CONSTELLATION SOFTWARE INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS ("MD&A")

The following discussion and analysis should be read in conjunction with the Unaudited Condensed Consolidated Interim Financial Statements for the three and six month periods ended June 30, 2018, which we prepared in accordance with International Financial Reporting Standards ("IFRS"). Certain information included herein is forward-looking and based upon assumptions and anticipated results that are subject to uncertainties. Should one or more of these uncertainties materialize or should the underlying assumptions prove incorrect, actual results may vary significantly from those expected. See "Forward-Looking Statements" and "Risks and Uncertainties".

Unless otherwise indicated, all dollar amounts are expressed in U.S. dollars. All references to "$" are to U.S. dollars and all references to "C$" are to Canadian dollars. Certain totals, subtotals and percentages may not reconcile due to rounding.

Additional information about Constellation Software Inc. (the "Company" or "Constellation"), including our most recently filed Annual Information Form ("AIF"), is available on SEDAR at www.sedar.com.

Forward Looking Statements

Certain statements in this report may contain "forward looking" statements that involve risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Words such as "may", "will", "expect", "believe", "plan", "intend", "should", "anticipate" and other similar terminology are intended to identify forward looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance as of the date of this MD&A, July 26, 2018. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements, including, but not limited to, the factors discussed under "Risks and Uncertainties". Although the forward looking statements contained in this MD&A are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this MD&A and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances. This report should be viewed in conjunction with the Company's other publicly available filings, copies of which can be obtained electronically on SEDAR at www.sedar.com.

Non-IFRS Measures

This MD&A includes certain measures which have not been prepared in accordance with IFRS such as Adjusted EBITA, Adjusted EBITA margin, Adjusted net income, and Adjusted net income margin.

The term ''Adjusted EBITA'' refers to net income before adjusting for finance and other expense (income), bargain purchase gain, finance costs, income taxes, share in net income or loss of equity investees, impairment of non-financial assets, amortization, TSS membership liability revaluation charge, and foreign exchange gain or loss. The Company believes that Adjusted EBITA is useful supplemental information as it provides an indication of the results generated by the Company's main business activities prior to taking into consideration how those activities are financed and taxed and also prior to taking into consideration intangible asset amortization and the other items listed above. ''Adjusted EBITA margin'' refers to the percentage that Adjusted EBITA for any period represents as a portion of total revenue for that period.

‘‘Adjusted net income’’ means net income adjusted for non-cash expenses (income) such as amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other expenses (income), and excludes the portion of the adjusted net income of Total Specific Solutions (TSS) B.V. (“TSS”) attributable to the minority owners of TSS (see “Capital Resources and Commitments” section). The Company believes that Adjusted net income is useful supplemental information as it provides an indication of the results generated by the Company’s main business activities prior to taking into consideration amortization of intangible assets, deferred income taxes, the TSS membership liability revaluation charge, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time, and adjusts for the portion of TSS’ Adjusted net income not attributable to shareholders of Constellation. ‘‘Adjusted net income margin’’ refers to the percentage that Adjusted net income for any period represents as a portion of total revenue for that period.

Adjusted EBITA and Adjusted net income are not recognized measures under IFRS and, accordingly, readers are cautioned that Adjusted EBITA and Adjusted net income should not be construed as alternatives to net income determined in accordance with IFRS. The Company’s method of calculating Adjusted EBITA and Adjusted net income may differ from other issuers and, accordingly, Adjusted EBITA and Adjusted net income may not be comparable to similar measures presented by other issuers. See ‘‘Results of Operations —Adjusted EBITA’’ and ‘‘— Adjusted net income’’ for a reconciliation of Adjusted EBITA and Adjusted net income to Net income. Adjusted EBITA includes 100% of the Adjusted EBITA of TSS.

Overview

We acquire, manage and build vertical market software (“VMS”) businesses. Generally, these businesses provide mission critical software solutions that address the specific needs of our customers in particular markets. Our focus on acquiring businesses with growth potential, managing them well and then building them, has allowed us to generate significant cash flows and revenue growth during the past several years.

Our revenue consists primarily of software license fees, maintenance and other recurring fees, professional service fees and hardware sales. Software license revenue is comprised of license fees charged for the use of our software products generally licensed under multiple-year or perpetual arrangements in which the fair value of maintenance and/or professional service fees are determinable, where applicable. Maintenance and other recurring revenue primarily consists of fees charged for customer support on our software products post-delivery and also includes, to a lesser extent, recurring fees derived from software as a service, subscriptions, combined software/support contracts, transaction-related revenues, and hosted products. Maintenance and other recurring fee arrangements generally include ongoing customer support and rights to certain product updates “when and if available” and products sold on a subscription basis. Professional service revenue consists of fees charged for implementation and integration services, customized programming, product training and consulting. Hardware sales include the resale of third party hardware that forms part of our customer solutions, as well as sales of customized hardware assembled internally. Our customers typically purchase a combination of software, maintenance, professional services and hardware, although the type, mix and quantity of each vary by customer and by product.

Expenses consist primarily of staff costs, the cost of hardware, third party licenses, maintenance and professional services to fulfill our customer arrangements, travel and occupancy costs and other general operating expenses.

Results of Operations
(In millions of dollars, except percentages and per share amounts)
Unaudited

	Three months ended June 30, 2018	Three months ended June 30, 2017	Period-Over-Period Change $	Period-Over-Period Change %	Six months ended June 30, 2018	Six months ended June 30, 2017	Period-Over-Period Change $	Period-Over-Period Change %
Revenue	**752.0**	**600.1**	**152.0**	**25%**	**1,470.5**	**1,155.4**	**315.1**	**27%**
Expenses	576.7	445.5	131.2	29%	1,136.5	870.3	266.2	31%
Adjusted EBITA	**175.4**	**154.6**	**20.8**	**13%**	**334.0**	**285.1**	**48.9**	**17%**
Adjusted EBITA margin	23%	26%			23%	25%		
Amortization of intangible assets	69.9	55.7	14.2	25%	138.5	108.0	30.5	28%
Foreign exchange (gain) loss	8.7	1.9	6.8	365%	(5.3)	3.4	(8.7)	NM
TSS membership liability revaluation charge	13.9	15.4	(1.5)	-10%	20.7	28.5	(7.8)	-27%
Share in net (income) loss of equity investees	0.0	(0.1)	0.1	NM	(0.2)	(0.1)	(0.1)	85%
Finance and other income	(1.2)	(0.4)	(0.7)	184%	(10.0)	(0.4)	(9.6)	NM
Bargain purchase gain	(0.0)	-	(0.0)	NM	(0.1)	-	(0.1)	NM
Finance costs	5.0	5.5	(0.5)	-9%	10.2	10.7	(0.5)	-5%
Income before income taxes	79.1	76.6	2.5	3%	180.2	135.1	45.2	33%
Income taxes expense (recovery)								
Current income tax expense (recovery)	35.0	30.1	4.9	16%	61.5	54.2	7.2	13%
Deferred income tax expense (recovery)	(7.8)	(4.7)	(3.2)	68%	(15.8)	(10.7)	(5.0)	47%
Income tax expense (recovery)	27.1	25.4	1.7	7%	45.7	43.5	2.2	5%
Net income	**52.0**	**51.2**	**0.8**	**2%**	**134.5**	**91.6**	**43.0**	**47%**
Adjusted net income	**121.9**	**112.3**	**9.6**	**9%**	**264.5**	**206.8**	**57.6**	**28%**
Adjusted net income margin	16%	19%			18%	18%		
Weighted average number of shares outstanding (000's)								
Basic and diluted	21,192	21,192			21,192	21,192		
Net income per share								
Basic and diluted	$ 2.45	$ 2.41	$ 0.04	2%	$ 6.35	$ 4.32	$ 2.03	47%
Adjusted EBITA per share								
Basic and diluted	$ 8.28	$ 7.29	$ 0.98	13%	$ 15.76	$ 13.46	$ 2.31	17%
Adjusted net income per share								
Basic and diluted	$ 5.75	$ 5.30	$ 0.45	9%	$ 12.48	$ 9.76	$ 2.72	28%
Cash dividends declared per share								
Basic and diluted	$ 1.00	$ 1.00	$ -	0%	$ 2.00	$ 2.00	$ -	0%

