

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, 2022, 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 4, 2022. 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 IRGA / TSS membership liability revaluation charge, and property and equipment purchased, and includes interest and dividends received. The portion of this amount applicable to non-controlling interests is then deducted. 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 may not be comparable to similar financial measures disclosed by other issuers. 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.

Corporate Reorganization

On January 4, 2021 (in anticipation of the acquisition of Topicus.com B.V.), the Company’s subsidiary, Constellation Software Netherlands Holding Coöperatief U.A. (“CSNH”), which principally holds the Total Specific Solutions Operating Group (“TSS”), completed a corporate reorganization. In conjunction with the reorganization, the following steps were completed on January 4, 2021:

- CSNH changed its name to Topicus.com Coöperatief U.A. (“Topicus Coop”).
- The Company engaged in a series of transactions the result of which was that its then existing equity interest in Topicus Coop became an equity interest in Topicus.com Inc. (“Topicus”) and Topicus became the new parent company of Topicus Coop. Topicus issued and Constellation received 39,412,385 preferred shares of Topicus (the “Topicus Preferred Shares”) and 39,412,385 subordinate voting shares of Topicus (the “Topicus Subordinate Voting Shares”). CSI distributed 39,412,367 of the Topicus Subordinate Voting Shares to its common shareholders pursuant a dividend-in-kind and continues to hold 18 Topicus Subordinate Voting Shares of Topicus.
- Constellation also holds 1 super voting share of Topicus (the “Topicus Super Voting Share”). The Topicus Super Voting Share entitles Constellation to that number of votes that equals 50.1% of the aggregate number of votes attached to all the outstanding Topicus Super Voting Shares and Topicus Subordinate Voting Shares. As a result, Constellation Software Inc. controls Topicus.
- Topicus Coop issued 19,665,642 Preference Units and 19,665,642 Ordinary Units to Joday Investments II B.V. (“Joday”) and certain individual investors affiliated therewith (being the previous minority owners of CSNH) (collectively known as the “Joday Group”).

On February 1, 2022, the Topicus Preferred Shares and Topicus Coop Preference Units were converted to Topicus Subordinate Voting Shares and Topicus Coop Ordinary Units respectively. Subsequent to the conversion, CSI will continue to consolidate Topicus and reflect an equity interest of 60.65% in Topicus and a non-controlling interest of 39.35%. The equity interest of 60.65% that the Company reflects in Topicus principally comprises the Company’s Subordinate Voting Shares and the ordinary units of Topicus Coop (“Topicus Coop Ordinary Units”) that are currently owned by the Joday Group and subject to the terms of the investor rights and governance agreement entered into by CSI, the Joday Group, Ijssel B.V., Topicus and Topicus Coop on January 5, 2021 (the “IRGA”).

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 rights to certain product updates “when and if available”. 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, depreciation, 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	
	2022	2021	\$	%	2022	2021	\$	%
Revenue	1,618	1,249	370	30%	3,050	2,425	625	26%
Expenses	1,242	912	331	36%	2,333	1,769	564	32%
Amortization of intangible assets	168	124	45	36%	314	242	72	30%
Foreign exchange (gain) loss	(42)	15	(57)	NM	(42)	2	(44)	NM
IRGA / TSS membership liability revaluation charge	29	22	8	35%	56	82	(26)	-31%
Finance and other income	18	(2)	20	NM	15	(4)	20	NM
Bargain purchase gain	(0)	0	(0)	NM	(1)	0	(1)	NM
Impairment of intangible and other non-financial assets	0	2	(2)	-89%	1	5	(4)	-76%
Redeemable preferred securities expense (income)	-	32	(32)	-100%	-	295	(295)	-100%
Finance costs	25	17	8	50%	44	32	12	38%
Income before income taxes	177	128	50	39%	328	2	327	NM
Income tax expense (recovery)								
Current income tax expense (recovery)	110	75	35	47%	209	138	71	51%
Deferred income tax expense (recovery)	(67)	(25)	(42)	170%	(126)	(39)	(86)	221%
Income tax expense (recovery)	43	50	(7)	-14%	83	99	(16)	-16%
Net income (loss) attributable to:								
Common shareholders of CSI	126	88	38	43%	224	80	145	182%
Non-controlling interests	8	(11)	19	NM	21	(177)	198	NM
Net income (loss)	134	78	57	73%	245	(97)	342	NM
Net cash flows from operating activities	78	171	(93)	-55%	576	667	(91)	-14%
Free cash flow available to shareholders	12	145	(133)	-92%	335	413	(79)	-19%
Weighted average number of shares outstanding								
Basic and diluted	21.2	21.2			21.2	21.2		
Net income (loss) per share								
Basic and diluted	\$ 5.94	\$ 4.16	\$ 1.78	43%	\$ 10.58	\$ 3.76	\$ 6.82	182%
Net cash flows from operating activities per share								
Basic and diluted	\$ 3.66	\$ 8.07	\$ (4.41)	-55%	\$ 27.17	\$ 31.46	\$ (4.29)	-14%
Free cash flow available to shareholders per share								
Basic and diluted	\$ 0.56	\$ 6.84	\$ (6.28)	-92%	\$ 15.80	\$ 19.51	\$ (3.71)	-19%
Cash dividends declared per share								
Basic and diluted	\$ 1.00	\$ 1.00	\$ -	0%	\$ 2.00	\$ 2.00	\$ -	0%

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, 2022 and 2021

Revenue:

Total revenue for the quarter ended June 30, 2022 was \$1,618 million, an increase of 30%, or \$370 million, compared to \$1,249 million for the comparable period in 2021. For the first six months of 2022 total revenues were \$3,050 million, an increase of 26%, or \$625 million, compared to \$2,425 million for the comparable period in 2021.

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 2% and negative 1% respectively, 2% 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 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. Organic growth is not a standardized financial measure and might not be comparable to measures disclosed by other issuers.

