

CONSTELLATION SOFTWARE INC.

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

The following discussion and analysis should be read in conjunction with the Unaudited Condensed Consolidated Interim Financial Statements for the three and six month periods ended June 30, 2019, 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. Due to rounding, certain totals and subtotals may not foot and certain percentages may not reconcile.

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, August 2, 2019. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements, including, but not limited to, the factors discussed under "Risks and Uncertainties". Although the forward looking statements contained in this MD&A are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this MD&A and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances. This report should be viewed in conjunction with the Company's other publicly available filings, copies of which can be obtained electronically on SEDAR at www.sedar.com.

Non-IFRS Measures

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

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

“Adjusted net income” means net income adjusted for non-cash expenses (income) such as amortization of intangible assets, deferred income taxes, the Total Specific Solutions (TSS) B.V. (“TSS”) membership liability revaluation charge, bargain purchase gains, and certain other expenses (income), and excludes the portion of the adjusted net income of 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, bargain purchase gains, and certain other non-cash expenses (income) incurred or recognized by the Company from time to time, and adjusts for the portion of TSS’ Adjusted net income not attributable to shareholders of Constellation. “Adjusted net income margin” refers to the percentage that Adjusted net income for any period represents as a portion of total revenue for that period.

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

Overview

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

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

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

Results of Operations

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

Unaudited

	Three months ended June 30,		Period-Over- Period Change		Six months ended June 30,		Period-Over- Period Change	
	2019	2018	\$	%	2019	2018	\$	%
Revenue	846	752	94	12%	1,665	1,471	194	13%
Expenses	638	577	61	11%	1,277	1,137	141	12%
Adjusted EBITA	208	175	33	19%	387	334	53	16%
Adjusted EBITA margin	25%	23%			23%	23%		
Amortization of intangible assets	75	70	5	8%	151	139	12	9%
Foreign exchange (gain) loss	13	9	5	53%	15	(5)	20	NM
TSS membership liability revaluation charge	8	14	(6)	-42%	18	21	(3)	-13%
Finance and other income	(0)	(1)	1	-63%	(3)	(10)	7	-67%
Bargain purchase gain	-	(0)	0	-100%	(28)	(0)	(28)	NM
Finance costs	9	5	4	82%	18	10	8	78%
Income before income taxes	103	79	24	30%	218	180	37	21%
Income taxes expense (recovery)								
Current income tax expense (recovery)	42	35	7	19%	78	61	16	27%
Deferred income tax expense (recovery)	(12)	(8)	(4)	52%	(20)	(16)	(4)	25%
Income tax expense (recovery)	30	27	3	10%	58	46	12	27%
Net income	73	52	21	41%	160	135	25	19%
Adjusted net income	137	122	16	13%	264	264	(0)	0%
Adjusted net income margin	16%	16%			16%	18%		
Weighted average number of shares outstanding								
Basic and diluted	21.2	21.2			21.2	21.2		
Net income per share								
Basic and diluted	\$ 3.45	\$ 2.45	\$ 1.00	41%	\$ 7.54	\$ 6.35	\$ 1.19	19%
Adjusted EBITA per share								
Basic and diluted	\$ 9.82	\$ 8.28	\$ 1.55	19%	\$ 18.28	\$ 15.76	\$ 2.52	16%
Adjusted net income per share								
Basic and diluted	\$ 6.49	\$ 5.75	\$ 0.73	13%	\$ 12.46	\$ 12.48	\$ (0.02)	0%
Cash dividends declared per share								
Basic and diluted	\$ 1.00	\$ 1.00	\$ -	0%	\$ 22.00	\$ 2.00	\$20.00	1000%

NM - Not meaningful

Due to rounding, certain totals may not foot and certain percentages may not reconcile.

Comparison of the three and six month periods ended June 30, 2019 and 2018

Revenue:

Total revenue for the quarter ended June 30, 2019 was \$846 million, an increase of 12%, or \$94 million, compared to \$752 million for the comparable period in 2018. For the first six months of 2019 total revenues were \$1,665 million, an increase of 13%, or \$194 million, compared to \$1,471 million for the comparable period in 2018. The increase for both the three and six month periods compared to the same periods in the prior year is primarily

attributable to growth from acquisitions as the Company experienced organic growth of negative 1% in both periods, positive 2% after adjusting for the impact of changes in the valuation of the US dollar against most major currencies in which the Company transacts business. For acquired companies, organic growth is calculated as the difference between actual revenues achieved by each company in the financial period following acquisition compared to the estimated revenues they achieved in the corresponding financial period preceding the date of acquisition by Constellation.

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

	Three months ended June 30,		Period-Over- Period Change		Q218 Proforma Adj. (Note 1)	Organic Growth	Six months ended June 30,		Period-Over- Period Change		Q218 Proforma Adj. (Note 2)	Organic Growth
	2019	2018	\$	%	\$	%	2019	2018	\$	%	\$	%
	(\$M, except percentages)						(\$M, except percentages)					
Licenses	61	48	13	27%	10	5%	113	92	22	24%	20	1%
Professional services	164	153	11	7%	23	-7%	322	295	27	9%	48	-6%
Hardware and other	41	43	(2)	-6%	5	-15%	77	76	1	2%	10	-10%
Maintenance and other recurring	581	508	72	14%	63	2%	1,152	1,008	144	14%	128	1%
	846	752	94	12%	101	-1%	1,665	1,471	194	13%	206	-1%

\$M - Millions of dollars

Due to rounding, certain totals may not foot and certain percentages may not reconcile.

Note 1: Estimated pre-acquisition revenues for the three months ended June 30, 2018 from companies acquired after March 31, 2018. (Obtained from unaudited vendor financial information.)

