Atlantic Pilotage Authority

Administration de Pilotage de l'Atlantique

Atlantic Pilotage Authority

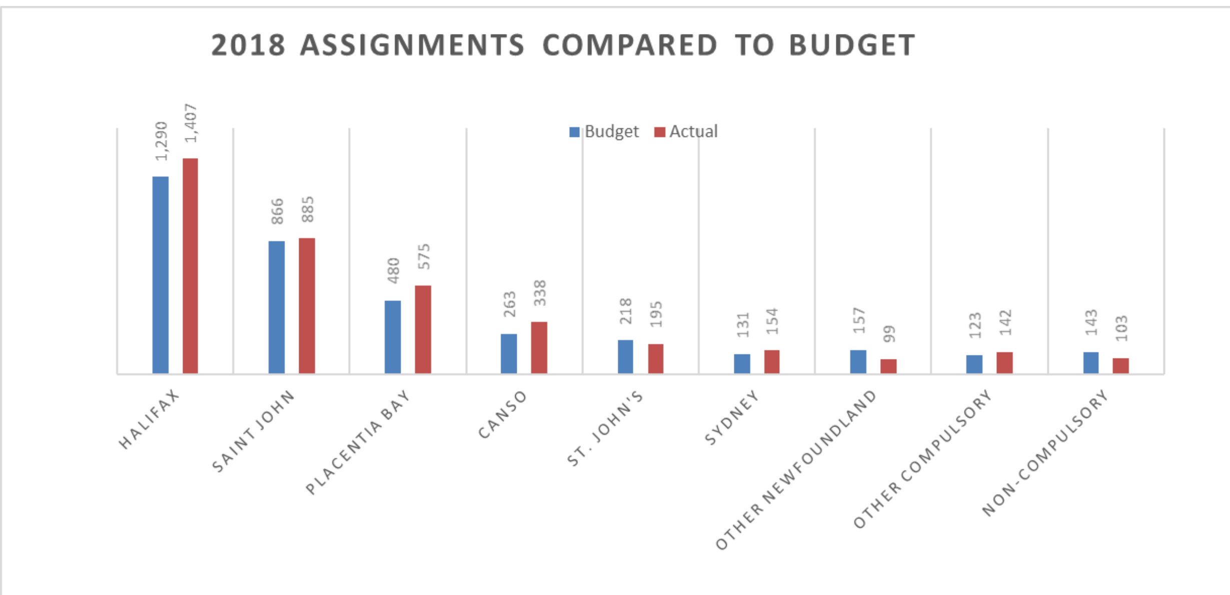
Second Quarter 2018

Management's Discussion and Analysis

August 30, 2018

TRAFFIC REVIEW

Pilotage Area	Actual Traffic through 2nd Qtr 2017	Budget Traffic through 2nd Qtr 2018	Actual Traffic through 2nd Qtr 2018	Variance from 2017	Percentage Variance from 2017	Variance from Budget 2018	Percentage Variance from Budget 2018
Halifax	1,272	1,290	1,407	135	11%	117	9%
Saint John	855	866	885	30	4%	19	2%
Placentia Bay	584	480	575	-9	-2%	95	20%
Canso	301	263	338	37	12%	75	29%
St. John's	218	218	195	-23	-11%	-23	-11%
Sydney	165	131	154	-11	-7%	23	18%
Other Newfoundland	138	157	99	-39	-28%	-58	-37%
Other Compulsory	119	123	142	23	19%	19	15%
Non-Compulsory	114	143	103	-11	-10%	-40	-28%
Total	3,766	3,671	3,898	132	4%	227	6%



The following discussion regarding the amount of activity in individual ports is referring to pilotage assignments only, and not the level of cargo or vessel traffic experienced by a port. There are several factors that may result in a difference between the activity reported by the Authority and that reported by another body such as a port authority. These factors include ships not subject to compulsory pilotage, ships utilizing mariners who have pilotage certificates, and the amount of cargo carried on a ship. The Authority reports on pilotage assignments performed by its pilots, but does not track the amount of cargo being carried on a vessel.