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

	Three months ended June 30,				Q221 Proforma Adj. (Note 1)	Organic Growth	Six months ended June 30,				Q221 Proforma Adj. (Note 2)	Organic Growth
			Period-Over- Period Change						Period-Over- Period Change			
	<u>2022</u>	<u>2021</u>	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>	<u>2022</u>	<u>2021</u>	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>
	(\$ in millions, except percentages)											
Licenses	72	71	1	1%	20	-21%	141	137	4	3%	34	-18%
Professional services	340	254	86	34%	116	-8%	610	491	119	24%	163	-7%
Hardware and other	50	43	7	17%	12	-9%	98	82	15	18%	22	-7%
Maintenance and other recurring	1,156	880	276	31%	260	1%	2,201	1,714	487	28%	430	3%
	1,618	1,249	370	30%	407	-2%	3,050	2,425	625	26%	648	-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, 2021 from companies acquired after March 31, 2021. (Obtained from unaudited vendor financial information.)

Note 2: Estimated pre-acquisition revenues for the six months ended June 30, 2021 from companies acquired after December 31, 2020. (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 2020. Note that the estimated revenues achieved by acquired companies in the corresponding financial period preceding the date of acquisition by Constellation may be updated in the quarter following the quarter they were acquired resulting in slight variances to previously reported figures.

	Quarter Ended									
	Jun. 30 2020	Sep. 30 2020	Dec. 31 2020	Mar. 31 2021	Jun. 30 2021	Sep. 30 2021	Dec. 31 2021	Mar. 31 2022	Jun. 30 2022	
Licenses	-30%	-10%	-6%	-4%	18%	3%	4%	-13%	-21%	
Professional services	-17%	-8%	-4%	6%	17%	8%	6%	-5%	-8%	
Hardware and other	-23%	-7%	-13%	-12%	15%	-12%	-12%	-5%	-9%	
Maintenance and other recurring	-3%	2%	4%	7%	12%	8%	5%	4%	1%	
Revenue	-8%	-1%	1%	6%	14%	7%	4%	1%	-2%	

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

	Quarter Ended									
	Jun. 30 2020	Sep. 30 2020	Dec. 31 2020	Mar. 31 2021	Jun. 30 2021	Sep. 30 2021	Dec. 31 2021	Mar. 31 2022	Jun. 30 2022	
Licenses	-28%	-11%	-7%	-8%	12%	2%	5%	-11%	-18%	
Professional services	-16%	-10%	-6%	1%	10%	6%	7%	-2%	-3%	
Hardware and other	-22%	-10%	-15%	-16%	9%	-13%	-11%	-3%	-4%	
Maintenance and other recurring	-1%	1%	2%	3%	7%	6%	6%	7%	6%	
Revenue	-7%	-3%	-1%	1%	8%	5%	5%	4%	2%	

Expenses:

The following table displays the breakdown of our expenses:

Expenses	Three months ended June 30,		Period-Over- Period Change		Six months ended June 30,		Period-Over- Period Change	
	<u>2022</u>	<u>2021</u>	\$	%	<u>2022</u>	<u>2021</u>	\$	%
	(\$ in millions, except percentages)				(\$ in millions, except percentages)			
Staff	873	665	209	31%	1,656	1,306	350	27%
Hardware	29	23	6	25%	56	45	11	24%
Third party license, maintenance and professional services	153	109	44	41%	276	205	71	35%
Occupancy	12	10	2	20%	23	19	3	18%
Travel, Telecommunications, Supplies & Software and equipment	80	44	36	81%	135	83	53	63%
Professional fees	28	17	11	65%	52	32	20	61%
Other, net	32	14	18	128%	68	19	49	254%
Depreciation	35	30	6	19%	67	59	8	14%
	1,242	912	331	36%	2,333	1,769	564	32%

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

Overall expenses for the quarter ended June 30, 2022 increased 36%, or \$331 million to \$1,242 million, compared to \$912 million during the same period in 2021. As a percentage of total revenue, expenses equalled 77% for the quarter ended June 30, 2022 and 73% for the same period in 2021. During the six months ended June 30, 2022, expenses increased 32%, or \$564 million to \$2,333 million, compared to \$1,769 million during the same period in 2021. As a percentage of total revenue, expenses equalled 76% for the six months ended June 30, 2022 and 73% for the same period in 2021. For the three and six months ended June 30, 2022 the change in valuation of the US dollar against most major currencies in which the Company transacts business resulted in an approximate 5% and 4% decrease in expenses respectively compared to the comparable periods of 2021.

Staff expense – Staff expenses increased 31% or \$209 million for the quarter ended June 30, 2022 and 27% or \$350 million for the six months ended June 30, 2022 over the same periods in 2021. 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	
	<u>2022</u>	<u>2021</u>	\$	%	<u>2022</u>	<u>2021</u>	\$	%
	(\$ in millions, except percentages)				(\$ in millions, except percentages)			
Professional services	206	136	70	51%	370	271	99	37%
Maintenance	168	134	34	25%	322	262	60	23%
Research and development	232	180	52	29%	446	354	92	26%
Sales and marketing	112	91	21	23%	218	177	41	23%
General and administrative	156	124	32	26%	300	242	58	24%
	873	665	209	31%	1,656	1,306	350	27%

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, 2022 was primarily due to the growth in the number of employees compared to the same periods in 2021 primarily due to acquisitions.

Hardware expenses – Hardware expenses increased 25% or \$6 million for the quarter ended June 30, 2022 and 24% or \$11 million for the six months ended June 30, 2022 over the same periods in 2021 as compared with the 17% and 18% increases in hardware and other revenue for the three and six month periods ending June 30, 2022 respectively over the comparable periods in 2021. Hardware margins for the three and six months ended June 30, 2022 were both 42% as compared to 46% and 45% for the comparable periods in 2021.

Third party license, maintenance and professional services expenses – Third party license, maintenance and professional services expenses increased 41% or \$44 million for the quarter ended June 30, 2022 and 35% or \$71 million for the six months ended June 30, 2022 over the same periods in 2021. The increase is primarily due to third party license, maintenance and professional services expenses of acquired businesses.

Occupancy expenses – Occupancy expenses increased 20% or \$2 million for the quarter ended June 30, 2022 and 18% or \$3 million for the six months ended June 30, 2022 over the same periods in 2021. The increase is primarily due to the occupancy expenses of acquired businesses.

Travel, Telecommunications, Supplies & Software and equipment expenses – Travel, Telecommunications, Supplies & Software and equipment expenses increased 81% or \$36 million for the quarter ended June 30, 2022 and 63% or \$53 million for the six months ended June 30, 2022 over the same periods in 2021. The increase in these expenses is primarily due to expenses incurred by acquired businesses. In addition employee travel is increasing as restrictions imposed as a result of COVID-19 are gradually being lifted.