Note 2: Estimated pre-acquisition revenues for the six months ended June 30, 2018 from companies acquired after December 31, 2017. (Obtained from unaudited vendor financial information.)

For comparative purposes the table below shows the quarterly organic growth as compared to the same period in the prior year by revenue type since Q2 2017.

	Quarter Ended								
	Jun. 30 2017	Sep. 30 2017	Dec. 31 2017	Mar. 31 2018	Jun. 30 2018	Sep. 30 2018	Dec. 31 2018	Mar. 31 2019	Jun. 30 2019
Licenses	-6%	2%	6%	-4%	-5%	-9%	-3%	-3%	5%
Professional services	-3%	3%	7%	3%	3%	-5%	1%	-5%	-7%
Hardware and other	1%	1%	17%	-16%	-11%	-20%	4%	-4%	-15%
Maintenance and other recurring	2%	5%	7%	8%	6%	3%	2%	1%	2%
Revenue	1%	4%	8%	5%	4%	-1%	2%	-1%	-1%

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

	Quarter Ended								
	Jun. 30 2017	Sep. 30 2017	Dec. 31 2017	Mar. 31 2018	Jun. 30 2018	Sep. 30 2018	Dec. 31 2018	Mar. 31 2019	Jun. 30 2019
Licenses	-4%	1%	3%	-8%	-7%	-7%	-1%	1%	8%
Professional services	-1%	1%	3%	-3%	0%	-4%	3%	-1%	-4%
Hardware and other	2%	0%	14%	-20%	-13%	-19%	5%	-1%	-14%
Maintenance and other recurring	4%	3%	4%	4%	4%	4%	4%	5%	4%
Revenue	2%	2%	5%	0%	1%	0%	3%	3%	2%

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. Following the guidance set out by IFRS 8, the public sector reportable segment is derived by combining our Volaris, Harris and TSS operating groups, and the private sector reportable segment is derived by combining our Vela, Jonas and Perseus operating groups. Each of our operating groups operate essentially as

mini Constellations, conglomerates of small vertical market software companies with similar economic characteristics. While the operating groups in the public sector are comprised of businesses that primarily serve government and government-related customers, they also include businesses that serve commercial customers, and similarly the operating groups in the private sector are comprised of businesses that primarily serve commercial customers but also include businesses that serve government and government-related customers. We continue to report two distinct segments as we believe the information is useful to shareholders.

The following table displays our revenue by reportable segment and the percentage change for the three and six months ended June 30, 2019 compared to the same periods in 2018:

	Three months ended June 30,		Period-Over- Period Change		Q218 Proforma Adj. (Note 1) \$	Organic Growth %	Six months ended June 30,		Period-Over- Period Change		Q218 Proforma Adj. (Note 2) \$	Organic Growth %
	2019	2018	\$	%			2019	2018	\$	%		
	(\$M, except percentages)						(\$M, except percentages)					
Public Sector												
Licenses	36	29	7	26%	8	0%	70	57	13	22%	15	-4%
Professional services	125	114	11	10%	19	-6%	247	225	22	10%	39	-6%
Hardware and other	33	36	(2)	-7%	4	-17%	64	62	1	2%	9	-11%
Maintenance and other recurring	369	322	47	15%	42	1%	732	642	91	14%	83	1%
	564	500	63	13%	73	-2%	1,113	986	127	13%	146	-2%
Private Sector												
Licenses	25	19	5	27%	2	15%	44	35	9	26%	5	11%
Professional services	38	39	(0)	-1%	4	-11%	74	70	5	6%	10	-6%
Hardware and other	7	7	0	1%	1	-6%	14	14	0	0%	1	-9%
Maintenance and other recurring	212	186	25	14%	21	2%	420	366	53	15%	44	2%
	282	252	30	12%	28	1%	552	485	67	14%	60	1%

Due to rounding, certain totals may not foot and certain percentages may not reconcile.

Note 1: Estimated pre-acquisition revenues for the three months ended June 30, 2018 from companies acquired after March 31, 2018. (Obtained from unaudited vendor financial information.)

Note 2: Estimated pre-acquisition revenues for the six months ended June 30, 2018 from companies acquired after December 31, 2017. (Obtained from unaudited vendor financial information.)

Public Sector

For the quarter ended June 30, 2019, total revenue in the public sector reportable segment increased 13%, or \$63 million to \$564 million, compared to \$500 million for the quarter ended June 30, 2018. For the six months ended June 30, 2019, total revenue increased by 13%, or \$127 million to \$1,113 million, compared to \$986 million for the comparable period in 2018. For purposes of calculating organic growth, estimated pre-acquisition revenues included from the relevant companies acquired in 2018 and 2019 was \$73 million and \$146 million for the three and six month periods ended June 30, 2018, respectively. Organic revenue growth was negative 2% for both the three and six months ended June 30, 2019 compared to the same periods in 2018, and positive 1% after adjusting for the impact of changes in the valuation of the US dollar against most major currencies in which the Company transacts business.

For comparative purposes the table below shows the quarterly organic growth as compared to the same period in the prior year by revenue type since Q2 2017 adjusting for the impact of foreign exchange movements.