Overall, pilotage revenue is 10% higher than the same period of 2017, and is 9% over budget. Pilotage assignment traffic levels are 4% greater than at the midpoint of 2017 and 6% over budget for 2018.

The Authority has four major compulsory ports (Halifax, NS; Strait of Canso, NS; Placentia

Bay, NL; and Saint John, NB) that contribute approximately 75% of its pilotage assignments each year. The activity in three of these four areas has increased over 2017 levels while the fourth area has only fallen by 2%.

The increase in traffic in Halifax, NS from 2017 is largely due to an increase in bulk cargo carriers and automobile carriers. Tanker traffic in the area has also increased, which is a reversal of a recent trend on this class of assignment within the port. Total pilotage activity in the port is 9% over budget with revenues 8% over budget through June 2018. The Authority had a pilot retire early in the year and is in the process of adding to its pilot strength. A retired pilot has come back on a fixed term to assist with the increased volumes during the busiest time of the year.

The traffic in Placentia Bay, NL is generated primarily from two major oil industry customers-the oil refinery at Come-by-Chance, and the transshipment terminal at Whiffen Head. Activity at both facilities is well above the 2017 pace and is significantly over budget. These increases have mostly offset a decline in assignments performed on a bunker fuel service that was launched late in 2016. The masters on this vessel have achieved certification and no longer require pilotage to be provided by the Authority. Traffic at the two main facilities is 22% over budget and has increased by 11% over the previous year. As these vessels are much larger than the bunker vessel assignments lost, the revenues in the area are 10% higher than 2017 levels and 23% over the 2018 budget.

In Saint John, NB, the Authority has had 30 more pilotage assignments (a 4% increase) than in 2017. This result has been caused by increased activity generated by the addition of a weekly container service caller. This activity has led to revenues being 2% over budget and have increased total revenues by 11% from 2017. The Authority has received advanced retirement notices from four Saint John pilots and training pilots are being added to fill these positions. This will cause an increase in costs for the area in the short term.

In Canso, NS, tanker traffic has increased by 9% from the same period of 2017. Bulk carrier traffic has increased by 13% from 2017 with an increase in coal shipment activity. The coal transshipment operation in the area is very price sensitive and is not guaranteed to operate in the area long-term. While it is operating it significantly increases pilotage revenue in the area as there are large vessels involved. At the time of the budgeting process the coal transshipment activity was not known to be continuing and was not included in the 2018 budget. The combination of these factors has left the area 29% over budget in activity, and 23% over budget on revenues through June 2018.

FINANCIAL AND STATISTICAL REVIEW

COMPARATIVE REVIEW		
FINANCIAL AND STATISTICAL DATA		
As at June 30		
	2018	**2017**
FINANCIAL		
(in thousands of Canadian dollars)		
Total Revenue	**$ 13,427**	**$ 12,174**
Operating Expenses		
Salaries, Fees and Benefits	8,126	7,180
Pilot Boats	3,586	3,116
Other	1,422	1,317
Total Operating Expenses	**13,134**	**11,613**
Profit/(Loss)	**$ 293**	**$ 561**
STATISTICAL		
Pilotage Assignments	3,898	3,766
Shipping Incidents	0	2
% of incident free assignments	100.00%	99.95%
Customer Complaints Filed	13	7
% of complaint free assignments	99.67%	99.81%

The revenue for the Authority has increased with the growth in piloted traffic and tariff increases. Much of the increased traffic is caused by the addition of larger vessels with tariff rates larger than the Authority's average. The average piloted vessel size has increased by 3% over 2017. Overall, traffic has increased by 4% from 2017 levels through June, with revenues increasing by 10%.

