# UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

# **FORM 20-F**

☐ REGISTRATION STATEMENT PUR	SUANT TO SECTION 12/b) OR (a)
OF THE SECURITIES EXCHA	
OF THE SECONTIES EXCHA	110L ACT 01 1934, 01
■ ANNUAL REPORT PURSUANT	TO SECTION 13 OR 15/d\ OF
THE SECURITIES EXCHA	
For the fiscal year ended	August 31, 2019; or
☐ TRANSITION REPORT PURSUAN	IT TO SECTION 12 OR 15/4) OF
THE SECURITIES EXCHAN	GE ACT OF 1934; or
☐ SHELL COMPANY REPORT PURSU	ANT TO SECTION 12 OF 15/d) OF
THE SECURITIES EXCHA	
Date of event requiring this	
For the transition period from	n;
Commission File	No. <b>0-30895</b>
EXFO I	NC
_	_
(Exact name of Registrant as	specified in its charter)
Not Appli	cable
(Translation of Registrant	's name into English)
Compa	-
Canad	·-
(Jurisdiction of incorpora	tion or organization)
400 Godin Avenue, Quebec, Q	uebec, G1M 2K2, Canada
(Address of principal of	executive offices)
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Quebec, G1M 2	K2, Canada
(Name, Telephone, E-mail and/or Facsimile numb	er and Address of Company Contact Person)
Securities registered or to be registered	oursuant to Section 12(b) of the Act.
Tide of each stars	Name of analy quality as a subtist as at the
Title of each class	Name of each exchange on which registered
Subordinate Voting Shares without par value	NASDAQ
Subordinate Voting Shares without par value	TSX

Securities registered or to be registered pursuant to Section 12(g) of the Act.

None (Title of Class) Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

# None (Title of Class)

As of August 31, 2019, the registrant had 23,703,675 Subordinate Voting Shares outstanding and 31,643,000 Multiple Voting Shares outstanding.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act					
Υ	∕es □	No 🗵			
If this report is an annual report or transition re reports pursuant to Section 13 or 15 (d) of the Se	•	•	he registrant is n	ot require	d to file
Y	res 🗖	No 🗵			
Indicate by check mark whether the registrant ( the Securities Exchange Act of 1934 during the p was required to file such reports), and (2) has be	preceding 12	months (or for such	n shorter period t	that the re	
Y	res 🗵	No 🗖			
Indicate by check mark whether the registrant has submitted and posted pursuant to Rule 405 cmonths (or for such shorter period that the regis	of Regulation	S-T (§232.405 of th	is chapter) during	g the prece	
Y	res 🗵	No 🗖			
Indicate by check mark whether the registrant filer, or an emerging growth company. See defir growth company" in Rule 12b-2 of the Exchange	nition of "larg				
Large accelerated filer	ccelerated file		Non-accele Emerging growth		
Indicate by check mark which basis of accoun included in this filing:	iting the reg	istrant has used to	prepare the fin	ancial stat	ements
U.S. GAAP International Financia International Account			by the 🗵	Other <b>[</b>	
If this is an annual report, indicate by check mark	k whether the	e registrant is a shell	company (as def	ined in Rul	e 12b-2
of the Exchange Act).	res 🗖	No 🗵			

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#### DISCLOSURE REGARDING FORWARD-LOOKING INFORMATION

This Annual Report contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, and we intend that such forward-looking statements be subject to the safe harbors created thereby. Forward-looking statements are statements other than historical information or statements of current condition. Words such as may, expect, believe, plan, anticipate, intend, could, estimate, continue, or similar expressions or the negative of such expressions are intended to identify forward-looking statements. In addition, any statements that refer to expectations, projections or other characterizations of future events and circumstances are considered forward-looking statements. They are not guarantees of future performance and involve risks and uncertainties. Actual results may differ materially from those in forward-looking statements due to various factors including, but not limited to, macroeconomic uncertainty, including trade wars and recessions; our ability to successfully integrate businesses that we acquire; capital spending and network deployment levels in the telecommunications industry (including our ability to quickly adapt cost structures to anticipated levels of business and our ability to manage inventory levels with market demand); future economic, competitive, financial and market conditions; consolidation in the global communications test, monitoring and analytics solutions markets and increased competition among vendors; capacity to adapt our future product offering to future technological changes; limited visibility with regard to the timing and nature of customer orders; delay in revenue recognition due to longer sales cycles for complex systems involving customers' acceptance; fluctuating exchange rates; concentration of sales; timely release and market acceptance of our new products and other upcoming products; our ability to successfully expand international operations and to conduct business internationally; and the retention of key technical and management personnel. Assumptions relating to the foregoing involve judgments and risks, all of which are difficult or impossible to predict and many of which are beyond our control. Other risk factors that may affect our future performance and operations are detailed in this Annual Report. We believe that the expectations reflected in the forward-looking statements are reasonable based on information currently available to us, but we cannot assure that the expectations will prove to have been correct. Accordingly, you should not place undue reliance on these forward-looking statements. These statements speak only as of the date of this document. Unless required by law or applicable regulations, we undertake no obligation to revise or update any of them to reflect events or circumstances that occur after the date of this document.

All dollar amounts in this Annual Report are expressed in US dollars, except as otherwise noted.

# PART I.

Item 1. Identity of Directors, Senior Management and Advisers

Not Applicable.

Item 2. Offer Statistics and Expected Timetable

Not Applicable.

#### Item 3. Key Information

#### A. Selected Financial Data

The consolidated statements of earnings data for the years ended August 31, 2017, 2018 and 2019 and the consolidated balance sheets data as at August 31, 2018 and 2019 have been derived from our audited consolidated financial statements that are included elsewhere in this Annual Report on Form 20-F. Consolidated statements of earnings data for the years ended August 31, 2015 and 2016 and consolidated balance sheets data as at August 31, 2015, 2016 and 2017 have been derived from our audited consolidated financial statements not included in this Annual Report on Form 20-F.

Consolidated financial statements from which the selected financial data has been derived, have been prepared in accordance with *International Financial Reporting Standards* (IFRS), as issued by the *International Accounting Standards Board* (IASB).

The selected financial data should be read in conjunction with "Item 5. Operating and Financial Review and Prospects" and our audited consolidated financial statements and the related notes thereto, included in this Annual Report on Form 20-F.

	Years ended August 31,									
		2019		2018		2017		2016		2015
		(in thousands of US dollars, except share and per share d						e data	n)	
Consolidated Statements of Earnings Data:										
Sales	\$	286,890	\$	269,546	\$	243,301	\$	232,583	\$	222,089
		440.677		105.004		04.220		07.066		05.000
Cost of sales (1)		118,677		105,004		94,329		87,066		85,039
Selling and administrative (2)		98,646		98,794		86,256		82,169		82,200
Net research and development		50,553		57,154		47,168		42,687		44,003
Depreciation of property, plant and equipment		5,469		5,444		3,902		3,814		4,835
Amortization of intangible assets		9,012		10,327		3,289		1,172		2,883
Changes in fair value of cash contingent										
consideration		-		(670)		(383)		_		_
Interest and other (income) expense		718		1,378		303		(828)		(155)
Foreign exchange (gain) loss		949		(1,309)		978		(161)		(7,212)
Unusual charge (2)		_		_		_		_		603
Share in net loss of an associate		_		2,080		_		_		_
Gain on deemed disposal of the investment										
in an associate		_		(2,080)		_		_		_
Earnings (loss) before income taxes		2,866		(6,576)		7,459	-	16,664		9,893
Income taxes		5,346		5,678		6,608		7,764		5,036
Net earnings (loss) for the year		(2,480)		(12,254)	_	851		8,900		4,857
Net loss for the year attributable to non-		(2,400)		(12,234)		031		0,500		4,037
controlling interest		_		(352)		_		_		_
Net earnings (loss) for the year attributable to				(002)						
parent interest	\$	(2,480)	\$	(11,902)	\$	851	\$	8,900	\$	4,857
Basic net earnings (loss) attributable to parent	<del>-</del>	(2,400)		(11,502)	<u> </u>	031		0,500		4,037
	Ļ	(0.04)	۲.	(0.22)	۲.	0.02	۲.	0.17	۲.	0.09
interest per share	\$	(0.04)	\$	(0.22)	\$	0.02	\$	0.17	\$	0.09
Diluted net earnings (loss) attributable to parent		(0.04)	4	(0.22)	<u>,</u>	0.00	<u>,</u>	0.46	۸.	0.00
interest per share	\$	(0.04)	\$	(0.22)	\$	0.02	\$	0.16	\$	0.08
Basic weighted average number of shares used in										
per share calculations (000's)		55,325		54,998		54,423		53,863		56,804
Diluted weighted average number of shares used										
in per share calculations (000's)		55,325		54,998		55,555		54,669		57,457
Other Consolidated Statements of Earnings Data:										
Gross research and development	\$	57,972	\$	65,243	\$	53,124	\$	47,875	\$	50,148

_	As at August 31,					
	2019	2018	2017	2016	2015	
		-				
Consolidated Balance Sheets Data:						
Cash	\$ 16,518	\$ 12,758	\$ 38,435	\$ 43,208	\$ 25,864	
Short-term investments	2,918	2,282	775	4,087	1,487	
Total assets	277,602	284,544	259,241	237,793	217,478	
Long-term debt (excluding current portion)	3,293	5,907	_	_	_	
Share capital	92,706	91,937	90,411	85,516	86,045	
Shareholders' equity	\$ 172,564	\$ 177,921	\$ 196,790	\$ 181,401	\$ 169,227	

- (1) The cost of sales is exclusive of depreciation and amortization, shown separately.
- (2) Selling and administrative is exclusive of unusual charge, shown separately, which represents bad debt expenses.

#### B. Capitalization and Indebtedness

Not Applicable.

#### C. Reasons for the Offer and Use of Proceeds

Not Applicable.

#### D. Risk Factors

#### Our business may be adversely affected by unfavorable general economic and market conditions.

Our business is subject to general global and regional economic conditions, particularly those in the communications test, monitoring and analytics markets. In the past, our operating results were adversely affected by unfavorable economic conditions and reduced or delayed capital spending in the Americas, Europe, Middle East and Africa (EMEA) as well as Asia-Pacific regions.

Global and regional economic conditions continue to be volatile and uncertain. If global and/or regional economic and market conditions, or economic conditions in key markets, remain uncertain or deteriorate into a recession, we may experience material adverse effects on our business. Unfavorable and/or uncertain economic and market conditions may result in lower capital spending or delayed spending by our customers on network test, monitoring and analytics solutions and, therefore, demand for our products could decline and adversely impact our revenue. Adverse economic and/or market conditions could also result in, among other things:

- difficulty in forecasting, budgeting and planning due to the uncertain spending plans of current or prospective customers;
- increased competition for fewer network projects and sales opportunities;
- increased pricing pressure that may adversely affect revenue and gross margin;
- higher cost structure compared to revenue level;
- increased risk of charges related to excess and obsolete inventories, write-offs of deferred tax assets and tax credits, and impairment of intangible assets and goodwill;
- customers' financial difficulties and increased difficulty in collecting accounts receivable;
- additional restructuring costs; and
- increased protectionism or international trade barriers.

These effects, as well as other unforeseeable effects, are difficult to forecast and mitigate. As a result, we may experience material adverse effects on our business, operating results, financial condition, and stock price.

#### Geopolitical and economic policies favoring national interests could adversely affect our results of operations.

Our overall performance depends to a certain extent upon international economic and political conditions. Many of our suppliers, vendors, partners and other entities with whom we do business have ties to China, and their ability to supply materials to us or otherwise work with us is strongly affected by their ability to do business in China. If the United States' relationship with China deteriorates or results in additional protectionist measures, retaliatory actions, more tariffs, increased barriers, increased import and export licensing requirements, or other restrictions or policies that favor domestic industries, then our operations may be adversely affected.

We have significant operations, including a large number of employees, R&D centers and other facilities in the United States, United Kingdom, France, India, Finland and Canada, among other countries. Nationalistic economic policies and political trends in some of these territories, such as opposition to globalization and free trade, sanctions or trade restrictions, withdrawal from or re-negotiation of global trade agreements, tax policies that favor domestic industries and interests, the anticipated exit of the United Kingdom from the European Union (known as Brexit), the distancing or potential exit of other countries from the European Union, and other similar actions may result in increased transaction costs, reduced ability to hire employees, diminished access to supplies and materials, lower demand or access to customers in international markets, and inability to conduct our operations as they have been conducted historically. Each of these factors may adversely affect our business.

# Fluctuations in the exchange rates between the Canadian dollar, US dollar, euro, British Pound and other currencies may adversely affect our revenues and operating results.

Our functional currency is the Canadian dollar, but we report our results in US dollars. As a result, any increase in the value of the US dollar versus the Canadian dollar, euro and British Pound could adversely affect our revenues because we generate a certain percentage of our sales in Canadian dollars, euros and British Pounds but we report them in US dollars in our financial statements.

We are also exposed to a currency risk in terms of operating results for any fluctuation in the exchange rate between the Canadian dollar, on one hand, and the US dollar, euro, British Pound and other currencies on the other. In fact, the majority of our revenues are denominated in US dollars, euros and British Pounds, but a significant portion of our cost of sales, operating expenses and capital expenditures are denominated in Canadian dollars, US dollars, euros and other currencies such as British Pounds, Rupees (India) and Renminbis (China). Even though we partially manage our exposure to currency risks with forward exchange contracts (by selling US dollars for Canadian dollars and US dollars for Indian Rupees) and even though some of our operating expenses are denominated in currencies other than the Canadian dollar, namely the US dollar, euro and British Pound, we remain exposed to fluctuations in the exchange rates between the Canadian dollar, on one hand, and the US dollar, euro and other currencies on the other. Any increase in the value of the Canadian dollar relative to the US dollar and other currencies, or any unfavorable variance between the value of the Canadian dollar and the contractual rates of our US-Canadian dollar forward exchange contracts, could result in increased expenses reported in US dollars or foreign exchange losses and have a material adverse effect on our operating results.

Foreign exchange rate fluctuations also flow through statement of earnings line items, since a significant portion of our cost of sales and operating expenses are denominated in Canadian dollars, euros, British Pounds and Indian rupees, and we report our results in US dollars. Any decrease in the value of the US dollar relative to the Canadian dollar and other currencies, could have a material adverse effect on our operating results and provide competitive advantages to our competitors.

We must continue to overcome significant competition in our targeted industries in order to keep or gain market share and achieve our growth strategy.

The market for our business activity – namely designing, manufacturing, marketing and selling test, monitoring and analytics solutions for communications service providers, data center, cloud and web-scale operators as well as network equipment manufacturers – is rapidly evolving and is marked by intense competition, consolidation and technical innovation. We anticipate the pace of change to remain high or even accelerate for our targeted markets in the future. We might see the emergence of new competitors or the consolidation of current competitors, as the markets for communications test, monitoring and analytics solutions evolve in response to technical innovations and economic conditions.

Main competitors in the test and measurement environment include global suppliers like Anritsu Corporation, Fortive Corporation (Fluke Networks), Keysight and Viavi Solutions, as well as smaller players such as AFL Noyes, Deviser Instruments, Kingfisher International, Shineway Tech, VeEX Inc., and Yokogawa Electric Corporation. On the service assurance, systems and services side, we mainly compete against Accedian Networks, Anritsu Corporation, Empirix, Keysight (IXIA), Netrounds, NetScout Systems, Inc., Elisa (Polystar), Radcom, Spirent Communications plc, and Viavi Solutions.

Some competitors have greater financial, technical and/or marketing resources than us. Consequently, they may be able to devote greater resources to the development, marketing, manufacturing, selling and support of their products in order to capture market share.

Competitors also may be better positioned than us to capture market share or to acquire companies and new technologies that would potentially displace our products or render them obsolete. We cannot predict whether current or future competitors will develop or market products that offer higher performance, more features, or are more cost-effective than our current or future products. To remain competitive and achieve our growth strategy, we must develop products internally or purchase technologies through acquisitions that offer higher performance and more functionality, in current and new sectors, so that we can increase our market share. Our failure to do so may harm our business, results of operations and financial condition.

We may not be able to make the acquisitions or strategic alliances needed for the development of our business and, if we do make such acquisitions or strategic alliances, we may not be able to successfully integrate the acquired businesses, products, technologies and personnel or realize the expected benefits of strategic alliances.

We intend to carefully seek businesses through acquisitions and alliances, whose products and technologies are complementary to ours, or which will enable us to expand our markets and/or our market share. However, we may not be able to make beneficial transactions or a sufficient number of them in the future to meet our strategic goals. Our competitors may be in a better position to acquire the same businesses, products and technologies that we want to acquire. Our fluctuating stock price, cash position, or ability to raise capital or issue debt on favorable terms at the time of an acquisition may also affect our ability to complete such an acquisition. Acquisitions or alliances could also distract management's attention from our day-to-day business and operations. In the event of any future acquisition or strategic alliance, we could, among other things:

- issue shares that would dilute individual shareholder percentage ownership;
- incur additional debt, be subject to additional debt covenants, and incur additional interest expense;
- assume liabilities and commitments;
- incur significant expenses related to acquisition costs;
- incur significant expenses related to amortization of additional intangible assets;
- incur significant impairment losses of goodwill and intangible assets related to such acquisitions; and
- incur losses from operations.

In the event we complete acquisitions or sign strategic alliances, we may be unable to successfully integrate acquired companies or realize the expected benefits of alliances. Integration risks include, among other things:

- problems integrating the acquired operations, technologies, products and personnel;
- risks associated with the transfer of acquired know-how and technology;
- unanticipated costs or liabilities;
- diversion of management's attention from our core business;
- adverse effects on existing business relationships with suppliers and customers;
- risks associated with entering markets in which we have no or limited prior experience; and
- potential loss of key employees, particularly those of acquired organizations.

Ultimately, the failure to make acquisitions or strategic alliances, or the inability to effectively integrate acquisitions and realize the expected benefits of alliances, could disrupt our overall business and harm our financial condition.

If we fail to adapt appropriately to the challenges associated with operating internationally, the expected growth of our business may be impeded, and our operating results may be affected.

For the fiscal year ended August 31, 2019, customers outside of Canada accounted for 94.5% of our sales. Our international sales will be limited if we cannot establish and maintain relationships with international distributors, set up additional foreign operations, expand international sales channel management, hire additional personnel, develop relationships with international communications service providers, web-scale operators and network equipment manufacturers, and operate adequate after-sales support internationally.

Even if we are able to successfully operate and expand our international operations, we may not be able to maintain or increase international market demand for our products. Our international operations are subject to a number of risks, including, among other things:

- challenges in staffing and managing foreign operations due to the limited number of qualified candidates, employment laws and business practices in foreign countries, any of which could increase the cost and reduce the efficiency of operating in foreign countries;
- fluctuations among currencies;
- our inability to comply with import/export, environmental and other trade compliance regulations of the countries in which we do business, together with unexpected changes in such regulations and bilateral trade agreements between countries;
- measures to ensure that we design, implement and maintain adequate and effective controls over our financial processes and reporting in the future;
- failure to adhere to laws, regulations and contractual obligations relating to customer contracts in various countries;
- difficulties in establishing and enforcing our intellectual property rights;
- inability to maintain a competitive list of distributors for indirect sales;
- tariffs and other trade barriers, including those between the US and China;
- economic instability in foreign markets, including Britain's decision to exit the European Union, and the impact this choice may have on doing business in Europe;
- wars, acts of terrorism and political unrest;
- language and cultural barriers;
- lack of integration of foreign operations;
- potential foreign and domestic tax consequences;
- technology standards that differ from those on which our products are based, which could require expensive redesign and retention of personnel familiar with those standards;
- longer accounts receivable payment cycles and possible difficulties in collecting payments which may increase our operating costs and hurt our financial performance; and
- failure to meet certification requirements.

Any of these factors could harm our international operations and negatively affect our business, results of operations and financial condition. The recurrence of weakness in these economies or of weakness in other foreign economies could also have a significant negative effect on our future operating results.

Our reliance on software development resources in India and manufacturing personnel in China may expose us to unanticipated costs or liabilities.

In addition to research and development centers in Quebec City, Canada, Montreal, Canada, Oulu, Finland, Rennes, France, Lannion, France and Valencia, Spain, we maintain a software development center in Pune, India. We also manufacture products at our wholly-owned production facility in Shenzhen, China.

Over the years, we have significantly increased our software development and manufacturing activities in India and China, respectively. There is no assurance that our reliance on software development resources in India and manufacturing personnel in China will enable us to maintain our cost structure at current levels, achieve additional cost savings, or generate greater resource efficiency. Furthermore, our software development and manufacturing efforts abroad involve significant risks in addition to the ones disclosed in other risk factors:

- difficulty in hiring and retaining appropriate engineering and manufacturing resources due to intense competition for such resources and resulting wage inflation;
- exposure to misappropriation of intellectual property and proprietary information;
- heightened exposure to changes in the economic, regulatory, security, and political conditions of these countries;
- fluctuations in currency exchange rates;
- changes in tax laws and regulations in India and China, including transfer pricing policies;
- cash management and repatriation of profit; and
- high inflation rates which could increase our operating costs and render these operations too expensive.

If we are unable to adapt to current and future changes in technology or if we are unable to introduce new and enhanced products on a timely basis, our products may become obsolete, which could prevent us from achieving our growth strategy and adversely affect our operating results.

The markets that we serve are characterized by rapidly evolving technology and industry standards that result in frequent new product introductions. For example, we are gradually transforming ourselves from a supplier of dedicated test instruments into a supplier of software-intensive monitoring and analytics solutions to meet the emerging needs of communications service providers. While we are devoting substantial resources to meet these needs, this trend may result in lower demand for our hardware test equipment. Additionally, barriers to entry are generally lower for such software-based solutions, which may lead to increased competition for our products and services. Any failure by us to anticipate or respond to new technological developments, customer requirements or evolving standards could cause us to incur significant impairment losses of goodwill and/or losses from operations. Consequently, this could have a material adverse effect on our business, results of operations and financial condition. The development of proprietary technology entails significant technical and business risks and requires substantial expenditures and lead times. The success of our new product introductions will depend on several factors, including, among other things, our ability to:

- properly identify and anticipate customer needs;
- innovate and develop new products on a timely basis;
- gain timely market acceptance for new products;
- manufacture and deliver our new products on time, in sufficient volume and with adequate quality;
- price our products competitively;
- continue investing in our research and development programs;
- anticipate competitors' announcements of new products; and
- successfully transform the company into an end-to-end monitoring and analytics supplier.

Failure to do the above could be exploited by our competitors. If we lose market share due to lapses in our product development, our business would suffer.

# Uncertain conditions surrounding the 5G infrastructure investment cycle may cause fluctuations in our revenue growth rate and impact our financial results.

Markets for the 5G infrastructure investment cycle may not develop in the manner or in the time period that we anticipate. If global economic conditions worsen, overall spending on 5G infrastructure may be reduced, which would adversely impact demand for our solutions in these markets. In addition, unfavorable developments with evolving laws and regulations worldwide related to 5G may limit or slow the rate of global adoption, impede our strategy and negatively affect our long-term expectations in this area. Even if the 5G infrastructure market and rate of adoption develop in the manner or in the time period that we anticipate, if we do not have timely, competitively priced, market-accepted solutions available to meet our customers' planned rollout of 5G platforms and systems, we may miss a significant market opportunity and our business, financial condition, results of operations and cash flows could be materially and adversely affected.

# Increased customer demand for our technical support services may adversely affect our relationships with our customers and our financial results.

We offer technical support services for many of our solutions, including professional services for the installation of our monitoring and analytics solutions. We may be unable to respond quickly enough to accommodate short-term increases in customer demand for our support services. We also may be unable to modify the format of our support services to compete with changes in support services provided by competitors. Our customers depend on our support organization to resolve issues related to our deployed solutions on their networks. A high level of support is critical for continued business relationships with our customers. If we or our channel partners do not effectively assist our customers in deploying our solutions, succeed in helping our customers to quickly resolve post-deployment issues, or provide effective ongoing support, it would adversely affect our ability to sell our solutions to existing customers and harm our ability to attract new customers. Consequently, any failure to maintain high-quality support and services would harm our operating results and reputation. Further customer demand for these services, without corresponding revenues, could have a material and adverse impact on our financial condition and results of operations.

We have faced pricing pressure on our existing products and expect this pressure will continue. If we do not continue to lower our manufacturing costs or introduce new products with higher margins, our gross margin may decrease, and our operating results may be adversely affected.

Increased competition in the communications test, monitoring and analytics markets, along with consolidation among competitors and customers, will likely result in ongoing downward pressure on average selling prices. For example, some of our customers have been subject to consolidation and could obtain products from a vendor other than us or demand more favorable terms and conditions from us. This, in turn, may negatively affect our gross margin. In addition, some customers may merge with or acquire our competitors and discontinue their relationships with us. Pricing pressure can result from a number of factors such as, among other things:

- increased competition for business;
- reduced demand;
- limited number of potential customers;
- competition from companies with lower production costs, including companies operating in lower-cost environments;
- introduction of new products by competitors;
- greater economies of scale for higher-volume competitors;
- large customers, who buy in high volumes, can exert substantial negotiating leverage over us; and
- resale of used equipment.

As pricing pressure will likely continue to affect our existing products, we may have to increase the number of units sold to maintain our existing sales levels. If we are unable to increase our sales levels, lower our manufacturing costs, or introduce new products with higher margins, our gross margin may decline, and our operating results may suffer.

Our products may have unforeseen defects, offer substandard technical specifications or fail to deliver the key features that customers want, all of which could harm our reputation, impede market acceptance of our products and negatively impact our business, results of operations and financial condition.

Given their complexity, our products may contain undetected software or hardware defects, inaccurate calibration or compatibility problems, or regulatory compliance issues, particularly when they are first introduced or when new versions are released. Our new products could also be substandard in terms of technical specifications or fail to deliver the key features that customers want. There can be no assurance that, despite our testing and diligent efforts, defects will not be found in new products after they have been fully deployed and operated under peak stress conditions, or that customized products will meet customer sign-off acceptance requirements. If we are unable to fix defects or other problems or meet customized requirements, we could experience, among other things:

- costly repairs;
- additional development and support costs;
- product returns or recalls;
- sales cancellations;
- damage to our brand reputation;
- loss of customers, failure to attract new customers or achieve market acceptance;
- diversion of development and engineering resources;
- · legal actions by our customers, including claims for consequential damages and loss of profits; and
- legal actions by governmental entities, including actions to impose product recalls and/or forfeitures.

The occurrence of any one or more of the foregoing could seriously harm our business, results of operations and financial condition.

Our intellectual property and proprietary technology are important to the continued success of our business. Our failure to protect this proprietary technology may significantly impair our competitive position.

Our success and ability to compete depend to a significant extent on our proprietary technology, with which we attempt to prevent others from using the innovations that are central to our existing and future products. As of August 31, 2019, our records indicate that we held the following portfolio of utility patents: 94 active granted US patents, 118 granted or validated patents in European countries and 45 patents in other jurisdictions. In addition, we have 53 utility patent applications (including provisional applications) pending in the US, 19 utility patent applications pending in Europe and 19 utility patent applications pending in other countries. The expiration dates of our active issued patents range from 2019 to 2037, with no significant active patent expiring in the near future.

Our records also indicate that, as of August 31, 2019, we held 36 active granted design patents, as well as 11 pending design patent applications, in the United States, Europe, China and other jurisdictions.

We also rely on a combination of copyright and trademark laws, trade secrets, confidentiality procedures, contractual provisions and license agreements to protect our proprietary technology.

We may have to engage in litigation, formal opposition proceedings, or the like to defend our patents and other intellectual property rights or to determine the validity or scope of the proprietary rights of others. Such litigation and opposition proceedings can be time-consuming and expensive, regardless of whether we win or lose.

The process of seeking patent protection can be long and expensive and we cannot be certain that any currently pending or future application will actually result in issued patents, or that, even if a patent is issued in a particular jurisdiction, it will not be subsequently invalidated at the patent office as a result of a third-party-initiated opposition procedure. Moreover, we cannot be certain that an issued patent will be of sufficient scope or strength to provide meaningful protection or commercial advantage to us.

We also rely on trade secret protection for our technology, in part through confidentiality agreements with our employees, consultants, distributors and third parties. However, these agreements may be breached or otherwise rendered ineffective and we may not have adequate remedies for any breach or shortfall of these agreements. In any case, others may come to know about our trade secrets through a variety of methods. In addition, the laws of some jurisdictions in which we sell our products may not protect our intellectual property rights to the same extent as do the laws of Canada and the United States.

# Our intellectual property rights, particularly our existing or future patents, may be invalidated, circumvented, challenged or required to be licensed to others.

Our intellectual property rights are important assets for us. Various events outside of our control pose a threat to our intellectual property rights, as well as to our products, services and technologies. For example, effective intellectual property protection may not be available in every country in which our products and services are distributed. Also, the efforts we have undertaken to protect our proprietary rights may not be sufficient or effective.

Furthermore, others may develop technologies that are similar or superior to our technology, duplicate or reverse engineer our technology, or design around the patents owned or licensed by us. We cannot be sure that the steps that we take to protect our technology will prevent misappropriation or infringement. If we fail or are unable to protect our technology, thereby enabling others to copy or use it, we will be less able to differentiate our products and our sales may decline.

Others may claim that our products infringe upon their intellectual property rights, or they may infringe our intellectual property, and we may expend significant resources enforcing or defending our rights or suffer competitive injury.

Litigation regarding intellectual property rights is common in the technology industry and third-party infringement claims involving technologies may increase. If an infringement claim is filed against us, we may be prevented from using some of our technologies and may incur significant costs to resolve the claim. Conversely, we may be required to spend significant resources to monitor and enforce our intellectual property rights.

While non-practicing entities (NPEs – also informally known as "patent trolls") are continually asserting patent claims against companies working in the Information and Communications Technology domain, "trademark trolls" are also becoming increasingly common. These "trademark trolls" will file trademarks in countries where the trademark has not yet been registered. In both cases, because their entire business model is predicated upon undertaking legal action to extract licensing and/or royalty fees from legitimate "practicing" entities, such as EXFO, they often initiate such litigation even if the purported relevance of their trademark or patent claims may be questionable. Consequently, we may be obliged to reach a negotiated monetary settlement or embark upon costly legal proceedings if a "patent troll" or a "trademark troll" asserts such claims against us.

More generally, we could incur substantial costs in defending ourselves and our customers against infringement claims asserted by any third party (including notably competitors), or in bringing infringement claims against others. Litigation could also adversely affect sales of the challenged product or technology and divert the efforts of our management and technical personnel. In the event of an infringement claim, we may be required to obtain one or more licenses from third parties. We cannot assure you that we, or our customers, could obtain necessary licenses from third parties at a reasonable cost or at all. If we fail to obtain a license where one is required, we could incur substantial liabilities and be forced to suspend the marketing of the challenged products.

# Our use of open source software in our products could adversely affect our ability to sell our products and subject us to possible litigation.

Some of our products contain software licensed to us by third-party authors under "open source" licenses. If our proprietary commercial software were to incorporate open source software, we might, under the terms of certain open source licenses, be required to license that combined software as well as release the source code of the combined software to third parties. This could allow third parties to use our proprietary software at no charge, could enable our competitors to create similar products with lower development effort and time, and ultimately could result in a loss of product sales and lower revenues for us.

We also could be subject to suits by parties claiming infringement of intellectual property rights in what we believe to be licensed open source software. Moreover, we cannot assure you that our internal processes for controlling our use of open source software in our products will be effective. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our products, to re-engineer our products, to discontinue the sale of our products if re-engineering could not be accomplished in a timely manner, to allow third parties to use our products at no charge under the terms of that open source software license, or to make generally available, in source code form, our proprietary software, any of which could adversely affect our business, operating results, and financial condition.

# Our quarterly revenues and operating results are subject to significant fluctuations and you should not rely on them as an indication of our future performance.

Our sales and operating results have fluctuated from quarter to quarter in the past and significant fluctuations may occur in the future. Given that orders for our monitoring and analytics solutions vary in size and complexity and in certain instances require customer acceptance before revenue recognition occurs, our sales may fluctuate significantly on a quarterly basis. As well, many of our deals involve lengthy sales cycles, contract negotiations, professional services, as well as extensive product testing, installation, laboratory or network certification, including network-specific or region-specific processes. In addition, our sales and operating results generally depend on the volume and timing of the orders we receive from customers as well as our ability to fulfill received orders.

On the other hand, our cost of sales and operating expenses, which include manufacturing overhead costs, selling and administrative, research and development, as well as depreciation and amortization expenses, are relatively fixed in the short term. If we sell fewer products than anticipated, if there is a delay in the launch of new products, or if prices for our products decline, we may not be able to quickly reduce our cost of sales and operating expenses in response to lower sales. Factors that could affect the amount and timing of our sales and cause quarterly fluctuations in our revenue and operating results include, among other things:

- length of the sales cycle for certain products, especially those that are higher priced and more complex;
- sales cycle prolonged by lengthy customer acceptance;
- timing of product launches and market acceptance of our new products as well as those of our competitors;
- our ability to sustain product volumes and high levels of quality across all product lines;
- timing of shipments for large orders;
- effect of seasonality on sales and bookings; and
- losing key accounts and not successfully developing new ones.

Our sales and operating results could also be volatile due to a number of factors, some of which we have little or no control over, including, without limitation:

- fluctuating demand for test, monitoring and analytics solutions;
- changes in the capital spending and operating budgets of our customers, which may cause seasonal
  or other fluctuations in product mix, volume, timing and number of orders we receive from
  our customers;

- order cancellations or rescheduled delivery dates;
- pricing changes by our competitors or suppliers;
- insufficient or excess inventory;
- variations in the mix between higher and lower-margin products and services;
- customer bankruptcies and difficulties in collecting accounts receivable;
- restructuring and impairment charges;
- foreign exchange rate fluctuations;
- general economic conditions, including a slowdown or recession;
- distorted effective tax rate due to non-taxable/deductible elements and unrecognized deferred tax assets; and
- effects of recent acquisitions of businesses.

We may in the future choose to reduce prices, increase spending, or modify our product portfolio in response to actions by competitors or in an effort to pursue new market opportunities. These actions may also adversely affect our business and operating results and may cause our quarterly results to be lower than the results of previous quarters. Due to these factors, you should not rely on quarter-to-quarter comparisons of our results of operations as an indication of our future performance.

We depend on short-term arrangements with a single supplier or a limited number of suppliers for some key components and materials in our products, which makes us susceptible to supply shortages or price fluctuations that could adversely affect our operating results.

We depend on a single supplier or a limited number of suppliers for several parts used to manufacture our products for which alternative sources may not be readily available. In addition, all of our orders are placed through individual purchase orders and, therefore, our suppliers may stop supplying parts to us at any time. Our reliance on a single source or limited number of suppliers could result in increased costs, delivery problems, reduced control over product pricing and quality and could require us to stockpile critical parts. Financial difficulties of suppliers could also affect our ability to obtain necessary parts in a timely manner. Any interruption or delay in the supply of any of these parts could significantly harm our ability to meet scheduled product deliveries to our customers and cause us to lose sales. Furthermore, the process of qualifying a new manufacturer for complex parts designed to our specifications, such as our optical, electronic and mechanical parts, is lengthy and would consume a substantial amount of time from our technical personnel and management. If we were required to change a supplier in a short period of time, our business would be disrupted. In addition, we may be unsuccessful in identifying a new supplier capable of meeting and willing to meet our needs on acceptable terms. Consolidation involving suppliers could further reduce the number of alternatives available to us and increase the cost of parts, which would render our products less competitive and result in lower margins.

Our failure to maintain an effective system of internal control over financial reporting means that we may not be able to accurately report our financial information or prevent fraud, which could harm our operating results and cause investors to lose confidence in our reported financial information.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with *International Financial Reporting Standards* (IFRS) as issued by the *International Accounting Standards Board* (IASB).

We devote significant resources and time to comply with the requirements of the Sarbanes-Oxley Act of 2002. Our efforts to comply with the annual internal control reporting requirement for each fiscal year depends on the effectiveness of our financial reporting as well as data systems and controls throughout our company and operating subsidiaries. We cannot be certain that these measures will ensure that we design, implement and maintain adequate controls over our financial processes and reporting in the future. Our failure to implement newly required or improved controls or adapt our controls, or difficulties encountered in their operation, or difficulties in the assimilation of acquired businesses into our control system, can harm our operating results, or prevent us from meeting our financial reporting obligations or result in a restatement of previously disclosed financial statements. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on our share price and our access to capital.

We require employees and managers who are knowledgeable about the specialized nature of our business. If we are unable to attract and retain sufficient numbers of highly skilled technical, sales, marketing, senior management and other personnel, our operations and financial results will suffer.

Due to the specialized nature of our business, we are highly dependent on the continued service of and on our ability to attract qualified engineering, sales, marketing, senior management and other personnel. If we are unable to attract and retain such qualified personnel, it could have a material adverse effect on our business, results of operations and financial condition.

We must also provide significant training for our employees due to the highly specialized nature of the communications test, monitoring and analytics markets. The knowledge base of our current personnel may be inadequate, or we may fail to assimilate and train new employees. Highly skilled employees with the education and training that we require – especially employees with significant experience and expertise in international business development, product management, sales, engineering and operations – may be difficult to find. Once trained, our employees may leave the organization or be hired by our competitors and reveal highly sensitive information to them.

# We may become involved in various lawsuits and legal proceedings that may substantially increase our costs and harm our business.

We may from time to time become involved in various lawsuits and legal proceedings. Litigation is subject to inherent uncertainties and an adverse result may arise from time to time that could have a material adverse effect on our business, results of operations or financial condition. Any litigation to which we are subject could require significant involvement of our senior management and may divert management attention from our business and operations.

In addition, the failure of our products to perform to customer expectations could give rise to product liability and warranty claims. We carry insurance for product liability and take accounting reserves for warranty claims that we consider adequate in view of industry practice, but this may not be sufficient to cover all potential liability.

We may also face other types of claims by third parties in relation to the conduct of our business. A successful claim against us for an amount exceeding our policy limits would force us to use our own resources to pay the claim, which could result in a reduction of our cash available for other uses, increase our expenses and have a negative effect on our business, results of operations and financial condition.

#### If we suffer loss to our factories or facilities, our operations could be seriously harmed.

Our factories and facilities may be subject to catastrophic losses due to fire, vandalism, terrorism or other natural or man-made disasters. We do not have redundant multiple-site capacity and if any of our facilities or factories were to experience a catastrophic loss, it would disrupt our operations, delay production, shipments and revenue and result in large expenses, thereby harming our results of operations.

Unexpected declines in our research and development and other tax credits and grants may have an adverse effect on our business.

Our operating results reflect substantial benefits from programs sponsored by governments for the support of research and development activities conducted in Canada and France. Research and development tax credits and grants represented 12.8% of our gross research and development expenses for the year ended August 31, 2019.

If changes in laws or government policies terminate or adversely modify the Canadian, French or Finnish government programs, under which we receive our research and development and other tax credits and grants, or if we unexpectedly become unable to participate in or take advantage of these programs, then our net research and development and other expenses will materially increase or we may decrease our research and development activities.

In addition, to the extent that we may increase our research and development activities in India, or potentially acquire new companies, our increased R&D activities may not be eligible for these programs. If we were required to decrease our research and development activities or were unable to benefit from other tax credits and grants, this could have a material adverse effect on our business, results of operations and financial condition.

Changes in our effective tax rate or adverse outcomes resulting from tax audits, including international intercompany transfer price audits, may have an adverse impact on our results.

As an international corporation, we are subject to taxation in the various jurisdictions in which we conduct business. Significant judgment is required in the determination of our worldwide provision for income taxes and this determination requires the interpretation and application of complex tax laws and regulations. Our global effective tax rate may be adversely impacted by the level of earnings, by changes in the mix of earnings/losses among companies and countries which may have different statutory tax rates, by the write-off of our deferred tax assets, by the intercompany transfer price used and by changes in tax rules and regulations. We are also subject to income tax and transfer pricing audits in the respective jurisdictions in which we conduct business. We regularly assess the likelihood of adverse outcomes resulting from these audits and review the adequacy of our provisions for income taxes. There can be no assurance that the outcomes of these tax audits will not result in liabilities in excess of our provisions, which could have an adverse impact on our results and financial condition.

# Our current principal stockholder has effective control over our company.

As of November 1, 2019, Germain Lamonde, our Executive Chairman of the Board, held 94.06% of the voting rights in our stock. By virtue of his stock ownership, Mr. Lamonde has effective control over all matters submitted to our stockholders, including the election of our Directors, and exercises significant control over our policies and affairs. Such concentration of voting power could have the effect of delaying, deterring or preventing a change in control or other business combinations that might otherwise be beneficial to our stockholders and may harm the market price of our shares.

If we complete major acquisitions of complementary businesses, products or technologies, we may need additional capital, and may not be able to raise additional capital on favorable terms or at all, which could limit our ability to grow and could increase our costs.

Our future liquidity and capital requirements are difficult to predict because they depend on numerous factors, including the success of our existing and new product offerings as well as competing technology and market developments. As a result, we may not be able to generate sufficient cash flows from our operations to meet additional working capital requirements, support additional capital expenditures or take advantage of acquisition opportunities. As at August 31, 2019, we held \$19.4 million in cash and short-term investments, while total debt and bank loans reached \$10.7 million. We also had revolving credit facilities of \$56.5 million available to us as at August 31, 2019.

We may need to raise additional capital in the future. Our ability to obtain additional financing will be subject to a number of factors, including market conditions, access to credit facilities, our operating performance, as well as current debt level. These factors may render the timing, amount, terms and conditions of additional financing unattractive for us. If we raise additional funds by selling equity securities, the relative ownership of our existing investors could be diluted, or new investors could obtain terms more favorable than previous investors. If we raise funds through debt financing, we could incur significant borrowing costs and be required to meet restrictive debt covenants. If we are unable to raise additional funds when needed or at terms satisfactory to us, our ability to operate and grow our business could be impeded.

#### We continue to realign our cost structure to current and anticipated future market conditions.

We implemented restructuring plans in previous years to realign our cost structure to current and anticipated future market conditions. The latest restructuring plan was completed after the second quarter of fiscal 2019. Delays in the implementation of anticipated workforce reductions in highly regulated locations outside of Canada and the US could materially impair our ability to achieve expected cost reductions or may disrupt our business. We may also fail to meet operational targets due to the loss of key employees. In addition, the anticipated cost savings and other benefits that we hope to achieve from these actions are based on many estimates and assumptions. These estimates and assumptions are subject to significant economic, competitive and other uncertainties, some of which are beyond our control. If these estimates and assumptions are incorrect, if we experience delays, or if other unforeseen events occur, our business and results of operations could be adversely affected.

# We have outstanding indebtedness and may incur additional indebtedness in the future, which could adversely affect our financial condition, liquidity and results of operations.

We currently have outstanding indebtedness as well as availability to incur additional indebtedness under revolving credit facilities. We may borrow additional amounts in the future and use the proceeds from any future borrowing for general corporate purposes, future acquisitions, capital expenditures, expansion of our business or repurchases of our outstanding subordinate voting shares. Our incurrence of this debt, and increases in our aggregate levels of debt, may adversely affect our operating results and financial condition by, among other things:

- requiring a portion of our cash flows from operations to make interest payments on this debt;
- increasing our vulnerability to general adverse economic and industry conditions;
- reducing cash flows available to fund capital expenditures and other corporate purposes and to grow our business; and
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry.

Our current revolving credit facilities and bank loan imposes restrictions on us, including restrictions on our ability to create liens on our assets and the ability of our subsidiaries to incur indebtedness, and requires us to maintain compliance with specified financial ratios. Our ability to comply with these ratios may be affected by events beyond our control. If we breach any of the covenants and do not obtain a waiver from the lenders, then, subject to applicable cure periods, our outstanding indebtedness could be declared immediately due and payable.

# Our business and operations would suffer in the event of a failure of our information technology infrastructure.

We rely upon the capacity, efficiency and security of our information technology hardware and software infrastructures and those from third parties, as well as our ability to expand and update these infrastructures, in response to our evolving needs. Any failure to manage, expand, update or secure our information technology infrastructures or any failure in the operation of these infrastructures could harm our business.

Our information systems and third-party systems may be vulnerable to damages from computer viruses, natural disasters, unauthorized access, theft of information and other similar disruptions. Any system failure, accident or security breach could result in disruptions to our operations. To the extent that any disruption, security breach or cyber-attack results in a loss or damage to our data, or inappropriate disclosure of confidential information, it could harm our business. In addition, these events may force us to devote more money and resources in order to protect ourselves against damages caused by these disruptions or security breaches in the future.

The enactment of new privacy laws and regulations in the jurisdictions in which we do business could require significant company resources or limit the way our customers can use our products.

The enactment of new federal, provincial, or foreign data privacy laws and regulations could prevent customers from taking advantage of all the features or capabilities of our products which, in turn, could reduce demand for certain of our products. In addition, changes in international privacy laws have required an adjustment to some of our internal processes and significant resources in the past, and future changes could require similar efforts and resources with regard to compliance. The adoption of or changes to any such data privacy laws and regulations could affect demand for our products, increase the cost of selling our products and divert time and attention of our management, all of which could have a material and adverse effect on our financial condition and results of operations. For example, the European Union (EU) data protection law, the General Data Protection Regulation (GDPR), which became effective in May 2018, is wide-ranging in scope. To adapt to these new requirements, we have invested resources necessary to enhance our policies and controls across our business units and services, relating to how we collect and use personal data from customers and employees and how vendors handle personal data we provide to them. We will also evaluate the potential impact of the Canadian "Digital Privacy Act" and the "People's Republic of China Network Security Law" that were implemented on November 1, 2018, and June 1, 2017, respectively, as well as that of the "California Consumer Privacy Act" coming into effect on January 1, 2020. Going forward, we expect that the international transfer of personal data will present ongoing compliance challenges and complicate our business transactions as we negotiate and implement suitable arrangements with international customers as well as international and domestic vendors.

Compliance with SEC rules relating to "conflict minerals" may require us and our suppliers to incur substantial expense and may result in disclosure by us that certain minerals used in components and/or products we contract to manufacture may contain such "conflict minerals".

The SEC adopted disclosure requirements under Section 1502 of the Dodd-Frank Act, regarding the source of certain conflict minerals for issuers for which such conflict minerals are necessary to the functionality or production of a product manufactured, or contracted to be manufactured, by that issuer, which are mined from the Democratic Republic of Congo ("DRC") and adjoining countries. The metals covered by the rules include tin, tantalum, tungsten and gold, commonly referred to as "3TG." Because we use components which contain tin, tantalum, tungsten or gold, the SEC rules require us to conduct a reasonable country of origin inquiry to determine if we know or have reason to believe any of the minerals used in the production process may have originated from the DRC or an adjoining country (collectively referred to as "covered countries") and, depending on the results of such inquiry, to perform further supply chain due diligence on the source and chain of custody of those minerals to determine if they originated in one of the covered countries and, if so, whether they financed or benefited armed groups in the covered countries. Our material sourcing is broad based and multi-tiered, and we may not be able to easily verify the origins for all metals used in our products. As a result, the costs of the aforementioned diligence efforts by us and by our suppliers could be significant. In addition, disclosures by us mandated by the rules which are perceived by the market to be "negative" may cause customers to refuse to purchase our products. We are unable to assess the cost of continuing compliance with this rule, and there can be no assurance that the cost will not have an adverse effect on our business, financial condition or results of operations.

# If we are held liable for the violation of the applicable anti-bribery laws, it could have a material adverse effect on our business.

We are subject to the applicable anti-bribery laws in countries we do business, which generally prohibit companies, their subsidiaries, their affiliates and their intermediaries from making improper payments to government officials for the purpose of obtaining or retaining business or otherwise obtaining favorable treatment. The anti-bribery laws generally apply to companies, individual directors, officers, employees and agents. Under the applicable anti-bribery laws, companies may be held liable for actions taken by agents, local partners or representatives. If we or our intermediaries fail to comply with the requirements of the applicable anti-corruption laws, governmental authorities in the U.S., in Canada or other countries could seek to impose civil and/or criminal penalties, which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

#### Our stock price is volatile.

Our stock price has experienced substantial volatility in the past and may remain volatile in the future. Volatility in our stock price can arise from a number of factors discussed in this "Risk Factors" section. Our stock price will fluctuate based on our financial performance and growth expectations. It can also be affected by public announcements from our competitors and our customers in the communications industry. In addition, turmoil in credit markets and in the broader economy can contribute to share price and volume fluctuations in global stock markets. During fiscal 2019, our closing stock price on NASDAQ ranged from a high of \$4.80 per share to a low of \$2.75 per share. These aforementioned factors, including volatility often unrelated to the operating performance of our company, may materially affect our stock price in the future.

#### Item 4. Information on the Company

#### A. History and Development of the Company

Our legal name and commercial name is EXFO Inc. / EXFO inc. Our head office is located at 400 Godin Avenue, Quebec, Quebec, Canada, G1M 2K2 and our main telephone number is (418) 683-0211. Our e-mail address is info@EXFO.com and our website is www.EXFO.com. Information on our website is not incorporated by reference in this Annual Report. Our agent for service in the United States is CT Corporation System, 111 Eighth Avenue, 13<sup>th</sup> Floor, New York, New York 10011. Our Transfer Agent and Registrar is AST Trust Company (Canada) (AST), 2001 Robert-Bourassa Blvd., Suite 1600, Montreal, Quebec, Canada, H3A 2A6. This Annual Report contains trademarks and registered trademarks of us and other companies.

We were incorporated in Canada on September 18, 1985 pursuant to the *Canada Business Corporations Act*. Since that date, we have amended our articles on various occasions mainly to modify our legal and corporate names and our share capital.

Since we are using this Form 20-F as an annual report, we have provided herein the information required pursuant to Item 4A(4) for the period beginning as at September 1, 2018 until the date of this Annual Report. For information responsive to this Item 4A(4) for prior periods, please refer to our previously filed Annual Reports on Form 20-F. Information in our previously filed Annual Reports on Form 20-F is not incorporated by reference in this Annual Report.

In October 2018, as part of our restructuring plan, we shut down our site in Concord, Ontario, Canada. On February 1, 2019, we sold our real estate property in Concord, Ontario, Canada for net proceeds of \$3.3 million. The transfer of ownership resulted in a gain of \$1.7 million recorded in the statement of earnings for fiscal 2019.

In October 2018, as part of our restructuring plan, we shut down our operations in Chelmsford, Massachusetts, USA. On December 1, 2018, we also transferred certain intellectual property held in the United States to Canada. This transfer created a one-time deferred income tax recovery of \$2.4 million in the statement of earnings for fiscal 2019.

On January 8, 2019, we announced that our Board of Directors approved a share repurchase program, by way of a normal course issuer bid on the open market of up to 1,200,000 subordinate voting shares at the prevailing market price. The period of the normal course issuer bid commenced on January 14, 2019 and will end on January 13, 2020. From January 14, 2019 through November 11, 2019, we spent approximately US\$0.6 million (including fees) to repurchase 127,604 subordinate voting shares.

#### B. Business Overview

We provide communications service providers (CSPs) as well as data center, cloud and web-scale operators with test, monitoring and analytics solutions to ensure the smooth deployment, maintenance and management of next-generation networks. We have also forged strong relationships with network equipment manufacturers (NEMs) to develop deep expertise that migrates from the lab to the field and beyond. We believe that our key differentiation comes from combining intelligent, automated and cloud-based test and monitoring solutions with real-time analytics to deliver superior network performance, service reliability and subscriber insights. We are number one in optical testing in terms of global market share and are among the top five suppliers of monitoring and analytics solutions for the communications industry worldwide.

We believe that our unique blend of hardware equipment, software and services accelerates digital transformations related to fixed and mobile network deployments. More specifically, we target high-growth market opportunities that enable customers to increase bandwidth capacity and improve quality of experience on network infrastructures: 5G and Internet of Things (IoT), 4G/LTE (long-term evolution), wireless backhaul and fronthaul, small cells and distributed antenna systems (DAS), 400G and 100G network upgrades as well as fiber-to-the-home (FTTH)/fiber-to-the-curb (FTTC)/fiber-to-the-node (FTTN) deployments.

We were founded in 1985 in Quebec City, Canada. Our original products were focused on the needs of installers and operators of fiber-optic networks. Customers use these field-portable test solutions for the installation, maintenance and troubleshooting of optical networks. Over the past several years, we have enhanced our competitive position in the communications test, monitoring and analytics markets through acquisitions of transport and datacom, copper/xDSL and wireless test companies, an IP service assurance business, an analytics software company, radio frequency (RF) test technologies for fiber-based radio access networks (RANs), automated network topology software, optical test equipment for lab and research applications, as well as performance analysis solutions for mobile networks and subscriber experience.

### **Industry Background**

EXFO benefited from ongoing fiber buildouts and early 5G wireless deployments in fiscal 2019 as CSPs transformed their networks to address growing Internet usage, proliferation of smart phones and tablets, and an explosion in video services. On the wireline side, the 100G upgrade cycle continued throughout metropolitan networks, 400G made its way into some data centers, while early 800G designs were seen in labs. We also witnessed fiber rollouts and small cell deployments closer to the network edge to support the ultra-high speeds and low-latency requirements of tomorrow's wireless infrastructures. On the wireless end, service providers worldwide became embroiled in a race to deliver 5G services first to their subscribers. Already, the two largest CSPs in the US are claiming bragging rights with partial deployments of 5G services in certain metropolitan areas. Leading service providers in South Korea and China also rolled out 5G services in calendar 2019, but massive commercial deployments are not expected until 2020 when 5G smartphones become widely available.

Against this backdrop, CSPs are grappling with the complex architectures required to manage virtualized networks, which are essential to monetizing 5G services and lowering operating costs. Early use cases revolve around fixed wireless and enhanced mobile broadband (eMBB) for ultra-high-definition video streaming, augmented reality and virtual reality applications. Next in line are massive machine type communications (mMTC), requiring a connection density of 1 million devices per square kilometer, to support the Internet of Things (IoT). Finally, ultra-reliable, low-latency communications (URLLC) are slated to come later in the 5G cycle to enable delay-sensitive applications like autonomous cars and industrial automation that require a response time as low as 1 ms.

#### **Growth Strategy**

Our long-term goal is to become the global leader in the communications test, monitoring and analytics markets. We believe that digital transformations are taking place throughout the communications industry to cope with surging bandwidth demand and the need to better monetize networks. Consequently, CSPs, webscale companies and NEMs are making considerable investments to modernize network infrastructures.

Our growth strategy focuses on internal investments and acquisitions in two main technology areas: fiber and 5G.

First, fiber is being deployed everywhere. Communications service providers are continuing fiber buildouts and high-speed deployments in Metro, regional and access networks to meet bandwidth demand. Cable companies are following suit with Fiber Deep initiatives to remain competitive. Webscale operators are building data centers closer to the network edge to ensure a superior quality of experience for end-users.

All these customer groups rely on fiber testing and we believe that the depth and breadth of our product portfolio and No. 1 position in the optical test equipment market will lead to our continued growth.

Second, 5G mobility. The 5G investment cycle got underway in limited geographies in 2019. Initial use cases revolve around fixed wireless and enhanced mobile broadband, but we believe that 5G is all about machines and incremental revenue. We should see massive machine type communications and ultra-reliable, low-latency applications later in the cycle.

EXFO is currently benefiting from the 5G network densification phase. Service providers are deploying small cells in densely populated areas to deliver the next-generation services that subscribers expect. These small cells need to be connected with fiber and we expect to capitalize with our leadership position in optical testing.

The next phase of 5G deployment will get underway in mid-2020 as mobile network operators deploy radio equipment for the standalone 5G standard. EXFO provides RAN optimization solutions for network operators, who must cope with the tradeoff between capacity and coverage on high-, mid- and low-band spectrum.

Finally, the network monitoring phase will begin in mid- to late-2020 when commercial rollouts of 5G networks become mainstream. This is when EXFO's troubleshooting and monitoring solutions will provide end-to-end visibility of 5G networks.

These full-fledged 5G networks will be built around a virtualized architecture to increase monetization opportunities and reduce operating costs. Already, we have successfully deployed a virtualized service assurance solution with 3UK, a British mobile network operator.

#### Customers

Customers on a global basis use our test, monitoring and analytics solutions to enable their networks to perform optimally during their complete life cycles: research, development, manufacturing, installation, maintenance and monitoring.

We initially developed test equipment for wireline CSPs and, to a lesser extent, component vendors and network equipment manufacturers, but over the years we have expanded our offering to wireless CSPs, cable television companies, data center, cloud and web-scale operators, public utilities, private network operators, third-party installers, equipment rental companies, large enterprises and laboratory researchers.

In fiscal 2019, our top customer accounted for 6.9% of our sales and our top three customers represented 18.1%. In comparison, our top customer accounted for 9.1% of sales and our top three customers represented 15.9% in 2018, while our top customer accounted for 10.1% of sales and our top three customers represented 18.4% in 2017.

# **Products**

Beginning in fiscal 2019, we started reporting sales and bookings results based on two newly defined product families: Test and Measurement (T&M) and Service Assurance, Systems and Services (SASS). Optical, transport and copper test solutions make up the T&M product family, including portable equipment for the field and benchtop units for the lab and manufacturing environments. The SASS family mainly consists of service assurance, fiber monitoring, analytics and professional services as well as other systems-related solutions like network simulation and network topology. The SASS product family tends to be software-intensive with longer sales and revenue-recognition cycles than the T&M group. We believe this product breakdown better reflects our long-term strategy, while enhancing comparisons against industry peers and investors' understanding of our business.

# Test and Measurement (T&M)

We offer a broad range of test solutions that support customers in the digital transformation of their networks from the core to the network edge. We believe the competitive advantages of our products include a high degree of innovation, modularity and ease of use. Ultimately, we believe our products enable NEMs, CSPs as well as data center, cloud and web-scale operators to design, deploy, and troubleshoot wireline and wireless networks, as well as help customers reduce their operating expenses.

We provide portable test solutions that are mainly used by CSPs to install, turn up and maintain their optical, wireless and copper-based communications networks. These products are available as handheld test instruments, portable platforms with related modules, and as rack-mounted chassis with related modules.

Our handheld instruments are durable, compact and easy to use. They include dedicated instruments like power meters for optical networks and digital subscriber line (DSL) testers for copper access networks. They can also be multi-function units that carry out several different measurements.

Our field-test platforms, namely the FTB-1 Pro Platform, FTB-1 Platform, FTB-2 Pro Platform, FTB-4 Pro Platform and FTB-500 Platform, are at the core of our portable product portfolio. Our FTB-1 Pro, designed for frontline technicians in the field, is a single-slot, modular platform dedicated to carry out optical, Ethernet and multiservice tests simply and efficiently. It differentiates itself through ultra-strong processing power and rich features like a multi-touch, high-resolution widescreen display. The FTB-1 Platform does not possess the same processing power or rich feature set of the FTB-1 Pro, but it is suitable for optical, copper, Ethernet and multiservice testing applications.

Our FTB-2 Pro offers the power and scalability of a multi-technology, high-performance unit, but in a smaller form factor. The FTB-2 Pro Platform can host two single-slot test modules, such as an OTDR (optical time domain reflectometer), automated optical loss test set (OLTS) with a variety of fiber inspection probes (FIPs), and Ethernet tester that can characterize transmission rates up to 100 Gbit/s.

The FTB-4 Pro, the latest addition to our platform family, supports as many as four modules for tests in high-speed networks, data centers and R&D labs. It provides field technicians with a combination of 400 Gbit/s commissioning, turn-up and troubleshooting tools on a single platform for both transport and advanced dispersion testing.

Our FTB-500 platform is available in two configurations for various high-end tasks with transmission rates up to 100 Gbit/s. The four-slot model of the FTB-500 is designed for datacom testing, OTDR analysis, optical loss, Ethernet and multiservice transport (SONET/SDH/OTN) testing. The eight-slot model is a high-performance, multiple-protocol unit that allows users to combine next-generation SONET/SDH functions with Ethernet, Fibre Channel and optical-layer testing capabilities. It can handle dispersion characterization (PMD and CD), as well as DWDM/ROADM testing with optical spectrum analysis, and a variety of FIPs.

All five portable platforms support USB, mobile, Wi-Fi, and Bluetooth connectivity capabilities to efficiently manage testing and reporting operations in the field. These PC-centric, open-ended platforms, combined with cloud-based software applications, can be transformed into a fully connected test environment that allows CSPs to automate complex, labor-intensive tasks like fiber-to-the-antenna (FTTA), distributed antenna system (DAS) and small cell deployments. Leveraging platform connectivity, customers can also keep track of their entire test fleet, manage software updates and schedule calibration procedures. All test data can be stored in a central database and used as a point of reference against future measurements within our cloud-based solution. Consequently, this enhanced test environment enables customers to increase productivity and reduce operating expenses.

Our network equipment manufacturer (NEM) solutions, mainly built around our LTB-8 Rackmount Platform, are available as test modules or stand-alone benchtop instruments.

Our highly scalable LTB-8 platform, which can host as many as eight 100G test modules, addresses the numerous requirements that NEMs demand from their multiservice transport and datacom network equipment. Lab users can carry out tests for a variety of technologies including Ethernet, OTN, Fibre Channel and SONET/SDH. Optical tests can also be carried out via power meters, variable attenuators and switches. Remote control of one or several LTB-8 platforms is available via a proprietary web-based interface. We also have a 400G test module for the LTB-8 platform that is dedicated to the lab and manufacturing markets.

Apart from our LTB-8 platform, we offer advanced optical test equipment for R&D labs. This high-end product portfolio includes benchtop optical spectrum analyzers, tunable lasers, tunable filters and passive optical component test systems for network equipment manufacturers and optical component vendors.

#### Service Assurance, Systems and Services (SASS)

We provide a comprehensive portfolio of monitoring solutions for wireline and wireless CSPs, delivering full visibility of the network, service and subscriber levels.

At the network level, we offer fiber monitoring solutions, which leverage OTDR (optical time domain reflectometry) technology, enabling centralized monitoring to detect fiber breaks or performance issues 24 hours per day, seven days per week.

At the service level, the EXFO Worx System is an active monitoring solution that delivers real-time, end-to-end quality of service (QoS) and quality of experience (QoE) service monitoring for next-generation IP networks. Built around a distributed architecture, we believe the EXFO Worx System enables the successful launch and ongoing profitable operation of Ethernet/IP-based voice, video and data networks and services across wireline and wireless networks.

We have transformed our active monitoring portfolio to address the growing need for virtualized solutions. The EXFO Worx solution offers a variety of software-based probes, enabling the interworking with virtualized network architectures and functions.

We believe a competitive advantage of EXFO's active monitoring solution is the ability to implement SLA (service level agreement) monitoring and assure any IP service, over any network, to any endpoint—all from the same open and extensible platform. Key capabilities include:

- Layer 2-7 service performance monitoring and analysis for business and residential services;
- Mobile backhaul and metro Ethernet service activation and assurance;
- IP/MPLS core monitoring and analysis;
- IP video service assurance;
- Advanced data correlation and analysis engine with comprehensive northbound APIs;
- Advanced analytics and reports; and
- Custom solutions and back-office integration services.

The EXFO Worx System offers a multi-play capability such that customers can leverage one, several or all of the aforementioned capabilities on a single platform, which we believe delivers significant savings in capital and operating expenditures.

Our active monitoring solution is complemented by network topology software for automated root cause analysis and network inventory applications (physical, virtual and hybrid). As such, we recognized a \$4.9 million deal in fiscal 2019 from a US service provider for our network topology software solution. This key contract win came with a related multi-million-dollar customer support plan over the next three years.

EXFO also offers a passive monitoring, analytics and troubleshooting solution for multi-technology mobile networks (2G, 3G, 4G), including the subscriber level. The EXFO-Astellia Nova solution provides mobile network operators with capabilities to detect, correlate, analyze, report, geolocate and troubleshoot issues related to network performance, handset behavior and service usage. It is fully virtualized and integrates rich information from call traces, probes, CRM, billing, etc., to make the most of big data.

This virtualized solution is used by 3UK for the passive monitoring of its recently launched, cloud-native, mobile core network.

The EXFO-Astellia Nova solution improves customer experience and mobile operators' business performance, optimizes end-to-end service quality, and provides the required insights to enhance subscriber experience. It meets the requirements of network operations, service operations, customer care and marketing teams. Key strengths of this solution include:

- Radio access network (RAN) optimization;
- Geolocation capabilities;
- Vendor independence;
- Data agnostic (call traces, probe data, third party);
- End-to-end, from radio to core;
- Big data based; and
- Fully virtualized.