NM - Not meaningful

Comparison of the three and six month periods ended June 30, 2018 and 2017

Revenue:

Total revenue for the quarter ended June 30, 2018 was $752.0 million, an increase of 25%, or $152.0 million, compared to $600.1 million for the comparable period in 2017. For the first six months of 2018 total revenues were $1,470.5 million, an increase of 27%, or $315.1 million, compared to $1,155.4 million for the comparable period in 2017. The increase for both the three and six month periods compared to the same periods in the prior year is primarily attributable to growth from acquisitions as the Company experienced organic growth of 4% in both the three and six month periods, 1% after adjusting for the impact of changes in the valuation of the US dollar against most major currencies in which the Company transacts business. For acquired companies, organic growth is calculated as the difference between actual revenues achieved by each company in the financial period following acquisition compared to the estimated revenues they achieved in the corresponding financial period preceding the date of acquisition by Constellation. The Company adopted IFRS 15 "Revenue from contracts with customers" ("IFRS 15") effective January 1, 2018 utilizing the cumulative effect method. Under the cumulative effect method comparative periods have not been restated; however, the quantitative differences between reported results under IFRS 15 and those that would have been reported under IAS 11 and IAS 18 ("prior IFRS") have been disclosed. For the three and six months ended June 30, 2018 total revenue was $1.4 million lower and $7.1 million higher respectively than it would have been under prior IFRS. The organic growth figures included above and below exclude the impact of IFRS 15.

The following table displays the breakdown of our revenue according to revenue type:

	Three months ended June 30,		Period-Over-Period Change		Q217 Proforma Adj. (Note 1)	Q218 IFRS 15 Adj. (Note 2)	Organic Growth
	2018	2017	$	%	$	$	%
	($M, except percentages)						
Licenses	47.9	40.9	7.0	17%	7.5	(1.8)	-5%
Professional services	152.6	120.7	31.9	26%	27.8	0.2	3%
Hardware and other	43.2	41.9	1.3	3%	6.9	-	-11%
Maintenance and other recurring	508.3	396.6	111.7	28%	83.6	3.0	6%
	752.0	600.1	152.0	25%	125.9	1.4	4%

	Six months ended June 30,		Period-Over-Period Change		Q217 Proforma Adj. (Note 3)	Q218 IFRS 15 Adj. (Note 4)	Organic Growth
	2018	2017	$	%	$	$	%
	($M, except percentages)						
Licenses	91.7	76.0	15.7	21%	15.4	(4.4)	-5%
Professional services	294.8	233.1	61.7	26%	53.0	0.1	3%
Hardware and other	76.0	73.4	2.6	4%	14.6	-	-14%
Maintenance and other recurring	1,008.0	772.9	235.1	30%	164.9	(2.8)	7%
	1,470.5	1,155.4	315.1	27%	247.9	(7.1)	4%

$M - Millions of dollars

Note 1: Estimated pre-acquisition revenues from companies acquired after March 31, 2017. (Obtained from unaudited vendor financial information.)

Note 2: Adjustment required to revenue figures for the three months ended June 30, 2018 to reverse the impact of adopting IFRS 15.

Note 3: Estimated pre-acquisition revenues from companies acquired after December 31, 2016. (Obtained from unaudited vendor financial information.)

Note 4: Adjustment required to revenue figures for the six months ended June 30, 2018 to reverse the impact of adopting IFRS 15.

For comparative purposes the table below shows the quarterly organic growth as compared to the same period in the prior year by revenue type since Q2 2016.

	Quarter Ended								
	Jun. 30 2016	Sep. 30 2016	Dec. 31 2016	Mar. 31 2017	Jun. 30 2017	Sep. 30 2017	Dec. 31 2017	Mar. 31 2018	Jun. 30 2018
Licenses	-15%	-11%	-1%	-13%	-6%	2%	6%	-4%	-5%
Professional services	2%	5%	1%	2%	-3%	3%	7%	3%	3%
Hardware and other	14%	2%	-29%	0%	1%	1%	17%	-16%	-11%
Maintenance and other recurring	3%	4%	3%	3%	2%	5%	7%	8%	6%
Revenue	**2%**	**3%**	**-1%**	**1%**	**1%**	**4%**	**8%**	**5%**	**4%**

The following table shows the same information adjusting for the impact of foreign exchange movements.

	Quarter Ended								
	Jun. 30 2016	Sep. 30 2016	Dec. 31 2016	Mar. 31 2017	Jun. 30 2017	Sep. 30 2017	Dec. 31 2017	Mar. 31 2018	Jun. 30 2018
Licenses	-14%	-10%	0%	-13%	-4%	1%	3%	-8%	-7%
Professional services	2%	6%	2%	3%	-1%	1%	3%	-3%	0%
Hardware and other	16%	5%	-28%	2%	2%	0%	14%	-20%	-13%
Maintenance and other recurring	3%	5%	5%	4%	4%	3%	4%	4%	4%
Revenue	**3%**	**4%**	**1%**	**3%**	**2%**	**2%**	**5%**	**0%**	**1%**

We aggregate our business into two distinct segments for financial reporting purposes: (i) the public sector reportable segment, which includes business units focused primarily on government and government-related customers, and (ii) the private sector reportable segment, which includes business units focused primarily on commercial customers.

The following table displays our revenue by reportable segment and the percentage change for the three and six months ended June 30, 2018 compared to the same periods in 2017:

	Three months ended June 30,		Period-Over-Period Change		Q217 Proforma Adj. (Note 1)	Q218 IFRS 15 Adj. (Note 2)	Organic Growth	Six months ended June 30,		Period-Over-Period Change		Q217 Proforma Adj. (Note 3)	Q218 IFRS 15 Adj. (Note 4)	Organic Growth
	2018	2017	$	%	$	$	%	2018	2017	$	%	$	$	%
	($M, except percentages)							($M, except percentages)						
Public Sector														
Licenses	28.6	24.7	3.9	16%	5.2	(1.2)	-8%	57.1	46.5	10.7	23%	10.9	(3.6)	-7%
Professional services	114.0	96.0	18.0	19%	20.0	0.2	-2%	224.9	185.2	39.6	21%	38.3	0.1	1%
Hardware and other	35.9	34.6	1.3	4%	3.6	-	-6%	62.4	59.2	3.2	5%	8.1	-	-7%
Maintenance and other recurring	321.8	251.0	70.9	28%	53.1	2.6	7%	641.6	489.6	152.0	31%	106.6	(3.1)	7%
	500.4	406.3	94.1	23%	81.9	1.6	3%	986.0	780.5	205.5	26%	163.9	(6.6)	4%
Private Sector														
Licenses	19.2	16.1	3.1	19%	2.4	(0.6)	1%	34.6	29.5	5.0	17%	4.5	(0.8)	-1%
Professional services	38.7	24.7	13.9	56%	7.8	-	19%	70.0	47.9	22.1	46%	14.6	-	12%
Hardware and other	7.3	7.3	(0.0)	0%	3.3	-	-31%	13.6	14.1	(0.5)	-4%	6.5	-	-34%
Maintenance and other recurring	186.5	145.6	40.9	28%	30.5	0.4	6%	366.4	283.3	83.1	29%	58.4	0.4	7%
	251.7	193.8	57.9	30%	44.0	(0.2)	6%	484.5	374.9	109.6	29%	84.0	(0.5)	5%

Certain totals and percentages may not reconcile due to rounding.
Note 1: Estimated pre-acquisition revenues from companies acquired after March 31, 2017. (Obtained from unaudited vendor financial information.)
Note 2: Adjustment required to revenue figures for the three months ended June 30, 2018 to reverse the impact of adopting IFRS 15.

