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 nine month periods ended September 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" or "CSI"), 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, October 31, 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 Free cash flow available to shareholders.

Free cash flow available to shareholders ''FCFA2S'' refers to net cash flows from operating activities less interest paid on lease obligations, interest paid on other facilities, credit facility transaction costs, repayments of lease obligations, the TSS membership liability revaluation charge, and property and equipment purchased, and includes interest and dividends received. We believe that FCFA2S is useful supplemental information as it provides an indication of the uncommitted cash flow that is available to shareholders if we do not make any acquisitions, or investments, and do not repay any debts. While we could use the FCFA2S to pay dividends or repurchase shares, our objective is to invest all of our FCFA2S in acquisitions which meet our hurdle rate.

FCFA2S is not a recognized measure under IFRS and, accordingly, readers are cautioned that FCFA2S should not be construed as an alternative to net cash flows from operating activities. See ‘‘Results of Operations —Free cash flow available to shareholders” for a reconciliation of FCFA2S to net cash flows from operating activities.

See Appendix A – “Note to shareholders regarding our replacement non-IFRS measure” for further discussion around the FCFA2S metric.

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 September 30,		Period-Over-Period Change		Nine months ended September 30,		Period-Over-Period Change	
	2019	2018	$	%	2019	2018	$	%
Revenue	**870**	**759**	**111**	**15%**	**2,534**	**2,230**	**305**	**14%**
Expenses	647	562	84	15%	1,924	1,699	225	13%
Amortization of intangible assets	84	70	13	19%	234	209	25	12%
Foreign exchange (gain) loss	6	8	(3)	-31%	20	3	17	545%
TSS membership liability revaluation charge	12	17	(5)	-31%	30	38	(8)	-21%
Finance and other income	1	(3)	4	NM	(2)	(13)	11	-84%
Bargain purchase gain	(7)	(0)	(7)	NM	(36)	(1)	(35)	NM
Finance costs	11	8	3	40%	29	18	11	62%
Income before income taxes	117	97	20	21%	335	277	58	21%
Income taxes expense (recovery)								
Current income tax expense (recovery)	44	32	12	38%	121	93	28	30%
Deferred income tax expense (recovery)	(8)	(1)	(7)	NM	(28)	(16)	(12)	70%
Income tax expense (recovery)	36	31	5	15%	94	77	17	22%
Net income	**82**	**66**	**16**	**24%**	**241**	**200**	**41**	**21%**
Net cash flows from operating activities	**177**	**143**	**34**	**24%**	**512**	**454**	**58**	**13%**
Free cash flow available to shareholders	**134**	**112**	**22**	**20%**	**397**	**381**	**16**	**4%**
Weighted average number of shares outstanding								
Basic and diluted	21.2	21.2			21.2	21.2		
Net income per share								
Basic and diluted	$ 3.85	$ 3.10	$ 0.75	24%	$ 11.39	$ 9.45	$ 1.94	21%
Net cash flows from operating activities per share								
Basic and diluted	$ 8.37	$ 6.75	$ 1.62	24%	$ 24.15	$ 21.40	$ 2.75	13%
Free cash flow available to shareholders per share								
Basic and diluted	$ 6.35	$ 5.29	$ 1.05	20%	$ 18.74	$ 17.97	$ 0.76	4%
Cash dividends declared per share								
Basic and diluted	$ 1.00	$ 1.00	$ -	0%	$ 23.00	$ 3.00	$20.00	667%

NM - Not meaningful

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

Comparison of the three and nine month periods ended September 30, 2019 and 2018

Revenue:

Total revenue for the quarter ended September 30, 2019 was $870 million, an increase of 15%, or $111 million, compared to $759 million for the comparable period in 2018. For the first nine months of 2019 total revenues were $2,534 million, an increase of 14%, or $305 million, compared to $2,230 million for the comparable period in 2018. The increase for both the three and nine 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 2% and negative 1% respectively, 0% and positive 2% respectively after adjusting for the impact of changes in the valuation of the

US dollar against most major currencies in which the Company transacts business. 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 September 30,		Period-Over-Period Change		Q318 Proforma Adj. (Note 1)	Organic Growth	Nine months ended September 30,		Period-Over-Period Change		Q318 Proforma Adj. (Note 2)	Organic Growth
	2019	2018	$	%	$	%	2019	2018	$	%	$	%
	($M, except percentages)						($M, except percentages)					
Licenses	51	49	2	5%	11	-14%	165	141	24	17%	31	-4%
Professional services	164	148	16	10%	29	-8%	485	443	43	10%	77	-7%
Hardware and other	45	40	5	12%	6	-2%	122	116	6	5%	16	-7%
Maintenance and other recurring	609	521	88	17%	82	1%	1,762	1,529	232	15%	210	1%
	870	759	111	15%	127	-2%	2,534	2,230	305	14%	333	-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 September 30, 2018 from companies acquired after June 30, 2018. (Obtained from unaudited vendor financial information.)