Professional fees – Professional fees increased 65% or \$11 million for the quarter ended June 30, 2022 and 61% or \$20 million for the six months ended June 30, 2022 over the same periods in 2021. There are no individually material reasons contributing to this variance.

Other, net – Other expenses increased 128% or \$18 million for the quarter ended June 30, 2022 and 254% or \$49 million for the six months ended June 30, 2022 over the same periods in 2021. 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	
	<u>2022</u>	<u>2021</u>	\$	%		<u>2022</u>	<u>2021</u>	\$	%
	(\$ in millions, except percentages)					(\$ in millions, except percentages)			
Advertising and promotion	22	12	10	82%		41	23	19	82%
Recruitment and training	9	6	3	52%		16	10	5	53%
Bad debt expense	1	1	0	23%		3	0	3	728%
R&D tax credits	(7)	(7)	(0)	6%		(14)	(13)	(1)	11%
Contingent consideration	3	5	(3)	-47%		13	6	7	122%
Government assistance	(0)	(8)	7	-95%		(1)	(15)	13	-92%
Other expense, net	5	5	1	14%		10	8	3	34%
	32	14	18	128%		68	19	49	254%

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

In 2020 and 2021 the governments of various jurisdictions in which we have operations had approved legislation and took administrative actions intended to aid businesses that had been adversely impacted by COVID-19, including making grants or credits available to eligible entities to subsidize or offset qualifying expenses, including employee wages, or to lower payroll taxes or required social insurance programs (in certain countries), in

each case subject to limits and other specified criteria. During the six months ended June 30, 2021, we determined that we qualified for an estimated aggregate amount of \$15 million of grants from various government authorities, including the Canada Emergency Wage Subsidy (CEWS) announced by the Government of Canada in April 2020, and recognized such amounts as a reduction in expenses during the period. During 2022, programs have either been canceled or we have determined that we no longer qualify. During the six months ended June 30, 2022 we recognized \$1 million as a reduction in expenses from programs that are still applicable.

The contingent consideration expense amounts recorded for the three and six months ended June 30, 2022 related 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. The advertising and promotion increase is primarily related to spending by acquired businesses and a gradual return to pre-COVID-19 levels of spending on trade shows and other marketing activities. Recruitment and training expenses have increased as many businesses that had a freeze on hiring as a result of COVID-19 are now starting to hire.

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

Depreciation – Depreciation of property and equipment increased 19% or \$6 million for the quarter ended June 30, 2022 and 14% or \$8 million for the six months ended June 30, 2022 over the same periods in 2021. The increases are 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	
	2022	2021	\$	%	2022	2021	\$	%
	(\$ in millions, except percentages)				(\$ in millions, except percentages)			
Amortization of intangible assets	168	124	45	36%	314	242	72	30%
Foreign exchange (gain) loss	(42)	15	(57)	NM	(42)	2	(44)	NM
IRGA / TSS membership liability revaluation charge	29	22	8	35%	56	82	(26)	-31%
Finance and other expense (income)	18	(2)	20	NM	15	(4)	20	NM
Bargain purchase gain	(0.4)	0	(0)	NM	(1)	0	(1)	NM
Impairment of intangible and other non-financial assets	0.3	2	(2)	-89%	1	5	(4)	-76%
Redeemable preferred securities expense (income)	-	32	(32)	-100%	-	295	(295)	-100%
Finance costs	25	17	8	50%	44	32	12	38%
Income tax expense (recovery)	43	50	(7)	-14%	83	99	(16)	-16%
	241	259	(18)	-7%	472	754	(282)	-37%

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 36% or \$45 million for the quarter ended June 30, 2022 and 30% or \$72 million for the six months ended June 30, 2022 over the same periods in 2021. The increase in amortization expense for the three and six months ended June 30, 2022 is primarily attributable to an increase in the carrying amount of our intangible asset balance over the twelve-month period ended June 30, 2022 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, 2022, we realized foreign exchange gains of \$42 million for both periods compared to losses of \$15 million and \$2 million for the same periods in 2021. The following table provides a breakdown of these amounts.

	Three months ended June 30, Period-Over-Period Change				Six months ended June 30, Period-Over-Period Change			
	<u>2022</u>	<u>2021</u>	<u>\$</u>	<u>%</u>	<u>2022</u>	<u>2021</u>	<u>\$</u>	<u>%</u>
	(\$ in millions, except percentages)				(\$ in millions, except percentages)			
Unrealized foreign exchange (gain) loss related to:								
- revaluation of intercompany loans between entities with differing functional currencies ⁽¹⁾	(10)	0	(10)	NM	(12)	1	(12)	NM
- 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.	(7)	4	(10)	NM	(3)	6	(10)	NM
- revaluation of the liability associated with the IRGA (Euro denominated liability)	(24)	4	(28)	NM	(32)	(7)	(24)	334%
Remaining foreign exchange (gain) loss	(1)	7	(8)	NM	5	3	2	86%
	(42)	15	(57)	NM	(42)	2	(44)	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.

IRGA / TSS membership liability revaluation charge – On December 23, 2014, in accordance with the terms of the purchase and sale agreement for the initial acquisition of TSS (as defined below) by CSI, and on the basis of the term sheets attached thereto, Constellation and the Joday Group, among others, entered into a Members Agreement (the “Members Agreement”) pursuant to which the Joday Group acquired 33.29% of the voting interests in Constellation Software Netherlands Holding Coöperatief U.A. (which was renamed to Topicus.com Coöperatief U.A.), a subsidiary of Constellation and the indirect owner of 100% of TSS at the time of the acquisition. Total proceeds from this transaction was €39 million (\$49 million).

On January 5, 2021, the Members Agreement was terminated in conjunction with the acquisition of Topicus.com B.V., the reorganization of Topicus Coop and the execution of the IRGA. The IRGA was established to create certain contractual obligations of the parties in respect of the governance of Topicus and Topicus Coop. The Joday Group’s interest in Topicus Coop now comprises 39,331,284 Topicus Coop Ordinary Units (“Topicus Coop Units”) resulting in an interest of 30.29% in Topicus Coop as of June 30, 2022. The IRGA provides for transfer restrictions in respect of the Topicus Coop Units. See “Liability of CSI under the terms of the IRGA” below for further details.

