

CONSTELLATION SOFTWARE INC.

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

The following discussion and analysis should be read in conjunction with the Annual Consolidated Financial Statements for the year ended December 31, 2016, 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, February 15, 2017. 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, Adjusted net income margin, Net Revenue, Average Invested Capital, and ROIC.

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.

“Net Revenue”. Net Revenue is revenue for IFRS purposes less any third party and flow-through expenses. The Company believes Net Revenue is a useful measure since it captures 100% of the license, maintenance and services revenues associated with Constellation’s own products, and only the margin on the lower value-added revenues such as commodity hardware or third party software.

Adjusted EBITA, Adjusted net income, and Net Revenue are not recognized measures under IFRS and, accordingly, readers are cautioned that Adjusted EBITA, Adjusted net income and Net Revenue should not be construed as alternatives to net income and revenue determined in accordance with IFRS. The Company’s method of calculating Adjusted EBITA, Adjusted net income and Net Revenue may differ from other issuers and, accordingly, Adjusted EBITA, Adjusted net income, and Net Revenue 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, and “ROIC plus Organic Growth” for a reconciliation of Net Revenue to Revenue. Adjusted EBITA includes 100% of the Adjusted EBITA of TSS, and Net Revenue includes 100% of the Net Revenue of TSS.

“Average Invested Capital” represents the average equity capital of the Company, and is based on the Company’s estimate of the amount of money that its common shareholders had invested in CSI. Subsequent to that estimate, each period the Company has kept a running tally, adding Adjusted net income, subtracting any dividends, adding any amounts related to share issuances and making some minor adjustments, including adjustments relating to our use of certain incentive programs and the amortization of impaired intangibles. The Company believes that Average Invested Capital is a useful measure as it approximates the retained earnings of the Company prior to taking into consideration amortization of intangible assets, deferred income taxes, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time.

“ROIC” means Return on Invested Capital and represents a ratio of Adjusted net income to Average Invested Capital. The Company believes this is a useful profitability measure as it excludes certain non-cash expenses (income) from both the numerator and denominator.

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 December 31,		Period-Over- Period Change		Year ended December 31,		Period-Over- Period Change		Year ended
	2016 2015 (Unaudited)	2015 2014 (Unaudited)	\$	%	2016 2015 (Unaudited)	2015 2014 (Unaudited)	\$	%	2014
Revenue	563.8	511.6	52.2	10%	2,125.1	1,838.3	286.8	16%	1,669.3
Expenses	412.4	378.7	33.7	9%	1,595.1	1,392.8	202.3	15%	1,321.3
Adjusted EBITA	151.4	132.8	18.6	14%	530.0	445.5	84.5	19%	348.1
Adjusted EBITA margin	27%	26%			25%	24%			21%
Amortization of intangible assets	58.6	47.9	10.7	22%	190.6	180.5	10.1	6%	173.2
Foreign exchange (gain) loss	1.2	(7.3)	8.5	NM	26.0	(15.7)	41.7	NM	10.5
TSS membership liability revaluation charge	7.7	7.1	0.6	9%	21.6	22.2	(0.6)	-3%	-
Share in net (income) loss of equity investees	0.4	(0.2)	0.6	NM	(5.3)	(1.1)	(4.2)	397%	(0.8)
Finance and other income	(7.6)	(1.5)	(6.1)	395%	(10.8)	(4.8)	(6.1)	127%	(4.1)
Finance costs	5.2	5.1	0.1	1%	21.6	20.1	1.5	7%	16.7
Income before income taxes	85.9	81.7	4.2	5%	286.4	244.3	42.1	17%	154.9
Income taxes expense (recovery)									
Current income tax expense (recovery)	25.0	15.9	9.2	58%	84.9	63.5	21.5	34%	51.5
Deferred income tax expense (recovery)	(4.8)	(0.1)	(4.7)	NM	(5.3)	3.6	(8.9)	NM	0.2
Income tax expense (recovery)	20.3	15.8	4.5	28%	79.6	67.1	12.6	19%	51.8
Net income	65.7	66.0	(0.3)	0%	206.8	177.2	29.5	17%	103.1
Adjusted net income	121.8	117.7	4.1	3%	395.0	371.0	24.0	6%	274.3
Adjusted net income margin	22%	23%			19%	20%			16%
Weighted average number of shares outstanding (000's)									
Basic and diluted	21,192	21,192			21,192	21,192			21,192
Net income per share									
Basic and diluted	\$ 3.10	\$ 3.11	\$ (0.01)	0%	\$ 9.76	\$ 8.36	\$ 1.39	17%	\$ 4.87
Adjusted EBITA per share									
Basic and diluted	\$ 7.14	\$ 6.27	\$ 0.88	14%	\$ 25.01	\$ 21.02	\$ 3.99	19%	\$ 16.43
Adjusted net income per share									
Basic and diluted	\$ 5.75	\$ 5.55	\$ 0.19	3%	\$ 18.64	\$ 17.51	\$ 1.13	6%	\$ 12.94
Cash dividends declared per share									
Basic and diluted	\$ 1.00	\$ 1.00	\$ -	0%	\$ 4.00	\$ 4.00	\$ -	0%	\$ 4.00
Total assets					1,883.5	1,639.3	244.1	15%	1,433.1
Total long-term liabilities					552.8	532.3	20.5	4%	414.4

NM - Not meaningful

Comparison of the three and twelve months ended December 31, 2016 and 2015

Revenue:

Total revenue for the quarter ended December 31, 2016 was \$563.8 million, an increase of 10%, or \$52.2 million, compared to \$511.6 million for the comparable period in 2015. For the 2016 fiscal year total revenues were \$2,125.1 million, an increase of 16%, or \$286.8 million, compared to \$1,838.3 million for the comparable period in 2015. The increase for both the three and twelve 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 negative 1% and positive 1% respectively, positive 1% and 2% respectively after adjusting for the impact of the net appreciation 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's Q4 2016 organic growth rate was negatively impacted as a result of higher than average hardware sales recorded in the quarter ended December 31, 2015 in our public sector relating to deliveries on various large projects in our transit vertical during that quarter. Hardware revenue is primarily recognized on delivery and as such can result in temporary spikes in revenue. Organic growth for the three and twelve month periods ended December 31, 2016 was positive 4% and 3% respectively after adjusting for both foreign exchange and hardware sales.