Note 2: Estimated pre-acquisition revenues for the nine months ended September 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 Q3 2017.

	Quarter Ended								
	Sep. 30 2017	Dec. 31 2017	Mar. 31 2018	Jun. 30 2018	Sep. 30 2018	Dec. 31 2018	Mar. 31 2019	Jun. 30 2019	Sep. 30 2019
Licenses	2%	6%	-4%	-5%	-9%	-3%	-3%	5%	-14%
Professional services	3%	7%	3%	3%	-5%	1%	-5%	-7%	-8%
Hardware and other	1%	17%	-16%	-11%	-20%	4%	-4%	-15%	-2%
Maintenance and other recurring	5%	7%	8%	6%	3%	2%	1%	2%	1%
Revenue	**4%**	**8%**	**5%**	**4%**	**-1%**	**2%**	**-1%**	**-1%**	**-2%**

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

	Quarter Ended								
	Sep. 30 2017	Dec. 31 2017	Mar. 31 2018	Jun. 30 2018	Sep. 30 2018	Dec. 31 2018	Mar. 31 2019	Jun. 30 2019	Sep. 30 2019
Licenses	1%	3%	-8%	-7%	-7%	-1%	1%	8%	-12%
Professional services	1%	3%	-3%	0%	-4%	3%	-1%	-4%	-5%
Hardware and other	0%	14%	-20%	-13%	-19%	5%	-1%	-14%	0%
Maintenance and other recurring	3%	4%	4%	4%	4%	4%	5%	4%	3%
Revenue	**2%**	**5%**	**0%**	**1%**	**0%**	**3%**	**3%**	**2%**	**0%**

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 nine months ended September 30, 2019 compared to the same periods in 2018:

	Three months ended September 30,		Period-Over-Period Change		Q318 Proforma Adj. (Note 1)	Organic Growth	Nine months ended September 30,		Period-Over-Period Change		Q318 Proforma Adj. (Note 2)	Organic Growth
	2019	2018	$	%	$	%	2019	2018	$	%	$	%
	($M, except percentages)						($M, except percentages)					
Public Sector												
Licenses	32	31	2	5%	9	-18%	102	88	14	16%	24	-9%
Professional services	127	114	13	11%	24	-8%	375	339	35	10%	63	-7%
Hardware and other	37	33	5	15%	5	1%	101	95	6	6%	13	-7%
Maintenance and other recurring	387	328	59	18%	54	1%	1,119	969	150	15%	137	1%
	584	506	79	16%	91	-2%	1,697	1,492	206	14%	237	-2%
Private Sector												
Licenses	19	18	1	3%	2	-8%	63	53	10	18%	7	5%
Professional services	36	34	3	8%	4	-5%	111	104	7	7%	14	-6%
Hardware and other	8	8	0	1%	1	-14%	21	21	0	0%	3	-11%
Maintenance and other recurring	223	194	29	15%	28	0%	642	560	82	15%	72	2%
	286	254	32	13%	36	-1%	837	738	99	13%	96	0%

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 September 30, 2018 from companies acquired after June 30, 2018. (Obtained from unaudited vendor financial information.)

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

Public Sector

For the quarter ended September 30, 2019, total revenue in the public sector reportable segment increased 16%, or $79 million to $584 million, compared to $506 million for the quarter ended September 30, 2018. For the nine months ended September 30, 2019, total revenue increased by 14%, or $206 million to $1,697 million, compared to $1,492 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 $91 million and $237 million for the three and nine month periods ended September 30, 2018, respectively. Organic revenue growth was negative 2% for both the three and nine months ended September 30, 2019 compared to the same periods in 2018, and 0% and positive 1% respectively after adjusting for the impact of changes in the valuation of the US dollar against most major currencies in which the Company transacts business.