To allow customers to get the most out of their monitoring and analytics investments, our experts work hands-on with them through value-added services that include quality assurance and performance audits as well as business consulting and customization. Additional services include training, project management and 24/7 customer support.

We also provide 2G, 3G, 4G/LTE and 5G network simulators for CSP labs and NEMs. EXFO's network simulators emulate real-world, large-scale network traffic and end-user behavior in a laboratory environment to predict network behavior, uncover faults and optimize networks before wireless networks and services are deployed. Typical tests include wireless node (EPC, IMS) functional and network load testing.

These various assets are key building blocks of the automated service assurance offering that EXFO is proposing for increasingly complex, cloud-native and 5G networks.

Finally, we offer communications intelligence tools for police, armed forces and other governmental organizations to help fight organized crime and terrorists.

### **Research and Development**

Our global R&D operations fall under the management of a vice president. We maintain R&D centers in Quebec City, Canada, Montreal, Canada, Oulu, Finland, Pune, India, Lannion, France, Rennes, France, Valencia, Spain, and London, UK. Gross research and development expenditures totaled \$58.0 million in fiscal 2019 compared to \$65.2 million in 2018 and \$53.1 million in 2017.

Aligned with our strategic imperative to increase R&D synergies and efficiencies, we transferred activities from Toronto, Canada and Chelmsford, US to primary R&D centers within the company. These two R&D centers were closed down in October 2018.

We believe that our future success largely depends on our ability to introduce new solutions and product enhancements to our core technologies. Through market-oriented product portfolio review processes, we ensure that our investments in research and development are aligned with market opportunities and customers' needs. This process enables us to maximize our returns on R&D investments by focusing our resources on prioritized projects. Product portfolio review meetings, which occur two times per year, enable us to select the right mix of new products and allocate the necessary resources for their development. All our projects, including those already underway, are reviewed, given a priority rating and allocated budgets and resources. Existing projects can be stopped or substantially redefined if there have been significant changes in market conditions, or if the project development schedule or budget has significantly changed.

Product development projects, once they are underway, are managed through a structured process known as the stage-gate approach combined with an Agile methodology. The stage-gate approach is based on a systematic review of a project's progress at various stages of its lifecycle. The following are the key review stages of the stage-gate approach:

- market study and research feasibility;
- product definition;
- development feasibility;
- development;
- qualification; and
- transfer to production.

At each stage, we review our project risks, costs and estimated completion time. We compare our design to anticipated market needs and ensure that our new product development is synchronized with other internal departments and external industry events.

The Agile methodology allows for software development to be done in small increments with constant validation with lead customers. Efficient execution is done through collaborative teams called SCRUM team, ensuring that each increment is fully tested and validated.

#### Sales

We sell our test, monitoring and analytics solutions through direct and indirect sales channels in the Americas (US, Canada, Central and South America), Europe, Middle East and Africa (EMEA) and Asia-Pacific regions.

In the Americas, we use a hybrid model, combining key account management with direct and indirect sales coverage. We typically use key account managers to serve large customers that generate high sales volumes or might potentially represent high sales volumes in the future. These key account managers are supplemented by regional sales managers, sales engineers, sales representatives and distributors in the US as well as Central and South American metropolitan areas, and regional sales managers and sales engineers in Canada.

We opt for a direct sales approach when selling higher-end, highly technical products to sophisticated buyers. Sales of low- to medium-level complexity products to less stringent technical buyers are usually done through a manufacturer representative organization or distributors supported by regional sales managers. Our main sales offices in the Americas are located in Richardson, Texas, Quebec City, Canada and Mexico D.F., Mexico. They are supplemented by a regional presence in cities across the US, Central and South America, as well as Canada.

On the international front, we have a direct sales force covering strategic accounts in EMEA and Asia-Pacific and distribution partners for smaller customers from lower revenue-generating regions.

Our sales network in EMEA is supported by a main office and service center in Chandler's Ford, Hampshire, UK, which serves as headquarters of our European sales operations and provides repair, calibration and technical support services for our EMEA customers. We also have additional sales offices in multiple countries across EMEA to serve and support our various customers and distribution partners.

As for Asia-Pacific, our regional headquarters are based in Singapore, while our main sales offices for mainland China are located in Beijing, Shenzhen and Shanghai. In addition, we have other sales offices in strategic locations around the Asia-Pacific region to support our customers and distribution partners.

We rely on a network of distributors worldwide to work with us in supporting mostly our international sales and to participate in a large number of international events. We believe that the local presence and cultural attributes of our distributors allow us to better serve our global markets.

Our sales team is led by our chief executive officer (CEO), who is supported by a vice president responsible for each major geographic region: Americas, EMEA and Asia-Pacific. These sales executives, in turn, are assisted by regional sales directors that lead a widely distributed team acting as key account managers, regional sales managers, sales engineers and application engineers. Our sales people are located throughout major metropolitan areas around the world. This group of sales professionals has on average more than 15 years of experience in the fields of telecommunications, fiber optics, or test and monitoring. Within each major geographic region, we have sales staff dedicated to test, monitoring and analytics customers.

We also have an in-house Customer Service Group to meet the needs of existing and new customers. This group is responsible for providing quotations to customers, supporting our sales force, managing demonstration units, order management, technical support and training as well as calibration and repair services.

Sales to customers in the Americas represented 50% of our sales in fiscal 2019, while sales to customers in EMEA and Asia-Pacific accounted for 32% and 18% of our sales, respectively. In comparison, the Americas, EMEA and Asia-Pacific accounted for 50%, 32% and 18% of our sales in 2018, respectively, and 55%, 26% and 19% in 2017, respectively.

# **Product Management**

All product management duties fall under the leadership of our CEO, who is supported by two vice presidents responsible for test and measurement (T&M) as well as service assurance, systems and services (SASS). Each product management executive, in turn, is assisted by directors and/or product managers who have various degrees in engineering, science and business administration. Directors and product managers are responsible for some aspects of our telecom marketing program, specifically product strategy, new product introductions, definition of new features and functions, pricing, product launches and advertising campaigns. We follow up our marketing initiatives by attending industry trade shows. Furthermore, we have a customer relationship management (CRM) system to compile market and customer information including forecasts, opportunities, leads and competitive data. We use this information to make strategic business decisions.

#### Marketing/Communications

All marketing and communications activities fall under the leadership of our CEO, who is supported by a director of corporate marketing. The department is responsible for promoting EXFO's brand globally; further strengthening the company's relevance to our customers, market and industry; positioning the T&M and SASS portfolios; supporting our Sales team and partners; and helping improve customer experience.

To accomplish these tasks, marketing and communications strategies are developed and executed by five multidisciplinary groups, responsible for the following:

- Digital Marketing: Achieving marketing objectives through applying digital technologies and media;
- Marketing Campaign Management: Marketing campaign planning and execution for all EXFO's portfolios, collaborating closely with product management;
- *Commercial Insights*: Generating and ensuring adoption of commercial insights to support our sales organization and partners; analyst relations; and our e-learning and training platform;
- Field Marketing and Communications: Shining the spotlight on EXFO across the globe, showcasing our expertise and depth of portfolio at industry events, in the media, and other targeted external and internal audiences; and
- *In-house agency*: Producing marketing and corporate communications collateral (graphic design, writing, etc.).

#### **Global Services**

EXFO's Global Services operation provides customers with a broad array of support and services worldwide. This team has in-house staff in North America, Europe, and Asia. It also provides local support in specific countries through select partners. Such a strategy enables EXFO to have a global reach while maintaining strong local ties.

This team's objective is to ensure customer satisfaction through a flawless business experience and to achieve our long-term mission by providing internal and customer-facing services. Specifically, it fulfills its mission by offering:

• Sales Support – Leverage the effectiveness of our sales force by providing pre-sales and demo support, as well as guiding customers in purchasing the correct equipment for their respective applications, issuing quotations, and promoting our extended warranty service and support program;

- Order Management Accurately process customer orders from entry through fulfillment and delivery, and manage order changes;
- Customer Service Serve as a primary interface for inbound and outbound customer communication. Provide customers with one central point of contact and work with the customer from purchasing equipment to helping them arrange for service, if necessary;
- Technical Support Provide post-sales technical support to Test & Measurement product end-users, by providing software fixes and upgrades, troubleshooting malfunction or wrong usage of equipment and suggesting ways to improve equipment productivity and performance;
- Field Support Provide expert technical support and deliver product service worldwide. Support our Worldwide Service Centers and directly manage the Service Partner Program. Where applicable, furnish installation and on-site servicing for more complex equipment and applications;
- Customer Care Services Provide pre-sale, delivery, post-sale technical support, and systems actualization of customer's network monitoring and converged service assurance systems;
- Education Services Aggregate expertise, develop material, and deliver free and fee-based training;
- Professional Services Provide value-added solution services for our test and system customers.

### Manufacturing

Our manufacturing operations consist mainly of material planning, supply-chain management, sub-assembly, final assembly and test, software loading, calibration, quality control, shipping, billing and customs management. Most of our manufacturing activities, which occupy a total of 125,000 square feet, take place at our facility compound in Quebec City, Canada, Shenzhen, China, and Lannion, France, but we also have facilities in Rennes, France and Oulu, Finland, for product configuration, software loading, quality control and shipping of monitoring systems. All our manufacturing operations fall under the supervision of a vice president.

Our Quebec City, Canada, operations mainly produce low-volume, high-complexity telecom products. It has maintained ISO 9001 certification since 1994 and first obtained TL 9000 certification in July 2012. Our manufacturing plant in Shenzhen, China, which started operations in September 2007, is responsible for the production of high-volume, low-complexity telecom products. Our Shenzhen plant, which follows the same corporate quality standards, was first certified ISO 9001 in January 2009 and also obtained TL 9000 certification in July 2012. Acquired from Yenista in 2017, our Lannion, France, operations, produce low-volume, high complexity test and measurement equipment for laboratory, university and production of optical components.

All of our products meet required industry standards, and some of our products address additional voluntary standards, such as those set by Telcordia, IEC, IETF, ETSI and other bodies that issue industry standards. During manufacturing, each product has a specific quality control plan, with rigorous checkpoints, to ensure product conformity. Various tasks in the quality assurance process include quality control, conformity testing, product documentation, product improvement, regulatory compliance, metrology and calibration.

Our manufacturing operations include the following responsibilities:

- **Production.** From production planning to product shipment, our production department is responsible for manufacturing high-quality products on time. Factories are organized in work cells; each cell consists of specialized technicians with equipment and has full responsibility over a product family. Technicians are cross-trained and versatile enough, so that they can carry out specific functions in more than one cell. This allows shorter lead times by alleviating bottlenecks.
- Manufacturing and Test Engineering. This department, which supports our production cells, acts like a gatekeeper to ensure the quality of our products and the effectiveness of our manufacturing processes. It is responsible for the transfer of products from research and development to manufacturing, product improvement, documentation, metrology, and the quality control and regulatory compliance process. Quality control represents a key element in our manufacturing operations. Quality is assured through product testing at numerous stages in the manufacturing process to ensure that our products meet both stringent industry and customer performance requirements.

• **Supply-Chain Management.** This department is responsible for sales forecasting, raw material procurement, material-cost reduction and vendor performance management. Our products consist of optical, electronic and mechanical parts, which are purchased from suppliers around the world. Approximately one-third of our parts are manufactured to our specifications. Materials represent the largest portion of our cost of goods. Our performance is tightly linked to vendor performance, requiring greater emphasis on this critical aspect of our business.

Our manufacturing operations are subject to environmental laws in various jurisdictions around the world. As the world undergoes climate changes, environmental and biodiversity issues have become critical to our society. We obtained ISO 14001 certification in October 2013 and, therefore, started continuous improvement in reducing our environmental footprint.

### Sources and Availability of Raw Materials

We use various suppliers to provide parts for the manufacture and support of multiple product lines. Although our intent is to establish at least two sources of supply for materials whenever possible, we obtain several parts from single or limited source supply arrangements. We may not be able to procure these parts from alternative sources at acceptable prices within a reasonable time; therefore, the loss or interruption of such arrangements could have an impact on our ability to deliver certain products on a timely basis. See Item 3D of this Annual Report under "Risk Factors – We depend on short-term arrangements with a single supplier or a limited number of suppliers for some key components and materials in our products, which makes us susceptible to supply shortages or price fluctuations that could adversely affect our operating results."

We will continue to mitigate the risk of production interruptions and shortages of parts by: (1) carrying safety stock of critical components, (2) monitoring the delivery performance of our suppliers, (3) selecting and qualifying alternative sources of supplies for key parts whenever possible, and (4) promptly assessing potential effects of worldwide natural disasters.

# Seasonality

Historically, we have been subject to seasonality mainly in our second quarter (December, January and February) due to the Christmas holidays and delays in approval of CSP spending budgets for the new calendar year. These two factors can have negative effects on our bookings in our second quarter, but they are mitigated by the renewal of annual maintenance contracts and sometimes calendar year-end spending on the part of CSPs. We are increasingly subject to seasonality in the fourth quarter (June, July and August) because bookings activity tends to slow down during the summer months, especially in Europe. The acquisition of Astellia in 2018 could also render us more vulnerable to seasonality in the summer, since its sales are largely concentrated in Europe, Middle East and Africa (EMEA). These seasonal effects do not apply consistently and do not always correlate to our financial results. Accordingly, they should not be considered as reliable indicators of future revenue or results of operations.

#### Competition

The communications test, monitoring and analytics markets are highly competitive and subject to rapid change because of technological developments and market conditions. We compete with many different companies, depending on product family and geographical market. We believe that the main competitive factors in the industry include the following:

- level of technical compliance and alignment to use-case;
- product performance and reliability;
- solution's contribution to productivity;
- price and quality of products;
- level of technological innovation;
- product lead times;
- breadth of product offerings;
- ease of use;

- brand-name recognition;
- customer service and technical support;
- strength of sales and distribution relationships; and
- financial stability of supplier.

Main competitors in the test and measurement environment include global suppliers like Anritsu Corporation, Fortive Corporation (Fluke Networks), Keysight and Viavi Solutions, as well as smaller players such as AFL Noyes, Deviser Instruments, Kingfisher International, Shineway Tech, VeEX Inc., and Yokogawa Electric Corporation. On the service assurance, systems and services side, we mainly compete against Accedian Networks, Anritsu Corporation, Empirix, Keysight (IXIA), Netrounds, NetScout Systems, Inc., Elisa (Polystar), Radcom, Spirent Communications plc, and Viavi Solutions. See Item 3D of this Annual Report under "Risk Factors – We must continue to overcome significant competition in our targeted industries in order to keep or gain market share and achieve our growth strategy."

#### **Employees**

As at November 1, 2019, we had 1,810 full-time employees compared to 1,803 and 1,577 for the same periods in 2018 and 2017, respectively. Our workforce as of November 1, 2019 included 401 employees in manufacturing, 656 employees in research and development, and 753 employees in sales and marketing as well as general and administrative functions.

Our future performance depends, to a significant degree, on our continued ability to attract and retain highly skilled and qualified technical, sales and marketing, and senior management personnel. The majority of our employees are not represented by a labor union with the exception of our manufacturing personnel in Quebec City, Canada, R&D and Service employees in Valencia and Madrid, Spain, and R&D and Service employees in Rennes, France. We consider relations with our employees to be good. See Item 3D of this Annual Report under "Risk Factors – We require employees and managers who are knowledgeable about the specialized nature of our business. If we are unable to attract and retain sufficient numbers of highly skilled technical, sales, marketing, senior management and other personnel, our operations and financial results will suffer".

# **Regulatory Environment**

In most countries where our products are sold, our products must comply with the regulations of one or more governmental entities. These regulations often are complex and vary from country to country. Depending upon the country and the relevant product, the applicable regulations may require product testing, approval, registration, marking and unique design restrictions. Accordingly, we have appointed a team of specialists who are responsible for ensuring that our products comply with all applicable regulations.

In the United States, our products must comply with the regulations of some agencies of the U.S. federal government, including the Federal Communications Commission (FCC), the Food and Drug Administration (FDA) and the Occupational Safety and Health Administration (OSHA). Under the FCC's regulations, our products must comply with certain electromagnetic interference (EMI) requirements to insure they do not generate electromagnetic noise which could possibly cause undesirable operation, as well as affect other surrounding devices. Additionally, some of our products must comply with the FDA's non-medical performance standards and related rules concerning light-emitting products, such as lasers. The FDA's regulations applicable to our products are intended to promote safety by limiting human exposure to harmful non-iodizing radiation. Similarly, our products must comply with safety standards adopted by OSHA.

Similar regulations apply in other countries. For example, in Canada our products must comply with the applicable standards adopted by the Standards Council of Canada (SCC). These include product safety standards developed in collaboration with the Canadian Standards Association as well as EMI requirements adopted by Innovation, Science and Economic Development Canada. Countries in the European Union require product compliance as dictated by the applicable directives, which are required to apply the CE marking on the product. This includes testing to ensure compliance with harmonized European Norm (EN) standards for product safety, EMC and Wireless products requirements and RoHS.

To address the issue of environmental compliance, the European Union has mandated the Restriction of the Use of Certain Hazardous Substances or "RoHS" Directive (2011/65/EU), which applies to all products included within the scope of WEEE Directive. Mandatory product compliance includes the ban of certain substances within specified concentrations, unless formally exempted by the Directive. To ensure compliance to this Directive, a formal restricted substance control (RSC) program was implemented for our products included within the scope of WEEE. This program ensures the design, procurement and manufacturing of affected products prevents the inclusion of the banned substances as specified by the RoHS Directive.

Other significant types of regulations not described in this Annual Report also may apply, depending upon the relevant product and country of destination.

### **Intellectual Property**

Our success and ability to compete are dependent in part on our ability to develop and protect our proprietary technology. We file U.S. as well as other foreign (utility) patent applications to protect technology, inventions and improvements important to the development of our business. We also rely on a combination of design patents, copyright, trademark, trade secret rights, licensing and confidentiality agreements.

Our intellectual property and proprietary technology are important to the continued success of our business. Were we to inadequately protect our intellectual property and proprietary technology, our competitive position might be significantly impaired. There also remains a risk that our intellectual property rights, particularly our existing or future patents might be invalidated, circumvented, challenged or required to be licensed to others. Furthermore, others may claim that our products infringe upon their intellectual property rights, or they may infringe our intellectual property, and we may expend significant resources enforcing or defending our rights or suffer competitive injury.

Our success and ability to compete depend to a significant extent on our proprietary technology, with which we attempt to prevent others from using the innovations that are central to our existing and future products. As of August 31, 2019, our records indicate that we held the following portfolio of utility patents: 94 active granted US patents, 118 granted or validated patents in Europe and 45 patents in other jurisdictions. In addition, we have 53 utility patent applications (including provisional applications) pending in the US, 19 utility patent applications pending in Europe and 19 utility patent applications pending in other countries. The expiration dates of our active issued patents range from 2019 to 2037, with no significant active patent expiring in the near future.

Our records also indicate that, as of August 31, 2019, we held 36 active granted design patents, as well as 11 pending design patent applications, in the United States, Europe, China and other jurisdictions.

We consider five of our inventions to be material. These inventions are protected by granted patents and/or pending patent applications and can be described as follows:

- a method and apparatus for improved characterization of loss-inducing "events" along an optical fiber
  using an Optical Time Domain Reflectometer (OTDR). By a judicious combination of OTDR data
  corresponding to different optical-pulse durations, the location and loss characteristics of an event
  can be quantified with much better accuracy and/or more rapidly than via conventional approaches;
- a method for determining the optical signal-to-noise ratio on polarization-multiplexed signals used in high-bandwidth DWDM optical networks by employing an optical spectrum analyzer (OSA). It employs a reference trace acquired with one channel being turned off;
- a scalable system for monitoring network elements, for which only a non-redundant subset
  of the identified network information is stored, thereby enabling monitoring of a much larger group
  of network elements than is possible with conventional memory-constrained monitoring systems.
  Furthermore, this system employs a multi-threaded architecture that dynamically spawns an array
  of multi-technology monitoring sub-systems. The user can leverage data from a multitude of sources
  and define a sequence of activities based on templates in order to accomplish a given task;

- a method for actively analyzing a data packet delivery path to provide diagnostics and root cause analysis of network delivery path issues;
- a communication methodology used to perform independent bi-directional protocol testing over a connection or connectionless network between two test instruments, wherein the transfer mechanism of status and intermediate test results during an active test and the transmission of the final results to one of the instruments enables the user to perform a bidirectional single-ended test.

Confidentiality and proprietary information agreements with our senior management, employees and others generally stipulate that all confidential information developed or made known to these individuals by us during the course of their relationship is to be kept confidential and not disclosed to third parties, except under specific circumstances. The agreements also generally provide that all intellectual property developed by the individual in the course of rendering services to us belongs exclusively to us. However, these efforts afford only limited protection.

# Disclosure pursuant to Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012

Under Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012, which added section 13(r) of the Securities Exchange Act of 1934, as amended ("the Exchange Act"), public reporting issuers are required to disclose whether they or any of their affiliates knowingly engaged in certain activities, transactions, or dealings relating to Iran or certain designated individuals or entities.

From September 2018 until November 2018, EXFO Solutions (formerly Astellia), a subsidiary of EXFO organized and existing under the laws of France, engaged in transactions involving the sale of passive monitoring and troubleshooting solutions and associated services to end users in Iran. EXFO Solutions (formerly Astellia) sold the equipment for end use by Iranian mobile network operators, Mobile Communications Company of Iran ("MCCI") and MTN Irancell. Although it is difficult to evaluate with any reasonable degree of certainty, we have concluded that we cannot exclude the possibility that MCCI or MTN Irancell is owned or controlled, directly or indirectly, by the government of Iran.

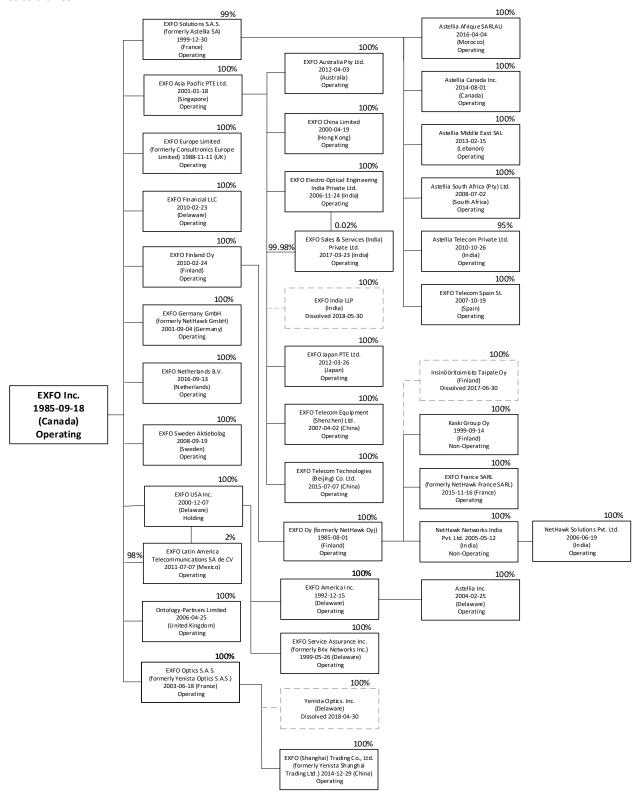
Gross revenues reported by EXFO Solutions (formerly Astellia) in connection with these transactions, for the three-month period mentioned above, were approximately US\$122,379; estimated net result from these transactions was nominal.

Prior to its acquisition by EXFO, EXFO Solutions (formerly Astellia), through a subsidiary located in Lebanon, employed four (4) employees delivering services in Iran, a practice that was continued after the acquisition through the end of October 2018. These activities complied in all material respects with applicable sanction laws and regulations; however, they were inconsistent with EXFO's internal policies. EXFO discovered this activity during the pre-acquisition due diligence of EXFO Solutions (formerly Astellia) and has conducted a comprehensive internal investigation and review. As a result of this investigation and review, EXFO has implemented additional compliance procedures designed to prevent future violations of its internal policy and is currently in the process of withdrawing from any direct activities, transactions, or dealings relating to Iran or certain designated individuals or entities and will no longer have employees providing services in Iran. In addition, EXFO revised its internal policies to allow indirect support and maintenance of EXFO Solutions' systems deployed at MCCI and MTN Irancell through a non-related third-party based outside Iran to honor EXFO Solutions' (formerly Astellia) prior engagement with existing customers in compliance with applicable export controls, sanctions and other laws, rules and regulation. The withdrawal process was completed on November 4, 2018 and support services through a non-related third party was established at that date.

Gross revenues reported by EXFO Solutions (formerly Astellia) in connection with these support services through a non-related third party for fiscal year 2019 were approximately US\$50,472; estimated net result from these transactions was nominal.

### C. Organizational Structure

As of November 1, 2019, the following chart presents our corporate structure, the jurisdiction of incorporation of our subsidiaries and the percentage of shares (which is also the percentage of voting power) that we hold in those subsidiaries.



# D. Property, Plant and Equipment

Our head offices are located in Quebec City, Province of Quebec, Canada where we occupy two buildings. These buildings house our executive and administrative offices, research and development facilities and production facilities. We also have offices in Montreal, Province of Quebec, Canada, in Richardson, Texas, United States (EXFO America Inc.), in Pune, India (EXFO Electro-Optical Engineering India Private Ltd.), in Chandler's Ford, Hampshire, United Kingdom (EXFO Europe Limited), in Lannion, France (EXFO Optics SAS), in Oulu, Finland (EXFO Oy), in Rennes, France (EXFO Solutions SAS), in Shenzhen, China (EXFO Telecom Equipment (Shenzhen) Co. Ltd.), in Valencia, Spain (EXFO Telecom Spain SL) and in London, United Kingdom (Ontology-Partners Limited).

In addition, we maintain sales offices and/or have regional sales managers located in Australia, China, Czech Republic, France, Germany, Great Britain, India, Japan, Lebanon, Mexico, Morocco, Singapore, South Africa, Spain, Sweden, United Arab Emirates and the United States.

The following table sets forth information with respect to the main facilities that we occupy as at November 1, 2019.

Location	Use of Space	Square Footage	% of Utilization	Type of Interest
400 Godin Avenue Quebec (Quebec) G1M 2K2	Occupied for research and development, customer services, repair/calibration services, manufacturing, management and administration	129,000 (1)	95%	Owned
2500 Alfred-Nobel Montreal (Quebec) H4S 2C3	Occupied for research and development, management and administration	75,000	70%	Owned
2500 Alfred-Nobel Montreal (Quebec) H4S 2C3	Leased to third parties	23,736	100%	Owned
2500 Alfred-Nobel Montreal (Quebec) H4S 2C3	Available for rent	26,264	0%	Owned
F1 to F3, No. 71-3, Xintian Avenue, Xintian Community Fuhai Subdistrict, Bao'an District Shenzhen, Guangdong 518103 China	Occupied for manufacturing of products, repair/calibration services	64,000	90%	Leased
ZAC Airlande 2, rue Jacqueline Auriol CS 69123 Saint-Jacques-de-la- Lande 35091 Rennes Cedex 9 France	Occupied for research and development, customer services, manufacturing, management and administration	50,235	90%	Leased
436 Nolin Street Quebec (Quebec) G1M 1E7	Occupied for manufacturing of products	44,000	95%	Owned

Location	Use of Space	Square Footage	% of Utilization	Type of Interest
Offices No 602, 603, 604, 701 and 702, Tower S-4 Cybercity Magarpatta, Hadapsar Pune 411 013 India	Occupied for research and development	33,981	85%	Owned
250 Apollo Drive Chelmsford, MA 01824 United States	Unoccupied	25,400	0%	Leased
4 rue de Louis de Broglie Lannion 22300 France	Occupied for research and development, manufacturing, management and administration	24,800	50%	Leased
Elektroniikkatie 2 FI-90590 Oulu Finland	Occupied for research and development, manufacturing, management and administration	13,380	100%	Leased
Winchester House School Lane Chandlers Ford, Eastleigh Hampshire SO53 4DG United Kingdom	Occupied for European customer service, repair/calibration services, sales management and administration	13,000	85%	Leased
Ronda Narciso Monturiol 6 Oficina 110B, 111B, 112B and 113B, Parque Technologico Paterna, Valencia 46980 Spain	Occupied for research and development and customer services	10,398	100%	Leased
Offices No 102 Tower S-4 Cybercity Magarpatta, Hadapsar Pune 411 013 India	Leased to a third party	5,979	100%	Owned
Phoenix Yard 65-69 Kings Cross Road London WC1X 9LW United Kingdom	Occupied for research and development, management and administration	5,000	100%	Leased

<sup>(1)</sup> Including the warehouse space. Premises without the warehouse are approximately 115,000 square feet.

# Item 4A. Unresolved Staff Comments

Not applicable.

#### Item 5. Operating and Financial Review and Prospects

This discussion and analysis contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, and we intend that such forward-looking statements be subject to the safe harbors created thereby. Forward-looking statements are statements other than historical information or statements of current condition. Words such as may, expect, believe, plan, anticipate, intend, could, estimate, continue, or similar expressions or the negative of such expressions are intended to identify forward-looking statements. In addition, any statements that refer to expectations, projections or other characterizations of future events and circumstances are considered forward-looking statements. They are not guarantees of future performance and involve risks and uncertainties. Actual results may differ materially from those in forward-looking statements due to various factors including, but not limited to, macroeconomic uncertainty, including trade wars and recessions; our ability to successfully integrate businesses that we acquire; capital spending and network deployment levels in the telecommunications industry (including our ability to quickly adapt cost structures to anticipated levels of business and our ability to manage inventory levels with market demand); future economic, competitive, financial and market conditions; consolidation in the global communications test, monitoring and analytics solutions markets and increased competition among vendors; capacity to adapt our future product offering to future technological changes; limited visibility with regard to the timing and nature of customer orders; delay in revenue recognition due to longer sales cycles for complex systems involving customers' acceptance; fluctuating exchange rates; concentration of sales; timely release and market acceptance of our new products and other upcoming products; our ability to successfully expand international operations and to conduct business internationally; and the retention of key technical and management personnel. Assumptions relating to the foregoing involve judgments and risks, all of which are difficult or impossible to predict and many of which are beyond our control. Other risk factors that may affect our future performance and operations are detailed in our Annual Report, on Form 20-F, and our other filings with the U.S. Securities and Exchange Commission and the Canadian securities commissions. We believe that the expectations reflected in the forward-looking statements are reasonable based on information currently available to us, but we cannot assure you that the expectations will prove to have been correct. Accordingly, you should not place undue reliance on these forward-looking statements. These statements speak only as of the date of this document. Unless required by law or applicable regulations, we undertake no obligation to revise or update any of them to reflect events or circumstances that occur after the date of this document. This discussion and analysis should be read in conjunction with the consolidated financial statements.

The following discussion and analysis of financial condition and results of operations is dated November 26, 2019.

All financial data are expressed in US dollars, except as otherwise noted, and determined based on International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). This discussion and analysis also contains financial data that do not comply with IFRS. Where such measures are presented, they are defined, and the reader is informed.

#### **COMPANY OVERVIEW**

We are a leading provider of test, monitoring and analytics solutions for fixed and mobile communications service providers (CSPs), web-scale operators and network equipment manufacturers (NEMs) in the global communications industry. Our broad portfolio of intelligent hardware and software solutions enable transformations related to fiber, 5G and network virtualization. Ultimately, customers rely on our solutions to increase network capacity and improve quality of experience for end-users while driving operational efficiencies.

Our success has been largely predicated on our core expertise in developing test equipment for fixed networks. These solutions are available as handheld test instruments, portable platforms with related modules, and as rack-mounted chassis with related modules. Our PC-centric, open-ended platforms, combined with cloud-based software applications, can be transformed into a fully connected test environment that allows CSPs to automate complex, labor-intensive tasks like fiber-to-the-antenna (FTTA), distributed antenna system (DAS) and small cell deployments. Leveraging platform connectivity, CSPs can also keep track of their entire test fleet, manage software updates and schedule calibration procedures. All test data can be stored in a central database and used as a point of reference against future measurements. Consequently, this enhanced test environment enables customers to increase productivity and reduce operating expenses.

Over the years, we have expanded our product portfolio into fiber monitoring, IP (Internet protocol) service assurance as well as monitoring of 2G, 3G, 4G/LTE and 5G mobile networks. Our fiber-monitoring solution leverages EXFO's expertise and market leadership in optical time domain reflectometry (OTDR) by using this technology as remote test units (RTUs) to monitor an optical plant 24 hours per day, seven days per week. This fiber monitoring solution proactively detects any fiber degradation or locates any fiber cut to optimize quality of service along long-haul, metro and access networks. Our IP service assurance solution is a probe-based hardware and software offering that delivers quality-of-service visibility as well as real-time service monitoring and verification of next-generation IP networks. We have enriched our IP service assurance offering, which can also be virtualized, with infrastructure performance management tools, analytics software and network topology discovery solutions via technology acquisitions.

Following the acquisition of Astellia S.A. (renamed EXFO Solutions S.A.S.) in January 2018, EXFO offers monitoring solutions for multi-technology mobile networks (2G, 3G, 4G, 5G). The EXFO-Astellia portfolio provides mobile CSPs with capabilities to detect, correlate, analyze, report, geolocate and troubleshoot issues related to network performance, handset behavior and service usage. These solutions can be fully virtualized and combined with information from call traces, third-party probes, CRM, billing, etc., to optimize a big data framework.

Our mobile portfolio also consists of network simulators and optical radio frequency (RF) test solutions. Our network simulators simulate real-world, large-scale network traffic and end-user behavior in a laboratory environment to predict network behavior, uncover faults and optimize networks before mobile networks and services are deployed. Our optical RF test solutions are dedicated to turning up and troubleshooting fiber-based mobile networks. These solutions are critical for locating and analyzing RF interference issues in FTTA, DAS, remote radio heads and baseband units that support 4G/LTE and 5G networks.

The competitive advantages of our products include a high degree of innovation, modularity (especially wireline products) and ease of use. Our products enable NEMs, CSPs and web-scale operators to design, deploy, troubleshoot and monitor fixed and mobile networks and, in the process, they help them reduce the cost of operating their networks.

We have a staff of approximately 1,900 people in 25 countries, supporting more than 2,000 customers around the world. We operate three main manufacturing sites, which are located in Québec City, Canada, Shenzhen, China, and Lannion, France, and we have facilities in Rennes, France, and Oulu, Finland, for product configuration, software loading, quality control and shipping of monitoring systems. We also have five main research and development expertise centers in Montréal, Québec City, Rennes, Oulu and London, supported by a software development center in India.

We released a number of key solutions in fiscal 2019 that enable customers to accelerate their network transformations. We introduced a new category of fiber-testing solutions with the launch of the industry's first optical fiber multimeter. This innovative test instrument simplifies the task of frontline technicians by automatically evaluating the quality of fiber links in a matter of seconds. We also expanded our 400G test portfolio with the launch of a module featuring an Open Transceiver System. This modular design enables compatibility between current and future high-speed transceivers with EXFO's field and lab test platforms. In addition, we released an automated fiber inspection tool for testing polarity, continuity and connector cleanliness on multifiber cables.

Our sales, which include a full-year contribution from newly acquired EXFO Solutions S.A.S. (formerly Astellia S.A.), compared to a seven-month contribution last year, increased 6.4% to \$286.9 million in fiscal 2019 from \$269.5 million in 2018. Bookings (purchase orders received from customers), which include a full-year contribution from EXFO Solutions, increased 11.2% to \$297.8 million in fiscal 2019, for a book-to-bill ratio of 1.04, from \$267.7 million in 2018.

Net loss attributable to the parent interest amounted to \$2.5 million, or \$0.04 per share, in fiscal 2019, compared to \$11.9 million, or \$0.22 per share in fiscal 2018. Net loss attributable to the parent interest in fiscal 2019 included net expenses totaling \$15.1 million, comprising \$7.8 million in after-tax amortization of intangible assets, \$1.8 million in stock-based compensation costs, \$3.2 million in after-tax restructuring charges, \$1.4 million for the acquisition-related deferred revenue fair value adjustment, and a foreign exchange loss of \$0.9 million. Net loss attributable to the parent interest also includes \$1.7 million for a gain on disposal of capital assets and \$2.4 million for a deferred income tax recovery. Net loss attributable to the parent interest in fiscal 2018 included net expenses totaling \$17.1 million, comprising \$9.4 million in after-tax amortization of intangible assets, \$1.7 million in stock-based compensation costs, \$3.4 million in after-tax restructuring charges, \$2.1 million for the acquisition-related deferred revenue fair value adjustment, \$0.7 million in positive change in the fair value of the cash contingent consideration, \$2.5 million in after-tax acquisition-related costs, and a foreign exchange gain of \$1.3 million.

Adjusted EBITDA (net earnings (loss) attributable to the parent interest before interest and other expense, income taxes, depreciation and amortization, stock-based compensation costs, restructuring charges, acquisition-related deferred revenue fair value adjustment, change in fair value of cash contingent consideration, and foreign exchange gain or loss) amounted to \$25.6 million, or 8.9% of sales, in fiscal 2019, compared to \$17.2 million, or 6.4% of sales in 2018. Adjusted EBITDA is a non-IFRS measure. See page 56 of this document for a complete reconciliation of adjusted EBITDA to IFRS net earnings (loss) attributable to the parent interest.

In September 2018, as part of our fiscal 2018 restructuring plan and the shutdown of our operations in Toronto, Canada, we entered into a binding agreement to sell one of our buildings for net proceeds of \$3.3 million. The transfer of ownership occurred during fiscal 2019 and resulted in a gain of \$1.7 million that was recorded in interest and other income (expense) line item in our consolidated statement of earnings for that year.

In addition, in fiscal 2019, as part of our fiscal 2018 restructuring plan and the shutdown of some of our facilities in the United States, we transferred the ownership of certain intellectual property held in the United States to Canada. This created a deductible tax asset in Canada and resulted in the recognition of a one-time deferred income tax recovery of \$2.4 million in fiscal 2019 as the recovery of this asset is probable. This deferred income tax recovery was recorded in our consolidated statement of earnings for that year.

# **Adjusted EBITDA outlook**

## Short-term target

#### Fiscal 2019

In fiscal 2018, we had established an adjusted EBITDA target of \$24 million for fiscal 2019. Actual adjusted EBITDA reached \$25.6 million, or 8.9% of sales, slightly higher than expected.

# Fiscal 2020

For fiscal 2020, considering results achieved in fiscal 2019, the anticipated increase in sales volume and the resulting improved fixed-cost absorption, the full impact of our fiscal 2018 restructuring plan, as well as the impact of the upcoming adoption of IFRS 16, "Leases", on September 1, 2019, we forecast adjusted EBITDA of \$33 million. The adoption of IFRS 16 is expected to increase adjusted EBITDA by approximately \$4 million in fiscal 2020. Our adjusted EBITDA target also considers constant currencies.

#### Medium-term target

In fiscal 2018, we established an adjusted EBITDA margin target of 15% of sales for the next three years (2019 to 2021). This medium-term adjusted EBITDA target was established based on expected sales increase mainly from our service assurance, systems and services (SASS) product line (which represented 27% of sales in fiscal 2018). This product line delivers a higher gross margin before depreciation and amortization than our test and measurement (T&M) product line (which represented 73% of our sales in fiscal 2018), due to its richer software content. In addition, we expect higher growth from our SASS product line over the next three years, as it represents a much larger addressable market (\$2.5 billion+) compared to our T&M product line (\$900 million) and for which our market share is lower compared to our T&M product line. This growth is expected to come from organic growth as well as through acquisitions, like those completed in fiscal 2017 and 2018 (Absolute Analysis Inc. (Absolute), Ontology Partners Limited (Ontology) and EXFO Solutions) and from related synergies. Furthermore, this sales growth should result in better absorption of our fixed manufacturing costs, which would increase our gross margin before depreciation and amortization and our adjusted EBITDA. A large portion of our operating costs is fixed mainly for research and development expenses as well as administrative expenses. Our adjusted EBITDA target also considers constant currencies.

Despite the positive impact the adoption of IFRS 16 will have on Adjusted EBITDA going forward, we reaffirm our adjusted EBITDA target of 15% for the next two years.

These short-term and medium-term adjusted EBITDA targets are forward-looking statements. In addition, as they exclude items that pertain to future events that are not currently estimable with a reasonable degree of accuracy, such as foreign exchange gain or loss and income taxes, no corresponding IFRS measure has been provided.

#### Sales

We sell our products to a diversified customer base in approximately 100 countries through our direct sales force and channel partners, such as sales representatives and distributors. Most of our sales are denominated in US dollars, euros and Canadian dollars.

In fiscal 2018 and 2019, no customer accounted for more than 10% of our sales, with our top customer representing 9.1% and 6.9% of our sales respectively. In fiscal 2017, our top customer represented 10.1% of our sales.

We believe that we have a vast array of products, a diversified customer base and a good spread across geographical areas, which provides us with reasonable protection against concentration of sales and credit risk.

#### **Cost of Sales**

The cost of sales includes raw materials, salaries and related expenses for direct and indirect manufacturing personnel and professional services, as well as overhead costs. Excess, obsolete and scrapped materials are also included in the cost of sales. However, the cost of sales is presented exclusive of depreciation and amortization, which are shown separately in the consolidated statements of earnings.

#### Selling and administrative, and research and development expenses

Selling and administrative expenses consist primarily of salaries and related expenses for personnel, sales commissions, travel expenses, marketing programs, professional services, information systems, human resources and other corporate expenses.

Gross research and development expenses consist primarily of salaries and related expenses for engineers and other technical personnel, material component costs as well as fees paid to third-party consultants. We are eligible to receive research and development tax credits on research and development activities carried out in Canada and France. All related research and development tax credits are recorded as a reduction of gross research and development expenses.

# **RESULTS OF OPERATIONS**

(in thousands of US dollars, except per share data, and as a percentage of sales for the years indicated)

Sales \$ 286,890  Cost of sales (2)		269,546 105,004 98,794 57,154 5,444 10,327 (670) 1,378 (1,309) 2,080 (2,080) (6,576) 5,678 (12,254) (352) (11,902)	\$	243,301 94,329 86,256 47,168 3,902 3,289 (383) 303 978 - - 7,459 6,608 851	100.0 %  41.4 34.4 17.6  1.9 3.1  - 0.3 0.3 - 1.0 1.9 (0.9)	100.0 %  39.0 36.7 21.2  2.0 3.8  (0.3) 0.5 (0.5) 0.8  (0.8) (2.4) 2.1 (4.5) (0.1)	100.0 %  38.8 35.5 19.4  1.6 1.4  (0.2) 0.1 0.4 3.0 2.7 0.3
Selling and administrative	\$	98,794 57,154 5,444 10,327 (670) 1,378 (1,309) 2,080 (2,080) (6,576) 5,678 (12,254) (352)	\$	86,256 47,168 3,902 3,289 (383) 303 978 - - 7,459 6,608 851	34.4 17.6 1.9 3.1 - 0.3 0.3 - - 1.0 1.9 (0.9)	36.7 21.2 2.0 3.8 (0.3) 0.5 (0.5) 0.8 (0.8) (2.4) 2.1 (4.5)	35.5 19.4 1.6 1.4 (0.2) 0.1 0.4 - - 3.0 2.7
Selling and administrative	\$	98,794 57,154 5,444 10,327 (670) 1,378 (1,309) 2,080 (2,080) (6,576) 5,678 (12,254) (352)	\$	86,256 47,168 3,902 3,289 (383) 303 978 - - 7,459 6,608 851	34.4 17.6 1.9 3.1 - 0.3 0.3 - - 1.0 1.9 (0.9)	36.7 21.2 2.0 3.8 (0.3) 0.5 (0.5) 0.8 (0.8) (2.4) 2.1 (4.5)	35.5 19.4 1.6 1.4 (0.2) 0.1 0.4 - - 3.0 2.7
Net research and development	\$	57,154 5,444 10,327 (670) 1,378 (1,309) 2,080 (2,080) (6,576) 5,678 (12,254) (352)	\$	47,168  3,902 3,289  (383) 303 978 7,459 6,608  851	17.6  1.9 3.1  - 0.3 0.3 - 1.0 1.9 (0.9)	21.2 2.0 3.8 (0.3) 0.5 (0.5) 0.8 (0.8) (2.4) 2.1 (4.5)	19.4 1.6 1.4 (0.2) 0.1 0.4 - - 3.0 2.7 0.3
Depreciation of property, plant and equipment	\$	5,444 10,327 (670) 1,378 (1,309) 2,080 (2,080) (6,576) 5,678 (12,254)	\$	3,902 3,289 (383) 303 978 - - 7,459 6,608	1.9 3.1  - 0.3 0.3 1.0 1.9 (0.9)	2.0 3.8 (0.3) 0.5 (0.5) 0.8 (0.8) (2.4) 2.1 (4.5)	1.6 1.4 (0.2) 0.1 0.4 - - 3.0 2.7
equipment	\$	10,327 (670) 1,378 (1,309) 2,080 (2,080) (6,576) 5,678 (12,254) (352)	\$	3,289 (383) 303 978 7,459 6,608 851	3.1 - 0.3 0.3 - - 1.0 1.9 (0.9)	3.8 (0.3) 0.5 (0.5) 0.8 (0.8) (2.4) 2.1 (4.5)	1.4 (0.2) 0.1 0.4 - - 3.0 2.7
Amortization of intangible assets	\$	10,327 (670) 1,378 (1,309) 2,080 (2,080) (6,576) 5,678 (12,254) (352)	\$	3,289 (383) 303 978 7,459 6,608 851	3.1 - 0.3 0.3 - - 1.0 1.9 (0.9)	3.8 (0.3) 0.5 (0.5) 0.8 (0.8) (2.4) 2.1 (4.5)	1.4 (0.2) 0.1 0.4 - - 3.0 2.7
Change in fair value of cash contingent consideration	\$	(670) 1,378 (1,309) 2,080 (2,080) (6,576) 5,678 (12,254)	\$	(383) 303 978 - - 7,459 6,608 851	- 0.3 0.3 - - 1.0 1.9 (0.9)	(0.3) 0.5 (0.5) 0.8 (0.8) (2.4) 2.1 (4.5)	(0.2) 0.1 0.4 - 3.0 2.7 0.3
consideration	\$	1,378 (1,309) 2,080 (2,080) (6,576) 5,678 (12,254) (352)	\$	303 978 - - 7,459 6,608 851	0.3 - 1.0 1.9 (0.9)	0.5 (0.5) 0.8 (0.8) (2.4) 2.1 (4.5)	0.1 0.4 - - 3.0 2.7 0.3
Interest and other expense	\$	1,378 (1,309) 2,080 (2,080) (6,576) 5,678 (12,254) (352)	\$	303 978 - - 7,459 6,608 851	0.3 - 1.0 1.9 (0.9)	0.5 (0.5) 0.8 (0.8) (2.4) 2.1 (4.5)	0.1 0.4 - - 3.0 2.7 0.3
Foreign exchange (gain) loss	\$	(1,309) 2,080 (2,080) (6,576) 5,678 (12,254) (352)	\$	978 - - 7,459 6,608 851	0.3 - 1.0 1.9 (0.9)	(0.5) 0.8 (0.8) (2.4) 2.1 (4.5)	0.4 - - 3.0 2.7 0.3
Share in net loss of an associate	\$	2,080 (2,080) (6,576) 5,678 (12,254) (352)	\$	7,459 6,608 851	1.0 1.9 (0.9)	(0.8) (2.4) 2.1 (4.5)	3.0 2.7 0.3
Gain on deemed disposal of the investment in an associate	\$	(2,080) (6,576) 5,678 (12,254) (352)	\$	6,608 851 –	1.9 (0.9)	(0.8) (2.4) 2.1 (4.5)	3.0 2.7 0.3
investment in an associate	\$	(2,080) (6,576) 5,678 (12,254) (352)	\$	6,608 851 –	1.9 (0.9)	(2.4) 2.1 (4.5)	3.0 2.7 0.3
investment in an associate	\$	(6,576) 5,678 (12,254) (352)	\$	6,608 851 –	1.9 (0.9)	(2.4) 2.1 (4.5)	3.0 2.7 0.3
Earnings (loss) before income taxes	\$	(6,576) 5,678 (12,254) (352)	\$	6,608 851 –	1.9 (0.9)	(2.4) 2.1 (4.5)	2.7 0.3
Income taxes	\$	5,678 (12,254) (352)	\$	6,608 851 –	1.9 (0.9)	2.1 (4.5)	2.7 0.3
Net earnings (loss) for the year	\$	(352)	\$	851 _	(0.9) –	(4.5)	0.3
Net loss for the year attributable to non- controlling interest	\$	(352)	\$	-			
controlling interest	\$		\$		-	(0.1)	
Net earnings (loss) for the year attributable to the parent interest \$ (2,480)  Basic and diluted net earnings (loss) attributable to the parent interest per share \$ (0.04)  Other selected information:  Gross margin before depreciation and amortization (3) \$ 168,213  Research and development data: Gross research and development. \$ 57,972	\$		\$		10.53-7	(0.1)	
Basic and diluted net earnings (loss) attributable to the parent interest per share	\$	(11,902)	\$	851	/a =1=/		
Basic and diluted net earnings (loss) attributable to the parent interest per share	Ş	(11,902)	Ş	921	ID 010/	(4.4)%	0.2.0/
attributable to the parent interest per share					(0.9)%	(4.4)%	0.3 %
attributable to the parent interest per share							
per share							
Other selected information:  Gross margin before depreciation and amortization (3)	_	(0.00)	_				
Gross margin before depreciation and amortization (3)	\$	(0.22)	\$	0.02			
Gross margin before depreciation and amortization (3)							
amortization (3) \$ 168,213  Research and development data: Gross research and development							
amortization (3) \$ 168,213  Research and development data: Gross research and development							
Research and development data:  Gross research and development	,	164 542	,	140.072	E0.C 0/	C1 O 0/	61.3.0/
Gross research and development \$ 57,972	\$	164,542	\$	148,972	58.6 %	61.0 %	61.2 %
Gross research and development \$ 57,972							
,		CE 242		52.424	20.2.0/	24.2.0/	24.0.0/
Restructuring charges included in:	\$	65,243	\$	53,124	20.2 %	24.2 %	21.8 %
Restructuring charges included in:							
Control color		547		4 607	0.4.0/	0.2.0/	0.7.0/
Cost of sales	\$	517	\$	1,697	0.1 %	0.2 %	0.7 %
Selling and administrative expenses \$ 495	\$	673	\$	1,150	0.2 %	0.2 %	0.5 %
Net research and development				2 222		4.0.0/	00 =
expenses \$ 2,506	_	2 2	\$	2,232	0.9 %	1.2 %	0.9 %
A J: -1 - J EDITO A (3.4)	\$	3,219					
Adjusted EBITDA (3, 4)	\$ \$	3,219 17,198	\$	22,041	8.9 %	6.4 %	9.1 %

<sup>(1)</sup> Consolidated statement of earnings and balance sheet data has been derived from our consolidated financial statements prepared according with IFRS, as issued by the IASB, except for non-IFRS measures.

<sup>(2)</sup> The cost of sales is exclusive of depreciation and amortization, shown separately.

<sup>(3)</sup> Refer to page 55 for non-IFRS measures.

<sup>(4)</sup> Includes acquisition-related costs of \$2.2 million or 0.8% of sales in fiscal 2018 and \$1.1 million or 0.4% of sales in 2017 (nil in 2019).

# **RESULTS OF OPERATIONS**

# **Sales and Bookings**

The following tables summarize sales and bookings by product line, in thousands of US dollars:

#### Sales

	Years ended August 31,				
	2019	2018	2017		
Test and measurement	\$ 204,693	\$ 197,423	\$ 193,863		
Service assurance, systems and services	82,788	71,248	49,906		
	287,481	268,671	243,769		
Foreign exchange gains (losses) on forward exchange					
contracts	(591)	875	(468)		
Total sales	\$ 286,890	\$ 269,546	\$ 243,301		

# **Bookings**

	Years ended August 31,					
	2019	2018	2017			
Test and measurement	\$ 210,055	\$ 193,836	\$ 198,583			
Service assurance, systems and services	88,341	72,982	53,651			
	298,396	266,818	252,234			
Foreign exchange gains (losses) on forward exchange						
contracts	(591)	875	(468)			
Total bookings	\$ 297,805	\$ 267,693	\$ 251,766			

# Sales by geographic region

The following table summarizes sales by geographic region:

	Years ended August 31,				
	2019	2018	2017		
Americas	50 %	50 %	55 %		
Europe, Middle East and Africa (EMEA)	32	32	26		
Asia-Pacific (APAC)	18	18	19		
	100 %	100 %	100 %		

# Fiscal 2019 vs. 2018

In fiscal 2019, our sales increased 6.4% to \$286.9 million, compared to \$269.5 million in 2018, while our bookings increased 11.2% year-over-year to \$297.8 million in 2019 from \$267.7 million in 2018, for a book-to-bill ratio of 1.04.

#### Sales

In fiscal 2019, the 6.4% increase in total sales year-over-year can be attributed to the positive effect of the acquisition of EXFO Solutions. EXFO Solutions contributed to our sales for the full reporting year in fiscal 2019 versus seven months in 2018. We also benefited from a \$4.9 million order that was recognized in fiscal 2019 for our real-time network topology solution (no such order in fiscal 2018). Otherwise, our total sales were negatively affected by currency fluctuations year-over-year.

In fiscal 2019, sales of our T&M product line improved 3.7% year-over-year, despite a negative currency impact. In fiscal 2019, we generated increased sales from our high-speed optical transport solutions, as well as higher sales from EXFO Optics for advanced solutions dedicated to labs and NEM environments, compared to 2018.

In fiscal 2019, sales of our SASS product line increased 16.2% year-over-year, despite a negative currency impact, mainly because we benefited from the EXFO Solutions acquisition for the full reporting year versus seven months in 2018. We also benefited from a \$4.9 million order that was recognized in fiscal 2019 for our real-time network topology solution (no such order in fiscal 2018).

## Bookings

In fiscal 2019, our total bookings increased 11.2% year-over-year, mainly due to the positive effect of the acquisition of EXFO Solutions. EXFO Solutions contributed to our bookings for the full reporting year in fiscal 2019 versus seven months in 2018.

We also benefited from larger calendar year-end budget spending from CSPs in the Americas for our T&M products and we received a \$4.9 million order for our real-time network topology solution (no such order in fiscal 2018), as well as four monitoring orders related to 5G deployments in fiscal 2019. Otherwise, in fiscal 2019, total bookings were negatively impacted by currency fluctuations year-over-year.

In fiscal 2019, bookings of our T&M product line increased 8.4% year-over-year mainly due to larger calendar year-end budget spending on the part of some CSPs in the Americas. Our high-speed optical transport and advanced solutions for NEMs and R&D labs also delivered higher bookings compared to 2018. This bookings increase was partially mitigated by the negative currency impact year-over-year.

In fiscal 2019, bookings of our SASS product line increased 21.0% year-over-year mainly due to the positive effect of the acquisition of EXFO Solutions. EXFO Solutions contributed to our bookings for the full period in fiscal 2019 versus seven months in 2018. We also benefited from the \$4.9 million order for our real-time network topology solution, as well as four monitoring orders related to 5G deployments. Otherwise, in fiscal 2019, total bookings were negatively impacted by currency fluctuations year-over-year.

# Fiscal 2018 vs. 2017

In fiscal 2018, our sales increased 10.8% to \$269.5 million, compared to \$243.3 million in 2017, while our bookings increased 6.3% year-over-year to \$267.7 million in 2018 from \$251.8 million in 2017, for a book-to-bill ratio of 0.99.

#### Sales

In fiscal 2018, the increase in total sales year-over-year comes from the positive effect of our acquisitions of EXFO Solutions (seven-month contribution) and EXFO Optics (eleven-month contribution), as well as the positive currency impact.

In fiscal 2018, sales of our T&M line increased 1.8% year-over-year mainly due to the acquisition of EXFO Optics and the positive currency impact.

Sales of our SASS product line increased 42.8% year-over-year in fiscal 2018, due to the positive effect of the acquisition of EXFO Solutions, higher sales of our network-quality fiber-monitoring systems (NQMS), as well as the positive currency impact. Otherwise, sales of our SASS product line slightly decreased year-over-year due to the streamlining of our passive monitoring product line in the second half of fiscal 2017, as well as the year-over-year decrease in sales of our legacy active monitoring product line.

#### **Bookings**

In fiscal 2018, the 6.3% increase in total bookings year-over-year comes from the positive effect of our acquisitions of EXFO Solutions (seven-month contribution), EXFO Optics (eleven-month contribution) and Ontology (full-year contribution in 2018 versus six-month contribution in 2017), a solid performance of our NQMS worldwide, as well as the positive currency impact, offset in part by lower bookings from our Transport and Datacom and passive monitoring product lines.

In fiscal 2018, bookings of our T&M product line decreased 2.4% year-over-year, despite the positive effect of the acquisition of EXFO Optics, as well as the positive currency impact year-over-year. In fiscal 2018, we reported lower bookings in APAC for our Transport and Datacom product line, which had delivered strong bookings in fiscal 2017 in this region. In addition, T&M bookings decreased year-over-year in APAC for both our optical (mainly in China due to delayed investments from NEMs as they prepare for 5G investments) and copper-access product lines, as well as in the Americas for our copper-access product line. Bookings of copper-testing solutions are characterized by large intermittent orders from customers.

Bookings of our SASS product line increased 36.0% year-over-year in fiscal 2018, due to the positive effect of the recent acquisition of EXFO Solutions, higher bookings for our NQMS solutions worldwide, as well as the positive currency impact. Bookings of NQMS are characterized by large intermittent orders from customers. However, we reported lower bookings for our passive-monitoring product line due to the streamlining of this product line in the second half of fiscal 2017.

As we gradually evolve from a supplier of dedicated test instruments to a supplier of end-to-end system-based solutions, our quarterly sales and bookings are becoming increasingly subject to quarterly fluctuations, as we are managing more complex, multimillion-dollar deals that have prolonged sales and revenue recognition cycles related to our protocol-layer products. This has been amplified with the recent acquisitions of EXFO Solutions and Ontology.

# GROSS MARGIN BEFORE DEPRECIATION AND AMORTIZATION (non-IFRS measure – refer to page 55 of this document)

Gross margin before depreciation and amortization amounted to 58.6%, 61.0% and 61.2% of sales in fiscal 2019, 2018 and 2017 respectively.

## Fiscal 2019 vs. 2018

In fiscal 2019, EXFO Solutions, which contributed to our gross margin before depreciation and amortization for the full period compared to seven months in the same period last year, delivered lower margins than our typical corporate margin, as a large portion of its sales comprise professional services, which had a negative impact on our gross margin before depreciation and amortization year-over-year.

In addition, in fiscal 2019, our gross margin before depreciation and amortization was negatively affected by a less favorable sales mix compared to 2018.

Furthermore, in fiscal 2019, we recorded in our sales foreign exchange losses on our forward exchange contracts of \$0.6 million, compared to foreign exchange gains of \$0.9 million in 2018. This gap reduced our gross margin before depreciation and amortization by 0.2% year-over-year.

In addition, in fiscal 2019, we recorded higher inventory writeoffs compared to 2018, which contributed to decrease our gross margin before depreciation and amortization by 0.3% year-over-year.

#### Fiscal 2018 vs. 2017

In fiscal 2018, gross margin before depreciation and amortization included a negative impact of 0.3% of sales for the acquisition-related deferred revenue fair value adjustment from the acquisition of EXFO Solutions (nil in 2017).

In fiscal 2018, gross margin before depreciation and amortization included \$0.5 million, or 0.2% of sales in restructuring charges for severance expenses, compared to \$1.7 million or 0.7% of sales in 2017, which had a positive impact on our gross margin before depreciation and amortization year-over-year.

In addition, in fiscal 2018, we recorded in our sales foreign exchange gains on our forward exchange contracts, compared to foreign exchange losses in 2017, which contributed to an increase of 0.2% in gross margin before depreciation and amortization year-over-year.

However, newly acquired EXFO Solutions delivered lower margins than our typical average corporate margin, and we recorded slightly higher writeoffs (excluding those in restructuring expenses) compared to 2017, which had a negative impact on our gross margin before depreciation and amortization year-over-year.

#### **SELLING AND ADMINISTRATIVE EXPENSES**

Selling and administrative expenses amounted to \$98.6 million, \$98.8 million and \$86.3 million for fiscal 2019, 2018 and 2017 respectively. As a percentage of sales, selling and administrative expenses amounted to 34.4%, 36.7% and 35.5% for fiscal 2019, 2018 and 2017 respectively.

#### Fiscal 2019 vs. 2018

In fiscal 2019, our selling and administrative expenses were slightly down (\$0.2 million) in dollars compared to 2018.

In fiscal 2019, our selling and administrative expense includes \$0.5 million in restructuring expenses compared to \$0.7 million in fiscal 2018. In addition, in fiscal 2018, our selling and administrative expenses included \$2.1 million (1.0% of sales) in acquisition-related costs following our business acquisitions, compared to nil in 2019.

In addition, in fiscal 2019, the positive impact of our 2018 restructuring plan reduced our selling and administrative expenses compared to 2018. Finally, the increase in the average value of the US dollar compared to other currencies had a positive impact on our selling and administrative expenses year-over-year.

However, in fiscal 2019, we incurred additional expenses compared to 2018, as we had the full-year contribution of EXFO Solutions, compared to a seven-month contribution in 2018. In addition, inflation and salary increases contributed to increasing our selling and administrative expenses year-over-year.

#### Fiscal 2018 vs. 2017

In fiscal 2018, our selling and administrative expenses increased \$12.5 million year-over-year, mainly due to additional expenses following the acquisitions of EXFO Solutions (seven-month contribution), EXFO Optics (eleven-month contribution) and Ontology (full contribution in 2018 versus six-month contribution in 2017), inflation, salary increases, as well as increased acquisition-related costs of \$1.1 million following the recent business acquisitions. In addition, in fiscal 2018, the decrease in the average value of the US dollar compared to other currencies had a negative impact on our selling and administrative expenses year-over-year.

However, in fiscal 2018, selling and administrative expenses included \$0.7 million in restructuring charges compared to \$1.2 million in 2017. In addition, the positive impact of our 2017 restructuring plan reduced our selling and administrative expenses year-over-year in fiscal 2018.

Excluding restructuring charges and acquisition-related costs for business combinations, our selling and administrative expenses would have represented 35.7% of sales, 1.1% higher compared to 34.6% of sales in 2017, due to the impact of the recent acquisitions and the negative currency impact.

#### RESEARCH AND DEVELOPMENT EXPENSES

## Gross research and development expenses

Gross research and development expenses totaled \$58.0 million, \$65.2 million and \$53.1 million for fiscal 2019, 2018 and 2017 respectively. As a percentage of sales, gross research and development expenses amounted to 20.2%, 24.2% and 21.8% for fiscal 2019, 2018 and 2017 respectively, while net research and development expenses accounted for 17.6%, 21.2% and 19.4% of sales for these respective years.

#### Fiscal 2019 vs. 2018

In fiscal 2019, our gross research and development expenses decreased \$7.3 million compared to 2018.

In fiscal 2019, the positive impact of our 2018 restructuring plan reduced our gross research and development expenses compared to 2018. In addition, in fiscal 2019, the increase in the average value of the US dollar compared to other currencies had a positive impact on our gross research and development expenses year-over-year.

In addition, in fiscal 2018, we incurred restructuring charges of \$3.2 million as part of our 2018 plan, compared to \$2.5 million in 2019, which reduced our gross research and development expenses year-over-year.

On the other hand, in fiscal 2019, we incurred additional expenses compared to 2018, as we had the full contribution of EXFO Solutions, compared to a seven-month contribution in 2018. Gross research and development expenses were also subject to inflation and salary increases in fiscal 2019, which increased our expenses year-over-year.

In fiscal 2019, the impact of our fiscal 2018 restructuring plan resulted in lower gross research and development expenses as a percentage of sales compared to 2018.

## Fiscal 2018 vs. 2017

In fiscal 2018, our gross research and development expenses increased \$12.1 million year-over-year, mainly due to additional expenses following the acquisitions of EXFO Solutions (seven-month contribution), EXFO Optics (eleven-month contribution) and Ontology (full contribution in 2018 versus six-month contribution in 2017), as well as inflation and salary increases.

In addition, in fiscal 2018, our gross research and development expenses included \$3.2 million in restructuring charges compared to \$2.2 million in 2017.

Finally, in fiscal 2018, the decrease in the average value of the US dollar compared to other currencies had a negative impact on our gross research and development expenses year-over-year.

