019	2018
Receivables from external parties	31,445	36,171
Receivables from Canada Revenue Agency GST (Note 17b)	2,533	2,784
Receivables from other government departments and agencies (Note 17b)	2,568	3,615
CFHT – Accounts receivable	79	201
TIO – Accounts receivable	1	-
Receivable and advances from employees	256	281
	36,882	43,052
Less: Allowance for doubtful accounts on receivables from external parties	(927)	(402)
Accounts receivable net of allowances	35,955	42,650
Accounts receivable held on behalf of Government	(39)	(63)
Net accounts receivable	35,916	42,587

6. Cash and Investments

<i>(in thousands of dollars)</i>	2019	2018
Cash and investments held by CFHT	1,928	1,947
Cash and investments held by TIO	14,754	9,199
Equity investments	-	-
Cash and investments	16,682	11,146

Equity investments include shares in two public companies (two in 2018) and one privately held company (one in 2018). 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, 2019, the book value of the equity investments was three dollars (three dollars in 2018). The fair value of NRC's equity investments in public companies was three dollars (9 dollars in 2018). The fair value of the privately held companies is not determinable.

7. Accounts Payable and Accrued Liabilities

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

<i>(in thousands of dollars)</i>	2019	2018
Accounts payable – External parties	146,343	95,273
Accounts payable – Other government departments and agencies (Note 17b)	30,925	21,351
Accrued wages and employee benefits	40,873	69,339
Contractor holdbacks	1,973	2,645
Remediation liabilities (Note 15a)	3,458	3,224
Sales tax payable	352	555
CFHT – Accounts payable	258	291
TIO – Accounts payable	4,683	4,377
Total accounts payable and accrued liabilities	228,865	197,055

8. Deferred Revenues

Deferred revenues 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. Revenues are 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:

<i>(in thousands of dollars)</i>	2019	2018
Opening balance	8,986	8,011
Funds received	47,464	67,031
Revenues recognized	<u>(45,469)</u>	<u>(66,056)</u>
Closing balance	10,981	8,986
CFHT – Deferred revenues	159	153
Total deferred revenues	11,140	9,139

9. Lease Obligation for Tangible Capital Assets

NRC has entered into an agreement to lease scientific equipment under capital lease with a cost of \$901,000 and accumulated amortization of \$113,000 as at March 31, 2019 (\$28,000 as at March 31, 2018). The obligation related to the upcoming years include the following:

<i>(in thousands of dollars)</i>	2019	2018
2019	-	185
2020	185	185
2021	121	185
2022	46	139
2023	<u>-</u>	<u>47</u>
Total future minimum lease payments	352	741
Less: imputed interest (1.75%)	(9)	(22)
Balance of obligations under leased tangible capital assets	343	719

10. 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 2018-2019 expense amounts to \$41,646,764 (\$35,551,328 in 2018). For Group 1 members, the expense represents approximately 1.01 times (1.01 times in 2018) the employee contribution and, for Group 2 members, approximately 1.00 times (1.00 times in 2018) 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. Severance benefits provided to NRC's employees were previously based on an employee's eligibility, years of service and salary at termination of employment. However, since 2011, the accumulation of severance benefits for voluntary departures progressively ceased for substantially all employees. Employees subject to these changes were given the option to be paid the full or partial value of benefits earned to date or collect the full or remaining value of benefits upon departure from the public service. 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:

<i>(in thousands of dollars)</i>	2019	2018
Accrued severance benefit obligation – beginning of year	30,281	31,317
Expense for the year:		
Current service cost	754	653
Interest cost	490	739
Actuarial loss	-	669
	<u>31,525</u>	<u>33,378</u>
Benefits paid during the year	(2,326)	(3,097)
Accrued benefit obligation, end of year	29,199	30,281

At the end of fiscal year 2018, an actuarial valuation of NRC's severance benefits obligation was completed using the projected benefit method. The significant actuarial assumptions adopted in measuring the severance benefits obligation are as follows

	2019	2018
Discount rate	1.7%	2.1%
Rate of compensation economic increase per year:		
2018	1.9%	1.9%
2019	2.0%	2.0%
Average remaining service period of active employees	13.0 years	13.0 years

c) Sick Leave Benefits

NRC provides benefits for sick leave to its eligible employees consisting of one and one-quarter (1 1/4) days of sick leave per calendar month. Sick leave can only be used for paid time off at the employee's normal rate of pay when the employee is unable to perform their duties because of illness or injury. Unused sick leave benefits accumulate during the employee's period of service and no payment is due to employees upon termination of employment for unused days. The changes in the obligation during the year were as follows:

<i>(in thousands of dollars)</i>	2019	2018
Employee sick leave benefit obligation – beginning of year	16,355	16,935
Expense for the year:		
Current service cost	2,166	2,205
Interest cost	340	269
Actuarial gain	-	(642)
	<u>18,861</u>	<u>18,767</u>
Benefits paid during the year	(2,464)	(2,412)
Accrued benefit obligation, end of year	16,397	16,355

At the end of fiscal year 2018, an actuarial valuation of NRC's employee sick leave benefit obligation was completed using the projected benefit method prorated on services. The significant actuarial assumptions adopted in measuring the employee sick leave benefit obligation are as follows:

	2019	2018
Discount rate	2.1%	2.1%
Rate of compensation economic increase per year:		
2018	2.2%	2.2%
2019	2.2%	2.2%
Average remaining service period of active employees	12.8 years	12.8 years

11. 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 is established by the H.L. Holmes selection committee.

<i>(in thousands of dollars)</i>	2019	2018
Endowment fund investments, beginning of year	5,259	5,137
Net income from endowment	154	149
Awards granted	(100)	(27)
Endowment fund investments, end of year	5,313	5,259

The portfolio for endowment fund investments had an average effective return of 3.02% (3.41% in 2018) and an average term to maturity of 2.66 years as at March 31, 2019 (2.12 years as at March 31, 2018). The fair value of the endowment fund investments as at March 31, 2019 was \$5,284,329 (\$5,244,088 in 2018).

12. Tangible Capital Assets

<i>(in thousands of dollars)</i>	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	2019	2018
Land	9,766	-	-	-	9,766	-	-	-	-	-	9,766	9,766
Buildings and facilities	821,164	6,499	22,582	-	850,245	(551,336)	(18,414)	(11)	-	(569,761)	280,484	269,828
Works and infrastructure	38,972	138	2,049	(495)	40,664	(22,209)	(833)	-	-	(23,042)	17,622	16,763
Machinery, equipment and furniture	559,275	14,577	8,386	(7,473)	574,765	(421,762)	(26,122)	(361)	7,342	(440,903)	133,862	137,513
Informatics equipment	35,665	214	159	(1,941)	34,097	(34,361)	(473)	-	1,941	(32,893)	1,204	1,304
Informatics software	19,729	404	71	(18)	20,186	(16,891)	(1,010)	-	20	(17,881)	2,305	2,838
Vehicles	3,154	231	6	(189)	3,202	(2,204)	(255)	16	155	(2,288)	914	950
Aircraft	19,267	147	-	-	19,414	(11,705)	(444)	-	-	(12,149)	7,265	7,562
Leasehold improvements	17,352	108	-	-	17,460	(8,522)	(664)	-	-	(9,186)	8,274	8,830
Assets under construction	100,284	56,930	(32,968)	(542)	123,704	-	-	-	-	-	123,704	100,284
Assets under construction – NRC/TIO	16,844	3,970	-	-	20,814	-	-	-	-	-	20,814	16,844
Leased tangible capital assets	64,552	49	-	-	64,601	(33,522)	(2,633)	-	-	(36,155)	28,446	31,030
CFHT – Tangible capital assets	18,239	219	841	-	19,299	(11,492)	(385)	(603)	-	(12,480)	6,819	6,747
TIO – Tangible capital assets	16,722	6,511	622	-	23,855	(475)	(272)	(18)	-	(765)	23,090	16,247
Total	1,740,985	89,997	1,748	(10,658)	1,822,072	(1,114,479)	(51,505)	(977)	9,458	(1,157,503)	664,569	626,506

(1) Adjustments include assets under construction of \$32,968,000 that were transferred to the other categories upon completion of the assets. During the year, NRC received a vehicle with a cost of \$42,499 and accumulated amortization of \$38,249 (net book value of \$4,250) from one other government department (OGD). Also, NRC transferred two pieces of equipment to other OGDs with a cost of \$373,142 and accumulated amortization of \$373,140.

Amortization expense for the year ended March 31, 2019 is \$51,504,898 (\$54,002,711 in 2018).

At March 31, 2019, NRC held eight land lease agreements (eight in 2018) 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 August 31, 2022) 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 latest lease starting April 1, 2018 provides a three-year term with renewal options for two additional periods of one year. 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.