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 Q3 2017 adjusting for the impact of foreign exchange movements.

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

Private Sector

For the quarter ended September 30, 2019, total revenue in the private sector reportable segment increased 13%, or $32 million to $286 million, compared to $254 million for the quarter ended September 30, 2018. For the nine months ended September 30, 2019, total revenue increased by 13%, or $99 million to $837 million, compared to $738 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 $36 million and $96 million for the three and nine month periods ended September 30, 2018, respectively. Organic revenue growth was negative 1% and 0% for the three and nine months ended September 30, 2019 respectively compared to the same periods in 2018, and 1% and 3% respectively after adjusting for the impact of changes in the valuation of the US dollar against most major currencies in which the Company transacts business.

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 Q3 2017 adjusting for the impact of foreign exchange movements.

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

Expenses:

The following table displays the breakdown of our expenses:

	Three months ended September 30,		Period-Over-Period Change		Nine months ended September 30,		Period-Over-Period Change	
	2019	2018	$	%	2019	2018	$	%
	($M, except percentages)				($M, except percentages)			
Expenses								
Staff	434	384	51	13%	1,316	1,163	153	13%
Hardware	25	22	3	13%	68	64	4	6%
Third party license, maintenance and professional services	75	66	9	14%	218	194	24	12%
Occupancy	9	19	(11)	-55%	26	58	(32)	-56%
Travel, Telecommunications, Supplies & Software and equipment	50	44	6	13%	143	131	12	9%
Professional fees	12	9	3	34%	34	28	6	21%
Other, net	18	11	6	57%	53	40	14	35%
Depreciation	23	7	17	251%	65	20	45	225%
	647	562	84	15%	1,924	1,699	225	13%

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

Overall expenses for the quarter ended September 30, 2019 increased 15%, or $84 million to $647 million, compared to $562 million during the same period in 2018. As a percentage of total revenue, expenses equalled 74% for both the quarters ended September 30, 2019 and 2018. During the nine months ended September 30, 2019, expenses increased 13%, or $225 million to $1,924 million, compared to $1,699 million during the same period in 2018. As a percentage of total revenue, expenses were 76% for both the nine months ended September 30, 2019 and 2018. For the three and nine months ended September 30, 2019 the change in valuation of the US dollar against

most major currencies in which the Company transacts business resulted in an approximate 2% and 3% respective decrease in expenses compared to the comparable periods of 2018.

Staff expense – Staff expenses increased 13% or $51 million for the quarter ended September 30, 2019 and 13% or $153 million for the nine months ended September 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 September 30,		Period-Over-Period Change		Nine months ended September 30,		Period-Over-Period Change	
	2019	2018	$	%	2019	2018	$	%
	($M, except percentages)				($M, except percentages)			
Professional services	93	82	10	12%	282	252	29	12%
Maintenance	96	81	15	19%	273	244	29	12%
Research and development	116	104	12	12%	360	315	45	14%
Sales and marketing	61	53	8	15%	186	163	23	14%
General and administrative	68	63	5	8%	216	190	26	14%
	434	384	51	13%	1,316	1,163	153	13%

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

The increase in staff expenses for the three and nine months ended September 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 increased 13% or $3 million for the quarter ended September 30, 2019 and 6% or $4 million for the nine months ended September 30, 2019 over the same periods in 2018 as compared with the 12% and 5% increases in hardware and other revenue for the three and nine month periods ending September 30, 2019 respectively over the comparable periods in 2018. Hardware margins for the three and nine months ended September 30, 2019 were 44% as compared to 44% and 45% respectively for the comparable periods in 2018.

Third party license, maintenance and professional services expenses – Third party license, maintenance and professional services expenses increased 14% or $9 million for the quarter ended September 30, 2019 and 12% or $24 million for the nine months ended September 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 55% or $11 million for the quarter ended September 30, 2019 and 56% or $32 million for the nine months ended September 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 $22 million and $63 million for the three and nine months ended September 30, 2019 respectively, an increase of 13% and 8% over the same periods in 2018 respectively.

Travel, Telecommunications, Supplies & Software and equipment expenses – Travel, Telecommunications, Supplies & Software and equipment expenses increased 13% or $6 million for the quarter ended September 30, 2019 and 9% or $12 million for the nine months ended September 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 34% or $3 million for the quarter ended September 30, 2019 and 21% or $6 million for the nine months ended September 30, 2019 over the same periods in 2018. There are no individually material reasons contributing to this variance.