Note 3: Estimated pre-acquisition revenues from companies acquired after December 31, 2016. (Obtained from unaudited vendor financial information.)
Note 4: Adjustment required to revenue figures for the six months ended June 30, 2018 to reverse the impact of adopting IFRS 15.

Public Sector

For the quarter ended June 30, 2018, total revenue in the public sector reportable segment increased 23%, or $94.1 million to $500.4 million, compared to $406.3 million for the quarter ended June 30, 2017. For the six months ended June 30, 2018, total revenue increased by 26%, or $205.5 million to $986.0 million, compared to $780.5 million for the comparable period in 2017. For purposes of calculating organic growth, estimated pre-acquisition revenues included from the relevant companies acquired in 2017 and 2018 was $81.9 million and $163.9 million for the three and six month periods ended June 30, 2017, respectively. For the three and six months ended June 30, 2018 total revenue was respectively $1.6 million lower and $6.6 million higher than it would have been under prior IFRS. Organic growth excludes the impact of IFRS 15. Organic revenue growth was 3% and 4%, respectively, for the three and six months ended June 30, 2018 compared to the same periods in 2017, and 0% for both periods after adjusting for the impact of changes in the valuation of the US dollar against most major currencies in which the Company transacts business.

Private Sector

For the quarter ended June 30, 2018, total revenue in the private sector reportable segment increased 30%, or $57.9 million to $251.7 million, compared to $193.8 million for the quarter ended June 30, 2017. For the six months ended June 30, 2018, total revenue increased by 29%, or $109.6 million to $484.5 million, compared to $374.9 million for the comparable period in 2017. For purposes of calculating organic growth, estimated pre-acquisition revenues included from the relevant companies acquired in 2017 and 2018 was $44.0 million and $84.0 million for the three and six month periods ended June 30, 2017, respectively. For the three and six months ended June 30, 2018 total revenue was respectively $0.2 million and $0.5 million higher than it would have been under prior IFRS. Organic growth excludes the impact of IFRS 15. Organic revenue growth was 6% and 5% for the three and six months ended June 30, 2018, respectively, compared to the same periods in 2017, and 4% and 3%, respectively, after adjusting for the impact of changes in the valuation of the US dollar against most major currencies in which the Company transacts business.

Expenses:

The following table displays the breakdown of our expenses:

	Three months ended June 30, 2018	Three months ended June 30, 2017	Period-Over-Period Change $	Period-Over-Period Change %	Six months ended June 30, 2018	Six months ended June 30, 2017	Period-Over-Period Change $	Period-Over-Period Change %
	($M, except percentages)				($M, except percentages)			
Expenses								
Staff	390.4	296.8	93.7	32%	779.9	586.1	193.8	33%
Hardware	24.0	23.1	0.9	4%	41.8	39.4	2.3	6%
Third party license, maintenance and professional services	66.6	50.5	16.1	32%	128.1	100.5	27.5	27%
Occupancy	19.8	14.4	5.4	37%	38.9	27.9	11.0	40%
Travel, Telecommunications, Supplies & Software and equipment	45.1	36.8	8.3	23%	87.0	71.1	15.9	22%
Professional fees	8.9	6.8	2.1	32%	19.1	13.7	5.4	39%
Other, net	15.1	11.8	3.3	28%	28.4	21.0	7.4	35%
Depreciation	6.7	5.3	1.4	27%	13.4	10.6	2.8	26%
	576.7	445.5	131.2	29%	1,136.5	870.3	266.2	31%

Overall expenses for the quarter ended June 30, 2018 increased 29%, or $131.2 million to $576.7 million, compared to $445.5 million during the same period in 2017. As a percentage of total revenue, expenses equalled 77% for the quarter ended June 30, 2018 and 74% for the same period in 2017. During the six months ended June 30, 2018, expenses increased 31%, or $266.2 million to $1,136.5 million, compared to $870.3 million during the same period in 2017. As a percentage of total revenue, expenses increased to 77% for the six months ended June 30, 2018 from 75% for the same period in 2017. For the three and six months ended June 30, 2018 the change in valuation of the US dollar against most major currencies in which the Company transacts business resulted in an approximate 3% and 4% respective increase in expenses compared to the comparable periods of 2017.

Staff expense – Staff expenses increased 32% or $93.7 million for the quarter ended June 30, 2018 and 33% or $193.8 million for the six months ended June 30, 2018 over the same periods in 2017. Staff expense can be broken down into five key operating departments: Professional Services, Maintenance, Research and Development, Sales and Marketing, and General and Administrative. Included within staff expenses for each of the above five departments are personnel and related costs associated with providing the necessary services. The table below compares the period over period variances.

	Three months ended June 30, 2018	Three months ended June 30, 2017	Period-Over-Period Change $	Period-Over-Period Change %	Six months ended June 30, 2018	Six months ended June 30, 2017	Period-Over-Period Change $	Period-Over-Period Change %
	($M, except percentages)				($M, except percentages)			
Professional services	87.8	64.6	23.2	36%	169.9	127.7	42.2	33%
Maintenance	78.9	61.2	17.7	29%	162.8	120.4	42.4	35%
Research and development	104.7	81.6	23.2	28%	210.9	162.8	48.1	30%
Sales and marketing	55.7	43.1	12.6	29%	109.6	85.1	24.5	29%
General and administrative	63.4	46.3	17.1	37%	126.6	90.0	36.6	41%
	390.4	296.8	93.7	32%	779.9	586.1	193.8	33%

The increase in staff expenses for the three and six months ended June 30, 2018 was primarily due to the growth in the number of employees compared to the same periods in 2017 primarily due to acquisitions.

Hardware expenses – Hardware expenses increased 4% or $0.9 million for the quarter ended June 30, 2018 and 6% or $2.3 million for the six months ended June 30, 2018 over the same periods in 2017 as compared with the 3% and 4% increase in hardware and other revenue for the three and six month periods ending June 30, 2018 respectively over the comparable periods in 2017. Hardware margins for both the three and six months ended June 30, 2018 were 45% as compared to 45% and 46% for the comparable periods in 2017.

Third party license, maintenance and professional services expenses – Third party license, maintenance and professional services expenses increased 32% or $16.1 million for the quarter ended June 30, 2018 and 27% or $27.5 million for the six months ended June 30, 2018 over the same periods in 2017. The increase is primarily due to third party license, maintenance and professional services expenses of acquired businesses.

Occupancy expenses – Occupancy expenses increased 37% or $5.4 million for the quarter ended June 30, 2018 and 40% or $11.0 million for the six months ended June 30, 2018 over the same periods in 2017. The increase in occupancy expenses is primarily due to the occupancy expenses of acquired businesses.