Number of Assignments at June 30
2016 – 2018

	2018		2017		2016	
	Assignments	%	Assignments	%	Assignments	%
Tanker	1,668	43%	1,660	44%	1,595	44%
General Cargo Vessel	971	25%	883	23%	894	25%
Container Ship	701	18%	677	18%	674	19%
Other	381	10%	429	11%	349	10%
Cruise Ship	177	5%	117	3%	89	2%
Total	3,898	100%	3,766	100%	3,601	100%

Salaries, fees, and benefits through June 2018 have increased from the same period in 2017 as the Authority has increased the number of pilots in preparation for planned retirements and overtime costs have increased with the increase in assignments. Administrative staff costs have also increased as the Authority prepares for retirements that are taking place later in 2018. Pilot boat costs have increased with the additional activity as service providers are compensated on a per-trip basis and expenditures on fuel increase with additional movements and increased fuel prices. The Authority also had two additional vessels through the first half of 2018 as the *Nova Pilot* and *Scotia Pilot* were purchased midway through 2017. "Other" expenses have grown from 2017 levels with increased transportations costs due to increased assignments, an increase in investment in portable pilotage units, and an increase in professional services, like legal expenses.

The Authority had a profit at the end of the second quarter of $293 thousand ($561 – 2017). A loss of $70 thousand was budgeted to this point in the year. Due to traffic patterns, the Authority expects a loss in the first quarter each year with a profit budgeted for the following three quarters.

CUSTOMER COMPLAINTS AND LEVEL OF SERVICE

The Authority developed a structured methodology for handling complaints several years ago in response to the Ministerial Review of Outstanding Pilotage Issues. The mechanism is designed to be as user friendly as possible, and the goal of the Authority is to ensure that timely feedback is provided to the complainant. The most common reason for a complaint to be submitted is due to a delay in an assignment. In some cases, the delay is caused by factors beyond the control of the Authority, such as weather or delays caused by the non-availability of port services such as tugs.

The Authority received 13 complaints out of a total of 3,898 assignments through June 30, 2018. The remaining 99.67% of assignments were performed without a complaint from the customer. For the same period of 2017, there were 7 complaints received out of 3,766 assignments, meaning 99.81% of the assignments had been performed without complaint. There has been an increase in pilot boat delays for Placentia Bay due to the volume of tanker movements. The area is serviced by one continuously crewed pilot boat which can cause short delays when pilots have to be transferred at both the boarding station and an anchorage without sufficient time for the pilot boat to transit between them. All complaints received are included in the above totals, including those submitted that involved delays not caused by the Authority.

Through June 2018 the Authority has had no shipping incidents reported. There were two incidents reported at this point in 2017. There were no injuries or environmental contamination associated with either of these incidents.

RISK ANALYSIS

The major financial risk faced by the Authority is the variability of traffic in major ports. The Authority does not control or influence the activity in each port. Variations in the number of ships, or the average ship size, from the budget may result in a significant positive or negative result.

After several years of declining activity, assignments in 2017 increased in every major port and district in which the Authority provides service. The Authority had growth in Halifax primarily to an increase in container traffic. Saint John had increased tanker traffic and cargo ships exporting potash through the port. Tanker traffic and coal transshipment provided significant growth in the Strait of Canso. Cruise traffic provided increased traffic in several ports, including Halifax, Sydney, and St. John's. The Whiffen Head transshipment terminal in Placentia Bay is now receiving product from the Hebron project which will increase activity in the area for years to come. This strong activity has continued into 2018.

Ship masters who have the required experience, and have passed a certificate examination, may pilot their own vessels in their designated areas. This has also caused a decline in pilotage assignments, particularly in the port of St. John's NL, with a lesser impact on the port of Halifax, NS. In total, there were 1,403 movements done by certificated masters through June 2018, an increase from 940 done during the same period in 2017.