	Quarter Ended								
	Jun. 30 <u>2017</u>	Sep. 30 <u>2017</u>	Dec. 31 <u>2017</u>	Mar. 31 <u>2018</u>	Jun. 30 <u>2018</u>	Sep. 30 <u>2018</u>	Dec. 31 <u>2018</u>	Mar. 31 <u>2019</u>	Jun. 30 <u>2019</u>
Licenses	-11%	0%	0%	-9%	-10%	-11%	-11%	-4%	2%
Professional services	0%	2%	3%	-3%	-5%	-6%	0%	-2%	-3%
Hardware and other	3%	2%	19%	-12%	-7%	-17%	14%	1%	-16%
Maintenance and other recurring	4%	3%	4%	3%	4%	3%	3%	4%	4%
Revenue	2%	3%	5%	-1%	0%	-2%	2%	2%	1%

Private Sector

For the quarter ended June 30, 2019, total revenue in the private sector reportable segment increased 12%, or \$30 million to \$282 million, compared to \$252 million for the quarter ended June 30, 2018. For the six months ended June 30, 2019, total revenue increased by 14%, or \$67 million to \$552 million, compared to \$485 million for the comparable period in 2018. For purposes of calculating organic growth, estimated pre-acquisition revenues included from the relevant companies acquired in 2018 and 2019 was \$28 million and \$60 million for the three and six month periods ended June 30, 2018, respectively. Organic revenue growth was 1% for both the three and six months ended June 30, 2019 compared to the same periods in 2018, and 4% after adjusting for the impact of changes in the valuation of the US dollar against most major currencies in which the Company transacts business.

For comparative purposes the table below shows the quarterly organic growth as compared to the same period in the prior year by revenue type since Q2 2017 adjusting for the impact of foreign exchange movements.

	Quarter Ended								
	Jun. 30 <u>2017</u>	Sep. 30 <u>2017</u>	Dec. 31 <u>2017</u>	Mar. 31 <u>2018</u>	Jun. 30 <u>2018</u>	Sep. 30 <u>2018</u>	Dec. 31 <u>2018</u>	Mar. 31 <u>2019</u>	Jun. 30 <u>2019</u>
Licenses	8%	1%	11%	-6%	-1%	-1%	18%	11%	20%
Professional services	-3%	-4%	6%	-1%	16%	6%	15%	4%	-7%
Hardware and other	-5%	-11%	-5%	-41%	-33%	-25%	-34%	-9%	-3%
Maintenance and other recurring	4%	3%	4%	6%	5%	6%	6%	5%	4%
Revenue	3%	1%	5%	2%	4%	4%	6%	5%	4%

Expenses:

The following table displays the breakdown of our expenses:

	Three months ended June 30,		Period-Over- Period Change		Six months ended June 30,		Period-Over- Period Change	
	2019	2018	\$	%	2019	2018	\$	%
	(\$M, except percentages)				(\$M, except percentages)			
Expenses								
Staff	437	390	47	12%	882	780	102	13%
Hardware	22	24	(2)	-7%	43	42	1	3%
Third party license, maintenance and professional services	73	67	7	10%	142	128	14	11%
Occupancy	9	20	(11)	-57%	17	39	(22)	-56%
Travel, Telecommunications, Supplies & Software and equipment	49	45	4	8%	93	87	6	7%
Professional fees	11	9	2	22%	22	19	3	14%
Other, net	15	15	(1)	-3%	36	28	7	26%
Depreciation	21	7	15	217%	42	13	29	213%
	638	577	61	11%	1,277	1,137	141	12%

Due to rounding, certain totals may not foot and certain percentages may not reconcile.

Overall expenses for the quarter ended June 30, 2019 increased 11%, or \$61 million to \$638 million, compared to \$577 million during the same period in 2018. As a percentage of total revenue, expenses equalled 75% for the quarter ended June 30, 2019 and 77% for the same period in 2018. During the six months ended June 30, 2019, expenses increased 12%, or \$141 million to \$1,277 million, compared to \$1,137 million during the same period in 2018. As a percentage of total revenue, expenses were 77% for both the six months ended June 30, 2019 and 2018. For the three and six months ended June 30, 2019 the change in valuation of the US dollar against most major currencies in which the Company transacts business resulted in an approximate 3% and 4% respective decrease in expenses compared to the comparable periods of 2018.

Staff expense – Staff expenses increased 12% or \$47 million for the quarter ended June 30, 2019 and 13% or \$102 million for the six months ended June 30, 2019 over the same periods in 2018. Staff expense can be broken down into five key operating departments: Professional Services, Maintenance, Research and Development, Sales and Marketing, and General and Administrative. Included within staff expenses for each of the above five departments are personnel and related costs associated with providing the necessary services. The table below compares the period over period variances.

	Three months ended June 30,		Period-Over- Period Change		Six months ended June 30,		Period-Over- Period Change	
	2019	2018	\$	%	2019	2018	\$	%
	(\$M, except percentages)				(\$M, except percentages)			
Professional services	93	88	5	6%	189	170	19	11%
Maintenance	88	79	10	12%	177	163	14	9%
Research and development	120	105	16	15%	244	211	33	16%
Sales and marketing	62	56	6	11%	125	110	15	14%
General and administrative	74	63	10	16%	147	127	21	16%
	437	390	47	12%	882	780	102	13%

Due to rounding, certain totals may not foot and certain percentages may not reconcile.

The increase in staff expenses for the three and six months ended June 30, 2019 was primarily due to the growth in the number of employees compared to the same periods in 2018 primarily due to acquisitions.

Hardware expenses – Hardware expenses decreased 7% or \$2 million for the quarter ended June 30, 2019 and increased 3% or \$1 million for the six months ended June 30, 2019 over the same periods in 2018 as compared with the 6% decrease and 2% increase in hardware and other revenue for the three and six month periods ending June 30, 2019 respectively over the comparable periods in 2018. Hardware margins for the three and six months ended June 30, 2019 were 45% and 44% respectively as compared to 45% for the comparable periods in 2018.

Third party license, maintenance and professional services expenses – Third party license, maintenance and professional services expenses increased 10% or \$7 million for the quarter ended June 30, 2019 and 11% or \$14 million for the six months ended June 30, 2019 over the same periods in 2018. The increase is primarily due to third party license, maintenance and professional services expenses of acquired businesses.