Other, net – Other expenses increased 57% or $6 million for the quarter ended September 30, 2019 and 35% or $14 million for the nine months ended September 30, 2019 over the same periods in 2018. The following table provides a further breakdown of expenses within this category.

	Three months ended September 30,		Period-Over-Period Change		Nine months ended September 30,		Period-Over-Period Change	
	2019	2018	$	%	2019	2018	$	%
	($M, except percentages)				($M, except percentages)			
Advertising and promotion	10	10	1	6%	34	31	2	7%
Recruitment and training	6	5	2	34%	15	12	2	17%
Bad debt expense	1	(0)	1	-706%	3	2	1	46%
R&D tax credits	(5)	(6)	1	-12%	(14)	(16)	1	-9%
Contingent consideration	2	0	2	400%	8	1	7	483%
Other expense, net	3	2	1	42%	8	8	0	2%
	18	11	6	57%	53	40	14	35%

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

The contingent consideration expense amounts recorded for the three and nine months ended September 30, 2019 relate to an increase in anticipated acquisition earnout payment accruals 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 251% or $17 million for the quarter ended September 30, 2019 and 225% or $45 million for the nine months ended September 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 $23 million for the three and nine months ended September 30, 2019 respectively, an increase of 22% and 15% over the same periods in 2018 respectively. 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 September 30,		Period-Over-Period Change		Nine months ended September 30,		Period-Over-Period Change	
	2019	2018	$	%	2019	2018	$	%
	($M, except percentages)				($M, except percentages)			
Amortization of intangible assets	84	70	13	19%	234	209	25	12%
Foreign exchange (gain) loss	6	8	(3)	-31%	20	3	17	545%
TSS membership liability revaluation charge	12	17	(5)	-31%	30	38	(8)	-21%
Finance and other expense (income)	1	(3)	4	NM	(2)	(13)	11	-84%
Bargain purchase gain	(7)	(0)	(7)	NM	(36)	(1)	(35)	NM
Finance costs	11	8	3	40%	29	18	11	62%
Income tax expense (recovery)	36	31	5	15%	94	77	17	22%
	142	131	11	8%	369	330	39	12%

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 19% or $13 million for the quarter ended September 30, 2019 and 12% or $25 million for the nine months ended September 30, 2019 over the same periods in 2018. The increase in amortization expense for the three and nine months ended September 30, 2019 is primarily attributable to an increase in the carrying amount of our intangible asset balance over the twelve-month period ended September 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 nine months ended September 30, 2019, we realized foreign exchange losses of $6 million and $20 million respectively compared to losses of $8 million and $3 million for the same periods in 2018. The following table provides a breakdown of these amounts.

	Three months ended September 30,		Period-Over-Period Change		Nine months ended September 30,		Period-Over-Period Change	
	2019	2018	$	%	2019	2018	$	%
	($M, except percentages)				($M, except percentages)			
Unrealized foreign exchange (gain) loss related to:								
- revaluation of intercompany loans between entities with differing functional currencies [1]	8	3	5	184%	9	9	(0)	-1%
- revaulation of the Company's unsecured subordinated floating rate debentures as a result of the appreciation (depreciation) of the Canadian dollar against the US dollar.	(2)	4	(7)	NM	6	(7)	13	NM
Remaining foreign exchange (gain) loss	(0)	1	(2)	NM	5	1	4	741%
	6	8	(3)	-32%	20	3	17	546%

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 6% or $12 million from Q2 2019, and approximately 16% or $30 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 5% or $10 million over the nine month period ended September 30, 2019 from $184 million to $194 million as a result of the revaluation charge of $30 million offset by a distribution to the TSS minority owners of $11 million and a $9 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 nine months of 2019.

Finance and other expense (income) – Finance and other expense (income) for the three and nine month periods ended September 30, 2019 was an expense of $1 million and income of $2 million respectively compared to income of $3 million and $13 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 $8 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 $8 million accrual was released into income in Q1 2018. Interest earned on cash balances for the three and nine months ended September 30, 2019 was $0 million and $3 million respectively, compared to $2 million and $3 million for the same periods in 2018. An expense in the amount of $1 million relating to the decrease in fair value of equity securities held for trading was recorded for the three and nine months ended September 30, 2019 with no similar expense recorded during the comparable periods in 2018.