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

	Three months ended December 31,		Period-Over-Period Change		Q415 Proforma Adjustment (Note 1)	Organic Growth %	Year ended December 31,		Period-Over-Period Change		2015 Proforma Adjustment (Note 2)	Organic Growth %
	<u>2016</u>	<u>2015</u>	\$	%			2016	2015	\$	%		
			(\$M, except percentages)						(\$M, except percentages)			
Licenses	39.4	34.4	5.1	15%	5.6	-1%	142.5	131.0	11.5	9%	27.7	-10%
Professional services	117.0	103.5	13.5	13%	12.9	1%	434.5	384.6	49.9	13%	49.6	0%
Hardware and other	38.7	53.3	(14.6)	-27%	1.1	-29%	147.7	152.9	(5.2)	-3%	8.2	-8%
Maintenance and other recurring	368.6	320.4	48.2	15%	36.7	3%	1,400.3	1,169.8	230.5	20%	187.6	3%
	<u>563.8</u>	<u>511.6</u>	<u>52.2</u>	<u>10%</u>	<u>56.4</u>	<u>-1%</u>	<u>2,125.1</u>	<u>1,838.3</u>	<u>286.8</u>	<u>16%</u>	<u>273.2</u>	<u>1%</u>

\$M - Millions of dollars

Note 1: Estimated pre-acquisition revenues from companies acquired after September 30, 2015. (Obtained from unaudited vendor financial information.)

Note 2: Estimated pre-acquisition revenues from companies acquired since the beginning of 2015. (Obtained from unaudited vendor financial information.)

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 twelve months ended December 31, 2016 compared to the same periods in 2015:

	Three months ended December 31,		Period-Over-Period Change		Q415 Proforma Adjustment (Note 1)	Organic Growth %	Year ended December 31,		Period-Over-Period Change		2015 Proforma Adjustment (Note 2)	Organic Growth %
	2016	2015	\$	%			2016	2015	\$	%		
			(\$M, except percentages)						(\$M, except percentages)			
Public Sector												
Licenses	25.0	22.0	3.0	14%	3.9	-3%	87.6	86.0	1.6	2%	16.6	-15%
Professional services	93.9	83.3	10.7	13%	10.1	1%	344.4	311.5	32.9	11%	35.1	-1%
Hardware and other	32.3	46.4	(14.1)	-30%	0.4	-31%	120.4	126.4	(5.9)	-5%	2.2	-6%
Maintenance and other recurring	232.4	197.6	34.8	18%	26.4	4%	875.9	744.6	131.2	18%	101.1	4%
	383.6	349.3	34.4	10%	40.8	-2%	1,428.3	1,268.5	159.8	13%	155.1	0%
Private Sector												
Licenses	14.4	12.3	2.1	17%	1.8	2%	55.0	45.0	9.9	22%	11.2	-2%
Professional services	23.1	20.2	2.9	14%	2.8	0%	90.1	73.1	17.0	23%	14.5	3%
Hardware and other	6.5	6.9	(0.5)	-7%	0.7	-16%	27.3	26.6	0.8	3%	5.9	-16%
Maintenance and other recurring	136.2	122.8	13.4	11%	10.3	2%	524.5	425.2	99.3	23%	86.5	3%
	180.2	162.3	17.9	11%	15.6	1%	696.8	569.8	127.0	22%	118.1	1%

Note 1: Estimated pre-acquisition revenues from companies acquired after September 30, 2015. (Obtained from unaudited vendor financial information.)

Note 2: Estimated pre-acquisition revenues from companies acquired since the beginning of 2015. (Obtained from unaudited vendor financial information.)

Public Sector

For the quarter ended December 31, 2016, total revenue in the public sector reportable segment increased 10%, or \$34.4 million to \$383.6 million, compared to \$349.3 million for the quarter ended December 31, 2015. For the fiscal year ended December 31, 2016, total revenue increased by 13%, or \$159.8 million to \$1,428.3 million, compared to \$1,268.5 million for the comparable period in 2015. For purposes of calculating organic growth, estimated pre-acquisition revenues included from the relevant companies acquired in 2015 and 2016 were \$40.8 million and \$155.1 million for the three and twelve month periods ended December 31, 2015, respectively. Organic revenue growth was negative 2% and 0% respectively for the three and twelve months ended December 31, 2016 compared to the same periods in 2015, and 0% and 1% respectively after adjusting for the impact of the net appreciation of the US dollar against most major currencies in which the Company transacts business. The public sector's Q4 2016 organic growth rate was negatively impacted as a result of higher than average hardware sales recorded in the quarter ended December 31, 2015 in our public sector relating to deliveries on various large projects in our transit vertical during that quarter. Hardware revenue is primarily recognized on delivery and as such can result in temporary spikes in revenue. Organic growth for the public sector for the three and twelve month periods ended December 31, 2016 was 4% and 2% respectively after adjusting for both foreign exchange and hardware sales.

Private Sector

For the quarter ended December 31, 2016, total revenue in the private sector reportable segment increased 11%, or \$17.9 million to \$180.2 million, compared to \$162.3 million for the quarter ended December 31, 2015. For the fiscal year ended December 31, 2016, total revenue increased by 22%, or \$127.0 million to \$696.8 million, compared to \$569.8 million for the comparable period in 2015. For purposes of calculating organic growth, estimated pre-acquisition revenues included from the relevant companies acquired in 2015 and 2016 were \$15.6 million and \$118.1 million for the three and twelve month periods ended December 31, 2015, respectively. Organic revenue growth was 1% for both the three and twelve months ended December 31, 2016 compared to the same periods in 2015, and 3% in each case after adjusting for the impact of the net appreciation 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 December 31,		Period-Over- Period Change		Year ended December 31,		Period-Over- Period Change	
	<u>2016</u>	<u>2015</u>	\$	%	<u>2016</u>	<u>2015</u>	\$	%
	(\$M, except percentages)				(\$M, except percentages)			
Expenses								
Staff	277.2	241.3	35.9	15%	1,059.0	912.4	146.6	16%
Hardware	20.6	32.1	(11.6)	-36%	82.3	90.3	(8.0)	-9%
Third party license, maintenance and professional services	49.9	46.5	3.4	7%	192.7	163.7	29.0	18%
Occupancy	14.1	11.8	2.3	20%	51.7	43.2	8.5	20%
Travel, Telecommunications, Supplies & Software and equipment	34.4	33.0	1.4	4%	129.8	114.5	15.3	13%
Professional fees	8.3	6.7	1.7	25%	28.2	22.6	5.6	25%
Other, net	0.9	2.4	(1.5)	-61%	29.0	29.0	(0.1)	0%
Depreciation	6.9	5.0	2.0	40%	22.4	17.0	5.3	31%
	412.4	378.7	33.7	9%	1,595.1	1,392.8	202.3	15%

Overall expenses for the quarter ended December 31, 2016 increased 9%, or \$33.7 million to \$412.4 million, compared to \$378.7 million during the same period in 2015. As a percentage of total revenue, expenses decreased to 73% for the quarter ended December 31, 2016 from 74% for the same period in 2015. During the fiscal year ended December 31, 2016, expenses increased 15%, or \$202.3 million to \$1,595.1 million, compared to \$1,392.8 million during the same period in 2015. As a percentage of total revenue, expenses decreased to 75% for the fiscal year ended December 31, 2016 from 76% for the same period in 2015. Our average employee headcount grew 16% in 2016 from 10,420 for the quarter ended December 31, 2015 to 12,124 for the quarter ended December 31, 2016 primarily due to acquisitions. For both the three and twelve months ended December 31, 2016 the appreciation of the US dollar against most other major currencies in which the Company transacts business resulted in an approximate 2% reduction in expenses compared to the comparable periods of 2015.