However, our gross research and development expenses decreased year-over-year due to the positive impact of our 2017 recent restructuring plan.

Excluding restructuring charges, which represent 1.2% of sales in fiscal 2018 compared to 0.9% of sales in 2017, our gross research and development expenses would have represented 23.0% of sales in 2018, 2.1% higher compared to 20.9% of sales in 2017, due to the impact of the recent acquisitions and the negative currency impact.

#### **Tax Credits and Grants**

We are entitled to tax credits for eligible research and development activities conducted in Canada and France.

Tax credits and grants for research and development activities were \$7.4 million, \$8.1 million and \$6.0 million for fiscal 2019, 2018 and 2017 respectively. As a percentage of gross research and development expenses, tax credits and grants reached 12.8%, 12.4% and 11.2% for fiscal 2019, 2018 and 2017 respectively.

#### Fiscal 2019 vs. 2018

The decrease in our tax credits and grants in fiscal 2019, compared to 2018, comes from reduced gross research and development expenses in Canada and France as a result of the impact of our 2018 restructuring plan.

#### Fiscal 2018 vs. 2017

The increase in our tax credits and grants in fiscal 2018, compared to 2017, is mainly due to the acquisitions of EXFO Solutions (seven-month contribution) and EXFO Optics (eleven-month contribution) that are entitled to tax credits and grants on research and development activities carried out in France. This also explains the increase in tax credits and grants as a percentage of gross research and development expenses year-over-year.

#### **AMORTIZATION OF INTANGIBLE ASSETS**

In conjunction with the business combinations we completed, we recorded intangible assets primarily consisting of core technologies and customer relationships. In addition, intangible assets include software. These intangible assets resulted in amortization expenses of \$9.0 million, \$10.3 million and \$3.3 million for fiscal 2019, 2018 and 2017 respectively.

## Fiscal 2019 vs. 2018

In fiscal 2019, amortization of intangible assets decreased of 1.3 million year-over-year, despite the full contribution of EXFO Solutions, compared to a seven-month contribution in 2018. The year-over-year decrease is due to the fact that some acquired intangible assets became fully amortized in fiscal 2019.

#### Fiscal 2018 vs. 2017

The increase in our amortization expense in fiscal 2018, compared to 2017, is due to the acquisitions of EXFO Solutions (seven-month contribution), EXFO Optics (eleven-month contribution) and Ontology (full contribution in 2018 compared to six-month contribution in 2017), as well as the decrease in the average value of the US dollar compared to other currencies year-over-year.

#### **FOREIGN EXCHANGE GAIN (LOSS)**

Foreign exchange gains and losses are mainly the result of the translation of operating activities denominated in currencies other than our functional currency, which is the Canadian dollar. A portion of our foreign exchange gains or losses results from the translation of cash balances and deferred income taxes denominated in US dollars. We manage our exposure to currency risk in part with forward exchange contracts. In addition, some of our entities' operating activities are denominated in US dollars, euros and British pounds, which further hedges this risk. However, we remain exposed to a currency risk; namely, any increase in the value of the Canadian dollar compared to the US dollar would have a negative impact on our operating results.

We reported a foreign exchange loss of \$0.9 million in fiscal 2019, compared to a gain of \$1.3 million in 2018 and a loss of \$1.0 million in 2017.

#### Fiscal 2019

In fiscal 2019, we witnessed some volatility in the value of the Canadian dollar as it fluctuated compared to the US dollar, which overall resulted in a foreign exchange loss of \$0.9 million. The period-end value of the Canadian dollar decreased 1.8% versus the US dollar to CA\$1.3294 = US\$1.00 in fiscal 2019 compared to CA\$1.3055 = US\$1.00 at the end of the previous year. In fiscal 2019, the average value of the Canadian dollar versus the US dollar was CA\$1.3247 = US\$1.00.

#### Fiscal 2018

In fiscal 2018, the period-end value of the Canadian dollar decreased versus the US dollar, compared to the previous year-end, which resulted in a foreign exchange gain of \$1.3 million during that year. The period-end value of the Canadian dollar decreased 4.1% versus the US dollar to CA\$1.3055 = US\$1.00 in fiscal 2018, compared to CA\$1.2536 = US\$1.00 at the end of the previous year. In fiscal 2018, the average value of the Canadian dollar versus the US dollar was CA\$1.2768 = US\$1.00.

#### Fiscal 2017

In fiscal 2017, the period-end value of the Canadian dollar increased versus the US dollar compared to the previous year-end, which resulted in a foreign exchange loss of \$1.0 million during the year. The period-end value of the Canadian dollar increased 4.4% versus the US dollar to CA\$1.2536 = US\$1.00 in fiscal 2017 compared to CA\$1.3116 = US\$1.00 at the end of the previous year. In fiscal 2017, the average value of the Canadian dollar versus the US dollar was CA\$1.3212 = US\$1.00.

Foreign exchange rate fluctuations also flow through the consolidated statement of earnings line items as portions of our sales are dominated in Canadian dollars and euros and significant portions of our cost of sales and operating items are denominated in Canadian dollars, euros, Indian rupees, British pounds, and CNY, and we report our results in US dollars. In fiscal 2019, the increase in the average value of the US dollar compared to the Canadian dollar, the euro, the British pound, the Indian Rupee and the CNY year-over-year, resulted in a positive impact on our expenses. The average value of the US dollar increased 3.8%, 4.9%, 4.8%, 7.2% and 3.9% respectively year-over-year, compared to the Canadian dollar, the euro, the British pound, the Indian Rupee and the CNY.

## **INCOME TAXES**

In fiscal 2019, we reported income tax expenses of \$5.3 million on earnings before income taxes of \$2.9 million, compared to income tax expenses of \$5.7 million on a loss before income taxes of \$6.6 million in 2018 and income tax expenses of \$6.6 million on earnings before income taxes of \$7.5 million in 2017.

# Discrete items affecting our effective income tax rate

#### Fiscal 2019

In fiscal 2019, as part of our fiscal 2018 restructuring plan and the shutdown of some of our facilities in the United States, we transferred the ownership of certain intellectual property held in the United States to Canada. This created a deductible tax asset in Canada and resulted in the recognition of a deferred income tax recovery of \$2.4 million in fiscal 2019 as the recovery of this asset is probable.

#### Fiscal 2018

In December 2017, the US tax reform ("Tax Cuts and Jobs Act") was substantively enacted and reduced the maximum corporate income tax rate from 35% to 21%, effective January 1, 2018. Based on our estimate of deferred tax assets expected to be used in fiscal 2018 and beyond against taxable income in the United States, we recorded a deferred income tax expense of \$1.5 million in fiscal 2018 to account for the effect of this new substantively enacted tax rate.

Our distorted tax rates for all periods mainly resulted from the fact that we did not recognize deferred income tax assets for some of our subsidiaries at loss and acquisition-related costs for business combinations incurred in fiscal 2017 and 2018 were non-deductible for tax purposes. In addition, we had some other non-deductible losses and expenses, such as stock-based compensation costs. However, a significant portion of our foreign exchange gain or loss was a result of the translation of the financial statements of our foreign subsidiaries from their local currency to the functional currency and was therefore non-taxable or non-deductible. Otherwise, our effective tax rate would have been closer to the combined Canadian and provincial statutory tax rate of 27% for this year.

Please refer to note 20 to our consolidated financial statements for a full reconciliation of our income tax provision.

#### LIQUIDITY AND CAPITAL RESOURCES

#### Cash Requirements and Capital Resources

As at August 31, 2019, cash and short-term investments totaled \$19.4 million, while our working capital was at \$39.1 million. Our cash and short-term investments increased \$4.4 million in fiscal 2019, compared to 2018.

The following table summarizes the increase of cash and short-term investments in fiscal 2019 in thousands of US dollars:

Cash flows provided by operating activities	\$ 17,242
Proceeds from disposal of capital assets	3,318
Purchases of capital assets	(7,498)
Repayment of bank loan	(5,195)
Repayment of long-term debt and other liabilities	(2,817)
Redemption of share capital	(312)
Unrealized foreign exchange loss on cash and short-term investments	 (342)
	\$ 4,396

Our short-term investments consist of debt instruments issued by high-credit quality corporations; therefore, we consider the risk of non-performance of these financial instruments to be limited. These debt instruments are not expected to be affected by a significant liquidity risk. For the purpose of managing our cash position, we have established a cash management policy, which we follow and monitor on a regular basis.

We believe that our cash balances and short-term investments totaling \$19.4 million, combined with our available revolving credit facilities of up to \$56.5 million, will be sufficient to meet our liquidity and capital requirements for the foreseeable future, including any possible working capital requirements from our new acquisitions. In addition to these assets and credit facilities, we have unused available lines of credit of \$21.9 million for foreign currency exposure related to forward exchange contracts. However, possible operating losses, additional restructuring costs and/or possible investments in or acquisitions of complementary businesses, products or technologies may require additional financing. There can be no assurance that additional debt or equity financing will be available when required or, if available, that it can be secured on satisfactory terms.

## Sources and Uses of Cash

We finance our operations and meet our capital expenditure requirements through a combination of cash flows from operating activities, the use of our cash and short-term investments, borrowing under our existing credit facilities as well as the issuance of subordinate voting shares.

#### Operating activities

Cash flows provided by operating activities were \$17.2 million in fiscal 2019, compared to \$14.4 million in 2018 and \$12.9 million in 2017.

#### Fiscal 2019 vs. 2018

Cash flows provided by operating activities in fiscal 2019 were attributable to net earnings after items not affecting cash of \$21.8 million, offset in part by the negative net change in non-cash operating items of \$4.6 million; this was mainly due to the negative effect on cash of the increase of \$4.8 million in our accounts receivable due to the timing of receipts and sales during the year, the negative effect on cash of the increase of \$1.3 million in our prepaid expenses due to timing of payments during the year, the negative effect on cash of the \$1.5 million increase in our other assets due to the timing of payments during the year, and the negative effect on cash of the \$1.6 million decrease in our other liabilities due to the repayments made during the year. These negative effects on cash were offset in part by the positive effect on cash of the \$1.5 million decrease in our income tax and tax credits recoverable due to tax credits recovered during the year and the positive effect on cash of the increase of \$3.2 million in our accounts payable and accrued liabilities and provisions due to timing of purchases and payments during the year.

#### Fiscal 2018 vs. 2017

Cash flows provided by operating activities in fiscal 2018 were attributable to net earnings after items not affecting cash of \$8.4 million, and the positive net change in non-cash operating items of \$6.0 million; this was mainly due to the positive effect on cash of the decrease of \$7.3 million in our accounts receivable due to the timing of receipts and sales during the year, and the increase of \$1.0 million in our accounts payable and accrued liabilities and provisions due to timing of purchases and payments during the year. These positive effects on cash were offset in part by the negative effect on cash of the \$1.0 million increase in our inventories to meet future demand and the negative effect on cash of the \$1.3 million increase in our other assets due to the timing of payments during the year.

# Investing activities

Cash flows used by investing activities amounted to \$4.9 million in fiscal 2019, compared to \$43.9 million in 2018 and \$16.5 million in 2017.

#### Fiscal 2019

In fiscal 2019, we made cash payments of \$7.5 million for the purchase of capital assets and we acquired (net of disposal) \$0.7 million worth of short-term investments. However, during the year, we received net proceeds of \$3.3 million from the sale of capital assets.

# Fiscal 2018

In fiscal 2018, we made cash payments of \$10.5 million and \$32.1 million respectively for the purchase of capital assets and the acquisitions of EXFO Optics and EXFO Solutions. In addition, we acquired (net of disposal) \$1.3 million worth of short-term investments during the year.

#### Fiscal 2017

In fiscal 2017, we made cash payments of \$12.8 million and \$7.2 million respectively for the acquisitions of Absolute and Ontology and the purchase of capital assets. Otherwise, we disposed (net of acquisitions) of \$3.5 million worth of short-term investments.

## Financing activities

Cash flows used by financing activities amounted to \$8.3 million in fiscal 2019, compared to cash flows provided of \$4.3 million in 2018 and cash flows used of \$1.5 million in 2017.

#### Fiscal 2019

In fiscal 2019, our bank loan decreased by \$5.2 million, we repaid \$2.8 million of our long-term debt and other liabilities, and we redeemed share capital for \$0.3 million.

#### Fiscal 2018

In fiscal 2018, our bank loan increased by \$11.1 million, but we repaid \$3.1 million of our long-term debt and other liabilities and paid \$3.7 million for the purchase of the non-controlling interest in EXFO Solutions.

#### Fiscal 2017

In fiscal 2017, we repaid the long-term debt of \$1.5 million assumed as part of the acquisition of Ontology.

# **Contractual obligations**

We are committed under the terms of contractual obligations which have various expiration dates, primarily for the rental of premises and equipment, licensing of intellectual property and long-term debt. The following table summarizes our contractual obligations, on an undiscounted basis, as at August 31, 2019 in thousands of US dollars:

	 ong-term debt	 perating leases	icensing reements	_	Total
No later than one year Later than one year and no later than	\$ 2,449	\$ 2,895	\$ 2,289	\$	7,633
five years	3,237	6,323	2,444		12,004
Later than five years	 56	 23	 -		79
	\$ 5,742	\$ 9,241	\$ 4,733	\$	19,716

Upon the adoption of IFRS 16, "Leases", on September 1, 2019, obligations under operating leases will be accounted in the consolidated balance sheet as right-of-use assets and lease liabilities measured at the present value of lease payments on date of adoption. See the New IFRS pronouncements section further in this document for a complete description of the impacts of the adoption of IFRS 16.

In addition, on August 31, 2019, we had letters of guarantee amounting to \$0.7 million for our own selling and purchasing requirements, which were reserved from our lines of credit; these letters of guarantee expire at various dates through fiscal 2022.

#### FORWARD EXCHANGE CONTRACTS

We are exposed to currency risk as a result of our export sales of products manufactured in Canada, China, France, and Finland, the majority of which are denominated in US dollars and euros. In addition, we are exposed to currency risk as a result of our research and development activities in India (Indian rupees). These risks are partially hedged by forward exchange contracts. Forward exchange contracts, which are designated as cash flow hedging instruments, qualify for hedge accounting.

As at August 31, 2019, we held forward exchange contracts to sell US dollars for Canadian dollars and Indian rupees at various forward rates, which are summarized as follows:

US dollars – Canadian dollars

Expiry dates	 Contractual amounts	Weighted average contractual forward rates
September 2019 to August 2020	\$ 35,500,000	1.3013
September 2020 to August 2021	19,900,000	1.3107
September 2021 to July 2022	6,000,000	1.3216
Total	\$ 61,400,000	1.3063
US dollars – Indian rupees		Weighted access
Expiry dates	 Contractual amount	Weighted average contractual forward rate
September 2019 to August 2020	\$ 3,500,000	71.48

The carrying amount of forward exchange contracts is equal to fair value, which is based on the amount at which they could be settled based on estimated current market rates. The fair value of forward exchange contracts amounted to net losses of \$0.5 million and of \$1.0 million as at August 31, 2018 and 2019 respectively. The US dollar – Canadian dollar year-end exchange rate was CA\$1.3294 = US\$1.00 as at August 31, 2019.

## **SHARE CAPITAL**

As at November 11, 2019, EXFO had 31,643,000 multiple voting shares outstanding, entitling to 10 votes each and 23,869,117 subordinate voting shares outstanding. The multiple voting shares and the subordinate voting shares are unlimited as to number and are without par value.

#### **OFF-BALANCE SHEET ARRANGEMENTS**

As at August 31, 2019, our off-balance sheet arrangements consisted of letters of guarantee amounting to \$0.7 million for our own selling and purchasing requirements, which were reserved from our lines of credit; these letters of guarantee expire at various dates through fiscal 2022.

# **STRUCTURED ENTITIES**

As at August 31, 2019, we did not have interests in any structured entities.

#### **CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

The preparation of financial statements in accordance with IFRS requires us to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses and the disclosures of contingent assets and liabilities at the date of the financial statements. On an ongoing basis, we evaluate these estimates and assumptions, including those related to the fair value of assets and liabilities acquired in business combinations, the fair value of financial instruments, the allowance for doubtful accounts receivable, the amount of tax credits recoverable, the provision for excess and obsolete inventories, the estimated useful lives of capital assets, the valuation of long-lived assets, the impairment of goodwill, the recoverable amount of deferred income tax assets, the amount of certain accrued liabilities, provisions and deferred revenue as well as stock-based compensation costs. We base our estimates and assumptions on historical experience and on other factors that we believe to be reasonable under the circumstances.

#### **Critical Judgments in Applying Accounting Policies**

# (a) Determination of functional currency

We operate in multiple countries and generate revenue and incur expenses in several currencies, namely the Canadian dollar, the US dollar, the euro, the British pound, the Indian rupee and the CNY (Chinese currency). The determination of the functional currency of EXFO and its subsidiaries may require significant judgment. In determining the functional currency of EXFO and its subsidiaries, we take into account primary, secondary and tertiary indicators. When indicators are mixed, and the functional currency is not obvious, we use our judgment to determine the functional currency.

## (b) Determination of cash generating units and allocation of goodwill

For the purpose of impairment testing, goodwill must be allocated to each cash-generating unit (CGU) or group of CGUs that are expected to benefit from the synergies of the business combination. Initial allocation and possible reallocation of goodwill to a CGU or a group of CGUs requires judgment.

# **Critical Estimates and Assumptions**

# (a) Inventories

We state our inventories at the lower of cost, determined on an average cost basis, and net realizable value, and we provide reserves for excess and obsolete inventories. We determine our reserves for excess and obsolete inventories based on the quantities on hand at the reporting dates compared to foreseeable needs, taking into account changes in demand, technology or market. It is possible that additional inventory reserves may occur if future sales are less than our forecasts or if there is a significant shift in product mix compared to our forecasts, which could adversely affect our results.

#### (b) Income taxes

We are subject to income tax laws and regulations in several jurisdictions. Under these laws and regulations, uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. We maintain provisions for uncertain tax positions that we believe appropriately reflect our risk based on our interpretation of laws and regulations. In addition, we make reasonable estimates and assumptions to determine the amount of deferred tax assets that can be recognized in our consolidated financial statements, based upon the likely timing and level of anticipated future taxable income together with tax planning strategies. The ultimate realization of our deferred income tax assets is dependent upon the generation of sufficient future taxable income during the periods in which those assets are expected to be realized.

## (c) Tax credits recoverable

Tax credits are recorded if there is reasonable assurance that we have complied and will comply with all the conditions related to the tax credits and that the tax credits will be received. The ultimate recovery of our Canadian non-refundable tax credits is dependent upon the generation of sufficient future taxable income during the tax credits carry-forward periods. We have made reasonable estimates and assumptions to determine the amount of non-refundable tax credits that can be recognized in our consolidated financial statements, based upon the likely timing and level of anticipated future taxable income together with tax planning strategies.

As at August 31, 2019, our Canadian non-refundable research and development tax credits recognized in the consolidated balance sheet amounted to \$38.9 million. To recover these non-refundable research and development tax credits, we need to generate approximately \$260 million (CA\$345 million) in pre-tax earnings at the Canadian federal level. To generate this level pre-tax earnings at the Canadian federal level over the estimated recovery period of 16 years, we must generate a pre-tax earnings compound annual growth rate of 1%, which we believe is probable. Our non-refundable research and development tax credits can be carried forward over a 20-year period.

# (d) Impairment of non-financial assets

Impairment exists when the carrying value of an asset or group of assets (cash generating unit (CGU)) exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The fair value less costs of disposal calculation for our CGUs is based on a market approach that relies on input from implicit valuation multiples and recent transactions for comparable assets or businesses, within the same industry. We apply judgment in making adjustments for factors such as size, risk profile or profitability and also consider EXFO's value derived from its market capitalization considering a control premium based on comparable situations. Depending on the market evidence available, we, from time to time, may further supplement this market approach with an income approach that considers discounted cash flows to determine fair value less costs of disposal, as well as the nature and magnitude of research and development activities carried out by the CGU. The discounted cash flow model involves significant judgment with respect to estimating cash flows (based on market participant assumptions) and the appropriate discount rate.

In the fourth quarter of fiscal 2019, we performed our annual goodwill impairment test for all CGUs.

For the purposes of the impairment test, goodwill has been allocated to the lowest level within the company at which it is monitored by management to make business decisions, which are the following CGUs:

EXFO CGU	\$ 12,949,000
EXFO Optics CGU	3,376,000
Service assurance, systems and services (SASS) CGU	 22,323,000
Total	\$ 38,648,000

Prior to fiscal 2019, the Brix, Ontology and EXFO Solutions CGUs have been identified as three separate CGUs for goodwill impairment testing as they represented the lowest level within EXFO at which the goodwill was monitored for internal management purposes, and the smallest group of assets that generated cash inflows that were largely independent of the cash inflows from other CGUs. However, at the end of August 2018, we implemented a restructuring plan to fast-track the integration of newly acquired EXFO Solutions' and Ontology's technologies with those of our service assurance on a common monitoring and analytics platform to better position the company's offering and reduce its costs. Consequently, starting September 1, 2018, following the announcement of this plan, all future operating and investing decisions related to these three CGUs have been aligned with the restructuring plan and related goodwill, previously allocated to each of these three CGUs, has been monitored for internal management purposes on a combined basis under the Service assurance, systems and services (SASS) CGU, which represented the smallest group of assets that would generate future cash inflows that would largely be independent of the cash inflows from the other CGUs.

In fiscal 2018, the goodwill impairment test has been performed closely to the date of the goodwill reallocation from the Brix, Ontology and EXFO Solutions' GCUs to the SASS CGU and goodwill of each of the three CGUs was not impaired. Consequently, no goodwill impairment test was performed on the date of goodwill reallocation to the combined goodwill.

In performing the fiscal 2019 goodwill impairment review of our CGUs, we determined the recoverable amount of goodwill based on fair value less costs of disposal. In estimating the recoverable amount of its CGUs, we used a market approach, which is based on sales multiples within the range of 1.0 to 7.6 times sales, for comparable businesses with similar operations within the same industry over the past year. We applied judgment in making certain adjustments for factors such as size, risk profile or profitability of the comparable businesses, when compared to our CGUs. In addition, for the SASS CGU, we also used a liquidation approach based on the level of research and development expenses incurred over the last two years.

As at August 31, 2019, the recoverable amount for all CGUs exceeded their carrying value.

## (e) Purchase price allocation in business combinations

The fair value of the total consideration transferred in business combinations (purchase price) must be allocated based on the estimated fair value of acquired net assets at the date of acquisition. Allocating the purchase price requires management to make estimates and judgments to determine assets acquired and liabilities assumed, useful lives of certain long-lived assets and the respective fair value of assets acquired, and liabilities assumed; this may require the use of unobservable inputs, including management's expectations of future revenue growth, operating costs and profit margins as well as discount rates.

#### i) Growth rates

The assumptions used are based on acquired companies' historical growth, expectations of future revenue growth, expected synergies as well as industry and market trends.

# ii) Discount rate

We use a discount rate to calculate the present value of estimated future cash flows, which represents our weighted average cost of capital (WACC).

# (f) Identification of performance obligations

Customer contracts may include promises to transfer multiple products and services to a customer. Determining whether the products and services are considered distinct performance obligations that should be accounted for separately or as one single performance obligation may require significant judgment. We assess whether each promised good or service is distinct for the purpose of identifying the various performance obligations in each contract. Promised goods and services are considered distinct provided that: (i) the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer; and (ii) our promise to transfer the good or service to the customer is separately identifiable or distinct from other promises in the contract.

#### **NEW IFRS PRONOUNCEMENTS**

IFRS Pronouncements Adopted in Fiscal 2019

#### Financial instruments

The final version of IFRS 9, "Financial Instruments", was issued in July 2014 and replaces IAS 39, "Financial Instruments: Recognition and Measurement". IFRS 9 uses a single approach to determine whether a financial asset is measured at amortized cost or fair value, replacing the multiple rules in IAS 39. The approach in IFRS 9 is based on how an entity manages its financial instruments in the context of its business model and the contractual cash flow characteristics of its financial assets. Most of the requirements in IAS 39 for classification and measurement of financial liabilities were carried forward unchanged to IFRS 9. The new standard also requires a single impairment method to be used, replacing the multiple impairment methods in IAS 39. Requirements relating to hedge accounting, representing a new hedge accounting model, have also been added to IFRS 9. The new standard iseffective for annual periods beginning on or after January 1, 2018 and must be applied retrospectively. We adopted this new standard on September 1, 2018 using the modified retrospective method. The following table summarizes the impact of its adoption on our consolidated balance sheet as at September 1, 2018, in thousands of US dollars:

	As reported as at August 31, 2018 Adjustments					As adjusted as at September 1, 2018	
Accounts receivables — Trade	\$	47,273	\$	(303)	\$	46,970	
Income taxes and tax credits recoverable	\$	4,790	\$	50	\$	4,840	
Total assets	\$	284,544	\$	(253)	\$	284,291	
Retained earnings	\$	114,906	\$	(253)	\$	114,653	
Shareholders' equity	\$	177,921	\$	(253)	\$	177,668	

In addition, our financial instruments are accounted for as follows under IFRS 9 as compared to our previous accounting policy with IAS 39:

Financial assets	Classification – IAS 39	Classification – IFRS 9
Cash	Loans and receivables	Amortized cost
Short-term investments	Available for sale	Fair value through other comprehensive income
Accounts receivable	Loans and receivables	Amortized cost
Forward exchange contracts	Derivatives used for hedging	Fair value through other comprehensive income
Financial liabilities	Classification – IAS 39	Classification – IFRS 9
Bank loan	Other financial liabilities	Amortized cost
Accounts payable and accrued liabilities	Other financial liabilities	Amortized cost
Other liabilities	Other financial liabilities	Amortized cost
Long-term debt	Other financial liabilities	Amortized cost
Forward exchange contracts	Derivatives used for hedging	Fair value through other comprehensive income

# Hedge accounting

All existing hedge relationships that were designated as effective hedging relationships under IAS 39, continue to qualify for hedge accounting under IFRS 9. IFRS 9 does not change the general principles of how we account for effective hedges.

#### *Revenue from contracts with customers*

IFRS 15, "Revenue from Contracts with Customers", was issued in May 2014. The objective of this new standard is to provide a single, comprehensive revenue recognition model for all contracts with customers to improve comparability. This new standard contains principles that an entity must apply to determine the measurement of revenue and timing of when it is recognized. The underlying principle is that an entity recognizes revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. This new standard is effective for annual periods beginning on or after January 1, 2018. We adopted this new standard on September 1, 2018 using the modified retrospective method. We applied this standard retrospectively only to contracts that are not completed at the date of initial application.

We concluded that the main areas of impact relate to the allocation of the transaction price to the various performance obligations under the contracts, the timing of revenue recognition for sales arrangements that contain customer acceptance clauses, and the sale of licenses that provide customers with the "right to use" our intellectual property. The adoption of the new standard had no material impact on our consolidated financial statements.

Foreign currency transactions and advance consideration

IFRIC 22, "Foreign Currency Transactions and Advance Consideration", was issued in December 2016. IFRIC 22 addresses how to determine the date of the transaction for the purpose of determining the exchange rate to use on initial recognition of the related asset, expense or income (or part of it) and on the derecognition of a non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration in a foreign currency. IFRIC 22 is effective for annual periods beginning on or after January 1, 2018. We adopted this interpretation retrospectively on September 1, 2018 and its adoption did not have a material impact on our consolidated financial statements.

New IFRS pronouncements not yet Adopted

#### Leases

IFRS 16, "Leases", was issued in January 2016. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract, i.e., the customer (lessee) and the supplier (lessor). IFRS 16 will supersede IAS 17, "Leases", and related interpretations. Under IFRS 16, lessees will recognize a right-of-use asset and a lease liability measured at the present value of lease payments for virtually all of their leases. Short-term leases with a term of 12 months or less are not required to be recognized. This new standard is effective for annual periods beginning on or after January 1, 2019.

We will adopt this new standard on September 1, 2019, using the modified retrospective method, which does not require adjustments to comparative periods. We will apply IFRS 16 at the adoption date and recognize right-of-use assets and lease liabilities in the period of adoption. The new standard provides a number of optional practical expedients in transition. Upon implementation of the new standard, we intend to elect the practical expedients to combine lease and non-lease components, and to not recognize right-of-use assets and lease liabilities for short-term leases. We are in the process of identifying appropriate changes to our accounting policies, information technology systems, business processes, and related internal controls to support recognition and disclosure requirements under IFRS 16. We expect that the adoption of IFRS 16 will increase our assets and liabilities by approximately \$11 million, as we will recognize a right-of-use asset and a lease liability for all our long-term leases. However, we do not expect the adoption of this standard to have a significant impact on net earnings. The lease expense, previously recorded under cost of sales, selling and administrative expenses and net research and development expenses line items will be recorded as depreciation expenses for the right-of-use asset and as interest expenses on the lease liability in the consolidated statements of earnings. In addition, lease payments for the right-of-use asset, previously reported in cash flow from operating activities, will be reported in cash flow from financing activities in the consolidated statements of cash flows.

#### Uncertainty over income tax treatments

IFRIC 23, "Uncertainty over Income Tax Treatments", was issued in June 2017. IFRIC 23 provides guidance on how to value uncertain income tax positions based on the probability of whether the relevant tax authorities will accept the company's tax treatments. A company is to assume that a taxation authority with the right to examine any amounts reported to it will examine those amounts and will have full knowledge of all relevant information when doing so. IFRIC 23 is effective for annual periods beginning on or after January 1, 2019. We will adopt this interpretation on September 1, 2019, and we do not expect its adoption to have a material impact on our consolidated financial statements.

#### **NON-IFRS MEASURES**

We provide non-IFRS measures (gross margin before depreciation and amortization and adjusted EBITDA) as supplemental information regarding our operational performance. Gross margin before depreciation and amortization represents sales, less cost of sales, excluding depreciation and amortization. Adjusted EBITDA represent net earnings (loss) attributable to the parent interest before interest and other expense, income taxes, depreciation and amortization, stock-based compensation costs, restructuring charges, acquisition-related deferred revenue fair value adjustment, change in fair value of cash contingent consideration, and foreign exchange gain or loss.

These non-IFRS measures eliminate the effect on our IFRS results of non-cash statement of earnings elements, restructuring charges as well as elements subject to significant volatility such as foreign exchange gain or loss. We use these measures for evaluating our historical and prospective financial performance, as well as our performance relative to our competitors. These non-IFRS measures are also used by financial analysts that evaluate and compare our performance against that of our competitors and industry players in our sector.

Finally, these measures help us plan and forecast future periods as well as make operational and strategic decisions. We believe that providing this information to our investors, in addition to the IFRS measures, allows them to see the company's results through the eyes of management, and to better understand our historical and future financial performance. More importantly, it enables the comparison of our performance on a relatively similar basis against that of other public and private companies in our industry worldwide.

The presentation of this additional information is not prepared in accordance with IFRS. Therefore, the information may not necessarily be comparable to that of other companies and should be considered as a supplement to, not a substitute for, the corresponding measures calculated in accordance with IFRS.

The following table summarizes the reconciliation of adjusted EBITDA to IFRS net earnings (loss) attributable to the parent interest, in thousands of US dollars:

	Years ended August 31,					
		2019		2018		2017
IFRS net earnings (loss) attributable to the parent						
interest for the year	\$	(2,480)	\$	(11,902)	\$	851
Add (deduct):						
Depreciation of property, plant and equipment		5,469		5,444		3,902
Amortization of intangible assets		9,012		10,327		3,289
Interest and other expense		718		1,378		303
Income taxes		5,346		5,678		6,608
Stock-based compensation costs		1,831		1,748		1,414
Restructuring charges		3,305		4,409		5,079
Change in fair value of cash contingent consideration		_		(670)		(383)
Acquisition-related deferred revenue fair value						
adjustment		1,435		2,095		_
Foreign exchange (gain) loss		949		(1,309)		978
Adjusted EBITDA for the year <sup>(1)</sup>	\$	25,585	\$	17,198	\$	22,041
Adjusted EBITDA in percentage of total sales		8.9%		6.4%		9.1%

<sup>(1)</sup> Includes acquisition-related costs of \$1.1 million and \$2.2 million in fiscal 2017 and 2018 respectively (nil in fiscal 2019).

# Item 6. Directors, Senior Management and Employees

# A. Directors and Senior Management

The following table sets forth information about our executive officers, senior managers and Directors as of November 1, 2019.

Name and Municipality of Residence	Position with EXFO		
ABDELKRIM BENAMAR Le Raincy, France	Vice President, Service Assurance, Systems and Services		
STEPHEN BULL Quebec City, Quebec	Vice President, Research and Development		
STÉPHANE CHABOT Quebec City, Quebec	Vice President, Test and Measurement		
FRANÇOIS CÔTÉ Montreal, Quebec	Independent Director		
SUZANNE DANEAU Beauharnois, Quebec	Vice President, Human Resources		
ETIENNE GAGNON Quebec, City, Quebec	Vice President, Commercial Transformation		
LUC GAGNON St-Augustin-de-Desmaures, Quebec	Vice President, Manufacturing Operations and Customer Service		
FLOYD ALLEN JOHNSTON Richardson, Texas	Vice President, Sales — Americas		
GERMAIN LAMONDE St-Augustin-de-Desmaures, Quebec	Executive Chairman of the Board		
ANGELA LOGOTHETIS Bath, United Kingdom	Independent Director		
CLAUDIO MAZZUCA LaSalle, Quebec	Vice President, Strategic Partnerships and Alliance		
PHILIPPE MORIN Senneville, Quebec	Chief Executive Officer		
PIERRE PLAMONDON Quebec City, Quebec	Chief Financial Officer and Vice President, Finance		
BENOIT RINGUETTE Boischatel, Quebec	General Counsel and Corporate Secretary		
MICHAEL SCHEPPKE Singapore, Singapore	Vice President, Sales — Asia-Pacific		
CLAUDE SÉGUIN Westmount, Quebec	Independent Director		
WILLEM JAN TE NIET Harfsen, Netherlands	Vice President, Sales — Europe Middle East and Africa		
RANDY E. TORNES Frisco, Texas	Independent Director		

The address of each of our executive officers, senior managers and Directors is c/o EXFO Inc., 400 Godin Avenue, Quebec, Quebec, Canada, G1M 2K2. The following is a brief biography of each of our executive officers, senior managers and Directors.

Abdelkrim Benamar was appointed EXFO's Vice President of Service Assurance, Systems and Services Division in May 2018, following the Astellia acquisition. In this role, Mr. Benamar is responsible for the overall product and services portfolio for monitoring and analytics. He brings over 25 years of experience in the telecom industry with proven leadership, business transformation and change management skills. Before joining EXFO, Mr. Benamar successively held the positions of COO (July 2015) and CEO (June 2016) of Astellia. He previously held several executive roles at Alcatel-Lucent including Vice President EMEA, CEO Alcatel-Lucent International, and Vice President Global Head of Financial Analysis and Risk Assessment. He has also worked for leading telecom companies such as Ericsson Group (2000–2007), Motorola (1996–2000) and Alcatel Mobile Phones, in areas such as R&D, Communications & Public Affairs, and Strategy and Sales. Mr. Benamar holds an engineering degree from Telecom SudParis (formerly known as Institut National des Télécommunications) and a PhD in electrical engineering from Université Paris-Sud.

Stephen Bull joined EXFO in 1995 as an Engineering Manager (project management) for the Advanced Optics group. From September 1997 to December 1999, he held the position of Assistant Director of Engineering responsible for all software development. Mr. Bull was then appointed EXFO's Vice President of Research and Development in December 1999. Today, he manages a department that includes more than 760 engineers and technicians spread across over three continents and nine locations. He is responsible for EXFO's product development initiatives and oversees the Project Management Office and related processes. Prior to joining EXFO, Mr. Bull was General Manager and Managing Director at Space Research Corporation, a military engineering company in Belgium, from June 1986 to March 1990, then at Taurus, an IT consulting firm, from 1990 to 1995. He is currently the President of the Institut de développement de produits (an institute dedicated to the advancement of product development practices) and a member of the Product Development Management Association (PDMA). He speaks regularly at conferences on product development. Mr. Bull holds a bachelor's degree in electrical engineering from Université Laval in Quebec City, and is a PDMA-certified New Product Development Professional.

Stéphane Chabot first joined EXFO as a Product Line Manager in 1998 and was promoted to Product Line Manager – Network Service Provider Market in 2001. As Vice President, Test and Measurement, Mr. Chabot is responsible for the Optical and Access and Platform product lines. Prior to this appointment, he was Director of EXFO's Optical Business Unit, a position he had held since 2006. In this role, Mr. Chabot led the main team developing EXFO's worldwide optical business and strategy, developing and maintaining the product family roadmap and vision, developing and controlling annual marketing, ensuring go-to-market plans, developing new markets, providing key market watch and competitive updates, analyzing product line performance and metrics, providing periodic benchmarking, and developing partnerships/OEMs/acquisitions within the product line family. Mr. Chabot was highly successful as Director of the Optical Business Unit, doubling its annual revenues to more than \$120 million and increasing EXFO's global share of the portable optical solutions market to 38 percent. His leadership has been instrumental in many key applications with global reach, such as fiber-to-the-home. Prior to his employment at EXFO, Mr. Chabot was a telecommunications officer in the Canadian Armed Forces from 1992 to 1998. Mr. Chabot holds a bachelor's degree in space science from the Royal Military College of Canada, and a diploma in business administration from Université Laval in Quebec City.

François Côté was appointed a member of our Board of Directors in January 2015. Mr. Côté is a director as a full-time occupation, for corporations in the public, private and non-profit sectors, bringing his expertise in strategy, M&A, governance and passion for growth. Mr. Côté held a variety of executive positions at Bell Canada prior to becoming President and Chief Executive Officer of Emergis. Following the acquisition of Emergis by TELUS in January 2008, he was appointed President of TELUS Quebec, TELUS Health and TELUS Ventures. In this role, Mr. Côté was responsible for broadening TELUS Quebec's presence and driving the company's national health strategy through timely investments in information technology and innovative wireless solutions. Mr. Côté holds a bachelor's degree in Industrial Relations from Laval University. In 2007, he was named Entrepreneur of the Year by Ernst & Young, in the Corporate Restructuring category for the province of Quebec. Mr. Côté serves on the boards of Purkinje, a Montreal health IT growth company as Chairman, Aspire Food Group, HZB Pharma Canada also as Chairman and Diagnos Inc. a new publicly listed company on the TSX Venture Exchange. Mr. Côté also serves on the Advisor Committee of Groupe Morneau.

Suzanne Daneau joined EXFO in October 2019 as Vice President of Human Resources. In her role, she is responsible to lead the global human resources function, develop and implement the HR strategy in support of the business plan while ensuring the outreach, acquisition, development and retention of talent. With more than 25 years of experience in well-known and well-established organizations in their communities, Suzanne has led several strategic transformation projects and has been involved in numerous acquisitions. Through her business acumen, she supports her senior management colleagues and actively participates in building organizational capacity as well as reinforcing a culture of performance. She is recognized for her expertise in organizational development, talent management and the optimization and efficiency of the human resources function. Suzanne holds a bachelor's degree in industrial relations from the University of Montreal and is currently studying for an EMBA from McGill University. In addition to being a CRHA member, she is also actively involved in Women's Governance and the Parity Certification Committee. Passionate about the importance of children's health, she gives her time with the Governors of Hope Foundation, a foundation that supports research on childhood and helps families through major hardships.

Étienne Gagnon was appointed Vice President, Commercial Transformation in February 2019. Mr. Gagnon is a noted international business and B2B marketing professional. Over the past 25 years, he has held leadership roles in sales team management, marketing strategy implementation and innovation management in high-growth, international tech companies. From 2017 to 2019, he headed up global commercial efforts as Senior Global Vice President of Sales and Marketing at Eddyfi Technologies, a fast-growing company in the field non-destructive testing inspection technology. From 2015 to 2017, he served as Vice President and then President of Optel Vision, positioning the company as the undisputed leader in the field of pharmaceutical product serialization. Under his leadership, the international sales team generated growth and market share in pharmaceutical packaging rapid inspection and serialization. From 2003 to 2015, he worked at EXFO. As part of his responsibilities as Vice President of Test and Measurement and Corporate Marketing, he was responsible for EXFO's wireline and wireless test and measurement business units (Optical, Transport and Datacom, Access, Simulators and Analyzers) and Corporate Marketing for the company. Mr. Gagnon previously held sales and innovation roles at TeraXion, EXFO and Bombardier Aerospace. He holds a bachelor's degree in mechanical engineering from Polytechnique Montréal and a master's degree in European affairs from Télécom Bretagne.

Luc Gagnon was appointed Vice President, Manufacturing Operations in May 2003 and, in May 2007, he also took on the role of Vice President of Global Services. He oversees the smooth operation of all manufacturing activities including purchasing, product engineering, quality assurance, planning, manufacturing engineering, product configuration, transportation and customs, and material resources. In addition, Mr. Gagnon must ensure that there is an ongoing and efficient relationship between the manufacturing process and the end customer. He also held the position of Production Director from 2000 to 2003. Before joining EXFO, Mr. Gagnon held similar roles in several other high-technology companies. He worked for Mendes from 1999 to 2000, for C-MAC from 1997 to 1999, for STERIS from 1993 to 1997 and for Mitel from 1985 to 1993. Mr. Gagnon holds a bachelor's degree in electrical engineering and master's degree in engineering, both from the Université de Sherbrooke.

Floyd Allen Johnston was appointed as Vice President, Sales – Americas in September 2019. Mr. Johnston has 27 years' experience in the telecommunications industry and extensive expertise in both wireline and wireless technology. Before joining EXFO, he served as vice president of the North America and Americas divisions for Mavenir. He previously held leadership roles at Oracle, Acme Packet and Tekelec. Mr. Johnston has an MBA in telecommunications from University of Dallas, and a master's degree in mediation and conflict resolution from Southern Methodist University (SMU) in Dallas, Texas.

Germain Lamonde, founder of EXFO, is Executive Chairman of the Board and served as the company's Chief Executive Officer (CEO) for over 30 years. During his tenure as CEO, Mr. Lamonde grew the company from the ground up, turning it into a global leader in the communications test, monitoring and analytics market and the world's #1 fiber/highspeed testing company, with customers in over one hundred countries. Today as Executive Chairman, Mr. Lamonde leads EXFO's acquisitions strategy and is actively involved in defining the company's growth and investment strategies, strategic direction and corporate governance policies. Mr. Lamonde has served on the board of directors of several public and private organizations, fulfilled numerous speaking engagements, and received several industry awards for his leadership, innovation and global development. Mr. Lamonde presently serves on the Board of QG100 and was recently appointed Chairman of the Quebec Digital Transformation Council and Chairman of ENCQOR the Canada—Quebec-Ontario partnership focused on research and innovation in the field of 5G/IoT innovation. Mr. Lamonde holds a bachelor's degree in engineering physics from Université de Montréal's school of engineering (Polytechnique Montréal) and a master's degree in optics from Université Laval in Québec City. He is a graduate of the Ivey Executive Program at Western University in London, Ontario, and a Fellow of the Canadian Academy of Engineering.

Angela Logothetis has more than twenty-five (25) years of international experience in the telecommunications industry. She has been strategically engaged in the industry's major network transformations. Ms. Logothetis has an outstanding software pedigree having worked for market-leading software companies including Amdocs, Cramer, PricewaterhouseCoopers and Accenture as well as start-up software companies Clarity and Time Quantum Technology. She has held senior leadership positions in ANZ, APAC and EMEA and has held global responsibility for the past ten (10) years. Ms. Logothetis is the CTO for Amdocs Open Network. Amdocs is the market leader in customer experience software solutions and services for the world's largest communications, entertainment and media service providers. Ms. Logothetis has held several senior leadership positions at Amdocs including Head of OSS Product and Technology, Vice President of OSS Product Management and Executive Site Lead for Amdocs Bath. She has chaired high-caliber software forums in Amdocs including the Divisional Leadership Team, the Technical Advisory Council, and has served as an executive on the Product Business Management Team and the Product Leadership Forum. Ms. Logothetis holds a Bachelor of Science degree, with first class honors, in Business Information Technology from the University of New South Wales, Australia. She completed dual majors in accountancy and information technology.

Claudio Mazzuca was appointed Vice President, Strategic Partners in May 2018. Prior to this appointment, he had served as Vice President, Systems and Analytics since 2012 and director of EXFO's Transport and Datacom Business Unit since 2006. In this role, he was responsible for the development and execution of business and product strategy for the unit, which now is a leading player in the Ethernet and next-generation packet transport test market segments. Mr. Mazzuca began his career as a systems engineer for Nortel Networks, where he worked on the launch of the highly successful 10G High-Speed Transport and DWDM product line, and later on Nortel's Preside Network Management solution. He then moved to technology startup Hyperchip Systems as Senior Product Manager, focusing on the development of large-scale metro and core IP routers and switches, and associated OEM components. In 2004, Mr. Mazzuca joined EXFO's Transport and Datacom Business Unit as Product Line Manager for the next-generation SONET/SDH products, and in 2005, was promoted to Group Manager for the entire Transport and Datacom product line. Mr. Mazzuca holds a bachelor's degree in electrical engineering from Montreal's Concordia University and a master's degree in business from McGill University, also in Montreal.

Philippe Morin was appointed Chief Executive Officer (CEO) of EXFO in April 2017 and is responsible for the company's strategy and financial directions, goals and results. He has more than thirty (30) years of experience in the telecommunications industry and joined EXFO in November 2015 as Chief Operating Officer (COO) leading the company's global sales leadership, market development, and product strategy. Before joining EXFO, Mr. Morin was Senior Vice President of Worldwide Sales and Field Operations at Ciena. He previously held senior leadership roles at Nortel Networks, including President of Metro Ethernet Networks and Vice President and General Manager of Optical Networks. Philippe Morin holds a bachelor's degree in electrical engineering from Université Laval in Quebec City, Canada, and a master's degree in business (MBA) from McGill University in Montreal, Canada.

Pierre Plamondon was appointed Chief Financial Officer and Vice President, Finance of EXFO in January 1996. He is responsible for accounting, legal and IT services, as well as financial reporting and investor relations. Prior to joining EXFO, Mr. Plamondon served as Senior Manager for Price Waterhouse, now PricewaterhouseCoopers LLP, from September 1981 to December 1995, in Canada and France. Mr. Plamondon is a member of the Order of Chartered Professional Accountants of Quebec. Over the years, he has served on the boards of several organizations, including Urbanimmersive, a public company listed on the TSX Venture Exchange, as well as non-profits, such as the Fondation de l'Université Laval and SOVAR Inc. (Société de valorisation des applications de la recherche de l'Université Laval). Mr. Plamondon holds a bachelor's degree in business administration and a license in accounting, both from Université Laval in Quebec City.

Benoit Ringuette has been our in-house General Counsel and Corporate Secretary since April 2004. Prior to joining EXFO, Mr. Ringuette practiced mainly in commercial, corporate and securities law from 1998 to 2003 as an associate in the law firms of O'Brien, Flynn Rivard in Quebec City and Desjardins Ducharme Stein Monast in Quebec City. Mr. Ringuette has been a member of the Quebec Bar since 1998. Mr. Ringuette holds a bachelor's degree in Civil Law and a master's degree in Business Administration (MBA) from Laval University in Quebec City, Canada.

Michael Scheppke was appointed EXFO's Vice President, Sales – APAC in October 2016. He is responsible for managing telecom sales, both direct and indirect, and executing sales strategies across the Asia-Pacific (APAC) region. Mr. Scheppke developed his expertise working in the industry in both the USA and Asia. Following several years at HP and Agilent, he spent a significant part of his career at Ixia, where he held various senior roles. He has developed and executed the go-to-market strategy for their network monitoring business in APAC by successfully leading diverse sales teams and expanding sales coverage with channel partners. Mr. Scheppke holds a bachelor of science degree in electrical engineering from the University of Florida.

Claude Séguin was appointed a member of EXFO's Board of Directors in February 2013. He brings to EXFO nearly forty (40) years of corporate, financial, executive and provincial government experience gained through senior management positions in major corporations and government departments. Mr. Séguin was Special advisor to the Founder and Executive Chairman at CGI Group Inc., a global leader in information technology and business process services, until March 2018. He was, until November 2016, Senior Vice President, Corporate Development and Strategic Investments. In this position, he was responsible for all merger and acquisition activities. Prior to joining CGI in 2003, he served as President of CDP Capital—Private Equity, and prior to this position, he served as Teleglobe Inc.'s Executive Vice President, Finance and Chief Financial Officer, a position that he held from 1992 to 2000. Mr. Séguin also has extensive senior-level government experience, having served as Deputy Finance Minister of the Province of Quebec from 1987 to 1992, in addition to Assistant Deputy Finance Minister in prior years. Prior to that, he held senior positions at the Province of Quebec Treasury Board. Mr. Séguin is a member of the board of HEC-Montréal. He also chairs the Boards of Centraide of Greater Montreal Foundation and of Fonds de solidarité FTQ, a \$15B Labour Sponsored Investment Fund in Québec. Claude Séguin graduated from HEC-Montréal and earned a master's and a Ph.D. in public administration from Syracuse University in New York State. He also followed the Advanced Management Program at Harvard Business School.

Willem Jan te Niet was appointed Vice President, Sales – EMEA in August 2016. He is responsible for managing telecom sales, both direct and indirect, and executing sales strategies across Europe, the Middle East and Africa. Prior to joining EXFO, Mr. te Niet was on the senior management teams for global leaders such as Citrix Systems, Equinix, Ericsson-LG and Nortel. He brings considerable expertise in the areas of cloud, networking and big data mobile analytics. Mr. te Niet also has more than 20 years of experience in managing sales teams and implementing successful business development strategies with wireline and mobile operators. Mr. te Niet holds a master's degree in business administration from the University of Groningen.

Randy E. Tornes was appointed a member of EXFO's Board of Directors in February 2013. He brings to EXFO over thirty (30) years of telecommunications experience gained through senior management positions at leading network equipment manufacturers. Mr. Tornes is Vice President, Client Partner for AT&T at Aricent, An Altran Company. Prior to joining Aricent, Mr. Tornes was Vice President Strategic Alliances at Juniper Networks, a worldwide leader in high-performance networking and telecommunications equipment. Mr. Tornes has also worked as the Operating Area Leader for AT&T and responsible for all sales, service and support of Juniper products and services. Prior to joining Juniper Networks in May 2012, he spent two (2) years at Ericsson, where he was Vice President Sales (AT&T account). Previous to that position, he worked for Nortel for twenty-six (26) years, holding various sales management positions, including Vice President Sales, GSM Americas. Mr. Tornes also served as member of the Board of Governors at 3G Americas LLC. Randy E. Tornes holds a Bachelor of Science degree in business—organizational development and production and operations management, from the University of Colorado in Colorado Springs.

# Term of Executive Officers

Executive officers are appointed annually by the Board of Directors and serve until their successors are appointed and qualified or until earlier resignation or removal. There are no family relations among directors and officers and no arrangements with third parties (customers, suppliers) pursuant to which they were appointed as officers or directors.

## B. Compensation

# **COMPENSATION OF DIRECTORS AND EXECUTIVE OFFICERS**

# **Compensation Discussion and Analysis**

This Compensation Discussion and Analysis focuses primarily on: (i) significant elements of the Corporation's executive compensation program; (ii) principles on which the Corporation makes compensation decisions and determines the amount of each element of executive and director compensation; and (iii) an analysis of the material compensation decisions made by the Human Resources Committee for the financial year ended August 31, 2019.

The following is a discussion of the compensation arrangements with the Corporation's Executive Chairman, Chief Executive Officer ("CEO"), Chief Financial Officer ("CFO") and each of the two most highly compensated executive officers of the Corporation and its subsidiaries whose total compensation was, individually, more than CA\$150,000 (collectively with the Executive Chairman, CEO and CFO, the "Named Executive Officers" or "NEOs"). The NEOs for the financial year ended August 31, 2019 were Mr. Germain Lamonde (Executive Chairman), Mr. Philippe Morin (CEO), Mr. Pierre Plamondon (CFO and Vice President, Finance), Mr. Willem Jan te Niet (Vice President, Sales — EMEA) and Mr. Dana Yearian (Vice President, Sales — Americas).

# Members of the Human Resources Committee

During the financial year ended August 31, 2019, the Human Resources Committee was composed of:

- Mr. François Côté (Chairman)
- Ms. Angela Logothetis
- Mr. Claude Séguin
- Mr. Randy E. Tornes

None of these members were officers or employees, or former officers or employees of the Corporation or its subsidiaries. All of the members of the Human Resources Committee are considered "independent", as defined in applicable securities legislation and regulations. They each have experience in executive compensation either as a chief executive officer or a senior executive officer of a publicly traded corporation. Mr. François Côté held a variety of executive positions, including president and chief executive officer, for approximately twenty (20) years. Mr. Côté also holds a Bachelor's degree in Industrial Relations. Ms. Angela Logothetis holds a Bachelor of Science degree, with first class honors, in Business Information Technology. She completed dual majors in accountancy and information technology. She has more than twenty-five (25) years of international experience in the telecommunications industry. Mr. Claude Séguin has held various senior management and executive positions in major corporations in the last forty (40) years. Mr. Randy E. Tornes has approximately thirty (30) years of management experience through senior sales management positions. Over the course of their careers, all members have been exposed at various degrees to the complexity of balancing efficient executive compensation strategies with the evolution of business requirements, having to manage directly or indirectly impacts and consequences of executive compensation decisions. The Board of Directors believes that the Human Resources Committee collectively has the knowledge, experience and background required to fulfill its mandate.

# Mandate of the Human Resources Committee

The Human Resources Committee of the Board of Directors is responsible for establishing the annual compensation and assessing the risks related thereto and overseeing the assessment of the performance of all the Corporation's executive officers, including the Executive Chairman and CEO. The Human Resources Committee also reviews and submits to the Board of Directors recommendations for the salary structure and the short-term and long-term incentive compensation programs for all employees of the Corporation. The Human Resources Committee also evaluates and makes recommendations to the Board of Directors regarding the compensation of directors, including the number of Deferred Share Units ("DSUs") credited to the non-employee directors pursuant to the Deferred Share Unit Plan. The Human Resources Committee's goal is to develop and monitor executive compensation programs that are consistent with strategic business objectives and shareholders' interests. Though the Human Resources Committee is responsible for the review of employees' performance and approval of the identity of the employees that will receive Performance Share Units ("PSUs"), Restricted Share Units ("RSUs") or options to purchase shares of the Corporation, in accordance with policies established by the Board of Directors and the terms of the Long-Term Incentive Plan, these functions may be shared between the Board of Directors and the Human Resources Committee. During the period from September 1, 2018 to August 31, 2019, these functions have been shared by the Board of Directors and the Human Resources Committee but have mainly been performed by the Human Resources Committee.

The Human Resources Committee has reviewed and discussed with the Executive Chairman, the CEO and the Vice President, Human Resources of the Corporation, the compensation disclosure in this document, and has recommended to the Board of Directors that the disclosure be included in this Annual Report.

From September 1, 2018 to November 1, 2019, the Human Resources Committee held five (5) meetings and at all of those meetings executive compensation was discussed. The Human Resources Committee meetings were attended by all the members of the Human Resources Committee, except Mr. Seguin who was absent at one (1) meeting. The following table outlines the main activities of the Human Resources Committee during the period from September 1, 2018 to November 1, 2019:

Meeting	Main Activities of the Human Resources Committee
October 11, 2018	Review of the Business Performance Measures results for the financial year ended August 31, 2018;
	Review of the Business Performance Measures for the financial year started September 1, 2018;
	Review of the Short-Term Incentive Plan results for the financial year ended August 31, 2018;
	Update on the Short-Term Incentive Plan for the financial year started September 1, 2018;
	Review of the proposed salary scales and salary increases for the year started September 1, 2018;
	Review of the compensation plans of executive officers for the financial year started September 1, 2018 being the Base Salary, the Short-Term Incentive Plan and the stock-based compensation delivered through the Long-Term Incentive Plan;
	Review and approval of the executive compensation section of the Management proxy circular for the financial year ended August 31, 2018;
	Review and approval of the CEO and Executive Chairman objectives and compensation plan;
	Human Resources Key Accomplishments;
	Annual Sales Force Achievement;
	Annual Review of the Human Resources Committee Charter;
	Review and approval of the stock-based compensation for executive officers delivered through the Long-Term Incentive Plan for the financial year started September 1, 2018.
January 9, 2019	Review of the Short-Term Incentive Plan results of some executive officers for the financial year ended August 31, 2018;
	• Review and approval of the Short-Term Incentive Plan of some executive officers for the financial year started September 1, 2018, including the CEO and Executive Chairman;
	Review of the quarterly results under the Short-Term Incentive Plan for the financial year started September 1, 2018 and being part of the Short-Term Incentive Plan;
	Review and approval of the stock-based compensation for performing employees delivered through the Long-Term Incentive Plan for the financial year started September 1, 2018;
	Leadership program and Talent Management;
	Review of the Risk Assessment of Executive Compensation.
April 10, 2019	Review of the quarterly results under the Short-Term Incentive Plan for the financial year started September 1, 2018 and being part of the Short-Term Incentive Plan;
	Succession Planning;
	Review of the Key Human Resources Initiatives;
	Compensation Review;
	Review of the stock-based compensation for performing and critical employees;
	Review of the Talent Management and Leadership program.
July 10, 2019	Review of the quarterly results under the Short-Term Incentive Plan for the financial year started September 1, 2018 and being part of the Short-Term Incentive Plan;
	Global Employment Status;
	Review and approval of the compensation package of recently hired executive officer;
	Review of the Talent Management and Leadership program;
	Review of the Key Human Resources Initiatives.

Meeting	Main Activities of the Human Resources Committee				
October 9, 2019	Review of the Business Performance Measures results for the financial year ended August 31, 2019;				
	Review of the Business Performance Measures for the financial year started September 1, 2019;				
	Review of the Short-Term Incentive Plan results for the financial year ended August 31, 2019;				
	Review of the Short-Term Incentive Plan for the financial year started September 1, 2019;				
	Review of the proposed salary scales and salary increases for the year started September 1, 2019;				
	<ul> <li>Review of the compensation plans of executive officers for the financial year started September 1, 2019 being the Base Salary, the Short-Term Incentive Plan and the stock-based compensation delivered through the Long-Term Incentive Plan;</li> </ul>				
	Review and approval of the executive compensation section of the Management proxy circular for the financial year ended August 31, 2019;				
	Review and approval of the CEO and Executive Chairman objectives and compensation plan;				
	<ul> <li>Review and approval of the stock-based compensation for senior management and officers delivered through the Long-Term Incentive Plan for the financial year started September 1, 2019;</li> </ul>				
	Annual Sales Force Achievement;				
	Annual Review of the Human Resources Committee Charter;				
	Review of the Directors' Compensation;				
	Review of the Key Human Resources Initiatives;				
	Review of the Risk Assessment of Executive Compensation.				

#### Compensation Plan Control – Compensation Consultant and Internal Review

As a general practice, the Corporation's relative position in terms of compensation levels is determined periodically through studies performed by independent consulting firms using a selected reference market of comparable companies. The benchmarking activities are further detailed below under the heading – "Benchmarking".

For the financial year ended on August 31, 2019, the Human Resources Committee retained the services of Willis Towers Watson to have access to benefits and compensation data and surveys relating to executive compensation.

For the financial year ended on August 31, 2018, the Human Resources Committee retained the services of Willis Towers Watson to evaluate the establishment of a performance share plan and Lee Hecht Harrison Knightsbridge in connection with outplacement services for an executive.

In addition, internal pay equity studies are a key factor used by the Corporation to complete the compensation review process and indicate where necessary adjustments may be required. During the financial year ended August 31, 2019, this practice continued, and certain compensation adjustments were made as have been made in previous years.

The Human Resources Committee has the authority to retain any independent consultants of its choice to advise its members on total executive compensation policy matters, and to determine the fees and the terms and conditions of the engagement of these consultants. The Human Resources Committee is ultimately responsible for its own decisions, which may take into consideration more than the information and recommendations provided by its compensation consultants or Management.

For the financial years that ended on August 31, 2018 and 2019, the Corporation also retained the services of, Aon, D-Teck Solutions, Eckler, Great Place to Work, Optonique and Willis Towers Watson for services which were not related to executive compensation. The services provided by Aon related to the access to compensation data and surveys for employees in various countries. The services provided by D-Teck Solutions related to psychometric testing. The services provided by Eckler related to pension plan analysis, retirement policy, governance and communication to employees. The Corporation retained the services of Great Place to Work for culture audit services. The services provided by Optonique related to the access to compensation data and surveys. The services provided by Willis Towers Watson concerned the access to benefits and compensation data and surveys for employees in Canada, United States and United Kingdom. Fees for the services performed that are not related to executive compensation are not required to be approved by the Human Resources Committee.

The aggregate fees paid to Aon, D-TECK Solutions, Eckler, Great Place to Work, Lee Hecht Harrison Knightsbridge, Optonique and Willis Towers Watson for consulting services provided to the Human Resources Committee related to determining compensation for any of the Corporation's directors and executive officers and to the Corporation for all other services provided during the financial years ended August 31, 2018 and 2019 were as follows:

Type of Fee	Financial 2018 Fees	Percentage of Financial 2018 Fees	Financial 2019 Fees	Percentage of Financial 2019 Fees
Executive Compensation – Related Fees	CA\$5,736	7%	CA\$807	2%
All Other Fees	CA\$76,774	93%	CA\$39,793	98%
Total	CA\$82,510	100%	CA\$40,600	100%

## **Benchmarking**

In 2016, the Corporation engaged Willis Towers Watson to perform an executive total compensation review (hereinafter in this Annual Report referred to as the "Target Compensation Positioning"). The compensation elements covered by the analysis were: base salary; target bonus; long-term incentive; perquisites and pension (hereinafter in this Annual Report referred to as the "Target Total Compensation"). Willis Towers Watson's work included assistance in benchmarking, assessing potential gaps between the market and the executives' compensation levels and proposing potential changes to ensure alignment with the market and with the Corporation's compensation policy. In 2016, eleven (11) executive positions were covered by the executive total compensation review, eight (8) located in Canada and three (3) outside of Canada.

For the purpose of assessing the competitiveness of the Target Total Compensation of senior executives, the Corporation considered compensation data from a comparator group including private and publicly traded companies of comparable size and similar industry, operations in multiple countries and attracting similar profiles of employees, professionals and experts. The comparator group has been revised in 2016 with the guidance and advice from Willis Towers Watson.

- Canada executives: For the executives based in Canada, the Corporation used the following comparator group: 5N Plus Inc., ACCEO Solutions, AgJunction Inc, Atos IT Services and Solutions, Inc., Avigilon Corporation, Callian Technologies Ltd., Ciena, COM DEV International Ltd., Constellation Software inc., Evertz Technologies Ltd., GTECH, Open Text Corporation, Redline Communications Group Inc., Sandvine Corporation, Sierra Wireless Inc., Smart Technologies Inc., Vecima Networks Inc., Vidéotron Ltée and Wi-Lan Inc.
- United States executives: For the executives based in the United States, the Corporation used
  the following comparator group: AMETEK, Avangate, BMC Software, CDK Global, Communications
  Systems, Crown Castle, Intelsat, Itron, Keysight Technologies, Laird Technologies, MTS Systems, Plexus,
  SAS Institute, SunGard Data Systems, Teradata, TomTom, Total System Services, Truphone
  and Verint Systems.
- United Kingdom executives: For the executives based in the United Kingdom, the Corporation used the following comparator group: BAE Systems Applied Intelligence, COLT Telecom, Flextronics, Fujitsu, Irdeto, McCain Foods, PepsiCo, Premier Food Group, QinetiQ, Qualcomm, Rentokil Initial, Talk Talk Group and Viacom.