The cost structures in ports are not easily adjusted in response to changes in activity. Due to the specialized nature and training required to be a marine pilot, reducing the work force in a port is not feasible to address short term declines in activity. For similar reasons, increasing the work force in response to growing activity requires significant planning and lead time in order to have effective pilots in place to handle the additional vessels. Certificates pose an additional challenge as these specific masters may leave at any point or be unavailable to their employer. This would result in a spike in traffic for which the area will need trained pilots. A shortage in the number of pilots can have significant consequences on the shipping industry with the potential for delays during peak periods, or if the port experiences an unexpected surge in activity. The Authority has also made a significant investment in pilotage vessels that have to be supported through tariff revenue in many ports, including Placentia Bay, Halifax, and Saint John. Variations in expected traffic in these areas pose an additional risk due to the fixed nature of these costs.

One major financial risk faced by the Authority has been mitigated by prior action. The cost of fuel, which has a significant impact on the cost of operating pilot boats, has been offset by a fuel recovery charge applied to assignments in Halifax, Saint John, Placentia Bay, Canso, Sydney, and Bras d'Or.

The Authority experienced an operating profit of $2.913 million in 2017 ($1.197 million in 2016). This is mainly due to the cooperation of our customers in agreeing to tariff adjustments and having increased traffic levels in virtually every area the Authority operates. These strong financial years have allowed the Authority to surpass its immediate financial goals by allocating $2.3 million in total savings towards future capital asset replacement and future severance liabilities, while maintaining a reserve fund for financial downturns and unknown future costs.

The 2016 tariff had included a surcharge that was meant to recover a large portion of the losses the Authority incurred in 2014 and 2015. Due to the recent financial performance of the Authority, this surcharge was ended on July 1, 2018, nine months earlier than intended. This will save users approximately $260 thousand in pilotage fees. An operating profit of $999 thousand has been budgeted for 2018.

TRAVEL, HOSPITALITY, AND CONFERENCE EXPENSES

The Atlantic Pilotage Authority's area of operation is defined as all the Canadian waters in and around the provinces of New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland and Labrador, including the waters of Chaleur Bay in the Province of Quebec. Within this region, the Authority has designated 17 compulsory pilotage areas. Each one has its unique industries and are serviced by licenced pilots and the required infrastructure such as pilot boat services.

Conducting regular pilotage operations requires travel to be conducted by the Authority's pilots. These costs are recovered directly from the customers for whom the services were delivered. Travel costs are also incurred for training of operational personnel as much of the training is done in Europe and Quebec City. These costs are included in the Authority's training budget. Included in the Pilot boats, operating costs category of the Authority's financial statements are travel costs associated with vessel maintenance personnel performing their regular duties.

Travel of pilotage authority board and management representatives is required to meet the needs of stakeholders in each area and manage the Authority's resources effectively. Periodic travel outside of the Authority's area of operation is also required to meet with Government representatives, industry associations, and the other pilotage authorities. Conferences include port specific marine business conferences and pilotage specific conferences. Board travel costs are captured with all other Board costs under Professional and special services in the Authority's financial statements.

The table below shows the travel, hospitality, and conference expenses for operations, and for administrative employees and the Board.

Travel, Hospitality, and Conference Expenses		
As at June 30		
(in thousands of Canadian dollars)		
	2018	**2017**
Operations	350	303
Training	57	47
Engineering	13	5
Total Operational Travel	**420**	**355**
Administration	48	57
Board	19	18
Total Administration Travel	**67**	**75**
Hospitality	4	4
Conference Fees	3	6
Total Hospitality and Conference Expenses	**7**	**10**
Total Travel, Hospitality, and Conference Expenses	**494**	**440**

Second Quarter 2018

Interim Unaudited

Condensed Financial Statements and Notes

Management's Responsibility for Financial Reporting

Management is responsible for the preparation and fair presentation of these quarterly financial statements in accordance with the Treasury Board of Canada Standard on Quarterly Financial Reports for Crown Corporations, and for such internal controls as management determines is necessary to enable the preparation of quarterly financial statements that are free from material misstatement. Management is also responsible for ensuring all other information in this quarterly financial report is consistent, where appropriate, with the quarterly financial statements.