Travel, Telecommunications, Supplies & Software and equipment expenses – Travel, Telecommunications, Supplies & Software and equipment expenses increased 23% or $8.3 million for the quarter ended June 30, 2018 and 22% or $15.9 million for the six months ended June 30, 2018 over the same periods in 2017. The increase in these expenses is primarily due to expenses incurred by acquired businesses.

Professional fees – Professional fees increased 32% or $2.1 million for the quarter ended June 30, 2018 and 39% or $5.4 million for the six months ended June 30, 2018 over the same periods in 2017. There are no individually material reasons contributing to this variance.

Other, net – Other expenses increased 28% or $3.3 million for the quarter ended June 30, 2018 and 35% or $7.4 million for the six months ended June 30, 2018 over the same periods in 2017. The following table provides a further breakdown of expenses within this category.

	Three months ended June 30,		Period-Over-Period Change		Six months ended June 30,		Period-Over-Period Change	
	2018	2017	$	%	2018	2017	$	%
	($M, except percentages)				($M, except percentages)			
Advertising and promotion	11.2	8.2	3.0	36%	21.6	15.4	6.2	40%
Recruitment and training	4.4	2.8	1.6	55%	7.9	5.6	2.3	40%
Bad debt expense	1.4	1.8	(0.3)	-19%	2.3	3.0	(0.7)	-23%
R&D tax credits	(5.6)	(3.4)	(2.2)	66%	(10.2)	(6.7)	(3.5)	52%
Contingent consideration	0.6	0.1	0.5	NM	0.9	(0.1)	1.0	NM
Other expense, net	3.1	2.3	0.9	38%	5.9	3.8	2.0	53%
	15.1	11.8	3.3	28%	28.4	21.0	7.4	35%

NM - Not meaningful

There are no individually material reasons contributing to the above variances.

Depreciation – Depreciation of property and equipment increased 27% or $1.4 million for the quarter ended June 30, 2018 and 26% or $2.8 million for the six months ended June 30, 2018 over the same periods in 2017. The increase is primarily due to the depreciation expense associated with acquired businesses.

Other Income and Expenses:

The following table displays the breakdown of our other income and expenses:

	Three months ended June 30,		Period-Over-Period Change		Six months ended June 30,		Period-Over-Period Change	
	2018	2017	$	%	2018	2017	$	%
	($M, except percentages)				($M, except percentages)			
Amortization of intangible assets	69.9	55.7	14.2	25%	138.5	108.0	30.5	28%
Foreign exchange (gain) loss	8.7	1.9	6.8	365%	(5.3)	3.4	(8.7)	NM
TSS membership liability revaluation charge	13.9	15.4	(1.5)	-10%	20.7	28.5	(7.8)	-27%
Share in net (income) loss of equity investees	0.0	(0.1)	0.1	NM	(0.2)	(0.1)	(0.1)	85%
Finance and other expense (income)	(1.2)	(0.4)	(0.7)	184%	(10.0)	(0.4)	(9.6)	NM
Bargain purchase gain	(0.0)	-	(0.0)	NM	(0.1)	-	(0.1)	NM
Finance costs	5.0	5.5	(0.5)	-9%	10.2	10.7	(0.5)	-5%
Income tax expense (recovery)	27.1	25.4	1.7	7%	45.7	43.5	2.2	5%
	123.4	103.4	20.0	19%	199.5	193.6	5.9	3%

NM - Not meaningful

Amortization of intangible assets – Amortization of intangible assets increased 25% or $14.2 million for the quarter ended June 30, 2018 and 28% or $30.5 million for the six months ended June 30, 2018 over the same periods in 2017. The increase in amortization expense for the three and six months ended June 30, 2018 is primarily attributable to an increase in the carrying amount of our intangible asset balance over the twelve-month period ended June 30, 2018 as a result of acquisitions completed during this twelve-month period.

Foreign exchange – Most of our businesses are organized geographically so many of our expenses are incurred in the same currency as our revenues, which mitigates some of our exposure to currency fluctuations. For the three and six months ended June 30, 2018, we realized a foreign exchange loss of $8.7 million and gain of $5.3 million respectively compared to losses of $1.9 million and $3.4 million for the same periods in 2017. The following table provides a breakdown of these amounts.

	Three months ended June 30,		Period-Over-Period Change		Six months ended June 30,		Period-Over-Period Change	
	2018	2017	$	%	2018	2017	$	%
	($M, except percentages)				($M, except percentages)			
Unrealized foreign exchange (gain) loss related to:								
- revaluation of intercompany loans between entities with differing functional currencies (1)	13.3	(5.4)	18.7	NM	6.1	(6.7)	12.9	NM
- revaulation of the Company's unsecured subordinated floating rate debentures as a result of the appreciation (depreciation) of the Canadian dollar against the US dollar.	(4.2)	6.0	(10.2)	NM	(10.6)	7.9	(18.5)	NM
Remaining foreign exchange (gain) loss	(0.4)	1.3	(2.2)	NM	(0.9)	2.1	(3.4)	NM
	8.7	1.9	6.4	365%	(5.3)	3.4	(9.1)	NM

NM - Not meaningful

(1) Offsetting amounts recorded in other comprehensive income. Net impact to Total comprehensive income for each period is nil.

The remaining foreign exchange gains and losses per the table above are primarily related to the unrealized foreign exchange translation gains and losses of certain net Canadian dollar denominated liability balances to US dollars as a result of the Canadian dollar's depreciation or appreciation against the US dollar.

TSS membership liability revaluation charge – The valuation of the TSS membership liability that was put in place in Q4 2014 increased by approximately 9% from Q1 2018 or $13.9 million, and approximately 15% from Q4 2017 or $20.7 million. The increases are primarily the result of the growth in TSS' reported trailing twelve month maintenance revenue (primarily due to acquisitions). Maintenance revenue and net tangible assets are the two main drivers in the calculation of the liability. The liability recorded on the balance sheet increased by 13% or $17.0 million over the six month period ended June 30, 2018 from $135.8 million to $152.8 million as a result of the revaluation charge of $20.7 million offset by a $3.7 million foreign exchange gain that was recorded through other comprehensive income. The TSS membership liability is denominated in Euros and the Euro depreciated 2% versus the US dollar during the first six months of 2018.

Share in net (income) loss of equity investees – Share in the net (income) loss of equity investees was income of $nil and $0.2 million for the three and six month periods ended June 30, 2018 respectively, compared to income of $0.1 million for both comparable periods in 2017 in line with changes in the profitability of equity investees.

Finance and other expense (income) – Finance and other income for the three and six month periods ended June 30, 2018 was $1.2 million and $10.0 million respectively compared to $0.4 million for both comparable periods in 2017. In September 2008 the Company acquired certain assets and liabilities of Maximus Inc.'s Asset, Justice, and Education Solutions businesses. As part of the acquisition, the Company recorded an accrual of $7.9 million for financial liabilities potentially due on a long-term acquired contract. No financial liabilities were ever assessed and the statute of limitations now restricts any legal action by the customer with regards to the acquired contract. The $7.9 million accrual was released into income in Q1 2018. Interest earned on cash balances for the three and six months ended June 30, 2018 was $0.7 million and $1.5 million respectively, compared to $0.9 million and $1.7 million for the same periods in 2017. Losses of $0.7 million and $1.5 million relating to the sale of available-for-sale equity securities were also recorded during the three and six months ended June 30, 2017 and no similar losses were recorded in 2018.

Bargain purchase gain – A bargain purchase gain adjustment totalling $0.1 million was recorded in the six month period ended June 30, 2018 relating to one of the acquisitions made during 2017. No similar gain was recognized for the same period in 2017.