Staff expense – Staff expenses increased 15% or \$35.9 million for the quarter ended December 31, 2016 and 16% or \$146.6 million for the fiscal year ended December 31, 2016 over the same periods in 2015. 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 December 31,		Period-Over- Period Change		Year ended December 31,		Period-Over- Period Change	
	<u>2016</u>	<u>2015</u>	\$	%	<u>2016</u>	<u>2015</u>	\$	%
	(\$M, except percentages)				(\$M, except percentages)			
Professional services	61.5	54.4	7.1	13%	237.9	213.6	24.2	11%
Maintenance	57.1	48.6	8.4	17%	213.8	176.5	37.3	21%
Research and development	76.3	69.0	7.3	11%	294.1	259.2	34.9	13%
Sales and marketing	38.7	32.5	6.2	19%	147.9	124.4	23.5	19%
General and administrative	43.7	36.8	6.9	19%	165.3	138.6	26.6	19%
	277.2	241.3	35.9	15%	1,059.0	912.4	146.6	16%

The increase in staff expenses for both the three and twelve month periods ended December 31, 2016 was primarily due to the growth in the number of employees compared to the same periods in 2015 primarily due to acquisitions.

Hardware expenses – Hardware expenses decreased 36% or \$11.6 million for the quarter ended December 31, 2016 and 9% or \$8.0 million for the fiscal year ended December 31, 2016 over the same periods in 2015, in conjunction with the decline in hardware revenue. Hardware margins for the three and twelve months ended December 31, 2016 were 47% and 44% respectively as compared to 40% and 41% for the comparable periods in 2015.

Third party license, maintenance and professional services expenses – Third party license, maintenance and professional services expenses increased 7% or \$3.4 million for the quarter ended December 31, 2016 and 18% or \$29.0 million for the fiscal year ended December 31, 2016 over the same periods in 2015. The increase is primarily due to third party license, maintenance and professional services expenses of acquired businesses.

Occupancy expenses – Occupancy expenses increased 20% or \$2.3 million for the quarter ended December 31, 2016 and 20% or \$8.5 million for the fiscal year ended December 31, 2016 over the same periods in 2015. 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 4% or \$1.4 million for the quarter ended December 31, 2016 and 13% or \$15.3 million for the fiscal year ended December 31, 2016 over the same periods in 2015. The increase in these expenses is primarily due to expenses incurred by acquired businesses.

Professional fees – Professional fees increased 25% or \$1.7 million for the quarter ended December 31, 2016 and 25% or \$5.6 million for the fiscal year ended December 31, 2016 over the same periods in 2015. The increase in professional fees is primarily the result of an increase in broker fees, due diligence services, and legal fees associated with acquisitions, and legal fees associated with the renewal of the Company’s credit facility.

Other, net – Other expenses decreased 61% or \$1.5 million for the quarter ended December 31, 2016 and 0.3% or \$0.1 million for the fiscal year ended December 31, 2016 over the same periods in 2015. The following table provides a further breakdown of expenses within this category.

	Three months ended December 31,		Period-Over-Period Change		Year ended December 31,		Period-Over-Period Change	
	<u>2016</u>	<u>2015</u>	\$	%	<u>2016</u>	<u>2015</u>	\$	%
	(\$M, except percentages)							
Advertising and promotion	6.9	5.6	1.3	23%	26.0	21.4	4.6	22%
Recruitment and training	3.9	2.7	1.3	47%	12.4	9.1	3.4	37%
Bad debt expense	0.2	0.2	0.0	22%	3.0	1.7	1.3	78%
R&D tax credits	(8.4)	(7.2)	(1.1)	16%	(19.0)	(14.8)	(4.2)	29%
Contingent consideration	(1.2)	(0.4)	(0.8)	NM	0.0	6.7	(6.7)	-100%
Other expense, net	(0.5)	1.6	(2.1)	-134%	6.5	5.0	1.5	31%
	0.9	2.4	(1.5)	-61%	29.0	29.0	(0.1)	0%

NM - Not meaningful

The contingent consideration expense amounts recorded for the periods above relate to an increase (decrease) to acquisition earnout payments primarily as a result of increases (decreases) to revenue forecasts for the associated acquisitions. Revenue forecasts are updated on a quarterly basis and related earnout payments are updated accordingly. The decrease in other expense, net (per the table above) for the quarter ended December 31,

2016 is primarily related to the \$3.2 million termination fee received from Redknee Solutions Inc. (“Redknee”) after Redknee terminated a subscription agreement they had entered into with the Company. For the fiscal year ended December 31, 2016 other expense, net (per the table above) includes a legal settlement expense with no similar expense for the three or twelve months ended December 31, 2015, that partially offsets the benefit of the Redknee termination fee. Remaining expense increases are primarily due to expenses incurred by acquired businesses.

Depreciation – Depreciation of property and equipment increased 40% or \$2.0 million for the quarter ended December 31, 2016 and increased 31% or \$5.3 million for the fiscal year ended December 31, 2016 over the same periods in 2015.

Other Income and Expenses:

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

	Three months ended December 31,		Period-Over- Period Change		Year ended December 31,		Period-Over- Period Change	
	<u>2016</u>	<u>2015</u>	\$	%	<u>2016</u>	<u>2015</u>	\$	%
	(\$M, except percentages)				(\$M, except percentages)			
Amortization of intangible assets	58.6	47.9	10.7	22%	190.6	180.5	10.1	6%
Foreign exchange (gain) loss	1.2	(7.3)	8.5	NM	26.0	(15.7)	41.7	NM
TSS membership liability revaluation charge	7.7	7.1	0.6	9%	21.6	22.2	(0.6)	-3%
Share in net (income) loss of equity investees	0.4	(0.2)	0.6	NM	(5.3)	(1.1)	(4.2)	397%
Finance and other expense (income)	(7.6)	(1.5)	(6.1)	395%	(10.8)	(4.8)	(6.1)	127%
Finance costs	5.2	5.1	0.1	1%	21.6	20.1	1.5	7%
Income tax expense (recovery)	20.3	15.8	4.5	28%	79.6	67.1	12.6	19%
	<u>85.7</u>	<u>66.9</u>	<u>18.9</u>	<u>28%</u>	<u>323.2</u>	<u>268.3</u>	<u>54.9</u>	<u>20%</u>

NM - Not meaningful

Amortization of intangible assets – Amortization of intangible assets increased 22% or \$10.7 million for the quarter ended December 31, 2016 and 6% or \$10.1 million for the fiscal year ended December 31, 2016 over the same periods in 2015. The increase in amortization expense is attributable to an increase in the carrying amount of our intangible asset balance over the twelve month period ended December 31, 2016 as a result of acquisitions completed during this 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 twelve months ended December 31, 2016, we realized foreign exchange losses of \$1.2 million and \$26.0 million respectively compared to gains of \$7.3 million and \$15.7 million for the same periods in 2015. The following table provides a breakdown of these amounts.