Based on our knowledge, these unaudited quarterly financial statements present fairly, in all material respects, the financial position, results of operations and cash flows of the corporation, as at the date of and for the periods presented in the quarterly financial statements.

Sean Griffiths
Chief Executive Officer

Peter MacArthur, CPA, CMA
Chief Financial Officer

Halifax, Canada
August 30, 2018

ATLANTIC PILOTAGE AUTHORITY

Statement of Financial Position

Unaudited

(in thousands of Canadian dollars)		**June 30, 2018**		December 31, 2017
Assets				
Current				
Cash	**$**	**4,268**	$	3,938
Trade receivables		**3,771**		3,712
Prepaid expenses		**250**		94
		8,289		7,744
Non-current				
Intangible assets		**221**		188
Pilot boats and equipment		**12,742**		12,964
		12,963		13,152
	$	**21,252**	$	20,896
Liabilities				
Current				
Trade and other payables	**$**	**2,136**	$	2,030
Bank loans		**2,033**		640
Deferred lease inducements		**59**		42
Employee severance benefits		**165**		35
		4,393		2,747
Non-current				
Bank loans		**3,881**		5,591
Employee severance benefits		**1,575**		1,488
Deferred Liabilities		**468**		428
		5,924		7,507
		10,317		10,254
Equity				
Retained earnings		**10,935**		10,642
		10,935		10,642
	$	**21,252**	$	20,896

The accompanying notes are an integral part of these financial statements.

ATLANTIC PILOTAGE AUTHORITY

Statement of Comprehensive Income (Loss)

Unaudited

(in thousands of Canadian dollars)	Three Months Ended June 30 **2018**	Three Months Ended June 30 2017	Six Months Ended June 30 **2018**	Six Months Ended June 30 2017
Revenues				
Pilotage charges	**$ 7,029**	$ 7,135	**$ 13,401**	$ 12,139
Other income	**13**	29	**26**	35
	7,042	7,164	**13,427**	12,174
Expenses				
Pilots' fees, salaries and benefits	**3,157**	2,790	**6,208**	5,372
Pilot boats, operating costs	**1,354**	1,373	**2,790**	2,505
Pilot boat crews' salaries and benefits	**495**	488	**984**	943
Staff salaries and benefits	**436**	403	**934**	865
Amortization and depreciation	**425**	323	**851**	645
Transportation and travel	**204**	199	**397**	347
Utilities, materials and supplies	**126**	133	**252**	234
Training	**118**	176	**232**	242
Professional and special services	**104**	62	**195**	175
Rentals	**74**	76	**147**	150
Finance costs	**38**	32	**76**	61
Communications	**34**	34	**68**	74
	6,565	6,089	**13,134**	11,613
Profit for the period	**477**	1,075	**293**	561
Other comprehensive loss	-	-	-	-
Actuarial loss on employee severance benefits				
Other comprehensive loss	-	-	-	-
Comprehensive income	**$ 477**	$ 1,075	**$ 293**	$ 561

The accompanying notes are an integral part of these financial statements.

ATLANTIC PILOTAGE AUTHORITY

Statement of Changes in Equity

Unaudited

	Three Months Ended June 30		Six Months Ended June 30	
(in thousands of Canadian dollars)	**2018**	2017	**2018**	2017
Retained earnings, beginning of the period	**$ 10,458**	$ 7,235	**$ 10,642**	$ 7,749
Profit for the period	**477**	1,075	**293**	561
Other comprehensive loss	**-**	-	**-**	-
Total comprehensive income	**477**	1,075	**293**	561
Retained earnings, end of period	**$ 10,935**	$ 8,310	**$ 10,935**	$ 8,310

The accompanying notes are an integral part of these financial statements.