Bargain purchase gain – Bargain purchase gain adjustments totalling $7 million and $36 million were recorded in the three and nine month periods ended September 30, 2019 respectively relating to three of the acquisitions made during 2018 and 2019 compared to $0 million and $1 million for the same periods 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. An additional payment from the seller relating to revisions to the acquired net tangible asset balance resulted in a further $7 million bargain purchase gain being recorded in Q3 2019. The business recorded a net income loss excluding the bargain purchase gains and amortization of intangible assets expense, of $10 million in the nine month period ended September 30, 2019, and based on current estimates $10 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 primarily 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 September 30, 2019 increased $3 million to $11 million, compared to $8 million for the same period in 2018. During the nine months ended September 30, 2019, finance costs increased $11 million to $29 million, compared to $18 million for the same period in 2018. Interest on debt and debentures increased $1 million and $5 million for the three and nine month periods ended September 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 $5 million was recorded in the three and nine month periods ended September 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 September 30, 2019, income tax expense increased $5 million to $36 million compared to $31 million for the same period in 2018. During the nine months ended September 30, 2019, income tax expense increased $17 million to $94 million compared to $77 million for the same period in 2018. 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 September 30, 2019 was $82 million compared to net income of $66 million for the same period in 2018. On a per share basis, this translated into a net income per diluted share of $3.85 in the quarter ended September 30, 2019 compared to net income per diluted share of $3.10 for the same period in 2018. For the nine months ended September 30, 2019, net income was $241 million or $11.39 per diluted share compared to $200 million or $9.45 per diluted share for the same period in 2018. There was no change in the number of shares outstanding.

Net cash flows from operating activities ("CFO"):

For the quarter ended September 30, 2019, CFO increased $34 million to $177 million compared to $143 million for the same period in 2018 representing an increase of 24%. For the first nine months of 2019, CFO increased $58 million to $512 million compared to $454 million during the same period in 2018, representing an increase of 13%. 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 CFO are now recorded as a component of cash flows used in financing activities. For the three and nine months ended September 30, 2019 lease obligation and interest payments totaled $14 million and $40 million respectively. If lease obligation and interest payments were deducted from CFO for the three and nine months ended September 30, 2019 the increase in CFO would have been 14% and 4% over the same periods in 2018.

Free cash flow available to shareholders ("FCFA2S"):

For the quarter ended September 30, 2019, FCFA2S increased $22 million to $134 million compared to $112 million for the same period in 2018 representing an increase of 20%. For the first nine months of 2019, FCFA2S increased $16 million to $397 million compared to $381 million during the same period in 2018, representing an increase of 4%. The primary reason for the large variance between the 4% growth in FCFA2S and the 14% revenue growth for the first nine months of 2019 is that FCFA2S includes the impact of changes in non-cash operating assets and liabilities exclusive of effects of business combinations or "changes in non-cash operating working capital". For the nine months ended September 30, 2019 there was $44 million of cash used in non-cash operating working capital compared to $19 million of cash generated from non-cash operating working capital for the same period in 2018.

	Nine months ended September 30,		Period-Over-Period Change	
	2019	2018	$	%
FCFA2S	397	381	16	4%
Add back change in non-cash operating working capital	44	(19)	63	NM
FCFA2S excluding changes in non-cash operating working capital	**442**	**362**	**79**	**22%**

NM - Not meaningful

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

There are many reasons contributing to the non-cash operating working capital impact variance none of which are indicative of an underlying concern with the Company's overall non-cash operating working capital balance. See "Non-IFRS Measures" for a description of FCFA2S.

The following table reconciles FCFA2S to net cash flows from operating activities:

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
	($M, except percentages)		($M, except percentages)	
Net cash flows from operating activities	177	143	512	454
Adjusted for:				
Interest paid on lease obligations	(2)	-	(5)	-
Interest paid on other facilities	(8)	(7)	(23)	(17)
Credit facility transaction costs	(0)	(3)	(0)	(3)
Repayments of lease obligations	(12)	-	(35)	-
TSS membership liability revaluation charge	(12)	(17)	(30)	(38)
Property and equipment purchased	(9)	(6)	(24)	(18)
Interest and dividends received	0	2	3	3
Free cash flow available to shareholders	134	112	397	381

Due to rounding, certain totals may not foot.