Finance costs – Finance costs for the quarter ended June 30, 2018 decreased $0.5 million to $5.0 million, compared to $5.5 million for the same period in 2017. During the six months ended June 30, 2018, finance costs decreased $0.5 million to $10.2 million, from $10.7 million over the same period in 2017. There are no individually material reasons contributing to these variances.

Income taxes – We operate globally and we calculate our tax provision in each of the jurisdictions in which we conduct business. Our effective tax rate on a consolidated basis is, therefore, affected by the realization and anticipated relative profitability of our operations in those various jurisdictions, as well as different tax rates that apply and our ability to utilize tax losses and other credits. For the quarter ended June 30, 2018, income tax expense increased $1.7 million to $27.1 million compared to $25.4 million for the same period in 2017. During the six months ended June 30, 2018, income tax expense increased $2.2 million to $45.7 million compared to $43.5 million for the same period in 2017. Current tax expense as a percentage of adjusted net income before tax was 22% and 19% for the three and six months ended June 30, 2018 respectively, and 21% for the same periods in 2017. This rate has historically approximated our cash tax rate however the quarterly rate can sometimes fall outside of the annual range due to out of period adjustments. Current tax expense reflects gross taxes before the application of R&D tax credits which are classified as part of "other, net" expenses in the statement of income. For the three and six months ended June 30, 2018 current tax expense was $0.4 million lower and $2.7 million higher respectively than it would have been under prior IFRS (IAS 18). The deferred income tax recovery increases of $3.2 million and $5.0 million for three and six months ended June 30, 2018 respectively, relates to various items including changes in recognition of certain deferred income tax assets.

Constellation is subject to tax audits in the countries in which the Company carries on business globally. These tax audits could result in additional tax expense in future periods relating to historical filings. Reviews by tax authorities generally focus on, but are not limited to, the validity of the Company's inter-company transactions, including financing and transfer pricing policies which generally involve subjective areas of taxation and a significant degree of judgment. If any of these tax authorities are successful with their challenges, the Company's income tax expense may be adversely affected and Constellation could also be subject to interest and penalty charges.

Net Income and Earnings per Share:

Net income for the quarter ended June 30, 2018 was $52.0 million compared to net income of $51.2 million for the same period in 2017. On a per share basis, this translated into a net income per diluted share of $2.45 in the quarter ended June 30, 2018 compared to net income per diluted share of $2.41 for the same period in 2017. For the six months ended June 30, 2018, net income was $134.5 million or $6.35 per diluted share compared to $91.6 million or $4.32 per diluted share for the same period in 2017. There was no change in the number of shares outstanding.

Adjusted EBITA:

For the quarter ended June 30, 2018, Adjusted EBITA increased to $175.4 million compared to $154.6 million for the same period in 2017 representing an increase of 13%. For the first six months of 2018, Adjusted EBITA increased to $334.0 million compared to $285.1 million during the same period in 2017, representing an increase of 17%. As discussed in the "Revenue" section above, the Company adopted IFRS 15 effective January 1, 2018 utilizing the cumulative effect method. Under the cumulative effect method comparative periods have not been restated however the quantitative differences between reported results under IFRS 15 and those that would have been reported under prior IFRS have been disclosed. For the three and six months ended June 30, 2018, Adjusted EBITA was $1.5 million lower and $7.3 million higher respectively, than it would have been under prior IFRS. Adjusted EBITA margin was 23% for both the three and six months ended June 30, 2018, compared to 26% and 25% during the same periods in 2017. Excluding the impact of IFRS 15, Adjusted EBITA margin would have been 24% and 22% for the three and six months ended June 30, 2018, respectively. The margin decline is primarily the result of lower margins on recently acquired businesses. See "Non-IFRS Measures" for a description of Adjusted EBITA and Adjusted EBITA margin.

The following table reconciles Adjusted EBITA to net income:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	($M, except percentages)		($M, except percentages)	
Total revenue	752.0	600.1	1,470.5	1,155.4
Net income	52.0	51.2	134.5	91.6
Adjusted for:				
Income tax expense (recovery)	27.1	25.4	45.7	43.5
Foreign exchange (gain) loss	8.7	1.9	(5.3)	3.4
TSS membership liability revaluation charge	13.9	15.4	20.7	28.5
Share in net (income) loss of equity investees	0.0	(0.1)	(0.2)	(0.1)
Finance and other income	(1.2)	(0.4)	(10.0)	(0.4)
Bargain purchase gain	(0.0)	-	(0.1)	-
Finance costs	5.0	5.5	10.2	10.7
Amortization of intangible assets	69.9	55.7	138.5	108.0
Adjusted EBITA	175.4	154.6	334.0	285.1
Adjusted EBITA margin	23%	26%	23%	25%

Certain totals and percentages may not reconcile due to rounding.

Adjusted net income:

For the quarter ended June 30, 2018, Adjusted net income increased to $121.9 million from $112.3 million for the same period in 2017, representing an increase of 9%. Adjusted net income margin was 16% for the quarter ended June 30, 2018 and 19% for the same period in 2017. For the quarter ended June 30, 2018, Adjusted net income was $0.7 million lower than it would have been under prior IFRS (IAS 18). For the first six months of 2018, Adjusted net income increased to $264.5 million from $206.8 million during the same period in 2017, representing an increase of 28%. Adjusted net income margin was 18% for both the six months ended June 30, 2018 and June 30, 2017. For the six months ended June 30, 2018, Adjusted net income was $4.4 million higher than it would have been under prior IFRS (IAS 18). Excluding the impact of the unrealized foreign exchange (gain) loss recorded in each of the three and six month periods ended June 30, 2017 and 2018, the $7.9 million financial liability accrual reversal recorded to finance and other income in Q1 2018, and the impacts of IFRS 15, the margins would have been 18% and 17% for the respective periods in 2018, and 19% and 18% for the respective periods in 2017. See "Non-IFRS Measures" for a description of Adjusted net income and Adjusted net income margin.

Non-controlling interest in the Adjusted net income of TSS - As explained in the "Capital Resources and Commitments" section below, in Q4 2014 33.29% of the voting interests in TSS were sold by us, however no adjustment has been made in the Company's Consolidated Financial Statements to reflect the 33.29% of earnings that are not attributable to Constellation shareholders. Instead, due to an option available to the minority owners to exercise a put option to sell all or a portion of their interests back to Constellation, the minority interest is accounted for as a liability on the Company's balance sheet. The liability is revalued at each period end in accordance with an agreed upon valuation methodology with the change being included in net income. The non-controlling interest in the Adjusted net income of TSS for the three and six months ended June 30, 2018 was $6.0 million and $13.4 million respectively, as compared to $5.3 million and $10.6 million for the same periods in 2017.

The following table reconciles Adjusted net income to Net income:

	Three months ended June 30, 2018	Three months ended June 30, 2017	Six months ended June 30, 2018	Six months ended June 30, 2017
	($M, except percentages)		($M, except percentages)	
Total revenue	752.0	600.1	1,470.5	1,155.4
Net income	52.0	51.2	134.5	91.6
Adjusted for:				
Amortization of intangible assets	69.9	55.7	138.5	108.0
TSS membership liability revaluation charge	13.9	15.4	20.7	28.5
Bargain purchase gain	(0.0)	-	(0.1)	-
Less non-controlling interest in the Adjusted net income of TSS	(6.0)	(5.3)	(13.4)	(10.6)
Deferred income tax expense (recovery)	(7.8)	(4.7)	(15.8)	(10.7)
Adjusted net income	121.9	112.3	264.5	206.8
Adjusted net income margin	16%	19%	18%	18%

Certain totals and percentages may not reconcile due to rounding.