Asia executives: For the executives based in Asia, the Corporation used a broader comparator group, based on general industry data: A.Menarini Asia-Pacific, Abbott Laboratories, AbbVie, Accenture, ACE Asia Pacific Services, ACE Insurance, ACE Life Insurance Company Ltd, ACR Capital Holdings, AIA Company, Aimia, Alcatel-Lucent, Amazon.com, ANZ Banking Group, ASML, AstraZeneca, Avanade, Aviva Ltd, AXA Insurance Singapore, AXA Life Insurance Singapore, Bank of New York Mellon, Baxter, Beckman Coulter, Becton Dickinson, BHP Billiton, Bio-Rad Laboratories, Biosensors, BT Global Services, Cerebos Pacific Limited, Chubb Pacific Underwriting, Cigna, CommScope, DHL, DHL Express, DHL GBS, DHL Global Forwarding, DHL Mail, DHL Supply Chain, Discovery Communications, Experian, Federal Insurance Company, Fujitsu, GE Energy, GE Healthcare, General Electric, Great Eastern Life Insurance, Hap Seng Consolidated, HSBC Holdings, IHS Global, IMI, Ingenico, Intel, Intercontinental Hotels Group, International Flavors & Fragrances, ITT Corporation, Johnson & Johnson, Lexmark, Liberty Insurance, M1 Limited, Manulife, MasterCard, Merck KgaA, Microsoft, Molex, MSD International GMBH (Singapore Branch), National Australia Bank, NBC Universal, NCR, Overseas Assurance Corporation, Pfizer, Pramerica Financial Asia HQ, Proximus, Prudential Assurance Company, Prudential Services, QBE Insurance, Qualcomm, Reinsurance Group of America, RELX Group, Rio Tinto, Roche Pharmaceuticals, Sabre Holdings, Sealed Air, Smiths Group, Spirax Sarco, Standard Chartered Bank, StarHub, Starwood Hotels & Resorts, Straits Developments, Swiss Reinsurance International, Teva Pharmaceutical Industries, Thermo Fisher Scientific, Trayport, TUI, UBS, Unilever, United Overseas Bank, Verizon, Zurich Insurance Company and Zurich Life Insurance.

To be considered in the comparator group, a company had to meet the following specific criteria:

- a) Similar industry: Technology Hardware and Equipment, Telecommunications Equipment and Services or Software and Services; and
- b) Comparable in size: revenues under CA\$1 billion. Only one publicly traded company had revenues above the equivalent of CA\$1 billion. The compensation market comparison is done using the regression analysis which is a method to predict the "size-adjusted" competitive level of compensation to reflect the size of the Corporation in relation to that of the other companies of the reference group. This method mitigates the impact that larger companies may have on the competitive compensation levels for the Corporation.

The Corporation also participates in two (2) major surveys on an annual basis and accordingly is permitted to purchase the results in order to continue the benchmarking of our compensation on a regular basis. The first one is Willis Towers Watson High Tech Middle Management, Professional and Support Compensation Survey, providing and receiving data for Canada, USA, UK, Finland and Lebanon. The other one is Radford (Aon) Global Sales Survey, providing and receiving data for all the countries where the Corporation employs sales force.

Guiding Principles for Compensation of Executive Officers

The Corporation's executive compensation plans are designed to attract, retain and motivate key executives who directly impact the Corporation's long-term success and the creation of shareholder value. In determining executive compensation, the Human Resources Committee considers the following four (4) principles:

- **Performance-based**: Executive compensation levels reflect both the results of the Corporation and individual results based on specific quantitative and qualitative objectives established at the beginning of each financial year in keeping with the Corporation's long-term strategic objectives.
- Aligned with shareholder interests: An important portion of incentive compensation for executives is composed of equity awards to ensure that executives are aligned with the principles of sustained long-term shareholder value growth.
- Market competitive: Compensation of executives is designed to be externally competitive
  when compared against executives of comparable peer companies, and in consideration
  of the Corporation's results.

• **Individually equitable**: Compensation levels are also designed to reflect individual factors such as scope of responsibility, experience, and performance against individual measures.

# Compensation Policies and Practices

In April 2007, the Corporation adopted a Best Practice Regarding the Granting Date of Stock Incentive Compensation. The purpose of this best practice is to ensure that the Corporation complies with securities regulation and avoids the backdating of equity-based incentive compensation. The best practice states that the Corporation shall: (i) grant recurrent equity-based incentive compensation pursuant to its Long-Term Incentive Plan on the fifth business day following the public release of the Corporation's financial results; and (ii) grant recurrent stock-based incentive compensation pursuant to its Deferred Share Unit Plan on the last business day of each quarter. In October 2014, the Corporation amended the Human Resources Committee Charter to adapt it to the latest NASDAQ Rules on independency of directors, nomination and compensation committees and to better describe the nomination process of directors and in October 2017 the Corporation amended the Human Resources Committee Charter in order to specifically add the compensation review of the Executive Chairman.

#### Risk-Assessment of Executive Compensation Program

The Human Resources Committee Charter provides that it is the responsibility of the Human Resources Committee to conduct an annual assessment of the risks associated with the Corporation's executive compensation policies and procedures. The Human Resources Committee considers the implications of the risks associated with the Corporation's compensation policies and practices when establishing recommendations for the compensation of executive officers. As such, for the financial year ended August 31, 2019, the Human Resources Committee conducted an internal risk assessment for executive compensation. The Human Resources Committee individually examined the compensation plans for each potential NEO against a list of elements that could trigger executives taking inappropriate or excessive risks. For the financial year ended August 31, 2019, the Human Resources Committee did not identify any risks associated with the Corporation's executive compensation policies and practices that are reasonably likely to have a material adverse effect on the Corporation.

#### Purchase of Hedging Financial Instruments by an Executive Officer or Director

While the Corporation has not adopted a policy prohibiting or restricting its executive officers and directors from purchasing financial instruments, including prepaid variable forward contracts, equity swaps, collars, or units of exchange funds, that are designated to hedge or offset a decrease in market value of equity securities granted as compensation or held, directly or indirectly, by the executive officer or director, to Management's knowledge, no executive officer or director has purchased any such financial instruments as of November 1, 2019. In addition, according to the Security Trading Policy of the Corporation, executive officers and directors are required to pre-clear with the Corporation's legal counsel's office any transaction concerning the Corporation's securities, which includes the entering into any of the above-mentioned financial instruments.

# **Compensation Elements**

The key elements of the Corporation's 2019 executive compensation program were (i) base salary, (ii) short-term incentive compensation (by way of the Short-Term Incentive Plan or the Sales Incentive Plan) and (iii) the stock-based incentive compensation delivered through the Long-Term Incentive Plan. In addition, the Corporation has also offered benefit plans and, if applicable, contributed to a Deferred Profit-Sharing Plan or a 401K Plan. To determine appropriate compensation levels for each compensation component, the Human Resources Committee considered all key elements of the executive compensation program. The Human Resources Committee did not assign specific weightings to any key element of the Corporation's 2019 executive compensation program.

#### Base Salaries

In establishing the base salaries of senior officers, including the Executive Chairman of the board of directors and the CEO, the Corporation takes into consideration responsibilities, job descriptions and salaries paid by other similar organizations for positions similar in magnitude, scope and complexity. The Human Resources Committee's objective is to align executive compensation levels with the Target Compensation Positioning offered within a reference market of comparable companies that are similar in size to the Corporation, with a particular focus on those within the high-technology/telecommunications and manufacturing-durable goods industries. The Human Resources Committee reviews the base salary of each executive officer on an annual basis at the beginning of each financial year and recommends that the Board of Directors approve appropriate adjustments, if required, within the salary range in order to maintain a competitive position within the marketplace.

# Short-Term Incentive Compensation

The Short-Term Incentive Plan ("STIP"), or the Sales Incentive Plan ("SIP") for the executive officers that are included within the sales force, provides executive officers with the opportunity to earn annual bonuses based on the Corporation's financial performance and the achievement of strategic corporate and departmental objectives established on a yearly basis (the "Business Performance Measures") as well as the achievement of individual performance objectives ("Individual Performance Measures"). The Business Performance Measures under the STIP also apply to all other employees of the Corporation, except the sales force, for which the SIP applies. The Individual Performance Measures only apply to executive officers and directors' levels of the Corporation.

Annually the Human Resources Committee determines the annual incentive target for each executive officer, being a percentage of the executive's base salary ("Annual Incentive Target"). The Annual Incentive Targets for executive officers eligible for incentive bonuses in the financial year ended August 31, 2019 were established to be progressively in line with the objective of the Human Resources Committee of aligning compensation with the Target Compensation Positioning offered in the reference market. For the most recently ended financial year, the Annual Incentive Target for the NEOs was:

Name & Position	Annual Incentive Target as % of Base Salary
Germain Lamonde, Executive Chairman	65.0%
Philippe Morin, CEO	52.5%
Pierre Plamondon, CFO and Vice President, Finance	45.0%
Willem Jan te Niet, Vice President, Sales — EMEA	73.0%
Dana Yearian, Vice President, Sales — Americas	90.0%

# **Short-Term Incentive Plan**

The STIP awards (for executive officers not in sales force) are calculated as follows:

Dasa Calami V	Annual Incentive	V	<b>Business Performance</b>	V	Individual Performance	
Base Salary	^	Target (%)	^	Measures (%)	^	Measures (%)

At the beginning of each financial year, the Human Resources Committee recommends for approval by the Board of Directors the Business Performance Measures that will account for the annual incentive compensation. The following table provides the Business Performance Measures, their weight and result within the overall Business Performance Measures applicable to all executive officers and employees of the Corporation except those executives and employees that are within the sale force:

Business Performance Measures (1)	Weight	Result in % of the Weight	Result of the Metrics
Consolidated revenues (2)	30%	20.56%	US\$286.9 million
Profitability (3)	45%	28.75%	US\$25.6 million
Quality (4)	18%	22.50%	115.0%
Net Promoter Score (5)	7%	7.59%	73.00
Total	100%	79.40%	

- (1) The corporate Profitability result for the year must be positive (above 0) for the whole Business Performance Measure to trigger a payout. The corporate Profitability represents net earnings before interest, income taxes, depreciation and amortization, restructuring charges, stock-based compensation costs, foreign exchange gain and certain one-time items.
- (2) For consolidated revenues metric, results will range from 40% to 100% of the weight upon attainment of a minimum threshold (US\$275.0 million) up to the target defined at the beginning of the financial year (US\$286.9 million) and from 100% to 125% of the weight from such annual target to the maximum threshold (US\$310.0 million).
- (3) For Profitability metric, results will range from 40% to 100% of the weight upon attainment of a minimum threshold (US\$22.0 million) up to the target defined at the beginning of the financial year (US\$31.0 million) and from 100% to 125% of the weight from such annual target to the maximum threshold (US\$35.5 million).
- (4) For quality, results will range from 25% to 100% of the weight upon attainment of a minimum threshold of 50% up to the annual target defined at the beginning of the financial year (100%) and from 100% to 125% of the weight from such annual target to the maximum threshold of 115%.
- (5) For Net Promoter Score metrics, results will range from 25% to 100% of the weight upon attainment of a minimum threshold of 62 up to the annual target defined at the beginning of the financial year (72) and from 100% to 125% of the weight from such annual target to the maximum threshold of 75.

The Individual Performance Measures are determined annually by the executive's supervisor or the Human Resources Committee and approved by the Board of Directors of the Corporation. They are based upon the position, role and responsibilities of each executive within the Corporation, departmental objectives and personal management objectives. At the conclusion of each year, the executive's supervisor or the Human Resources Committee evaluates the performance of the executive against the pre-determined objectives and the executive's performance is evaluated by progress, achievements and contributions. The following tables provide for each NEO subject to the STIP an overview of the elements included within the Individual Performance Measures, their weight and result for financial year 2019 within the overall Individual Performance Measures:

Germain Lamonde, Executive Chairman					
Elements of Individual Performance Measures (1)	Weight (from 0% to 120%) (2)	Result (%)			
Financial objectives					
Corporate EBITDA	From 0% to 30%	19.76%			
Corporate revenues	From 0% to 30%	26.32%			
Strategic contribution					
Positioning and transforming the Corporation's divisions as set forth in the Corporation's strategic plan, Maximizing the value from the Corporation's Mergers & Acquisitions activities	From 0% to 30%	19.88%			
Corporate Development & Governance	From 0% to 30%	25.65%			
Total		91.61%			
Total of Business Performance Measures (79.40%) X Individual Performance Measures (91.61%)		72.74%			

<sup>(1)</sup> If the minimum level of the Corporate EBITDA, as determined at the beginning of the financial year, is not achieved, payment of any variable compensation to the Executive Chairman will be at the discretion of the Human Resources Committee.

<sup>(2)</sup> The weight of each individual objective is not capped but the total is capped at 150%.

Philippe Morin, CEO					
Elements of Individual Performance Measures (1)	Weight (from 0% to 120%) (2)	Result (%)			
Financial objectives					
Corporate EBITDA	From 0% to 30%	19.76%			
Corporate revenues	From 0% to 20%	14.76%			
Corporate cash flow from operations (3)	From 0% to 10%	15.00%			
Strategic contribution					
Positioning and transforming the Corporation's divisions as set forth in the Corporation's strategic plan, Maximizing the value from the Corporation's Mergers & Acquisitions activities	From 0% to 40%	18.57%			
Delivering the strategic transformation imperatives as set forth in the Corporation's strategic plan and strengthening the Corporation's strategic capabilities	From 0% to 20%	17.39%			
Total		85.48%			
Total of Business Performance Measures (79.40%) X Individual Performance Measures (85.48%)		67.87%			

<sup>(1)</sup> If the minimum level of the Corporate EBITDA, as determined at the beginning of the financial year, is not achieved, payment of any variable compensation to the CEO will be at the discretion of the Human Resources Committee.

<sup>(3)</sup> This objective is capped.

Pierre Plamondon, CFO and Vice President of Finance					
Elements of Individual Performance Measures (1)	Weight (from 0% to 120%) (2)	Result (%)			
Financial objectives					
Corporate EBITDA	From 0% to 30%	19.76%			
Corporate revenues	From 0% to 20%	14.76%			
Corporate cash flow from operations	From 0% to 10%	17.24%			
Strategic contribution					
Contribute to the Corporation's finance function transformation set forth in the Corporation's strategic plan	From 0% to 30%	26.00%			
Contribute to the Corporation's digital transformation set forth in the Corporation's strategic plan	From 0% to 20%	17.00%			
Leadership performance	From 0% to 10%	8.00%			
Total		102.76%			
Total of Business Performance Measures (79.40%) X Individual Performance Measures (102.76%)		81.59%			

<sup>(1)</sup> If the minimum level of the Corporate EBITDA, as determined at the beginning of the financial year, is not achieved, payment of any variable compensation to the CFO and Vice President of Finance will be at the discretion of the Human Resources Committee.

## Sales Incentive Plan

The SIP objectives for executive officers in the sales force are aimed to reward three (3) elements that are shareholder oriented (contribution margins, bookings and EBITDA). The objectives are determined by the executive's supervisor and are for the territory under the executive's supervision. The following tables outline the SIP objectives for each NEO who is within the sales force:

<sup>(2)</sup> The weight of each individual objective, with the exception of the corporate cash flow from operations objective, is not capped but the total is capped at 150%.

<sup>(2)</sup> The weight of each individual objective is not capped but the total is capped at 150%.

Willem Jan te Niet, Vice President, Sales — EMEA					
Business Performance Measures Incentive Targets (US\$) Results (US\$)					
Contribution Margin Bonus (1)	107,616	94,135			
Bonus on Bookings Achievement (2)	35,872	26,498			
Corporate EBITDA (3)	35,872	19,687			
Total	179,360	140,320			

- (1) The amount of bonus for the attainment of the quarterly contribution margin targets for the territory of EMEA is based on the percentage of achievement up to 100% of the quarterly and annual contribution margin targets defined at the beginning of the financial year. An accelerated amount of bonus based on the percentage of attainment of the quarterly and annual contribution margin targets above 100% is also payable.
- (2) The amount of bonus for the attainment of the bookings' targets for the territory of EMEA is based on the percentage of achievement up to 100% of the quarterly and annual bookings targets defined at the beginning of the financial year. An accelerated amount of bonus based on the percentage of attainment from above 100%, 150% and 200% of the annual bookings target is also payable.
- (3) If the minimum level of the Corporate EBITDA, as determined at the beginning of the financial year, is achieved then 25% up to 100% of achievement is payable and capped at 125% but if it is not achieved, payment of any variable compensation to the NEO will be at the discretion of the Human Resources Committee.

Dana Yearian, Vice President, Sales — Americas					
Business Performance Measures Incentive Targets (US\$) Results (US\$)					
Contribution Margin Bonus (1)	131,094	115,328			
Bonus on Bookings Achievement (2)	43,698	39,182			
Corporate EBITDA (3)	43,698	23,974			
Total	218,490	178,484			

- (1) The amount of bonus for the attainment of the quarterly contribution margin targets for the territory of the Americas is based on the percentage of achievement up to 100% of the quarterly and annual contribution margin targets defined at the beginning of the financial year. An accelerated amount of bonus based on the percentage of attainment of the quarterly and annual contribution margin targets above 100% is also payable.
- (2) The amount of bonus for the attainment of the bookings' targets for the territory of the Americas is based on the percentage of achievement up to 100% of the quarterly and annual bookings targets defined at the beginning of the financial year. An accelerated amount of bonus based on the percentage of attainment from above 100%, 150% and 200% of the annual bookings target is also payable.
- (3) If the minimum level of the Corporate EBITDA, as determined at the beginning of the financial year, is achieved then 25% up to 100% of achievement is payable and capped at 125% but if it is not achieved, payment of any variable compensation to the NEO will be at the discretion of the Human Resources Committee.

# Long-Term Incentive Compensation

The long-term incentive compensation offered by the Corporation is made up of two (2) main initiatives: i) the Long-Term Incentive Plan (the "LTIP") for directors, officers, employees and other persons or companies providing ongoing management or consulting services ("Consultants") of the Corporation and its subsidiaries and ii) the Deferred Share Unit Plan (the "DSU Plan") for non-employee directors of the Corporation.

Under the amending provisions, the Board of Directors may amend the LTIP and the DSU Plan or any options, Performance Share Units ("PSUs"), Restricted Share Units ("RSUs") and Deferred Share Units ("DSUs") issuable thereunder at any time without the consent of the holders of such securities provided that such amendment shall (i) not adversely alter or impair any securities previously granted except as permitted by the terms of the plans, (ii) be subject to any required approval of any securities regulatory authority or stock exchange, and (iii) be subject to shareholder approval, where required, by law, stock exchange requirements or the plans themselves, provided however that actions which do not require shareholder approval include, without limitation, the following actions:

- amendments of a general housekeeping or clerical nature that, among others, clarify, correct or rectify any ambiguity, defective provision, error or omission in the LTIP or the DSU Plan;
- amendments necessary to comply with applicable laws or the requirements of any securities regulatory authority or stock exchange;
- changing the eligibility for, and limitations on, participation in the LTIP and the DSU Plan;
- modifying the terms and conditions of any options, PSUs, RSUs and DSUs, including restrictions, not inconsistent with the terms of the LTIP and the DSU Plan, which terms and conditions may differ among individual grants and holders of such securities;
- modifying the periods referred to in the LTIP during which vested options may be exercised, provided that the option period is not extended beyond ten years after the date of the granting of the option;
- amendments with respect to the vesting period, with respect to circumstances that would accelerate the vesting of options, PSUs or RSUs, or the redemption of DSUs;
- any amendment resulting from or due to the alteration of share capital as more fully set out in the LTIP and the DSU Plan;
- amendments to the provisions relating to the administration of the LTIP and the DSU Plan; and
- suspending or terminating the LTIP and the DSU Plan.

For greater certainty, the Board of Directors shall be required to obtain shareholder approval to make the following amendments:

- a reduction in the exercise price of options held by an insider;
- an extension of the exercise period of options held by an insider;
- any amendment to remove or to exceed the limits on insider participation;
- an increase to the maximum number of Subordinate Voting Shares issuable under the LTIP and the DSU Plan; and
- any amendment to the amendment provisions of the LTIP and the DSU Plan.

For the first three bullet points above, the votes attached to shares held directly or indirectly by insiders benefiting directly or indirectly from the amendment must be excluded. In addition, with respect to the last bullet point above, where the amendment will disproportionately benefit one or more insiders over other holders of options, DSUs, PSUs or RSUs, the votes of shares held directly or indirectly by those insiders receiving the disproportionate benefit must be excluded. The LTIP refers to "Units" and a Unit is defined as a PSU or a RSU granted under the LTIP.

# Long-Term Incentive Plan (LTIP)

The principal component of the long-term incentive compensation offered by the Corporation is the LTIP. Introduced in May 2000, the LTIP is designed to provide directors, officers, employees and Consultants of the Corporation and its subsidiaries with an incentive to create value and accordingly ensures that their interests are aligned with those of the Corporation's shareholders and to further attract, motivate and retain all of its employees, including the NEOs with the exception of the Executive Chairman who, as of August 31, 2012, is no longer participating. The LTIP is subject to review by the Human Resources Committee to ensure maintenance of its market competitiveness. The LTIP was amended in January 2005, in January 2016, in January 2018 and in January 2019.

The Board of Directors has full and complete authority to interpret the LTIP and to establish the rules and regulations applying to it and to make all other determinations it deems necessary or useful for the administration of the LTIP, provided that such interpretations, rules, regulations and determinations are consistent with the rules of all stock exchanges on which the securities of the Corporation are then traded and with all applicable securities legislation and regulations.

The LTIP provides for the issuance of options to purchase Subordinate Voting Shares and the issuance of PSUs and RSUs redeemable for Subordinate Voting Shares issued from treasury to participating directors, officers, employees and Consultants of the Corporation and its subsidiaries. The Board of Directors, upon recommendation from the Human Resources Committee, designates the recipients of options, PSUs or RSUs and determines the number of Subordinate Voting Shares covered by options, PSUs or RSUs, the dates of vesting, the expiry date and any other conditions relating to these options, PSUs or RSUs, in each case in accordance with the applicable legislation of the securities regulatory authorities.

During the financial year ended August 31, 2019, target awards for eligible officers under the LTIP were established to be in line with the objective of the Human Resources Committee to align compensation with the Target Compensation Positioning offered in the reference market. Each NEO, with the exception of the Executive Chairman since the end of the financial year ended August 31, 2012, is entitled to receive PSUs or RSUs annually in accordance with the following policy:

Name & Position	Grant Levels (1) (% of Previous Year Base Salary)
Philippe Morin, CEO	55.0%
Pierre Plamondon, CFO and Vice President, Finance	45.0%
Willem Jan te Niet, Vice President, Sales – EMEA	35.0%
Dana Yearian, Vice President, Sales – Americas	42.5%

<sup>(1)</sup> Actual grant value may differ from the grant level guidelines as the stock price may vary between the time of the grant and its approval.

PSU or RSU awards are based on the expected impact of the role of the executive officer on the Corporation's performance and strategic development as well as market benchmarking. The Human Resources Committee undertakes an analysis from time to time to determine the possible payouts pursuant to the LTIP under various scenarios and at various levels of share price growth to ensure that the LTIP is aligned with the interests of the Corporation's shareholders.

PSUs or RSUs are also used to attract and retain top executives, as well as in business acquisitions. For the year ended August 31, 2019, the Corporation determined the number of PSUs or RSUs granted to each executive officer according to their individual contribution, specifically with respect to additional responsibilities as the case may be. As disclosed under the section "Summary Compensation Table" hereof, all of the NEOs, with the exception of the Executive Chairman as described earlier, were granted RSUs during the last financial year. The purpose of the grants was to focus the executives on developing and successfully implementing the continuing growth strategy of the Corporation and to align the executives with the principles of sustained long-term shareholder value growth. The grants were also considered to contribute to the Corporation's objective to align the compensation of the executives with the reference market. The Corporation did not take into account the amount and terms of outstanding options, PSUs or RSUs or the restrictions on resale of such units when determining the grants mentioned above.

The exercise price of the options is determined by the Board of Directors at the time of granting the options, subject to compliance with the rules of all stock exchanges on which the Subordinate Voting Shares are listed and with all applicable securities legislation and regulation. In any event, the exercise price may not be lower than the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and the NASDAQ Global Select Market on the last trading day preceding the grant date, using the daily exchange rate of the Bank of Canada on the last trading day preceding the grant date to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars. Any option issued is non-transferable, except in the event of death, for legal representative. As at November 1, 2019, there were no options granted and none outstanding.

The fair value at the time of grant of a PSU or RSU is equal to the market value of Subordinate Voting Shares at the time the PSU or RSU is granted. The grant date market value is equal to the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and the NASDAQ Global Select Market on the last trading day preceding the grant date, using the daily exchange rate of the Bank of Canada on the last trading day preceding the grant date to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars. Any PSU or RSU issued is non-transferable, except in the event of death, for legal representative. As at August 31, 2019, there were no PSUs granted and outstanding and a total of 1,836,446 RSUs granted and outstanding pursuant to the LTIP having a weighted average fair value at the time of grant of US\$3.78 (CA\$4.88) per RSU.

The maximum number of Subordinate Voting Shares that are issuable under the LTIP and DSU Plan shall not exceed 11,792,893 Subordinate Voting Shares, which represents 21.3% of the Corporation's issued and outstanding voting shares as of August 31, 2019. From this total, 4,806,810 Subordinate Voting Shares have been issued and 2,087,953 Subordinate Voting Shares are issuable under actual awards held by participants, which represents 12.5% of the Corporation's issued and outstanding voting shares as of August 31, 2019, leaving 4,898,130 Subordinate Voting Shares available for grant under the LTIP and DSU Plan, representing 8.8% of the issued and outstanding voting shares as of August 31, 2019.

All of the Subordinate Voting Shares covered by options that expire or are cancelled become reserved Subordinate Voting Shares for the purposes of options, PSUs or RSUs that may be subsequently granted under the terms of the LTIP. No participant shall hold in total options to purchase, PSUs, RSUs and DSUs representing more than 5% of the number of Subordinate Voting Shares issued and outstanding from time to time. There are additional limitations for insiders of the Corporation. The number of Subordinate Voting Shares issuable at any time pursuant to options, PSUs, RSUs and DSUs granted to insiders of the Corporation shall not exceed 10% of the total issued and outstanding Subordinate Voting Shares. The number of Subordinate Voting Shares issued to insiders, within a one (1) year period, pursuant to the exercise, settlement or redemption of options, PSUs, RSUs and DSUs shall not exceed 10% of the number of issued and outstanding Subordinate Voting Shares, and the number of Subordinate Voting Shares issued to any one insider and such insider's associates, within a one-year period, pursuant to the exercise, settlement or redemption of options, PSUs, RSUs and DSUs shall not exceed 5% of the total issued and outstanding Subordinate Voting Shares of the Corporation. Options vest at a rate as determined by the Board of Directors. Options may be exercised in whole or in part once vested. Options that are granted under the LTIP must be exercised within a maximum period of ten (10) years following the date of their grant (the "Option Period") or they will be forfeited provided however that the Option Period shall be automatically extended if the date on which it is scheduled to terminate falls during a blackout period or within ten (10) business days after the last day of a blackout period. In such cases, the Option Period shall terminate ten (10) business days after the last day of a blackout period.

The vesting dates of PSUs or RSUs are subject to a minimum term of three (3) years and a maximum term of ten (10) years from the award date. The following table presents, for the last five (5) financial years, the RSUs granted and their respective vesting schedule. No PSUs were granted as of August 31<sup>st</sup>, 2019.

Financial Year Ended	Grant Date	RSUs Granted (#)	Fair Value at the Time of Grant (US\$/RSU)	Vesting Schedule
August 31, 2019	October 18, 2018	166,161	3.17	
	January 15, 2019	238,500	3.42	100% on the third anniversary date of the grant.
	July 17, 2019	30,571	3.85	
	October 18, 2018	197,699	3.17	100% on the third anniversary date of the grant if performance objectives related to long-term growth of revenue and profitability, as determined by the Board of Directors of the Corporation, are fully attained.
	Total	632,931		

Financial Year Ended	Grant Date	RSUs Granted (#)	Fair Value at the Time of Grant (US\$/RSU)	Vesting Schedule
August 31, 2018	October 19, 2017	15,000	4.00	
	January 16, 2018	154,833	4.45	50% on each of the third and fourth anniversary dates of the grant.
	February 2, 2018	30,000	4.62	
	October 19, 2017	211 155	4.00	100% on the fifth anniversary date of the grant subject to early
	November 13, 2017	9,633	4.30	vesting of up to 1/3 on the third anniversary date of the grant and up to 50% of the remaining units on the fourth anniversary date of the grant if performance objectives namely related to long-term growth of revenue and profitability, as determined by the Board of Directors of the Corporation, are fully attained.
	Total	420,621		
August 31, 2017	October 19, 2016	38,300	4.01	
	January 18, 2017	153,700	5.10	50% on each of the third and fourth anniversary dates of the grant.
	April 5, 2017	123,110	4.89	
	October 19, 2016	207,269	4.01	100% on the fifth anniversary date of the grant subject to early
	April 5, 2017	4,764	4.89	vesting of up to 1/3 on the third anniversary date of the grant and up to 50% of the remaining units on the fourth anniversary date of the grant if performance objectives namely related to long-term growth of revenue and profitability, as determined by the Board of Directors of the Corporation, are fully attained.
	Total	527,143		
August 31, 2016	October 15, 2015	36,900	3.23	
	November 9, 2015	109,890	3.43	
	January 13, 2016	151,400	3.00	50% on each of the third and fourth anniversary dates of the grant.
	July 7, 2016	2,500	3.30	
	August 15, 2016	10,000	3.33	
	October 15, 2015	206,373	3.23	100% on the fifth anniversary date of the grant subject to early
	November 9, 2015	54,945	3.43	vesting of up to 1/3 on the third anniversary date of the grant and up to 50% of the remaining units on the fourth anniversary date of the grant if performance objectives namely related to long-term growth of revenue and profitability, as determined by the Board of Directors of the Corporation, are fully attained.
	Total	572,008		
August 31, 2015	October 16, 2014	29,150	3.71	
	January 14, 2015	163,400	3.55	50% on each of the third and fourth anniversary dates of the grant.
	March 31, 2015	5,000	3.78	3070 on each of the third and fourth anniversary dates of the grant.
	July 2, 2015	12,299	3.27	
	October 16, 2014	197,726	3.71	100% on the fifth anniversary date of the grant subject to early
	July 2, 2015	1,946	3.27	vesting of up to 1/3 on the third anniversary date of the grant and up to 50% of the remaining units on the fourth anniversary date of the grant if performance objectives namely related to long-term growth of revenue and profitability, as determined by the Board of Directors of the Corporation, are fully attained.
	Total	409,521		

If any vesting dates fall into any blackout period or any other restrictive period during which the PSU or RSU holder is not entitled to trade the Corporation's Subordinate Voting Shares, the PSUs or RSUs shall: (i) vest on the fifth trading day the PSU or RSU holder is entitled to trade after such blackout period or restrictive period; or (ii) if the PSU or RSU holder decides, prior to such vesting date, to pay his/her income tax without using any of the Subordinate Voting Shares' proceeds, then and only then, the vesting date shall remain the one determined on the granting date for such PSUs or RSUs.

With the exceptions mentioned under the section entitled "Termination and Change of Control Benefits", unless otherwise determined by the Board of Directors, any option granted pursuant to the LTIP will lapse: (i) immediately upon the termination of the relationship with the Corporation or one of its subsidiaries for a good and sufficient cause for employees or officers or at the date on which an employee or an officer resigns or leaves his employment with the Corporation or one of its subsidiaries (or within thirty (30) days if the holder's employment is terminated for reasons not related to cause); and (ii) thirty (30) days after a director ceases to be a member of the Board of Directors of the Corporation or one of its subsidiaries for any reason other than death or permanent disability. The LTIP provides that, in the event of death or permanent disability, any option held by the optionee lapses six (6) months after the date of permanent disability and the option shall become exercisable no later than the date of termination by reason of death or permanent disability of the employee or the officer. In the event of retirement, any option held by an employee lapses thirty (30) days after the date of any such retirement. Nevertheless, in case of retirement or early retirement of an officer or employee, the Board of Directors or the Human Resources Committee may at its own discretion extend the period an option will lapse in accordance with the terms of the LTIP.

With the exceptions mentioned under the section entitled "Termination and Change of Control Benefits", unless otherwise determined by the Board of Directors, any PSU or RSU granted pursuant to the LTIP will lapse: (i) immediately, where vesting of a unit is subject to the attainment of performance objectives, if such performance objectives have not been attained (or postponed at a further vesting date as determined by the Board of Directors); and (ii) immediately, whether or not subject to attainment of performance objectives, upon the termination of the relationship with the Corporation or one of its subsidiaries for a good and sufficient cause for employees or officers or at the date on which an employee or an officer resigns or leaves his employment with the Corporation or one of its subsidiaries.

The LTIP provides that any PSU or RSU granted will vest immediately, to a certain proportion as determined by the LTIP, upon the termination of the relationship of an employee or officer with the Corporation or one of its subsidiaries for reasons not related to cause. The LTIP provides that any PSU or RSU granted pursuant to the LTIP will vest immediately upon the termination of the relationship of an employee or officer with the Corporation or one of its subsidiaries because of death or permanent disability. The LTIP also provides that upon participant attainment of the retirement conditions established by the Corporation and continued compliance with the confidentiality, non-solicitation and non-competition obligations of the PSU or RSU holder, the PSU or RSU holder shall be entitled to the regular vesting as established by the Board of Directors at the time of grant pursuant to the LTIP. Furthermore, in case of a PSU or RSU holder employment with the Corporation is terminated following a change of control, the Board of Directors or the Human Resources Committee may, at its own discretion, increase the number of Subordinate Voting Shares to which a PSU or RSU holder is entitled.

In the event of a change of control, the Board of Directors or the Human Resources Committee may, prior or following the change of control, accelerate the time at which an option, PSU or RSU may first be exercised or the time during which an option, PSU or RSU or any part thereof will become exercisable.

The full text of the LTIP is included in our 2018 Annual Information Form on Form 20-F under Exhibit 4.59, which was filed on November 27, 2018 on SEDAR at www.sedar.com in Canada or on EDGAR at www.sec.gov/edgar.shtml in the U.S.

# Performance Share Units Grants in Last Financial Year

There were no PSUs redeemable for Subordinate Voting Shares granted during the financial year ended August 31, 2019. As at November 1, 2019, there were 140,995 PSUs granted and outstanding.

## Restricted Share Unit Grants in Last Financial Year

The aggregate number of RSUs granted from September 1, 2018 to August 31, 2019, was 632,931 having a weighted average fair value at the time of grant of US\$3.30 (CA\$4.32) per RSU. The fair value at the time of grant of a RSU is equal to the market value of Subordinate Voting Shares at the time RSUs are granted. At August 31, 2019, there were a total of 1,836,446 RSUs granted and outstanding pursuant to the LTIP having a weighted average fair value at the time of grant of US\$3.78 (CA\$4.88) per RSU.

The PSUs or RSUs are redeemed for Subordinate Voting Shares issued from treasury on the vesting dates established by the Board of Directors of the Corporation at the time of grant in its sole discretion.

Therefore, the value at vesting of a RSU, when converted to Subordinate Voting Shares, is equivalent to the market value of a Subordinate Voting Share at the time the conversion takes place and is taxable as employment income. The table above shows information regarding RSU grants made under the LTIP during the financial year ended August 31, 2019. No PSUs were granted during the financial year ended August 31, 2019.

During the financial year ended August 31, 2019, the following RSUs were granted to the following NEOs:

Name	RSUs Granted (#)	Percentage of Total RSUs Granted to Employees in Financial Year (%) (1)	Fair Value at the Time of Grant (US\$/RSU) (2)	Grant Date	Vesting Schedule (3)
	34,892				100% on the third anniversary date of the grant.
Philippe Morin	43,615	12.40%	3.17	October 18, 2018	100% on the third anniversary date of the grant if performance objectives namely related to long-term growth of revenue and profitability, as determined by the Board of Directors of the Corporation are fully attained. (4)
	16,842				100% on the third anniversary date of the grant.
Pierre Plamondon	21,052	5.99%	3.17	October 18, 2018	100% on the third anniversary date of the grant if performance objectives namely related to long-term growth of revenue and profitability, as determined by the Board of Directors of the Corporation are fully attained. (4)
	13,117				100% on the third anniversary date of the grant.
Willem Jan te Niet	16,397	4.66%	3.17	October 18, 2018	100% on the third anniversary date of the grant if performance objectives namely related to long-term growth of revenue and profitability, as determined by the Board of Directors of the Corporation are fully attained. (4)
	16,282				100% on the third anniversary date of the grant.
Dana Yearian	20,353	5.79%	3.17	October 18, 2018	100% on the third anniversary date of the grant if performance objectives namely related to long-term growth of revenue and profitability, as determined by the Board of Directors of the Corporation are fully attained. (4)

<sup>(1)</sup> Such percentage does not include any cancelled RSUs.

<sup>(2)</sup> The fair value at the time of grant of a RSU is equal to the market value of Subordinate Voting Shares at the time RSUs are granted. The grant date market value is equal to the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and the NASDAQ Global Select Market on the last trading day preceding the grant date, using the daily exchange rate of the Bank of Canada on the last trading day preceding the grant date to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars as required.

<sup>(3)</sup> All RSUs first vesting cannot be earlier than the third anniversary date of their grant.

<sup>(4)</sup> Those RSUs granted in the financial year ended August 31, 2019 vest on the third anniversary date of the grant but are subject to the attainment of performance objectives, as determined by the Board of Directors of the Corporation. Such performance objectives are based on the attainment of a profitability metric target for the upcoming three fiscal years. The profitability metric is determined as the upcoming three fiscal year 's cumulative Corporation's IFRS net earnings (loss) before interest and other expense, income taxes, and amortization, stock-based compensation costs, restructuring charges, acquisition-related deferred revenue fair value adjustment and foreign exchange gain or loss, change in fair value of cash contingent consideration, and extraordinary gain or loss ("LTIP EBITDA"). Accordingly, the vesting performance objectives will be attained, calculated on a pro-rated basis as follows: i) 0% for a LTIP EBITDA below target for the three-year period ending on August 31, 2021; ii) 50% to 100% for a LTIP EBITDA at target or above and caped at two times the target for the three-year period ending on August 31, 2021.

The following table summarizes information about RSUs granted to the members of the Board of Directors and to Management and Corporate Officers of the Corporation and its subsidiaries as at August 31, 2019:

	Number of RSUs (#)	% of Issued and Outstanding RSUs	Weighted Average Fair Value at the Time of Grant (\$US/RSU)
Executive Chairman (one (1) individual)	-	_	-
CEO (one (1) individual)	327,039	17.81%	3.73
Board of Directors (four (4) individuals)	-	_	-
Management and Corporate Officers (ten (10) individuals)	844,544	45.99%	3.58

## Option Grants in Last Financial Year

There were no options to purchase the Corporation's Subordinate Voting Shares granted during the financial year ended August 31, 2019 and thereafter until November 1, 2019. As at November 1, 2019, there were no options granted and none outstanding.

# <u>Deferred Share Unit Plan (DSU Plan)</u>

Introduced in October 2004 and effective as of January 2005, the Corporation's DSU Plan (the Deferred Share Unit Plan) is designed to align more closely the interests of the Corporation's non-employee directors with those of its shareholders.

Under the DSU Plan, non-employee directors may elect to receive up to 100% of their retainer fees in the form of DSUs, each of which has an estimated value determined based on the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and the NASDAQ Global Select Market on the last trading day preceding the grant date, using the daily exchange rate of the Bank of Canada on the last trading day preceding the grant date to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars, as required. DSUs entitle the holder thereof to dividends in the form of additional DSUs at the same rate as dividends on Subordinate Voting Shares. Any DSU issued is non-transferable, except by will or other testamentary document or according to the laws respecting the devolution and allotment of estates.

When a participant ceases to act as a director, the participant (or in the case of death, the beneficiary of the DSUs) may cause the Corporation to redeem the DSUs by filing a notice of redemption with the Corporation's Secretary specifying the redemption date. If the participant or his/her beneficiary or legal representative, as the case may be, fails to file such a notice, the redemption date shall be December 15 of the first calendar year commencing after the year the participant ceased to act as a director. Within ten business days after the redemption date, the participant shall receive, at the discretion of the Corporation, in satisfaction of the number of DSUs credited to his or her account on such date, any of the following: (a) a number of Subordinate Voting Shares purchased on the open market having a value, net of any applicable withholdings, equal to the market value of a Subordinate Voting Share on the redemption date multiplied by the number of DSUs credited to his or her notional account on the payment date, (b) a number of Subordinate Voting Shares issued by the Corporation equal to the number of DSUs credited to his or her notional account on the payment date, or (c) any combination of clauses (a) and (b). If a participant dies after ceasing to act as a director, but before filing a redemption notice, these provisions shall apply with such modifications as the circumstances require.

Subordinate Voting Shares issued by the Corporation will be issued from the same pool of Subordinate Voting Shares reserved for issuance pursuant to the LTIP. There are additional limitations for insiders of the Corporation. The number of Subordinate Voting Shares issuable at any time pursuant to options, PSUs, RSUs and DSUs granted to insiders of the Corporation shall not exceed 10% of the total issued and outstanding Subordinate Voting Shares. The number of Subordinate Voting Shares issued to insiders, within a one (1) year period, pursuant to the exercise, settlement or redemption of options, PSUs, RSUs and DSUs shall not exceed 10% of the number of issued and outstanding Subordinate Voting Shares, and the number of Subordinate Voting Shares issued to any one insider and such insider's associates, within a one-year period, pursuant to the exercise, settlement or redemption of options, PSUs, RSUs and DSUs shall not exceed 5% of the total issued and outstanding Subordinate Voting Shares of the Corporation.

## <u>Deferred Share Unit Grants in Last Financial Year</u>

The aggregate number of DSUs credited to non-employee directors during the financial year ended August 31, 2019 was 69,818. The estimated value at the time of grant of a DSU is determined based on the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and the NASDAQ Global Select Market on the last trading day preceding the grant date, using the daily exchange rate of the Bank of Canada on the last trading day preceding the grant date to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars, as required. The value at vesting of a DSU is equivalent to the market value of the Subordinate Voting Shares when a DSU is converted to such Subordinate Voting Shares. As at August 31, 2019, there were a total of 251,507 DSUs credited and outstanding pursuant to the DSU Plan having a weighted average fair value at the time of grant of US\$3.90 (CA\$4.99).

During the financial year ended August 31, 2019, the following DSUs were granted to the non-employee members of the Board of Directors:

DSUs Granted (#)	Weighted Average Fair Value at the Time of Grant (US\$/DSU)	Total of the Fair Value at the Time of Grant (US\$)	Vesting
69,818	3.63	253,439	At the time director ceases to be a member of the Board of Directors of the Corporation

The following table summarizes information about DSUs granted to the non-employee members of the Board of Directors as at November 1, 2019:

	DSUs Granted (#)	% of Issued and Outstanding DSUs	Total of the Fair Value at the Time of Grant (US\$)	Weighted Average Fair Value at the Time of Grant (US\$/DSU)
Board of Directors (four (4) individuals)	251,507	100%	980,877	3.90

# Number of Subordinate Voting Shares Reserved for Future Issuance

During the financial year ended August 31, 2019, 69,818 DSUs and 632,931 RSUs were granted to directors, officers and employees. Such awards were issued from the pool of Subordinate Voting Shares reserved for issuance pursuant to the LTIP and the DSU Plan of which the maximum number of Subordinate Voting Shares issuable shall not exceed 11,792,893, which represents 21.3% of the Corporation's issued and outstanding voting shares as at August 31, 2019. As at August 31, 2019, the number of Subordinate Voting Shares reserved for future issuance is 4,898,130 representing 8.8% of the Corporation's issued and outstanding voting shares as at August 31, 2019.

## Stock Appreciation Rights Plan

On August 4, 2001, the Corporation established a Stock Appreciation Rights Plan (the "SAR Plan"), as amended on January 12, 2010, for the benefit of certain employees residing in countries where the granting of stock-based compensation under the LTIP is not feasible in the opinion of the Corporation. The Board of Directors has full and complete authority to interpret the SAR Plan and to establish the rules and regulations applying to it and to make all other determinations it deems necessary or useful for the administration of the SAR Plan.

Under the SAR Plan, eligible employees are entitled to receive a cash amount equivalent to the difference between the market price of the Subordinate Voting Shares on the date of exercise or the date of vesting and the exercise price determined on the date of grant. No Subordinate Voting Shares are issuable under the SAR Plan.

The Board of Directors has delegated to Management the task of designating the recipients of stock appreciation rights, the date of exercise or vesting, the expiry date and other conditions. Under the terms of the SAR Plan, the exercise price determined on the date of grant of the stock appreciation right is equal to zero (0) if the stock appreciation right is to reflect a PSU or RSU under the LTIP or, if the stock appreciation right is to reflect an option under the LTIP, the exercise price determined on the date of grant may not be lower than the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and on the NASDAQ Global Select Market on the last trading day preceding the grant date, using the daily exchange rate of the Bank of Canada on the last trading day preceding the grant date to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars. Stock appreciation rights are non-transferable.

The stock appreciation rights, reflecting a PSU or RSU under the LTIP, vest at a rate of 50% annually commencing on the third anniversary date of the date of grants made in October 2015, January 2016, October 2016, January 2017 and January 2018 and at a rate of 100% on the third anniversary date of the date of grants made in January 2019.

The stock appreciation rights, reflecting a PSU or RSU under the LTIP, will: i) lapse immediately upon the termination of the relationship with the Corporation or one (1) of its subsidiaries for a good and sufficient cause or at the date on which an employee resigns or leaves his employment with the Corporation or one (1) of its subsidiaries; and ii) vest immediately, to a certain proportion as determined by the SAR Plan, upon the termination without cause of the relationship of an employee with the Corporation or one (1) of its subsidiaries.

The stock appreciation rights, reflecting an option under the LTIP, vest over a four-year period, with 25% vesting annually commencing on the first anniversary date of the date of grant. However, since October 2007, some stock appreciation rights, representing an option under the LTIP, vest at a rate of 50% annually commencing on the third anniversary date of the grants made in October 2009.

For stock appreciation rights, reflecting an option under the LTIP, once vested, such right may be exercised between the second and the fifteenth business day following each release of the Corporation's quarterly financial results and will lapse immediately upon the termination of the relationship with the Corporation or one (1) of its subsidiaries for a good and sufficient cause or at the date on which an employee resigns or leaves his employment with the Corporation or one (1) of its subsidiaries (or within thirty (30) days if the holder is dismissed without cause). In the event of retirement or disability, any stock appreciation right held by an employee lapses thirty (30) days after the date of any such disability or retirement. In the event of death, any stock appreciation right lapses six (6) months after the date of death.

All of the stock appreciation rights that are granted under the SAR Plan may be exercised within a maximum period of ten (10) years following the date of their grant.

From September 1, 2018 until November 1, 2019, 10,046 Stock Appreciation Rights ("SARs") were exercised.

During the financial year ended August 31, 2019, 6,000 SARs were granted to employees. As at August 31, 2019, there were 21,000 SARs outstanding.

## Benefits and Perquisites

Certain employees of the Corporation, including the NEOs, are eligible to participate in the Corporation's benefits programs, which may include life insurance, extended health and dental coverage, short and long-term disability coverage, accidental death and dismemberment (AD&D) compensation and emergency travel assistance. Although the majority of costs of the benefits are paid by the Corporation, employees (including the NEOs) may also be required to contribute to obtain such benefits.

With the exception of car allowances that are provided to the Corporation's Executive Chairman and Vice Presidents of Sales, executive officers, including other NEOs, do not receive any perquisites. The value of the perquisites for each of the NEOs, if applicable, is less than CA\$50,000 or 10% of total annual salary and bonus for the financial year and, as such, is not included in the table provided under the heading "Summary Compensation Table" and in the table provided under the heading "Termination and Change of Control Benefits".

## Deferred Profit-Sharing Plan

The Corporation maintains a deferred profit-sharing plan (the "DPSP") for certain eligible Canadian resident employees, including NEOs but excluding the Corporation's Executive Chairman, under which the Corporation may elect to match the employees' contributions up to a maximum of 4% of an employee's gross salary, provided that the employee has contributed to a tax-deferred registered retirement savings plan. Cash contributions, for eligible employees to the DPSP, and expenses for the years ended August 31, 2017, 2018 and 2019 amounted to US\$1,571,000, US\$1,610,000 and US\$1,592,000, respectively. The amounts contributed to the DPSP are invested at the employee's will in the investment vehicles offered by Manufacturers Life Insurance Company (Manulife), the Corporation's fund administrator. Withdrawals of funds from the DPSP account are not permitted. In the event of termination of the employment, if the employee has been a member of the DPSP for more than two (2) years, the employee is entitled to receive the funds accumulated in his DPSP account.

#### 401K Plan

The Corporation maintains a 401K plan for eligible United States resident employees of its subsidiaries. Employees become eligible to participate in the 401K plan on the date they are hired. Under this plan, the Corporation must contribute an amount equal to 3% of an employee's current compensation. In addition, employees may elect to defer their current compensation up to the lesser of 1% of eligible compensation or the statutorily prescribed annual limit and have the deferral contributed to the 401K plan. The 401K plan permits, but does not require, the Corporation to make additional matching contributions to the 401K plan on behalf of the eligible participants, subject to a maximum of 50% of the first 6% of the participant's current compensation subject to certain legislated maximum contribution limits. The Corporation contributes up to 3% of the participant's current compensation, subject to certain legislated maximum contribution limits. In the years ended August 31, 2017, 2018 and 2019, the Corporation made aggregate contributions of US\$630,000, US\$591,000 and US\$460,000 respectively, to the 401K plan. Contributions by participants or by the Corporation to the 401K plan and income earned on plan contributions are generally not taxable to the participant until withdrawn and contributions by the Corporation are generally deductible by the Corporation when made. At the direction of each participant, the trustees of the 401K plan invest the assets of the 401K plan in selected investment options.

# 2019 Performance and Compensation

Compensation for the NEOs is awarded through the Corporation's executive compensation plan, which aligns compensation with key strategic objectives and individual performance. The Corporation has established Business Performance Measures outlining key performance indicators which are applicable to all employees. You will find more information on such indicators under the heading "Short-Term Incentive Compensation". These performance indicators focus efforts, communicate priorities and enable performance to be benchmarked.

The following table highlights the NEOs early vesting achievement in accordance with the Corporation's LTIP:

Long-Term Incentive Plan (LTIP) - RSUs						
Date of Grant	Vesting Date	% of Early Vesting Achievement (1)				
October 15, 2015	October 15, 2019	8%				
October 19, 2016	October 21, 2019	11%				

<sup>(1)</sup> The vesting schedules are provided in the table under the heading "Long-Term Incentive Plan".

## Conclusion

By way of application of the Corporation's executive compensation policy, an important part of executive compensation is linked to corporate performance and long-term value creation. The Human Resources Committee continuously reviews executive compensation programs to ensure that they maintain their competitiveness and continue to focus on the Corporation's objectives, values and business strategies.

For the financial year ending August 31, 2012, we made a significant change to the Executive Chairman compensation structure. Following the evaluation of the share ownership of the Executive Chairman, it was decided by the Human Resources Committee that the Executive Chairman should no longer receive equity-based compensation within his compensation as the share ownership of the Executive Chairman has been determined to be sufficient and that equity-based compensation was no longer reasonably considered as an incentive to performance.

Depending on specific circumstances, the Human Resources Committee may also recommend employment terms and conditions that deviate from the policies and the execution by the Corporation or its subsidiaries of employment contracts on a case-by-case basis.

# **Executive Chairman Performance Compensation during Last Three (3) Financial Years**

The following table compares the compensation awarded to Mr. Germain Lamonde in respect of his performance as CEO until April 1, 2017 and then as Executive Chairman to the Total Market Capitalization Growth for the last three (3) financial years. The compensation includes base salary, short-term incentive payments, as well as long-term incentive payments at grant date pursuant to the LTIP.

Compensation Elements	2019	2018	2017 (1)	Three-Year Total
Cash				
Base Salary	CA\$486,735	CA\$588,350	CA\$717,500	CA\$1,792,585
Short-Term Incentive	CA\$230,128	CA\$160,800	CA\$262,962	CA\$653,890
Equity				
Long-Term Incentive	-	ı	_	_
Total Direct Compensation	CA\$716,863	CA\$749,150	CA\$980,462	CA\$2,446,475
Contribution to DPSP	-	-	_	_
All Other Compensation	-	-	_	_
Total Compensation	CA\$716,863	CA\$749,150	CA\$980,462	CA\$2,446,475
Annual Average	-	-	_	CA\$815,492
Total Market Capitalization (CA\$ millions) as at August 31	268.4	318.0	322.3	302.9
Total Cost as a % of Market Capitalization	0.27%	0.24%	0.31%	0.27%

<sup>(1)</sup> On April 1, 2017, Mr. Germain Lamonde stepped down as CEO and became Executive Chairman of the Corporation.

## **CEO Performance Compensation during Last Three (3) Financial Years**

The following table compares the compensation awarded to Mr. Philippe Morin in respect of his performance as COO until April 1, 2017 and then as CEO to the Total Market Capitalization Growth for the last three (3) financial years. The compensation includes base salary, short-term incentive payments, as well as long-term incentive payments at grant date pursuant to the LTIP.

Compensation Elements	2019	2018	2017 (1)	Three-Year Total
Cash				
Base Salary	CA\$531,898	CA\$522,750	CA\$512,500	CA\$1,567,148
Short-Term Incentive	CA\$189,528	CA\$115,396	CA\$118,531	CA\$423,455
Equity				
Long-Term Incentive	CA\$323,449	CA\$256,251	CA\$531,256	CA\$1,110,956
Total Direct Compensation	CA\$1,044,875	CA\$894,397	CA\$1,162,287	CA\$3,101,559
Contribution to DPSP	CA\$24,156	CA\$986	CA\$14,346	CA\$39,488
All Other Compensation	_	_	_	-
Total Compensation	CA\$1,069,031	CA\$895,383	CA\$1,176,633	CA\$3,141,047
Annual Average	-	_	_	CA\$1,047,016
Total Market Capitalization (CA\$ millions) as at August 31	268.4	318.0	322.3	302.9
Total Cost as a % of Market Capitalization	0.40%	0.28%	0.37%	0.35%

<sup>(1)</sup> Mr. Philippe Morin was nominated CEO on April 1, 2017.

# **Summary Compensation Table of Named Executive Officers**

The table below shows compensation information during the three (3) most recently completed financial years for the NEOs. This information includes, as applicable, the Canadian and US dollar and Euro value of base salaries, share-based and option-based awards, non-equity incentive plan compensations, pension value and all other compensation, if any, whether paid or deferred.

				Option-	Non-Equity Plan Compe	<del>-</del>			
Name and Principal Position	Financial Year	Salary <sup>(1) (2)</sup> (\$)	Share-Based Awards <sup>(2) (3)</sup> (\$)	Based Awards (\$)	Annual Incentive Plans <sup>(2) (4)</sup>	Long-Term Incentive Plan	Pension Value (\$)	All Other Compensation (\$) (2) (5)	Total Compensation (\$)
Germain Lamonde, Executive	2019	367,430 <sup>(US)</sup> 486,735 <sup>(CA)</sup>	(US) (CA)	-	173,721 <sup>(US)</sup> 230,128 <sup>(CA)</sup>	-	-	-	541,151 <sup>(US)</sup> 716,863 <sup>(CA)</sup>
Chairman <sup>(6)</sup>	2018	460,800 <sup>(US)</sup> 588,350 <sup>(CA)</sup>	(US) (CA)	-	125,940 <sup>(US)</sup> 160,800 <sup>(CA)</sup>	-	-	_	586,740 <sup>(US)</sup> 749,150 <sup>(CA)</sup>
	2017	543,067 <sup>(US)</sup> 717,500 <sup>(CA)</sup>	(US) (CA)	-	199,032 <sup>(US)</sup> 262,962 <sup>(CA)</sup>	-	-	_	742,099 <sup>(US)</sup> 980,462 <sup>(CA)</sup>
Philippe Morin, CEO <sup>(7)</sup>	2019	401,523 <sup>(US)</sup> 531,898 <sup>(CA)</sup>	244,168 <sup>(US)</sup> 323,449 <sub>(CA)</sub>	-	143,072 <sup>(US)</sup> 189,528 <sup>(CA)</sup>	-	-	18,235 <sup>(US)</sup> 24,156 <sup>(CA)</sup>	806,998 <sup>(US)</sup> 1,069,031 <sup>(CA)</sup>
	2018	409,422 <sup>(US)</sup> 522,750 <sup>(CA)</sup>	200,698 <sup>(US)</sup> 256,251 <sup>(CA)</sup>	-	90,379 <sup>(US)</sup> 115,396 <sup>(CA)</sup>	-	-	772 <sup>(US)</sup> 986 <sup>(CA)</sup>	701,271 <sup>(US)</sup> 895,383 <sup>(CA)</sup>
	2017	387,905 <sup>(US)</sup> 512,500 <sup>(CA)</sup>	402,101 <sup>(US)</sup> 531,256 <sup>(CA)</sup>	1	89,715 <sup>(US)</sup> 118,531 <sup>(CA)</sup>	-	ı	10,858 <sup>(US)</sup> 14,346 <sup>(CA)</sup>	890,579 <sup>(US)</sup> 1,176,633 <sup>(CA)</sup>
Pierre Plamondon, CFO and Vice	2019	235,129 <sup>(US)</sup> 311,476 <sup>(CA)</sup>	117,856 <sup>(US)</sup> 156,123 <sup>(CA)</sup>	1	86,330 <sup>(US)</sup> 114,362 <sup>(CA)</sup>	ı	I	10,368 <sup>(US)</sup> 13,734 <sup>(CA)</sup>	449,683 <sup>(US)</sup> 595,695 <sup>(CA)</sup>
President, Finance	2018	241,535 <sup>(US)</sup> 308,392 <sup>(CA)</sup>	106,561 <sup>(US)</sup> 136,057 <sup>(CA)</sup>	-	60,189 <sup>(US)</sup> 76,850 <sup>(CA) (8)</sup>	-	-	7,833 <sup>(US)</sup> 10,002 <sup>(CA)</sup>	416,118 <sup>(US)</sup> 531,301 <sup>(CA)</sup>
	2017	228,841 <sup>(US)</sup> 302,345 <sup>(CA)</sup>	100,176 <sup>(US)</sup> 132,352 <sup>(CA)</sup>	-	46,116 <sup>(US)</sup> 60,928 <sup>(CA)</sup>	_	_	11,006 <sup>(US)</sup> 14,541 <sup>(CA)</sup>	386,139 <sup>(US)</sup> 510,166 <sup>(CA)</sup>

				Option-	-	Non-Equity Incentive Plan Compensation (\$)			
Name and Principal Position	Financial Year	Salary <sup>(1) (2)</sup> (\$)	Share-Based Awards (2) (3) (\$)	Based Awards (\$)	Annual Incentive Plans <sup>(2) (4)</sup>	Long-Term Incentive Plan	Pension Value (\$)	All Other Compensation (\$) (2) (5)	Total Compensation (\$)
Willem Jan te Niet, Vice President, Sales — EMEA	2019	235,956 (US) 312,571 (CA) 208,019 (€)	93,559 (US) 123,938 (CA) 82,482 (€)	-	140,320 (US) 185,882 (CA) 123,706 (€)	-	-	18,877 (US) 25,006 (CA) 16,642 (€)	488,712 (US) 647,397 (CA) 430,849 (€)
	2018	243,191 <sup>(US)</sup> 310,506 <sup>(CA)</sup> 203,940 <sup>(€)</sup>	80,612 (US) 102,925 (CA) 67,601 (€)	-	141,296 (US) 180,406 (CA) 118,491 (€)	-	-	19,455 <sup>(US)</sup> 24,841 <sup>(CA)</sup> 16,315 <sup>(€)</sup>	484,554 (US) 618,678 (CA) 406,347 (€)
	2017	226,587 <sup>(US)</sup> 299,367 <sup>(CA)</sup> 206,625 <sup>(€)</sup>	66,891 (US) 88,376 (CA) 60,998 (€)	-	104,094 (US) 137,529 (CA) 94,923 (€)	-	-	7,912 <sup>(US)</sup> 10,454 <sup>(CA)</sup> 7,215 <sup>(€)</sup>	405,484 (US) 535,726 (CA) 369,761 (€)
Dana Yearian, Vice President,	2019	242,897 <sup>(US)</sup> 321,766 <sup>(CA)</sup>	116,133 <sup>(US)</sup> 153,841 <sup>(CA)</sup>	-	178,484 <sup>(US)</sup> 236,438 <sup>(CA)</sup>	-	-	8,400 <sup>(US)</sup> 11,127 <sup>(CA)</sup>	545,914 <sup>(US)</sup> 723,172 <sup>(CA)</sup>
Sales — Americas	2018	242,897 <sup>(US)</sup> 310,131 <sup>(CA)</sup>	101,208 <sup>(US)</sup> 129,222 <sup>(CA)</sup>	-	152,285 <sup>(US)</sup> 194,438 <sup>(CA)</sup>	_	-	7,667 <sup>(US)</sup> 9,789 <sup>(CA)</sup>	504,057 <sup>(US)</sup> 643,580 <sup>(CA)</sup>
	2017	238,134 <sup>(US)</sup> 314,623 <sup>(CA)</sup>	99,223 <sup>(US)</sup> 131,094 <sup>(CA)</sup>	-	156,675 <sup>(US)</sup> 206,999 <sup>(CA)</sup>	_	-	7,049 <sup>(US)</sup> 9,314 <sup>(CA)</sup>	501,081 <sup>(US)</sup> 662,030 <sup>(CA)</sup>

<sup>(1)</sup> Base salary earned in the financial year, regardless when paid.

(4) Indicates the total bonus earned during the financial year whether paid during the financial year or payable on a later date:

Name	Paid during the	Paid in the First Quarter	Total Bonus Earned during
	Financial Year Ended	of the Financial Year	the Financial Year
	August 31, 2019 <sup>(i)</sup>	Ending on August 31, 2020 <sup>(i)</sup>	Ended August 31, 2019 <sup>(i)</sup>
	(\$)	(\$)	(\$)
Germain Lamonde	_ (US)	173,721 <sup>(US)</sup>	173,721 <sup>(US)</sup>
	_ (CA)	230,128 <sup>(CA)</sup>	230,128 <sup>(CA)</sup>
Philippe Morin	_ (US)	143,072 <sup>(US)</sup>	143,072 <sup>(US)</sup>
	_ (CA)	189,528 <sup>(CA)</sup>	189,528 <sup>(CA)</sup>
Pierre Plamondon	_ (US)	86,330 <sup>(US)</sup>	86,330 <sup>(US)</sup>
	_ (CA)	114,362 <sup>(CA)</sup>	114,362 <sup>(CA)</sup>
Willem Jan te Niet	85,619 <sup>(US)</sup>	54,701 <sup>(US)</sup>	140,320 <sup>(US)</sup>
	113,419 <sup>(CA)</sup>	72,463 <sup>(CA)</sup>	185,882 <sup>(CA)</sup>
	75,482 <sup>(E)</sup>	48,224 <sup>(€)</sup>	123,706 <sup>(€)</sup>
Dana Yearian	109,973 <sup>(US)</sup>	68,511 <sup>(US)</sup>	178,484 <sup>(US)</sup>
	145,681 <sup>(CA)</sup>	90,757 <sup>(CA)</sup>	236,438 <sup>(CA)</sup>

<sup>(</sup>i) Refer to note 2 above.

<sup>(2)</sup> The compensation information for Canadian residents has been converted from Canadian dollars to US dollars based upon an average foreign exchange rate of CA\$ 1.3247 = US\$1.00 for the financial year ended August 31, 2019, CA\$1.2768 = US\$1.00 for the financial year ended August 31, 2018 and CA\$1.3212 = US\$1.00 for the financial year ended August 31, 2017. The compensation information for the Netherlands resident has been converted from Euros to US dollars based upon an average foreign exchange rate of €0.8816 = US\$1.00 for the financial year ended August 31, 2019, €0.8386 = US\$1.00 for the financial year ended August 31, 2017 and the conversion from US dollars to Canadian dollars is made as described above.

<sup>(3)</sup> Indicates the dollar amount based on the grant date fair value of the RSUs awarded under the LTIP for the financial year. The fair value at the time of grant of a RSU is equal to the market value of Subordinate Voting Shares at the time RSUs are granted. The grant date market value is equal to the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and the NASDAQ Global Select Market on the last trading day preceding the grant date, using the daily exchange rate of the Bank of Canada on the last trading day preceding the grant date to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars as required. Grants of RSUs to NEOs are detailed under section "Compensation Discussion and Analysis – Long-Term Incentive Plan".

- (5) Indicates the amount contributed by the Corporation during the financial year to the DPSP as detailed under section "Compensation Discussion and Analysis Deferred Profit-Sharing Plan", the 401K plan as detailed under section "Compensation Discussion and Analysis 401K plan", as applicable, for the benefit of the NEOs. Mr. Lamonde is not eligible to participate in the DPSP.
- (6) Mr. Lamonde stepped down as CEO as of April 1, 2017 and was nominated Executive Chairman of the Corporation.
- (7) Mr. Morin was promoted from Chief Operating Officer of the Corporation to CEO of the Corporation as of April 1, 2017.
- (8) Including a discretionary bonus of CA\$10,000 (US\$7,832).