See Appendix A – "Note to shareholders regarding our replacement non-IFRS measure" for further discussion around the FCFA2S metric.

Quarterly Results

	Quarter Ended								
	Sep. 30 2017	Dec. 31 2017	Mar. 31 2018	Jun. 30 2018	Sep. 30 2018	Dec. 31 2018	Mar. 31 2019	Jun. 30 2019	Sep. 30 2019
Revenue	637	688	718	752	759	831	819	846	870
Net income	54	76	83	52	66	179	87	73	82
CFO	123	163	258	53	143	208	284	50	177
FCFA2S	99	143	242	27	112	178	250	12	134
Net income per share									
Basic & diluted	2.56	3.59	3.90	2.45	3.10	8.46	4.09	3.45	3.85
CFO per share									
Basic & diluted	5.79	7.67	12.16	2.50	6.75	9.84	13.40	2.36	8.37
FCFA2S per share									
Basic & diluted	4.68	6.75	11.41	1.27	5.29	8.39	11.81	0.58	6.35

We experience seasonality in our operating results in that FCFA2S in the first quarter of every year is typically the highest and FCFA2S in the second quarter of every year is the lowest. The key driver impacting this seasonality is the timing of annual maintenance contract renewals. 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 $435 million to negative $4 million in the nine months ended September 30, 2019 resulting from net capital deployed on acquisitions plus dividends paid exceeding cash flows from operations. Cash decreased by $354 million to $235 million at September 30, 2019 compared to $589 million at December 31, 2018 and bank indebtedness increased by $82 million to $239 million at September 30, 2019 compared to $157 million at December 31, 2018.

Total assets increased $302 million, from $2,935 million at December 31, 2018 to $3,237 million at September 30, 2019. The increase is primarily due to a $333 million increase in intangible assets and $220 million of right of use assets set up in conjunction with the Company's adoption of IFRS 16 offset by a decrease in cash of $354 million. (See the "New standards and interpretations adopted" section below.) At September 30, 2019 three subsidiaries holding cash totalling $60 million maintained debt facilities, which facilities are without recourse to Constellation. As explained in the "Capital Resources and Commitments" section below, there are limitations on the ability of these subsidiaries to distribute funds to Constellation.

Current liabilities increased $302 million, from $1,344 million at December 31, 2018 to $1,646 million at September 30, 2019. The increase is primarily due to an increase in deferred revenue of $133 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, lease obligations of $57 million set up in conjunction with the Company's adoption of IFRS 16, and an increase in bank indebtedness of $69 million.

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

	Nine months ended September 30, 2019	Nine months ended September 30, 2018
Net cash provided by operating activities	512	454
Net cash from (used in) financing activities	(481)	(8)
Cash used in the acquisition of businesses	(453)	(507)
Cash obtained with acquired businesses	103	48
Net cash from (used in) other investing activities	(28)	(15)
Net cash from (used in) investing activities	(378)	(475)
Effect of foreign currency	(6)	(4)
Net increase (decrease) in cash and cash equivalents	**(354)**	**(33)**

The net cash flows from operating activities were $512 million for the nine months ended September 30, 2019. The $512 million provided by operating activities resulted from $241 million in net income plus $434 million of non-cash adjustments to net income offset by $44 million of cash used in non-cash operating working capital and $119 million in taxes paid.

The net cash flows used in financing activities in the nine months ended September 30, 2019 were $481 million, which is mainly a result of dividends paid of $487 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 $23 million. In addition, lease obligation and interest payments of $40 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. Offsetting the above was a net increase in bank indebtedness of $81 million.

The net cash flows used in investing activities in the nine months ended September 30, 2019 were $378 million. The cash used in investing activities was primarily due to acquisitions for an aggregate of $453 million (including payments for holdbacks relating to prior acquisitions) offset by $103 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

CSI Facility

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 September 30, 2019, $22 million had been drawn on the CSI Facility, and letters of credit totalling $10 million were issued, which limits the borrowing capacity on a dollar-for-dollar basis.