13. Contractual Rights

The activities of NRC sometimes involve the negotiation of contracts or agreements with outside parties that result in NRC having rights to both assets and revenues in the future. They principally involve research and technical services, and intellectual property, royalties and fees. Major contractual rights that will generate revenues in future years and that can be reasonably estimated are summarized as follows:

<i>(in thousands of dollars)</i>	2020	2021	2022	2023	2024 and thereafter	Total
Revenue contracts	63,582	24,494	7,176	3,824	11,908	110,984

14. 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:

<i>(in thousands of dollars)</i>	2020	2021	2022	2023	2024 and thereafter	Total
Transfer payments	244,370	40,253	11,584	148	-	296,355
Operating contracts	63,502	23,101	10,563	8,612	215	105,993
Total	307,872	63,354	22,147	8,760	215	402,348

Transfer payments contractual obligations to CFHT and TIO as shown in Notes 17c) and 17d) have been excluded from the contractual obligations.

15. 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 that pose the highest risk to the environment and human health.

NRC has identified five sites (seven sites in 2018) where contamination may exist for which an assessment, remediation and monitoring may be required. Of these sites, NRC has identified three sites (three sites in 2018) where action is possible and for which a liability of \$3,458,402 (\$3,224,044 in 2018) 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. No additional sites were identified during 2018-2019.

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, 2019 and March 31, 2018. When the liability estimate is based on future cash requirement, the amount is adjusted for inflation using a forecast Consumer Price Index rate of 2%. Inflation is included in the undiscounted amount. 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 2019	Estimated Liability 2019	Estimated Total Undiscounted Expenditures 2019	Number of Sites 2018	Estimated Liability 2018	Estimated Total Undiscounted Expenditures 2018
Office/Commercial/Industrial Operations	3	3,458,402	3,458,402	3	3,224,044	3,224,044
Total	3	3,458,402	3,458,402	3	3,224,044	3,224,044

There were no expected recoveries in 2018 and 2019, and the estimated total undiscounted expenditures equal the estimated liability in 2018 and 2019.

Of the two sites that do not have liabilities, both 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.

b) Asset retirement obligation

NRC has recognized an asset retirement obligation of \$641,000 (\$658,000 in 2018) 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 \$740,000 (\$759,000 in 2018). The liability for the expected future cash flows, as reflected in the consolidated financial statements, has been discounted at a weighted average of 1.77% (1.64% in 2018) 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:

<i>(in thousands of dollars)</i>	2019	2018
Asset retirement obligation, beginning of year	658	318
Obligations increased	-	313
Accretion of future asset retirement obligation	(17)	27
Asset retirement obligation, end of year	641	658

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.

16. Contingent Liabilities

Claims have been made against NRC in the normal course of operations. Legal proceedings for three claims were pending at March 31, 2019 (three in 2018). NRC has no claim that it believes will likely result in a liability where the amount is indeterminable (one in 2018) and three claims that it believes that outcome is indeterminable, as is the liability amount (two in 2018). In 2019, NRC has zero claims that it believes the outcome is unlikely (none in 2018).

17. 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 that were obtained without charge from OGDs as disclosed below.

a) Common services provided without charge by OGDs and agencies

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

<i>(in thousands of dollars)</i>	2019	2018
Employer's contributions to the health and dental insurance plans provided by Treasury Board Secretariat	34,215	34,678
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 (SSC) (Note 4)	-	19,255
Legal services provided by Justice Canada	179	180
Workers' compensation benefits provided by Employment and Social Development Canada	151	167
Accommodation Services provided by Public Services and Procurement Canada (PSPC)	227	193
Total	34,772	54,473

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 PSPC, 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 were recognized without charge up until 2018. Starting in 2019, these services are no longer included in NRC's consolidated Statement of Operations and Departmental Net Financial Position as a reasonable estimate can no longer be made.

b) Other transactions with related parties

<i>(in thousands of dollars)</i>	2019	2018
Accounts receivable from OGDs and agencies	5,101	6,399
Accounts payable to OGDs and agencies	30,925	21,351
Expenses – OGDs and agencies	98,034	82,382
Revenues – OGDs and agencies	78,810	83,674

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 (CFHT), 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. CFHT was established in 1974 by a Tripartite Agreement among 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 2019, NRC contributed \$4.3 million to CFHT (\$4.2 million in 2018). These contributions are eliminated upon consolidation. CFHT's condensed financial information for the year ended December 31 is as follows:

<i>(in thousands of dollars)</i>	December 31, 2018	December 31, 2017
Total assets	20,953	20,677
Total liabilities	<u>1,515</u>	<u>1,645</u>
Total unrestricted net assets	<u>19,438</u>	<u>19,032</u>
Total revenues	13,072	13,930
Total expenses	<u>13,982</u>	<u>14,930</u>
Net operating results	<u>(910)</u>	<u>(1,000)</u>

NRC's future contractual obligations to CFHT are not included in the transfer payment contractual obligations (Note 14) and are as follows:

<i>(in thousands of dollars)</i>	2020	2021	2022	2023	2024 and thereafter	Total
CFHT	4,536	4,713	4,830	4,951	10,277	29,307

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. TIO was established in 2014 by the Regents of the University of California, the California Institute of Technology, the National Institutes of Natural Sciences (Japan) and the National Astronomical Observatories of the Chinese Academy of Sciences. The Department of Sciences of Technology, Government of India and 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 December 31, 2018 based on the aggregate pledged by all current parties. In 2019, NRC contributed \$13.1 million for TIO's Assets Under Construction (\$8.0 million in 2018). TIO's condensed financial information for the year ended December 31 is as follows:

<i>(in thousands of dollars)</i>	December 31, 2018	December 31, 2017
Total assets	195,193	128,180
Total liabilities	<u>25,329</u>	<u>22,965</u>
Total unrestricted net assets	<u>169,864</u>	<u>105,215</u>
Total revenues	76,951	34,663
Total expenses	<u>20,905</u>	<u>26,649</u>
Net operating results	<u>56,046</u>	<u>8,014</u>

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 consolidated financial statements. These contractual obligations for TIO are not included in the transfer payment contractual obligations (Note 14) and are as follows:

<i>(in thousands of dollars)</i>	2020	2021	2022	2023	2024 and thereafter	Total
TIO	48,484	39,026	32,999	31,998	19,129	171,636

18. Transfers From/To OGDs

Transfer of tangible capital assets between OGDs and NRC have occurred in 2018 and 2019.

The transactions are as follows:

<i>(in thousands of dollars)</i>	2019	2018
Net tangible capital asset transfers	4	4
Total	4	4

19. Segmented Information

Presentation by segment is based on the NRC's core responsibility. 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 core responsibilities, by major object of expense and by major type of revenues. The segment results for the period are as follows:

<i>(in thousands of dollars)</i>	Science and Innovation	Internal Services	2019 Total	2018 Total (Restated Note 4)
Transfer payments				
Grants and contributions	367,515	-	367,515	280,684
Total transfer payments	367,515	-	367,515	280,684
Operating expenses				
Salaries and employee benefits	375,637	103,796	479,433	466,635
Utilities, material and supplies	75,693	10,685	86,378	83,433
Amortization of tangible capital assets	49,268	2,237	51,505	54,003
Professional services	46,417	24,184	70,601	92,075
Repair and maintenance	16,638	4,033	20,671	19,098
Payment in lieu of taxes	12,031	1,489	13,520	13,250
Transportation and communication	15,669	2,505	18,174	16,863
Rentals	4,559	5,685	10,244	10,920
Awards	1,042	129	1,171	2,423
Loss (gain) on disposal of tangible capital assets	285	(89)	196	802
Costs of goods sold	692	-	692	765
Information	881	970	1,851	1,788
Bad debts	-	876	876	55
Other	717	144	861	2,066
Total operating expenses	599,529	156,644	756,173	764,176
Total expenses	967,044	156,644	1,123,688	1,044,860
Revenues				
Research services	64,264	-	64,264	66,883
Technical services	99,892	(1,086)	98,806	112,673
Intellectual property, royalties and fees	6,115	-	6,115	12,292
Sales of goods and information products	5,382	38	5,420	6,555
Rentals	20	7,270	7,290	6,628
Grants and contributions	7,112	1,457	8,569	10,276
Lease inducement revenue	-	2,548	2,548	2,548
Other	4,179	1,038	5,217	3,625
Revenues earned on behalf of Government	-	-	(44)	(128)
Total revenues	186,964	11,265	198,185	221,352
Net cost of operations before government funding and transfers	780,080	145,379	925,503	823,508

20. 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 rate risk, currency risk 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.

21. Comparative Information

Comparative figures have been reclassified to conform to the current year's presentation.