The valuation of the IRGA liability (previously the TSS membership liability) increased by approximately 7% or \$29 million from Q1 2022, and approximately 14% or \$56 million from Q4 2021. The increases are primarily the result of the growth in TSS’ trailing twelve month maintenance revenue on a pro-forma basis (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 1% or \$3 million over the six month period ended June 30, 2022 from \$395 million to \$397 million as a result of the revaluation charge of \$56 million offset by a distribution to the Joday Group of \$22 million and a \$32 million foreign exchange gain. The IRGA / TSS membership liability is denominated in Euros and the Euro depreciated 8% versus the US dollar during the first six months of 2022.

Finance and other expense (income) – Finance and other expense for the three and six months ended June 30, 2022 was \$18 million and \$15 million respectively, compared to income of \$2 million and \$4 million respectively for the same periods in 2021. The decrease in fair value of equity securities held for trading for the three and six months ended June 30, 2022 was \$23 million and \$25 million respectively, compared to increases of \$1 million and \$2 million respectively for the same periods in 2021. Interest earned on cash balances for the three and six months ended June 30, 2022 was \$0.2 million and \$0.5 million respectively, compared to \$0.6 million and \$1.2 million respectively for the same periods in 2021.

Bargain purchase gain – Bargain purchase gains totalling \$0.4 million and \$1 million were recorded in the three and six month periods ended June 30, 2022 relating to acquisitions made in the period. The gains resulted from the fact that the fair value of the separately identifiable assets and liabilities acquired exceeded the total consideration paid, principally due to the acquisition of certain assets that will benefit the Company that had limited value to the sellers.

Impairment of intangible and other non-financial assets – Impairment expenses of \$0.3 million and \$1 million were recorded in the three and six month periods ended June 30, 2022 compared to \$2 million and \$5 million for the same periods in 2021. These expenses primarily relate to acquired businesses that have been unable to achieve the goals established in their associated investment thesis.

Redeemable preferred securities expense (income) – The redeemable preferred securities expense for the three and six months ended June 30, 2021 was \$32 million and \$295 million respectively, with no similar expense recorded for the same periods in 2022. In conjunction with the acquisition of Topicus.com B.V., Topicus Coop issued 5,842,882 Topicus Coop Preference Units (the “Preferred Securities”) to Ijssel B.V. The Preferred Securities were non-voting and were redeemable at the option of the holder for a redemption price of approximately €19.06 (\$23.28) per security. The redemption price was either to be settled in cash or through the issuance of a variable number of Topicus Coop Ordinary Units of equal value. The Preferred Securities were convertible into Topicus Coop Ordinary Units at a conversion ratio of 1:1, and the Topicus Coop Ordinary Units are convertible into Subordinate Voting Shares of Topicus also at a conversion ratio of 1:1. The Preferred Securities holders were also entitled to a fixed annual cumulative dividend of 5% per annum on the initial Preferred Securities value of approximately €19.06 (\$23.28) per security.

The Preferred Securities were recorded at fair value at the end of each reporting period until the Notification of Conversion (as described in note 12 to the Annual Consolidated Financial Statements for the year ended December 31, 2021). The change in fair value of the Preferred Securities was recorded as redeemable preferred securities expense (income) in the condensed consolidated interim statements of income. Based on the Preferred Securities conversion right, the value of the Preferred Securities was primarily dependent on the price movement of Topicus’ Subordinate Voting Shares. At March 31, 2021 the market price of Topicus’ Subordinate Voting Shares closed at C\$82.54 or approximately \$65.54. The increase in value from \$23.28 to \$65.54 multiplied by the 5.8 million Preferred Securities outstanding equalled approximately \$247 million. The Notification of Conversion was received from the Preferred Securities holders on May 17, 2021. The closing market price of Topicus’ Subordinate Voting Shares on that date was C\$89.87 or approximately \$74.28. The increase in value from \$65.54 to \$74.28 multiplied by the 5.8 million Preferred Securities outstanding equalled approximately \$51 million. The net increase for the six months ended June 30, 2021 was therefore \$298 million (\$247 million + \$51 million). The difference between the increases of \$51 million and \$298 million and the fair value adjustment of \$32 million and \$295 million for the three and six month periods ended June 31, 2021 primarily relates to the impact of share price volatility and optionality and the accrued dividend of \$1 million and \$3 million for each respective period.

On February 1, 2022, all outstanding Topicus Coop Preference Securities were converted into Topicus Coop Ordinary Units.

Finance costs – Finance costs for the quarter ended June 30, 2022 increased \$8 million to \$25 million, compared to \$17 million for the same period in 2021. During the six months ended June 30, 2022, finance costs

increased \$12 million to \$44 million, from \$32 million for the same period in 2021. The increases are primarily a result of an increase in the average debt outstanding in 2022 as compared to 2021.

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, 2022, income tax expense decreased \$7 million to \$43 million compared to \$50 million for the same period in 2021. During the six months ended June 30, 2022, income tax expense decreased \$16 million to \$83 million compared to \$99 million for the same period in 2021. Current tax expense has historically approximated our cash tax rate however the quarterly expense 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 (loss). The Company’s consolidated effective tax rate in respect of continuing operations for the three and six months ended June 30, 2022 was 24% and 25% respectively (39% and 5,258% respectively for the three and six months ended June 30, 2021). The 2021 effective tax rate is impacted by the redeemable preferred securities expense, which is not deductible for tax purposes.

Effective for 2022, research and experimentation (R&E) expenditures are no longer allowed to be deducted as incurred for US entities. The Tax Cuts and Jobs Act (TCJA) mandates that, for tax years beginning after December 31, 2021, R&E expenditures be deferred and amortized. US-based expenditures will be amortized over a 5 year period, and non-US-based expenditures over a 15 year period. The total estimated impact to current income tax expense is \$146 million for the 2022 fiscal year. \$40 million and \$73 million was accrued and expensed in the three and six month periods ended June 30, 2022 respectively. An offsetting amount has been booked to deferred income tax expense so there is no impact on net tax expense or the effective tax rate.