Debt without recourse to CSI

Certain of CSI's subsidiaries have entered into term debt facilities and revolving credit facilities with various financial institutions. CSI does not guarantee the debt of its subsidiaries, nor are there any cross-guarantees between subsidiaries. The credit facilities are collateralized by substantially all of the assets of the borrower entity and its subsidiaries. The credit facilities typically bear interest at a rate calculated using an interest rate index plus a margin. The financing arrangements for each subsidiary typically contain certain restrictive covenants, which may include limitations or prohibitions on additional indebtedness, payment of cash dividends, redemption of capital, capital spending, making of acquisitions and sales of assets. In addition, certain financial covenants must be met by those subsidiaries that have outstanding debt.

Debt without recourse to CSI comprises the following:

	Revolving Credit Facilities	Term Debt Facilities	Total
Principal outstanding at September 30, 2019 (and equal to fair value)	$ 98	$ 119	$ 217
Deduct: Carrying value of transaction costs included in debt	(1)	(2)	(3)
Carrying value at September 30, 2019	97	117	214
Current portion	97	2	99
Non-current portion	-	115	115

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.

<u>Other commitments</u>

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 $61 million at September 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 September 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 October 31, 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 income. The impact to organic revenue growth for the three and nine months ended September 30, 2019 was approximately negative 2% and 3% 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 nine months ended September 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 nine months ended September 30, 2019:

	Three Months Ended September 30, 2019		Nine Months Ended September 30, 2019	
Currencies	% of Revenue	% of Expenses	% of Revenue	% of Expenses
USD	51%	46%	52%	45%
CAD	7%	11%	7%	11%
GBP	8%	8%	7%	7%
EURO	21%	21%	22%	22%
CHF	1%	3%	1%	3%
Others	11%	11%	11%	10%
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 nine months ended September 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 October 31, 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 September 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 September 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.

APPENDIX A
NOTE TO SHAREHOLDERS REGARDING OUR REPLACEMENT NON-IFRS MEASURE

In my last Letter to Shareholders dated April 20, 2018, I wrote about the pros and cons of using the growth in Adjusted net income ("ANI") per share versus cash flow from operations ("CFO") per share as indicators of the increase in CSI's economic value. Neither metric is ideal.

Too often managers and shareholders unquestioningly accept ANI as the equivalent of earnings available to shareholders. Regulators require reconciliations of ANI to net income to highlight the difference, but these reconciliations often get short shrift. CFO doesn't distinguish well between the return on capital and the return of capital.

In CSI's reconciliation of ANI and Adjusted EBITA to net income the largest item is the amortisation of intangible assets. Clearly some of this amortisation represents an actual decrease in the economic value of the related underlying intangible assets. Our appreciating intangible assets have more than offset depreciating intangible assets to date, so I didn't fret about adding back the entire amount when calculating ANI. That will not always be the case. We have literally thousands of purchased products and the associated customer relationships. Many of these intangible assets are regularly maintained, enhanced and extended. A few deteriorate - some due to irrational competitors, some due to poor management and some due to shrinkage in the underlying vertical. The vast majority of CSI's economic value resides in our ability to acquire and manage these intangible assets. I can guarantee that indiscriminately adding back amortisation to create a proxy for earnings available to shareholders will eventually be misleading. I'd much rather our shareholders focused on the free cash flow that is produced each year and the trend in that free cash flow.

While the growth in net cash flow from operations (as defined by IFRS) is a useful starting point in understanding CSI's economic value, it doesn't take into account all of our cash needs for continuing operations. To reflect these necessary expenditures, we are introducing some adjustments to operating cash flow, to create a metric that we call Free cash flow available to shareholders, or "FCFA2S".

We will no longer report ANI and Adjusted EBITA. We will focus instead on IFRS sanctioned measures of profitability (i.e. net income) and cashflow (i.e. net cashflow from operations) in our MD&A, and will add FCFA2S as our only non-IFRS metric.

In the table below, we've presented the FCFA2S (along with ANI, CFO and net income) for the last 10 years. In the table below that, we've presented the same metrics for the last 9 quarters.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Net Cash flows from operating activities	82	107	138	145	220	341	396	491	528	662
Interest expense, financing fees and lease obligations	(5)	(5)	(5)	(4)	(4)	(20)	(18)	(24)	(25)	(28)
Interest and dividends received	1	1	1	0	0	1	1	1	4	5
Property and Equipment-purchases	(4)	(7)	(7)	(6)	(11)	(14)	(13)	(19)	(20)	(25)
TSS Minority Owners Liability	-	-	-	-	-	-	(22)	(22)	(50)	(55)
Free Cash Flow Available to Shareholders ("FCFA2S")	**74**	**96**	**126**	**135**	**206**	**308**	**344**	**427**	**438**	**559**
Adjusted net income ("ANI")	**62**	**84**	**140**	**172**	**207**	**274**	**371**	**395**	**463**	**597**
Net Income	**10**	**42**	**157**	**93**	**93**	**103**	**177**	**207**	**222**	**379**

Note: For historical reconciliations of Net Income to ANI see the MD&A filed for the relevant period, available on SEDAR at www.sedar.com.