Quarterly Results

	Jun. 30 2016	Sep. 30 2016	Dec. 31 2016	Mar. 31 2017	Jun. 30 2017	Sep. 30 2017	Dec. 31 2017	Mar. 31 2018	Jun. 30 2018
	Quarter Ended ($M, except per share amounts)								
Revenue	528.7	545.6	563.8	555.3	600.1	636.5	687.6	718.5	752.0
Net income	55.0	67.5	65.7	40.4	51.2	54.3	76.1	82.5	52.0
Adjusted net income	89.9	120.7	121.8	94.5	112.3	115.5	140.6	142.6	121.9
Adjusted net income margin	17%	22%	22%	17%	19%	18%	20%	20%	16%
Net income per share									
Basic & diluted	2.60	3.18	3.10	1.91	2.41	2.56	3.59	3.90	2.45
Adjusted net income per share									
Basic & diluted	4.24	5.70	5.75	4.46	5.30	5.45	6.63	6.73	5.75

We experience seasonality in our operating results in that Adjusted net income margins in the first quarter of every year are typically lower than margins achieved in the second, third and fourth quarters. The key drivers for the lower margins are increased payroll tax costs associated with our annual bonus payments that are made in the month of March, and the fact that historically there has been a consistent focus at year end to complete sales implementation projects which generally translates into increased professional services revenue in the fourth quarter and decreased professional services revenue in the first quarter. Our quarterly results may also fluctuate as a result of the various acquisitions which may be completed by the Company in any given quarter. We may experience variations in our net income on a quarterly basis depending upon the timing of certain expenses or gains, which may include changes in provisions, acquired contract liabilities, foreign exchange gains and losses, bargain purchase gains, and gains or losses on the sale of financial and other assets.

Liquidity

Our net cash position (cash less bank indebtedness excluding capitalized transaction costs) decreased by $111.4 million to $279.3 million in the quarter ended June 30, 2018 resulting from capital deployed on acquisitions exceeding cash flows from operations. Bank indebtedness decreased by $34.0 million to $64.2 million at June 30, 2018 compared to $98.2 million at December 31, 2017, and cash decreased by $145.4 million to $343.6 million at June 30, 2018 compared to $489.0 million at December 31, 2017.

Total assets increased $265.3 million, from $2,288.2 million at December 31, 2017 to $2,553.6 million at June 30, 2018. The increase is primarily due to an increase in intangible assets of $263.3 million primarily relating to acquisitions made since December 31, 2017. At June 30, 2018 TSS held a cash balance of $21.8 million. As explained in the "Capital Resources and Commitments" section below, there are limitations on TSS' ability to distribute funds to Constellation.

Current liabilities increased $124.4 million, from $1,172.1 million at December 31, 2017 to $1,296.6 million at June 30, 2018. The increase is primarily due to an increase in deferred revenue of $170.4 million mainly due to acquisitions made since December 31, 2017 and the timing of maintenance and other billings versus performance and delivery under those customer arrangements, offset by a decrease in accounts payable and accrued liabilities of $31.6 million largely relating to the payment of bonuses accrued in 2017.

Net Changes in Cash Flows
(in $M's)

	Six months ended June 30, 2018	Six months ended June 30, 2017
Net cash provided by operating activities	310.6	242.4
Net cash from (used in) financing activities	(87.4)	(57.4)
Net cash from (used in) acquisition activities	(354.6)	(131.1)
Net cash from (used in) other investing activities	(10.6)	14.4
Net cash from (used in) investing activities	(365.1)	(116.7)
Effect of foreign currency	(3.4)	8.0
Net increase (decrease) in cash and cash equivalents	**(145.4)**	**76.3**

The net cash flows from operating activities were $310.6 million for the six months ended June 30, 2018. The $310.6 million provided by operating activities resulted from $134.5 million in net income plus $212.9 million of non-cash adjustments to net income and $45.3 million of cash from non-cash operating working capital, offset by $82.1 million in taxes paid.

The net cash flows used in financing activities in the six months ended June 30, 2018 were $87.4 million, which is mainly a result of dividends paid of $42.4 million, a net decrease in bank indebtedness of $34.5 million, and interest paid on bank indebtedness and the Company's unsecured subordinated floating rate debentures in the period of $10.5 million.

The net cash flows used in investing activities in the six months ended June 30, 2018 were $365.1 million. The cash used in investing activities was primarily due to acquisitions for an aggregate of $354.6 million (including payments for holdbacks relating to prior acquisitions).

We believe we have sufficient cash and available credit capacity to continue to operate for the foreseeable future. Generally our VMS businesses operate with negative working capital as a result of the collection of maintenance payments and other revenues in advance of the performance of the related services. As such, management anticipates that it can continue to grow the business organically without any additional funding. If we continue to acquire VMS businesses we may need additional external funding depending upon the size and timing of the potential acquisitions.

Capital Resources and Commitments

Bank Indebtedness

On October 27, 2017, we completed an amendment and restatement of our revolving credit facility agreement (the "CSI Facility") with a syndicate of Canadian chartered banks and U.S. banks in the amount of $460 million, extending its maturity date to October 27, 2022. The CSI Facility bears a variable interest rate with no fixed repayments required over the term to maturity. Interest rates are calculated at standard U.S. and Canadian reference rates plus interest rate spreads based on a leverage table. The CSI Facility is currently collateralized by the majority of our assets including the assets of certain material subsidiaries. The CSI Facility contains standard events of default which if not remedied within a cure period would trigger the repayment of any outstanding balance. The CSI Facility is available for acquisitions, distributions, working capital needs, and other general corporate purposes and for the needs of our subsidiaries. As at June 30, 2018, no amounts were drawn on the CSI Facility, and letters of credit totalling $16.0 million were issued, which limits the borrowing capacity on a dollar-for-dollar basis. Transaction costs associated with this CSI Facility are being amortized through profit or loss using the effective interest rate method. As at June 30, 2018, the carrying amount of such costs totalling $1.1 million has been classified as part of other non-current assets in the statement of financial position.

On June 24, 2014 Constellation Software Netherlands Holding Cooperatief U.A. ("CNH"), a subsidiary of Constellation and the indirect owner of 100% of TSS, entered into a €150 million term and €10 million multicurrency revolving credit facility (the "CNH Facility") with a number of European and North American financial institutions. The CNH Facility bears interest at a rate calculated at EURIBOR plus interest rate spreads based on a leverage table. The CNH Facility is collateralized by substantially all of the assets owned by CNH and its subsidiaries which includes substantially all of the assets of TSS and its subsidiaries. The CNH Facility contains standard events of default which if not remedied within a cure period would trigger the repayment of any outstanding balance. On July 14, 2017 (in conjunction with the issuance of the New CNH Facility, as defined below), the principal outstanding on the term loan of €116.5 million was repaid in full and the CNH Facility was extinguished. Unamortized transaction costs of $3.3 million associated with the CNH Facility were included in profit or loss for the year ended December 31, 2017.