Occupancy expenses – Occupancy expenses decreased 57% or \$11 million for the quarter ended June 30, 2019 and 56% or \$22 million for the six months ended June 30, 2019 over the same periods in 2018. The decrease is a result of the Company’s adoption of IFRS 16, “Leases”. (See the “New standards and interpretations adopted” section below.) The Company has adopted IFRS 16 with an initial adoption date of January 1, 2019. The Company utilized the modified retrospective method to adopt the new standard and therefore, the comparative information has not been restated and continues to be reported under IAS 17, “Leases” and related interpretations. Under IAS 17 occupancy costs would have been approximately \$21 million and \$41 million for the three and six months ended June 30, 2019 respectively, an increase of 5% over the same periods in 2018.

Travel, Telecommunications, Supplies & Software and equipment expenses – Travel, Telecommunications, Supplies & Software and equipment expenses increased 8% or \$4 million for the quarter ended June 30, 2019 and 7% or \$6 million for the six months ended June 30, 2019 over the same periods in 2018. The increase in these expenses is primarily due to expenses incurred by acquired businesses.

Professional fees – Professional fees increased 22% or \$2 million for the quarter ended June 30, 2019 and 14% or \$3 million for the six months ended June 30, 2019 over the same periods in 2018. There are no individually material reasons contributing to this variance.

Other, net – Other expenses decreased 3% or \$1 million for the quarter ended June 30, 2019 and increased 26% or \$7 million for the six months ended June 30, 2019 over the same periods in 2018. The following table provides a further breakdown of expenses within this category.

	Three months ended June 30,		Period-Over-Period Change		Six months ended June 30,		Period-Over-Period Change	
	2019	2018	\$	%	2019	2018	\$	%
	(\$M, except percentages)							
Advertising and promotion	12	11	1	6%	23	22	2	8%
Recruitment and training	5	4	0	8%	8	8	1	7%
Bad debt expense	1	1	(0)	-7%	3	2	0	10%
R&D tax credits	(5)	(6)	1	-14%	(9)	(10)	1	-7%
Contingent consideration	0	1	(0)	NM	6	1	5	NM
Other expense, net	1	3	(2)	-64%	5	6	(1)	-15%
	15	15	(1)	-4%	36	28	7	25%

NM - Not meaningful

Due to rounding, certain totals may not foot and certain percentages may not reconcile.

The contingent consideration expense amount recorded for the six months ended June 30, 2019 relates to an increase in anticipated acquisition earnout payment accruals recorded in Q1 2019 primarily as a result of increases to revenue forecasts for the associated acquisitions. Revenue forecasts are updated on a quarterly basis

and the related anticipated acquisition earnout payment accruals are updated accordingly. There are no individually material reasons contributing to the remaining variances.

Depreciation – Depreciation of property and equipment increased 217% or \$15 million for the quarter ended June 30, 2019 and 213% or \$29 million for the six months ended June 30, 2019 over the same periods in 2018. The increase is primarily a result of the Company’s adoption of IFRS 16 as explained in the “New standards and interpretations adopted” section below. Under IAS 17 depreciation expense would have been approximately \$8 million and \$15 million for the three and six months ended June 30, 2019 respectively, an increase of 11% over the same periods in 2018. This increase is primarily due to the depreciation expense associated with acquired businesses.

Other Income and Expenses:

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

	Three months ended June 30,		Period-Over- Period Change		Six months ended June 30,		Period-Over- Period Change	
	<u>2019</u>	<u>2018</u>	\$	%	<u>2019</u>	<u>2018</u>	\$	%
	(\$M, except percentages)				(\$M, except percentages)			
Amortization of intangible assets	75	70	5	8%	151	139	12	9%
Foreign exchange (gain) loss	13	9	5	53%	15	(5)	20	NM
TSS membership liability revaluation charge	8	14	(6)	-42%	18	21	(3)	-13%
Finance and other expense (income)	(0)	(1)	1	-63%	(3)	(10)	7	-67%
Bargain purchase gain	-	(0)	0	-100%	(28)	(0)	(28)	NM
Finance costs	9	5	4	82%	18	10	8	78%
Income tax expense (recovery)	30	27	3	10%	58	46	12	27%
	135	123	12	9%	228	199	28	14%

NM - Not meaningful

Due to rounding, certain totals may not foot and certain percentages may not reconcile.

Amortization of intangible assets – Amortization of intangible assets increased 8% or \$5 million for the quarter ended June 30, 2019 and 9% or \$12 million for the six months ended June 30, 2019 over the same periods in 2018. The increase in amortization expense for the three and six months ended June 30, 2019 is primarily attributable to an increase in the carrying amount of our intangible asset balance over the twelve-month period ended June 30, 2019 as a result of acquisitions completed during this twelve-month period.

Foreign exchange – Most of our businesses are organized geographically so many of our expenses are incurred in the same currency as our revenues, which mitigates some of our exposure to currency fluctuations. For the three and six months ended June 30, 2019, we realized foreign exchange losses of \$13 million and \$15 million respectively compared to a loss of \$9 million and gain of \$5 million for the same periods in 2018. The following table provides a breakdown of these amounts.

	Three months ended June 30,				Six months ended June 30,			
	2019	2018	Period-Over-Period Change		2019	2018	Period-Over-Period Change	
	(\$M, except percentages)				(\$M, except percentages)			
Unrealized foreign exchange (gain) loss related to:								
- revaluation of intercompany loans between entities with differing functional currencies ⁽¹⁾	3	13	(10)	-78%	1	6	(5)	-89%
- 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.	4	(4)	8	NM	9	(11)	19	NM
Remaining foreign exchange (gain) loss	6	(0)	6	NM	5	(1)	6	NM
	13	9	5	53%	15	(5)	20	NM

NM - Not meaningful

Due to rounding, certain totals may not foot and certain percentages may not reconcile.