ATLANTIC PILOTAGE AUTHORITY

Statement of Cash Flows

Unaudited

(in thousands of Canadian dollars)	Three months ended June 30 **2018**	Three months ended June 30 2017	Six months ended June 30 **2018**	Six months ended June 30 2017
Operating Activities				
Receipts from customers	**$ 6,362**	$ 5,757	**$ 13,343**	$ 10,974
Payments to and on behalf of employees	**(4,014)**	(3,778)	**(7,773)**	(7,078)
Payments to suppliers	**(2,049)**	(2,142)	**(4,200)**	(3,800)
Finance costs paid	**(38)**	(33)	**(76)**	(61)
Other income received	**13**	29	**26**	35
Net cash provided by (used in) operating activities	**274**	(167)	**1,320**	70
Investing Activities				
Purchases of intangible assets	**(31)**	(2)	**(50)**	(5)
Purchases of pilot boats and equipment	**(245)**	(3,354)	**(620)**	(3,555)
Net cash used in investing activities	**(276)**	(3,356)	**(670)**	(3,560)
Financing Activities				
Repayment of lease inducements	**(3)**	-	**(3)**	-
Proceeds from bank loan	**-**	3,000	**-**	3,000
Repayment of bank loan	**(159)**	(126)	**(317)**	(237)
Net cash (used in) provided by financing activities	**(162)**	2,874	**(320)**	2,763
(Decrease) increase in cash	**(164)**	(649)	**330**	(727)
Cash, beginning of the period	**4,432**	2,005	**3,938**	2,083
Cash, end of the period	**$ 4,268**	$ 1,356	**$ 4,268**	$ 1,356

The accompanying notes are an integral part of these financial statements.

1. GENERAL INFORMATION AND BASIS OF PRESENTATION

The Atlantic Pilotage Authority (the "Authority") was established in 1972 pursuant to the Pilotage Act. The principal registered address of the Authority is 1791 Barrington Street, Halifax, Nova Scotia. The objects of the Authority are to establish, operate, maintain, and administer a safe and efficient pilotage service within designated Canadian waters. The Pilotage Act provides that pilotage tariffs shall be fair, reasonable, and sufficient to permit the Authority to operate on a self-sustaining financial basis. Under the Pilotage Act, no payment to the Authority may be made under an appropriation by Parliament to discharge an obligation or liability.

The Authority is a Crown corporation listed in Schedule III, Part I of the Financial Administration Act and is not subject to the provisions of the Income Tax Act.

In July 2015, the Authority was issued a directive (PC 2015-1114) pursuant to section 89 of the Financial Administration Act to align its travel, hospitality, conference and event expenditure policies, guidelines and practices with the Treasury Board policies, directives and related instruments on travel, hospitality, conference and event expenditures in a manner that is consistent with its legal obligations, and to report on the implementation of this directive in the Authority's next corporate plan. The Authority finalized its implementation of this directive in July 2017 and has subsequently remained in full compliance with the directive.

The Atlantic Pilotage Authority is classified as a Government Businesses Enterprise (GBE). As a GBE, the Authority prepares its statements in accordance with International Financial Reporting Standards (IFRS), as issued by the Accounting Standards Board (AcSB).

These financial statements have been prepared in accordance with the Treasury Board of Canada Standard on Quarterly Financial Reports for Crown Corporations. In accordance with the Treasury Board of Canada Standard, these financial statements do not include all of the financial statement disclosures required for annual financial statements and should be read in conjunction with the Authority's Canadian GAAP annual consolidated financial statements for the year ended December 31, 2017. In management's opinion, the financial statements reflect all adjustments that are necessary for a fair presentation of the results for the interim period presented.

2. SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies are as follows:

(a) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and demand deposits, together with short-term, highly liquid investments that are readily convertible to a known amount of cash, and that are subject to an insignificant risk of changes in value. The Authority had nil cash equivalents as at June 30, 2018 (2017 - nil).