On July 14, 2017, CNH entered into a new credit facility (the "New CNH Facility") with a number of European financial institutions. Under this credit facility, CNH is able to borrow up to €300 million under a multicurrency revolving loan facility and up to €50 million under an additional uncommitted term loan facility. The New CNH Facility has an initial term of five years with an extension option for two additional one year periods. The New CNH Facility bears interest at a rate calculated at EURIBOR plus interest rate spreads based on a leverage table. The New CNH Facility is collateralized by substantially all of the assets owned by CNH and its subsidiaries which includes substantially all of the assets of TSS and its subsidiaries. The New CNH Facility contains standard events of default which if not remedied within a cure period would trigger the repayment of any outstanding balance. As at June 30, 2018, $64.2 million (€55.0 million) had been drawn from this credit facility. Transaction costs associated with the New CNH Facility have been included as part of the carrying amount of the liability and are being amortized through profit or loss using the effective interest rate method. Amortized costs recognized in the three and six months ended June 30, 2018 relating to this facility amounted to $0.1 million and $0.2 million respectively. As at June 30, 2018, the carrying amount of such costs relating to this facility totaling approximately $1.7 million (€1.4 million) has been classified as part of the New CNH Facility in the consolidated statement of financial position.

The CSI Facility and New CNH Facility are independent of each other. The New CNH Facility is not guaranteed by Constellation or its subsidiaries nor is Constellation or any subsidiary subject to the terms of the New

CNH Facility other than, in each case, CNH and its subsidiaries. Similarly, CNH and its subsidiaries did not guarantee the CSI Facility and are not subject to the provisions thereof. The CSI Facility imposes limitations on the aggregate amount of investment that Constellation may make in CNH and its subsidiaries and the financial results of CNH and its subsidiaries are not included for the purposes of determining compliance by Constellation with the financial covenants in the CSI Facility. The New CNH Facility imposes limitations on the amount of distributions that CNH and its subsidiaries may make to Constellation.

On July 6, 2018 Acceo Solutions, L.P. and its wholly-owned subsidiary Acceo Solutions Inc. (together "Acceo") entered into a $110.5 million (C$145.0 million) term and $7.6 million (C$10.0 million) revolving credit facility (the "Acceo Facility") with two North American lenders. Acceo is indirectly 100% owned by Constellation. The Acceo term facility presently bears interest at a rate calculated at CDOR plus interest rate spreads based on a leverage table. The Acceo Facility is collateralized by substantially all of the assets owned by Acceo and its material subsidiaries. The Acceo Facility contains standard events of default which if not remedied within a cure period would trigger the repayment of any outstanding balance. On July 6, 2018, $110.5 million (C$145.0 million) was drawn on the term component of the Acceo Facility. The term facility requires quarterly principal repayments of $0.3 million (C$0.4 million), commencing on September 30, 2018, with the balance of the term facility to be repaid in full on July 6, 2023. As at July 6, 2018 no amounts had been drawn on the revolving component of the Acceo Facility. The revolving component of the Acceo Facility is available for acquisitions, working capital needs, and other general corporate purposes. Transaction costs associated with the Acceo Facility will be included as part of the carrying amount of the liability and will be amortized through profit or loss using the effective interest rate method. The carrying amount of such costs relating to this facility is estimated to be $2.7 million.

The Acceo Facility is independent of each of the CSI Facility and the New CNH Facility. The obligations of Acceo are not guaranteed by Constellation or its subsidiaries, however a $19 million (C$25 million) Promissory Note issued by N. Harris Computer Corporation to Acceo Solutions Inc. (representing an amount equal to the balance of the purchase price payable by Acceo Solutions to its previous shareholders in relation to Acceo acquisition) has been pledged under the Acceo Facility. In addition, Constellation and its subsidiaries other than Acceo and its subsidiaries are not subject to the terms of the Acceo Facility. Similarily, Acceo and its subsidiaries did not guarantee the CSI Facility or the New CNH Facility and is not subject to the provisions thereof. The Acceo Facility imposes limitations on the amount of distributions that Acceo may make to Constellation.

Debentures

On October 1, 2014 and November 19, 2014, the Company issued unsecured subordinated debentures (the "Debentures") with a total principal value of C$96.0 million for total proceeds of C$91.2 million. The proceeds were used by the Company to pay down $81.2 million of outstanding bank indebtedness.

On September 30, 2015, the Company issued an additional tranche of Debentures with a total principal value of C$186.2 million for total proceeds of C$214.2 million. The proceeds were used by the Company to pay down $130.4 million of outstanding bank indebtedness. The September 30, 2015 issuance formed a single series with the outstanding C$96.0 million aggregate principal amount of Debentures, Series 1 of the Company. The Debentures have a maturity date of March 31, 2040.

TSS Membership Liability

On December 23, 2014, in accordance with the terms of the purchase and sale agreement for the TSS acquisition, and on the basis of the term sheets attached thereto, Constellation and the sellers of TSS along with members of TSS' executive management team (collectively, the "minority owners") entered into a Members Agreement pursuant to which the minority owners acquired 33.29% of the voting interests in CNH. Proceeds from this transaction in the amount of $48.5 million (€39.4 million) were utilized to repay, in part, outstanding bank indebtedness of Constellation. In accordance with IFRS, 100% of the financial results for TSS are included in the consolidated financial results of the Company.

Each of the minority owners may, at any time, exercise a put option to sell all or a portion of their interests in CNH back to Constellation for an amount calculated in accordance with a valuation methodology described within the Members Agreement. Accordingly, the Company classified the proceeds from the Members Agreement as a liability. The main valuation driver in such calculation is the maintenance and other recurring revenue of CNH. Upon the exercise of a put option, Constellation would be obligated to redeem up to 33.33% of the minority owners' interests put, no later than 30 business days from the date notice is received (classified as a current liability), and up to 33.33% on each of the first and second anniversary of the date the first redemption payment is made.

The seller of TSS also has an option available to it to sell approximately 68% of its interests in CNH, for an amount calculated in accordance with a valuation methodology described within the Members Agreement, in the event that Robin Van Poelje, TSS' CEO, is no longer employed by TSS. The approximately 32% remaining interest can be sold via the put option described above.

In the event of a change of control in Constellation, the minority owners would have the option to sell 100% of their interests in CNH for an amount calculated in accordance with a valuation methodology described within the Members Agreement. Constellation would be obligated to remit payment in respect thereof no later than 30 business days from the date notice is given.

Commencing at any time after December 31, 2023, Constellation may exercise a call option to purchase all of the minority owners' interests in CNH, for an amount calculated in accordance with a valuation methodology described within the Members Agreement. Upon exercise of the call option, the full purchase price will be paid within 30 business days of the notice date, following which the minority owners' membership in CNH will be terminated. There is a valuation premium if the call option is exercised versus the put option.

If any of TSS' executive management team that participate in the Members Agreement are terminated for urgent cause as defined in Section 7:678 of the Dutch Civil Code, Constellation shall have the right to purchase all of the interests beneficially owned by the terminated executive for an amount calculated in accordance with the valuation methodology described within the Members Agreement. The full purchase price will be paid within 30 business days from the date notice is given, following which the terminated executive's membership in CNH will be terminated. An option does exist for the terminated executive to elect to be paid in annual installments of 33.33% of his interests in CNH over a 3 year period. The valuation of the interests being purchased will be calculated at each annual payment date.

Other commitments

Commitments include operating leases for office equipment and facilities, letters of credit and performance bonds issued on our behalf by financial institutions in connection with facility leases and contracts with public sector customers. Also, occasionally we structure some of our acquisitions with contingent consideration based on the future performance of the acquired business. The fair value of contingent consideration recorded in our statement of financial position was $18.3 million at June 30, 2018. Aside from the aforementioned, we do not have any other business arrangements, derivative financial instruments, or any equity interests in non-consolidated entities that would have a significant effect on our assets and liabilities as at June 30, 2018.