(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 non-US dollar denominated working capital balances to US dollars as a result of the depreciation or appreciation of the US dollar.

TSS membership liability revaluation charge – The valuation of the TSS membership liability that was put in place in Q4 2014 increased by approximately 4% or \$8 million from Q1 2019, and approximately 10% or \$18 million from Q4 2018. The increases are primarily the result of the growth in TSS' reported trailing twelve month maintenance revenue (primarily due to acquisitions). Maintenance revenue and net tangible assets are the two main drivers in the calculation of the liability. The liability recorded on the balance sheet increased by 3% or \$6 million over the six month period ended June 30, 2019 from \$184 million to \$190 million as a result of the revaluation charge of \$18 million offset by a \$12 million foreign exchange gain that was recorded through other comprehensive income. The TSS membership liability is denominated in Euros and the Euro depreciated versus the US dollar during the first six months of 2019.

Finance and other expense (income) – Finance and other income for the three and six month periods ended June 30, 2019 was \$0.4 million and \$3 million respectively compared to \$1 million and \$10 million for the comparable periods in 2018. In September 2008 the Company acquired certain assets and liabilities of Maximus Inc.'s Asset, Justice, and Education Solutions businesses. As part of the acquisition, the Company recorded an accrual of \$7.9 million for financial liabilities potentially due on a long-term acquired contract. No financial liabilities were ever assessed and the statute of limitations now restricts any legal action by the customer with regards to the acquired contract. The \$7.9 million accrual was released into income in Q1 2018. Interest earned on cash balances for the three and six months ended June 30, 2019 was \$0.2 million and \$3 million respectively, compared to \$1 million and \$2 million for the same periods in 2018.

Bargain purchase gain – A bargain purchase gain adjustment totalling \$28 million was recorded in the six month period ended June 30, 2019 relating to two of the acquisitions made during 2018 and 2019. No similar gain was recognized for the same period in 2018. In Q4 2018 the Company acquired a business that was undergoing an extensive restructuring. The seller of that business capitalized the balance sheet on closing with cash in the amount of \$53 million (€47 million) that is being utilized to fund losses generated by the business, contributing to a bargain purchase gain of \$63 million being recorded in Q4 2018. Revisions to the restructuring cost expectations resulted in an additional bargain purchase gain of \$4 million being recorded in Q1 2019. The business recorded an EBITA loss of \$15 million in the six month period ended June 30, 2019, and based on current estimates an EBITA loss of

approximately \$16 million inclusive of restructuring costs, will be recorded in the full year 2019 results. There was no current income tax recovery recorded in 2019 associated with these losses. The remaining \$24 million bargain purchase gain relates to an acquisition in Q1 2019 where the seller will continue as a minority partner in the acquired business. The seller contributed \$17 million into the partnership on acquisition.

Finance costs – Finance costs for the quarter ended June 30, 2019 increased \$4 million to \$9 million, compared to \$5 million for the same period in 2018. During the six months ended June 30, 2019, finance costs increased \$8 million to \$18 million, compared to \$10 million for the same period in 2018. Interest on debt and debentures increased \$2 million and \$4 million for the three and six month periods ended June 30, 2019 respectively over the same periods in 2018 as a result of an increase in the average amount of debt outstanding. The remaining increase is primarily a result of the Company’s adoption of IFRS 16 as explained in the “New standards and interpretations adopted” section below. Under IFRS 16 interest expense on lease obligations totaling \$2 million and \$4 million was recorded in the three and six month periods ended June 30, 2019 respectively, with no similar expense being recorded in 2018.

Income taxes – We operate globally and we calculate our tax provision in each of the jurisdictions in which we conduct business. Our effective tax rate on a consolidated basis is, therefore, affected by the realization and anticipated relative profitability of our operations in those various jurisdictions, as well as different tax rates that apply and our ability to utilize tax losses and other credits. For the quarter ended June 30, 2019, income tax expense increased \$3 million to \$30 million compared to \$27 million for the same period in 2018. During the six months ended June 30, 2019, income tax expense increased \$12 million to \$58 million compared to \$46 million for the same period in 2018. Current tax expense as a percentage of adjusted net income before tax was 23% and 22% for the three and six months ended June 30, 2019 respectively, and 22% and 19% respectively for the same periods in 2018. This rate has historically approximated our cash tax rate however the quarterly rate can sometimes fall outside of the annual range due to out of period adjustments. Current tax expense reflects gross taxes before the application of R&D tax credits which are classified as part of “other, net” expenses in the statement of income.

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

Net Income and Earnings per Share:

Net income for the quarter ended June 30, 2019 was \$73 million compared to net income of \$52 million for the same period in 2018. On a per share basis, this translated into a net income per diluted share of \$3.45 in the quarter ended June 30, 2019 compared to net income per diluted share of \$2.45 for the same period in 2018. For the six months ended June 30, 2019, net income was \$160 million or \$7.54 per diluted share compared to \$135 million or \$6.35 per diluted share for the same period in 2018. There was no change in the number of shares outstanding.

Adjusted EBITA:

For the quarter ended June 30, 2019, Adjusted EBITA increased to \$208 million compared to \$175 million for the same period in 2018 representing an increase of 19%. For the first six months of 2019, Adjusted EBITA increased to \$387 million compared to \$334 million during the same period in 2018, representing an increase of 16%. Adjusted EBITA margin was 25% and 23% for the three and six months ended June 30, 2019 respectively, compared to 23% during the same periods in 2018. See “Non-IFRS Measures” for a description of Adjusted EBITA and Adjusted EBITA margin.