	Three months ended December 31,		Period-Over-Period Change		Year ended December 31,		Period-Over-Period Change	
	2016	2015	\$	%	2016	2015	\$	%
	(\$M, except percentages)				(\$M, except percentages)			
Unrealized foreign exchange (gain) loss related to:								
- revaluation of intercompany loans between entities with differing functional currencies ⁽¹⁾	6.8	2.6	4.1	157%	17.7	4.9	12.8	261%
- revaluation of the Company's unsecured subordinated floating rate debentures as a result of the appreciation (depreciation) of the Canadian dollar against the US dollar.	(5.2)	(7.6)	2.4	-31%	7.0	(18.0)	25.0	NM
Remaining foreign exchange (gain) loss	(0.4)	(2.4)	2.0	-83%	1.3	(2.7)	4.0	NM
	1.2	(7.3)	8.5	NM	26.0	(15.7)	41.7	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 increased by approximately 12% or \$7.7 million for the quarter ended December 31, 2016 and by approximately 40% or \$21.6 million for the fiscal year ended December 31, 2016 primarily as a result of the growth in TSS maintenance revenue in the respective periods. Valuation increases of \$7.1 million and \$22.2 million were recorded in the three and twelve months ended December 31, 2015. The liability recorded on the balance sheet increased by 35% or \$18.9 million over the twelve month period as a result of a foreign exchange gain that was recorded through other comprehensive income. The TSS membership liability is denominated in Euros and the Euro depreciated 4% versus the US dollar during 2016.

Share in net (income) loss of equity investees – Share in the net (income) loss of equity investees was a loss of \$0.4 million and income of \$5.3 million for the three and twelve months ended December 31, 2016 respectively, compared to income of \$0.2 million and \$1.1 million for the same periods in 2015. The primary reason for the increase in net income for the twelve months ended December 31, 2016 was the gain on disposal of assets realized by an equity investee in the period.

Finance and other income – Finance and other income for the quarter ended December 31, 2016 was \$7.6 million compared to \$1.5 million for the same period in 2015. During the fiscal year ended December 31, 2016, finance and other income was \$10.8 million compared to \$4.8 million for the same period in 2015. Gains of \$2.7 million and \$5.2 million relating to the sale of equity securities available-for-sale were recorded during the three and twelve months ended December 31, 2016 and no similar gains were recorded in 2015. In addition, interest earned on cash balances totalling \$0.5 million and \$0.8 million were recorded during the three and twelve months ended December 31, 2016 with immaterial amounts recorded in 2015, in line with the increase in cash balances in 2016 as compared to 2015. The remaining other income amounts primarily relate to acquired net tangible asset adjustments for acquisitions recorded subsequent to the finalization of purchase accounting.

Finance costs – Finance costs for the quarter ended December 31, 2016 increased \$0.1 million to \$5.2 million, compared to \$5.1 million for the same period in 2015. During the fiscal year ended December 31, 2016, finance costs increased \$1.5 million to \$21.6 million, from \$20.1 million over the same period in 2015. The increase in finance costs for the fiscal year ended December 31, 2016 primarily relates to interest paid on the Company's unsecured subordinated floating rate debentures. 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 principal amount outstanding during the nine months ended September 30, 2015 was C\$96.0 million, versus C\$282.2 million

during the three months ended December 31, 2015 and fiscal year ended December 31, 2016. The interest expense recorded on the debentures issued on September 30, 2015 is reduced by the amortization of the 15% premium that was received when issued. The premium is being amortized over five years from the date of issuance. The increase in finance costs relating to the debentures was partially offset by reduced interest expense on our credit facilities resulting from decreased average borrowings and interest rates in the three and twelve month periods ended December 31, 2016 compared to the same periods in 2015.

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 December 31, 2016, income tax expense increased \$4.5 million to \$20.3 million compared to \$15.8 million for the same period in 2015. During the fiscal year ended December 31, 2016, income tax expense increased \$12.6 million to \$79.6 million compared to \$67.1 million for the same period in 2015. Current tax expense as a percentage of adjusted net income before tax was 17% and 18% for the three and twelve months ended December 31, 2016 respectively, versus 12% and 15% for the same periods in 2015. 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. As a result of the depletion of tax credits available to certain of our Canadian entities and a proportionately higher level of profitability in the US, the annual rate has gradually increased since 2013. 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. The deferred income tax expense decrease of \$4.7 million and \$8.9 million for the three and twelve months ended December 31, 2016 respectively, relates to various items including changes in recognition of certain deferred income tax assets.

Net Income and Earnings per Share:

Net income for the quarter ended December 31, 2016 was \$65.7 million compared to net income of \$66.0 million for the same period in 2015 representing a decrease of 0.5%. On a per share basis this translated into a net income per diluted share of \$3.10 in the quarter ended December 31, 2016 compared to net income per diluted share of \$3.11 for the same period in 2015. For the fiscal year ended December 31, 2016, net income was \$206.8 million or \$9.76 per diluted share compared to \$177.2 million or \$8.36 per diluted share for the same period in 2015, representing an increase of 17%.

There were no changes in the number of shares outstanding.

Adjusted EBITA:

For the quarter ended December 31, 2016, Adjusted EBITA increased to \$151.4 million compared to \$132.8 million for the same period in 2015 representing an increase of 14%. Adjusted EBITA margin was 27% for the quarter ended December 31, 2016 and 26% for the same period in 2015. For the 2016 fiscal year, Adjusted EBITA increased to \$530.0 million compared to \$445.5 million during the same period in 2015, representing an increase of 19%. Adjusted EBITA margin was 25% in the 2016 fiscal year and 24% for the same period in 2015. 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 December 31,		Year ended December 31,	
	2016	2015	2016	2015
	(\$M, except percentages)		(\$M, except percentages)	
Total revenue	563.8	511.6	2,125.1	1,838.3
Net income	65.7	66.0	206.8	177.2
Adjusted for:				
Income tax expense (recovery)	20.3	15.8	79.6	67.1
Foreign exchange (gain) loss	1.2	(7.3)	26.0	(15.7)
TSS membership liability revaluation charge	7.7	7.1	21.6	22.2
Share in net (income) loss of equity investees	0.4	(0.2)	(5.3)	(1.1)
Finance and other income	(7.6)	(1.5)	(10.8)	(4.8)
Finance costs	5.2	5.1	21.6	20.1
Amortization of intangible assets	58.6	47.9	190.6	180.5
Adjusted EBITA	151.4	132.8	530.0	445.5
Adjusted EBITA margin	27%	26%	25%	24%

Adjusted net income:

For the quarter ended December 31, 2016, Adjusted net income increased to \$121.8 million from \$117.7 million for the same period in 2015, representing an increase of 3%. Adjusted net income margin was 22% for the quarter ended December 31, 2016 and 23% for the same period in 2015. For the 2016 fiscal year, Adjusted net income increased to \$395.0 million from \$371.0 million during the same period in 2015, representing an increase of 6%. Adjusted net income margin was 19% in the 2016 fiscal year and 20% for the same period in 2015. 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 twelve months ended December 31, 2016 was \$5.4 million and \$18.7 million respectively, as compared to \$3.1 million and \$12.6 million for the same periods in 2015.