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 attributable to common shareholders of CSI for the quarter ended June 30, 2022 was \$126 million compared to \$88 million for the same period in 2021. On a per share basis this translated into a net income per diluted share of \$5.94 in the quarter ended June 30, 2022 compared to net income per diluted share of \$4.16 for the same period in 2021. For the six months ended June 30, 2022, net income attributable to common shareholders of CSI was \$224 million or \$10.58 per diluted share compared to \$80 million or \$3.76 per diluted share for the same period in 2021. There was no change in the number of shares outstanding.

Net cash flows from operating activities (“CFO”):

For the quarter ended June 30, 2022, CFO decreased \$93 million to \$78 million compared to \$171 million for the same period in 2021 representing a decrease of 55%. For the six months ended June 30, 2022, CFO decreased \$91 million to \$576 million compared to \$667 million for the same period in 2021 representing a decrease of 14%. The primary reason for the decline in CFO for the three and six months ended June 30, 2022 is that CFO 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 three and six months ended June 30, 2022 there was \$188 million and \$18 million of cash used in non-cash operating working capital respectively compared to \$99 million of cash used and \$100 million of cash generated from non-cash operating working capital for the same periods in 2021. 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. Specifically, no concerns with accounts receivable or unbilled revenue aging.

Income taxes paid increased 50% or \$49 million for the quarter ended June 30, 2022 and 28% or \$41 million for the six months ended June 30, 2022 over the same periods in 2021. An approximate \$50 million cash tax payment was made in the three and six month periods ending June 30, 2022 relating to the deferral of R&E expenses associated with the TCJA. (See "Income taxes" above.)

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

For the quarter ended June 30, 2022, FCFA2S decreased \$133 million to \$12 million compared to \$145 million for the same period in 2021 representing a decrease of 92%. For the six months ended June 30, 2022, FCFA2S decreased \$79 million to \$335 million compared to \$413 million for the same period in 2021 representing a decrease of 19%. The items negatively impacting CFO summarized above are the same items negatively impacting FCFA2S. On February 1, 2022, the Topicus Preferred Shares and Topicus Coop Preference Units were converted to Topicus Subordinate Voting Shares and Topicus Coop Ordinary Units respectively. As a result of this conversion the non-controlling interest in Topicus.com Inc. decreased from approximately 70% to 39%.

The controlling / non-Controlling interest ("NCI") percentage is based on the Topicus Subordinate Voting Shares and Topicus Coop Ordinary Units ("Common Shares"). The controlling interest that the Company reflects in Topicus includes the Common Shares that are currently owned by the Joday Group and subject to the terms of the IRGA.

Common Share Holdings:

	Jan 31, 2022		Feb 1, 2022	
Public shareholders of TOI	40,512,360	62.4%	40,512,360	31.2%
Ijssel Group	4,742,889	7.3%	10,585,771	8.2%
Joday Group	19,665,642	30.3%	39,331,284	30.3%
CSI	19	0.0%	39,412,404	30.4%
	<u>64,920,910</u>		<u>129,841,819</u>	
NCI		69.7%		39.4%

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

	Three months ended June 30,		Six months ended June 30,	
	<u>2022</u>	<u>2021</u>	<u>2022</u>	<u>2021</u>
	(\$ in millions, except percentages)		(\$ in millions, except percentages)	
Net cash flows from operating activities	78	171	576	667
Adjusted for:				
Interest paid on lease obligations	(3)	(2)	(5)	(5)
Interest paid on other facilities	(16)	(9)	(26)	(18)
Credit facility transaction costs	(2)	(2)	(3)	(4)
Payments of lease obligations	(23)	(20)	(45)	(41)
IRGA / TSS membership liability revaluation charge	(29)	(22)	(56)	(82)
Property and equipment purchased	(12)	(7)	(19)	(11)
Interest and dividends received	0	1	0	1
	<u>(7)</u>	<u>110</u>	<u>422</u>	<u>507</u>
Less amount attributable to Non-controlling interests	18	35	(87)	(94)
Free cash flow available to shareholders	12	145	335	413

Due to rounding, certain totals may not foot.

Quarterly Results

	Quarter Ended									
	Jun. 30 <u>2020</u>	Sep. 30 <u>2020</u>	Dec. 31 <u>2020</u>	Mar. 31 <u>2021</u>	Jun. 30 <u>2021</u>	Sep. 30 <u>2021</u>	Dec. 31 <u>2021</u>	Mar. 31 <u>2022</u>	Jun. 30 <u>2022</u>	
Revenue	922	1,003	1,091	1,176	1,249	1,299	1,383	1,431	1,618	
Net income (loss) *	83	122	149	(9)	88	107	124	98	126	
CFO	237	234	355	495	171	292	341	498	78	
FCFA2S	190	181	307	269	145	226	244	324	12	
Net income per share *										
Basic & diluted	3.90	5.78	7.02	-0.41	4.16	5.04	5.86	4.63	5.94	
CFO per share										
Basic & diluted	11.17	11.05	16.73	23.38	8.07	13.78	16.09	23.51	3.66	
FCFA2S per share										
Basic & diluted	8.99	8.56	14.47	12.67	6.84	10.68	11.50	15.27	0.56	

* Attributable to common shareholders of CSI

We experience seasonality in our operating results in that CFO and FCFA2S in the first quarter of every year is typically the highest and CFO 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.

Spin-Out of Topicus.com Inc.

Constellation (TSX:CSU) and Topicus (TSXV:TOI) announced on January 5, 2021 that Constellation, acting through its Total Specific Solutions (“TSS”) operating group and its subsidiary TPCS Holding B.V., completed the purchase of 100% of the shares of Topicus.com B.V., a Netherlands-based diversified vertical market software provider, from IJssel B.V. and that in connection with the closing of the acquisition, TSS has been spun out of Constellation and now operates, together with Topicus.com B.V., as a separate public company, Topicus.com Inc. (collectively, the “Spin-Out Transactions”).

In connection with the completion of the Spin-Out Transactions, on January 4, 2021, all of Constellation’s common shareholders of record on December 28, 2020 received, by way of a dividend-in-kind, 1.859817814 subordinate voting shares of Topicus.com (the “Spin-Out Shares”) for each common share of Constellation held.