The TSS membership liability commitment assumes that the minority owners have exercised their put option to sell 100% of their interests back to Constellation. This option however has not been exercised as at July 26, 2018. See the "Critical Accounting Estimate" section of the Company's 2017 Annual Consolidated Financial Statements for a discussion on the valuation methodology utilized.

Foreign Currency Exposure

We operate internationally and have foreign currency risks related to our revenue, operating expenses, assets and liabilities denominated in currencies other than the U.S. dollar. Consequently, we believe movements in the foreign currencies in which we transact will impact future revenue and net earnings. Our analysis related to the change in average exchange rates from 2017 to 2018 suggests that the impact to Adjusted EBITA margins for the three and six months ended June 30, 2018 was less than 1%. The impact to organic revenue growth for both the three and six months ended June 30, 2018 was approximately positive 3%. We cannot predict the effect of foreign exchange gains or losses in the future; however, if significant foreign exchange losses are experienced, they could have a material adverse effect on our business, revenues, results of operations, and financial condition. The Company enters into forward foreign exchange contracts from time to time with the objective of mitigating volatility in profit or loss in respect of financial liabilities. In entering into these forward exchange contracts, the Company is exposed to the credit risk of the counterparties to such contracts and the possibility that the counterparties will default on their payment obligations under these contracts. However, given that the counterparties are Schedule 1 banks or affiliates thereof, the Company believes these risks are not material. During the six months ended June 30, 2018, the Company did not purchase any contracts of this nature.

The following table provides an approximate breakdown of our revenue and expenses by currency, expressed as a percentage of total revenue and expenses, as applicable, for the three and six months ended June 30, 2018:

	Three Months Ended June 30, 2018		Six Months Ended June 30, 2018	
Currencies	% of Revenue	% of Expenses	% of Revenue	% of Expenses
USD	53%	45%	53%	47%
CAD	8%	13%	7%	12%
GBP	7%	8%	7%	8%
EURO	21%	22%	22%	22%
CHF	1%	3%	1%	3%
Others	11%	10%	10%	9%
Total	100%	100%	100%	100%

Off-Balance Sheet Arrangements

As a general practice, we have not entered into off-balance sheet financing arrangements. Except for operating leases and letters of credit, all of our liabilities and commitments are reflected as part of our statement of financial position.

Proposed Transactions

We seek potential acquisition targets on an ongoing basis and may complete several acquisitions in any given fiscal year.

New standards and interpretations adopted

IFRS 9 Financial Instruments

IFRS 9 replaces the guidance in IAS 39 Financial Instruments: Recognition and Measurement, on the classification and measurement of financial assets. IFRS 9 eliminates the existing IAS 39 categories of held to maturity, available-for-sale and loans and receivable.

Financial assets will be classified into one of two categories on initial recognition:

- financial assets measured at amortized cost; or
- financial assets measured at fair value.

The classification of financial assets under IFRS 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics.

Gains and losses on remeasurement of financial assets measured at fair value will be recognized in profit or loss, except for an investment in an equity instrument which is not held-for-trading. IFRS 9 provides, on initial recognition, an irrevocable election to present all fair value changes from the investment in other comprehensive income ("OCI") ("FVOCI"). The election is available on an individual investment-by-investment basis. Amounts presented in OCI will not be reclassified to profit or loss at a later date. IFRS 9 also includes a new general hedge accounting standard which will align hedge accounting more closely with risk management.

IFRS 9 replaces the 'incurred loss' model in IAS 39 with an expected credit loss ("ECL") model. The new impairment model applies to financial assets at amortized cost, contract assets and debt investments at FVOCI.

The Company adopted this standard on January 1, 2018 and it had a nominal impact on the Company's disclosures.

IFRS 15 Revenue from Contracts with Customers

The Company has adopted IFRS 15 Revenue from Contracts with Customers with an initial adoption date of January 1, 2018. The Company utilized the cumulative effect method to adopt the new standard and therefore, the comparative information has not been restated and continues to be reported under IAS 18 and IAS 11. (See Note 20 of the Unaudited Condensed Consolidated Interim Financial Statements for the three and six month periods ended June 30, 2018.)

New standards and interpretations not yet adopted

A number of new standards, and amendments to standards and interpretations, are not yet effective for the quarter ended June 30, 2018, and have not been applied in preparing our consolidated financial statements. The relevant standards are listed below.

IFRS 16 Leases

In January 2016, the IASB issued the final publication of the IFRS 16 Leases standard, which will supersede the current IAS 17, Leases standard. Under IFRS 16, a lease will exist when a customer controls the right to use an identified asset as demonstrated by the customer having exclusive use of the asset for a period of time. IFRS 16 introduces a single accounting model for lessees and all leases will require an asset and liability to be recognized on the statement of financial position at inception. The accounting treatment for lessors will remain largely the same as under IAS 17.

The standard is effective for annual periods beginning on or after January 1, 2019 with early adoption permitted, but only if the entity is also applying IFRS 15. The Company is required to retrospectively apply IFRS 16 to all existing leases as of the date of transition and has the option to either:

- apply IFRS 16 with full retrospective effect; or
- recognize the cumulative effect of initially applying IFRS 16 as an adjustment to opening equity at the date of initial application.

As a practical expedient, an entity is not required to reassess whether a contract is, or contains, a lease at the date of initial application. The Company is assessing the impact of this standard on its consolidated financial statements; however, the Company believes that on adoption of the standard there will be an increase to assets and liabilities, as the Company will be required to record a right-of-use asset and a corresponding lease liability on its Consolidated Statements of Financial Position, as well as a decrease to operating costs, an increase to finance costs (due to accretion of the lease liability) and an increase to depreciation (due to depreciation of the right-of-use asset).

Share Capital

As at July 26, 2018, there were 21,191,530 common shares outstanding.

Risks and Uncertainties

The Company's business is subject to a number of risk factors which are described in our most recently filed AIF. Additional risks and uncertainties not presently known to us or that we currently consider immaterial also may impair our business and operations and cause the price of the common shares to decline. If any of the noted risks actually occur, our business may be harmed and the financial condition and results of operation may suffer significantly. In that event, the trading price of the common shares could decline, and shareholders may lose all or part of their investment.

Controls and Procedures

Evaluation of disclosure controls and procedures:

Management is responsible for establishing and maintaining disclosure controls and procedures as defined under National Instrument 52-109. At June 30, 2018, the President and Chief Financial Officer concluded that the design and operation of these disclosure controls and procedures were effective and that material information relating to the Company, including its subsidiaries, was made known to them and was recorded, processed, summarized and reported within the time periods specified under applicable securities legislation.

Internal controls over financial reporting:

The President and Chief Financial Officer have designed or caused to be designed under their supervision, disclosure controls and procedures which provide reasonable assurance that material information regarding the Company is accumulated and communicated to the Company's management, including its President and Chief Financial Officer in a timely manner.

In addition, the President and Chief Financial Officer have designed or caused it to be designed under their supervision internal controls over financial reporting ("ICFR") to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements. The President and Chief Financial Officer have been advised that the control framework the President and the Chief Financial Officer used to design the Company's ICFR is recognized by the Committee of Sponsoring Organizations of the Treadway Commission.

The President and the Chief Financial Officer have evaluated, or caused to be evaluated under their supervision, whether or not there were changes to its ICFR during the period ended June 30, 2018 that have materially affected, or are reasonably likely to materially affect the Company's ICFR. No such changes were identified through their evaluation.

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that its objectives are met. Due to inherent limitations in all such systems, no evaluations of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Accordingly, our disclosure controls and procedures and our internal controls over financial reporting are effective in providing reasonable, not absolute, assurance that the objectives of our control systems have been met.