The following table reconciles Adjusted net income to Net income:

	Three months ended December 31,		Year ended December 31,	
	<u>2016</u>	<u>2015</u>	<u>2016</u>	<u>2015</u>
	(\$M, except percentages)		(\$M, except percentages)	
Total revenue	<u>563.8</u>	<u>511.6</u>	<u>2,125.1</u>	<u>1,838.3</u>
Net income	65.7	66.0	206.8	177.2
Adjusted for:				
Amortization of intangible assets	58.6	47.9	190.6	180.5
TSS membership liability revaluation charge	7.7	7.1	21.6	22.2
Less non-controlling interest in the Adjusted net income of TSS	(5.4)	(3.1)	(18.7)	(12.6)
Deferred income tax expense (recovery)	(4.8)	(0.1)	(5.3)	3.6
Adjusted net income	121.8	117.7	395.0	371.0
Adjusted net income margin	22%	23%	19%	20%

Quarterly Results

	Quarter Ended								
	Dec. 31 <u>2014</u>	Mar. 31 <u>2015</u>	Jun. 30 <u>2015</u>	Sep. 30 <u>2015</u>	Dec. 31 <u>2015</u>	Mar. 31 <u>2016</u>	Jun. 30 <u>2016</u>	Sep. 30 <u>2016</u>	Dec. 31 <u>2016</u>
	(\$M, except per share amounts)								
Revenue	439.8	422.9	443.5	460.4	511.6	487.0	528.7	545.6	563.8
Net income	39.3	32.9	32.7	45.7	66.0	18.7	55.0	67.5	65.7
Adjusted net income	86.6	74.7	79.7	98.9	117.7	62.5	89.9	120.7	121.8
Adjusted net income margin	20%	18%	18%	21%	23%	13%	17%	22%	22%
Net income per share									
Basic & diluted	1.86	1.55	1.54	2.16	3.11	0.88	2.60	3.18	3.10
Adjusted net income per share									
Basic & diluted	4.09	3.52	3.76	4.67	5.55	2.95	4.24	5.70	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, bargain purchase gains and gains or losses on the sale of financial and other assets.

ROIC plus Organic Growth

We believe the metric of ROIC plus organic Net Revenue growth is a proxy for the annual increase in shareholder value. The table below summarizes this metric for 2015 and 2016. Further discussion on this metric is included in the Company's annual letters to shareholders available on SEDAR at www.sedar.com. For acquired companies, organic Net Revenue growth is calculated as the difference between actual Net Revenues achieved by each company in the financial period following acquisition compared to the estimated Net Revenues they achieved in the corresponding financial period preceding the date of acquisition by Constellation.

	Fiscal Year ended December 31,	
	<u>2016</u>	<u>2015</u>
	(\$M, except percentages)	
Adjusted Net Income	395	371
Average Invested Capital	1,261	965
ROIC	31%	38%
Organic Net Revenue growth (YoY)	1%	-3%
ROIC + organic Net Revenue growth	32%	35%

Organic Net Revenue growth excludes any adjustment for foreign exchange.

See "Non-IFRS Measures" for a description of Adjusted Net Income, Average Invested Capital, ROIC and Net Revenue.

The following table reconciles Net Revenue to Revenue:

	Fiscal Year ended December 31,	
	<u>2016</u>	<u>2015</u>
	(\$M)	
Revenue	2,125.1	1,838.3
Adjusted for:		
Hardware expenses	(82.3)	(90.3)
Third party license, maintenance and professional services expenses	(192.7)	(163.7)
Flow through expenses	(18.9)	(18.1)
Net Revenue	1,831.2	1,566.2

	Fiscal Year ended December 31,	
	2016	2015
	(\$M, except percentages)	
Net Revenue	1,831.2	1,566.2
Prior year's Net Revenue	1,566.2	1,420.1
Proforma Adjustment. (Note 1)	238.5	187.6
	<u>1,804.7</u>	<u>1,607.7</u>
Organic Net Revenue Growth	1%	-3%

Note 1: Estimated pre-acquisition Net Revenues from companies acquired since the beginning of 2015 and 2014 respectively. (Obtained from unaudited vendor financial information.)

Liquidity

Our net cash position (cash less bank indebtedness excluding capitalized transaction costs) increased by \$188.5 million to \$227.3 million in the quarter ended December 31, 2016 resulting from cash flows from operations exceeding capital deployed on acquisitions. A repayment of €8 million (approximately \$9 million) was made in 2016 on our Euro denominated credit facility however the impact of foreign exchange on this facility resulted in a net decrease in the fair value of \$13.4 million to \$126.2 million at December 31, 2016 compared to \$139.6 million at December 31, 2015. In addition, cash increased by \$175.0 million to \$353.5 million at December 31, 2016 compared to \$178.5 million at December 31, 2015.

Total assets increased \$244.2 million, from \$1,639.3 million at December 31, 2015 to \$1,883.5 million at December 31, 2016. The increase is primarily due to an increase in cash of \$175.0 million, and an increase in intangible assets of \$41.6 million primarily relating to acquisitions made since December 31, 2015. At December 31, 2016 TSS held a cash balance of \$9.0 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 \$103.4 million, from \$769.8 million at December 31, 2015 to \$873.2 million at December 31, 2016. The increase is primarily due to an increase in deferred revenue of \$39.9 million mainly due to acquisitions made since December 31, 2015 and the timing of maintenance and other billings versus performance and delivery under those customer arrangements, and an increase in income taxes payable of \$34.1 million.

Net Changes in Cash Flows

(in \$M's)

	Year ended December 31, 2016	Year ended December 31, 2015
Net cash provided by operating activities	490.9	395.9
Net cash from (used in) financing activities	(117.6)	(20.2)
Net cash from (used in) acquisition activities	(178.1)	(248.8)
Net cash from (used in) other investing activities	(16.6)	(12.3)
Net cash from (used in) investing activities	(194.7)	(261.1)
Effect of foreign currency	(3.6)	(6.9)
Net increase (decrease) in cash and cash equivalents	175.0	107.8

The net cash flows from operating activities were \$490.9 million for the fiscal year ended December 31, 2016. The \$490.9 million provided by operating activities resulted from \$206.8 million in net income plus \$345.6 million of non-cash adjustments to net income, offset by \$16.5 million of cash utilized from non-cash operating working capital and \$45.0 million in taxes paid.