	Q317	Q417	Q118	Q218	Q318	Q418	Q119	Q219	Q319
Net Cash flows from operating activities	123	163	258	53	143	208	284	50	177
Interest expense, financing fees and lease obligations	(8)	(6)	(5)	(5)	(9)	(8)	(19)	(22)	(22)
Interest and dividends received	1	1	1	1	2	2	3	0	0
Property and Equipment-purchases	(5)	(5)	(4)	(8)	(6)	(7)	(7)	(8)	(9)
TSS Minority Owners Liability	(12)	(10)	(7)	(14)	(17)	(18)	(10)	(8)	(12)
Free Cash Flow Available to Shareholders ("FCFA2S")	**99**	**143**	**242**	**27**	**112**	**178**	**250**	**12**	**134**
Adjusted net income ("ANI")	**116**	**141**	**143**	**122**	**145**	**187**	**127**	**137**	**154**
Net Income	**54**	**76**	**83**	**52**	**66**	**179**	**87**	**73**	**82**

Note: For historical reconciliations of Net Income to ANI see the MD&A filed for the relevant period, available on SEDAR at www.sedar.com.

We calculate FCFA2S by taking net cash flow from operating activities per IFRS, subtracting the amounts that we spend on fixed assets and on servicing the capital we have sourced from other stakeholders (e.g. debt providers, lease providers, minority shareholders), and then adding interest and dividends earned on investments. The remaining FCFA2S is the uncommitted cashflow available to CSI's shareholders if we made no further acquisitions, nor repaid our other capital-providing stakeholders.

There has been grumbling from some of CSI's directors and finance staff that I'm creating much ado about nothing… that FCFA2S is very similar to ANI, so why make the change? Partly, it's the name. ANI implies income. When we buy a company that we expect to consistently shrink, then the ANI for that business is actually a combination of return on capital and return of capital. The name implies otherwise.

I did like the fact that ANI, unlike CFO, was net of the cost of servicing the capital provided by other stakeholders (e.g. interest on debt, dividends on preferred stock, and lease payments). The deductions from CFO that we've made to create FCFA2S reflect this cost. This may become an increasingly important adjustment if we do more partnering with other investors and operators or create spin-out businesses.

FCFA2S captures changes in working capital, while ANI did not. If venture-backed competitors use their balance sheet as a weapon, we will have to respond and that could depress our FCFA2S, but would not depress ANI. At the extreme, we've seen some venture-backed competitors offering a year or two of free SaaS service in return for customers signing a 5 year subscription.

FCFA2S reflects cash taxes, while ANI uses only current taxes. I'm a motivated consumer of corporate tax arcana… at least when it comes to optimising cash taxes. That said, I am baffled by what the accountants are now doing with the reported current and deferred tax liabilities and tax assets. I believe that these balance sheet items verge on meaningless for even the most sophisticated analysts of financial information.

And lastly, we will reconcile FCFA2S to CFO, its closest IFRS measure. I believe that FCFA2S will nearly always be less than CFO. This feels more comfortable to me than reconciling ANI to net income, and always having ANI be significantly greater than net income.

While we could use the FCFA2S to pay dividends, or repurchase shares, our current objective is to invest all of it in acquisitions which meet our hurdle rate.

If you keep a weather eye on the trends in CSI's FCFA2S per share, I think you'll be able to spot any significant deterioration in the value of our intangible assets.

Mark Leonard

Glossary

''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.

''Adjusted net income'' ("ANI") 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).

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.

The following table reconciles Adjusted net income to Net income for the current period:

	Q319 ($M)
Net income	82
Adjusted for:	
Amortization of intangible assets	84
TSS membership liability revaluation charge	12
Bargain purchase gain	(7)
Less non-controlling interest in the Adjusted net income of TSS	(7)
Deferred income tax expense (recovery)	(8)
Adjusted net income	154

Due to rounding, certain totals may not foot.