Constellation’s equity interest in TSS prior to the Spin-Out Transactions was 66.7%. Constellation’s equity interest in Topicus after completion of the Spin-Out Transactions on a fully diluted basis was approximately 30.4%. In addition, Constellation as the holder of the Topicus Super Voting Share is entitled to that number of votes that equals 50.1% of the aggregate number of votes attached to all of the outstanding voting shares at such time. As a result of the Topicus Super Voting Share Constellation consolidated the financial results of Topicus with its financial results.

The tables below provide certain supplemental balance sheet, statement of income, and net operating cash flow information of Topicus for the three and six months ended June 30, 2022. Topicus is not considered a reportable operating segment of Constellation, however, management has chosen to provide certain supplemental financial information to provide greater clarity into the operating performance and cash flow from operations of Topicus considering Constellation’s equity ownership.

Selected Balance Sheet Information
As at June 30, 2022

	Constellation Software Inc. (excluding (Unaudited) Topicus)			Topicus	Consolidated
Cash	509	167		676	
Bank debt and debentures	1,221	264		1,485	

Statement of Income
(Excluding intercompany activity)

(Unaudited)	For the three months ended June 30, 2022			For the six months ended June 30, 2022		
	Constellation Software Inc. (excluding Topicus)	Topicus	Consolidated	Constellation Software Inc. (excluding Topicus)	Topicus	Consolidated
Revenue	1,385	233	1,618	2,589	460	3,050
Expenses	1,063	180	1,242	1,984	349	2,333
Amortization of intangible assets	141	28	168	261	53	314
Foreign exchange (gain) loss	(42)	0	(42)	(42)	0	(42)
IRGA / Membership liability revaluation charge	29	-	29	56	-	56
Finance and other income	22	(4)	18	21	(6)	15
Bargain purchase gain	(0)	-	(0)	(1)	-	(1)
Impairment of intangible and other non-financial assets	0	-	0	1	-	1
Redeemable preferred securities expense (income)	-	-	-	-	-	-
Finance costs	21	4	25	37	7	44
Income before income taxes	152	26	177	273	56	328
Income tax expense (recovery)						
Current income tax expense (recovery)	99	12	110	185	24	209
Deferred income tax expense (recovery)	(61)	(7)	(67)	(114)	(12)	(126)
Income tax expense (recovery)	38	5	43	71	12	83
Net income	114	21	134	202	43	245
Net cash flows from operating activities	112	(35)	78	412	164	576

Foreign Exchange Adjusted Organic Revenue Growth
(Excluding intercompany activity)

	For the three months ended June 30, 2022			For the six months ended June 30, 2022		
	Constellation Software Inc. (excluding Topicus)	Topicus	Consolidated	Constellation Software Inc. (excluding Topicus)	Topicus	Consolidated
Licenses	-16%	-27%	-18%	-14%	-23%	-15%
Professional services	-4%	2%	-3%	-3%	-1%	-3%
Hardware and other	-5%	7%	-4%	-4%	22%	-3%
Maintenance and other recurring	5%	8%	6%	6%	7%	6%
Revenue	2%	5%	2%	3%	4%	3%

Acquisition of business segment from Allscripts Healthcare Solutions

On May 2, 2022, Constellation, through its wholly-owned subsidiary, N. Harris Computer Corporation, completed the purchase from Allscripts Healthcare Solutions (“Allscripts”) of Allscripts’ Hospitals and Large Physician Practices business segment. This business segment now operates under the name Altera.

The tables below provide certain supplemental balance sheet, statement of income, and net operating cash flow information of Altera for the three and six months ended June 30, 2022. Altera is not considered a reportable operating segment of Constellation, however, management has chosen to provide certain supplemental financial information to provide greater clarity into the operating performance and cash flow from operations of Altera considering the size of the business and its impact on the results of Constellation.

Selected Balance Sheet Information
As at June 30, 2022

	Constellation Software Inc. (excluding Altera)		
(Unaudited)	Altera	Altera	Consolidated
Cash	622	54	676
Bank debt and debentures	1,152	333	1,485

Statement of Income
(Excluding intercompany activity)

	For the three months ended June 30, 2022			For the six months ended June 30, 2022		
	Constellation Software Inc. (excluding Altera)			Constellation Software Inc. (excluding Altera)		
(Unaudited)	Altera	Altera	Consolidated	Altera	Altera	Consolidated
Revenue	1,478	140	1,618	2,910	140	3,050
Expenses	1,114	129	1,242	2,204	129	2,333
Amortization of intangible assets	156	13	168	301	13	314
Foreign exchange (gain) loss	(42)	1	(42)	(42)	1	(42)
IRGA / Membership liability revaluation charge	29	-	29	56	-	56
Finance and other income	18	(0)	18	15	(0)	15
Bargain purchase gain	(0)	-	(0)	(1)	-	(1)
Impairment of intangible and other non-financial assets	0	-	0	1	-	1
Redeemable preferred securities expense (income)	-	-	-	-	-	-
Finance costs	22	3	25	41	3	44
Income before income taxes	182	(5)	177	333	(5)	328
Income tax expense (recovery)						
Current income tax expense (recovery)	118	(7)	110	216	(7)	209
Deferred income tax expense (recovery)	(75)	7	(67)	(133)	7	(126)
Income tax expense (recovery)	43	0	43	83	0	83
Net income	139	(5)	134	250	(5)	245
Net cash flows from operating activities	83	(5)	78	581	(5)	576
Free cash flow available to shareholders	25	(13)	12	348	(13)	335

Foreign Exchange Adjusted Organic Revenue Growth
(Excluding intercompany activity)

	For the three months ended June 30, 2022			For the six months ended June 30, 2022		
	Constellation Software Inc. (excluding Altera)			Constellation Software Inc. (excluding Altera)		
	Altera	Altera	Consolidated	Altera	Altera	Consolidated
Licenses	-16%	-46%	-18%	-13%	-46%	-15%
Professional services	-3%	-3%	-3%	-3%	-3%	-3%
Hardware and other	-3%	-43%	-4%	-3%	-43%	-3%
Maintenance and other recurring	7%	-4%	6%	7%	-4%	6%
Revenue	3%	-6%	2%	3%	-6%	3%

Liquidity

Our net debt position (bank indebtedness excluding capitalized transaction costs less cash) increased by \$854 million to \$602 million in the six months ended June 30, 2022 resulting from the net capital deployed on acquisitions plus dividends exceeding cash flows from operations. Cash decreased by \$87 million to \$676 million at June 30, 2022 compared to \$763 million at December 31, 2021 and bank indebtedness increased by \$767 million to \$1,278 million at June 30, 2022 compared to \$511 million at December 31, 2021.