## **Incentive Plan Awards**

The significant terms of all plan-based awards and non-equity incentive plan awards, issued or vested, or under which options have been exercised, during the financial year, or outstanding at the end of the financial year are described herein under the section entitled "Compensation Discussion and Analysis – Long-Term Incentive Plan" and "Compensation Discussion and Analysis – Short Term Incentive Compensation".

Outstanding Share-Based Awards and Option-Based Awards

The following sets out for each NEO all option, PSUs and RSU awards outstanding as at August 31, 2019, if any, including those granted before August 31, 2019.

	Outstanding Option-Based Awards (Options)				Outstanding Share-Based Awards (PSUs or RSUs)			
Name	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price	Option Expiration Date	Value of Unexercised "in-the-money" Options	Number of Shares or Units of Shares that Have Not Vested (#)	Market or Payout Value of Share-Based Awards that Have Not Vested (US\$) (1)	Market or Payout Value of Vested Share- Based Awards Not Paid Out or Distributed (US\$)	
Germain Lamonde	-	-	-	-	_	_	_	
Philippe Morin	-	-	-	-	327,039	1,193,692	_	
Pierre Plamondon	-	-	-	-	143,945	525,399	_	
Willem Jan te Niet	-	-	-	-	71,348	260,420	-	
Dana Yearian	-	_	-	-	139,346	508,613	_	

<sup>(1)</sup> The value of unvested PSUs or RSUs at the financial year-end is the market value of the Subordinate Voting Shares on August 31, 2019, which was US\$3.65 (CA\$4.85). The market value of the Subordinate Voting Shares was calculated by using the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and on the NASDAQ Global Select Market on August 30, 2019 using the daily exchange rate of the Bank of Canada to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars as required. The actual gains on vesting will depend on the value of the Subordinate Voting Shares on the date of vesting. There can be no assurance that these values will be realized.

# **Exercised Option-Based Awards**

No option-based awards of the Corporation were held during the financial year ended August 31, 2019 by the NEOs.

Incentive Plan Awards – Value Vested or Earned during the Year

The following table summarizes, for each of the NEOs, the value of share-based awards vested during the financial year ended August 31, 2019, if any, and the value of non-equity incentive plan compensation earned during the financial year ended August 31, 2019, if any.

Name	Share-Based Awards – Value Vested during the Year (US\$) (1)	Non-Equity Incentive Plan Compensation – Value Earned during the Year (US\$) (2)
Germain Lamonde	_	173,721
Philippe Morin	171,020	143,072
Pierre Plamondon	66,009	86,330
Willem Jan te Niet	32,775	140,320
Dana Yearian	60,382	178,484

- (1) The aggregate dollar value realized is equivalent to the market value of the Subordinate Voting Shares underlying the PSUs or RSUs at vesting. This value, as the case may be, has been converted from Canadian dollars to US dollars based upon the daily exchange rate of the Bank of Canada on the day of vesting.
- (2) Includes total non-equity incentive plan compensation earned by each NEO in respect to the financial year ended on August 31, 2019 (as indicated under the "Summary Compensation Table").

## **Pension Plan Benefits**

The Corporation does not have a defined benefit pension plan. The significant terms of the DPSP and the 401K plan of the Corporation are described herein under the sections entitled "Compensation Discussion and Analysis – Deferred Profit-Sharing Plan" and "Compensation Discussion and Analysis – 401K plan". The amounts paid by the Corporation to the NEOs under such plans are detailed in the column entitled "All other compensation" in the "Summary Compensation Table".

# **Termination and Change of Control Benefits**

The Corporation has an employment agreement with Mr. Germain Lamonde, the Corporation's Executive Chairman. The agreement is for an indeterminate period and compensation is reviewed annually. In the event of the termination of Mr. Lamonde's employment without cause, Mr. Lamonde will be entitled to a severance payment equal to twenty-four (24) months of his current rate of remuneration (base salary, STIP compensation and benefits) and the immediate vesting of all stock options, PSUs and RSUs if any. In addition, in the event that Mr. Lamonde's employment is terminated following a merger or an acquisition by a third party of substantially all of the Corporation's assets or of the majority of its share capital ("Change of Control"), he will be entitled to a severance payment equal to twenty-four (24) months of his current rate of remuneration (base salary, STIP compensation and benefits) and to the immediate vesting of all stock options, PSUs and RSUs if any. If Mr. Lamonde voluntarily resigns, he will be entitled to immediate vesting of all stock options, PSUs and RSUs if any.

The Corporation has an employment agreement with Mr. Philippe Morin, the Corporation's Chief Executive Officer. The agreement is for an indeterminate period and compensation is reviewed annually. In the event of termination of Mr. Morin's employment without cause, Mr. Morin will be entitled to a severance payment equal to twelve (12) months of his current base salary and to the immediate vesting, to a certain proportion as determined by the LTIP, of PSUs and RSUs if any. In addition, in the event Mr. Morin's employment is terminated following a Change of Control, he will be entitled to a severance payment equal to twelve (12) months of his current base salary and to the immediate vesting of all stock options, PSUs and RSUs if any.

The Corporation has an employment agreement with Mr. Pierre Plamondon, the Corporation's CFO and Vice President, Finance. The agreement is for an indeterminate period and compensation is reviewed annually. In the event of termination of Mr. Plamondon's employment without cause, Mr. Plamondon will be entitled to a severance payment equal to twelve (12) months of his current base salary and to the immediate vesting, to a certain proportion as determined by the LTIP, of PSUs and RSUs if any. In addition, in the event Mr. Plamondon's employment is terminated following a Change of Control, he will be entitled to a severance payment equal to eighteen (18) months of his current rate of remuneration (base salary, STIP compensation and benefits) and to the immediate vesting of all stock options, PSUs and RSUs if any.

The Corporation has an employment agreement with Mr. Willem Jan te Niet, the Corporation's Vice President, Sales — EMEA. The agreement is for an indeterminate period and compensation is reviewed annually. In the event of termination of Mr. te Niet's employment without cause, Mr. te Niet will be entitled to severance payments equal to one (1) month per year of service as a Vice President of the Corporation with a minimum of six (6) months but in no case exceeding twelve (12) months of his current base salary and to the immediate vesting, to a certain proportion as determined by the LTIP, of PSUs and RSUs if any. In addition, in the event Mr. te Niet's employment is terminated following a Change of Control, he will be entitled to severance payments equal to one (1) month per year of service as a Vice President of the Corporation with a minimum of six (6) months but in no case exceeding twelve (12) months of his current rate of remuneration (base salary, SIP compensation and benefits) and to the immediate vesting of all stock options, PSUs and RSUs if any.

The Corporation has an employment agreement with Mr. Dana Yearian, the Corporation's Vice President, Sales — Americas. The agreement is for an indeterminate period and compensation is reviewed annually. In the event of termination of Mr. Yearian's employment without cause, Mr. Yearian will be entitled to a severance payment equal to twelve (12) months of his current base salary and to the immediate vesting, to a certain proportion as determined by the LTIP, of PSUs and RSUs if any. In addition, in the event Mr. Yearian's employment is terminated following a Change of Control, he will be entitled to a severance payment equal to eighteen (18) months of his current rate of remuneration (base salary, SIP compensation and benefits) and to the immediate vesting of all stock options, PSUs and RSUs if any.

The following table outlines the estimated incremental payments NEOs would be entitled to receive if a termination payment event occurred on August 31, 2019, which includes all payments, payables and benefits that would be given by the Corporation to a NEO upon such termination payment event.

	Termination Payment Event						
Named Executive Officer	Without Cause (\$) (1) (2)	Change of Control (\$) (2) (3)	Voluntary (\$)				
Germain Lamonde	986,740 <sup>(US) (4)</sup> 1,295,070 <sup>(CA)</sup>	986,740 <sup>(US)</sup> 1,295,070 <sup>(CA)</sup>	0 (2)				
Philippe Morin <sup>(6)</sup>	1,094,815 <sup>(US)</sup> 1,453,122 <sup>(CA)</sup>	1,595,215 <sup>(US)</sup> 2,118,037 <sup>(CA)</sup>	-				
Pierre Plamondon <sup>(6)</sup>	535,834 <sup>(US)</sup> 711,043 <sup>(CA)</sup>	968,376 <sup>(US)</sup> 1,280,622 <sup>(CA)</sup>	-				
Willem Jan te Niet <sup>(6)</sup>	284,405 <sup>(US)</sup> 377,188 <sup>(CA)</sup> 250,731 <sup>(€)</sup>	437,387 <sup>(US)</sup> 580,466 <sup>(CA)</sup> 385,600 <sup>(€)</sup>	-				
Dana Yearian <sup>(6)</sup>	534,616 <sup>(US)</sup> 709,393 <sup>(CA)</sup>	1,101,386 <sup>(US)</sup> 1,450,134 <sup>(CA)</sup>	-				

<sup>(1)</sup> The aggregate amount disclosed includes an evaluation of the amount that the NEO would have been entitled to should a termination of employment without cause have occurred on August 31, 2019 and includes, as the case may be for each NEO, the base salary that would have been received and total value of PSUs, RSUs and options that would have vested (with the exception of Mr. Lamonde's evaluation which is described in note 6 below and includes: the base salary, STIP compensation, and total value of PSUs, RSUs and options that would have vested). The amount for base salary compensation is calculated according to those amounts provided under the section entitled "Summary Compensation Table" included in this Annual Report. The amount for the total value attached to the vesting of PSUs, RSUs and options determined pursuant to the LTIP as described in the section entitled "Long-Term Incentive Compensation – Long-Term Incentive Plan" for termination without cause.

<sup>(2)</sup> The aggregate amount for Canadian residents has been converted from Canadian dollars to US dollars based upon a foreign exchange rate of CA\$1.3247 = US\$1.00 as of August 31, 2019. The aggregate amount for Netherlands resident has been converted from Euros to US dollars based upon a foreign exchange rate of €0.8816 = US\$1.00 as of August 31, 2019.

- (3) The aggregate amount disclosed includes, as the case may be for each NEO, an evaluation of the amount that the NEO would have been entitled to should a termination of employment for Change of Control have occurred on August 31, 2019 and includes, as the case may be, namely, the base salary, STIP or SIP compensation and total value of PSUs, RSUs and options that would have vested. The amount for base salary and STIP or SIP compensation are calculated according to those amounts provided under the section entitled "Summary Compensation Table" included in this Annual Report, the total value attached to the vesting of PSUs, RSUs and options is calculated according to those amounts provided in the columns named "Value of unexercised "in-the-money" options" and "Market or payout value of share-based awards that have not vested" of the table included under the heading entitled "Outstanding share-based awards and option-based awards".
- (4) The aggregate amount disclosed includes an evaluation of the amount that Mr. Lamonde would have been entitled to should a termination of employment without cause have occurred on August 31, 2019 and includes: the base salary, STIP compensation, and total value of PSUs, RSUs and options that would have vested. The amount for base salary and STIP compensation are calculated according to those amounts provided under the section entitled "Summary Compensation Table" included in this Annual Report; the total value attached to the vesting of PSUs or RSUs and options are calculated according to those amounts provided in the columns named "Value of unexercised "in-the-money" options" and "Market or payout value of share-based awards that have not vested" of the table included under the heading entitled "Outstanding share-based awards and option-based awards".
- (5) Mr. Lamonde did not hold any PSUs, RSUs or options on August 31, 2019.
- (6) None of these NEOs held any PSUs or options on August 31, 2019.

## **Compensation of Directors**

#### **Director Compensation Table**

In the financial year ended August 31, 2014, the decision was made to increase the Annual Retainer and eliminate the attendance fees and each Director who was not an employee of the Corporation or any of its subsidiaries received an Annual Retainer as set forth in the following table, payable in a combination of cash and DSUs as chosen by the director pursuant to the DSU Plan. Since June 2017 pursuant to our internal policy, our Directors have the obligation to elect to receive at least seventy-five (75%) of their Annual Retainer in form of DSUs until their cumulative Annual Retainers equal or exceed three (3) times the sum of: i) the Annual Retainer for Directors; ii) the Annual Retainer for Audit Committee Members; and iii) the Annual Retainer for Human Resources Committee Members. The significant terms of the DSU Plan are described herein under the section entitled "Long-Term Incentive Compensation – Deferred Share Unit Plan".

	From September 1, 2018 to August 31, 2019		
Annual Retainer for Directors (1)	CA\$70,000 (2)	US\$52,842 (3)	
Annual Retainer for Lead Director	CA\$10,000	US\$7,549 <sup>(3)</sup>	
Annual Retainer for Audit Committee Chairman	CA\$12,000	US\$9,059 <sup>(3)</sup>	
Annual Retainer for Audit Committee Members	CA\$4,500 <sup>(4)</sup>	US\$3,397 <sup>(3)</sup>	
Annual Retainer for Human Resources Committee Chairman	CA\$7,000	US\$5,284 <sup>(3)</sup>	
Annual Retainer for Human Resources Committee Members	CA\$4,500 <sup>(4)</sup>	US\$3,397 <sup>(3)</sup>	

<sup>(1)</sup> All the Directors elected to receive 100% of their Annual Retainer for Directors in form of DSUs except Mr. François Côté, who elected to receive 75% of his Annual Retainer in form of DSUs.

<sup>(2)</sup> The Annual Retainer for Mr. François Côté and Mr. Claude Séguin is CA\$70,000 (US\$52,842). The Annual Retainer for Ms. Angela Logothetis and Mr. Randy E. Tornes is US\$70,000 (CA\$92,729).

<sup>(3)</sup> The compensation information has been converted from Canadian dollars to US dollars based upon an average foreign exchange rate of CA\$1.3247 = US\$1.00 for the financial year ended August 31, 2019.

<sup>(4)</sup> The Annual Retainer for Audit Committee Members and Human Resources Committee Members is CA\$4,500 (US\$3,397) for Mr. François Côté and Mr. Claude Séguin and US\$4,500 (CA\$5,961) for Ms. Angela Logothetis and Mr. Randy Tornes.

In the financial year ended August 31, 2019, the Directors who were not employees of the Corporation earned the following compensation:

Name	Fees Earned <sup>(1)</sup> (\$)	Share-Based Awards (\$)	Option- Based Awards (\$)	Non-Equity Incentive Plan Compensation (\$)	Pension Value (\$)	All Other Compensation (\$)	Total (\$)
François Côté	69,073 <sup>(US)</sup> 91,500 <sup>(CA)</sup>	-	-	-	-	-	69,073 <sup>(US)</sup> 91,500 <sup>(CA)</sup>
Angela Logothetis	79,000 <sup>(US)</sup> 104,651 <sup>(CA)</sup>	-	-	-	-	-	79,000 <sup>(US)</sup> 104,651 <sup>(CA)</sup>
Claude Séguin	65,298 <sup>(US)</sup> 86,500 <sup>(CA)</sup>	-	-	-	-	-	65,298 <sup>(US)</sup> 86,500 <sup>(CA)</sup>
Randy E. Tornes	79,000 <sup>(US)</sup> 104,651 <sup>(CA)</sup>	-	-	-	-	-	79,000 <sup>(US)</sup> 104,651 <sup>(CA)</sup>

<sup>(1)</sup> The compensation information has been converted from Canadian dollars to US dollars based upon an average foreign exchange rate of CA\$1.3247 = US\$1.00 for the financial year ended August 31, 2019 except for compensation amounts paid to Ms. Angela Logothetis and Mr. Randy E. Tornes which were paid in US dollars. Subject to our internal policy, the fees are always payable in cash, but executives are provided the opportunity to elect to exchange all or a portion of their Annual Retainer for Directors into DSUs. The following table identifies the portion of the fees earned by the directors that were paid in DSUs and the portion that were paid in cash.

	Fees Earned				
Name	DSUs (\$) <sup>(i)</sup>	Cash (\$)	Total (\$)		
François Côté	39,632 <sup>(US)</sup>	29,441 <sup>(US)</sup>	69,073 <sup>(US)</sup>		
	52,500 <sup>(CA)</sup>	39,000 <sup>(CA)</sup>	91,500 <sup>(CA)</sup>		
Angela Logothetis	79,000 <sup>(US)</sup>	_ (US)	79,000 <sup>(US)</sup>		
	104,651 <sup>(CA)</sup>	_ (CA)	104,651 <sup>(CA)</sup>		
Claude Séguin	65,298 <sup>(US)</sup>	_ (US)	65,298 <sup>(US)</sup>		
	86,500 <sup>(CA)</sup>	_ (CA)	86,500 <sup>(CA)</sup>		
Randy E. Tornes	70,000 <sup>(US)</sup>	9,000 <sup>(US)</sup>	79,000 <sup>(US)</sup>		
	92,729 <sup>(CA)</sup>	11,922 <sup>(CA)</sup>	104,651 <sup>(CA)</sup>		

<sup>(</sup>i) The estimated value at the time of grant of a DSU is determined based on the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and the NASDAQ Global Select Market on the last trading day preceding the grant date, using the daily exchange rate of the Bank of Canada on the last trading day preceding the grant date to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars, as required. The value at vesting of a DSU is equivalent to the market value of a Subordinate Voting Share when a DSU is converted to such Subordinate Voting Share.

## Director Incentive Plan Awards

The significant terms of all plan-based awards and non-equity-incentive plan awards, issued or vested, or under which options have been exercised, during the year, or outstanding at the end of the financial year are described herein under section entitled "Compensation Discussion and Analysis – Long-Term Incentive Plan".

## Outstanding Share-Based Awards and Option-Based Awards

The following table sets out for each Director of the Corporation all awards outstanding as at August 31, 2019, if any, including awards granted before August 31, 2019.

	Outstanding Share-Based Awards (DSUs)					
Name	Number of Shares or Units of Shares that Have Not Vested (#)	Market or Payout Value of Share-Based Awards that Have Not Vested (US\$) <sup>(1)</sup>	Market or Payout Value of Vested Share-Based Awards Not Paid Out or Distributed (US\$)			
François Côté	38,582	140,824	-			
Angela Logothetis	49,714	181,456	-			
Claude Séguin	64,211	234,370	-			
Randy E. Tornes	99,000	361,350	-			

<sup>(1)</sup> The value of unvested DSUs at the financial year-end is the market value of the Subordinate Voting Shares on August 30, 2019, which was US\$3.65 (CA\$4.85). The market value of the Subordinate Voting Shares was calculated by using the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and on the NASDAQ Global Select Market on August 30, 2019 using the daily exchange rate of the Bank of Canada to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars as required. The actual gains on vesting will depend on the value of the Subordinate Voting Shares on the date of vesting. There can be no assurance that these values will be realized.

## **Exercised Share-Based Awards**

In the financial year that ended August 31, 2019, none of the DSUs of Directors vested and the Directors did not receive any non-equity incentive compensation from the Corporation.

## Securities Authorized for Issuance under Equity Compensation Plans

The following table sets forth the number of Subordinate Voting Shares of the Corporation issued and outstanding as at August 31, 2019, or that may be issued, under the Corporation's LTIP and DSU Plan, both of which were approved by the Corporation's shareholders.

Plan Category	Number of Securities to Be Issued upon Exercise of Outstanding DSUs, Options, PSU and RSUs (#) (a)	Weighted-Average Exercise Price of Outstanding DSUs, Options, PSU and RSUs (US\$) (b)	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (#) (c)
DSU Plan – DSUs	251,507	n/a <sup>(1)</sup>	
LTIP – Options	-	-	4 909 120
LTIP - PSUs	-	-	4,898,130
LTIP – RSUs	1,836,446	n/a <sup>(1)</sup>	

<sup>(1)</sup> The value of DSUs, PSUs and RSUs will be equal to the market value of the Subordinate Voting Shares of the Corporation on the date of vesting.

## **Annual Burn Rate**

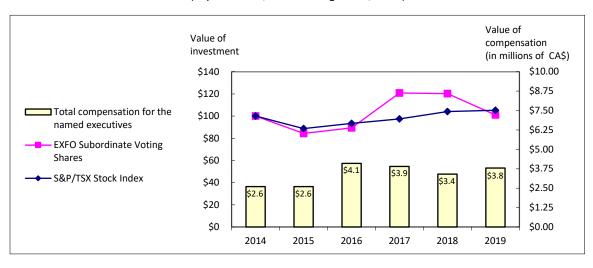
In accordance with the requirements of section 613 of the TSX Company Manual the following table sets out the burn rate of the awards granted under the Corporation's security-based compensation arrangements as of the end of the financial years ended August 31, 2019, August 31, 2018 and August 31, 2017. As at November 1, 2019 the only security-based compensation arrangements are the LTIP and the DSU Plan. The table below sets out the burn rate for such security-based compensation arrangements. The burn rate is calculated by dividing the number of DSUs, options, PSUs or RSUs, as applicable, granted under the respective plans during the relevant fiscal year by the weighted average number of securities outstanding for the applicable fiscal year:

	Year ended August 31, 2019	Year ended August 31, 2018	Year ended August 31, 2017
Number of DSUs granted	69,818	65,745	45,058
Number of Options granted	-	-	_
Number of PSUs granted	-	-	_
Number of RSUs granted	632,931	420,621	527,143
Weighted average number of securities outstanding for the applicable year	55,325,000	54,998,000	54,423,000
Annual burn rate of the DSUs	0.1%	0.1%	0.1%
Annual burn rate of Options	-	-	-
Annual burn rate of PSUs	-	-	-
Annual burn rate of RSUs	1.1%	0.8%	1.0%

## **PERFORMANCE GRAPH**

The below line graph compares the cumulative total shareholder return of the Corporation's Subordinate Voting Shares with the cumulative shareholder return of the S&P/TSX Composite Index for the last five (5) financial years ended August 31, 2019. It assumes that the initial value of the investment in the Corporation's Subordinate Voting Shares and in the S&P/TSX Composite Index was CA\$100 on September 1, 2014. The bar chart below illustrates the trend in total compensation paid to the NEOs in office during such periods; the Executive Chairman, CEO and CFO are included in each period but the other named executive officers changed from one period to another. For further information about the identity and compensation of the NEOs, please refer to our previous five (5) Annual Reports and this Annual Report under the section "Summary Compensation Table".

# The Corporation's Stock Performance (September 1, 2014 to August 31, 2019)



	August 31,					
	2014	2015	2016	2017	2018	2019
EXFO Subordinate Voting Shares (CA\$)	\$100	\$84	\$89	\$121	\$120	\$101
S&P/TSX Composite Index (CA\$)	\$100	\$89	\$93	\$97	\$104	\$105
NEOs' total compensation (in millions of CA\$)	\$2.6	\$2.6	\$4.1	\$3.9	\$3.4	\$3.8

The line graph reflects that EXFO underperformed the S&P/TSX Composite Index in fiscal years 2015, 2018 and 2019, but performed better in 2016 and 2017. At the end of the five-year measurement period, the performance gap between EXFO and the S&P/TSX Composite Index was relatively small. Total shareholder return for the Corporation dropped in 2015, recovered in 2016 and particularly in 2017, stabilized in 2018 and slipped in 2019. Total shareholder return for the Index decreased in 2015, steadily increased in 2016, 2017 and 2018, then stabilized in 2019.

The Corporation was negatively impacted by uneven macro-economic conditions and irregular telecom spending during this five-year period. Its sales were also affected by global exchange rates, notably the increase of the US dollar versus a basket of currencies like the Canadian dollar, British pound and Euro. The Index, meanwhile, suffered from lower prices for natural resources in 2015, but it was less perturbed by unsteady macro-economic conditions. Due to the relatively small size of the Corporation and its market capitalization, its Subordinate Voting Shares tend to be more volatile and more severely impacted, either positively or negatively, than the Index.

The bar chart on the previous page illustrates that over the same five-year period, the total level of compensation received by the NEOs, as expressed in Canadian dollars, followed the Corporation's share price performance in 2016, but not in 2015, 2017, 2018 and 2019. The following information should be considered when analyzing the chart:

- The Corporation's share price decreased as at August 31, 2015 compared to the previous financial year, while total NEO compensation as expressed in Canadian dollars remained flat for the same period. It should be noted, however, three out of five NEOs were remunerated in currencies other than the Canadian dollar. On a constant currency basis, total NEO compensation would have decreased by about CA\$100,000 year-over-year. As a result, total compensation received by the NEOs for this period was aligned with share price performance.
- The Corporation's share performance increased from September 1, 2015 to August 31, 2016. Total compensation received by the NEOs during this period also increased but at a higher rate than the Corporation's share price. It should be noted that the Corporation hired an executive to the newly created position of Chief Operating Officer in the early part of the financial year, which contributed to the increase in total compensation received by the NEOs during this period.
- The Corporation's share performance increased from September 1, 2016 to August 31, 2017. Total compensation received by the NEOs decreased during this period as certain financial targets were not met, which consequently was aligned with shareholders' interests.
- The Corporation's share price remained relatively flat as at August 31, 2018 compared to the previous financial year, while total compensation received by the NEOs decreased during that period as certain financial targets were not met. In addition, fewer Restricted Share Units (RSUs) were attributed to the CEO in 2018 than in the previous year, while the Executive Chairman accepted a reduced compensation plan after transitioning from his former role as CEO.
- The Corporation's share performance decreased from September 1, 2018 to August 31, 2019.
   Total compensation received by the NEOs increased during this period since most financial targets were met with revenues, bookings, IFRS net loss, adjusted EBITDA and cash flows from operations improving year-over-year.

Total compensation to NEOs of the Corporation is defined as the aggregate of base salary, short-term compensation and long-term compensation. Base salary is established at the beginning of each financial year, according to recommendations made by the Board of Directors' Human Resources Committee. Short-term compensation, which varies from one year to the next, is contingent upon the achievement of pre-established objectives measured against corporate and individual targets for a given financial year. For more information about short-term compensation, refer to the heading entitled "Short Term Incentive Compensation." Long-term compensation, which is provided in the form of RSUs, vests over a three- to five-year period, depending on the achievement of pre-established corporate goals. For more information about long-term compensation, refer to the heading entitled "Long-Term Incentive Plan".

Consequently, base salary and short-term compensation do not necessarily track the market value of our share price. Long-term compensation, however, is directly aligned with share-price performance, since the market value of RSUs is equal to the market value of our shares on any vesting day. Accordingly, the market value of the Corporation's share price will affect the planned value of NEOs' total compensation, thereby partially aligning their experience with that of shareholders.

## **DIRECTORS AND OFFICERS' LIABILITY INSURANCE**

The Corporation maintains insurance protection against liability incurred by its officers and directors as well as those of its subsidiaries in the performance of their duties. The entire premium, amounting to US\$176,554 from September 30, 2019 to September 30, 2020, is paid by the Corporation. The aggregate limit of liability in respect of any and all claims is US\$20 million per year, subject to a deductible of US\$250,000. A separate excess director and officer liability policy with aggregate limit of US\$5 million provides broad form side A coverage, featuring difference-in-conditions (DIC) drop-down coverage that fills in potential coverage gaps that may exist under restrictive or unresponsive underlying insurance. This specific policy provides coverage for personal directors and officers liability if the organization fails or refuses to indemnify, or is financially unable to do so, or is prevented by law from indemnifying and will also respond if the primary D&O policy limit is consumed.

# C. Board Practices

# **Board of Directors**

Our Directors are elected at the annual meeting of shareholders for one-year terms and serve until their successors are elected or appointed, unless they resign or are removed earlier. We plan to hold our next annual meeting of shareholders on January 8, 2020. Our articles of incorporation provide for a Board of Directors of a minimum of three (3) and a maximum of twelve (12) Directors. Our Board of Directors presently consists of six Directors. Under the Canada Business Corporations Act, twenty-five percent of the Directors and of the members of any committee of the Board of Directors must be resident Canadians. We have no arrangements with any of our Directors providing for the payment of benefits upon their termination of service as Director except for the vesting of their respective Deferred Share Units as detailed above.

The following charts and notes set out the name of each of the individuals proposed to be nominated at the Meeting for election as a director of the Corporation. Included in these charts is information relating to the proposed directors' committee memberships, meeting attendance, period of service as a director, principal directorships with other organizations and equity ownership (or securities over which each of them exercises control or direction) in the Corporation.

#### **GERMAIN LAMONDE**



St-Augustin-de-Desmaures, Quebec, Canada

Director since September 1985

Not Independent (Management)

Principal Occupation: Executive Chairman of the Board of Directors

Germain Lamonde, founder of EXFO, is Executive Chairman of the Board and served as the company's Chief Executive Officer (CEO) for over 30 years. During his tenure as CEO, Mr. Lamonde grew the company from the ground up, turning it into a global leader in the communications test, monitoring and analytics market and the world's #1 fiber/highspeed testing company, with customers in over one hundred countries. Today as Executive Chairman, Mr. Lamonde leads EXFO's acquisitions strategy and is actively involved in defining the company's growth and investment strategies, strategic direction and corporate governance policies. Mr. Lamonde has served on the board of directors of several public and private organizations, fulfilled numerous speaking engagements, and received several industry awards for his leadership, innovation and global development and was named EY Entrepreneur of the Year 2018 Canada. Mr. Lamonde is presently Chairman of ENCQOR, the Canada-Quebec-Ontario partnership focused on research and innovation in the field of 5G/IoT innovation and serves on the Board of QG100 - a CEO development forum. Mr. Lamonde holds a bachelor's degree in engineering physics from Polytechnique Montréal and a master's degree in optics from Université Laval in Québec City. He is a graduate of the Ivey Executive Program at Western University in London, Ontario, and is also a Fellow of the Canadian Academy of Engineering.

Board/Committee Membership			Attend	ance (1)	Board Memberships	of Another Reporting Issuer	
Board of Directors			5/6	83%	_		
Securities Held							
As at	Subordii Voting Sha		Multiple Voting Shares (#)	PSUs (#)	RSUs (#)	Total Shares <sup>(2)</sup> and PSUs, RSUs (#)	Total Market Value <sup>(3)</sup> of Shares <sup>(2)</sup> and PSUs, RSUs (US\$)
August 31, 2019	3,672,47	74 <sup>(4)</sup>	31,643,000 (5)	-	-	35,315,474	128,901,480

<sup>(1)</sup> From September 1, 2018 until November 1, 2019, Mr. Lamonde attended four (4) board meetings in person and one (1) board meeting by telephone.

<sup>(2)</sup> Includes both Subordinate Voting Shares and Multiple Voting Shares.

<sup>(3)</sup> The value of unvested PSUs or RSUs at the financial year-end is the market value of the Subordinate Voting Shares on August 31, 2019, which was US\$3.65 (CA\$4.85). The market value of the Subordinate Voting Shares and Multiple Voting Shares was calculated by using the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and on the NASDAQ Global Select Market on August 30, 2019 using the daily exchange rate of the Bank of Canada to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars as required. The actual gains on vesting of PSUs or RSUs will depend on the value of the Subordinate Voting Shares on the date of vesting. There can be no assurance that these values will be realized.

<sup>(4)</sup> Mr. Lamonde exercises control over 3,191,666 Subordinate Voting Shares through G. Lamonde Investissements Financiers Inc., a company controlled by Mr. Lamonde. Mr. Lamonde exercises control over 316,247 Subordinate Voting Shares through 9356-8988 Québec Inc., a company controlled by Mr. Lamonde. Mr. Lamonde exercises direct control over 164,561 Subordinate Voting Shares.

<sup>(5)</sup> Mr. Lamonde exercises control over 29,743,000 Multiple Voting Shares through G. Lamonde Investissements Financiers Inc., a company controlled by Mr. Lamonde. Mr. Lamonde exercises control over 1,900,000 Multiple Voting Shares through 9356-8988 Québec Inc., a company controlled by Mr. Lamonde.

# FRANÇOIS CÔTÉ



Montreal, Quebec, Canada
Director since
January 2015
Lead Director
Independent

Principal Occupation:

François Côté was appointed a member of our Board of Directors in January 2015. Mr. Côté is a director as a full-time occupation, for corporations in the public, private and non-profit sectors, bringing his expertise in strategy, M&A, governance and passion for growth. Mr. Côté held a variety of executive positions at Bell Canada prior to becoming President and Chief Executive Officer of Emergis. Following the acquisition of Emergis by TELUS in January 2008, he was appointed President of TELUS Quebec, TELUS Health and TELUS Ventures. In this role, Mr. Côté was responsible for broadening TELUS Quebec's presence and driving the company's national health strategy through timely investments in information technology and innovative wireless solutions. Mr. Côté holds a bachelor's degree in Industrial Relations from Laval University. In 2007, he was named Entrepreneur of the Year by Ernst & Young, in the Corporate Restructuring category for the province of Quebec. Mr. Côté serves on the boards of Purkinje, a Montreal health IT growth company as Chairman, Aspire Food Group, HZB Pharma Canada also as Chairman and Diagnos Inc. a new publicly listed company on the TSX Venture Exchange. Mr. Côté also serves on the Advisor Committee of Groupe Morneau.

Board/Committee Membership	Attendance (1)		Board Memberships of Another Reporting Issuer		
Board of Directors Audit Committee Human Resources Committee Independent Board of Directors	6/6 5/5 5/5 5/5	100% 100% 100% 100%	Diagnos Inc.		
Securities Held					

As at	Subordinate Voting Shares (#)	DSUs (#)	Total Shares <sup>(2)</sup> and DSUs (#)	Total Market Value <sup>(3)</sup> of Shares <sup>(2)</sup> and DSUs (US\$)			
August 31, 2019	6,500	38,582	45,082	164,549			

<sup>(1)</sup> From September 1, 2018 until November 1, 2019, Mr. Côté attended five (5) board meetings in person and one (1) board meeting by telephone.

<sup>(2)</sup> Refers to Subordinate Voting Shares.

<sup>(3)</sup> The value of unvested DSUs at the financial year-end is the market value of the Subordinate Voting Shares on August 31, 2019, which was US\$3.65 (CA\$4.85). The market value of the Subordinate Voting Shares was calculated by using the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and on the NASDAQ Global Select Market on August 30, 2019 using the daily exchange rate of the Bank of Canada to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars as required. The actual gains on vesting of DSUs will depend on the value of the Subordinate Voting Shares on the date of vesting. There can be no assurance that these values will be realized.

#### **ANGELA LOGOTHETIS**



Bath United Kingdom

Director since January 2017

Independent

Principal Occupation: Vice President and CTO, Amdocs Open Network (1)

Angela Logothetis has more than twenty-five (25) years of international experience in the telecommunications industry. She has been strategically engaged in the industry's major network transformations. Ms. Logothetis has an outstanding software pedigree having worked for market-leading software companies including Amdocs, Cramer, PricewaterhouseCoopers and Accenture as well as start-up software companies Clarity and Time Quantum Technology. She has held senior leadership positions in ANZ, APAC and EMEA and has held global responsibility for the past ten (10) years. Ms. Logothetis is the CTO for Amdocs Open Network. Amdocs is the market leader in customer experience software solutions and services for the world's largest communications, entertainment and media service providers. Ms. Logothetis has held several senior leadership positions at Amdocs including Head of OSS Product and Technology, Vice President of OSS Product Management and Executive Site Lead for Amdocs Bath. She has chaired high-caliber software forums in Amdocs including the Divisional Leadership Team, the Technical Advisory Council, and has served as an executive on the Product Business Management Team and the Product Leadership Forum. Ms. Logothetis holds a Bachelor of Science degree, with first class honors, in Business Information Technology from the University of New South Wales, Australia. She completed dual majors in accountancy and information technology.

Board/Committee Membership	A	Attend	ance <sup>(2)</sup>	Board Memberships of Another Reporting Issuer		
Board of Directors Audit Committee Human Resources Committee Independent Board of Directors	5, 5,	5/6 5/5 5/5 5/5	100% 100% 100% 100%	_		
Securities Held						

Securities neta							
As at	Subordinate Voting Shares (#)	DSUs (#)	Total Shares <sup>(3)</sup> and DSUs (#)	Total Market Value <sup>(4)</sup> of Shares <sup>(3)</sup> and DSUs (US\$)			
August 31, 2019	_	49,714	49,714	181,456			

<sup>(1)</sup> Amdocs is a market leader in software solutions and services for communications, media and entertainment service providers.

<sup>(2)</sup> From September 1, 2018 until November 1, 2019, Ms. Logothetis attended five (5) board meetings in person and one (1) board meeting by telephone.

<sup>(3)</sup> Refers to Subordinate Voting Shares.

<sup>(4)</sup> The value of unvested DSUs at the financial year-end is the market value of the Subordinate Voting Shares on August 31, 2019, which was US\$3.65 (CA\$4.85). The market value of the Subordinate Voting Shares was calculated by using the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and on the NASDAQ Global Select Market on August 30, 2019 using the daily exchange rate of the Bank of Canada to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars as required. The actual gains on vesting of DSUs will depend on the value of the Subordinate Voting Shares on the date of vesting. There can be no assurance that these values will be realized.

#### PHILIPPE MORIN



Montreal, Quebec Canada

Director since January 2018

Not Independent (Management)

Principal Occupation: CEO of the Corporation Philippe Morin was appointed Chief Executive Officer (CEO) of EXFO in April 2017 and is responsible for the Corporation's strategy and financial directions, goals and results. He has more than thirty (30) years of experience in the telecommunications industry and joined EXFO in November 2015 as Chief Operating Officer (COO) leading the company's global sales leadership, market development, and product strategy. Before joining EXFO, Mr. Morin was Senior Vice President of Worldwide Sales and Field Operations at Ciena. He previously held senior leadership roles at Nortel Networks, including President of Metro Ethernet Networks and Vice President and General Manager of Optical Networks. Philippe Morin holds a bachelor's degree in electrical engineering from Université Laval in Quebec City, Canada, and a master's degree in business administration (MBA) from McGill University in Montreal, Canada.

Board/Committee Men	nbership		Attendance (1)		Board Memberships of Another Reporting Issuer				
Board of Directors			6/6	100%	-				
Securities Held									
As at	Subordinate Voting Shares		RSUs (#)		Total Shares <sup>(2)</sup> and PSUs, RSUs (#)	Total Market Value <sup>(3)</sup> of Shares <sup>(2)</sup> and PSUs, RSUs (US\$)			
August 31, 2019	658,059	-	327,039		985,098	3,595,608			

<sup>(1)</sup> From September 1, 2018 until November 1, 2019, Mr. Morin attended five (5) board meetings in person and one (1) board meeting by telephone.

<sup>(2)</sup> Refers to Subordinate Voting Shares.

<sup>(3)</sup> The value of unvested PSUs or RSUs at the financial year-end is the market value of the Subordinate Voting Shares on August 31, 2019, which was US\$3.65 (CA\$4.85). The market value of the Subordinate Voting Shares and Multiple Voting Shares was calculated by using the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and on the NASDAQ Global Select Market on August 30, 2019 using the daily exchange rate of the Bank of Canada to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars as required. The actual gains on vesting of PSUs or RSUs will depend on the value of the Subordinate Voting Shares on the date of vesting. There can be no assurance that these values will be realized.

## **CLAUDE SÉGUIN**



Westmount, Quebec, Canada

Director since February 2013

Independent

Principal Occupation: Director

Claude Séguin was appointed a member of EXFO's Board of Directors in February 2013. He brings to EXFO nearly forty (40) years of corporate, financial, executive and provincial government experience gained through senior management positions in major corporations and government departments. Mr. Séguin was Special advisor to the Founder and Executive Chairman at CGI Group Inc., a global leader in information technology and business process services, until March 2018. He was, until November 2016, Senior Vice President, Corporate Development and Strategic Investments. In this position, he was responsible for all merger and acquisition activities. Prior to joining CGI in 2003, he served as President of CDP Capital—Private Equity, and prior to this position, he served as Teleglobe Inc.'s Executive Vice President, Finance and Chief Financial Officer, a position that he held from 1992 to 2000. Mr. Séguin also has extensive senior-level government experience, having served as Deputy Finance Minister of the Province of Quebec from 1987 to 1992, in addition to Assistant Deputy Finance Minister in prior years. Prior to that, he held senior positions at the Province of Quebec Treasury Board. Mr. Séguin is a member of the board of HEC-Montréal. He also chairs the Boards of Centraide of Greater Montreal Foundation and of Fonds de solidarité FTQ, a \$15B Labour Sponsored Investment Fund in Québec. Claude Séguin graduated from HEC-Montréal and earned a master's and a Ph.D. in public administration from Syracuse University in New York State. He also followed the Advanced Management Program at Harvard Business School.

Board/Committee Membership	Attend	ance (1)	Board Memberships of Another Reporting Issuer			
Board of Directors	5/6	83%	Fonds de solidarité FTQ			
Audit Committee	5/5	100%				
Human Resources Committee	4/5	80%				
Independent Board of Directors	4/5	80%				

Securities Held									
As at	Subordinate Voting Shares (#)	DSUs (#)	Total Shares <sup>(2)</sup> and DSUs (#)	Total Market Value <sup>(3)</sup> of Shares <sup>(2)</sup> and DSUs (US\$)					
August 31, 2019	5,000	64,211	69,211	252,620					

<sup>(1)</sup> From September 1, 2018 until November 1, 2019, Mr. Séguin attended four (4) board meetings in person and one (1) board meeting by telephone.

<sup>(2)</sup> Refers to Subordinate Voting Shares.

<sup>(3)</sup> The value of unvested DSUs at the financial year-end is the market value of the Subordinate Voting Shares on August 31, 2019, which was US\$3.65 (CA\$4.85). The market value of the Subordinate Voting Shares was calculated by using the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and on the NASDAQ Global Select Market on August 30, 2019 using the daily exchange rate of the Bank of Canada to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars as required. The actual gains on vesting of DSUs will depend on the value of the Subordinate Voting Shares on the date of vesting. There can be no assurance that these values will be realized.

#### **RANDY E. TORNES**



Frisco, Texas, USA Director since February 2013 Independent

Principal Occupation: Vice President, Client Partner for AT&T at Aricent (1)

Randy E. Tornes was appointed a member of EXFO's Board of Directors in February 2013. He brings to EXFO over thirty (30) years of telecommunications experience gained through senior management positions at leading network equipment manufacturers. Mr. Tornes is Vice President, Client Partner for AT&T at Aricent, An Altran Company. Prior to joining Aricent, Mr. Tornes was Vice President Strategic Alliances at Juniper Networks, a worldwide leader in high-performance networking and telecommunications equipment. Mr. Tornes has also worked as the Operating Area Leader for AT&T and responsible for all sales, service and support of Juniper products and services. Prior to joining Juniper Networks in May 2012, he spent two (2) years at Ericsson, where he was Vice President Sales (AT&T account). Previous to that position, he worked for Nortel for twenty-six (26) years, holding various sales management positions, including Vice President Sales, GSM Americas. Mr. Tornes also served as member of the Board of Governors at 3G Americas LLC. Randy E. Tornes holds a Bachelor of Science degree in business—organizational development and production and operations management, from the University of Colorado in Colorado Springs.

Board/Committee Membership			Attend	ance (2)	Board Memberships of Another Reporting Issuer				
Board of Directors Audit Committee Human Resources Committee Independent Board of Directors				100% 100% 100% 100%	-				
Securities Held									
	Subordinata		•		Total Shares (3)	Total Market Value (4)			

Securities near									
As at	Subordinate Voting Shares (#)	DSUs (#)	Total Shares <sup>(3)</sup> and DSUs (#)	Total Market Value <sup>(4)</sup> of Shares <sup>(3)</sup> and DSUs (US\$)					
August 31, 2019	_	99,000	99,000	361,350					

<sup>(1)</sup> Aricent is a global design and engineering company.

<sup>(2)</sup> From September 1, 2018 until November 1, 2019, Mr. Tornes attended five (5) board meetings in person and one (1) board meeting by telephone.

<sup>(3)</sup> Refers to Subordinate Voting Shares.

<sup>(4)</sup> The value of unvested DSUs at the financial year-end is the market value of the Subordinate Voting Shares on August 31, 2019, which was US\$3.65 (CA\$4.85). The market value of the Subordinate Voting Shares was calculated by using the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and on the NASDAQ Global Select Market on August 30, 2019 using the daily exchange rate of the Bank of Canada to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars as required. The actual gains on vesting of DSUs will depend on the value of the Subordinate Voting Shares on the date of vesting. There can be no assurance that these values will be realized.

The information as to Subordinate Voting Shares and Multiple Voting Shares beneficially owned or over which the above-named individuals exercise control or direction is not within the direct knowledge of the Corporation and has been furnished by the respective individuals. The information as to the Principal Board Memberships is also not within the direct knowledge of the Corporation and has been furnished by the respective individuals.

With the exception of Mr. Philippe Morin (as disclosed below), none of the individuals who are proposed to be nominated at the Meeting for election as a director of the Corporation:

- a) is, as at the date hereof, or has been, within ten (10) years before the date hereof, a director, chief executive officer or chief financial officer of any company that (i) was subject to an order that was issued while such individual was acting in the capacity as director, chief executive officer or chief financial officer, or (ii) was subject to an order that was issued after such individual ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer;
- b) is, as at the date hereof, or has been within ten (10) years before the date hereof, a director or executive officer of any company that, while such individual was acting in that capacity, or within a year of that individual ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets;
- c) has, within the ten (10) years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold his assets; or
- d) has been subject to (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority, or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable security holder in deciding whether to vote for such individual.

Mr. Philippe Morin acted as an executive officer of Nortel Networks Corporation ("Nortel") and its affiliates from 2006 to 2010 as President Metro Ethernet Networks. Nortel and certain of its affiliates filed for bankruptcy protection in a number of jurisdictions in January 2009.

From September 1, 2018 through November 1, 2019, the Board met a total of six (6) times. Each member attended all meetings, except for Mr. Lamonde and Mr. Séguin who were absent at one (1) meeting.

## **Committees of the Board of Directors**

Our Board of Directors has established an audit committee, a human resources committee and a disclosure committee.

Our audit committee will recommend a firm to be appointed as independent auditors to audit financial statements and to perform services related to the audit, review the scope and results of the audit with the independent auditors, review with management and the independent auditors our annual operating results and consider the adequacy of the internal accounting procedures and the effect of the procedures relating to the auditors' independence. Further to changes to NASDAQ corporate governance rules and Securities and Exchange Act rules flowing from the adoption of the *Sarbanes-Oxley Act*, we review our audit committee charter annually to ensure that we comply with all new requirements. Accordingly, in October 2019, the Audit Committee reviewed the Audit Committee Charter, a copy of which is filed as Exhibit 11.5 to this Annual Report and is also readily available from EXFO's website at www.EXFO.com. Information on our Web site is not incorporated by reference in this Annual Report. As at November 1, 2019, the audit committee is composed of four independent Directors: François Côté, Angela Logothetis, Claude Séguin and Randy E. Tornes. The chairperson of the audit committee is Claude Séguin.

From September 1, 2018 through November 1, 2019, the Audit Committee met a total of five (5) times. Each member attended all meetings.

Our human resources committee will evaluate, review and supervise our procedures with regards to human resources and will assess the performance of our executive officers and the chief executive officer. This committee will also review annually the remuneration of the Directors and will recommend to the Board of Directors general remuneration policies regarding salaries, bonuses and other forms of remuneration for our Directors, executive officers and employees as a whole. Finally, the human resources committee will review our organizational structure annually and the development and maintenance of a succession plan. In October 2014 and in October 2017, the Human Resources Committee reviewed and amended the Human Resources Committee Charter which integrates the Compensation Committee Charter and the Nominating and Governance Committee Charter, copy of which is filed as Exhibit 11.6 to our 2014 Annual Report and as Exhibit 11.15 to our 2017 Annual Report, the Human Resources Committee reviewed and amended the Human Resources Committee Charter in order to specifically add the compensation review of the Executive Chairman which is also readily available from EXFO's website at www.EXFO.com. Information on our Web site is not incorporated by reference in this Annual Report. As at November 1, 2019, the Human Resources Committee is composed of four (4) independent Directors: François Côté, Angela Logothetis, Claude Séguin and Randy E. Tornes. The chairperson of the Human Resources Committee is François Côté.

From September 1, 2018 through November 1, 2019, the Human Resources committee met a total of five (5) times and all members attended all meetings except for Mr. Séguin who was absent at one (1) meeting.

The disclosure committee is responsible for overseeing our disclosure practices. This committee consists of the executive chairman, the chief executive officer, the chief financial officer, the director of investor relations, the director of financial reporting and accounting as well as our general counsel and corporate secretary.

Furthermore, our independent Directors hold regularly scheduled meetings at which non-independent directors and members of management are not in attendance. The independent Directors hold as many meetings, as needed, annually and any Director may request such meeting at any time. From September 1, 2018 through November 1, 2019, five (5) meetings of independent Directors without management occurred and all members attended all meetings except Mr. Séguin who was absent at one (1) meeting. In June 2011, an Independent Members Committee Charter was adopted. A copy of this Independent Members Committee Charter has been filed as Exhibit 11.9 to our 2011 Annual Report.

#### REPORT ON CORPORATE GOVERNANCE PRACTICES

## **Corporate Governance Developments in Canada**

In January 2004, the Canadian Securities Administrators (the "CSA") adopted Multilateral Instrument 52-110—Audit Committees, which was last amended in November 2015 ("MI 52-110"). MI 52-110 sets forth certain requirements regarding Audit Committee composition and responsibilities, as well as reporting obligations with respect to audit-related matters. The disclosure of the MI 52-110 requirements is included in our 2019 Annual Information Form on Form 20-F under Exhibit 11.5 (Audit Committee Charter), Items 6.A (Directors and Senior Management) and 16.C (Principal Accountant Fees and Services) available as described below. For the composition of the Audit Committee, refer to the table provided under heading "Nominees for Election as Directors and their Beneficial Ownership of Voting Securities".

Effective June 30, 2005, the CSA also adopted National Instrument 58-101—Disclosure of Corporate Governance Practices ("NI 58-101") and National Policy 58-201—Effective Corporate Governance ("NP 58-201" and, together with MI 52-110, the "CSA Corporate Governance Standards"). NP 58-201 provides guidance to Canadian issuers with respect to corporate governance practices, while NI 58-101 requires issuers to make certain disclosures regarding their governance practices. The CSA Corporate Governance Standards, particularly NI 58-101 and NP 58-201, have replaced the former guidelines of the Toronto Stock Exchange that had, prior to the coming into force of the CSA Corporate Governance Standards, served as the primary source of codified recommendations in respect of corporate governance practices in Canada.

#### **EXFO's Corporate Governance Practices**

In accordance with NI 58-101, we are required to disclose information with respect to our system of corporate governance. Over the past few years, we have undertaken a comprehensive review of our corporate governance practices in order to best comply with and, whenever practicable, exceed the CSA Standards.

We adopted in March 2005, and are updating on a regular basis, a number of charters and policies, including an Audit Committee Charter, a Board of Directors Corporate Governance Guidelines, a Code of Ethics for our Principal Executive Officer and Senior Financial Officers, a Disclosure Guidelines, an Ethics and Business Conduct Policy, a Human Resources Committee Charter, a Securities Trading Policy and a Statement on Reporting Ethical Violations (Whistleblower Policy). We adopted in October 2006 a policy regarding Hiring Employees and Former Employees of Independent Auditor. We adopted in June 2011 an Independent Members Committee Charter. We also adopted in October 2011 a majority voting policy for the election of our Directors and amended it in order to comply with the TSX Rules in March 2016. We amended in October 2012 the Human Resources Committee Charter in order to expressly reflect the responsibility of the Human Resources Committee to conduct an annual assessment of the risks associated with the Corporation's executive compensation policies and procedures.

In July 2018, we amended our Ethics and Business Conduct Policy and our Agent Code of Conduct to remove the exception for facilitation payments. In March 2017, we amended our Disclosure Guidelines to add the Executive Chairman as a member of the Disclosure Committee. In June 2017, we also amended our Director Share Ownership Policy and our Board of Directors Corporate Governance Guidelines in order to introduce mandatory obligations for our Directors to elect to receive at least seventy-five (75%) of their Annual Retainer in form of DSUs until their cumulative Annual Retainers equal or exceed three (3) times the sum of: i) the Annual Retainer for Directors; ii) the Annual Retainer for Audit Committee Members; and iii) the Annual Retainer for Human Resources Committee Members.

We amended in January 2013, in October 2014 and in October 2017 the Human Resources Committee Charter in order to respectively receive and discuss suggestions from shareholders for potential Directors' nominees, to adapt it to the latest NASDAQ Rules on compensation committee along with an update on the nomination of Directors process and in order to specifically add the compensation review of the Executive Chairman. We adopted in January 2013 a Policy Regarding Conflict Minerals. We amended our Ethics and Business Conduct Policy and our Statement on Reporting Ethical Violations (Whistleblower Policy) in June 2013 and adopted in September 2013 the Agent Code of Conduct to formalize our anti-corruption compliance program. We adopted also in September 2013 a Director Share Ownership Policy. We also amended in October 2014 the Audit Committee Charter in order to harmonize its terminology with MI 52-110. We are also implementing best practices such as Best Practice regarding the Granting Date of Stock Incentive Compensation and the establishment of guidelines regarding the filing and disclosure of material contracts. We refer to our Board of Directors and Committee Charters as our "Corporate Governance Rules".

We are of the view that adopting and implementing good corporate governance practices is a cornerstone of our corporate and management practices and policies and that our existing corporate governance practices already meet the prevailing corporate governance standards. We further believe that the measures we have adopted with respect to corporate governance comply substantially with the CSA Standards.

We encourage our shareholders to consult our Corporate Governance Rules and Ethics and Business Conduct Policy available on our website (www.EXFO.com) and also available in print to any shareholder who requests copies by contacting our Corporate Secretary.

Our 2019 Annual Information Form on Form 20-F (also filed with the Securities and Exchange Commission ("SEC")), which will be available on or before November 29, 2019 and which may be obtained free of charge upon request to the Corporate Secretary or at www.sedar.com in Canada or www.sec.gov/edgar.shtml in the U.S., will also contain certain information with respect to our corporate governance practices.

We are dedicated to updating our corporate governance practices on an ongoing basis in order to respond to the evolution of best practices. We and our Board of Directors are of the view that our corporate governance practices, as summarized in the Exhibit 11.7 attached to this Annual Report, are in substantial compliance with the CSA Corporate Governance Standards. Copies of our Corporate Governance Rules and all related policies (including those mentioned above) are available on our website (www.EXFO.com) as mentioned in Exhibit 11.7.

# D. Employees

We have fostered a corporate culture where growth and change are strongly encouraged. In fact, employees are constantly evolving with the rapid pace of technology to meet new challenges and realities. We believe that we possess a good cross-section of experience and youth to handle these inevitable changes in the industry.

As of November 1, 2019, we had a total of 1,810 employees, up from a total of 1,803 on November 1, 2018. We have 725 employees in Canada, primarily based in the province of Quebec, and 1,085 employees based outside of Canada. 656 are involved in research and development, 401 in manufacturing, 318 in sales and marketing, 130 in general administrative positions and 305 in communications and customer support. We have agreements with the majority of our employees covering confidentiality and non-competition. Our 97 manufacturing employees based in Quebec City plant are represented by a collective agreement through "Syndicat des employé(e)s d'EXFO". Our 51 employees in Spain are represented by a collective agreement through an independent union and 169 employees in Rennes, France, are represented by collective agreements through CFDT and CGT. We have never experienced a work stoppage. We believe that relations with our employees and bargaining unit are good.

# E. Share Ownership

The following table presents information regarding the ownership of Subordinate Voting Shares, Exercisable "in-the-money" and "out-of-the-money" options and the beneficial ownership of our share capital as at November 1, 2019 by our Executive Chairman, our Chief Executive Officer, our Chief Financial Officer, our Directors, our two other most highly compensated executive officers, our other executive officers as a group, all of our Directors and executive officers as a group.

Each multiple voting share is convertible at the option of the holder into one subordinate voting share. Holders of our subordinate voting shares are entitled to one (1) vote per share and holders of our multiple voting shares are entitled to ten (10) votes per share.

Total

Currently Evercisable Ontions

		Owned as at November 1, 2019				Total Subordinate				Total Percentage
	_	"In-the-	"Out-of- n-the-money" the-money"		Voting Shares Beneficially Owned (1)		Multiple Voting Shares Beneficially Owned (1)		of Voting Power	
Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Percent
3,672,474 <sup>(2)</sup>	15.38	_	*	_	*	3,672,474	15.38	31,643,000 (3)	100	94.06
658,835	2.76	_	*	-	*	658,835	2.76	_	_	*
112,505	*	-	*	-	*	112,505	*	-	-	*
6,500	*	-	*	-	*	6,500	*	-	-	*
	*	-	*	-	*	-	*	-	-	*
5,000	*	_	*	_	*	5,000	*	-	-	*
-	*	_	*	_	*	-	*	_	-	*
2,635	*	_	*	_	*	2,635	*	_	_	*
-	*	_	*	_	*	-	*	_	-	*
88,903	*	_	*	_	*	88,903	*	_	_	*
4,546,852	19.04	_	*	_	*	4,546,852	19.04	31,643,000	100	94.32
	Shares O  Number  3,672,474 (2) 658,835 112,505 6,500 - 5,000 - 2,635 -	3,672,474 (2) 15.38 658,835 2.76 112,505 * 6,500 * - * 5,000 * - * 2,635 * - * 88,903 *	Subordinate Voting Shares Owned       Cowned Winstead         Number       Percent       Number         3,672,474 (2)       15.38       —         658,835       2.76       —         112,505       *       —         6,500       *       —         -       *       —         5,000       *       —         2,635       *       —         2,635       *       —         88,903       *       —	Subordinate Voting Shares Owned         Owned as at Noting Shares Owned           Number         Percent         Number         Percent           3,672,474 (2)         15.38         -         *           658,835         2.76         -         *           112,505         *         -         *           6,500         *         -         *           -         *         -         *           5,000         *         -         *           -         *         -         *           2,635         *         -         *           -         *         -         *           88,903         *         -         *	Owned as at November 1           Subordinate Voting Shares Owned         "(In-the-money")         "Out the-money"           Number         Percent         Number         Percent         Number           3,672,474 (2)         15.38         -         *         -           658,835         2.76         -         *         -           112,505         *         -         *         -           6,500         *         -         *         -           5,000         *         -         *         -           5,000         *         -         *         -           2,635         *         -         *         -           88,903         *         -         *         -	Subordinate Voting Shares Owned         Owned as at November 1, 2019           Number         Percent         Number         Percent         Number         Percent         Number         Percent         Number         Percent           3,672,474 (2)         15.38         -         *         -         *           658,835         2.76         -         *         -         *           112,505         *         -         *         -         *           6,500         *         -         *         -         *           -         *         -         *         -         *           5,000         *         -         *         -         *           -         *         -         *         -         *           2,635         *         -         *         -         *           -         *         -         *         -         *           88,903         *         -         *         -         *	Subordinate Voting Shares Owned         Owned as at November 1, 2019         Total Subordinate Subordinates (Voting Shares)           Number         Percent         Number         Percent         Number         Percent         Number         Percent         Number         Percent         Number         Number         Number         3,672,474         4         558,835         2.76         -         *         -         *         658,835         112,505         *         -         *         -         *         658,835         112,505         *         -         *         -         *         658,835         112,505         *         -         *         -         *         658,835         112,505         *         -         *         -         *         658,835         112,505         *         -         *         -         *         658,835         -         *         -         *         658,835         -         *         -         *         658,835         -         *         -         *         658,835         -         -         *         6,500         -         *         -         *         -         -         -         -         -         - <th< td=""><td>Subordinate Voting Shares Owned         Owned as at November 1, 2019         Total Subordinate Voting Shares Beneficially Owned (3)           Number         Percent         Number         Percent         Number         Percent         Number         Percent         Number         Percent         Number         Percent         15.38         —         *         —         *         —         *         3,672,474         15.38         —         *</td><td>Subordinate Voting Shares Owned         Owned as at November 1, 2019         Total Subordinate Voting Shares Multiple Voting Shares (Number of the-morey")         Total Subordinate Voting Shares (Number of the-morey")         Multiple Voting Shares (Number of the-morey")         Number (Number of the-morey")         Number of the-morey"         Number of the-morey (Number of the-morey)         Number of the more of th</td><td>Subordinate Voting Shares Owned Shares Shar</td></th<>	Subordinate Voting Shares Owned         Owned as at November 1, 2019         Total Subordinate Voting Shares Beneficially Owned (3)           Number         Percent         Number         Percent         Number         Percent         Number         Percent         Number         Percent         Number         Percent         15.38         —         *         —         *         —         *         3,672,474         15.38         —         *	Subordinate Voting Shares Owned         Owned as at November 1, 2019         Total Subordinate Voting Shares Multiple Voting Shares (Number of the-morey")         Total Subordinate Voting Shares (Number of the-morey")         Multiple Voting Shares (Number of the-morey")         Number (Number of the-morey")         Number of the-morey"         Number of the-morey (Number of the-morey)         Number of the more of th	Subordinate Voting Shares Owned Shares Shar

- (1) Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Options that are currently exercisable or exercisable within sixty (60) days as at November 1, 2019 (including options that have an exercise price above the market price) are deemed to be outstanding and to be beneficially owned by the person holding such options for the purpose of computing the percentage ownership of such person, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Accordingly, DSUs, PSUs and RSUs are not included.
- (2) The number of shares held by Germain Lamonde includes 3,191,666 subordinate voting shares held of record G. Lamonde Investissements Financiers Inc., 316,247 subordinate voting shares held of record by 9356-8988 Québec Inc. and 164,561 subordinate voting shares held by Germain Lamonde.
- (3) The number of shares held by Germain Lamonde includes 29,743,000 multiple voting shares held of record by G. Lamonde Investissements Financiers Inc. and 1,900,000 multiple voting shares held of record by 9356-8988 Québec Inc.

There are no options outstanding as at November 1, 2019.

The following table presents information regarding Deferred Share Units, Performance Share Units and Restricted Share Units held by our Executive Chairman, our Chief Executive Officer, our Chief Financial Officer, our Directors, our two other most highly compensated executive officers, our other executive officers as a group, all of our Directors and executive officers as a group, as at November 1, 2019.

		DSUs			PSUs			RSUs	
Name	Number	Percentage	Estimated Average Value at the time of grant US\$/DSU (1)	Number	Percentage	Fair Value at the time of grant US\$/PSU (2)	Number	Percentage	Fair Value at the time of grant US\$/RSU (3)
Germain Lamonde	_	_	_	_	_	_	_	_	_
	-	-		28,965 <sup>(4)</sup>	20.54 %	3.83	54,945 <sup>(5)</sup>	3.11%	3.43
	_	_	_				51,831 <sup>(6)</sup>	2.93 %	3.43
	_	_	_				45,786 <sup>(7)</sup>	2.59 %	4.01
	_	_	_				38,110 (8)	2.16 %	4.89
Dhilinna Maria	_	_	-				4,764 <sup>(9)</sup>	0.27 %	4.89
Philippe Morin	_	_	-				51,353 <sup>(10)</sup>	2.91%	4.00
	_	_	_				34,892 <sup>(11)</sup>	1.98 %	3.17
	_	_	_				43,615 (12)	2.47 %	3.17
	_	_	-				28,965 (13)	1.64 %	3.83
	_	_	_				15,000 <sup>(14)</sup>	0.85 %	3.83
	_	_	_	13,878 (4)	9.84%	3.83	27,140 <sup>(15)</sup>	1.54 %	3.23
	_	_	_				24,239 <sup>(7)</sup>	1.37 %	4.01
S: SI I	_	_	_				27,266 <sup>(10)</sup>	1.54 %	4.00
Pierre Plamondon	_	_	_				16,842 (11)	0.95 %	3.17
	_	_	_				21,052 (12)	1.19 %	3.17
	_	_	_				13,878 <sup>(13)</sup>	0.79 %	3.83
François Côté	38,582 <sup>(16)</sup>	15.34 %	3.82	_	_	_		_	-
Angela Logothetis	49,714 (16)	19.77 %	3.96	_	_	_		_	_
Claude Séguin	64,211 (16)	25.53 %	3.93	_	-	_	_	_	-
Randy E. Tornes	99,000 (16)	39.36 %	3.90	_	-	_	_	_	_
	_	_	_	11,553 <sup>(4)</sup>	8.19 %	3.83	5,000 (17)	0.28 %	3.33
	_	_	-				16,069 <sup>(7)</sup>	0.91%	4.01
	_	_	_				20,153 (10)	1.14 %	4.00
Willem Jan te Niet	_	_	_				13,117 (11)	0.74 %	3.17
	_	_	_				16,397 <sup>(12)</sup>	0.93 %	3.17
	_	_	_				11,553 <sup>(13)</sup>	0.65 %	3.83
	_	_	_				15,000 <sup>(14)</sup>	0.85 %	3.83
Dana Yearian	_	_		_	_	_		_	_

<sup>\*</sup> Less than 1%.