(b) Financial instruments

Trade and other receivables and trade and other payables, classified as other financial liabilities, are measured at amortized cost using the effective interest method. Due to their short-term nature, the cost of these financial instruments approximates their fair value.

Bank loans are classified as other financial liabilities and are initially measured at fair value. After initial recognition, bank loans are measured at amortized cost using the effective interest method.

The Authority is not party to any derivative financial instruments or hedges.

(c) Intangible assets

The Authority's intangible assets are comprised of purchased software. When the software does not form an integral part of the machinery or computer hardware to which it relates, it is separately accounted as an intangible asset. Intangibles are carried at cost less accumulated amortization and impairment losses.

Any impairment is recognized as an expense in comprehensive income and is measured as the amount by which the carrying amount exceeds its recoverable amount.

(d) Pilot boats and equipment

Pilot boats and equipment are recorded at cost. The cost of pilot boats under construction includes design, project management, legal, material, direct labour, and interest on construction loans. Amounts included in pilot boats under construction are transferred to the appropriate pilot boat classifications upon completion, and depreciation commences.

Any impairment is measured as the amount by which the carrying amount exceeds its recoverable amount and is recognized as a loss for the year. Gains or losses arising on the disposal of pilot boats and equipment are determined as the difference between the disposal proceeds and the carrying amount of the assets and are recognized in profit or loss. Gains are recognized in other income, while losses are recognized as a loss for the year in pilot boats, operating costs or utilities, materials and supplies depending on the assets that were disposed.

(e) Deferred lease inducements

The Authority received a cash inducement for tenant improvements which is presented as a liability. The Authority also benefited from a free rental clause that extends from June 1, 2017 to May 31, 2018 in its new lease for its head office premises. This free rent is considered a lease inducement and is presented as a liability for the expired portion as at June 30, 2018.

These inducements are amortized on a linear basis over the lease duration. The term of the lease expires May 31, 2027.

(f) Employee severance benefits

Employees are entitled to specified severance benefits as provided for under collective agreements or employment contracts, based on their years of service and final salary. The liability for these payments is estimated and recorded in the accounts as the benefits accrue to the employees.

The costs and the benefit obligation are actuarially determined using the projected unit credit method prorated on service that incorporates management's best estimate of the rate of employee turnover, retirement age, future salary and benefit levels, and other actuarial factors.

Actuarial gains and losses are recognized in other comprehensive income in the period in which they occur and flow into retained earnings.

(g) Pension plan

Substantially all of the employees of the Authority are covered by the Public Service Pension Plan (the "Plan"), a defined benefit plan established through legislation and sponsored by the Government of Canada. Contributions are required by both the employees and the Authority to cover current service cost. Pursuant to legislation currently in place, the Authority has no legal or constructive obligation to pay further contributions with respect to any past service or funding deficiencies of the Plan. Consequently, contributions are recognized as an expense in the year when employees have rendered service and represent the total pension obligation of the Authority.

(h) Revenue recognition

Revenues from pilotage charges are recognized when pilotage services are provided.

3. ACCOUNTING STANDARDS AND AMENDMENTS

(a) Accounting standards and amendments issued and effective

Effective January 1, 2017, the Authority adopted the amended IAS 7, "Statement of Cash Flows". The adoption of this amended standard resulted in additional disclosure regarding changes in liabilities arising from financing activities.