The following table reconciles Adjusted EBITA to net income:

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
	(\$M, except percentages)		(\$M, except percentages)	
Total revenue	846	752	1,665	1,471
Net income	73	52	160	135
Adjusted for:				
Income tax expense (recovery)	30	27	58	46
Foreign exchange (gain) loss	13	9	15	(5)
TSS membership liability revaluation charge	8	14	18	21
Finance and other income	(0)	(1)	(3)	(10)
Bargain purchase gain	-	(0)	(28)	(0)
Finance costs	9	5	18	10
Amortization of intangible assets	75	70	151	139
Adjusted EBITA	208	175	387	334
Adjusted EBITA margin	25%	23%	23%	23%

Due to rounding, certain totals may not foot and certain percentages may not reconcile.

Adjusted net income:

For the quarter ended June 30, 2019, Adjusted net income increased to \$137 million from \$122 million for the same period in 2018, representing an increase of 13%. Adjusted net income margin was 16% for both the quarter ended June 30, 2019 and for the same period in 2018. For the first six months of 2019 and 2018, Adjusted net income was \$264 million. Adjusted net income margin was 16% for the six months ended June 30, 2019 and 18% for the same period in 2018. Excluding the impact of the unrealized foreign exchange (gain) loss recorded in each of the three and six month periods ended June 30, 2018 and 2019, and the \$7.9 million financial liability accrual reversal recorded to finance and other income in Q1 2018, the margins would have been 18% and 17% for the respective periods in 2019, and 17% for both the respective periods in 2018. See “Non-IFRS Measures” for a description of Adjusted net income and Adjusted net income margin.

Non-controlling interest in the Adjusted net income of TSS - As explained in the “Capital Resources and Commitments” section below, in Q4 2014 33.29% of the voting interests in TSS were sold by us, however no adjustment has been made in the Company’s Consolidated Financial Statements to reflect the 33.29% of earnings that are not attributable to Constellation shareholders. Instead, due to an option available to the minority owners to exercise a put option to sell all or a portion of their interests back to Constellation, the minority interest is accounted for as a liability on the Company’s balance sheet. The liability is revalued at each period end in accordance with an agreed upon valuation methodology with the change being included in net income. The non-controlling interest in the Adjusted net income of TSS for the three and six months ended June 30, 2019 was \$7 million and \$16 million respectively, as compared to \$6 million and \$13 million for the same periods in 2018.

The following table reconciles Adjusted net income to Net income:

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
	(\$M, except percentages)		(\$M, except percentages)	
Total revenue	846	752	1,665	1,471
Net income	73	52	160	135
Adjusted for:				
Amortization of intangible assets	75	70	151	139
TSS membership liability revaluation charge	8	14	18	21
Bargain purchase gain	-	(0)	(28)	(0)
Less non-controlling interest in the Adjusted net income of TSS	(7)	(6)	(16)	(13)
Deferred income tax expense (recovery)	(12)	(8)	(20)	(16)
Adjusted net income	137	122	264	264
Adjusted net income margin	16%	16%	16%	18%

Due to rounding, certain totals may not foot and certain percentages may not reconcile.

Quarterly Results

	Quarter Ended									
	Jun. 30 2017	Sep. 30 2017	Dec. 31 2017	Mar. 31 2018	Jun. 30 2018	Sep. 30 2018	Dec. 31 2018	Mar. 31 2019	Jun. 30 2019	
	(\$M, except per share amounts)									
Revenue	600	637	688	718	752	759	831	819	846	
Net income	51	54	76	83	52	66	179	87	73	
Adjusted net income	112	116	141	143	122	145	188	127	137	
Adjusted net income margin	19%	18%	20%	20%	16%	19%	23%	15%	16%	
Net income per share Basic & diluted	2.41	2.56	3.59	3.90	2.45	3.10	8.46	4.09	3.45	
Adjusted net income per share Basic & diluted	5.30	5.45	6.63	6.73	5.75	6.85	8.85	5.97	6.49	

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

Special dividend

On February 13, 2019 the Company declared a \$20.00 per share special dividend (approximately \$424 million) payable on April 5, 2019 to all common shareholders of record at close of business on March 16, 2019.

Liquidity

Our net cash position (cash less bank indebtedness excluding capitalized transaction costs) decreased by \$338 million to \$93 million in the quarter ended June 30, 2019 resulting from net capital deployed on acquisitions plus dividends paid exceeding cash flows from operations. Cash decreased by \$375 million to \$214 million at June 30, 2019 compared to \$589 million at December 31, 2018 and bank indebtedness decreased by \$36 million to \$121 million at June 30, 2019 compared to \$157 million at December 31, 2018.

Total assets decreased \$6 million, from \$2,935 million at December 31, 2018 to \$2,929 million at June 30, 2019. The decrease is primarily due to the decrease in cash of \$375 million offset by a \$71 million increase in intangible assets and \$211 million of right of use assets set up in conjunction with the Company's adoption of IFRS 16. (See the "New standards and interpretations adopted" section below.) At June 30, 2019, TSS held a cash balance of \$18 million and Acceo held a cash balance of \$29 million. As explained in the "Capital Resources and Commitments" section below, there are limitations on the ability of TSS and Acceo to distribute funds to Constellation.

Current liabilities increased \$108 million, from \$1,344 million at December 31, 2018 to \$1,452 million at June 30, 2019. The increase is primarily due to an increase in deferred revenue of \$146 million mainly due to acquisitions made since December 31, 2018 and the timing of maintenance and other billings versus performance and delivery under those customer arrangements, and lease obligations of \$54 million set up in conjunction with the Company's adoption of IFRS 16. Offsetting these increases is a decrease in bank indebtedness of \$40 million and a decrease in accounts payable and accrued liabilities of \$64 million largely relating to the payment of bonuses accrued in 2018.