		DSUs		-	PSUs			RSUs	
Name	Number	Percentage	Estimated Average Value at the time of grant US\$/DSU (1)	Number	Percentage	Fair Value at the time of grant US\$/PSU (2)	Number	Percentage	Fair Value at the time of grant US\$/RSU (3)
	-	_	_	86,599 (4)	61.42 %	3.83	1,840 (18)	0.10 %	3.27
	_	_	_				69,376 <sup>(15)</sup>	3.93 %	3.23
	_	_	_				1,250 (19)	0.07 %	3.00
	_	_	_				74,679 <sup>(7)</sup>	4.23 %	4.01
	_	_	_				2,000 (20)	0.11%	4.01
Other executive	_	_	_				2,500 (21)	0.14 %	5.10
officers as a group	_	_	_				87,081 (10)	4.93 %	4.00
	_	_	_				7,233 (22)	0.41%	4.45
	_	_	_				69,892 (11)	3.96%	3.17
	_	_	_				87,362 (12)	4.95 %	3.17
	_	_	_				88,678 (13)	5.02 %	3.83
	_	_	_				51,742 (14)	2.93 %	3.83
Total	251,507	100.00 %	3.90	140,995	100.00%	3.83	1,140,600	64.57 %	3.66
	-	_	_	140,995	100.00%	3.83	54,945 <sup>(5)</sup>	3.11%	3.43
	_	_	_	_	_	_	51,831 <sup>(6)</sup>	2.93 %	3.43
	_	_	_	_	_	_	160,773 <sup>(7)</sup>	9.10 %	4.01
	_	_	_	_	_	_	38,110 <sup>(8)</sup>	2.16 %	4.89
	_	_	_	_	_	_	4,764 <sup>(9)</sup>	0.27 %	4.89
	_	_	_	_	_	_	185,853 <sup>(10)</sup>	10.52 %	4.00
	-	_	_	_	_	_	134,743 (11)	7.63 %	3.17
All of the directors	_	_	_	_	_	_	168,426 <sup>(12)</sup>	9.53 %	3.17
and executive	_	_	_	_	-	_	143,074 <sup>(13)</sup>	8.10 %	3.83
officers as a group	_	_	-	_	_	-	81,742 (14)	4.63 %	3.83
	-	_	-	_	_	-	96,516 (15)	5.46 %	3.23
	_	_	_	-	-	_	5,000 (17)	0.28 %	3.33
	_	_	_	_	-	_	1,840 (18)	0.10%	3.27
	_	_	_	-	-	_	1,250 (19)	0.07 %	3.00
	_	_	_	_	_	_	2,000 (20)	0.11%	4.01
	_	_	_	_	_	_	2,500 (21)	0.14%	5.10
	_	_	_	_	_	_	7,233 (22)	0.41%	4.45
Total	251,507	100.00 %	3.90	140,995	100.00%	3.83	1,140,600	64.57 %	3.66

- (1) The estimated average value at the time of grant of a DSU is the average of the estimated value at the time of grant of a DSU which is determined based on the highest of the closing prices of the Subordinate Voting Shares on the Toronto Stock Exchange and the NASDAQ Global Select Market on the last trading day preceding the grant date, using the daily exchange rate of the Bank of Canada on the last trading day preceding the grant date to convert either the NASDAQ Global Select Market closing price to Canadian dollars or the Toronto Stock Exchange closing price to United States dollars, as required. The value at vesting of a DSU is equivalent to the market value of a Subordinate Voting Share when a DSU is converted to such Subordinate Voting Share.
- (2) The fair value at the time of grant of a PSU is equal to the market value of Subordinate Voting Shares at the time PSUs are granted.
- (3) The fair value at the time of grant of a RSU is equal to the market value of Subordinate Voting Shares at the time RSUs are granted.
- (4) Those PSUs will vest on the third anniversary date of the grant in October 2019 on the attainment of performance objectives as determined by the Board of Directors.
- (5) Those RSUs will vest at a rate of 1/2 annually commencing on the third anniversary date of the grant in November 2015.
- (6) Those RSUs will vest on the fifth anniversary date of the grant in November 2015 but are subject to early vesting on the third and fourth anniversary date of the grant on the attainment of performance objectives as determined by the Board of Directors. Accordingly, subject to the attainment of performance objectives, the first early vesting is up to 1/3 of the units on the third anniversary date of the grant and the second early vesting is up to 50% of the remaining units on the fourth anniversary date of the grant.
- (7) Those RSUs will vest on the fifth anniversary date of the grant in October 2016 but are subject to early vesting on the third and fourth anniversary date of the grant on the attainment of performance objectives as determined by the Board of Directors. Accordingly, subject to the attainment of performance objectives, the first early vesting is up to 1/3 of the units on the third anniversary date of the grant and the second early vesting is up to 50% of the remaining units on the fourth anniversary date of the grant.
- (8) Those RSUs will vest at a rate of 1/2 annually commencing on the third anniversary date of the grant in April 2017.
- (9) Those RSUs will vest on the fifth anniversary date of the grant in April 2017 but are subject to early vesting on the third and fourth anniversary date of the grant on the attainment of performance objectives as determined by the Board of Directors. Accordingly, subject to the attainment of performance objectives, the first early vesting is up to 1/3 of the units on the third anniversary date of the grant and the second early vesting is up to 50% of the remaining units on the fourth anniversary date of the grant.

- (10) Those RSUs will vest on the fifth anniversary date of the grant in October 2017 but are subject to early vesting on the third and fourth anniversary date of the grant on the attainment of performance objectives as determined by the Board of Directors. Accordingly, subject to the attainment of performance objectives, the first early vesting is up to 1/3 of the units on the third anniversary date of the grant and the second early vesting is up to 50% of the remaining units on the fourth anniversary date of the grant.
- (11) Those RSUs will vest on the third anniversary date of the grant in October 2018.
- (12) Those RSUs will vest on the third anniversary date of the grant in October 2018 on the attainment of performance objectives as determined by the Board of Directors.
- (13) Those RSUs will vest on the third anniversary date of the grant in October 2019.
- (14) Those RSUs will vest on the third anniversary date of the grant in October 2019.
- (15) Those RSUs will vest on the fifth anniversary date of the grant in October 2015 but are subject to early vesting on the third and fourth anniversary date of the grant on the attainment of performance objectives as determined by the Board of Directors. Accordingly, subject to the attainment of performance objectives, the first early vesting is up to 1/3 of the units on the third anniversary date of the grant and the second early vesting is up to 50% of the remaining units on the fourth anniversary date of the grant.
- (16) Those DSUs will vest at the time Director ceases to be a member of the Board of the Corporation.
- (17) Those RSUs will vest at a rate of 1/2 annually commencing on the third anniversary date of the grant in August 2016.
- (18) Those RSUs will vest on the fifth anniversary date of the grant in July 2015 but are subject to early vesting on the third and fourth anniversary date of the grant on the attainment of performance objectives as determined by the Board of Directors. Accordingly, subject to the attainment of performance objectives, the first early vesting is up to 1/3 of the units on the third anniversary date of the grant and the second early vesting is up to 50% of the remaining units on the fourth anniversary date of the grant.
- (19) Those RSUs will vest at a rate of 1/2 annually commencing on the third anniversary date of the grant in January 2016.
- (20) Those RSUs will vest at a rate of 1/2 annually commencing on the third anniversary date of the grant in October 2016.
- (21) Those RSUs will vest at a rate of 1/2 annually commencing on the third anniversary date of the grant in January 2017.
- (22) Those RSUs will vest at a rate of 1/2 annually commencing on the third anniversary date of the grant in January 2018.

#### **Escrowed Securities**

To our knowledge as at November 1, 2019, none of the equity securities of the Company were held in escrow.

# Item 7. Major Shareholders and Related Party Transactions

## A. Major Shareholders

The following table presents information regarding the beneficial ownership of our share capital as at November 1, 2019 by persons or groups of affiliated persons known by us to own more than 5% of our voting shares.

	Multiple Voting Shares Beneficially Owned (1)		Subordinate \ Beneficially	Total Percentage of Voting Power	
Name	Number	Percent	Number	Percent	Percent
Germain Lamonde <sup>(2)</sup> 9356-8988 Quebec Inc. <sup>(3)</sup> G. Lamonde Investissements	31,643,000 1,900,000	100.00% 6.00%	3,672,474 316,247	15.38% 1.32%	94.06% 5.68%
Financiers Inc. <sup>(3)</sup> Graham Partners LP (Harber	29,743,000	94.00%	3,191,666	13.37%	88.34%
Capital)	-	_	1,295,345	5.43%	*

<sup>\*</sup> Less than 1%

Each multiple voting share is convertible at the option of the holder into one subordinate voting share. Holders of our subordinate voting shares are entitled to one vote per share and holders of our multiple voting shares are entitled to ten votes per share.

Ever since EXFO became a publicly traded company in June 2000, including the most recent three-year period, Mr. Lamonde and his related companies has maintained majority ownership. According to publicly available information, Graham Partners LP (Harber Capital) is EXFO's second-largest shareholder with 1.3 million subordinate voting shares or 5.4% of the public float.

As at November 11, 2019, 23,869,117 subordinate voting shares were outstanding. Approximately 96.33% (22,992,223) of our subordinate voting shares were held in bearer form and the remainder (876,894 subordinate voting shares) was held by 219 record holders. As at November 11, 2019, we believe approximately 57.57% of our outstanding subordinate voting shares were held in the United States.

<sup>(1)</sup> Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Options that are currently exercisable within 60 days of November 1, 2019 (including options that have an exercise price above the market price) are deemed to be outstanding and to be beneficially owned by the person holding such options for the purpose of computing the percentage ownership of such person, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

<sup>(2)</sup> The number of shares held by Germain Lamonde includes 1,900,000 multiple voting shares held of record by 9356-8988 Quebec Inc., 29,743,000 multiple voting shares held of record by G. Lamonde Investissements Financiers Inc., 316,247 subordinate voting shares held of record by 9356-8988 Quebec Inc., 3,191,666 subordinate voting shares held of record by G. Lamonde Investissements Financiers Inc. and 164,561 subordinate voting shares held directly by Germain Lamonde.

<sup>(3) 9356-8988</sup> Quebec Inc. and G. Lamonde Investissements Financiers Inc. are companies controlled by Mr. Lamonde.

# B. Related Party Transactions

# Indebtedness of Directors, Executive Officers and Employees

From September 1, 2018 through the date of this Annual Report, none of our directors, executive officers, associates or affiliates had any material interest in any transaction with us or in any proposed transaction which has materially affected or could materially affect us.

# C. Interests of Experts and Counsel

Not applicable.

## Item 8. Financial Information

#### A. Consolidated Statements and Other Financial Information

See Item 18, "Financial Statements" for certain other information required by this item.

#### **Export Sales**

Export and domestic sales in thousands of US dollars and as a percentage of sales are as follows:

				Yea	rs ended Au	ıgust 31,		
	 2019	2019			2018		 2017	
Export Sales	\$ 270,977	94%		\$	251,121	93%	\$ 220,715	91%
Domestic Sales	15,913	6			18,425	7	22,586	9
	\$ 286,890	100%		\$	269,546	100%	\$ 243,301	100%

## **Legal Proceedings**

There are no legal or arbitration proceedings pending or threatened of which we are aware which may have or have had a significant effect on our financial position.

#### **Dividend Policy**

We do not currently anticipate paying dividends for at least the next three years. Our current intention is to reinvest any earnings in our business long-term growth. Any future determination by us to pay dividends will be at the discretion of our Board of Directors and in accordance with the terms and conditions of any outstanding indebtedness and will depend on our financial condition, results of operations, capital requirements and such other functions as our Board of Directors considers relevant.

# B. Significant Changes

In September 2018, as part of our fiscal 2018 restructuring plan and the shutdown of our operations in Toronto, Canada, we entered into a binding agreement to sell one of our buildings for net proceeds of \$3.3 million. The transfer of ownership occurred during fiscal 2019 and resulted in a gain of \$1.7 million that was recorded in interest and other income-expense line item in our consolidated statement of earnings for that year.

In addition, in fiscal 2019, as part of our fiscal 2018 restructuring plan and the shutdown of some of our facilities in the United States, we transferred the ownership of certain intellectual property held in the United States to Canada. This created a deductible tax asset in Canada and resulted in the recognition of a one-time deferred income tax recovery of \$2.4 million in fiscal 2019 as the recovery of this asset is probable. This deferred income tax recovery was recorded in our consolidated statement of earnings for that year.

On January 8, 2019, we announced that our Board of Directors approved a share repurchase program, by way of a normal course issuer bid on the open market of up to 1,200,000 subordinate voting shares at the prevailing market price. The period of the normal course issuer bid commenced on January 14, 2019 and will end on January 13, 2020. From January 14, 2019 through November 11, 2019, we spent approximately US\$0.6 million (including fees) to repurchase 127,604 subordinate voting shares.

Item 9. The Offer and Listing

Not Applicable, except for Item 9A (4) and Item 9C.

# A. Offer and Listing Details

	NASDAQ (US\$)		TSX (	CA\$)
	High	Low	High	Low
September 1, 2014 to August 31, 2015	4.40	2.45	4.92	3.32
September 1, 2015 to August 31, 2016	4.32	2.57	5.44	3.61
September 1, 2016 to August 31, 2017	6.05	3.42	7.99	4.41
September 1, 2017 to August 31, 2018	4.70	3.20	5.81	4.29
September 1, 2018 to August 31, 2019	4.97	2.66	6.70	3.51
September 1, 2017 to November 30, 2017 (2018 1st Quarter)	4.45	3.75	5.61	4.79
December 1, 2017 to February 28, 2018 (2018 2 <sup>nd</sup> Quarter)	4.70	4.06	5.81	5.25
March 1, 2018 to May 31, 2018 (2018 3 <sup>rd</sup> Quarter)	4.40	3.35	5.63	4.35
June 1, 2018 to August 31, 2018 (2018 4 <sup>th</sup> Quarter)	4.41	3.20	5.77	4.29
September 1, 2018 to November 30, 2018 (2019 1st Quarter)	4.45	2.66	5.77	3.51
December 1, 2019 to February 28, 2019 (2019 2 <sup>nd</sup> Quarter)	3.90	2.74	5.16	3.66
March 1, 2019 to May 31, 2019 (2019 3 <sup>rd</sup> Quarter)	4.97	3.20	6.70	4.30
June 1, 2019 to August 31, 2019 (2019 4 <sup>th</sup> Quarter)	4.30	3.41	5.61	4.53
May 2019	4.80	3.86	6.47	5.20
June 2019	4.25	3.51	5.61	4.77
July 2019	4.30	3.47	5.47	4.53
August 2019	3.89	3.41	5.20	4.67
September 2019	3.99	3.47	5.27	4.80
October 2019	4.30	3.61	5.59	4.81
November 2019 (until November 11)	4.38	4.03	5.75	5.35

# C. Markets

Our subordinate voting shares have been quoted on the NASDAQ Global Select Market under the symbol EXFO and listed on The Toronto Stock Exchange under the symbol EXF since our initial public offering on June 29, 2000. Prior to that time, there was no public market for our subordinate voting shares. The table above sets forth, for the periods indicated, the high and low closing sales prices per subordinate voting share as reported on the NASDAQ Global Select Market and the Toronto Stock Exchange.

On November 11, 2019, the last reported sale price for our subordinate voting shares on the NASDAQ Global Select Market was US\$4.21 per share and the last reported sale price for our subordinate voting shares on the Toronto Stock Exchange was CA\$5.59 per share.

## Item 10. Additional Information

# A. Share Capital

Not Applicable

## B. Memorandum and Articles of Association

Our Amended Articles of Incorporation and By-laws are incorporated by reference to our registration statement on Form F-1 dated June 9, 2000 (File No. 333-38956) and amendments to our Articles by reference to Exhibit 1.4 to our fiscal year 2009 Annual Report on Form 20-F and Exhibit 1.5 to our fiscal year 2010 Annual Report on Form 20-F.

## C. Material Contracts

Except as otherwise disclosed in this Annual Report and our consolidated financial statements and notes included elsewhere in this Annual Report, we have no other material contracts.

# D. Exchange Controls

Subject to the following paragraph, there is no law or governmental decree or regulation in Canada that restricts the export or import of capital, or affects the remittance of dividends, interest or other payments to non-resident holders of our subordinate voting shares, other than withholding tax requirements.

There is no limitation imposed by Canadian law or by our articles of incorporation or our other charter documents on the right of a non-resident to hold or vote subordinate voting shares, other than as provided by the *Investment Canada Act*, the *North American Free Trade Agreement Implementation Act* (Canada) and the *World Trade Organization Agreement Implementation Act*. The *Investment Canada Act* requires notification and, in certain cases, advance review and approval by the Government of Canada of an investment to establish a new Canadian business by a non-Canadian or of the acquisition by a "non-Canadian" of "control" of a "Canadian business", all as defined in the *Investment Canada Act*. Generally, the threshold for review will be higher in monetary terms for a member of the World Trade Organization or North American Free Trade Agreement.

#### E. Taxation

#### **United States Taxation**

The information set forth below under the caption "United States Taxation" is a summary of the material U.S. federal income tax consequences of the ownership and disposition of subordinate voting shares by a U.S. Holder, as defined below. These discussions are not a complete analysis or listing of all of the possible tax consequences of such transactions and do not address all tax considerations that may be relevant to particular holders in light of their personal circumstances or to persons that are subject to special tax rules. In particular, the information set forth under the caption "United States Taxation" deals only with U.S. Holders that hold subordinate voting shares as capital assets within the meaning of Section 1221 of the Internal Revenue Code of 1986, as amended (the "Code"), and who do not at any time own, nor are treated as owning, 10% or more of the total combined voting power of all classes of our stock entitled to vote or 10% or more of the total value of shares of all classes of our stock.

In addition, this description of U.S. tax consequences does not address the tax treatment of special classes of U.S. Holders, such as financial institutions, regulated investment companies, traders in securities who elect to mark-to-market their securities, tax-exempt entities, insurance companies, partnerships, persons holding subordinate voting shares as part of a hedging, integrated or conversion transaction or as part of a "straddle," U.S. expatriates, persons subject to the alternative minimum tax, persons who acquired their subordinate voting shares through the exercise or cancellation of employee stock options or otherwise as compensation for services, dealers or traders in securities or currencies and holders whose "functional currency" is not the U.S. dollar. This summary does not address U.S. estate and gift tax consequences or tax consequences under any state and local tax laws or non-U.S. tax laws.

As used in this section, the term "U.S. Holder" means a beneficial owner of subordinate voting shares that is for U.S. federal income tax purposes:

- (a) an individual citizen or resident of the United States;
- (b) a corporation created or organized under the laws of the United States or any state thereof and the District of Columbia;
- (c) an estate the income of which is subject to United States federal income taxation regardless of its source;
- (d) a trust if (1) a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons as described in Section 7701 (a) (30) of the Code have authority to control all substantial decisions of the trust or (2) the trust has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person; or
- (e) any other person whose worldwide income or gain is otherwise subject to U.S. federal income taxation on a net income basis.

If a partnership or other flow-through entity holds subordinate voting shares, the U.S. federal income tax treatment of a partner or other owner will generally depend upon the status of the partner or other owner and upon the activities of the partnership or other flow-through entity. If you are a partner or other owner of a partnership or other flow-through entity holding subordinate voting shares, you should consult your tax advisor.

Holders of subordinate voting shares who are not U.S. Holders, sometimes referred to as "Non-U.S. Holders", should also consult their own tax advisors, particularly as to the applicability of any tax treaty.

The following discussion is based upon:

- the Code;
- U.S. judicial decisions;
- administrative pronouncements;
- existing and proposed Treasury regulations; and
- the Canada U.S. Income Tax Treaty.

Any of the above is subject to change, possibly with retroactive effect, so as to result in U.S. federal income tax consequences different from those discussed below. We have not requested, and will not request, a ruling from the U.S. Internal Revenue Service (the "IRS") with respect to any of the U.S. federal income tax consequences described below, and as a result, there can be no assurance that the IRS will not disagree with or challenge any of the conclusions we have reached and described here.

The following discussion is for general information only and is not intended to be, nor should it be construed to be, legal or tax advice to any holder of subordinate voting shares and no opinion or representation with respect to the U.S. federal income tax consequences to any holder is made. Holders of subordinate voting shares are urged to consult their tax advisors as to the particular consequences to them under U.S. federal, state, local and applicable non-U.S. tax laws of the acquisition, ownership and disposition of subordinate voting shares.

#### Dividends

Subject to the discussion of passive foreign investment companies below, the gross amount of any distribution paid by us to a U.S. Holder will generally be subject to U.S. federal income tax as foreign source dividend income to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Such income will be includable in the gross income of a U.S. Holder on the day received by the U.S. Holder. The amount of any distribution of property other than cash will be the fair market value of such property on the date of the distribution. In the case of a taxable corporate U.S. Holder, such dividends will be taxable as ordinary income and will not be eligible for the corporate dividends received deduction, which is generally allowed to U.S. corporate shareholders on dividends received from a domestic corporation. In the case of a non-corporate U.S. Holder, including individuals, such dividends should generally be eligible for a maximum tax rate of 23.8% provided, as we believe to be the case, that we are not a "passive foreign investment company". To the extent that an amount received by a U.S. Holder exceeds such holder's allocable share of our current and accumulated earnings and profits, such excess will be applied first to reduce such U.S. Holder's tax basis in his subordinate voting shares, thereby increasing the amount of gain or decreasing the amount of loss recognized on a subsequent disposition of the subordinate voting shares. Then, to the extent such distribution exceeds such U.S. Holder's tax basis, it will be treated as capital gain. We do not currently maintain, nor do we plan on maintaining, calculations of our earnings and profits for U.S. federal income tax purposes.

The gross amount of distributions paid in Canadian dollars, or any successor or other foreign currency, will be included in the income of such U.S. Holder in a U.S. dollar amount calculated by reference to the spot exchange rate in effect on the day the distributions are paid regardless of whether the payment is in fact converted into U.S. dollars. If the Canadian dollars, or any successor or other foreign currency, are converted into U.S. dollars on the date of the payment, the U.S. Holder should not be required to recognize any foreign currency gain or loss with respect to the receipt of Canadian dollars as distributions. The U.S. Holder will have a basis in any Canadian dollars or other foreign currency distributed equal to their U.S. dollar value on the payment date. If, instead, the Canadian dollars are converted at a later date, any currency gains or losses resulting from the conversion of the Canadian dollars will be treated as U.S. source ordinary income or loss. U.S. Holders are urged to consult their own tax advisors concerning the U.S. tax consequences of acquiring, holding and disposing of Canadian dollars.

A U.S. Holder may be entitled to deduct, or claim a foreign tax credit for, Canadian taxes that are withheld on dividends received by the U.S. Holder, subject to applicable limitations in the Code. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For this purpose, such dividends should generally constitute foreign source "passive category income" or, in the case of certain U.S. Holders, "general category income". The rules governing the foreign tax credit are complex. U.S. Holders are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

A Non-U.S. Holder of subordinate voting shares generally will not be subject to U.S. federal income or withholding tax on dividends received on subordinate voting shares unless such income is effectively connected with the conduct by such Non-U.S. Holder of a trade or business in the United States.

## Sale or Exchange

A U.S. Holder's initial tax basis in the subordinate voting shares will generally be cost to the holder. A U.S. Holder's adjusted tax basis in the subordinate voting shares will generally be the same as cost, but may differ for various reasons including the receipt by such holder of a distribution that was not made up wholly of earnings and profits as described above under the heading "Dividends." Subject to the discussion of passive foreign investment companies below, gain or loss realized by a U.S. Holder on the sale or other disposition of subordinate voting shares will be subject to U.S. federal income taxation as capital gain or loss in an amount equal to the difference (if any) between the U.S. Holder's adjusted tax basis (determined in U.S. dollars) in the subordinate voting shares and the U.S. dollar value of the amount realized on the disposition of such subordinate voting shares. Capital gains of non-corporate U.S. Holders, including individuals, derived with respect to a sale, exchange or other disposition of subordinate voting shares held for more than one year are subject to a maximum federal income tax rate of 23.8%. The deductibility of capital losses is subject to limitations. In the case of a non-corporate U.S. Holder, the federal tax rate applicable to capital gains will depend upon:

- the holder's holding period for the subordinate voting shares, with a preferential rate available for subordinate voting shares held for more than one year; and
- the holder's marginal tax rate for ordinary income.

Any gain realized will generally be treated as U.S. source gain, and loss realized by a U.S. Holder generally also will be treated as from sources within the United States.

If a U.S. Holder receives any foreign currency on the sale of subordinate voting shares, such U.S. Holder may recognize ordinary income or loss as a result of currency fluctuations between the date of the sale of subordinate voting shares and the date the sale proceeds are converted into U.S. dollars.

A Non-U.S. Holder of subordinate voting shares generally will not be subject to U.S. federal income or withholding tax on any gain realized on the sale or exchange of such subordinate voting shares unless:

- such gain is effectively connected with the conduct by such Non-U.S. Holder of a trade or business in the United States; or
- in the case of any gain realized by an individual Non-U.S. Holder, such Non-U.S. Holder is present in the United States for 183 days or more in the taxable year of such sale and certain other conditions are met.

## Passive Foreign Investment Company

We believe that our subordinate voting shares should not currently be treated as stock of a passive foreign investment company for United States federal income tax purposes, but this conclusion is a factual determination made annually and thus may be subject to change based on future operations as well as the composition and valuation of our assets. In particular, a significant portion of our gross assets is comprised of cash and short-term investments, which the PFIC rules treat as passive without regard to the purpose for which we hold those assets. If the proportion of these passive assets were to increase relative to the fair market value of our other assets, we may be treated as a passive foreign investment company. In general, we will be a passive foreign investment company with respect to a U.S. Holder if, for any taxable year in which the U.S. Holder holds our subordinate voting shares, either:

- at least 75% of our gross income for the taxable year is passive income; or
- at least 50% of the average value of our assets is attributable to assets that produce or are held for the production of passive income.

For this purpose, passive income includes, among other things, income such as:

- dividends;
- interest;
- rents or royalties, other than certain rents or royalties derived from the active conduct of trade or business;
- annuities; and
- gains from assets that produce passive income.

If a non-U.S. corporation owns at least 25% by value of the stock of another corporation, the non-U.S. corporation is treated for purposes of the passive foreign investment company tests as owning its proportionate share of the assets of the other corporation and as receiving directly its proportionate share of the other corporation's income.

If we are treated as a passive foreign investment company, a U.S. Holder that did not make a qualified electing fund election, if available, or a mark-to-market election, as described below, would be subject to special rules with respect to:

- any gain realized on the sale or other disposition of subordinate voting shares; and
- any "excess distribution" by us to the U.S. Holder.

Generally, "excess distributions" are the parts of any distributions to the U.S. Holder in respect of the subordinate voting shares during a single taxable year that are greater than 125% of the average annual distributions received by the U.S. Holder in respect of the subordinate voting shares during the three preceding taxable years or, if shorter, the U.S. Holder's holding period for the subordinate voting shares.

Under the passive foreign investment company rules,

- the gain or excess distribution would be allocated ratably over the U.S. Holder's holding period for the subordinate voting shares;
- the amount allocated to the taxable year in which the gain or excess distribution was realized and to taxable years prior to the first year in which we were classified as a PFIC would be taxable as ordinary income; and
- the amount allocated to each other prior year would be subject to tax as ordinary income at the highest tax rate in effect for that tax year, and the interest charge generally applicable to underpayments of tax would be imposed in respect of the tax attributable to each such year.

A U.S. Holder owning actually or constructively "marketable stock" of a passive foreign investment company may be able to avoid the imposition of the passive foreign investment company tax rules described above by making a mark-to-market election. Generally, pursuant to this election, a U.S. Holder would include in ordinary income or, subject to the following sentence, loss, for each taxable year during which such stock is held, an amount equal to the difference as of the close of the taxable year between the fair market value of its stock and its adjusted tax basis in such stock. Any mark-to-market loss is treated as an ordinary deduction, but only to the extent of the ordinary income that the U.S. Holder has included pursuant to the election in prior taxable years. The electing U.S. Holder's basis in its stock would be adjusted to reflect any of these income or loss amounts. Holders desiring to make the mark-to-market election should consult their tax advisors with respect to the application and effect of making such election.

In the case of a U.S. Holder who does not make a mark-to-market election, the special passive foreign investment company tax rules described above will not apply to such U.S. Holder if the U.S. Holder makes an election to have us treated as a qualified electing fund and we provide certain required information to holders. For a U.S. Holder to make a qualified electing fund election, we would have to satisfy certain reporting requirements. We have not determined whether we will undertake the necessary measures to be able to satisfy such requirements in the event that we were treated as a passive foreign investment company.

A U.S. Holder that makes a qualified electing fund election will be currently taxable on its pro rata share of our ordinary earnings and net capital gain, at ordinary income and capital gains rates, respectively, for each of our taxable years, regardless of whether or not distributions were received. The U.S. Holder's basis in the subordinate voting shares will be increased to reflect taxed but undistributed income. Distributions of income that had previously been taxed will result in a corresponding reduction of basis in the subordinate voting shares and will not be taxed again as a distribution to the U.S. Holder. U.S. Holders desiring to make a qualified electing fund election should consult their tax advisors with respect to the advisability of making such election.

# **United States Backup Withholding and Information Reporting**

A U.S. Holder will generally be subject to information reporting with respect to dividends paid on, or proceeds of the sale or other disposition of, our subordinate voting shares that are paid within the United States or through some U.S. related financial intermediaries to U.S. Holders, unless the U.S. Holder is a corporation or comes within certain other categories of exempt recipients. A U.S. Holder that is not an exempt recipient will generally be subject to backup withholding with respect to the proceeds from the sale or the disposition of, or with respect to dividends on, subordinate voting shares unless the U.S. Holder timely provides a taxpayer identification number and complies with the other applicable requirements of the backup withholding rules. A U.S. Holder who fails to provide a correct taxpayer identification number may be subject to penalties imposed by the United States Internal Revenue Service.

Non-U.S. Holders will generally be subject to information reporting and possible backup withholding with respect to the proceeds of the sale or other disposition of subordinate voting shares effected within the United States, unless the holder certifies to its foreign status or otherwise establishes an exemption and the broker does not have actual knowledge or reason to know that the holder is a U.S. Holder. Payments of dividends on or proceeds from the sale of subordinate voting shares within the United States by a payor within the United States to a non-exempt U.S. or Non-U.S. Holder will be subject to backup withholding if such holder fails to provide appropriate certification. In the case of such payments by a payor within the United States to a foreign partnership other than a foreign partnership that qualifies as a "withholding foreign partnership" within the meaning of such Treasury regulations, the partners of such partnership will be required to provide the certification discussed above in order to establish an exemption from backup withholding tax and information reporting requirements.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be allowed as a refund or credit against a holder's U.S. federal income tax liability, provided that the required information is furnished to the IRS.

# **Canadian Federal Income Tax Considerations**

The following is a summary of the material Canadian federal income tax considerations generally applicable to a U.S. person who holds subordinate voting shares and who, for the purposes of the *Income Tax Act* (Canada) (the "ITA"), and the *Canada-United States Income Tax Convention* (1980) (the "Convention"), as applicable and at all relevant times:

- is resident in the United States and not resident in Canada;
- holds the subordinate voting shares as capital property;
- does not have a "permanent establishment" or "fixed base" in Canada, as defined in the Convention;
   and
- deals at arm's length with us. Special rules, which are not discussed below, may apply to "financial
  institutions", as defined in the ITA, and to non-resident insurers carrying on an insurance business
  in Canada and elsewhere.

This discussion is based on the current provisions of the ITA and the Convention and on the regulations promulgated under the ITA, all specific proposals to amend the ITA or the regulations promulgated under the ITA announced by or on behalf of the Canadian Minister of Finance prior to the date of this Annual Report and the current published administrative practices of the Canada Revenue Agency. It does not otherwise take into account or anticipate any changes in law or administrative practice nor any income tax laws or considerations of any province or territory of Canada or any jurisdiction other than Canada, which may differ from the Canadian federal income tax consequences described in this document.

Under the ITA and the Convention, dividends paid or credited, or deemed to be paid or credited, on the subordinate voting shares to a U.S. person who owns less than 10% of the voting shares will be subject to Canadian withholding tax at the rate of 15% of the gross amount of those dividends or deemed dividends. If a U.S. person is a corporation and owns 10% or more of the voting shares, the rate is reduced from 15% to 5%. Subject to specified limitations, a U.S. person may be entitled to credit against U.S. federal income tax liability for the amount of tax withheld by Canada.

Under the Convention, dividends paid to specified religious, scientific, charitable and similar tax exempt organizations and specified organizations that are resident and exempt from tax in the United States and that have complied with specified administrative procedures are exempt from this Canadian withholding tax.

A capital gain realized by a U.S. person on a disposition or deemed disposition of the subordinate voting shares will not be subject to tax under the ITA unless the subordinate voting shares constitute taxable Canadian property within the meaning of the ITA at the time of the disposition or deemed disposition. In general, the subordinate voting shares will not be "taxable Canadian property" to a U.S. person if they are listed on a prescribed stock exchange, which includes The Toronto Stock Exchange, unless, at any time within the five-year period immediately preceding the disposition, the U.S. person, persons with whom the U.S. person did not deal at arm's length, or the U.S. person together with those persons, owned or had an interest in or a right to acquire more than 25% of any class or series of our shares.

If the subordinate voting shares are taxable Canadian property to a U.S. person, any capital gain realized on a disposition or deemed disposition of those subordinate voting shares will generally be exempt from tax by virtue of the Convention if the value of the subordinate voting shares at the time of the disposition or deemed disposition is not derived principally from real property, as defined by the Convention, situated in Canada. The determination as to whether Canadian tax would be applicable on a disposition or deemed disposition of the subordinate voting shares must be made at the time of the disposition or deemed disposition.

Holders of subordinate voting shares are urged to consult their own tax advisors to determine the particular tax consequences to them, including the application and effect of any state, local or foreign income and other tax laws, of the acquisition, ownership and disposition of subordinate voting shares.

# F. Dividends and Paying Agents

Not Applicable.

# G. Statement by Experts

Not Applicable.

## H. Documents on Display

Any statement in this Annual Report about any of our contracts or other documents is not necessarily complete. If the contract or document is filed as an exhibit to the registration statement, the contract or document is deemed to modify the description contained in this Annual Report. You must review the exhibits themselves for a complete description of the contract or document.

You may review a copy of our filings with the SEC, including exhibits and schedules filed with it, at the SEC's public reference facilities at 100 F Street, N.E., Washington, D.C. 20549 and at the regional offices of the SEC located at 233 Broadway, New York, New York 10279 and at the Northwestern Atrium Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. You may also obtain copies of such materials from the Public Reference Section of the SEC, 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. You may call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. The SEC maintains a Web site (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC.

You may read and copy any reports, statements or other information that we file with the SEC at the addresses indicated above and you may also access them electronically at the Web site set forth above. These SEC filings are also available to the public from commercial document retrieval services.

We are required to file reports and other information with the SEC under the Securities Exchange Act of 1934. Reports and other information filed by us with the SEC may be inspected and copied at the SEC's public reference facilities described above. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of proxy statements and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. Under the Exchange Act, as a foreign private issuer, we are not required to publish financial statements as frequently or as promptly as United States companies.

# I. Subsidiary Information

See Item 4.C. of this Annual Report.

# Item 11. Qualitative and Quantitative Disclosures about Market Risk

## **Market Risk**

## Currency Risk

Our functional currency is the Canadian dollar. We have adopted the US dollar as our reporting currency as it is the most commonly used reporting currency in our industry. We are exposed to a currency risk as a result of our export sales of products manufactured in Canada, China, France and Finland, the majority of which are denominated in US dollars and euros. This risk is partially hedged by forward exchange contracts and certain cost of sales and operating expenses (US dollars and euros). In addition, we are exposed to a currency risk as a result of our research and development activities in India (Indian rupees). This risk is partially hedged by forward exchange contracts. We do not enter into forward exchange contracts for trading or speculative purposes. Forward exchange contracts, which are designated as cash flow hedging instruments, qualify for hedge accounting.

The following tables summarize the forward exchange contracts in effect as at August 31, 2019, classified by expected transaction dates, none of which exceed three fiscal years, as well as the notional amounts of such contracts (in thousands of US dollars) along with the weighted average contractual forward rates under such contracts. The notional amounts of such contracts are used to calculate the contractual payments to be made under these contracts.

US dollars – Canadian dollars forward exchange contracts

		Years er	nding Augus	t 31,	
		2020	2021		2022
Forward exchange contracts to sell US dollars in exchange for Canadian dollars  Contractual amounts	\$	35,500 \$	19,900	ć	6,000
Weighted average contractual forward rates	Ş	1.3013	1.3107	Ş	1.3216
US dollars – Indian rupees forward exchange contracts					ar ending ugust 31, 2020
Forward exchange contracts to sell US dollars in exchange for In Contractual amount		•		\$	3,500 71.48

## Fair Value

The following table summarizes significant derivative and non-derivative financial assets and liabilities that are subject to currency risk as at August 31, 2019 and for which such risk is charged to earnings:

	Carrying/nominal amount (in thousands of US dollars)			ying/nominal amount thousands of euros)	
Financial assets					
Cash	\$	5,531	€	3,129	
Accounts receivable		30,451		6,389	
	<u> </u>	35,982	9,518		
Financial liabilities	<u> </u>	_		_	
Bank loan		5,000	_		
Accounts payable and accrued liabilities		12,563		2,218	
Forward exchange contracts (nominal value)	5,800		5,800		_
	23,363		23,363		2,218
Net exposure	\$ 12,619		€	7,300	

In addition to these assets and liabilities, we have derivatives financial liabilities for our outstanding forward exchange contracts in the amount (nominal value) of \$61.4 million as at August 31, 2019, for which the currency risk is charged to other comprehensive income.

The value of the Canadian dollar compared to the US dollar was CA\$1.3294 = US\$1.00 as at August 31, 2019.

The value of the Canadian dollar compared to the euro was CA\$1.4672 = €1.00 as at August 31, 2019.

The following sensitivity analysis summarizes the effect that a change in the value of the Canadian dollar (compared to the US dollar and euro) on derivatives and non-derivatives financial assets and liabilities denominated in US dollars and euros, would have on net earnings, net earnings per diluted share and comprehensive income, based on the foreign exchange rates as at August 31, 2019:

- An increase (decrease) of 10% in the period-end value of the Canadian dollar compared to the US dollar would decrease (increase) net earnings by \$1.2 million, or \$0.02 per diluted share, as at August 31, 2019.
- An increase (decrease) of 10% in the period-end value of the Canadian dollar compared to the euro would decrease (increase) net earnings by \$0.8 million or \$0.01 per diluted share, as at August 31, 2019.
- An increase (decrease) of 10% in the period-end value of the Canadian dollar compared to the US dollar would increase (decrease) other comprehensive income by \$4.1 million as at August 31, 2019.

The impact of the change in the value of the Canadian dollar compared to the US dollar and the euro on these derivative and non-derivative financial assets and financial liabilities is recorded in the foreign exchange gain or loss line item in the consolidated statements of earnings, except for outstanding forward contracts, and except for those of foreign operations, whose impact is recorded in other comprehensive income. The change in the value of the Canadian dollar compared to the US dollar and the euro also affects our balances of income tax recoverable or payable, as well as deferred income tax assets and liabilities denominated in US dollars and euros; this may result in additional and significant foreign exchange gains or losses. However, these tax-related assets and liabilities are not considered financial instruments and are therefore excluded from the sensitivity analysis above. The foreign exchange rate fluctuations also flow through the consolidated statements of earnings line items, as a significant portion of our cost of sales and operating expenses are denominated in Canadian dollars, euros, British pounds and Indian rupees, and we report our results in US dollars; that effect is not reflected in the sensitivity analysis above.

#### Interest rate risk

We have limited exposure to interest rate risk. We are mainly exposed to interest rate risks through our cash, short-term investments, bank loan and long-term debt.

We analyse our interest risk exposure on an ongoing basis. A change in interest rate of 1% would have an insignificant impact on net earnings and other comprehensive income.

#### Short-term investments

As at August 31, 2019, our short-term investments, in the amount of \$2.9 million, mainly consist of a term deposits denominated in Indian rupees, bearing interest at annual rates of 5.1% to 7.0%, maturing on different dates between September 2019 and May 2020.

Due to their short-term maturity, our short-term investments are not subject to significant fair value interest rate risk. Accordingly, changes in fair value have been nominal to the degree that amortized cost approximates the fair value. Any change in the fair value of our short-term investments, all of which are classified as financial assets at fair value through other comprehensive income, is recorded in the consolidated statements of comprehensive income.

## Other financial instruments

Short-term other liabilities bear interest at EURIBOR, plus a margin. Accounts receivable and accounts payable and accrued liabilities are non-interest-bearing financial assets and liabilities.

#### Credit risk

Financial instruments that potentially subject us to credit risk consist of cash, short-term investments, accounts receivable, other assets and forward exchange contracts (with a positive fair value). As at August 31, 2019, our short-term investments consist of debt instruments issued by high-credit quality corporations. These debt instruments are not expected to be affected by a significant credit risk. Our cash and forward exchange contracts are held with or issued by high-credit quality financial institutions; therefore, we consider the risk of non-performance on these instruments to be limited.

We apply the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade accounts receivable and contract assets. To measure the expected credit losses, trade accounts receivable and contract assets have been grouped based on shared credit risk characteristics and the days past due. The contract assets relate to unbilled work in progress and have substantially the same risk characteristics as the trade accounts receivable for the same type of contracts. We have therefore concluded that the expected loss rates for trade accounts receivable are a reasonable approximation of the loss rates for the contract assets. The expected loss rates are based on the payment profiles of sales over a period of 60 months. The historical loss rates are adjusted to reflect current and forward-looking information on economic factors affecting the ability of the customers to settle the accounts receivable.

For the year ended August 31, 2019, no customer represented more than 10% of our sales.

The following table summarizes the age of trade accounts receivable as at August 31, 2019 (in thousands of US dollars):

Current	\$ 39,054
Past due, 0 to 30 days	3,529
Past due, 31 to 60 days	2,006
Past due, more than 60 days	 6,928
Total trade accounts receivable	\$ 51,517

Changes in the allowance for doubtful accounts are as follows as at August 31, 2019 (in thousands of US dollars):

Balance – Beginning of year	\$ 772
IFRS 9 adoption initial adjustment	303
Addition charged to earnings	864
Writeoff of uncollectible accounts	(404)
Balance – End of year	\$ 1,535

# Liquidity risk

Liquidity risk is defined as the potential that we cannot meet our obligations as they become due.

The following table summarizes the contractual maturity of our derivative and non-derivative financial liabilities as at August 31, 2019 (in thousands of US dollars):

	Later than  No later 1 year and than no later than one year 5 years			 er than years
Bank loan	\$ 5,000	\$	_	\$ _
Accounts payable and accrued liabilities	49,945		_	-
Forward exchange contracts				
Outflow	39,000	2	5,900	-
Inflow	(38,252)	(2	5,585)	-
Long-term debt	2,449		3,237	56
Other liabilities	1,606		_	-
Total	\$ 59,748	\$	3,552	\$ 56

As at August 31, 2019, we had \$19.4 million in cash and short-term investments and \$54.9 million in accounts receivable. In addition to these financial assets, we have unused available lines of credit totaling \$56.5 million for working capital and general corporate purposes, including potential acquisitions as well as unused lines of credit of \$21.9 million for foreign currency exposure related to our forward exchange contracts.

# Item 12. Description of Securities Other than Equity Securities

Not Applicable.

# PART II.

# Item 13. Defaults, Dividend Arrearages and Delinquencies

Not Applicable.

# Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

Not Applicable.

#### Item 15 Controls and Procedures

#### (a) Disclosure Controls and Procedures

Disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by EXFO under applicable securities legislation is gathered and reported to senior management, including our Chief Executive Officer and Chief Financial Officer on a timely basis so that appropriate decisions can be made regarding public disclosure.

As of the end of the Company's fiscal year ended August 31, 2019, an evaluation of the effectiveness of the Company's disclosure controls and procedures was carried out by management with the participation of our Chief Executive Officer and Chief Financial Officer. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that these disclosure controls and procedures were effective as at August 31, 2019.

Our management, including the Chief Executive Officer and Chief Financial Officer, believe that any disclosure controls and procedures or internal control over financial reporting, no matter how well conceived and operated, can provide only a reasonable and not absolute assurance that the objectives of the control system are met. Further, the design of a control system reflects the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been prevented or detected. Controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of the control. The design of any systems of controls is also based in part on certain assumptions about the likelihood of certain events, and there can be no assurance that any design can achieve its stated goals under all potential future conditions. Accordingly, because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

## (b) Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with *International Financial Reporting Standards* (IFRS) as issued by the *International Accounting Standards Board* (IASB).

EXFO's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of EXFO; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of EXFO; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of EXFO's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management conducted an evaluation of the effectiveness of EXFO's internal control over financial reporting based on the criteria established in *Internal Control – Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, management concluded that EXFO's internal control over financial reporting was effective as of August 31, 2019.

# (c) Attestation Report of the Independent Registered Public Accounting Firm

The effectiveness of our internal control over financial reporting as of August 31, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in its report which appears herein.

# (d) Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the period covered by this Annual Report on Form 20-F, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## Item 16. [Reserved]

# Item 16A. Audit Committee Financial Expert

Our Board of Directors has determined that Mr. Claude Séguin, chairman of our Audit Committee, is an Audit Committee financial expert. Mr. Séguin is independent of management, in accordance with the CSA Standards as described in Item 6C – Board Practices of this Annual Report. For a description of Mr. Séguin's education and experience, please refer to Item 6A. The other members of the Audit Committee are Mr. François Côté, Ms. Angela Logothetis and Mr. Randy E. Tornes, all of whom are independent. For a description of their respective education and experience, please also refer to Item 6A.

#### Item 16B. Code of Ethics

In 2003, we adopted a code of ethics that applies to our chief executive officer, our chief financial officer and our manager of financial reporting and accounting. A copy of this code of ethics has been filed as exhibit 11.1 to our 2010 Annual Report. In March 2005, the Board adopted and, in 2010, 2013, 2017 and 2018, updated the following policies:

- Code of Ethics for our Principal Executive Officer and Senior Financial Officers;
- Board of Directors Corporate Governance Guidelines;
- Ethics and Business Conduct Policy;
- Statement of Reporting Ethical Violations (Whistleblower).

A copy of those policies has been filed respectively as exhibit 11.1 to our 2010 Annual Report, as exhibit 11.13 to our 2017 Annual Report, as exhibit 11.16 to our 2018 Annual Report and as exhibit 11.4 to our 2013 Annual Report. All these policies are also readily available on our website at www.EXFO.com. Accordingly, we believe that our corporate governance practices are in alignment to current regulatory requirements. We will provide without charge to each person, on the written or oral request of such person, a copy of our code of ethics. Requests for such copies should be directed to us at the following address: 400 Godin Avenue, Quebec, Quebec, G1M 2K2, Canada, Attention: Corporate Secretary, telephone number (418) 683-0211.

## Item 16C. Principal Accountant Fees and Services

## **Audit Fees**

During the financial years ended August 31, 2018 and 2019, our principal accountant, PricewaterhouseCoopers LLP, billed us aggregate amounts of CA\$525,000 and CA\$587,000 respectively for the audit of our annual consolidated financial statements and services in connection with statutory and regulatory filings.

## **Audit-Related Fees**

During the financial years ended August 31, 2018 and 2019, our principal accountant, PricewaterhouseCoopers LLP, billed us aggregate amounts of CA\$113,000 and CA\$99,000 respectively for audit-related fees namely for the quarterly review of interim consolidated financial statements.

## **Tax Fees**

During the financial years ended August 31, 2018 and 2019, our principal accountant, PricewaterhouseCoopers LLP, billed us aggregate amounts of CA\$114,000 and CA\$177,000 respectively for services related to tax compliance, tax advice and tax planning.

# **All Other Fees**

No other fees were billed in fiscal 2018 and 2019.

#### **Audit Committee Pre-Approval Policies and Procedures**

Our Audit Committee Charter requires that the Audit Committee give prior approval of the annual audit plan (refer to Item 6C for further details on the Audit Committee Charter). In the event any adjustments to the audit plan may be required during the course of a financial year, such adjustments shall be approved by the chairman of the Audit Committee, acting alone, and shall be reported to the full Audit Committee at its next meeting.

In the case of non-audit services (excluding tax matters), the policy provides that proposals shall be submitted to the chairman of the Audit Committee and our chief financial officer at the same time and the chairman of the Audit Committee will be responsible for approval of such proposal, subject to any modifications that he may require. The chairman will make a report to the full Audit Committee at its next meeting.

As concerns tax services to be provided by our principal accountant, our policy provides that the principal accountant will present to the Audit Committee for pre-approval, on or before the beginning of each financial year, an engagement for tax matters that are foreseeable for the upcoming year and the Audit Committee shall be responsible for pre-approval thereof, subject to any modifications it may make to such proposals. In the event tax services are required that were not pre-approved by the Audit Committee, the procedure set forth in the previous paragraph will apply.

During the financial year ended on August 31, 2019, 100% of tax fees were approved by the Audit Committee pursuant to this policy.

## Item 16D. Exemptions from the Listing Standards for Audit Committees

Not Applicable.

## Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

**Issuer Purchases of Equity Securities** 

From September 1, 2017 through November 12, 2018, no repurchase occurred.

On January 8, 2019, we announced that our Board of Directors approved a share repurchase program, by way of a normal course issuer bid on the open market of up to 1,200,000 subordinate voting shares at the prevailing market price. The period of the normal course issuer bid commenced on January 14, 2019 and will end on January 13, 2020.

From January 14, 2019 through November 11, 2019, we spent approximately US\$0.6 million (including fees) to repurchase 127,604 subordinate voting shares.

	(a) Total (b) Average Price Paid Number per Share (or Units) of Shares			(c) Total Number of Shares (or Units) Purchased as Part of	(d) Maximum Number of Shares (or Units) that May Yet Be Purchased
Period	(or Units) Purchased (#)	NASDAQ (US\$)	TSX (CA\$)	Publicly Announced Plans or Programs (#)	Under the Plans or Programs (#)
From September 1, 2018				_	_
To September 30, 2018		_	_		
From October 1, 2018					
To October 31, 2018	_	_	_	_	_
From November 1, 2018					
To November 30, 2018	_	_	_	_	_
From December 1, 2018					
To December 31, 2018		_	_	_	_
From January 1, 2019					
To January 13, 2019	_	_	_	_	_
From January 14, 2019	22.022	2.22	4.27	22.022	1 200 000
To January 31, 2019	32,032	3.23	4.37	32,032	1,200,000
From February 1, 2019	200	2.25	4.25	200	4.467.060
To February 28, 2019	200	3.25	4.25	200	1,167,968
From March 1, 2019					4.467.760
To March 31, 2019		_	_	_	1,167,768
From April 1, 2019					4.467.760
To April 30, 2019	] _	_	_	_	1,167,768
From May 1, 2019					4.467.760
To May 31, 2019	] _	_	_	_	1,167,768
From June 1, 2019					4.467.760
To June 30, 2019	] _	_	_	_	1,167,768
From July 1, 2019	20.206		F 02	20.200	1 120 272
To July 31, 2019	29,396	_	5.02	29,396	1,138,372
From August 1, 2019	24.764		F 00	24.764	1 112 600
To August 31, 2019	24,764	_	5.06	24,764	1,113,608
From September 1, 2019					1 112 000
To September 30, 2019		_	_	_	1,113,608
From October 1, 2019	20 522		F 30	20 522	1.005.006
To October 31, 2019	28,522	_	5.28	28,522	1,085,086
From November 1, 2019	12.000		F F0	12.000	1.073.306
To November 11, 2019	12,690		5.59	12,690	1,072,396
Total	127,604			127,604	1,072,396

# Item 16F. Change in Registrant's Certifying Accountant

Not Applicable.

## Item 16G. Corporate Governance

The Corporation's corporate governance practices do not differ significantly from the practices followed by United States domestic companies listed on the NASDAQ Global Select Market. A copy of the Corporation's Corporate Governance Policies is included as Exhibits 11.1 and 11.2 to our 2010 Annual Report on Form 20-F; as Exhibit 11.9 to our 2011 Annual Report on Form 20-F, as Exhibit 11.3, 11.4, 11.10, 11.11 and 11.12, to our 2013 Annual Report on Form 20-F, as Exhibit 11.6 to our 2014 Annual Report on Form 20-F, as Exhibits 11.5, 11.7 and 11.8 to our 2016 Annual Report on Form 20-F, as Exhibits 11.5, 11.7, 11.16 and 11.17 to our 2018 Annual Report on Form 20-F and as Exhibits 11.5, 11.7 and 11.18 to our 2019 Annual Report on Form 20-F.

Item 16H. Mine Safety Disclosure

Not Applicable.

PART III.

Item 17. Financial Statements

Not Applicable.

Item 18. Financial Statements

Not Applicable.

# Item 19. Exhibits

Number	Exhibit
1.1	Amended Articles of Incorporation of EXFO (incorporated by reference to Exhibit 3.1 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
1.2	Amended By-laws of EXFO (incorporated by reference to Exhibit 1.2 of EXFO's Annual Report on Form 20F dated January 16, 2003, File No. 000-30895).
1.3	Amended and Restated Articles of Incorporation of EXFO (incorporated by reference to Exhibit 1.3 of EXFO's Annual Report on Form 20-F dated January 18, 2001, File No. 000-30895).
1.4	<u>Certificate of Amendment, Canada Business Corporations Act (incorporated by reference to Exhibit 10.1 of EXFO's Annual Report on Form 20-F dated November 25, 2009, File No. 000-30895).</u>
1.5	Certificate of Amendment (Change of Name), Canada Business Corporations Act (incorporated by reference to Exhibit 1.5 of EXFO's Annual Report on Form 20-F dated November 24, 2010, File No. 000-30895).
2.1	Form of Subordinate Voting Share Certificate (incorporated by reference to Exhibit 4.1 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
2.2	Form of Registration Rights Agreement between EXFO and Germain Lamonde dated July 6, 2000) (incorporated by reference to Exhibit 10.13 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
3.1	Form of Trust Agreement among EXFO, Germain Lamonde, GEXFO Investissements Technologiques Inc., Fiducie Germain Lamonde and G. Lamonde Investissements Financiers Inc. (incorporated by reference to Exhibit 4.2 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.1	Agreement of Merger and Plan of Reorganization, dated as of November 4, 2000, by and among EXFO, EXFO Sub, Inc., EXFO Burleigh Instruments, Inc., Robert G. Klimasewski, William G. May, Jr., David J. Farrell and William S. Gornall (incorporated by reference to Exhibit 4.1 of EXFO's Annual Report on Form 20-F dated January 18, 2001, File No. 000-30895).
4.2	Amendment No. 1 to Agreement of Merger and Plan of Agreement, dated as of December 20, 2000, by and among EXFO, EXFO Sub, Inc., EXFO Burleigh Instruments, Inc., Robert G. Klimasewski, William G. May, Jr., David J. Farrell and William S. Gornall (incorporated by reference to Exhibit 4.2 of EXFO's Annual Report on Form 20-F dated January 18, 2001, File No. 000-30895).
4.3	Agreement of Merger, dated as of August 20, 2001, by and among EXFO, Buyer Sub, and Avantas Networks Corporation and Shareholders of Avantas Networks corporation (incorporated by reference to Exhibit 4.3 of EXFO's Annual Report on Form 20-F dated January 18, 2002, File No. 000-30895).
4.4	Amendment No. 1 dated as of November 1, 2002 to Agreement of Merger, dated as of August 20, 2001, by and among EXFO, 3905268 Canada Inc., Avantas Networks Corporation and Shareholders of Avantas Networks (incorporated by reference to Exhibit 4.4 of EXFO's Annual Report on Form 20-F dated January 18, 2002, File No. 000-30895).
4.5	Offer to purchase shares of Nortech Fibronic Inc., dated February 6, 2000 among EXFO, Claude Adrien Noel, 9086-9314 Québec Inc., Michel Bédard, Christine Bergeron and Société en Commandite Capidem Québec Enr. and Certificate of Closing, dated February 7, 2000 among the same parties (including summary in English) (incorporated by reference to Exhibit 10.2 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.6	Share Purchase Agreement, dated as of March 5, 2001, among EXFO Electro-Optical Engineering, Inc., John Kennedy, Glenn Harvey and EFOS Corporation (incorporated by reference to Exhibit 4.1 of EXFO's Registration Statement on Form F-3 filed on July 13, 2001, File No. 333-65122).

Number	Exhibit
4.7	Amendment Number One, dated as of March 15, 2001, to Share Purchase Agreement, dated as of March 5, 2001, among EXFO Electro-Optical Engineering, Inc., John Kennedy, Glenn Harvey and EFOS Corporation. (incorporated by reference to Exhibit 4.2 of EXFO's Registration Statement on Form F-3 filed on July 13, 2001, File No. 333-65122).
4.8	Share Purchase Agreement, dated as of November 2, 2001 between JDS Uniphase Inc. and 3905268 Canada Inc. (incorporated by reference to Exhibit 4.8 of EXFO's Annual Report on Form 20-F dated January 18, 2002, File No. 000-30895).
4.9	Intellectual Property Assignment and Sale Agreement between EFOS Inc., EXFO Electro-Optical Engineering, Inc., John Kennedy, Glenn Harvey and EFOS Corporation. (incorporated by reference to Exhibit 4.3 of EXFO's Registration Statement on Form F-3 filed on July 13, 2001, File No. 333-65122).
4.10	Offer to acquire a building, dated February 23, 2000, between EXFO and Groupe Mirabau Inc. and as accepted by Groupe Mirabau Inc. on February 24, 2000 (including summary in English) (incorporated by reference to Exhibit 10.3 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.11	Lease Agreement, dated December 1, 1996, between EXFO and GEXFO Investissements Technologiques Inc., as assigned to 9080-9823 Québec Inc. on September 1, 1999 (including summary in English) (incorporated by reference to Exhibit 10.4 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.12	Lease Agreement, dated March 1, 1996, between EXFO and GEXFO Investissements Technologiques Inc., as assigned to 9080-9823 Québec Inc. on September 1, 1999 (including summary in English) (incorporated by reference to Exhibit 10.5 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.13	<u>Lease renewal of the existing leases between 9080-9823 Québec Inc. and EXFO, dated November 30, 2001(incorporated by reference to Exhibit 4.13 of EXFO's Annual Report on Form 20-F dated January 18, 2002, File No. 000-30895).</u>
4.14	Loan Agreement between EXFO and GEXFO Investissements Technologiques Inc., dated May 11, 1993, as assigned to 9080-9823 Québec Inc. on September 1, 1999 (including summary in English) (incorporated by reference to Exhibit 10.9 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.15	Resolution of the Board of Directors of EXFO, dated September 1, 1999, authorizing EXFO to acquire GEXFO Distribution Internationale Inc. from GEXFO Investissements Technologiques Inc. (including summary in English) (incorporated by reference to Exhibit 10.10 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.16	Form of Promissory Note of EXFO issued to GEXFO Investissements Technologiques Inc. dated June 27, 2000) (incorporated by reference to Exhibit 10.12 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.17	Term Loan Offer, dated March 28, 2000, among EXFO and National Bank of Canada as accepted by EXFO on April 3, 2000 (including summary in English) (incorporated by reference to Exhibit 10.11 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.18	Employment Agreement of Germain Lamonde dated May 29, 2000 (incorporated by reference to Exhibit 10.15 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.19	Employment Agreement of Bruce Bonini dated as of September 1, 2000 (incorporated by reference to Exhibit 4.24 of EXFO's Annual Report on Form 20-F dated January 18, 2002, File No. 000-30895).
4.20	Employment Agreement of Juan-Felipe Gonzalez dated as of September 1, 2000 (incorporated by reference to Exhibit 4.25 of EXFO's Annual Report on Form 20-F dated January 18, 2002, File No. 000-30895).

Number	Exhibit
4.21	Employment Agreement of David J. Farrell dated as of December 20, 2000 (incorporated by reference
	to Exhibit 4.26 of EXFO's Annual Report on Form 20-F dated January 18, 2002, File No. 000-30895).
4.22	<u>Deferred Profit Sharing Plan, dated September 1, 1998 (incorporated by reference to Exhibit 10.6 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).</u>
4.23	Stock Option Plan, dated May 25, 2000 (incorporated by Reference to Exhibit 10.7 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.24	Share Plan, dated April 3, 2000 (incorporated by reference to Exhibit 10.8 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).
4.25	<u>Directors' Compensation Plan (incorporated by reference to Exhibit 10.17 of EXFO's Registration Statement on Form F-1 filed on June 9, 2000, File No. 333-38956).</u>
4.26	Restricted Stock Award Plan, dated December 20, 2000 (incorporated by reference to Exhibit 4.21 of EXFO's Annual Report on Form 20-F dated January 18, 2001, File No. 000-30895).
4.27	Asset Purchase Agreement by and Among EXFO Electro-Optical Engineering Inc., EXFO Gnubi Products Group Inc., gnubi communications, L.P., gnubi communications General Partner, LLC, gnubi communications Limited Partner, LLC, gnubi communications, Inc., Voting Trust created by The Irrevocable Voting Trust Agreement Among Carol Abraham Bolton, Paul Abraham and James Ray Stevens, James Ray Stevens and Daniel J. Ernst dated September 5, 2002 (incorporated by reference to Exhibit 4.30 of EXFO's Annual Report on Form 20-F dated January 16, 2003, File No. 000-30895).
4.28	EXFO Protocol Inc. Executive Employment Agreement with Sami Yazdi signed November 2, 2001 (incorporated by reference to Exhibit 4.31 of EXFO's Annual Report on Form 20-F dated January 16, 2003, File No. 000-30895).
4.29	Second Amending Agreement to the Employment Agreement of Bruce Bonini dated as of September 1, 2002, (incorporated by reference to Exhibit 4.29 of EXFO's Annual Report on Form 20-F dated January 15, 2004, File No. 000-30895).
4.30	Severance and General Release Agreement with Bruce Bonini dated August 8, 2003, (incorporated by reference to Exhibit 4.30 of EXFO's Annual Report on Form 20-F dated January 15, 2004, File No. 000-30895).
4.31	Separation Agreement and General Release with Sami Yazdi dated April 1, 2003, (incorporated by reference to Exhibit 4.31 of EXFO's Annual Report on Form 20-F dated January 15, 2004, File No. 000-30895).
4.32	Executive Employment Agreement of James Stevens dated as of October 4, 2003, (incorporated by reference to Exhibit 4.32 of EXFO's Annual Report on Form 20-F dated January 15, 2004, File No. 000-30895).
4.33	Termination Terms for John Holloran Jr. dated May 28, 2003, (incorporated by reference to Exhibit 4.33 of EXFO's Annual Report on Form 20-F dated January 15, 2004, File No. 000-30895).
4.34	Employment Agreement of Pierre Plamondon dated as of September 1, 2002, (incorporated by reference to Exhibit 4.34 of EXFO's Annual Report on Form 20-F dated January 15, 2004, File No. 000-30895).
4.35	Long-Term Incentive Plan, dated May 25, 2000, amended in October 2004 and effective January 12, 2005 (incorporated by reference to Exhibit 4.35 of EXFO's Annual Report on Form 20-F dated November 29, 2005, File No. 000-30895).
4.36	<u>Deferred Share Unit Plan, effective January 12, 2005 (incorporated by reference to Exhibit 4.36 of EXFO's Annual Report on Form 20-F dated November 29, 2005, File No. 000-30895).</u>

Number	Exhibit
4.37	Asset Purchase Agreement by and Among EXFO Electro-Optical Engineering Inc., Consultronics Limited., Andre Rekai, Consultronics Europe Limited, Consultronics Development Kft. and Consultronics Inc. dated January 5, 2006 (incorporated by reference to Exhibit 4.37 of EXFO's Annual Report on Form 20-F dated November 29, 2006, File No. 000-30895).
4.38	Share Repurchase Program by Way of Normal Course Issuer Bid dated November 6, 2007 (incorporated by reference to EXFO's report on Form 6-K dated November 6, 2007, file No. 000-30895).
4.39	Share Purchase Agreement by and Among EXFO Electro-Optical Engineering Inc., Navtel Communications Inc. and Vengrowth Investment Fund, BDC Capital Inc. and others, dated March 26, 2008 (incorporated by reference to Exhibit 4.38 of EXFO's Annual Report on Form 20-F dated November 26, 2008, File No. 000-30895).
4.40	Agreement and Plan of Merger by and among Gexfo Distribution Internationale Inc., EXFO Service Assurance Inc. and Brix Networks, Inc. and Charles River Ventures, LLC dated April 2, 2008 (incorporated by reference to EXFO's Material Change Report on Form 6-K dated May 2, 2008, File No. 000-30895).
4.41	Issuer Tender Offer, Letter of Transmittal and Notice of Guaranteed Delivery dated November 10, 2008 (incorporated by reference as Exhibits (a) (1) (i), (a) (1) (ii) and (a) (1) (iii) to EXFO's Schedule TO dated November 10, 2008, File No. 000-30895).
4.42	Renewal of EXFO's Share Repurchase Program by Way of Normal Course Issuer Bid dated November 6, 2008 (incorporated by reference to EXFO's report on Form 6-K dated November 6, 2008, file No. 000-30895).
4.43	Final results of Issuer Bid Tender Offer, dated December 18, 2009 (incorporated by reference to EXFO's Material Change Report on Form 6-K dated December 19, 2008, file No. 000-30895).
4.44	Share Transfer Agreement by and among GEXFO Distribution Internationale Inc. and AWS Holding AB (PicoSolve AB) and Patent Transfer Agreement by and among EXFO Electro-Optical Engineering Inc. and Starta Eget Boxen 11629 AB dated February 5, 2009 (incorporated by reference to Exhibit 4.44 of EXFO's Annual Report on Form 20-F dated November 25, 2009, File No. 000-30895).
4.45	Renewal of EXFO's Share Repurchase Program by Way of Normal Course Issuer Bid dated November 10, 2009 (incorporated by reference to EXFO's report on Form 6-K dated November 6, 2009, file No. 000-30895).
4.46	Share Purchase Agreement by and among EXFO Finland Oy and NetHawk Oyi's majority shareholders dated March 12, 2010 (incorporated by reference to EXFO's Material Change Report on Form 6-K dated March 19, 2010, File No. 000-30895).
4.47	Share Purchase Agreement by and among EXFO Inc. and Photonic Acquisition Inc. dated October 1, 2010 (incorporated by reference to EXFO's Material Change Report on Form 6-K dated October 8, 2010, File No. 000-30895).
4.48	Renewal of EXFO's Share Repurchase Program by Way of Normal Course Issuer Bid dated November 5, 2010 (incorporated by reference to EXFO's report on Form 6-K dated November 5, 2010, file No. 000-30895).
4.49	Renewal of EXFO's Share Repurchase Program by Way of Normal Course Issuer Bid dated November 7, 2011 (incorporated by reference to EXFO's report on Form 6-K dated November 7, 2011, file No. 000-30895).
4.50	Renewal of EXFO's Share Repurchase Program by Way of Normal Course Issuer Bid dated November 7, 2012 (incorporated by reference to EXFO's report on Form 6-K dated November 7, 2012, file No. 000-30895).
4.51	Renewal of EXFO's Share Repurchase Program by Way of Normal Course Issuer Bid dated January 8, 2014 (incorporated by reference to EXFO's report on Form 6-K dated January 9, 2014, file No. 000-30895).