(b) Accounting standards and amendments issued but not yet effective

Accounting standards and amendments issued but not yet effective which are expected to be relevant to the Authority include:

In July 2014, the International Accounting Standards Board (IASB) issued the complete version of IFRS 9, "Financial Instruments", first issued in November 2009, which brings together the classification and measurement, impairment and hedge accounting phases of the IASB's project to replace IAS 39, "Financial Instruments: Recognition and Measurement". IFRS 9 introduces a principles-based approach to the classification of financial assets based on an entity's business model and the nature of the cash flows of the asset. The mandatory effective date of IFRS 9 is January 1, 2018, however, the Authority does not expect the implementation to have a material impact on its financial statements. The Authority does not expect the implementation will result in a significant change in the classification and measurement of its financial instruments because the Authority's treatment of its current financial instruments is consistent with IFRS 9. The impairment requirements in the new standard are based on an expected credit loss model, rather than the incurred loss model in the current standard. The Authority intends to apply the simplified approach available in the new standard to measure expected impairment. This will result in a more consistent allowance for impairment without a significant change in valuation.

In May 2014, the IASB issued IFRS 15, “Revenue from Contracts with Customers”, which establishes principles for reporting about the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity’s contracts with customers. The mandatory effective date of IFRS 15 is January 1, 2018. The Authority has not early adopted this new standard. Due to the nature of the Authority’s revenues, this standard is not expected to have a material impact on the financial statements, but will require additional disclosures.

In January 2016, the IASB issued IFRS 16, “Leases”, which sets out the principles that both parties to a contract apply in order to provide relevant information about leases in a manner that faithfully represents those transactions. IFRS 16 requires all leases to be reported on the lessee's balance sheet. There are also changes in accounting over the life of the lease. - For lessees the total periodic expenses will generally have a front-loaded expense recognition pattern. Leases that are less than 12 months in duration, or that are for low dollar value items, are not required to be capitalized. Lessors’ accounting treatment remains similar to current practice. They will continue to classify leases as finance and operating leases. The mandatory effective date of IFRS 16 is January 1, 2019. The Authority has not early adopted this new standard, but has determined that accounting for its head office lease will be impacted. The Authority currently estimates the likely impact to be a right-of-use asset valued at $892 and an increase in its lease liabilities of $943.

4. USE OF ESTIMATES AND JUDGMENTS

The preparation of financial statements requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, and revenue and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgments about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised.

(a) Critical accounting estimates

Critical accounting estimates are estimates and assumptions made by management that may result in material adjustments to the carrying amount of assets and liabilities within the next year. Management has made the following critical accounting estimates or assumptions in preparation of these financial statements:

Amortization and depreciation rates

All the intangible assets have finite useful lives. Amortization of intangible assets is charged on a straight-line basis over the estimated useful lives of the assets. The useful lives used in the calculation of amortization for purchased software is 5 to 10 years.

Depreciation of pilot boats and equipment is calculated on a straight-line basis and is based on the estimated useful life of the assets as follows:

Pilot boat hulls and structures	10 to 25 years
Pilot boat equipment	5 to 10 years
Pilot boat generators	5 years
Pilot boat engines	5 to 10 years
Pilot boat inspections	4 to 5 years
Furniture and equipment	2 to 10 years
Leasehold improvements	10 years

Useful lives are based on management's estimates of the periods of service provided by the intangible assets and the pilot boats and equipment. The useful lives of these assets are reviewed annually for continued appropriateness. Changes to the useful life estimates would affect future amortization or depreciation expense and the future carrying value of the assets.

Employee severance benefits

The Authority engages an external actuary to assess the fair value of its employee severance benefits. The Authority assesses this obligation at December 31 each year. The plan is sensitive to significant actuarial assumptions, the discount rate, the estimate of salary rate increases, and the assumed age at retirement.

(b) Critical accounting judgments

Critical accounting judgments are accounting policies that have been identified as being complex or involving subjective judgments or assessments.

Impairment test for non-financial assets

The non-financial assets with finite useful lives are required to be tested for impairment only when indication of impairment exists. Management is required to make a judgment with respect to the existence of impairment indicators at the end of each reporting period. Some indicators of impairment that management may consider include changes in the current and expected future use of the asset, external valuations of the assets, and obsolescence or physical damage to the asset.