Net Changes in Cash Flows

(in \$M's)

	Six months ended June 30, 2019	Six months ended June 30, 2018
Net cash provided by operating activities	334	311
Net cash from (used in) financing activities	(560)	(87)
Cash used in the acquisition of businesses	(167)	(394)
Cash obtained with acquired businesses	35	40
Net cash from (used in) other investing activities	(18)	(11)
Net cash from (used in) investing activities	(149)	(365)
Effect of foreign currency	0	(3)
Net increase (decrease) in cash and cash equivalents	(375)	(145)

The net cash flows from operating activities were \$334 million for the six months ended June 30, 2019. The \$334 million provided by operating activities resulted from \$160 million in net income plus \$270 million of non-cash adjustments to net income offset by \$7 million of cash used in non-cash operating working capital and \$88 million in taxes paid. In conjunction with the Company's adoption of IFRS 16 on January 1, 2019, lease obligation and interest payments that have historically been deducted from cash flows from operations are now

recorded as a component of cash flows used in financing activities. For the six months ended June 30, 2019 lease obligation and interest payments totaled \$26 million.

The net cash flows used in financing activities in the six months ended June 30, 2019 were \$560 million, which is mainly a result of dividends paid of \$466 million, a net decrease in bank indebtedness of \$40 million, a distribution to the minority owners of TSS of \$11 million, and interest paid on bank indebtedness and the Company's unsecured subordinated floating rate debentures in the period of \$15 million. In addition, lease obligation and interest payments of \$26 million were included within financing activities in 2019 in conjunction with the Company's adoption of IFRS 16. Under IAS 17 in 2018 this cash outflow would have reduced cash flows from operating activities.

The net cash flows used in investing activities in the six months ended June 30, 2019 were \$149 million. The cash used in investing activities was primarily due to acquisitions for an aggregate of \$167 million (including payments for holdbacks relating to prior acquisitions) offset by \$35 million of acquired cash.

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 December 19, 2018, we completed an amendment and restatement of our revolving credit facility agreement (the "CSI Facility") with a syndicate of Canadian chartered banks, U.S. banks, and a Japanese bank in the amount of \$700 million, extending its maturity date to December 19, 2023. The CSI Facility bears a variable interest rate with no fixed repayments required over the term to maturity. Interest rates are calculated at standard U.S. and Canadian reference rates plus interest rate spreads based on a leverage table. The CSI Facility is currently collateralized by the majority of our assets including the assets of certain material subsidiaries. The CSI Facility contains standard events of default which if not remedied within a cure period would trigger the repayment of any outstanding balance. The CSI Facility is available for acquisitions, distributions, working capital needs, and other general corporate purposes and for the needs of our subsidiaries. As at June 30, 2019, no amounts were drawn on the CSI Facility, and letters of credit totalling \$22 million were issued, which limits the borrowing capacity on a dollar-for-dollar basis.

On July 14, 2017, Constellation Software Netherlands Holding Cooperatief U.A. ("CNH"), a subsidiary of Constellation and the indirect owner of 100% of TSS, entered into a new credit facility (the "New CNH Facility") with a number of European financial institutions. Under this credit facility, CNH is able to borrow up to €300 million under a multicurrency revolving loan facility and up to €50 million under an additional uncommitted term loan facility. The New CNH Facility has an initial term of five years with an extension option for two additional one year periods. The New CNH Facility bears interest at a rate calculated at EURIBOR plus interest rate spreads based on a leverage table. The New CNH Facility is collateralized by substantially all of the assets owned by CNH and its subsidiaries which includes substantially all of the assets of TSS and its subsidiaries. The New CNH Facility contains standard events of default which if not remedied within a cure period would trigger the repayment of any outstanding balance. As at June 30, 2019, \$11 million had been drawn from this credit facility.

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

guarantee the CSI Facility and are not subject to the provisions thereof. The New CNH Facility imposes limitations on the amount of distributions that CNH and its subsidiaries may make to Constellation.

On July 6, 2018 Acceo Solutions, L.P. and its wholly-owned subsidiary Acceo Solutions Inc. (together “Acceo”) entered into a C\$145 million term and C\$10 million revolving credit facility (the “Acceo Facility”) with two North American lenders. Acceo is indirectly 100% owned by Constellation. The Acceo term facility presently bears interest at a rate calculated at CDOR plus interest rate spreads based on a leverage table. The Acceo Facility is collateralized by substantially all of the assets owned by Acceo and its material subsidiaries. The Acceo Facility contains standard events of default which if not remedied within a cure period would trigger the repayment of any outstanding balance. As at June 30, 2019, \$110 million was drawn on the term component of the Acceo Facility. The term facility requires quarterly principal repayments of \$0.3 million (C\$0.4 million), with the balance of the term facility to be repaid in full on July 6, 2023. As at June 30, 2019, no amounts had been drawn on the revolving component of the Acceo Facility. The revolving component of the Acceo Facility is available for acquisitions, working capital needs, and other general corporate purposes. Transaction costs associated with the Acceo Facility 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 June 30, 2019, the carrying amount of such costs relating to this facility totaling approximately \$2 million has been classified as part of Debt without recourse to Constellation Software Inc. in the consolidated statement of financial position.