Number	Exhibit
4.52	Final results of Issuer Bid Tender Offer, dated February 20, 2015 (incorporated by reference to EXFO's Material Change Report on Form 6-K dated February 24, 2015, file No. 000-30895).
4.53	Renewal of EXFO's Share Repurchase Program by Way of Normal Course Issuer Bid dated March 25, 2015 (incorporated by reference to EXFO's report on Form 6-K dated March 25, 2015, file No. 000-30895).
4.54	Nomination of Mr. Philippe Morin as Chief Operation Officer, dated August 26, 2015 (incorporated by reference to EXFO's Material Change Report on Form 6-K dated August 28, 2015, file No. 000-30895).
4.55	Long-Term Incentive Plan, dated May 25, 2000, amended in October 2004 and effective January 12, 2005 (incorporated by reference to Exhibit 4.55 of EXFO's Annual Report on Form 20-F dated November 28, 2016, File No. 000-30895).
4.56	Renewal of EXFO's Share Repurchase Program by Way of Normal Course Issuer Bid dated April 1, 2016 (incorporated by reference to EXFO's report on Form 6-K dated March 30, 2016, file No. 000-30895).
4.57	Long-Term Incentive Plan, dated May 25, 2000, amended in October 2004 and on January 12, 2005 and effective January 10, 2018 (incorporated by reference to Exhibit 4.57 of EXFO's Annual Report on Form 20-F dated November 24, 2017, File No. 000-30895).
4.58	Deferred Share Unit Plan, effective January 12, 2005, amended in January 2018 and effective January 10, 2018 (incorporated by reference to Exhibit 4.58 of EXFO's Annual Report on Form 20-F dated November 24, 2017, File No. 000-30895).
4.59	Long-Term Incentive Plan, dated May 25, 2000, amended in October 2004, in January 12, 2005 and on January 10, 2018 and effective January 9, 2019 (incorporated by reference to Exhibit 4.59 of EXFO's Annual Report on Form 20-F dated November 27, 2018, File No. 000-30895).
4.60	Share Repurchase Program by Way of Normal Course Issuer Bid dated January 14, 2019 (incorporated by reference to EXFO's report on Form 6-K dated January 9, 2019, file No. 000-30895).
8.1	Subsidiaries of EXFO (list included in Item 4C of this Annual Report).
11.1	Code of Ethics for our Principal Executive Officer and Senior Financial Officers (incorporated by reference to Exhibit 11.1 of EXFO's Annual Report on Form 20-F dated November 24, 2010, File No. 000-30895).
11.2	Board of Directors Corporate Governance Guidelines (incorporated by reference to Exhibit 11.2 of EXFO's Annual Report on Form 20-F dated November 24, 2010, File No. 000-30895).
11.3	Ethics and Business Conduct Policy (incorporated by reference to Exhibit 11.3 of EXFO's Annual Report on Form 20-F dated November 25, 2013, File No. 000-30895).
11.4	Statement of Reporting Ethical Violations (Whistleblower) (incorporated by reference to Exhibit 11.4 of EXFO's Annual Report on Form 20-F dated November 25, 2013, File No. 000-30895).
11.5	Audit Committee Charter (incorporated by reference to Exhibit 11.5 of EXFO's Annual Report on Form 20-F dated November 26, 2019, File No. 000-30895).
11.6	Human Resources Committee Charter (incorporated by reference to Exhibit 11.6 of EXFO's Annual Report on Form 20-F dated November 24, 2014, File No. 000-30895).
11.7	Corporate Governance Practices (incorporated by reference to Exhibit 11.7 of EXFO's Annual Report on Form 20-F dated November 26, 2019, File No. 000-30895).
11.8	Majority Voting Policy (incorporated by reference to Exhibit 11.8 of EXFO's Annual Report on Form 20-F dated November 28, 2016, File No. 000-30895).
11.9	Independent Members Committee Charter (incorporated by reference to Exhibit 11.9 of EXFO's Annual Report on Form 20-F dated November 23, 2011, File No. 000-30895).
11.10	Agent Code of Conduct (incorporated by reference to Exhibit 11.10 of EXFO's Annual Report on Form 20-F dated November 25, 2013, File No. 000-30895).

Number	Exhibit
11.11	Policy Regarding Conflict Minerals (incorporated by reference to Exhibit 11.11 of EXFO's Annual Report on Form 20-F dated November 25, 2013, File No. 000-30895).
11.12	Director Share Ownership Policy (incorporated by reference to Exhibit 11.12 of EXFO's Annual Report on Form 20-F dated November 25, 2013, File No. 000-30895).
11.13	Board of Directors Corporate Governance Guidelines dated February 28, 2010 and amended on June 29, 2017 (incorporated by reference to Exhibit 11.13 of EXFO's Annual Report on Form 20-F dated November 24, 2017, File No. 000-30895).
11.14	<u>Director Share Ownership Policy dated September 25, 2013 and amended on June 29, 2017 (incorporated by reference to Exhibit 11.14 of EXFO's Annual Report on Form 20-F dated November 24, 2017, File No. 000-30895).</u>
11.15	Human Resources Committee Charter dated February 28, 2010 and amended on October 9, 2012, on October 8, 2014 and on October 12, 2017 (incorporated by reference to Exhibit 11.15 of EXFO's Annual Report on Form 20-F dated November 24, 2017, File No. 000-30895).
11.16	Ethics and Business Conduct Policy dated November 25, 2013 and amended on July 10, 2018 (incorporated by reference to Exhibit 11.16 of EXFO's Annual Report on Form 20-F dated November 27, 2018, File No. 000-30895).
11.17	Agent Code of Conduct dated November 25, 2013 and amended on July 10, 2018 (incorporated by reference to Exhibit 11.17 of EXFO's Annual Report on Form 20-F dated November 27, 2018, File No. 000-30895).
11.18	Policy Regarding Conflict Minerals dated January 9, 2013 and amended on December 12, 2018 (incorporated by reference to Exhibit 11.18 of EXFO's annual report on Form 20-F dated November 26, 2019, File No. 000-30895).
12.1	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
12.2	Certification of the Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
13.1	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
13.2	Certification of the Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

# **SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

EXFO INC.

By: <u>/s/ Philippe Morin</u>
Name: Philippe Morin

Title: Chief Executive Officer

Date: November 26, 2019

## **EXHIBIT 11.5**

# EXFO INC. (the "Corporation")

# **AUDIT COMMITTEE CHARTER ("CHARTER")**

# I. Purpose

The primary objective of the Audit Committee is to assist the Board in fulfilling its oversight responsibilities with respect to (a) the financial statements and other financial information provided by the Corporation to its stockholders, the public and others, (b) the Corporation's compliance with legal and regulatory requirements, (c) the external auditors' qualifications, independence and performance, and (d) the performance of the Corporation's internal audit functions if any.

Although the Audit Committee has the powers and responsibilities set forth in this Charter, the role of the Audit Committee is oversight. It oversees the accounting and financial reporting process of the Corporation by external auditors. Members of the Audit Committee are not full-time employees of the Corporation and may or may not be accountants or auditors by profession or experts in the fields of accounting or auditing and, in any event, do not serve in such capacity. Consequently, it is not the duty of the Audit Committee to conduct audits or to determine that the Corporation's financial statements and disclosures are complete and accurate and are in accordance with generally accepted accounting principles and applicable rules and regulations. These are the responsibilities of management and the external auditors.

# II. Composition

The Audit Committee shall consist of three or more directors, each of whom shall satisfy the independence, financial literacy and experience requirements of Section 10A of the Securities Exchange Act, NASDAQ and any other regulatory requirements.

The members of the Audit Committee shall be appointed by the Board on the recommendation of the Human Resource Committee, in the best interests of the Corporation and its shareholders.

The Audit Committee may form and delegate authority to subcommittees when appropriate.

# III. Meetings

The Audit Committee shall meet at least four times per year on a quarterly basis, or more frequently as circumstances require. As part of its job to foster open communication, the Audit Committee shall meet at least quarterly with the external auditors and the Legal Counsel in separate private sessions to discuss any matters that the Audit Committee of each of these groups believe should be discussed privately.

The members of the Audit Committee shall select a chair who will preside at each meeting of the Audit Committee and, in consultation with the other members of the Audit Committee, shall set the frequency and length of each meeting and the agenda of items to be addressed at each upcoming meeting.

The chair shall ensure that the agenda for each upcoming meeting of the Audit Committee is circulated to each member of the Audit Committee as well as each other director in advance of the meeting.

# IV. Authority and Responsibilities

In recognition of the fact that the external auditors are ultimately accountable to the Audit Committee, the Audit Committee shall have the sole authority and responsibility to nominate, evaluate and, where appropriate, replace the external auditors (or to nominate the external auditors for stockholder approval), and shall approve all audit compensation fees and terms and all non-audit engagements with the external auditors. The Audit Committee shall consult with management but shall not delegate these responsibilities. To fulfill its responsibilities, the Audit Committee shall:

## With respect to the external auditors:

- 1. Be directly responsible for recommending the nomination, compensation, retention and oversight of the external auditors (including resolution of disagreements between management and the external auditors regarding financial reporting) for the purpose of preparing its audit report or related work.
- 2. Have the sole authority to review in advance, and grant any appropriate pre-approvals, of (a) all auditing services to be provided by the external auditors and (b) all non-audit services to be provided by the external auditors as permitted by Section 10A of the Securities Exchange Act and any other regulatory requirements, and in connection therewith to approve all fees and other terms of engagement. The Audit Committee shall also review and approve disclosures required by applicable regulatory requirements.
- 3. Review on an annual basis the performance of the external auditors including the lead audit partner.
- 4. Review the Corporation's financial statements, MD&A and annual and earnings (profit or loss) press releases before the Corporation publicly discloses this information.
- 5. Ensure that the external auditors submit directly to the Audit Committee, on an annual basis, a formal written statement consistent with Independence Standards Board Standard No. 1.
- 6. Actively discuss with the external auditors with respect to any disclosed relationships or services that may impact the objectivity and independence of the external auditors and satisfy itself as to the external auditors' independence.
- 7. Take, or recommend that the full board take, appropriate action to oversee the independence of the external auditor.
- 8. Confirm that the lead audit partner and the audit partner responsible for reviewing the audit, has not performed audit services for the Corporation for each of the five previous fiscal years, taking into account years prior to adoption of S/O Act.
- 9. Review all reports required to be submitted by the external auditors to the Audit Committee under Section 10A of the Securities Exchange Act and any other regulatory requirements.
- 10. Review, based upon the recommendation of the external auditors and management, the scope and plan of the work to be done by the external auditors.

## With respect to the annual financial statements:

- 11. Review and discuss with management and the external auditors the Corporation's annual audited financial statements, including disclosures made in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the external auditors' audit of the annual financial statements prior to submission to stockholders, any government body, any stock exchange or the public.
- 12. Discuss with the external auditors the matters required to be discussed by Statement on Auditing Standards No. 61, as amended, relating to the conduct of the audit.
- 13. Recommend to the Board, if appropriate, that the Corporation's annual audited financial statements be included in the Corporation's annual report on Form 20-F or 40-F for filing with the Securities and Exchange Commission and with any other regulatory authorities.

## With respect to quarterly financial statements:

14. Review and discuss with management the Corporation's quarterly financial statements, including disclosures made in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the external auditors' review of the quarterly financial statements, prior to submission to stockholders, any government body, any stock exchange or the public.

## With respect to annual reviews:

15. Obtain and review an annual report from management relating to the accounting principles used in the preparation of the Corporation's financial statements, including those policies for which management is required to exercise discretion or judgments regarding the implementation thereof. If requested, discuss with management and the external auditors any issues regarding accounting principles used by the Corporation.

# With respect to periodic reviews:

- 16. Periodically review separately with each of management and the external auditors (a) any significant disagreement between management and the external auditors in connection with the preparation of the financial statements, (b) any difficulties encountered during the course of the audit, including any restrictions on the scope of work or access to required information and (c) management's response to each.
- 17. Periodically discuss with the external auditors, without management being present, (a) their judgments about the quality and appropriateness of the Corporation's accounting principles and financial disclosure practices as applied in its financial reporting and (b) the completeness and accuracy of the Corporation's financial statements.
- 18. Consider and approve, if appropriate, significant changes to the Corporation's accounting principles and financial disclosure practices as suggested by the external auditors or management. Review with the external auditors and management, at appropriate intervals, the extent to which any changes in accounting principles or financial disclosure practices, as approved by the Audit Committee, have been implemented.
- 19. Review and discuss with management, the external auditors and the Corporation's in-house and independent counsel, as appropriate, any legal, regulatory or compliance matters that could have a significant impact on the Corporation's financial statements, including applicable changes in accounting standards or rules.

## With respect to discussions with management:

- 20. Review and discuss with management the Corporation's earnings press releases, including the use of "Pro forma" or "Adjusted" non-GAAP information as well as financial information and earnings guidance provided to analysts and rating agencies. Such discussions maybe done generally (i.e., discussion of the types of information to be disclosed and the types of presentation to be made).
- 21. Review and discuss with management all material off-balance sheet transactions, arrangements, obligations (including contingent obligations) and other relationships of the Corporation with unconsolidated entities or other persons, that may have a material current or future effect on financial condition, changes in financial condition, results of operations, liquidity, capital resources, capital reserves or significant components of revenues or expenses.
- 22. Review and discuss with management the Company's major risk exposures and the steps management has taken to monitor, control and manage such exposures.

# With respect to internal controls and disclosure controls and procedures:

- 23. In consultation with the external auditors, review the adequacy to the Corporation's internal controls and disclosure controls and procedures designed to insure compliance with laws and regulations, and discuss the responsibilities, budget and staffing needs for support of internal controls and disclosure controls and procedures.
- 24. Establish procedures for (a) the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls or auditing matters and (b) the confidential, anonymous submission by employees of the Corporation of concerns regarding the questionable accounting or auditing matters.
- 25. Review, when required by regulation, (i) the internal control report prepared by management, including management's assessment of the effectiveness of the Corporation's internal controls for financial reporting and (ii) the external auditor's attestation, and report, on the assessment made by management.

# Other:

- 26. Review and approve all related-party transactions.
- 27. Review and approve (a) any change or waiver in the Corporation's "Code of Ethics for our Principal Executive Officer and Senior Financial Officers" and (b) any disclosure regarding such change or waiver.
- 28. Establish a policy addressing the Corporation's hiring of employees or former employees of the external auditors who were engaged on the Corporation's account that provides as a minimum that the positions of CEO, CFO, Chief Accounting Officer, Controller or any person serving in an equivalent position cannot be filled by a person employed by the external auditor and that participated in the audit of the Corporation during the preceding twelve month period.
- 29. Review and reassess the adequacy of this Charter annually and recommend to the Board any changes deemed appropriate by the Audit Committee.
- 30. Report regularly to the Board. Review with the full Board any issues that have arisen with respect to the quality or integrity of the Company's financial statements, the Company's compliance with legal or regulatory requirements, the performance and independence of the Company's external auditors.

31. Perform any other activities consistent with this Charter, the Corporation's by-laws and governing law, as the Audit Committee or the Board deems necessary or appropriate.

#### V. Resources

The Audit Committee shall have the authority to retain independent legal, accounting and other consultants to advise the Audit Committee. The Audit Committee may request any officer or employee of the Corporation or the Corporation's outside counsel or external auditors to attend a meeting of the Audit Committee or to meet with any members of, or consultants to, the Audit Committee.

The Audit Committee shall determine the extent of funding necessary for payment of compensation to the external auditors for the purpose of rendering or issuing the annual audit report and to any independent legal, accounting and other consultants retained to advise the Audit Committee.

## EXHIBIT 11.7

### **CORPORATE GOVERNANCE PRACTICES**

		CSA Guidelines	EXFO's Corporate Governance Practices
1.	Boa	rd of Directors	
	(a)	Disclose the identity of directors who are independent.	The following directors are independent:  Mr. François Côté  Ms. Angela Logothetis  Mr. Claude Séguin  Mr. Randy E. Tornes
	(b)	Disclose the identity of directors who are not independent and describe the basis for that determination.	Mr. Germain Lamonde – non-independent – is Executive Chairman of the Corporation and the majority shareholder of the Corporation as he has the ability to exercise a majority of the votes for the election of the Board of Directors.  Mr. Philippe Morin – non-independent – is CEO of the Corporation since April 1, 2017.
	(c)	Disclose whether or not a majority of directors are independent. If a majority of directors are not independent, describe what the board of directors does to facilitate its exercise of independent judgment in carrying out its responsibilities.	The majority of directors are independent:  From September 1, 2018 to November 1, 2019, 4 out of 6.
	(d)	If a director is presently a director of any other issuer that is a reporting issuer (or the equivalent) in a jurisdiction or a foreign jurisdiction, identify both the director and the other issuer.	Mr. François Côté is chairman of the board of directors of Diagnos Inc. Mr. Claude Séguin is chairman of the board of directors of Fonds de solidarité FTQ.
	(e)	Disclose whether or not the independent directors hold regularly scheduled meetings at which non-independent directors and members of management are not in attendance. If the independent directors hold such meetings, disclose the number of meetings held since the beginning of the issuer's most recently completed financial year. If the independent directors do not hold such meetings, describe what the board does to facilitate open and candid discussion among its independent directors.	The independent Directors hold as many meetings as needed annually and any Director may request a meeting at any time. From September 1, 2018 and to November 1, 2019 five (5) meetings of independent Directors without Management occurred.  In June 2011, an Independent Members Committee Charter was adopted.

(f) Disclose whether or not the chair of the board is an independent director. If the board has a chair or lead director who is an independent director, disclose the identity of the independent chair or lead director, and describe his or her role and responsibilities. If the board has neither a chair that is independent nor a lead director that is independent, describe what the board does to provide leadership for its independent directors. The Chair of the Board of Directors (being the majority shareholder) is not an independent Director. Since 2002, the Corporation has named an independent director to act as "Lead Director". Mr. François Côté has been acting as the independent "Lead Director" of the Corporation since January 2016.

The Lead Director is an outside and unrelated Director appointed by the Board of Directors to ensure that the Board of Directors can perform its duties in an effective and efficient manner independent of Management. The appointment of a Lead Director is part of the Corporation's ongoing commitment to good corporate governance. The Lead Director will namely:

- provide independent leadership to the Board of Directors;
- select topics to be included in the Board of Directors meetings;
- facilitate the functioning of the Board of Directors independently of the Corporation's Management;
- maintain and enhance the quality of the Corporation's corporate governance practices;
- in the absence of the Executive Chair, act as chair of meetings of the Board of Directors;
- recommend, where necessary, the holding of special meetings of the Board of Directors;
- serve as Board of Directors ombudsman, so as to ensure that questions or comments of individual directors are heard and addressed;
- manage and investigate any report received through the Corporation website pursuant to the Corporation's Statement on reporting Ethical Violations, Ethics and Business Conduct Policy and Agent Code of Conduct; and
- work with the Board of Directors to facilitate the process for developing, monitoring and evaluating specific annual objectives for the Board of Directors each year.
- (g) Disclose the attendance record of each director for all board meetings held since the beginning of the issuer's most recently completed financial year.

The table below indicates the Directors' record of attendance at meetings of the Board of Directors and its committees during the financial year ended August 31, 2019:

Director	Board Meetings Attended	Audit Committee Meetings Attended	Human Resources Committee Meetings Attended	Independent Directors Meetings Attended	Total Board and Committee Meetings Attendance Rate
Lamonde, Germain	4 of 5	n/a	n/a	n/a	80%
Côté, François	5 of 5	4 of 4	4 of 4	4 of 4	100%
Logothetis, Angela	5 of 5	4 of 4	4 of 4	4 of 4	100%
Morin, Philippe	5 of 5	n/a	n/a	n/a	100%
Séguin, Claude	4 of 5	4 of 4	3 of 4	3 of 4	82%
Tornes, Randy E.	5 of 5	4 of 4	4 of 4	4 of 4	100%
Attendance Rate:	93%	100%	94%	94%	95%

- Board Mandate Disclose the text of the board's written mandate. If the board does not have a written mandate, describe how the board delineates its role and responsibilities.
  - (a) Assuring the integrity of the executive officers and creating a culture of integrity throughout the organization.
  - (b) Adoption of a strategic planning process.
  - Identification of principal risks and implementing of risk management systems.
  - (d) Succession planning including appointing, training and monitoring senior management.
  - (e) Communications policy.

(f) Integrity of internal control and management information systems. The Board of Directors is committed to maintaining the highest standards of integrity throughout the organization. Accordingly, the Board of Directors adopted an Ethics and Business Conduct Policy and a Statement on Reporting Ethical Violations (Whistleblower Policy) which are available on the Corporation's website (www.EXFO.com) to all employees and initially distributed to every new employee of the Corporation.

The Board of Directors provides guidance for the development of the strategic planning process and approves the process and the plan developed by Management annually. In addition, the Board of Directors carefully reviews the strategic plan and deals with strategic planning matters that arise during the year.

The Board of Directors works with Management to identify the Corporation's principal risks and manages these risks through regular appraisal of Management's practices on an ongoing basis.

The Human Resources Committee is responsible for the elaboration and implementation of a succession planning process and its updates as required. The Human Resources Committee is responsible to monitor and review the performance of the Executive Chairman and of the Chief Executive Officer and that of all other senior officers.

The Chief Financial Officer of the Corporation is responsible for communications between Management and the Corporation's current and potential shareholders and financial analysts. The Board of Directors adopted and implemented Disclosure Guidelines to ensure consistency in the manner that communications with shareholders and the public are managed. The Audit Committee reviews press releases containing the quarterly results of the Corporation prior to release. In addition, all material press releases of the Corporation are reviewed by the Executive Chairman, Chief Executive Officer, Chief Financial Officer, Investor Relations Manager, Director of Financial Reporting and Accounting and General Counsel. The Disclosure Guidelines have been established in accordance with the relevant disclosure requirements under applicable Canadian and United States securities laws.

The Audit Committee has the responsibility to review the Corporation's systems of internal controls regarding finance, accounting, legal compliance and ethical behavior. The Audit Committee meets with the Corporation's external auditors on a quarterly basis. Accordingly, the Corporation fully complies with Sarbanes-Oxley Act requirements within the required period of time.

(g) Approach to corporate governance including developing a set of corporate governance principles and guidelines that are specifically applicable to the issuer. The Board of Directors assumes direct responsibility for the monitoring of the Board of Director's corporate governance practices, the functioning of the Board of Directors and the powers, mandates and performance of the committees. These responsibilities were previously assumed by the Human Resources Committee. Accordingly, the Board of Directors adopted the following policies to fully comply with these responsibilities, which are updated on a regular basis as required:

Policy	Adopted	Amendments
Audit Committee Charter*	March 2005	November 2011 (French version only)
Board of Directors Corporate	March 2005	October 2014 February 2010
Governance Guidelines*		June 2017
Code of Ethics for our Principal Executive Officer and Senior Financial Officers*	March 2005	February 2010
Disclosure Guidelines	March 2005	May 2005 August 2008 March 2017
Ethics and Business Conduct Policy*	March 2005	June 2013 July 2018
Human Resources Committee Charter*	March 2005	September 2006 October 2012 January 2013 October 2014 October 2017
Securities and Trading Policy	March 2005	February 2010
Statement on Reporting Ethical Violations (Whistleblower Policy) *	March 2005	June 2013
Policy Regarding Hiring Employees and Former Employees of Independent Auditor*	October 2006	February 2010
Best Practice Regarding the Granting Date of Stock Incentive Compensation	April 2007	February 2010
Guidelines Regarding the Filing and Disclosure of Material Contracts	October 2008	February 2010
Independent Members Committee Charter*	June 2011	
Majority Voting Policy*	October 2011	March 2016
Policy Regarding Conflict Minerals*	January 2013	December 2018
Agent Code of Conduct*	September 2013	July 2018
Director Share Ownership Policy*	September 2013	June 2017

<sup>\*</sup> Available on the Corporation's website (www.EXFO.com).

The Board of Directors adopted in October 2011 a Majority Voting Policy for the election of Directors and updated it in accordance with the TSX Rules in March 2016. In October 2012 in order to expressly reflect the responsibility of the Human Resources Committee to conduct an annual assessment of the risks associated with the Corporation's executive compensation policies and procedures, the Board of Directors amended the Human Resources Committee Charter. The Board of Directors amended in January 2013 the Human Resources Committee Charter to include within the Human Resources Committee's mandate the responsibility to receive and discuss suggestions from shareholders for potential director's nominees. Also, in January 2013, the Board of Directors adopted a Policy Regarding Conflict Minerals. In the course of formalizing its anti-corruption compliance program, the Board of Directors amended the Ethics and Business Conduct Policy and the Statement on Reporting Ethical Violations (Whistleblower Policy) in June 2013 and also adopted in September 2013 the Agent Code of Conduct. In September 2013, the Board of Directors integrated a governance best practice by adopting a Director Share Ownership Policy.

The Board of Directors amended in October 2014 the Human Resources Committee Charter in order to adapt it to the latest NASDAQ Rules on compensation committees along with an update on the nomination of Directors process and the Audit Committee Charter in order to harmonize its terminology with MI 52-110.

The Board of Directors amended in March 2017 the Disclosure Guidelines to add the Executive Chairman as a member of the Disclosure Committee. The Board of Directors amended in June 2017 the Director Share Ownership Policy and the Board of Directors Corporate Governance Guidelines in order to introduce mandatory obligations for the Directors to elect to receive at least seventy-five (75%) of their Annual Retainer in form of DSUs until their cumulative Annual Retainers equal or exceed three (3) times the sum of: i) the Annual Retainer for Directors; ii) the Annual Retainer for Audit Committee Members; and iii) the Annual Retainer for Human Resources Committee Members. The Board of Directors amended in October 2017 the Human Resources Committee Charter in order to specifically add the compensation review of the Executive Chairman. The Board of Directors amended in July 2018 the Ethics and Business Conduct Policy and the Agent Code of Conduct to remove the exception for facilitation payments.

(h) Expectations and responsibilities of Directors, including basic duties and responsibilities with respect to attendance at board meetings and advance review of meeting materials. The Board of Directors is also responsible for the establishment and functioning of all of the Board of Directors' committees, their compensation and their good standing. At regularly scheduled meetings of the Board of Directors, the Directors receive, consider and discuss committee reports. The Directors also receive in advance of any meeting, all documentation required for the upcoming meetings and they are expected to review and consult this documentation.

#### 3. Position Descriptions

- Disclose whether or not the board has developed written position descriptions for the chair of the board and the chair of each board committee. If the board has not developed written position descriptions for the chair and/or the chair of each board committee, briefly describe how the board delineates the role and responsibilities of such each position.
- (b) Disclose whether or not the board and CEO have developed a written position description for the CEO. If the board and CEO have not developed such a position description, briefly describe how the board delineates the role and responsibilities of the CEO.

#### 4. Orientation and Continuing Education

- (a) Briefly describe what measures the board takes to orient new directors regarding
  - the role of the board, its committees and its directors; and
  - ii. the nature and operation of the issuer's business.

There is no specific mandate for the Board of Directors, however the Board of Directors is, by law, responsible for managing the business and affairs of the Corporation. Any responsibility which is not delegated to senior Management or to a committee of the Board of Directors remains the responsibility of the Board of Directors. Accordingly, the chairs of the Board of Directors, of the Audit Committee and of the Human Resources Committee will namely:

- provide leadership to the Board of Directors or Committee;
- ensure that the Board of Directors or Committee can perform its duties in an effective and efficient manner;
- facilitate the functionary of the Board of Directors or Committee;
   and
- promote best practices and high standards of corporate governance.

No written position description has been developed for the Executive Chairman nor for the CEO. The Executive Chairman and the Chief Executive Officer, along with the rest of Management placed under their supervision, are responsible for meeting the corporate objectives as determined by the strategic objectives and budget as they are adopted each year by the Board of Directors.

The Human Resources Committee Charter foresees that the Human Resources Committee maintains an orientation program for new Directors.

Presentations and reports relating to the Corporation's business and affairs are provided to new Directors. In addition, new Board of Directors members meet with senior Management of the Corporation to review the business and affairs of the Corporation.

(b) Briefly describe what measures, if any, the board takes to provide continuing education for its directors. If the board does not provide continuing education, describe how the board ensures that its directors maintain the skill and knowledge necessary to meet their obligations as directors.

The Human Resources Committee Charter foresees that the Human Resources Committee maintains a continuing education program for Directors. In March 2013, the independent Directors of the Corporation attended a presentation on the Corruption of Foreign Public Officials Act given by PricewaterhouseCoopers LLP. In March 2014, the independent Directors of the Corporation attended a presentation on directors' fiduciary duty by Fasken Martineau DuMoulin LLP. In March 2015, the Directors of the Corporation attended a presentation on directors' fiduciary duty in a controlled environment and on Corporate Governance by Norton Rose Fulbright LLP. In October 2015 the Directors of the Corporation attended a presentation on the Corporation's Service Assurance products by the Vice President Transport and Service Assurance Division of the Corporation. In 2016, the Directors of the Corporation attended an online training on the Corporation's business and orientation. In 2017, the Directors of the Corporation attended a training on the Corporation's products and solutions and also attended a presentation on Fraud Risk given by PricewaterhouseCoopers LLP. In 2018, the Directors of the Corporation attended trainings on the Corporation's products and solutions and attended a presentation on stock valuation by Canaccord Genuity and by Cowen. In 2019, the Directors of the Corporation attended trainings on the Corporation's products and solutions and on IFRS.

#### 5. Ethical Business Conduct

- (a) Disclose whether or not the board has adopted a written code for the directors, officers and employees. If the board has adopted a written code:
  - i. disclose how a person or company may obtain a copy of the code;
  - ii. describe how the board monitors compliance with its code, or if the board does not monitor compliance, explain whether and how the board satisfies itself regarding compliance with its code; and
  - iii. provide a cross-reference to any material change report filed since the beginning of the issuer's most recently completed financial year that pertains to any conduct of a director or executive officer that constitutes a departure from the code.

The Corporation is committed to maintaining the highest standard of business conduct and ethics. Accordingly, the Board of Directors updated and established (i) a Board of Directors Corporate Governance Guidelines, (ii) a Code of Ethics for our Principal Executive Officer and senior Financial Officers, (iii) an Ethics and Business Conduct Policy and (iv) a Statement on Reporting Ethical Violations (Whistleblower Policy) which are available on the Corporation's website (www.EXFO.com).

The Board of Directors will determine, or designate appropriate persons to determine, appropriate actions to be taken in the event of a violation of the Code of Ethics for our Principal Executive Officer and senior Financial Officers. Someone who does not comply with this Code of Ethics will be subject to disciplinary measures, up to and including discharge from the Corporation. Furthermore, a compliance affirmation must be filled in a written form agreeing to abide by the policies of the Code of Ethics.

No material change report has been required or filed during our financial year ended August 31, 2019 with respect to any conduct constituting a departure from our Code of Ethics.

- (b) Describe any steps the board takes to ensure directors exercise independent judgement in considering transactions and agreements in respect of which a director or executive officer has a material interest.
- (c) Describe any other steps the board takes to encourage and promote a culture of ethical business conduct.

Activities that could give rise to conflicts of interest are prohibited. Members of the Board of Directors should contact the Lead Director or in-house legal counsel regarding any issues relating to possible conflict of interest. If such event occurs, the implicated Board of Directors member will not participate in the meeting and discussion with respect to such possible conflict of interest and will not be entitled to vote on such matter. Senior executives should also contact the in-house legal counsel regarding any issues relating to possible conflict of interest.

The Corporation has instituted and follows a "Whistleblower Policy" where each member of the Board of Directors as well as any senior officer, every employee of the Corporation and any person is invited and encouraged to report anything appearing or suspected of being non-ethical to our Lead Director, in confidence. The Lead Director has the power to hire professional assistance to conduct an internal investigation should he so feel it is required. The Corporation also provides training to its employees as part of its anti-corruption compliance program.

#### 6. Nomination of Directors

 (a) Describe the process by which the board identifies new candidates for board nomination. The Board of Directors adopted and implemented a Human Resources Committee Charter which integrates the Compensation Committee Charter and the Nominating and Governance Committee Charter. The Human Resources Committee is responsible for nomination, assessment and compensation of Directors and Officers.

More specifically, the Human Resources Committee, which is comprised entirely of independent Directors, is responsible for the recruitment and recommendation of new candidates for appointment or election to the Board. When considering a potential candidate, the Human Resources Committee considers the qualities and skills that the Board, as a whole, should have and assesses the competencies and skills of the current members of the Board. Based on the talent already represented on the Board, the Human Resources Committee then identifies the specific skills, personal qualities or experiences that a candidate should possess in light of the opportunities and risks facing the Corporation. Potential candidates are screened to ensure that they possess the requisite qualities, including integrity, business judgment and experience, business or professional expertise, independence from Management, international experience, financial literacy, excellent communications skills and the ability to work well with the Board and the Corporation. The Human Resources Committee considers the existing commitments of a potential candidate to ensure that such candidate will be able to fulfill his or her obligations as a Board member.

The Human Resources Committee maintains a list of potential director candidates for its future consideration and may engage outside advisors to assist in identifying potential candidates. The Human Resources Committee also considers recommendations for director nominees submitted by the Corporation's shareholders, Officers, Directors and senior Management.

- (b) Disclose whether or not the board has a nominating committee composed entirely of independent directors. If the board does not have a nominating committee composed entirely of independent directors, describe what steps the board takes to encourage an objective nomination process.
- The Human Resources Committee consists of four (4) members all of whom are independent Directors. The Chairman of the Human Resources Committee is Mr. François Côté.

(c) If the board has a nominating committee, describe the responsibilities, powers and operation of the nominating committee.

The Human Resources Committee Charter foresees:

# 7. Compensation

 recommending a process for assessing the performance of the Board of Directors as a whole, the Chair of the Board of Directors and the Committee chairs and the contribution of individual Directors, and seeing to its implementation;

- (a) Describe the process by which the board determines the compensation for the issuer's directors and officers.
- recommending the competencies, skills and personal qualities required on the Board of Directors in order to create added value, taking into account the opportunities and risks faced by the Corporation and subsequently identifying and recommending to the Board of Directors.

(b) Disclose whether or not the board has a compensation committee composed entirely of independent directors. If the board does not have a compensation committee composed entirely of independent directors, describe what steps the board takes to ensure an objective process for determining such compensation. The Human Resources Committee consists of four (4) members all of whom are independent Directors. The Chairman of the Human

Resources Committee reviews

compensation policies in light of market conditions, industry

practice and level of responsibilities. Only independent Directors

are compensated for acting as Directors of the Corporation.

Resources Committee is Mr. François Côté.

periodically

(c) If the board has a compensation committee, describe the responsibilities, powers and operation of the compensation committee. The Human Resources Committee Charter foresees that such committee shall:

 review and approve on an annual basis the annual compensation of all senior officers which namely includes the assessment of risks associated with the compensation of such senior officers;

Human

- review and approve, on behalf of the Board of Directors or in collaboration with the Board of Directors as applicable, on the basis of the attribution authorized by the Board of Directors, to whom options to purchase shares of the Corporation, PSUs, RSUs or DSUs shall be offered as the case may be and if so, the terms of such options, PSUs, RSUs or DSUs in accordance with the terms of the Corporation's LTIP or DSU Plan provided that no options, PSUs, RSUs or DSUs shall be granted to members of this committee without the approval of the Board of Directors;
- recommend to the Board of Directors from time to time the remuneration to be paid by the Corporation to Directors;
- make recommendations to the Board of Directors with respect to the Corporation's incentive compensation plans and equitybased plans.

The Board of Directors has no other standing committee.

- 8. Other Board Committees If the board has standing committees other than the audit, compensation and nominating committees identify the committees and describe their function.
- 9. Assessments Disclose whether or not the board, its committees and individual directors are regularly assessed with respect to their effectiveness and contribution. If assessments are regularly conducted, describe the process used for the assessments. If assessments are not regularly conducted, describe how the board satisfies itself that the board, its committees, and its individual directors are performing effectively.

# 10. Director Term Limits and Other Mechanisms of Board Renewal –

Disclose whether or not the issuer has adopted term limits for the directors on its board or other mechanisms of board renewal and, if so, include a description of those director term limits or other mechanisms of board renewal. If the issuer has not adopted director term limits or other mechanisms of board renewal, disclose why it has not done so.

The Board of Directors assumes direct responsibility for the monitoring of the Board of Directors' corporate governance practices, the functioning of the Board of Directors and the powers, mandates and performance of the Human Resources Committee. The Human Resources Committee, composed solely of independent Directors, initiates a self-evaluation of the Board of Directors' performance on an annual basis. Questionnaires are distributed to each independent director for the purpose of evaluation of the Board of Directors' responsibilities and functions and the performance of the Board of Directors' Committees. The results of the questionnaires are compiled on a confidential basis to encourage full and frank commentary and are discussed at the next regular meeting of the Human Resources Committee or independent Board of Directors members meeting.

The Corporation does not have a policy that limits the term of the directors on its board. The Board has determined that the term limit of the director's mandate or the mandatory retirement age is not essential in part, because Board renewal has not been a challenge for the Corporation in recent years. Specifically, the average tenure of the current independent directors is low, at approximately five (5) years and a third (sixty-four (64) months). Historically, including the current independent directors, the average tenure of the independent directors that served on the Board of Directors since 2000 is approximately seven (7) years and eight (8) months. In addition, the Corporation seeks to avoid losing the services of a qualified director with experience and in-depth knowledge of the Corporation through the imposition of an arbitrary term limit but is of the opinion however that a balance between long-term directors and new directors who bring a different experience and new ideas is essential.

The Human Resources Committee initiates a self-evaluation of the Board of Directors' performance on an annual basis. This evaluation is an alternative mechanism for renewing the terms of the Directors serving on its Board of Directors. The annual review process of the overall efficiency of the Board of Directors and committees as a whole and of committee members and Directors on an individual basis, remains the best way of ensuring that the skills required are well represented within the Board of Directors.

- 11. Policies Regarding the Representation of Women, Indigenous Person, Person with Disabilities or a Member of Visible Minorities on the Board
  - (a) Disclose whether the issuer has adopted a written policy relating to the identification and nomination of women, indigenous person, person with disabilities or a member of visible minorities directors. If the issuer has not adopted such a policy, disclose why it has not done so.
  - (b) If an issuer has adopted a policy referred to in (a), disclose the following in respect of the policy:
    - a short summary of its objectives and key provisions,
    - ii. the measures taken to ensure that the policy has been effectively implemented,
    - iii. annual and cumulative progress by the issuer in achieving the objectives of the policy, and
    - iv. whether and, if so, how the board or its nominating committee measures the effectiveness of the policy.

The Corporation does not have any written policy regarding the identification and nomination of women, indigenous person, person with disabilities or a member of visible minorities directors as it did not deem it necessary and its focus is on the recruitment of candidates with the specific skills, personal qualities and experiences to add the highest value to the Board, rather than on the gender or other personal characteristics of particular candidates.

The Corporation does not have a written policy.

- 12. Consideration of the Representation of Women, Indigenous Person, Person with Disabilities or a Member of Visible Minorities in the Director Identification and Selection Process - Disclose whether and, if so, how the board or nominating committee considers the level of representation of women, indigenous person, person disabilities or a member of visible minorities on the board in identifying and nominating candidates for election or re-election to the board. If the issuer does not consider the level of representation of women, indigenous person, person with disabilities or a member of visible minorities on the board in identifying and nominating candidates for election or re-election to the board, disclose the issuer's reasons for not doing so.
- 13. Consideration Given the to Representation of Women, Indigenous Person, Person with Disabilities or a Member of Visible Minorities in **Executive Officer Appointments** Disclose whether and, if so, how the considers the level representation of women, indigenous person, person with disabilities or a member of visible minorities in executive officer positions when making executive officer appointments. If the issuer does not consider the level of representation of women, indigenous person, person with disabilities or a member of visible minorities in executive officer positions when making executive officer appointments, disclose the issuer's reasons for not doing so.

The Human Resources Committee does not specifically consider the level of representation of women, indigenous person, person with disabilities or a member of visible minorities on the Board in identifying and nominating candidates for election or re-election to the Board. In the context of such process, it considers the then current Board composition and anticipated competencies required so as to add the highest value to the Board. See Heading 6 "Nomination of Directors" on page 149 of this Annual Report for a description of the process adhered to by the Corporation to select director candidates.

The Corporation is focused on finding executive talent to grow and expand its business. As such, it focuses on recruiting and retaining executive talent needed to develop and implement the Corporation's strategy, objectives and goals without regard for the gender or other personal characteristics of particular candidates for executive officer positions.

- 14. Issuer's Targets Regarding the Representation of Women, Indigenous Person, Person with Disabilities or a Member of Visible Minorities on the Board and in Executive Officer Positions
  - (a) For purposes of this Item, a "target" means a number or percentage, or a range of numbers or percentages, adopted by the issuer of women, indigenous person, person with disabilities or a member of visible minorities on the issuer's board or in executive officer positions of the issuer by a specific date.

(b) Disclose whether the issuer has adopted a target regarding women, indigenous person, person with disabilities or a member of visible minorities on the issuer's board. If the issuer has not adopted a target, disclose why it has not done so.

- (c) Disclose whether the issuer has adopted a target regarding women, indigenous person, person with disabilities or a member of visible minorities in executive officer positions of the issuer. If the issuer has not adopted a target, disclose why it has not done so.
- (d) If the issuer has adopted a target referred to in either (b) or (c), disclose:
  - i. the target, and
  - ii. the annual and cumulative progress of the issuer in achieving the target.

N/A.

The Corporation does not have a target of women, indigenous person, person with disabilities or a member of visible minorities on the Board of Directors because it does not believe that any candidate for membership to the Board of Directors should be chosen nor excluded solely or largely because of gender or other personal characteristics. In selecting director nominees, the Corporation considers the skills, expertise and background that would complement the existing Board.

The Corporation has not adopted a target regarding women, indigenous person, person with disabilities or a member of visible minorities in executive officer positions of the Corporation. The Corporation considers candidates based on their qualifications, personal qualities, business background and experience, and does not feel that targets necessarily result in the identification or selection of the best candidates.

The Corporation has not adopted a target.

- 15. Number of Women, Indigenous Person, Person with Disabilities or a Member of Visible Minorities on the Board and in Executive Officer Positions
  - (a) Disclose the number and proportion (in percentage terms) of directors on the issuer's board who are women, indigenous person, person with disabilities or a member of visible minorities.
  - (b) Disclose the number and proportion (in percentage terms) of executive officers of the issuer, including all major subsidiaries of the issuer, who are women, indigenous person, person with disabilities or a member of visible minorities.

Currently, one of the Corporation's Board members is a woman (17%).

Currently, none of the Corporation's Board members is an indigenous person (First Nations, Inuit and Métis), a person with disabilities nor a member of visible minorities.

Currently, one of the Corporation's executive officers is a woman (9%).

Currently, none of the Corporation's executive officers is an indigenous person (First Nations, Inuit and Métis), a person with disabilities nor a member of visible minorities.

#### **EXHIBIT 11.18**

#### EXFO INC. (« EXFO », « Company »)

#### **Policy Regarding Conflict Minerals**

EXFO Inc. and its affiliates aim for the highest standards of ethical conduct and integrity in all areas of its activities.

Some product components used in our industry depend on certain minerals, such as gold, tin, tantalum and tungsten. Certain countries of the central African region, including the Democratic Republic of Congo ("DRC") and several surrounding countries, are mining some of those minerals extensively. What makes these minerals particularly controversial is their prominence in eastern DRC, as well as their role in feeding ongoing hostilities in the region and the continuing instability, violence and human rights abuses that affect the region, hence the designation "Conflict Minerals".

As gold, tantalum, tin and tungsten may be necessary to the functionality or production of our products, EXFO is committed to sourcing materials from environmentally and socially responsible suppliers. It is our policy not to purchase from known-conflict sources and we expect our suppliers to abide by the same standard. Since mineral mining and smelting are several steps away from our final product manufacturing, it is extremely difficult to trace the origin of minerals. Additionally, minerals may be smelted together with recycled materials, making it impossible to ascertain the true source.

Understanding the complexity of this challenge, EXFO has adopted the Electronics Industry Citizenship Coalition (EICC) Standard Conflict Minerals reporting format, and we request our suppliers to use the same format when reporting their supply chain status to us. As part of our review of the Conflict Minerals reports that we receive from our suppliers, named smelters are cross-checked against the list of known smelters as well as the Conflict-Free Smelter list published by EICC (http://www.responsiblemineralsinitiative.org/).

As a publicly traded company with shares listed on a US exchange, EXFO complies with the Dodd-Frank Wall Street Reform and Consumer Protection Act, Section 1502 and the implementation guidelines published by the Securities and Exchange Commission (SEC), which require supply chain reporting and reasonable due diligence with respect to the sourcing of Conflict Minerals and their conflict-free status. EXFO supports its customers' efforts to reach the common goal of ensuring a socially and environmentally responsible supply chain.

#### /s/ Luc Gagnon

Luc Gagnon

Vice President, Manufacturing Operations and Customer Service EXFO Inc.

# Exhibit 12.1 Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Philippe Morin, certify that:

- 1. I have reviewed this Annual Report on Form 20-F of EXFO Inc. ("EXFO");
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of EXFO as of, and for, the periods presented in this report;
- 4. EXFO's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for EXFO and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to EXFO, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of EXFO's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in EXFO's internal control over financial reporting that occurred during the period covered by the Annual Report that has materially affected, or is reasonably likely to materially affect, EXFO's internal control over financial reporting; and
- 5. EXFO's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to EXFO's auditors and the audit committee of EXFO's board of directors:
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect EXFO's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in EXFO's internal control over financial reporting.

Date: November 26, 2019

/s/ Philippe Morin
Philippe Morin
Chief Executive Officer
(Principal Executive Officer)

# Exhibit 12.2 Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), the undersigned officer of EXFO Inc., hereby certifies, that:

- 1. The Annual Report on Form 20-F for the year ended August 31, 2019 of EXFO fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in this Annual Report fairly presents, in all material respects, the financial condition and results of operations of EXFO.

Date: November 26, 2019

#### /s/ Philippe Morin

Philippe Morin Chief Executive Officer (Principal Executive Officer)

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Report or as separate disclosure document.

# Exhibit 13.1 Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Pierre Plamondon, certify that:

- 1. I have reviewed this Annual Report on Form 20-F of EXFO Inc. ("EXFO");
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of EXFO as of, and for, the periods presented in this report;
- 4. EXFO's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for EXFO and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to EXFO, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of EXFO's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in EXFO's internal control over financial reporting that occurred during the period covered by the Annual Report that has materially affected, or is reasonably likely to materially affect, EXFO's internal control over financial reporting; and
- 5. EXFO's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to EXFO's auditors and the audit committee of EXFO's board of directors:
  - All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect EXFO's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in EXFO's internal control over financial reporting.

Date: November 26, 2019

/s/ Pierre Plamondon
Pierre Plamondon, CPA, CA
Chief Financial Officer
and Vice President, Finance
(Principal Financial Officer)

# Exhibit 13.2 Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), the undersigned officer of EXFO Inc., hereby certifies, that:

- 1. The Annual Report on Form 20-F for the year ended August 31, 2019 of EXFO fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in this Annual Report fairly presents, in all material respects, the financial condition and results of operations of EXFO.

Date: November 26, 2019

#### <u>/s/ Pierre Plamondon</u>

Pierre Plamondon, CPA, CA Chief Financial Officer and Vice President, Finance (Principal Financial Officer)

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Report or as separate disclosure document.

#### **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of EXFO Inc.

#### Opinions on the financial statements and internal control over financial reporting

We have audited the accompanying consolidated balance sheets of EXFO Inc. and its subsidiaries (together, the "Company") as at August 31, 2019 and 2018, and the related consolidated statements of earnings, comprehensive income (loss), changes in shareholders' equity and cash flows for each of the three years in the period ended August 31, 2019, including the related notes (collectively referred to as the consolidated financial statements). We also have audited the Company's internal control over financial reporting as at August 31, 2019, based on criteria established in *Internal Control – Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as at August 31, 2019 and 2018, and its financial performance and its cash flows for each of the three years in the period ended August 31, 2019 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board (IFRS). Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of August 31, 2019, based on criteria established in *Internal Control – Integrated Framework* (2013) issued by the COSO.

#### **Basis for opinions**

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in "Management's Annual Report on Internal Control over Financial Reporting" included in Item 15(b) of the Annual Report on Form 20-F for the fiscal year ended August 31, 2019. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

#### Definition and limitations of internal control over financial reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Pricewaterhouse Coopers LLP

Montréal, Canada November 26, 2019

We have served as the Company's auditor since 1994.

<sup>&</sup>lt;sup>1</sup> CPA auditor, CA, public accountancy permit No. A111799

# **Consolidated Balance Sheets**

(in thousands of US dollars)

	As a	t August 31,
	2019	2018
Assets		
Current assets		
Cash	\$ 16,518	\$ 12,758
Short-term investments (note 6)	2,918	
Accounts receivable (note 6)		
Trade	51,517	47,273
Other	3,396	
Income taxes and tax credits recoverable (note 20)	3,159	4,790
Inventories (note 7)	38,017	38,589
Prepaid expenses	6,510	
Other assets (note 19)	3,083	2,279
•	125,118	
Tax credits recoverable (note 20)	46,704	47,677
Property, plant and equipment (notes 8 and 22)	39,364	
Intangible assets (notes 9 and 22)	21,654	
Goodwill (notes 9 and 22)	38,648	
Deferred income tax assets (note 20)	4,821	
Other assets	1,293	•
	\$ 277,602	_
Liabilities		
Current liabilities		
Bank loan (note 10)	\$ 5,000	\$ 10,692
Accounts payable and accrued liabilities (note 11)	50,790	47,898
Provisions (note 11)	1,065	2,954
Income taxes payable	704	873
Deferred revenue (note 19)	24,422	16,556
Other liabilities	1,606	3,197
Current portion of long-term debt (note 12)	2,449	2,921
	86,036	85,091
Provisions (note 11)	2,737	2,347
Deferred revenue (note 19)	9,056	6,947
Long-term debt (note 12)	3,293	5,907
Deferred income tax liabilities (note 20)	3,598	5,910
Other liabilities	318	421
	105,038	106,623
Commitments (note 13)		
Shareholders' equity		
Share capital (note 14)	92,706	
Contributed surplus	19,196	
Retained earnings	112,173	
Accumulated other comprehensive loss (note 15)	(51,511	
	172,564	177,921
	\$ 277,602	\$ 284,544

The accompanying notes are an integral part of these consolidated financial statements.

On behalf of the Board

<u>/s/ Philippe Morin</u> PHILIPPE MORIN, Chief Executive Officer

# **EXFO Inc.**Consolidated Statements of Earnings

(in thousands of US dollars, except share and per share data)

		Years e	ended August	31,	
	2019		2018		2017
Sales (note 22)	\$ 286,890	\$	269,546	\$	243,301
Cost of sales (1)	118,677		105,004		94,329
Selling and administrative	98,646		98,794		86,256
Net research and development	50,553		57,154		47,168
Depreciation of property, plant and equipment	5,469		5,444		3,902
Amortization of intangible assets	9,012		10,327		3,289
Change in fair value of cash contingent consideration	_		(670)		(383)
Interest and other expense	718		1,378		303
Foreign exchange (gain) loss	949		(1,309)		978
Share in net loss of an associate (note 3)	_		2,080		_
Gain on deemed disposal of the investment in					
an associate (note 3)	 		(2,080)		_
Earnings (loss) before income taxes	2,866		(6,576)		7,459
Income taxes (note 20)	 5,346		5,678		6,608
Net earnings (loss) for the year	(2,480)		(12,254)		851
Net loss for the year attributable to non-controlling interest	 		(352)		_
Net earnings (loss) for the year attributable to parent interest	\$ (2,480)	\$	(11,902)	\$	851
Basic and diluted net earnings (loss) attributable to parent interest per share	\$ (0.04)	\$	(0.22)	\$	0.02
Basic weighted average number of shares outstanding (000's)	55,325		54,998		54,423
Diluted weighted average number of shares outstanding (000's) (note 21)	55,325		54,998		55,555

<sup>(1)</sup> The cost of sales is exclusive of depreciation and amortization, shown separately.

# **EXFO Inc.**Consolidated Statements of Comprehensive Income (Loss)

(in thousands of US dollars)

	,	Years e	nded August	31,	
	2019		2018		2017
Net earnings (loss) for the year	\$ (2,480)	\$	(12,254)	\$	851
Other comprehensive income (loss), net of income taxes Items that may be reclassified subsequently to net earnings					
Foreign currency translation adjustment	(4,177)		(6,491)		8,262
Unrealized gains/losses on forward exchange contracts Reclassification of realized gains/losses on forward	(795)		(1,476)		1,403
exchange contracts in net earnings  Deferred income tax effect of gains/losses on forward	744		(972)		423
exchange contracts	 67		554		(479)
Other comprehensive income (loss)	 (4,161)		(8,385)		9,609
Comprehensive income (loss) for the year	(6,641)		(20,639)		10,460
Comprehensive loss for the year attributable to non- controlling interest	 		(352)		
Comprehensive income (loss) for the year attributable to parent interest	\$ (6,641)	\$	(20,287)	\$	10,460

# **Consolidated Statements of Changes in Shareholders' Equity**

(in thousands of US dollars)

	Year ended August 31, 2017									
		Share capital	c	ontributed surplus		Retained earnings		ccumulated other mprehensive loss	sł	Total nareholders' equity
Balance as at September 1, 2016	\$	85,516	\$	18,150	\$	126,309	\$	(48,574)	\$	181,401
Issuance of share capital (note 14)		3,490		_		_				3,490
Reclassification of stock-based compensation costs (note 14)		1,405		(1,405)		_				-
Stock-based compensation costs		-		1,439		_				1,439
Net earnings for the year		-		_		851				851
Other comprehensive income										
Foreign currency translation adjustment		-		_		_		8,262		8,262
Changes in unrealized gains/losses on forward exchange										
contracts, net of deferred income taxes of \$479		-		_		_		1,347		1,347
Total comprehensive income for the year										10,460
Balance as at August 31, 2017	\$	90,411	\$	18,184	\$	127,160	\$	(38,965)	\$	196,790

					Year ende	d Augu	ıst 31, 2018			
	Share capital	С	ontributed surplus	_	Retained earnings		ccumulated other mprehensive loss	n-controlling interest	sh	Total nareholders' equity
Balance as at September 1, 2017	\$ 90,411	\$	18,184	\$	127,160	\$	(38,965)	\$ _	\$	196,790
Reclassification of stock-based compensation										
costs (note 14)	1,526		(1,526)		_		_	_		_
Stock-based compensation costs	_		1,770		_		_	_		1,770
Business combination (note 3)	_		_		_		_	(3,662)		(3,662)
Acquisition of non-controlling interest on										
acquisition of subsidiary (note 3)	_		_		(352)		_	4,014		3,662
Net loss for the year	_		_		(11,902)		_	(352)		(12,254)
Other comprehensive loss										
Foreign currency translation adjustment	_		_		-		(6,491)	_		(6,491)
Changes in unrealized gains/losses on forward										
exchange contracts, net of deferred income										
taxes of \$554	_		_		_		(1,894)	_		(1,894)
Total comprehensive loss for the year										(20,639)
Balance as at August 31, 2018	\$ 91,937	\$	18,428	\$	114,906	\$	(47,350)	\$ _	\$	177,921

	Year ended August 31, 2019										
		Share capital	Co	ontributed surplus		Retained earnings		ccumulated other mprehensive loss	sł	Total nareholders' equity	
Balance as at August 31, 2018 Adoption of IFRS 9 (note 2)	\$	91,937 –	\$	18,428 –	\$	114,906 (253)	\$	(47,350) –	\$	177,921 (253)	
Adjusted balance as at September 1, 2018		91,937		18,428		114,653		(47,350)		177,668	
Reclassification of stock-based compensation costs (note 14)		1,106		(1,106)		,				, –	
Redemption of share capital (note 14)		(337)		25		_		_		(312)	
Stock-based compensation costs		_		1,849		_		_		1,849	
Net loss for the year		_		_		(2,480)		_		(2,480)	
Other comprehensive income (loss)  Foreign currency translation adjustment Changes in unrealized gains/losses on forward exchange		-		-		_		(4,177)		(4,177)	
contracts, net of deferred income taxes of \$67		_		_		_		16		16	
Total comprehensive loss for the year			-							(6,641)	
Balance as at August 31, 2019	\$	92,706	\$	19,196	\$	112,173	\$	(51,511)	\$	172,564	

# **EXFO Inc.**Consolidated Statements of Cash Flows

(in thousands of US dollars)

		Years e	nded August 3	1,	
	2019	-	2018		2017
Cash flows from operating activities					
Net earnings (loss) for the year	\$ (2,480)	\$	(12,254)	\$	851
Add (deduct) items not affecting cash					
Stock-based compensation costs	1,831		1,748		1,477
Depreciation and amortization	14,481		15,771		7,191
Gain on disposal of capital assets (note 4)	(1,732)		_		_
Writeoff of capital assets	1,386		592		_
Change in fair value of cash contingent consideration			(670)		(383)
Deferred revenue	10,477		1,998		1,723
Deferred income taxes	(2,103)		1,368		1,054
Share in net loss of an associate	-		2,080		_
Gain on deemed disposal of the investment in an associate			(2,080)		_
Changes in foreign exchange gain/loss	 (46)		(181)		1,096
	21,814		8,372		13,009
Changes in non-cash operating items					
Accounts receivable	(4,786)		7,275		3,955
Income taxes and tax credits	1,536		86		(2,386)
Inventories	(134)		(1,020)		911
Prepaid expenses	(1,307)		57		(918)
Other assets	(1,459)		(1,311)		(121)
Accounts payable and accrued liabilities and provisions	3,184		1,033		(1,745)
Other liabilities	 (1,606)		(122)		165
	 17,242		14,370		12,870
Cash flows from investing activities	(4.070)		(4 == 0)		(0.010)
Additions to short-term investments	(1,879)		(1,550)		(2,910)
Proceeds from disposal and maturity of short-term investments	1,168		234		6,374
Purchases of capital assets (notes 8 and 9)	(7,498)		(10,452)		(7,175)
Proceeds from disposal of capital assets (note 4)	3,318		- (42.520)		_
Investment in an associate (note 3)	_		(12,530)		(42.702)
Business combinations, net of cash acquired (note 3)	 		(19,600)		(12,792)
	 (4,891)		(43,898)		(16,503)
Cash flows from financing activities	(= .0=)				
Bank loan	(5,195)		11,061		- (4.400)
Repayment of long-term debt	(2,817)		(1,688)		(1,480)
Redemption of share capital (note 14)	(312)		- (4.440)		_
Other liabilities	_		(1,449)		_
Acquisition of non-controlling interest (note 3)	 - (2.22.1)		(3,657)		- (1.100)
	 (8,324)		4,267		(1,480)
Effect of foreign exchange rate changes on cash	 (267)		(416)		340
Change in cash	3,760		(25,677)		(4,773)
Cash – Beginning of year	12,758		38,435		43,208
Cash – End of year	\$ 16,518	\$	12,758	\$	38,435
Supplementary information					
Income taxes paid	\$ 2,577	\$	2,376	\$	2,866

The accompanying notes are an integral part of these consolidated financial statements.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### 1 Nature of Activities and Incorporation

EXFO Inc. and its subsidiaries (together "EXFO" or the "company") develops smarter test, monitoring and analytics solutions for fixed and mobile network operators, webscale companies and equipment manufacturers in the global communications industry.

EXFO is a company incorporated under the Canada Business Corporations Act and is domiciled in Canada. The address of its headquarters is 400 Godin Avenue, Québec City, Quebec, Canada, G1M 2K2.

These consolidated financial statements were authorized for issue by the Board of Directors on November 26, 2019.

#### 2 Basis of Presentation

These consolidated financial statements have been prepared in accordance with the *International Financial Reporting Standards* (IFRS), as issued by the *International Accounting Standards Board* (IASB). The company has consistently applied the same accounting policies through all periods presented, except as described below.