Total assets increased \$1,655 million, from \$5,766 million at December 31, 2021 to \$7,421 million at June 30, 2022. The increase is primarily due to a \$1,087 million increase in intangible assets, an increase in accounts receivable of \$176 million, an increase in unbilled revenue of \$96 million and a \$214 million increase in other assets. At June 30, 2022 ten subsidiaries holding cash totalling \$187 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 \$1,036 million, from \$2,461 million at December 31, 2021 to \$3,497 million at June 30, 2022. The increase is primarily due to an increase in deferred revenue of \$511 million mainly due to acquisitions made since December 31, 2021 and the timing of maintenance and other billings versus performance and delivery under those customer arrangements, an increase in bank indebtedness of \$392 million, and an increase in accounts payable and accrued liabilities of \$60 million.

Net Changes in Cash Flows

(\$ in millions)

	Six months ended June 30, 2022	Six months ended June 30, 2021
Net cash provided by operating activities	576	667
Net cash from (used in) financing activities	605	12
Cash used in the acquisition of businesses	(1,273)	(658)
Cash obtained with acquired businesses	148	85
Net cash from (used in) other investing activities	(108)	(8)
Net cash from (used in) investing activities	(1,233)	(582)
Effect of foreign currency	(35)	(4)
Net increase (decrease) in cash and cash equivalents	(87)	94

The net cash flows from operating activities were \$576 million for the six months ended June 30, 2022. The \$576 million provided by operating activities resulted from net income of \$245 million plus \$539 million of non-cash adjustments to net income, offset by \$190 million in taxes paid and \$18 million used towards non-cash operating working capital.

The net cash flows from financing activities for the six months ended June 30, 2022 were \$605 million, which is mainly a result of \$754 million from the net increase in debt facilities offset by dividends paid to common shareholders of \$42 million, a distribution to the Joday Group of \$23 million, lease obligation payments of \$45 million, and interest payments of \$31 million.

The net cash flows used in investing activities for the six months ended June 30, 2022 were \$1,233 million. The cash used in investing activities was primarily due to acquisitions for an aggregate of \$1,273 million (including payments for holdbacks relating to prior acquisitions), and \$96 million in purchases of other investments, offset by \$148 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 November 5, 2021, Constellation completed an amendment and restatement of its revolving credit facility agreement (the “CSI Facility”), with a syndicate of Canadian chartered banks and U.S. banks in the amount of \$700 million, extending its maturity date to November 2026. 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 the Company’s 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. As at June 30, 2022, \$237 million had been drawn from this credit facility, and letters of credit totaling \$13 million were issued, which limits the borrowing capacity on a dollar-for-dollar basis.

Guarantees

One of CSI’s subsidiaries has entered into a \$79 million (£65 million) term debt facility with a financial institution for which CSI has guaranteed the debt. The facility bears a fixed rate of interest. The term loan contains events of default that, if not remedied, allow the loan note holder to require repayment of the loan principal and interest. The loan is due in 2028.

Debt without recourse to CSI

Certain of CSI’s subsidiaries have entered into term debt facilities and revolving credit facilities with various financial institutions. Except as noted above, 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 borrowing 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 (\$ in millions):

	Topicus Revolving Credit Facility	Debt Facilities	Total
Principal outstanding at June 30, 2022 (and equal to fair value)	\$ 152	\$ 810	962
Deduct: Carrying value of transaction costs included in debt balance	(0)	(10)	(10)
Carrying value at June 30, 2022	152	800	952
Current portion	152	54	206
Non-current portion	-	746	746

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 million for total proceeds of C\$91 million. The proceeds were used by the Company to pay down \$81 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 million for total proceeds of C\$214 million. The proceeds were used by the Company to pay down \$130 million of outstanding bank indebtedness. The September 30, 2015 issuance formed a single series with the outstanding C\$96 million aggregate principal amount of Debentures, Series 1 of the Company. The Debentures have a maturity date of March 31, 2040.

Liability of CSI under the terms of the IRGA / TSS Membership Agreement

On December 23, 2014, in accordance with the terms of the purchase and sale agreement for the initial acquisition of TSS by CSI, and on the basis of the term sheets attached thereto, Constellation and the Joday Group, among others, entered into a Members Agreement (the “Members Agreement”) pursuant to which the Joday Group acquired 33.29% of the voting interests in Constellation Software Netherlands Holding Coöperatief U.A. (which was renamed to Topicus.com Coöperatief U.A.), a subsidiary of Constellation and the indirect owner of 100% of TSS at the time of the acquisition. Total proceeds from this transaction was €39 million (\$49 million).

On January 5, 2021, the Members Agreement was terminated in conjunction with the acquisition of Topicus.com B.V., the reorganization of Topicus Coop and the execution of the IRGA. The IRGA was established to create certain contractual obligations of the parties in respect of the governance of Topicus and Topicus Coop. The Joday Group’s interest in Topicus Coop now comprises 39,331,284 Topicus Coop Ordinary Units resulting in an interest of 30.29% in Topicus Coop as of March 31, 2022. The IRGA provides for transfer restrictions in respect of the Topicus Coop Units.

Any time after January 5, 2021, any member of the Joday Group has the right, at his or its option, to sell any number of its Topicus Coop Units to CSI at a cash price per Topicus Coop Unit determined in accordance with the IRGA. Upon the exercise of such option by a member of the Joday Group, CSI will be obligated to purchase 33.33% of such Topicus Coop Units within 30 days, and an additional 33.33% on each of the first and the second anniversary of such initial purchase. Notwithstanding the foregoing, CSI can offer Topicus the right to purchase such Topicus Coop Units in lieu of CSI.

In the event of a change of control of CSI, any member of the Joday Group has the right, at his or its option, to sell all of its Topicus Coop Units to CSI at a cash price per Topicus Coop Unit determined in accordance with the IRGA. Upon the exercise of such option by a member of the Joday Group, CSI will be obligated to purchase all such Topicus Coop Units. Notwithstanding the foregoing, CSI can offer Topicus the right to purchase such Topicus Coop Units in lieu of CSI.