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

For the year ended March 31, 2019

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 [2018-19 Departmental Results Report](#) and the [2019-20 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 financial management framework 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
- Monitoring of regular updates on internal control management, as well as the provision of related assessment results and action plans to the Deputy Head, departmental senior management and 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 services on behalf of NRC;
- The Treasury Board of Canada Secretariat provides services related to public sector insurance for employees of NRC and centrally administers payment of the employer's share of contributions toward statutory employee benefit plans on behalf of NRC;
- 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.

Information on the overall effectiveness of the system of internal control over financial reporting for these service providers is contained within their respective annex.

3. Departmental assessment results during fiscal year 2018-19

The following table summarizes the status of the ongoing monitoring activities according to the previous fiscal year's rotational plan.

Previous year's rotational ongoing monitoring plan for current year	Status
Entity level controls	Completed as planned and no remedial actions required.
Information technology general controls (ITGC): contribution management system access and authentication	Completed as planned and some remedial actions required.
Procurement to payment: <ul style="list-style-type: none"> • Procurement via purchase orders to payment • Payments without reference to purchase orders • Payments to other government departments through interdepartmental settlements • Acquisition card utilization, payment and reconciliation 	Completed as planned and no remedial actions required. Noted improvements related to the application of expenditure initiation and section 34 for expenses with payments made to other government departments through interdepartmental settlements.
Transfer payments: <ul style="list-style-type: none"> • TRIUMF contribution program • Industrial Research Assistance Program (IRAP) contribution agreements and claims 	Completed as planned and some opportunities for improvement. Completion planned for 2019-20.
Capital assets: acquisitions	Completed as planned and some remedial actions required.

Previous year's rotational ongoing monitoring plan for current year	Status
Inventory for consumption and for resale	Completed as planned and some opportunities for improvement.
Payroll administration: modifications	Completed as planned and some remedial actions required.
Revenues, receivables and receipts: sales contracts and intellectual property royalties	Deferred due to overlap with audit of research agreement management and intellectual property royalties and awards led by Internal Audit which started in 2018-19.
Master data: customer and costing	Completed as planned and some opportunities for improvement.

In 2018-19, NRC also followed up on the status of remedial plans from previous years. Action plans related to information technology general controls, transfer payments, capital assets and revenues, receivables and receipts are in progress.

In 2018-19, NRC documented the fleet cards process.

3.1 New or significantly amended key controls

Changes impacting NRC's key financial controls during 2018-19 included:

- NRC continued moving towards more electronic processing with the implementation of the SAP travel module in June 2018. This has further simplified and improved the promptness of the approval process as well as strengthened internal controls within NRC's financial system, including electronic audit trail of approvals and documentation.
- NRC's contribution management system continued to be further integrated with NRC's financial system with respect to payables-at-year-end processes.

3.2 Ongoing monitoring program

NRC's rotational risk-based monitoring plan was re-assessed and updated to reflect the impacts of key changes and previous year results and is covering a five-year period (2017-18 to 2021-22). NRC completed its reassessment of financial controls within procurement to payment, transfer payments, capital assets, inventory, payroll administration and master data business areas in addition to the entity level controls and ITGCs.

Overall, the key controls tested performed as intended, with remediation required as follows:

- *ITGC*: Testing this year focused on the access and authentication for the contribution management system. Access control weaknesses were detected and communicated to the responsible parties. Compensatory controls are in place.
- *Capital assets*: Testing this year focused on the sub-process related to the acquisitions of capital assets. Consistent with previous years' assessments, there continue to be

issues in relation to the accounting treatment of acquisitions which could impact the depreciation amounts. A review of business processes surrounding the administration of capital assets is to be undertaken in order to see improvements.

- *Payroll administration:* Testing this year focused on the sub-process related to payroll modifications. Weaknesses in relation to manual business processes were identified and communicated to the responsible parties. Action plans were implemented by the business process owner.

4. Departmental action plan for the next fiscal year and subsequent years

NRC's risk-based ongoing monitoring plan for the next three years is shown in the following table. The plan is reviewed each year to take into account process and risk changes.

Key control areas	Fiscal year 2019-20	Fiscal year 2020-21	Fiscal year 2021-22
Entity Level Controls	√	√	√
IT General Controls under departmental management	√	√	√
Procurement to payment	√	√	√
Transfer payments	√	√	√
Capital assets	√	√	√
Inventory	√	√	√
Payroll administration	√	√	√
Revenues, receivables and receipts			√
Master data	√	√	√

√ = Planned assessment of key controls, not all sub-processes are assessed annually

In addition to the ongoing monitoring rotational plan, NRC also plans to review remediation actions completed in all areas in which issues were noted in Section 3.