The net cash flows used in financing activities in the fiscal year ended December 31, 2016 were \$117.6 million, which is mainly a result of dividends paid of \$84.8 million, and interest paid on bank indebtedness and the Company's unsecured subordinated floating rate debentures in the period of \$22.9 million.

The net cash flows used in investing activities in the fiscal year ended December 31, 2016 were \$194.7 million. The cash used in investing activities was primarily due to acquisitions for an aggregate of \$178.1 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 February 25, 2016, we completed an amendment and restatement of our revolving credit facility agreement (the "CSI Facility"), extending its maturity date to August 11, 2020. The CSI Facility limit was increased from \$300 million to \$485 million with a syndicate of new and existing Canadian chartered banks and U.S. banks. 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 December 31, 2016, no amounts were drawn on the CSI Facility, and letters of credit totalling \$15.4 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 December 31, 2016, the carrying amount of such costs totalling \$1.0 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 (approximately \$168 million) term and €10 million (approximately \$11 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. At December 31, 2016, €120 million (approximately \$126 million) remains outstanding on the term component of the CNH Facility. €20 million must be repaid in instalments prior to June 24, 2020, and €100 million is non-amortizing and due on June 24, 2021. The remaining €20 million term component of the CNH Facility remains undrawn. If drawn, principal must be repaid in five equal instalments starting on June 24, 2018. As at December 31, 2016 no amounts had been drawn on the €10 million multicurrency revolving component of the CNH Facility. The revolving component of the CNH Facility is available for acquisitions, working capital needs, and other general corporate purposes until June 24, 2020. Transaction costs associated with the 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. As at December 31, 2016, the carrying amount of such costs relating to this CNH Facility totalling \$3.5 million (€3.3 million) has been classified as part of non-current CNH Facility in the statement of financial position.

The CSI Facility and CNH Facility are independent of each other. The CNH Facility is not guaranteed by Constellation or its subsidiaries nor is Constellation or any subsidiary subject to the terms of the 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 CNH Facility imposes limitations on the amount of distributions that CNH and its subsidiaries 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 €39.4 million (\$48.5 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 \$15.5 million at December 31, 2016. 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 December 31, 2016.

(in millions of dollars)

	Total	< 1 yr	1-5 yrs	> 5 yrs
Operating and capital leases	203.4	59.5	113.5	30.3
Holdbacks	17.9	17.1	0.9	-
TSS membership liability	72.9	26.4	46.5	-
Debentures	209.9	-	-	209.9
Bank indebtedness	126.2	7.4	118.8	-
Total outstanding commitments	630.3	110.4	279.7	240.3

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 February 15, 2017. See the “Critical Accounting Estimate” section of the Company’s 2016 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 2015 to 2016 suggests that the impact to Adjusted EBITA margins for both the three and twelve months ended December 31, 2016 was less than 1%. The impact to organic revenue growth for both the three and twelve months ended December 31, 2016 was approximately negative 2% and negative 1% respectively. 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 fiscal year ended December 31, 2016, 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 twelve months ended December 31, 2016:

Currencies	Three Months Ended December 31, 2016		Fiscal Year Ended December 31, 2016	
	% of Revenue	% of Expenses	% of Revenue	% of Expenses
USD	58%	50%	59%	51%
CAD	6%	11%	6%	12%
GBP	6%	8%	8%	8%
EURO	21%	22%	19%	19%
CHF	0%	2%	1%	2%
Others	8%	7%	8%	7%
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.

Critical Accounting Estimates

General

The preparation of our consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. Our estimates are based on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Our ongoing evaluation of these estimates forms the basis for making judgments about the carrying values of assets and liabilities and the reported amount of revenues and expenses, in cases where they are not readily ascertainable from other sources. Actual amounts may differ from these estimates under different assumptions or conditions.

Our significant accounting policies are fully described in Note 3 to our annual consolidated financial statements which are available on SEDAR (www.sedar.com). Certain accounting policies are particularly important to the reporting of our financial position and results of operations, and require the application of significant judgment by our management. An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, and if different estimates that reasonably could have been used, or changes in the accounting estimates that are reasonably likely to occur periodically, could have a material impact on the financial statements. Management believes the following critical accounting policies reflect the more significant estimates and assumptions used in the preparation of our consolidated financial statements. We believe that there have been no significant changes in our critical accounting estimates for the years presented in our consolidated financial statements.

Revenue Recognition

Revenue represents the fair value of consideration received or receivable from customers for goods and services provided by the Company, net of discounts and sales taxes. The Company reports revenue under four revenue categories being, License, Hardware and other, Professional services, and Maintenance and other recurring revenue.

Typically, the Company's software license agreements are multiple-element arrangements as they may also include maintenance, professional services, and hardware. Multiple-element arrangements are recognized as the revenue for each unit of accounting is earned based on the relative fair value of each unit of accounting as determined by an internal analysis of prices or by using the residual method. A delivered element is considered a separate unit of accounting if it has value to the customer on a standalone basis, and delivery or performance of the undelivered elements is considered probable and substantially under the Company's control. If these criteria are not met, revenue for the arrangement as a whole is accounted for as a single unit of accounting. Where company-specific objective evidence of fair value cannot be determined for undelivered elements, the Company determines fair value of the respective element by estimating its stand-alone selling price, which is also applied for the presentation as part of the revenue categories noted above when certain of those elements are deemed to be a single unit of accounting.

The Company typically sells or licenses software on a perpetual basis, but also licenses software for a specified period. Revenue from short-term time-based licenses, which usually include support services during the license period, is recognized rateably over the license term. Revenue from multi-year time-based licenses that include support services, whether separately priced or not, is recognized rateably over the license term unless a substantive support service renewal rate exists; if this is the case, the amount allocated to the delivered software is recognized as license revenue based on the residual approach once the revenue criteria have been met. In those instances where the customer is required to renew mandatory support and maintenance in order to maintain use of the licensed software over the license term, the Company recognizes the consideration attributable to the license and support for the initial term of the arrangement over the initial term and recognizes revenue for the support renewal fees in subsequent years over the respective renewal periods.

Revenue from the license of software involving significant implementation or customization essential to the functionality of the Company's product, or from the sales of hardware where software is essential to its functionality, is recognized under the percentage-of-completion method of contract accounting based either on the achievement of contractually defined milestones or based on labour hours. Any probable losses are recognized immediately in profit or loss. In certain situations where the outcome of an arrangement cannot be estimated reliably, costs associated with the arrangement are recognized as incurred. In this situation, revenues are recognized only to the extent of the costs incurred that are probable of recovery.