The Acceo Facility is independent of each of the CSI Facility and the New CNH Facility. The obligations of Acceo are not guaranteed by Constellation or its subsidiaries, however a \$18 million (C\$25 million) Promissory Note issued by N. Harris Computer Corporation to Acceo Solutions Inc. (representing an amount equal to the balance of the purchase price payable by Acceo Solutions to its previous shareholders in relation to the Acceo acquisition) has been pledged under the Acceo Facility. In addition, Constellation and its subsidiaries other than Acceo and its subsidiaries are not subject to the terms of the Acceo Facility. Similarly, Acceo and its subsidiaries did not guarantee the CSI Facility or the New CNH Facility and is not subject to the provisions thereof. The Acceo Facility imposes limitations on the amount of distributions that Acceo may make to Constellation.

Debentures

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

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

TSS Membership Liability

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

Each of the minority owners may, at any time, exercise a put option to sell all or a portion of their interests in CNH back to Constellation for an amount calculated in accordance with a valuation methodology described within the Members Agreement. Accordingly, the Company classified the proceeds from the Members Agreement

as a liability. The main valuation driver in such calculation is the maintenance and other recurring revenue of CNH. Upon the exercise of a put option, Constellation would be obligated to redeem up to 33.33% of the minority owners' interests put, no later than 30 business days from the date notice is received (classified as a current liability), and up to 33.33% on each of the first and second anniversary of the date the first redemption payment is made.

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

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

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

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

Other commitments

Commitments include operating leases for office equipment and facilities, letters of credit and performance bonds issued on our behalf by financial institutions in connection with facility leases and contracts with public sector customers. Also, occasionally we structure some of our acquisitions with contingent consideration based on the future performance of the acquired business. The fair value of contingent consideration recorded in our statement of financial position was \$42 million at June 30, 2019. Aside from the aforementioned, we do not have any other business arrangements, derivative financial instruments, or any equity interests in non-consolidated entities that would have a significant effect on our assets and liabilities as at June 30, 2019.

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 August 2, 2019. See the "Critical Accounting Estimate" section of the Company's 2018 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 2018 to 2019 suggests that the impact to Adjusted EBITA margins for the three and six months ended June 30, 2019 was less than 1%. The impact to organic revenue growth for both the three and six months ended June 30, 2019 was approximately positive 3%. We cannot predict the effect of foreign

exchange gains or losses in the future; however, if significant foreign exchange losses are experienced, they could have a material adverse effect on our business, revenues, results of operations, and financial condition. The Company enters into forward foreign exchange contracts from time to time with the objective of mitigating volatility in profit or loss in respect of financial liabilities. In entering into these forward exchange contracts, the Company is exposed to the credit risk of the counterparties to such contracts and the possibility that the counterparties will default on their payment obligations under these contracts. However, given that the counterparties are Schedule 1 banks or affiliates thereof, the Company believes these risks are not material. During the six months ended June 30, 2019, the Company did not purchase any contracts of this nature.

The following table provides an approximate breakdown of our revenue and expenses by currency, expressed as a percentage of total revenue and expenses, as applicable, for the three and six months ended June 30, 2019:

Currencies	Three Months Ended June 30, 2019		Six Months Ended June 30, 2019	
	% of Revenue	% of Expenses	% of Revenue	% of Expenses
USD	52%	45%	52%	45%
CAD	7%	12%	7%	12%
GBP	7%	7%	7%	7%
EURO	22%	22%	22%	22%
CHF	1%	3%	1%	3%
Others	11%	11%	10%	11%
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 letters of credit, all of our liabilities and commitments are reflected as part of our statement of financial position.

Proposed Transactions

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

New standards and interpretations adopted

IFRS 16 Leases

The Company has adopted IFRS 16 with an initial adoption date of January 1, 2019. The Company utilized the modified retrospective method to adopt the new standard and therefore, the comparative information has not been restated and continues to be reported under IAS 17, Leases and related interpretations.

IFRS 16 specifies how leases will be recognized, measured, presented and disclosed and it provides a single lessee model, requiring lessees to recognize right-of-use assets and lease liabilities for all major leases. The impact of the transition to IFRS 16 is shown in Note 22 of the Company's financial statements for the three and six months ended June 30, 2019. The Company's accounting policy under IFRS 16 is as follows:

At inception of a contract, the Company assesses whether a contract is, or contains, a lease based on whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured based on the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located,

less any lease incentives received. The assets are depreciated to the earlier of the end of the useful life of the right-of-use asset or the lease term using the straight-line method as this most closely reflects the expected pattern of consumption of the future economic benefits. The lease term includes periods covered by an option to extend if the Company is reasonably certain to exercise that option. In addition, the right-of-use asset can be periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability. The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as the discount rate.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, extension or termination option. When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero. The Company has elected to apply the practical expedient not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low value assets. The lease payments associated with these leases is recognized as an expense on a straight-line basis over the lease term.

Share Capital

As at August 2, 2019, there were 21,191,530 common shares outstanding.

Risks and Uncertainties

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

Controls and Procedures

Evaluation of disclosure controls and procedures:

Management is responsible for establishing and maintaining disclosure controls and procedures as defined under National Instrument 52-109. At June 30, 2019, the President and Chief Financial Officer concluded that the design and operation of these disclosure controls and procedures were effective and that material information relating to the Company, including its subsidiaries, was made known to them and was recorded, processed, summarized and reported within the time periods specified under applicable securities legislation.

Internal controls over financial reporting:

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

In addition, the President and Chief Financial Officer have designed or caused it to be designed under their supervision internal controls over financial reporting ("ICFR") to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements. The President and Chief Financial

Officer have been advised that the control framework the President and the Chief Financial Officer used to design the Company's ICFR is recognized by the Committee of Sponsoring Organizations of the Treadway Commission.

The President and the Chief Financial Officer have evaluated, or caused to be evaluated under their supervision, whether or not there were changes to its ICFR during the period ended June 30, 2019 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.