If CSI reduces its economic interest in Topicus by a sale or transfer of its economic interest (and not due to any additional issuance of any shares or equity by Topicus) by more than one-third (calculated on a fully converted basis in accordance with the IRGA), any member of the Joday Group has the right, at his or its option, to sell to CSI one-third of its Topicus Coop Units at a cash price per Topicus Coop Unit determined in accordance with the IRGA. Upon the exercise of such put option by a member of the Joday Group, CSI will be obligated to purchase all such put Topicus Coop Units. Notwithstanding the foregoing, CSI can offer Topicus the right to purchase such Topicus Coop Units in lieu of CSI. Any member of the Joday Group has a similar right to sell one-half or all of its remaining Topicus Coop Units, respectively, at its option, if CSI further reduces its remaining fully-diluted economic interest in Topicus by a sale or transfer of its economic interest by one-half and again if CSI sells its entire remaining economic interest in Topicus.

All of the Topicus Coop Ordinary Units and Topicus Coop Preference Units held by the Joday Group and Ijssel B.V. (collectively, the “Topicus Coop Exchangeable Units”) are exchangeable, directly or indirectly, for Topicus Subordinate Voting Shares. All of the above rights of members of the Joday Group apply to any Topicus Subordinate Voting Shares issued on an exchange of Topicus Coop Exchangeable Units.

At any time after December 31, 2023, CSI has the right, at its option, to buy all of the Topicus Coop Units and shares of Topicus held by certain members of the Joday Group (excluding Joday) at a cash price per Topicus Coop Unit (or share of Topicus, as applicable) determined in accordance with the IRGA. After December 31, 2043, CSI has the same right to buy all of the Topicus Coop Units and shares of Topicus held by the remaining members of the Joday Group, including Joday.

In addition, if certain individuals affiliated with Joday are terminated from their employment with Topicus Coop or an affiliate thereof for urgent cause (as defined in the Dutch Civil Code), CSI has the right, at its option, to buy all of Topicus Coop Units held by such individuals at a cash price per Topicus Coop Unit determined in accordance with the IRGA.

The Company classified the above obligations of CSI under the terms of the IRGA as a liability consistent with the classification of similar obligations under the Members Agreement. The main valuation driver in the calculation of the liability is the maintenance and other recurring revenue of Topicus. Maintenance and recurring revenue of Topicus for the trailing twelve months on a pro-forma basis determined at the end of the current reporting period was used as the basis for valuing the interests at each purchase date. Any increase or decrease in the value of such liability is recorded as an expense or income in the consolidated statement of income for the period. In conjunction with the termination of the Members Agreement and the execution of the IRGA, the Company recognized an expense of \$19 million as the formula associated with the calculation of the obligation has changed from the use of actual trailing twelve months maintenance and other recurring revenue of Topicus to a calculation which includes the revenue increase from acquired companies on a pro-forma basis.

During the periods ended June 30, 2022 and December 31, 2021, no options were exercised. During the six months ended June 30, 2022, a distribution in the amount of \$23 million was paid to the Joday Group relating to their Topicus Preferred Shares.

Redeemable Preferred Securities

In conjunction with the acquisition of Topicus.com B.V., Topicus Coop issued 5,842,882 Topicus Coop Preference Units (the “Preferred Securities”) to Ijssel B.V. The Preferred Securities were non-voting and prior to the Notification of Conversion were redeemable at the option of the holder for a redemption price of approximately €19.06 per unit. The redemption price would have been either settled in cash or through the issuance of a variable number of Topicus Coop Ordinary Units of equal value. The Preferred Securities are convertible into Topicus Coop Ordinary Units at a conversion ratio of 1:1. The Preferred Securities holders were entitled to a fixed annual cumulative dividend of 5% per annum on the initial Preferred Securities value of approximately €19.06 per unit.

On February 1, 2022, the Preferred Securities were converted to Topicus Coop Ordinary Units.

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 \$129 million at June 30, 2022. 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, 2022.

The IRGA liability commitment assumes that the Joday Group has exercised their put option to sell 100% of their interests back to Constellation. This option however has not been exercised as at August 4, 2022. See note 7 to the Unaudited Condensed Consolidated Interim Financial Statements for the three and six months ended June 30, 2022 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 six months ended June 30, 2022 was approximately negative 5% and negative 4% 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 six months ended June 30, 2022, 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, 2022:

Currencies	Three Months Ended June 30, 2022		Six Months Ended June 30, 2022	
	% of Revenue	% of Expenses	% of Revenue	% of Expenses
USD	52%	47%	50%	45%
EUR	18%	18%	20%	19%
GBP	8%	8%	9%	9%
CAD	6%	9%	6%	9%
AUD	4%	4%	4%	4%
BRL	2%	2%	2%	2%
CHF	1%	2%	1%	2%
SEK	1%	1%	1%	1%
Others	7%	9%	7%	9%
Total	100%	100%	100%	100%

Due to rounding, certain totals may not foot.

Off-Balance Sheet Arrangements

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

Proposed Transactions

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

Share Capital

As at August 4, 2022, 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 operations 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.

The Company is closely monitoring the impact of COVID-19 on all aspects of its business. COVID-19 was declared a global pandemic by the World Health Organization on March 11, 2020. The COVID-19 pandemic has had disruptive effects in countries in which the Company operates and has adversely impacted many of its business units' operations to date, including through the cancellation by certain customers of their ongoing software maintenance contracts and the suspension or cancellation of new software purchases. The pandemic may also have an adverse impact on many of the Company's customers, including their ability to satisfy ongoing payment obligations to the Company, which could increase the Company's bad debt exposure. The future impacts of the pandemic and any resulting economic impact are largely unknown and rapidly evolving. It is possible that the COVID-19 pandemic, the measures taken by the governments of countries affected and the resulting economic impact may continue to adversely affect the Company's results of operations, cash flows and financial position as well as its customers in future periods, and this impact could be material.

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, 2022, the President and Chief Financial Officer, based on the investigation and advice of those under their supervision, have 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 by those 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 by those under their supervision, whether or not there were changes to its ICFR during the period ended June 30, 2022 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.