A portion of the Company's sales, categorized as hardware and other revenue, are accounted for as product revenue. Product revenue is recognized when the Company has an executed agreement, the product has been delivered and costs can be measured reliably, the amount of the fee to be paid by the customer is fixed and determinable, and the collection of the related receivable is deemed probable from the outset of the arrangement. If for any of the product or service offerings, the Company determines at the outset of an arrangement that the amount of revenue cannot be measured reliably, and the Company concludes that the inflow of economic benefits associated with the transaction is not probable, then the revenue is deferred until the arrangement fee becomes due and payable by the customer. If, at the outset of an arrangement, the Company determines that collectability is not probable, and the Company concludes that the inflow of economic benefits associated with the transaction is not probable, then revenue recognition is deferred until the earlier of when collectability becomes probable or payment is received. If collectability becomes unlikely before all revenue from an arrangement is recognized, the Company recognizes revenue only to the extent of the fees that are successfully collected unless collectability becomes reasonably assured again. If a customer is specifically identified as a collection risk, the Company does not recognize revenue except to the extent of the fees that have already been collected.

Revenue related to the customer reimbursement of travel related expenses incurred during a project implementation is included in the hardware and other revenue category. Revenue is recognized as costs are incurred which is consistent with the period in which the costs are invoiced. Reimbursable travel expenses incurred for which an invoice has not been issued, are recorded as part of work in progress on the statement of financial position.

Maintenance and other recurring revenue primarily consists of fees charged for customer support on software products post-delivery and also includes, to a lesser extent, recurring fees derived from combined software/support contracts, transaction revenues, managed services, and hosted products. The company-specific fair value of maintenance is typically derived from rates charged to renew these services after an initial period. Maintenance revenue remaining to be recognized in profit or loss is recognized as deferred revenue in the statements of financial position when amounts have been billed in advance and the term of the service period has commenced.

Professional Services revenue including implementation, training and customization of software is recognized by the stage of completion of the arrangement determined using the percentage of completion method noted above or as such services are performed as appropriate in the circumstances. The revenue and profit of fixed price contracts is recognized on a percentage of completion basis when the outcome of a contract can be estimated reliably. When the outcome of the contract cannot be estimated reliably, the amount of revenue recognized is limited to the cost incurred in the period. Losses on contracts are recognized as soon as a loss is foreseen by reference to the estimated costs of completion.

Management exercises judgement in determining whether a contract's outcome can be estimated reliably. Management also applies estimates in the calculation of future contract costs and related profitability as it relates to labour hours and other considerations, which are used in determining the value of amounts recoverable on contracts and timing of revenue recognition. Estimates are continually and routinely revised based on changes in the facts relating to each contract. Judgement is also needed in assessing the ability to collect the corresponding receivables.

The timing of revenue recognition often differs from contract payment schedules, resulting in revenue that has been earned but not billed. These amounts are included in work in progress. Amounts billed in accordance with customer contracts, but not yet earned, are recorded and presented as part of deferred revenue.

Valuation of Identifiable Goodwill and Other Intangible Assets

Acquisitions have been accounted for using the acquisition method required by IFRS 3. Goodwill arising on acquisitions is measured as the fair value of the consideration transferred including the recognized amount of any non-controlling interest in the acquiree, if any, less the net recognized amount of the estimated fair value of identifiable assets acquired and liabilities assumed (subject to certain exemptions to fair value measurement principles such as deferred tax assets or liabilities), all measured as of the acquisition date. When the excess of the consideration transferred less the assets and liabilities acquired is negative, a bargain purchase gain is recognized immediately in profit or loss. Transaction costs that the Company incurs in connection with a business combination are expensed as incurred.

We use the income approach to value acquired technology and customer related intangible assets, which are the two material intangible asset categories reported in our financial statements.

The income approach is a valuation technique that calculates the fair value of an intangible asset based on the cash flows that the asset can be expected to generate over its remaining useful life. We utilize the discounted cash flow ("DCF") methodology which is a form of the income approach that begins with a forecast of the annual cash flows a market participant would expect the subject intangible asset to generate over a discrete projection period. The forecasted cash flows for each of the years in the discrete projection period are then converted to their present value equivalent using a rate of return appropriate for the risk of achieving the intangible assets' projected cash flows, again, from a market participant perspective. The present value of the forecasted cash flows are then added to the present value of the residual value of the intangible asset (if any) at the end of the discrete projection period to arrive at a conclusion with respect to the estimated fair value of the subject intangible asset.

Specifically, we rely on the relief-from-royalty method to value the acquired technology and the multiple-period excess earnings method ("MEEM") to value customer relationship assets.

The underlying premise of the relief-from-royalty method is that the fair value of the technology is equal to the costs savings (or the "royalty avoided") resulting from the ownership of the asset by the avoidance of paying royalties to license the use of the technology from another owner. Accordingly the income forecast reflects an estimate of a fair royalty that a licensee would pay, on a percentage of revenue basis, to obtain a license to utilize the technology.

The MEEM method isolates the cash flows attributable to the subject asset by utilizing a forecast of expected cash flows less the returns attributable to other enabling assets, both tangible and intangible.

Goodwill is initially recorded when the purchase price paid for an acquisition exceeds the fair value assigned to the net identifiable tangible and intangible assets acquired. Goodwill is not amortized but rather it is periodically assessed for impairment. We perform an annual review in the fourth quarter of each fiscal year, or more frequently if indicators of potential impairment exist, to determine if the recorded goodwill is impaired.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses, with the carrying value being reviewed for impairment at least annually and whenever events or changes in circumstances indicate that the carrying value may be impaired. In respect of equity accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment, and an impairment loss on such an investment is not allocated to any asset, including goodwill, that forms part of the carrying amount of the equity accounted investee. No such losses have been recognized during the year.

The impairment test methodology is based on a comparison between the higher of fair value less costs to sell and value-in-use of each of the Company's business units (considered as the grouping of cash generating units at which level the impairment test is performed) and the net asset carrying values (including goodwill) of the Company's business units. Within the Company's reporting structure, business units generally reflect one level

below the six operating segments (Volaris, Harris, Total Specific Solutions, Jonas, Perseus (previously known as Homebuilder), and Vela Operating Groups). In determining the recoverable amount, the Company applies an estimated market valuation multiple to the business unit's most recent annual recurring revenues, which are derived from combined software/support contracts, transaction revenues, and hosted products. Valuation multiples applied by management for this purpose reflect current conditions specific to the business unit and are assessed for reasonability by comparison to the Company's current and past experience of ranges of multiples required to acquire representative software companies. In addition, in certain instances, the recoverable amount is determined using a value-in-use approach which follows the same valuation process that is undertaken for the Company's business acquisitions. An impairment is recognized if the carrying amount of a cash generating unit exceeds its estimated recoverable amount.

We also review the carrying value of amortizable intangible assets for impairment whenever events and circumstances indicate that the carrying value of an asset may not be recoverable from the estimated future cash flows expected to result from its use and eventual disposition. Any change in estimate which causes the undiscounted expected future cash flows to be less than the carrying value, would result in an impairment loss being recognized equal to the amount by which the carrying value of the asset exceeds the fair value of the asset.

The critical accounting estimates described above affect both the public and private segments of the business. The approach taken by management in performing these estimates is not significantly different between segments.

TSS Membership Liability

Commencing any time after December 31, 2014, each of the minority owners may 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 membership 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, and up to 33.33% on each of the first and second anniversary of the date the first redemption payment is made.

In determining the valuation of the liability at December 31, 2016 we assumed the minority owners exercised their put option on December 31, 2016, and redeemed 33.33% of their interests on exercise, and will redeem 33.33% on each of the first and second anniversary dates. Maintenance and recurring revenue of CNH for the fiscal year ended December 31, 2016 was used as the basis for valuing the interests at each redemption date. A similar approach will be utilized to value any interests that have not been put or called at the end of each subsequent reporting period. However, the actual maintenance and recurring revenue of CNH for the trailing twelve months from the date of the related reporting period end will be utilized in the calculation. Any increase or decrease in the value of the membership liability will be recorded as an expense or income respectively in the Consolidated Statements of Income for the period.

Accounting for Income Taxes

Significant management judgment is required in determining our provision for income taxes, our income tax assets and liabilities, and any valuation allowance recorded against our net income tax assets. We operate in multiple geographic jurisdictions, and to the extent that we have profits in each jurisdiction, these profits are taxed pursuant to the tax laws of their jurisdiction. Our effective tax rate may be affected by changes in, or interpretations of, tax laws in any given jurisdiction, the level of profitability, utilization of net operating losses and tax credit carry forwards, changes in geographical mix of income and expense, and changes in management's assessment of matters, such as the ability to realize future tax assets. As a result of these considerations, we must estimate our income taxes in each of the jurisdictions in which we operate on a quarterly basis. This process involves estimating our actual

current tax exposures, together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in future tax assets and liabilities, which are included in our consolidated balance sheet.

Current tax is the expected taxes payable or receivable on the taxable income or loss for the period, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to taxes payable in respect of previous years.

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognized for temporary differences relating to investments in subsidiaries to the extent that it is probable that they will not reverse in the foreseeable future. In addition, deferred tax is not recognized for taxable temporary differences arising on the initial recognition of goodwill.

Deferred tax is measured at tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but we intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously.

A deferred tax asset is recognized for unused tax losses, tax credits, difference in tax bases in the purchaser's tax jurisdiction and its cost as reported in the consolidated financial statements as a result of an intra-group transfer of assets and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

We are subject to income tax audits by various authorities in respect of prior periods that could result in additional tax expense in future periods. While the outcome of current outstanding actions and claims remains uncertain, it is expected that they will be resolved without a material impact to our financial position. However, there can be no assurances as to the final resolution of these matters and, if the final outcome is adverse to us, the amounts we will be required to pay and the loss of certain future tax deductions could be material to our financial statements.

Accounts Receivable

We evaluate the collectability of our trade receivables based on a combination of factors. We regularly analyze our significant customer accounts and when we become aware of a specific customer's inability to meet its financial obligations to us, such as in the case of bankruptcy filings or deterioration in the customer's operating results or financial position, we record specific bad debt reserves to reduce the related receivable to the amount which we reasonably believe is collectible. We also record reserves for bad debts on a small portion of all other customer balances based on a variety of factors, including the length of time that the receivables are past due, the financial health of the customer, macroeconomic considerations and historical experience. If circumstances related to specific customers change, our estimates of the recoverability of receivables could be further adjusted.

Work In Progress

For revenue arrangements that are accounted for under the percentage of completion method as well as other arrangements and contracts which limit our ability to invoice at certain milestones that do not match the timing of the actual provision of the services, we record such revenue and the related unbilled receivable in work in process. Similar to accounts receivable, we constantly have to evaluate our ability to bill and subsequently collect any amounts contained in the work in progress accounts. We review these balances on a periodic basis to ensure customer balances are prudent based upon a variety of factors, such as the financial health of the customer,

macroeconomic considerations and historical experience. If circumstances related to specific customers change, our estimates of the recoverability of work in progress may be further adjusted.

Provisions

A provision is recognized if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are measured at the estimated future cash flows required to settle the present obligation, based on the most reliable evidence available at the reporting date. The estimated cash flows are discounted at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The amortization of the discount is recognized as part of finance costs.

We are currently involved in various claims and legal proceedings. Quarterly, we review the status of each significant matter and assess our potential financial exposure. Because of the uncertainties related to these matters, provisions are based only on the best information available at the time. As additional information becomes available, we reassess the potential liability related to our pending claims and litigation and, if necessary, revise our provisions. Such revisions in the estimates of the potential liabilities could have a material impact on our results of operations and financial position.

Recent Accounting Pronouncements

A number of new standards, and amendments to standards and interpretations, are not yet effective for the quarter ended December 31, 2016, and have not been applied in preparing our consolidated financial statements. The relevant standards are listed below.

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. The Standard 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.

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 an equity instrument that is not held for trading in other comprehensive income (OCI). The election is available on an individual share-by-share 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.

The standard has a mandatory effective date for annual periods beginning on or after January 1, 2018 with early adoption permitted. The Company is assessing the impact of this standard on its consolidated financial statements.

IFRS 15 Revenue from Contracts with Customers

On May 28, 2014, the IASB issued IFRS 15 Revenue from Contracts with Customers. The new standard is effective for fiscal years beginning on or after January 1, 2018 and is available for early adoption. The standard contains a single model that applies to contracts with customers. The model features a contract-based five-step analysis of transactions to determine whether, how much and when revenue is recognized. New estimates and judgmental thresholds have been introduced, which may affect the amount and/or timing of revenue recognized. The Company intends to adopt IFRS 15 in its financial statements for the annual period beginning on January 1, 2018. We have a team dedicated to ensuring our compliance with IFRS 15. This team is responsible for determining existing policies, differences between existing policies and IFRS 15, ensuring our data collection is appropriate, and communicating the upcoming changes with various stakeholders. In addition, this team is assisting in the development of processes and policies that will help ensure an effective transition and the related results are accurate. As a result, we are continuing to assess the impact of this standard on our consolidated financial statements.

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, we believe that on adoption of the standard there will be an increase to assets and liabilities, as we will be required to record a right-of-use asset and a corresponding lease liability on our 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 and amortization (due to amortization of the right-of-use asset).

Share Capital

As at February 15, 2017, 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 December 31, 2016, 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 December 31, 2016 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.