IFRS Pronouncements Adopted in Fiscal 2019

#### Financial instruments

The final version of IFRS 9, "Financial Instruments", was issued in July 2014 and replaces IAS 39, "Financial Instruments: Recognition and Measurement". IFRS 9 uses a single approach to determine whether a financial asset is measured at amortized cost or fair value, replacing the multiple rules in IAS 39. The approach in IFRS 9 is based on how an entity manages its financial instruments in the context of its business model and the contractual cash flow characteristics of its financial assets. Most of the requirements in IAS 39 for classification and measurement of financial liabilities were carried forward unchanged to IFRS 9. The new standard also requires a single impairment method to be used, replacing the multiple impairment methods in IAS 39. Requirements relating to hedge accounting, representing a new hedge accounting model, have also been added to IFRS 9. The new standard is effective for annual periods beginning on or after January 1, 2018 and must be applied retrospectively. The company adopted this new standard on September 1, 2018 using the modified retrospective method. The following table summarizes the impact of its adoption on the company's consolidated balance sheet as at September 1, 2018:

		As reported at August 31, 2018	ıstments	As adjusted as at September 1, 2018				
	<u> </u>	47,273	خ	(303)	ċ	46,970		
Accounts receivable — Trade (note 6)	Ş	47,273	Ş	(303)	\$	46,970		
Income taxes recoverable	\$	4,790	\$	50	\$	4,840		
Total assets	\$	284,544	\$	(253)	\$	284,291		
Retained earnings	\$	114,906	\$	(253)	\$	114,653		
Shareholders' equity	\$	177,921	\$	(253)	\$	177,668		

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

In addition, the company's consolidated financial instruments are accounted for as follows under IFRS 9 as compared to the company's previous accounting policy with IAS 39:

Financial assets Classification – IAS 39 Classification – IFRS 9

Cash Loans and receivables Amortized cost

Short-term investments Available for sale Fair value through other comprehensive

income

Accounts receivable Loans and receivables Amortized cost

Forward exchange contracts Derivatives used for hedging Fair value through other comprehensive

income

Financial liabilities

Bank loanOther financial liabilitiesAmortized costAccounts payable and accrued liabilitiesOther financial liabilitiesAmortized costOther liabilitiesOther financial liabilitiesAmortized costLong-term debtOther financial liabilitiesAmortized cost

Forward exchange contracts Derivatives used for hedging Fair value through other comprehensive

income

#### Hedge accounting

All existing hedge relationships that were designated as effective hedging relationships under IAS 39 were re-designated, and continue to qualify for hedge accounting under IFRS 9. The adoption of IFRS 9 did not change the application of hedge accounting for the company's effective hedges.

#### Revenue from contracts with customers

IFRS 15, "Revenue from Contracts with Customers", was issued in May 2014. The objective of this new standard is to provide a single, comprehensive revenue recognition model for all contracts with customers to improve comparability. This new standard contains principles that an entity must apply to determine the measurement of revenue and timing of when it is recognized. The underlying principle is that an entity recognizes revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. This new standard is effective for annual periods beginning on or after January 1, 2018. The company adopted this new standard on September 1, 2018 using the modified retrospective method. The company applied this standard retrospectively only to contracts that were not completed at the date of initial application.

The company concluded that the main areas of impact relate to the allocation of the transaction price to the various performance obligations under the contracts, the timing of revenue recognition for sales arrangement that contain customer acceptance clauses, and the sale of licenses that provide customers with the "right to use" the company's intellectual property. The adoption of the new standard had no material impact on the company's consolidated financial statements.

#### Foreign currency transactions and advance consideration

IFRIC 22, "Foreign Currency Transactions and Advance Consideration", was issued in December 2016. IFRIC 22 addresses how to determine the date of the transaction for the purpose of determining the exchange rate to use on initial recognition of the related asset, expense or income (or part of it) and on the derecognition of a non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration in a foreign currency. IFRIC 22 is effective for annual periods beginning on or after January 1, 2018. The company adopted this interpretation retrospectively on September 1, 2018, and its adoption did not have a material impact on its consolidated financial statements.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### **Basis of measurement**

These consolidated financial statements have been prepared under the historical cost convention, except for the revaluation of derivative financial instruments, short-term investments and the contingent liability.

#### Consolidation

These consolidated financial statements include the accounts of the company and its domestic and foreign subsidiaries. Intercompany accounts and transactions have been eliminated.

#### **Revenue recognition under IFRS 15**

The company exercises judgment and use estimates in connection with determining the amounts of product and services revenues to be recognized in each accounting period.

The company accounts for revenue once a legally enforceable contract with a customer has been approved by the parties and the related promises to transfer products or services have been identified. A contract is defined by the company as an arrangement with commercial substance identifying payment terms, each party's rights and obligations regarding the products or services to be transferred and collection is probable. The company's contracts usually take the form of a customer purchase order.

Customer contracts may include promises to transfer multiple products and services to a customer. Determining whether the products and services are considered distinct performance obligations that should be accounted for separately or as one single performance obligation may require significant judgment. The company assesses whether each promised good or service is distinct for the purpose of identifying the various performance obligations in each contract. Promised goods and services are considered distinct provided that: (i) the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer; and (ii) the company's promise to transfer the good or service to the customer is separately identifiable or distinct from other promises in the contract. The company derives revenues from goods and services. Sales of goods, which represent the majority of the sales of the company, consist of standalone hardware products, hardware products with embedded software that are essential to providing customers the intended functionality of the solutions, standalone software licenses, as well as hardware products bundled with a software license. Sales of services mainly consist of professional services, consulting, stand-ready software-as-a-service (SAAS), maintenance contracts, extended warranties, installation, integration and training. The company's performance obligations consist of a variety of products and services.

Revenue is recognized when control of the products or services are transferred to the customers in an amount that reflects the consideration the company expects to be entitled to in exchange for products and services. Revenue is recognized at the point in time control is transferred to the customer. For hardware sales, transfer of control to the customer typically occurs at the point the product is shipped or delivered to the customer's designated location. For "right of use" software license sales, transfer of control to the customer typically occurs upon shipment, electronic delivery, or when the software is available for download by the customer. For instances where software license is sold along with essential services, such as integration or installation, transfer of control occurs, and revenue is typically recognized upon customer acceptance. In certain instances, acceptance is deemed to have occurred if all acceptance provisions lapse, or if the company has evidence that all acceptance provisions will be, or have been, satisfied. Revenue from software and hardware support is recognized ratably over the support period. Support services generally include rights to unspecified upgrades (when and if available), telephone and internet-based support, updates, bug fixes and hardware repair and replacement. SAAS services are recognized ratably over the contract term.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

If the contract contains a single performance obligation, the entire transaction price is attributed to that performance obligation. Some of the company's contracts include multiple distinct performance obligations with a combination of products and services, maintenance and support, professional services and/or training. The company allocates the transaction price among the performance obligations in an amount that depicts the relative standalone selling prices (SSP) of each obligation. Judgment is required to determine the SSP for each distinct performance obligation. The company assesses SSP based on historical pricing for products and services, whether sold alone or as part of a multiple element transaction. The company reviews sales of the product and services elements on a regular basis and updates, when appropriate, its SSP for such elements to ensure that it reflects recent pricing experience.

Payments for products and services are typically due up front with payment terms of 30 to 90 days. However, the company has contracts pursuant to which payments are due over a certain period generally not exceeding one year based on agreed-upon payments terms either prior or following the transfer of control for the contracted performance obligations. Payments on multi-year maintenance, consulting services are typically due in annual, quarterly or monthly installments over the contract term. The company did not have any material variable consideration such as obligations for returns, refunds or warranties as at August 31, 2019.

#### **Presentation currency**

The functional currency of the company is the Canadian dollar. The company has adopted the US dollar as its presentation currency as it is the most commonly used reporting currency in its industry. The consolidated financial statements are translated into the presentation currency as follows: assets and liabilities are translated at the exchange rate in effect on the date of the consolidated balance sheet; revenues and expenses are translated at the monthly average exchange rate. The foreign currency translation adjustment arising from such translation is included in accumulated other comprehensive income in shareholders' equity.

#### Foreign currency translation

#### (a) Foreign currency transactions

Transactions denominated in currencies other than the functional currency are translated into the relevant functional currency as follows: Monetary assets and liabilities are translated at the exchange rate in effect on the date of the consolidated balance sheet, and revenues and expenses are translated at the exchange rate in effect on the date of the transaction. Non-monetary assets and liabilities measured at historical cost and denominated in a foreign currency are translated using the exchange rate at the date of the transaction, whereas non-monetary items that are measured at fair value and denominated in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Foreign exchange gains and losses arising from such translation are included in the consolidated statements of earnings.

#### (b) Foreign operations

Each foreign operation determines its own functional currency and items included in the financial statements of each foreign operation are measured using that functional currency. The financial statements of each foreign operation that has a functional currency different from the company are translated into Canadian dollars as follows: assets and liabilities are translated at the exchange rate in effect on the date of the consolidated balance sheet; revenues and expenses are translated at the monthly average exchange rate. The foreign currency translation adjustment arising from such translation is included in accumulated other comprehensive income in shareholders' equity.

#### **Financial instruments**

The classification of financial instruments depends on the intended purpose when the financial instruments were acquired or issued, as well as on their characteristics and designation by the company.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### Financial assets at amortized cost

Financial assets are measured at amortized cost if they are held within a business model whose objective is to hold assets to collect contractual cash flows, and their contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Otherwise, they are classified at fair value through profit or loss through other comprehensive income.

Financial liabilities at amortized cost

Financial liabilities are measured at amortized cost.

Financial assets at fair value through other comprehensive income

Financial assets at fair value through other comprehensive income are initially recognized at fair value plus transaction costs and are subsequently measured at fair value. After their initial recognition, any changes in their fair value are reflected in the consolidated statements of comprehensive income.

#### Derivative financial instruments and hedging activities

Forward exchange contracts are utilized by the company to manage its foreign currency exposure. Forward exchange contracts are entered into by the company to hedge anticipated US-dollar-denominated sales and the related accounts receivable as well as Indian-rupee-denominated operating expenses and the related accounts payable. The company's policy is not to utilize those derivative financial instruments for trading or speculative purposes.

The company's forward exchange contracts, which are designated as cash flow hedging instruments, qualify for hedge accounting.

Forward exchange contracts are classified as financial instruments at fair value through other comprehensive income. They are initially recorded at fair value and subsequently measured at fair value. The fair value of forward exchange contracts is determined using observable prices and forward exchange rates at the consolidated balance sheet date, with the resulting value discounted back to present value. After initial recognition, the effective portion of changes in their fair value is reflected in other comprehensive income. Any ineffective portion is recognized immediately in the consolidated statements of earnings. Upon recognition of related hedged sales and operating expenses, accumulated changes in fair value of forward exchange contracts are respectively reclassified in sales and net research and development expenses in the consolidated statements of earnings.

At the inception of a hedge relationship, the company formally designates and documents the hedge relationship to which the company wishes to apply hedge accounting, the risk management objectives, the hedging instrument, the hedged item and the method used to test effectiveness. The company assesses effectiveness of the hedge relationship at inception and on an ongoing basis using the dollar-offset method.

#### Fair value hierarchy

The company classifies its derivative and non-derivative financial assets and financial liabilities measured at fair value using the fair value hierarchy as follows:

- Level 1: Quoted prices (unadjusted) in an active market for identical assets or liabilities;
- Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset and liability, either directly or indirectly; and
- Level 3: Unobservable inputs for the asset or liability.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

The company's short-term investments and forward exchange contracts are measured at fair value at each balance sheet date. The company's short-term investments are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices in active markets. The company's forward exchange contracts are classified within Level 2 of the fair value hierarchy because they are valued using observable prices and forward foreign exchange rates at the balance sheet dates.

#### **Short-term investments**

All investments with original terms to maturity of three months or less and that are not required for the purposes of meeting short-term cash requirements are classified as short-term investments. Short-term investments can be hold to maturity or sold and are classified as financial assets at fair value through other comprehensive income; therefore, they are carried at fair value in the consolidated balance sheet, and any changes in their fair value are reflected in other comprehensive income. Upon the disposal or maturity of these assets, accumulated changes in their fair value are reclassified from other comprehensive income to the consolidated statements of earnings.

#### **Inventories**

Inventories are valued on an average cost basis, at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs necessary to make the sale.

The cost of work in progress and finished goods includes material, labor and an allocation of manufacturing overhead.

#### Property, plant and equipment and depreciation

Property, plant and equipment are recorded at cost, net of accumulated depreciation and accumulated impairment losses. Such cost is reduced by related research and development tax credits.

Depreciation is provided on a straight-line basis over the estimated useful lives of the asset as follows:

Term
Land improvements 15 years
Buildings 20 to 60 years
Equipment 3 to 15 years
Leasehold improvements The lesser of useful life and remaining lease term

The assets' residual values and useful lives are reviewed at each financial year-end and are adjusted prospectively, if appropriate.

#### Intangible assets, goodwill and amortization

#### Intangible assets

Intangible assets with finite useful lives primarily include the cost of core technology, customer relationships and software. The cost of intangible assets acquired in a business combination is the fair value of the assets at the date of acquisition. Following initial recognition, intangible assets are carried at cost less accumulated amortization and accumulated impairment losses. Amortization is provided on a straight-line basis over the estimated useful lives of two to eight years for core technologies, three months to five years for customer relationships, one year for brand name, and two and eight years for software. None of the company's intangible assets were developed internally.

The amortization method and the useful lives of intangible assets are reviewed at each financial year-end, and adjusted prospectively, if appropriate.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### Goodwill

Goodwill represents the excess of the purchase price of acquired businesses over the estimated fair value of net identifiable assets acquired and is allocated to each cash-generating unit (CGU) or group of CGUs that are expected to benefit from the related business combination. A group of CGUs represents the lowest level within the company at which the goodwill is monitored for internal management purposes, which is not higher than an operating segment. Goodwill is not amortized but must be tested for impairment on an annual basis or more frequently if events or circumstances indicate that it might be impaired.

#### Research and development

All costs related to research are expensed as incurred, net of related tax credits and grants. Development costs are expensed as incurred, net of related tax credits and grants, unless they meet the recognition criteria of IAS 38, "Intangible Assets", in which case they are capitalized, net of related tax credits and grants and amortized on a straight-line basis over the estimated benefit period. Research and development expenses mainly comprise salaries and related expenses, material costs as well as fees paid to third-party consultants. As at August 31, 2018 and 2019, the company had not capitalized any development costs.

The company elected to account for non-refundable research and development tax credits under IAS 20, "Accounting for Governmental Grants and Disclosures of Governmental Assistance", and as such, these tax credits are presented against gross research and development expenses in the consolidated statements of earnings. Non-refundable research and development tax credits are included in earnings or deducted from the related assets, provided there is reasonable assurance that the company has complied and will comply with the conditions related to the tax credits and that the tax credits will be received.

#### Impairment of non-financial assets

The company assesses at each reporting date whether there is an indication that the carrying value of property, plant and equipment and finite-life intangible assets may not be recoverable. Non-financial assets that are not amortized (such as goodwill) are subject to an annual impairment test. If any indication exists, or when annual impairment testing is required, the company estimates the asset or asset group's recoverable amount. For the purpose of measuring recoverable amounts, assets are grouped at the lowest levels for which there are separately identifiable cash flows (CGUs). The recoverable amount is the higher of an asset or CGU's fair value less costs of disposal and its value in use. Where the carrying value of an asset or CGU exceeds its recoverable amount, the asset or the CGU is considered impaired and is written down to its recoverable amount. The company performs its annual goodwill impairment test in the fourth quarter of each fiscal year.

For property, plant and equipment and finite-life intangible assets, the reversal of impairment is limited so that the carrying value of the asset does not exceed its recoverable amount, nor exceed the carrying value that would have been determined, net of depreciation or amortization, had no impairment loss been recognized for the asset in prior periods. Impairment losses on goodwill are not reversed.

#### Leases

Operating leases are leases for which the company does not assume substantially all the risks and rewards of ownership of the asset. Operating lease rentals are charged to the consolidated statements of earnings on a straight-line basis over the lease term.

As at August 31, 2018 and 2019, all significant leases of the company were classified as operating leases.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### **Government grants**

Grants related to operating expenses are included in earnings when the related expenses are incurred. Grants related to capital expenditures are deducted from the related assets. Grants are included in the consolidated statements of earnings or deducted from the related assets, provided there is reasonable assurance that the company has complied and will comply with all the conditions related to the grants and that the grants will be received.

#### Warranty

The company offers its customers basic warranties of one to three years, depending on the specific products and terms of the purchase agreement. The company's typical warranties require it to repair or replace defective products during the warranty period at no cost to the customer. Costs related to basic warranties are accrued at the time of shipment, based upon estimates of expected rework and warranty costs to be incurred. Costs associated with separately priced extended warranties are expensed as incurred.

#### Income taxes

Income taxes comprise current and deferred income taxes.

#### Current income taxes

Current income tax assets and liabilities for the current and prior years are measured at the amount expected to be recovered or paid to the taxation authorities. Income tax rates used to calculate the amount are those that are enacted or substantively enacted at the balance sheet dates in the tax jurisdictions where the company generates taxable income/loss.

#### Deferred income taxes

The company provides for deferred income taxes using the liability method. Under this method, deferred income tax assets and liabilities are determined based on deductible or taxable temporary differences between financial statement values and tax values of assets and liabilities as well as the carry-forward of unused tax losses and deductions, using enacted or substantively enacted income tax rates at the balance sheet dates, that are expected to be in effect for the years in which the assets are expected to be recovered or the liabilities to be settled.

Deferred income tax assets are recognized only to the extent that it is probable that future taxable income will be available against which the deductible temporary differences as well as unused tax losses and deductions can be utilized.

Deferred tax liabilities are recognized for all taxable temporary differences and for taxable temporary differences arising on investments in subsidiaries, except where the reversal of these temporary differences can be controlled, and it is probable that the differences will not reverse in the foreseeable future.

Deferred income tax assets and liabilities are presented as non-current in the consolidated balance sheets.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### Uncertain tax positions

The company is subject to income tax laws and regulations in several jurisdictions. There are many transactions and calculations during the course of business for which the ultimate tax determination is uncertain. The company maintains provisions for uncertain tax positions that it believes appropriately reflect its risk. These provisions are made using the best estimate of the amount expected to be paid based on a qualitative assessment of all relevant factors. The company reviews the adequacy of these provisions at the end of the reporting periods and any changes in the provisions are recognized in the consolidated statements of earnings when they occur. However, it is possible that at some future dates, liabilities in excess of the company's provisions could result from audits by, or litigation with, the relevant taxing authorities. Where the final outcome of these tax-related matters is different from the amounts that were initially recorded, such differences will be recognized in the consolidated statement of earnings in the period in which such determination is made.

#### Earnings per share

Basic earnings per share are calculated by dividing net earnings attributable to common equity holders of the company by the weighted average number of common shares outstanding during the year.

Diluted earnings per share are calculated by dividing net earnings attributable to common equity holders of the company by the weighted average number of common shares outstanding during the year, plus the effect of dilutive potential common shares outstanding during the year. This method requires that diluted earnings per share be calculated (using the treasury stock method) as if all dilutive potential common shares had been exercised at the latest at the beginning of the year or on the date of issuance, as the case may be, and that the funds obtained thereby (plus an amount equivalent to the unamortized portion of related stock-based compensation costs) be used to purchase common shares of the company at the average market price of the common shares during the year.

#### Stock-based compensation

#### Equity-settled awards

The company's stock options, restricted share units and deferred share units are equity-settled awards. The company accounts for stock-based compensation costs on equity-settled awards using the Black-Scholes option valuation model. The fair value of equity-settled awards is measured at the date of grant. Stock-based compensation costs are amortized to expense over the vesting periods together with a corresponding change in contributed surplus in shareholders' equity. For equity-settled awards with graded vesting, each tranche is considered a separate grant with a different vesting date and fair value, and each tranche is accounted for separately.

#### Cash-settled awards

The company's stock appreciation rights are cash-settled awards. The company accounts for stock-based compensation costs on cash-settled awards using the Black-Scholes option valuation model. The fair value of the cash-settled awards is remeasured at the end of each reporting period, with any changes in the fair value recognized in the consolidated statements of earnings.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### **Operating segments**

Operating segments are defined as components of an entity engaged in business activities from which it may earn revenues and incur expenses, and whose operating results are regularly reviewed by the chief operating decisionmaker (CODM) to make decisions about resources to be allocated to segments and assess their performance and for which discrete information is available. The function of the CODM is performed by the Chief Executive Officer who reviews consolidated results for the purposes of allocating resources and evaluating performance. Accordingly, the company determines that it has one operating segment as of, and for the years ended August 31, 2017, 2018 and 2019. Entity-wide disclosures are presented in note 22.

#### Critical accounting judgments in applying accounting policies and estimates

The preparation of financial statements in accordance with IFRS requires management to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses as well as the disclosures of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those judgments, estimates and assumptions.

Critical judgments, estimates and assumptions are the following:

#### Critical judgments in applying accounting policies

#### (a) Determination of functional currency

The company operates in multiple countries and generates revenue and incurs expenses in several currencies, namely the Canadian dollar, the US dollar, the euro, the British pound, the Indian rupee and the CNY (Chinese currency). The determination of the functional currency of the company and its subsidiaries may require significant judgment. In determining the functional currency of the company and its subsidiaries, management takes into account primary, secondary and tertiary indicators. When indicators are mixed, and the functional currency is not obvious, management uses its judgment to determine the functional currency.

#### (b) Determination of cash generating units and allocation of goodwill

For the purpose of impairment testing, goodwill must be allocated to each CGU or group of CGUs that are expected to benefit from the synergies of the business combination. Initial allocation and possible reallocation of goodwill to a CGU or a group of CGUs requires judgment.

#### Critical estimates and assumptions

#### (a) Inventories

The company states its inventories at the lower of cost, determined on an average cost basis, and net realizable value, and provides reserves for excess and obsolete inventories. The company determines its reserves for excess and obsolete inventories based on the quantities on hand at the reporting dates compared to foreseeable needs, taking into account changes in demand, technology or market.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### (b) Income taxes

The company is subject to income tax laws and regulations in several jurisdictions. Under these laws and regulations, uncertainties exist with respect to the interpretation of complex tax laws and regulations and the amount and timing of future taxable income. The company maintains provisions for uncertain tax positions that it believes appropriately reflect its risk based on its interpretation of laws and regulations. In addition, management has made reasonable estimates and assumptions to determine the amount of deferred tax assets that can be recognized in the consolidated financial statements, based upon the likely timing and level of anticipated future taxable income together with tax planning strategies. The ultimate realization of the company's deferred income tax assets is dependent upon the generation of sufficient future taxable income during the periods in which those assets are expected to be realized.

#### (c) Tax credits recoverable

Tax credits are recorded if there is reasonable assurance that the company has complied and will comply with all the conditions related to the tax credits and that the tax credits will be received. The ultimate recovery of the company's non-refundable tax credits is dependent upon the generation of sufficient future taxable income during the tax credits carry-forward periods. Management has made reasonable estimates and assumptions to determine the amount of non-refundable tax credits that can be recognized in the consolidated financial statements, based upon the likely timing and level of anticipated future taxable income together with tax planning strategies (note 20).

#### (d) Impairment of non-financial assets

Impairment exists when the carrying value of an asset or group of assets (CGU) exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The fair value less costs of disposal calculation for the company's CGUs is based on a market approach that relies on unobservable inputs based on valuation multiples and recent transactions for comparable assets or businesses, within the same industry. The company applies judgment in making adjustments to the unobservable inputs for factors such as size, risk profile or profitability. The company also considers the company's value derived from its market capitalization, adjusting for a control premium considered appropriate based on other comparable companies with significant controlling interests. Depending on the market evidence available, the company, from time to time, may further supplement this market approach with an income approach that considers discounted cash flows to determine fair value less costs of disposal, as well as the nature and magnitude of research and development activities carried out by the CGU. The discounted cash flow model involves significant judgment with respect to estimating cash flows (based on market participant assumptions) and the appropriate discount rate.

#### (e) Purchase price allocation in business combinations

The fair value of the total consideration transferred in business combinations (purchase price) must be allocated based on estimated fair value of acquired net assets at the date of acquisition. Allocating the purchase price requires management to make estimates and judgments to determine assets acquired and liabilities assumed, useful lives of certain long-lived assets and the respective fair value of assets acquired, and liabilities assumed; this may require the use of unobservable inputs, including management's expectations of future revenue growth, operating costs and profit margins as well as discount rates.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### (f) Identification of performance obligations

Customer contracts may include promises to transfer multiple products and services to a customer. Determining whether the products and services are considered distinct performance obligations that should be accounted for separately or as one single performance obligation may require significant judgment. The company assesses whether each promised good or service is distinct for the purpose of identifying the various performance obligations in each contract. Promised goods and services are considered distinct provided that: (i) the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer; and (ii) the company's promise to transfer the good or service to the customer is separately identifiable or distinct from other promises in the contract.

#### **Recently issued IFRS Pronouncements Not Yet Adopted**

#### Leases

IFRS 16, "Leases", was issued in January 2016. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract, i.e., the customer (lessee) and the supplier (lessor). IFRS 16 will supersede IAS 17, "Leases", and related interpretations. Under IFRS 16, lessees will recognize a right-of-use asset and a lease liability measured at the present value of lease payments for virtually all of their leases. Short-term leases with a term of 12 months or less are not required to be recognized. This new standard is effective for annual periods beginning on or after January 1, 2019.

The company will adopt this new standard on September 1, 2019, using the modified retrospective method, which does not require adjustments to comparative periods. The company will apply IFRS 16 at the adoption date and recognize right-of-use assets and lease liabilities in the period of adoption. The new standard provides a number of optional practical expedients in transition. Upon implementation of the new standard, the company intends to elect the practical expedients to combine lease and non-lease components, and to not recognize right-of-use assets and lease liabilities for short-term leases. The company is in the process of identifying appropriate changes to its accounting policies, information technology systems, business processes, and related internal controls to support recognition and disclosure requirements under IFRS 16. The company expects that the adoption of IFRS 16 will increase its assets and liabilities by approximately \$11 million, as it will recognize a right-of-use asset and a lease liability for all its long-term leases. However, the company does not expect the adoption of this standard to have a significant impact on net earnings. The lease expense, previously recorded under cost of sales, selling and administrative expenses and net research and development expenses line items will be recorded as depreciation expenses for the right-of-use asset and as interest expenses on the lease liability in the consolidated statements of earnings. In addition, lease payments for the right-of-use asset, previously reported in cash flow from operating activities will be reported in cash flow from financing activities in the consolidated statements of cash flows.

#### Uncertainty over income tax treatments

IFRIC 23, "Uncertainty over Income Tax Treatments", was issued in June 2017. IFRIC 23 provides guidance on how to value uncertain income tax positions based on the probability of whether the relevant tax authorities will accept the company's tax treatments. A company is to assume that a taxation authority with the right to examine any amounts reported to it will examine those amounts and will have full knowledge of all relevant information when doing so. IFRIC 23 is effective for annual periods beginning on or after January 1, 2019. The company will adopt this interpretation on September 1, 2019 and we do not expect its adoption will have a material impact on its consolidated financial statements.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### 3 Business Combinations

#### Fiscal 2018

Astellia S.A. (renamed EXFO Solutions S.A.S.) - Business combination achieved in stages

On September 8, 2017, the company acquired a 33.1% interest in Astellia S.A. (EXFO Solutions), a publicly traded company on the NYSE Euronext Paris stock exchange. EXFO Solutions is a provider of network and subscriber intelligence-enabling mobile operators to drive service quality, maximize operational efficiency, reduce churn and increase revenue. Its vendor-independent, real-time monitoring and troubleshooting solution is used to optimize networks end-to-end from radio to core. The purchase price amounted to €10 per share for a total cash consideration of €8,567,500 (US\$10,311,100).

On October 10, 2017, the company reached an agreement with EXFO Solutions to acquire EXFO Solutions' remaining shares, at a share price of €10, for a total consideration of €17,321,380 (US\$21,357,500) by way of a public tender offer. The public offering opened on December 15, 2017 and closed on January 26, 2018.

On December 21 and 22, 2017, the company acquired additional interests of 6.0% and 1.2% respectively in EXFO Solutions at a purchase price of €10 per share for a total cash consideration of €1,878,610 (US\$2,218,600), which brought the company's investment in EXFO Solutions to 40.3%.

On January 26, 2018, upon the closing of the public tender offer, the company acquired additional interest of 48.1% in EXFO Solutions at a purchase price of €10 per share for a total cash consideration of €12,452,090 (US\$15,476,900), which brought the company's investment in EXFO Solutions to 88.4% and provided the company with control over EXFO Solutions.

The company re-opened the public tender offer to acquire the remaining shares of EXFO Solutions from February 9, 2018 to February 22, 2018. During that period, the company acquired an additional interest of 8.9% in EXFO Solutions at a purchase price of €10 per share for a total cash consideration of €2,318,530 (US\$2,841,400), which brought the company's investment in EXFO Solutions to 97.3%.

Finally, on February 28, 2018, the company entered into a squeeze-out process to acquire the remaining 2.7% interest in EXFO Solutions at a share price of €10, for a total cash consideration of €672,150 (US\$820,600). The binding terms of the squeeze-out process gave the company control over EXFO Solutions' remaining shares as at February 28, 2018 and consequently, as of that date the company controlled 100% of EXFO Solutions' shares.

The fair value of the total consideration paid for all shares of EXFO Solutions amounted to €25,888,880 (US\$32,137,800) and consisted of €21,102,880 (US\$26,241,000) in cash, net of EXFO Solutions' cash of €4,786,000 (US\$5,896,800) at the date of acquisition of control.

From September 8, 2017 to January 25, 2018, the investment in EXFO Solutions provided the company with significant influence over EXFO Solutions, and it was therefore accounted for under the equity method as required by IAS 28, "Investments in Associates and Joint Ventures". Under this method, on initial recognition this investment was recognized at cost, and the carrying amount decreased to recognize the company's share of the net loss of EXFO Solutions after the acquisition date. Included in the consolidated statement of earnings for the year ended August 31, 2018 is an equity loss pick-up of \$2,079,800.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

Upon the acquisition of an additional 48.1% interest in EXFO Solutions on January 26, 2018 (the "acquisition date"), the acquisition has been considered a business combination, and the acquisition was accounted for by applying the acquisition method as required by IFRS 3, "Business Combinations", and the requirements of IFRS 10, "Consolidated Financial Statements". Consequently, the fair value of the total consideration was allocated to the assets acquired and liabilities assumed based on management's estimate of their fair value as at the acquisition date. The results of operations of the acquired business have been included in the consolidated financial statements of the company since January 26, 2018. The company recognized the non-controlling interest in EXFO Solutions at fair value. At the acquisition date, the carrying value of the 40.3% interest in EXFO Solutions held prior to the business combination was re-measured at fair value, that is, €10 per share, and was deemed to have been disposed of on that date. This acquisition-date re-measurement and deemed disposal resulted in a gain of \$2,079,800 that was accounted for in the consolidated statement of earnings for the year ended August 31, 2018.

In addition, upon the successive acquisitions of the non-controlling interest in February 2018, the company recorded a gain in the amount of \$352,000 in shareholders' equity, representing the excess of the carrying value of the non-controlling interest and the purchase price paid.

The following table summarizes EXFO Solutions' contributed sales and net loss attributable to the parent interest for the period from January 26, 2018 to August 31, 2018:

Sales (1)	\$ 16,377
Net loss attributable to the parent interest (1, 2)	\$ 12,850

If the acquisition had occurred on September 1, 2017, consolidated pro forma sales and net loss attributable to the parent interest of the combined entities for the year ended August 31, 2018 would have been \$292,134,000 and \$18,768,000 respectively.

- (1) Includes acquisition-related deferred revenue fair value adjustment of \$2,095,000.
- (2) Includes amortization of acquired intangible assets of \$5,077,000.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

The fair value of the total consideration was allocated based on an estimate of fair value of acquired net assets at the date of acquisition as follows:

Assets acquired		
Accounts receivable	\$	16,374
Income taxes and tax credits recoverable	*	11,259
Inventories		3,045
Prepaid expenses		1,229
Property, plant and equipment		1,944
Core technologies		12,869
Customer relationships		8,381
Brand name		846
Other intangible assets		498
Other assets		1,402
		57,847
Liabilities assumed		31,511
Accounts payable and accrued liabilities		11,068
Deferred revenue		4,748
Long-term debt (note 12)		8,888
Deferred income tax liabilities		2,692
Other liabilities		6,715
Net identifiable assets acquired		23,736
Goodwill		2,505
Fair value of the total consideration, net of cash acquired	\$	26,241
The fair value of the total consideration, net of cash acquired, consisted of the following at the	acquisition dat	e:
Cash paid net of cash acquired	\$	9,580

The estimated fair value of acquired accounts receivable amounted to \$16,374,000 as at January 26, 2018. The gross contractual amount of accounts receivable amounted to \$18,758,000 as at January 26, 2018. The estimate at the acquisition date of the gross contractual cash flows not expected to be collected amounted to \$2,384,000.

12,967

3,694 26,241

Fair value of shares held

Non-controlling interest (purchased in February 2018)

Acquired intangible assets are amortized on a straight-line basis over their estimated useful lives of four and eight years for core technologies, two to five years for customer relationships, and one year for brand name.

Acquired goodwill mainly represents synergies with the company's products as well as EXFO Solutions' acquired workforce. Acquired goodwill is not deductible for tax purposes. Goodwill was allocated to the EXFO Solutions CGU up to August 31, 2018. Since then, it has been allocated to the service assurance, systems and services CGU (note 9).

The functional currency of EXFO Solutions is the euro and as such it is considered a foreign operation. The financial operations of EXFO Solutions are translated into Canadian dollars as follows: assets and liabilities are translated at the exchange rate in effect on the date of the balance sheet; revenue and expenses are translated at the monthly average exchange rate. The foreign currency translation adjustment arising from such translation is included in accumulated other comprehensive loss in shareholders' equity.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

Yenista Optics S.A.S. (renamed EXFO Optics S.A.S.)

On October 2, 2017, the company acquired all issued and outstanding shares of Yenista Optics S.A.S. (EXFO Optics), a privately held company located in France and a supplier of advanced optical test equipment for the research and development and manufacturing markets. The acquisition-date fair value of the total consideration amounted to €9,400,000 (US\$1,052,000) and consisted of €8,114,000 (US\$9,540,000) in cash, net of EXFO Optics' cash of €1,286,000 (US\$1,512,000) at the acquisition date.

This acquisition was accounted for by applying the acquisition method as required by IFRS 3, "Business Combinations", and the requirements of IFRS 10, "Consolidated Financial Statements"; consequently, the fair value of the total consideration was allocated to the assets acquired and liabilities assumed based on management's estimate of their fair value as at the acquisition date. The results of operations of the acquired business have been included in the consolidated financial statements of the company since October 2, 2017, being the acquisition date.

The fair value of the total consideration was allocated based on an estimate of the fair value of acquired net assets at the date of acquisition as follows:

Assets acquired	
Accounts receivable	\$ 1,889
Inventories	2,384
Property, plant and equipment	1,424
Core technologies	3,686
Customer relationships	811
In-process research and development	305
Other intangible assets	132
Prepaid expenses	 171
	10,802
Liabilities assumed	
Accounts payable and accrued liabilities	1,035
Long-term debt (note 12)	2,143
Deferred income taxes	1,510
Net identifiable assets acquired	6,114
Goodwill	 3,426
Fair value of the total consideration, net of cash acquired	\$ 9,540

Acquired intangible assets are amortized on a straight-line basis over their estimated useful life of two to five years for core technologies and three months for customer relationships.

Acquired goodwill mainly represents synergies with the company's products as well as EXFO Optics' acquired workforce. Acquired goodwill is not deductible for tax purposes. Goodwill is allocated to the EXFO Optics CGU (note 9).

The functional currency of EXFO Optics is the euro, and, as such, it is considered a foreign operation. The financial operations of EXFO Optics are translated into Canadian dollars as follows: assets and liabilities were translated at the exchange rate in effect on the date of the balance sheet; revenue and expenses are translated at the monthly average exchange rate. The foreign currency translation adjustment arising from such translation is included in accumulated other comprehensive loss in shareholders' equity.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

In connection with business combinations completed in fiscal 2018, the company incurred acquisition-related costs of \$2,484,000, of which \$2,236,000 were presented in selling and administrative expenses and \$248,000 were presented in interest and other expense.

#### 4 Restructuring Charges

#### Fiscal 2018

In August 2018, the company implemented a restructuring plan to accelerate the integration of its acquired monitoring and analytics technologies from EXFO Solutions and simplify its cost structure and optimize resources as the company converges toward fewer sites and reduces its workforce.

This plan resulted in expenses mainly comprising severance expenses, costs for remaining non-cancellable operating leases, writeoff of research and development income tax credits and impairment of long-lived assets, net of related income taxes. During the fourth quarter of fiscal 2018, the company recorded severance expenses of \$2,072,000, costs for remaining non-cancelable operating lease of \$1,137,000, writeoff of research and development income tax credits of \$1,200,000 and impairment of long-lived assets of \$150,000, net of related income taxes of \$1,150,000, for total after-tax restructuring charges of \$3,409,000. The additional restructuring charges of \$3,305,000, and related income taxes of \$63,000, for total after-tax restructuring charges of \$3,242,000 (note 18), was recorded in fiscal 2019. Restructuring charges in fiscal 2019 comprised severance expenses and were part of the fiscal 2018 restructuring plan.

In fiscal 2019, as part of this restructuring plan and the shutdown of its facilities in Toronto, Canada, the company sold one of its buildings for net proceeds of \$3,318,000. The transaction resulted in a pre-tax gain of \$1,732,000 that was recorded in the consolidated statement of earnings for the year ended August 31, 2019.

In addition, in fiscal 2019, as part of this restructuring plan and the shutdown of some of its facilities in the United States, the company transferred the ownership of certain intellectual properties held in the United States to Canada. This created a deductible tax asset in Canada and resulted in the recognition of a deferred income tax recovery of \$2,383,000 in fiscal 2019 as the recovery of this asset is probable. This deferred income tax recovery was recorded in the consolidated statement of earnings for the year ended August 31, 2019.

The following tables summarize changes in restructuring accrual during the years ended August 31, 2018 and 2019:

	Years ended August 31,				
		2019		2018	
Balance – Beginning of year	\$	3,167	\$	2,477	
Addition		3,305		3,209	
Payments		(5,339)		(2,052)	
Reversal		_		(467)	
Balance – End of year (note 11)	\$	1,133	\$	3,167	

#### Fiscal 2017

In May 2017, the company implemented a restructuring plan to streamline its passive monitoring solutions portfolio. This plan resulted in severance expenses of \$4,049,000 and inventory writeoffs of \$1,030,000, for total restructuring charges of \$5,079,000 during the year. All expenses related to this plan were fully paid as at August 31, 2018.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### 5 Capital Disclosures

The company is not subject to any external restrictions on its capital.

The company's objectives when managing capital are:

- To maintain a flexible capital structure that optimizes the cost of capital at acceptable risk;
- To sustain future development of the company, including research and development activities, market development and potential acquisitions of complementary businesses or products; and
- To provide the company's shareholders with an appropriate return on their investment.

No changes were made to the objectives and policies during the years ended August 31, 2018 and 2019.

The company defines its capital as shareholders' equity, excluding accumulated other comprehensive loss. The capital of the company amounted to \$225,271,000 and \$224,075,000 as at August 31, 2018 and 2019 respectively.

#### 6 Financial Instruments

The following tables summarize financial instruments by category:

	As at August 31, 2019						
	A	thro comp	nir value ough other prehensive ncome		Total		
Financial assets							
Cash	\$	16,518	\$	_	\$	16,518	
Short-term investments	\$	_	\$	2,918	\$	2,918	
Accounts receivable	\$	54,834	\$	_	\$	54,834	
Forward exchange contracts	\$	_	\$	79	\$	79	
Financial liabilities							
Bank loan	\$	5,000	\$	_	\$	5,000	
Accounts payable and accrued liabilities	\$	49,945	\$	_	\$	49,945	
Other liabilities	\$	1,606	\$	_	\$	1,606	
Long-term debt	\$	5,742	\$	_	\$	5,742	
Forward exchange contracts	\$	_	\$	1,057	\$	1,057	

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

As at August	31.	2018 -	IAS 39
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		Loans and receivables		Available for sale		her ncial lities	us	ivatives ed for edging		Γotal
Financial assets										
Cash	\$ 1	2,758	\$	_	\$	-	\$	-	\$ :	12,758
Short-term investments	\$	_	\$	2,282	\$	-	\$	-	\$	2,282
Accounts receivable	\$ 4	6,955	\$	_	\$	_	\$	_	\$ 4	46,955
Other assets	\$	352	\$	_	\$	_	\$	_	\$	352
Forward exchange contracts	\$	_	\$	_	\$	_	\$	318	\$	318
Financial liabilities										
Bank loan	\$	_	\$	_	\$10	,692	\$	_	\$ :	10,692
Accounts payable and accrued liabilities	\$	_	\$	_	\$47	,308	\$	_	\$ 4	47,308
Other liabilities	\$	_	\$	_	\$ 3	,197	\$	_	\$	3,197
Long-term debt	\$	_	\$	_	\$8	,828	\$	_	\$	8,828
Forward exchange contracts	\$	_	\$	_	\$	_	\$	807	\$	807

#### Fair value

Cash, accounts receivable, bank loan, accounts payable and accrued liabilities and other liabilities are financial instruments whose carrying values approximate their fair values due to their short-term maturities. The fair value of the long-term debt amounted to \$8,879,000 and \$5,644,000 as at August 31, 2018 and 2019.

The fair value of derivative and non-derivative financial assets and financial liabilities measured at fair value by level of hierarchy is as follows:

	As at August 31, 2019					As at August 31, 2018			
	Level 1		Level 2		Level 1		Level 2		
Financial assets									
Short-term investments	\$	2,918	\$	_	\$	2,282	\$	_	
Forward exchange contracts	\$	_	\$	79		_	\$	318	
Financial liabilities									
Forward exchange contracts	\$	_	\$	1,057	\$	_	\$	807	

Valuation techniques used to value financial instruments are as follows:

The fair value of the long-term debt is estimated by discounting expected cash flows at rates currently offered to the company for debts of the same remaining maturities and conditions.

The fair value of forward exchange contracts is based on the amount at which they could be settled based on estimated current market rates.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### Market risk

#### Currency risk

The functional currency of the company is the Canadian dollar. The company is exposed to currency risk as a result of its export sales of products manufactured in Canada, China, France and Finland, the majority of which are denominated in US dollars and euros. This risk is partially hedged by forward exchange contracts and certain cost of sales and operating expenses (US dollars and euros). In addition, the company is exposed to currency risk as a result of its research and development activities in India (Indian rupees). This risk is partially hedged by forward exchange contracts. Forward exchange contracts, which are designated as cash flow hedging instruments, qualify for hedge accounting.

As at August 31, 2018 and 2019, the company held contracts to sell US dollars for Canadian dollars and Indian rupees at various forward rates, which are summarized as follows:

US dollars - Canadian dollars

Expiry dates	ontractual imounts	Weighted average contractual forward rates
As at August 31, 2018		
September 2018 to August 2019	\$ 26,400	1.3029
September 2019 to August 2020	15,700	1.2756
September 2020 to May 2021	3,700	1.2703
Total	\$ 45,800	1.2909
As at August 31, 2019		
September 2019 to August 2020	\$ 35,500	1.3013
September 2020 to August 2021	19,900	1.3107
September 2021 to July 2022	6,000	1.3216
Total	\$ 61,400	1.3063
US dollars – Indian rupees		
Expiry dates	ontractual imounts	Weighted average contractual forward rates
As at August 31, 2018		
September 2018 to May 2019	\$ 4,600	67.68
As at August 31, 2019		
September 2019 to August 2020	\$ 3,500	71.48

The carrying amount of forward exchange contracts is equal to fair value, which is based on the amount at which they could be settled based on estimated current market rates.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

As at August 31, 2019, forward exchange contracts in the amount of \$79,000 are presented as current assets in other accounts receivable, forward exchange contracts in the amount of \$845,000 are presented as current liabilities in accounts payable and accrued liabilities, and forward exchange contracts in the amount of \$212,000 are presented as long-term liabilities in other long-term liabilities in the consolidated balance sheet. Forward exchange contracts of \$167,000, included in other accounts payable and accrued liabilities, for which related hedged sales are recognized, are recorded in the consolidated statement of earnings. Otherwise, other forward exchange contracts are not yet recorded in the consolidated statement of earnings and are recorded in other comprehensive income.

As at August 31, 2018, forward exchange contracts in the amount of \$318,000 are presented as current assets in other accounts receivable, forward exchange contracts in the amount of \$590,000 are presented as current liabilities in accounts payable and accrued liabilities, and forward exchange contracts in the amount of \$217,000 are presented as long-term liabilities in other long-term liabilities in the consolidated balance sheet. Forward exchange contracts of \$64,000, included in other accounts receivable, for which related hedged sales are recognized, are recorded in the consolidated statement of earnings. Otherwise, other forward exchange contracts are not yet recorded in the consolidated statement of earnings and are recorded in other comprehensive income.

Based on the portfolio of forward exchange contracts as at August 31, 2019, the company estimates that the portion of net unrealized losses on these contracts as of that date, which will be realized and reclassified from accumulated other comprehensive income to net earnings over the next 12 months, amounts to \$599,000.

For the years ended August 31, 2017, 2018 and 2019, the company recorded within its sales the following foreign exchange gains (losses) on forward exchange contracts:

	Years ended August 31,						
		2019		2018		2017	
Gains (losses) on forward exchange contracts	\$	(591)	\$	875	\$	(468)	

The following table summarizes significant derivative and non-derivative financial assets and financial liabilities that are subject to currency risk as at August 31, 2018 and 2019 and for which such risk is charged to earnings:

	As at August 31,									
		20	19			20	18			
	Carrying/nominal amount (in thousands of US dollars)		amount	ng/nominal (in thousands f euros)	amount	ing/nominal t (in thousands JS dollars)	amount	ng/nominal (in thousands euros)		
Financial assets										
Cash	\$	5,531	€	3,129	\$	2,790	€	3,352		
Accounts receivable		30,451		6,389		30,306		3,787		
		35,982		9,518		33,096		7,139		
Financial liabilities										
Bank loan		5,000		_		7,197		3,000		
Accounts payable and accrued liabilities Forward exchange contracts (nominal		12,563		2,218		13,017		2,107		
value)		5,800		_		5,000		_		
		23,363		2,218		25,214		5,107		
Net exposure	\$	12,619	€	7,300	\$	7,882	€	2,032		

In addition to these assets and liabilities, the company has derivative financial liabilities for its outstanding forward exchange contracts in the amount (nominal value) of \$45,800,000 and \$61,400,000 as at August 31, 2018 and 2019 respectively for which the currency risk is charged to other comprehensive income.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

The value of the Canadian dollar compared to the US dollar was CA\$1.3055 = US\$1.00 and CA\$1.3294 = US\$1.00 as at August 31, 2018 and 2019 respectively.

The value of the Canadian dollar compared to the euro was CA\$1.5210 = €1.00 and CA\$1.4672 = €1.00 as at August 31, 2018 and 2019 respectively.

The following sensitivity analysis summarizes the effect that a change in the value of the Canadian dollar (compared to the US dollar and euro) on derivative and non-derivative financial assets and financial liabilities denominated in US dollars and euros would have on net earnings, net earnings per diluted share and comprehensive income, based on the foreign exchange rates as at August 31, 2018 and 2019:

- An increase (decrease) of 10% in the period-end value of the Canadian dollar compared to the US dollar would decrease (increase) net earnings by \$844,000, or \$0.02 per diluted share, and \$1,166,000, or \$0.02 per diluted share, as at August 31, 2018 and 2019 respectively.
- An increase (decrease) of 10% in the period-end value of the Canadian dollar compared to the euro would decrease (increase) net earnings by \$335,000, or \$0.01 per diluted share, and \$769,000 or \$0.01 per diluted share, as at August 31, 2018 and 2019 respectively.
- An increase (decrease) of 10% in the period-end value of the Canadian dollar compared to the US dollar would increase (decrease) other comprehensive income by \$2,956,000 and \$4,072,000 as at August 31, 2018 and 2019 respectively.

The impact of the change in the value of the Canadian dollar compared to the US dollar and the euro on these derivative and non-derivative financial assets and financial liabilities is recorded in the foreign exchange gain or loss line item in the consolidated statements of earnings, except for outstanding forward contracts, and except for those of foreign operations, whose impact is recorded in other comprehensive income. The change in the value of the Canadian dollar compared to the US dollar and the euro also affects the company's balances of income tax recoverable or payable, as well as deferred income tax assets and liabilities denominated in US dollars and euros; this may result in additional and significant foreign exchange gains or losses. However, these tax-related assets and liabilities are not considered financial instruments and are therefore excluded from the sensitivity analysis above. The foreign exchange rate fluctuations also flow through the consolidated statements of earnings line items, as a significant portion of the company's cost of sales and operating expenses are denominated in Canadian dollars, euros, British pounds and Indian rupees, and the company reports its results in US dollars; that effect is not reflected in the sensitivity analysis above.

#### Interest rate risk

The company has limited exposure to interest rate risk. The company is mainly exposed to interest rate risks through its cash, short-term investments, bank loan and long-term debt.

The company analyzes its interest risk exposure on an ongoing basis. A change in interest rate of 1% would have an insignificant impact on net earnings and comprehensive income.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

Short-term investments

Short-term investments consist of the following:

	As at August 31,				
		2019		2018	
Term deposits denominated in Indian rupees, bearing interest at annual rates of 5.0% to 6.8% in 2018 and 5.1% to 7.0% in 2019, maturing on different dates between October 2018 and August 2019 in 2018 and September 2019	<b>A</b>	2.540	<b>A</b>	4.000	
and May 2020 in 2019	\$	2,548	\$	1,909	
Other		370		373	
	\$	2,918	\$	2,282	

Due to their short-term maturity, the company's short-term investments are not subject to a significant fair value interest rate risk. Accordingly, changes in fair value have been nominal to the degree that amortized cost approximates the fair value. Any change in the fair value of the company's short-term investments, all of which are classified as financial assets at fair value through other comprehensive income, is recorded in the consolidated statements of comprehensive income.

#### Other financial instruments

Short-term other liabilities bear interest at EURIBOR, plus a margin. Accounts receivable and accounts payable and accrued liabilities are non-interest-bearing financial assets and financial liabilities.

#### **Credit risk**

Financial instruments that potentially subject the company to credit risk consist of cash, short-term investments, accounts receivable, other assets and forward exchange contracts (with a positive fair value). As at August 31, 2019, the company's short-term investments consist of debt instruments issued by high-credit-quality corporations. These debt instruments are not expected to be affected by a significant credit risk. The company's cash and forward exchange contracts are held with or issued by high-credit-quality financial institutions; therefore, the company considers the risk of non-performance on these instruments to be limited.

The company applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade accounts receivable and contract assets. To measure the expected credit losses, trade accounts receivable and contract assets have been grouped based on shared credit risk characteristics and the days past due. The contract assets relate to unbilled work in progress and have substantially the same risk characteristics as the trade accounts receivable for the same type of contracts. The company has therefore concluded that the expected loss rates for trade accounts receivable are a reasonable approximation of the loss rates for the contract assets. The expected loss rates are based on the payment profiles of sales over a period of 60 months. The historical loss rates are adjusted to reflect current and forward-looking information on economic factors affecting the ability of the customers to settle the accounts receivable.

For the years ended August 31, 2018 and 2019, no customer represented more than 10% of sales. For the year ended August 31, 2017, the company's top customer represented 10.1% of sales.

# **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

The following table summarizes the age of trade accounts receivable:

	As at August 31,					
		2019		2018		
Current	\$	39,054	\$	34,344		
Past due, 0 to 30 days		3,529		6,011		
Past due, 31 to 60 days		2,006		2,556		
Past due, more than 60 days		6,928		4,362		
	\$	51,517	\$	47,273		

Changes in the allowance for doubtful accounts are as follows:

	Years ended August 31,				
		2019		2018	
Balance – Beginning of year	\$	772	\$	2,960	
IFRS 9 adoption initial adjustment (note 2)		303		_	
Addition charged to earnings		864		834	
Writeoff of uncollectible accounts and reversal		(404)		(3,022)	
Balance – End of year	\$	1,535	\$	772	

# Liquidity risk

Liquidity risk is defined as the potential that the company cannot meet its obligations as they become due.

The following tables summarize the contractual maturity of the company's derivative and non-derivative financial liabilities:

	As at August 31, 2019						
	No later than one year		Later than 1 year and no later than 5 years		Later than 5 years		
Bank loan	\$	5,000	\$	_	\$	_	
Accounts payable and accrued liabilities		49,945		_		-	
Forward exchange contracts							
Outflow		39,000		25,900		_	
Inflow		(38,252)		(25,585)		_	
Long-term debt		2,449		3,237		56	
Other liabilities		1,606				_	
Total	\$	59,748	\$	3,552	\$	56	

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

	As at August 31, 2018 Later than							
	No later than one year		1 year and no later than 5 years		Later than 5 years			
Bank loan	\$	10,692	\$	_	\$	_		
Accounts payable and accrued liabilities		47,308		_		_		
Forward exchange contracts								
Outflow		31,000		19,400		_		
Inflow		(30,738)		(18,940)		_		
Long-term debt		2,921		5,745		162		
Other liabilities		3,197						
Total	\$	64,380	\$	6,205	\$	162		

As at August 31, 2019, the company had \$19,436,000 in cash and short-term investments and \$54,913,000 in accounts receivable. In addition to these financial assets, the company has unused available lines of credit totaling \$56,496,000 for working capital and general corporate purposes, including potential acquisitions as well as unused lines of credit totaling \$21,948,000 for foreign currency exposure related to its forward exchange contracts (note 10).

#### 7 Inventories

	 As at August 31,			
	 2019		2018	
Raw materials	\$ 24,115	\$	24,561	
Work in progress	1,009		869	
Finished goods	12,893		13,159	
	\$ 38,017	\$	38,589	

The cost of sales comprised almost exclusively the amount of inventory recognized as an expense during the reporting years, and amounts to \$98,503,000, \$116,923,000 and \$127,725,000 for the years ended August 31, 2017, 2018 and 2019 respectively, including related depreciation and amortization, which are shown separately in operating expenses (note 18).

Inventory writedown amounted to \$3,259,000, \$2,541,000 and \$3,270,000 for the years ended August 31, 2017, 2018 and 2019 respectively.

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

# 8 Property, Plant and Equipment

	 d and land rovements	В	uildings	Ec	Juipment	_	easehold provements	Total
Cost as at September 1, 2017	\$ 4,522	\$	31,951	\$	35,574	\$	3,048	\$ 75,095
Additions	17		3,048		5,677		46	8,788
Business combinations (note 3)	_		_		3,105		263	3,368
Disposals	_		(1,413)		(3,651)		(175)	(5,239)
Foreign currency translation adjustment	 (180)		(1,240)		(1,617)		(134)	 (3,171)
Cost as at August 31, 2018	4,359		32,346		39,088		3,048	78,841
Additions	_		1,116		3,700		164	4,980
Disposals	(192)		(3,378)		(4,623)		(164)	(8,357)
Foreign currency translation adjustment	(76)		(592)		(1,329)		(153)	 (2,150)
Cost as at August 31, 2019	\$ 4,091	\$	29,492	\$	36,836	\$	2,895	\$ 73,314
Accumulated depreciation as at								
September 1, 2017	\$ 1,295	\$	7,333	\$	25,207	\$	1,128	\$ 34,963
Depreciation for the year	48		604		4,420		372	5,444
Disposals	_		(994)		(3,440)		(30)	(4,464)
Foreign currency translation adjustment	 (53)		(282)		(1,024)		(53)	 (1,412)
Accumulated depreciation as at								
August 31, 2018	1,290		6,661		25,163		1,417	34,531
Depreciation for the year	47		667		4,391		364	5,469
Disposals	_		(1,452)		(3,673)		(114)	(5,239)
Foreign currency translation adjustment	 (53)		(120)		(602)		(36)	 (811)
Accumulated depreciation as at								
August 31, 2019	\$ 1,284	\$	5,756	\$	25,279	\$	1,631	\$ 33,950
Net carrying value as at:								
August 31, 2018	\$ 3,069	\$	25,685	\$	13,925	\$	1,631	\$ 44,310
August 31, 2019	\$ 2,807	\$	23,736	\$	11,557	\$	1,264	\$ 39,364

As at August 31, 2018 and 2019, unpaid additions to property, plant and equipment amounted to \$1,788,000 and \$894,000 respectively.

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

# 9 Intangible Assets and Goodwill

# Intangible assets

	Core technology	-	ustomer itionships	rese	process arch and elopment	rand ame	Software	Total
Cost as at September 1, 2017	\$ 12,893	\$	1,689	\$	_	\$ _	\$ 11,901	\$ 26,483
Additions	89		-		-	_	3,049	3,138
Business combinations (note 3)	16,555		9,192		305	846	630	27,528
Disposal	(60)		-		-	_	(2,474)	(2,534)
Foreign currency translation								
adjustment	(1,419)		(590)		(13)	 (50)	(446)	(2,518)
Cost as at August 31, 2018	28,058		10,291		292	796	12,660	52,097
Additions	363		-		-	_	1,719	2,082
Disposal	(27)		-		(293)	_	(222)	(542)
Foreign currency translation								
adjustment	(1,955)		(618)		1	 (46)	(240)	(2,858)
Cost as at August 31, 2019	\$ 26,439	\$	9,673	\$		\$ 750	\$ 13,917	\$ 50,779
Accumulated amortization as at								
September 1, 2017	\$ 5,130	\$	169	\$	-	\$ _	\$ 10,001	\$ 15,300
Amortization for the year	4,878		3,949		-	519	981	10,327
Disposal	(45)		-		-	_	(2,462)	(2,507)
Foreign currency translation								
adjustment	(353)		(185)			 (7)	(344)	(889)
Accumulated amortization as at								
August 31, 2018	9,610		3,933		-	512	8,176	22,231
Amortization for the year	4,926		2,372		-	284	1,430	9,012
Disposal	(19)		-		-	_	(219)	(238)
Foreign currency translation								
adjustment	(1,080)		(424)			 (46)	(330)	(1,880)
Accumulated amortization as at								
August 31, 2019	\$ 13,437	\$	5,881	\$		\$ 750	\$ 9,057	\$ 29,125
Net carrying value as at:	4 40 440		6.250		202	204	d 4404	d 20 055
August 31, 2018	\$ 18,448	\$	6,358	\$	292	\$ 284	\$ 4,484	\$ 29,866
August 31, 2019	\$ 13,002	\$	3,792	\$	_	\$ _	\$ 4,860	\$ 21,654
Remaining amortization period as								
at August 31, 2019	4 years		2 years		_	_	3 years	
	,		,				- ,	

# Goodwill

	Years ended August 31,					
		2019				
Balance – Beginning of year	\$	39,892	\$	35,077		
Business combinations (note 3)		_		5,931		
Foreign currency translation adjustment		(1,244)		(1,116)		
Balance – End of year	\$	38,648	\$	39,892		

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

In the fourth quarter of fiscal 2018 and 2019, the company performed its annual goodwill impairment test for all CGUs.

Goodwill has been allocated to the lowest level within the company at which it is monitored by management to make business decisions, which are the following CGUs:

	As at August 31,				
		2019		2018	
EXFO CGU	\$	12,949	\$	13,185	
EXFO Optics CGU (note 3)		3,376		3,562	
Service assurance, systems and services CGU		22,323		_	
Brix CGU		_		13,327	
Ontology CGU (note 3)		_		7,471	
EXFO Solutions CGU (note 3)		_		2,347	
Total	\$	38,648	\$	39,892	

Prior to fiscal 2019, the Brix, Ontology and EXFO Solutions CGUs have been identified as three separate CGUs for goodwill impairment testing as they represented the lowest level at which the goodwill was monitored for internal management purposes, and the smallest group of assets that generated cash inflows that were largely independent of the cash inflows from other CGUs.

However, at the end of August 2018, management implemented a restructuring plan to fast-track the integration of newly acquired EXFO Solutions' and Ontology's technologies with those of the company's service assurance on a common monitoring and analytics platform to better position the company's offering and reduce its costs (note 4).

Consequently, starting September 1, 2018, following the announcement of this plan, all future operating and investing decisions related to these three CGUs have been aligned with the restructuring plan and related goodwill, previously allocated to each of these three CGUs, has been monitored for internal management purposes on a combined basis under the Service assurance, systems and services (SASS) CGU, which represented the smallest group of assets that would generate future cash inflows that would largely be independent of the cash inflows from the other CGUs.

In fiscal 2018, the goodwill impairment test had been performed closely to the date of the goodwill reallocation from the Brix, Ontology and EXFO Solutions' CGUs to the SASS CGU, and the goodwill of each of the three CGUs was not impaired. Consequently, no goodwill impairment test was performed on the date of goodwill reallocation to the combined CGU.

In performing the fiscal 2019 goodwill impairment review of its CGUs, the company determined the recoverable amount of goodwill based on fair value less costs of disposal. In estimating the recoverable amount of its CGUs, the company used a market approach, which is based on sales multiples within the range of 1.0 to 7.6 times sales for comparable businesses with similar operations within the same industry over the past year. The company applied judgment in making certain adjustments for factors such as size, risk profile or profitability of the comparable businesses, when compared to the company's CGUs. In addition, for the SASS CGU, the company also used a liquidation approach based on the level of research and development expenses incurred over the last two years.

As at August 31, 2019, the recoverable amount for all CGUs exceeded their carrying value.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### 10 Credit Facilities

The company has revolving credit facilities of up to CA\$70,000,000 (US\$52,655,000) and US\$9,000,000. These credit facilities are used to finance working capital and for other general corporate purposes. The Canadian dollar revolving credit facility bears interest at the Canadian prime rate or LIBOR, plus a margin, and the US dollar revolving credit facility bears interest at the US prime rate or LIBOR plus a margin. These revolving credit facilities are secured by a movable mortgage over the universality of the company's Canadian movable assets, present and future, as well as over the universality of movable assets, present and future, of certain US and UK subsidiaries. The company is subject to covenants under this credit facility that were met as at August 31, 2019. As at August 31, 2019, an amount of \$5,433,000 was drawn from these credit facilities for the bank loan of \$5,000,000 and letters of guarantee of \$433,000.

The company also has credit facilities of up to €500,000 (US\$552,000) for which an amount of €251,000 (US\$277,000) was drawn from these lines of credit for letters of guarantee. These credit facilities are unsecured and bear interest at EURIBOR, plus a margin.

In addition, the company has lines of credit totaling \$26,179,000 for the foreign currency risk exposure related to its US dollar – Canadian dollar forward exchange contracts (note 6). As at August 31, 2019, an amount of \$5,818,000 was reserved from these lines of credit.

Finally, the company has a line of credit of INR128,571,000 (US\$1,800,000) for the foreign currency risk exposure related to its US dollar – Indian rupee forward exchange contracts (note 6). As at August 31, 2019, an amount of INR15,214,000 (US\$213,000) was reserved from this line of credit.

#### 11 Accounts Payable and Accrued Liabilities and Provisions

Accounts payable and accrued liabilities

	 As at August 31,					
	 2019		2018			
Trade	\$ 27,996	\$	26,052			
Salaries and social benefits	19,716		18,101			
Forward exchange contracts (note 6)	845		590			
Other	2,233		3,155			
	\$ 50,790	\$	47,898			

#### **Provisions**

As at August 31,				
	2019	_	2018	
\$	356	\$	417	
	1,133		3,167	
	2,313		1,717	
\$	3,802	\$	5,301	
	\$	\$ 356 1,133 2,313	\$ 356 \$ 1,133 2,313	

Ac at August 21

### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

### 12 Long-Term Debt

As part of the acquisitions of EXFO Optics and EXFO Solutions, the company assumed long-term debt (note 3).

	As at August 31,			
		2019		2018
Unsecured, non-interest-bearing loans, denominated in euros, repayable in quarterly instalments, maturing in March 2024 and March 2025	\$	866	\$	883
Unsecured loans, denominated in euros, repayable in monthly, quarterly or bi-annual instalments, bearing interest at annual rates of nil to 5.0%, maturing at different dates between December 2018 and September 2023				
in 2018 and March 2020 and September 2023 in 2019		3,111		4,853
Loans, secured by the universality of the assets of a subsidiary, denominated				
in euros, repayable in monthly instalments, bearing interest at annual rates of 0.7% to 2.0%, maturing at different dates between December 2018				
and August 2022 in 2018 and April 2020 and August 2022 in 2019		459		828
Loans, secured by the universality of the assets of a subsidiary, denominated				
in euros, repayable in monthly or quarterly instalments, bearing interest at annual rates of 1.1% to 2.9%, maturing at different dates between				
March 2020 and July 2022		1,306		2,264
•				
		5,742		8,828
Current portion of long-term debt		2,449		2,921
	\$	3,293	\$	5,907

The company is subject to certain covenants under its long-term debt that were met as at August 31, 2019.

Principal repayments of long-term debt over the forthcoming years are as follows as at August 31, 2019:

No later than one year	\$ 2,449
Later than one year and no later than five years	3,237
Later than five years	56
	\$ 5,742

#### 13 Commitments

The company entered into operating leases for certain of its premises and equipment, which expire at various dates through 2024. Minimum rentals payable under operating leases are as follows:

	As at August 31,				
		2019		2018	
No later than 1 year	\$	2,895	\$	3,365	
Later than 1 year and no later than 5 years		6,323		9,519	
Later than 5 years		23		502	
	\$	9,241	\$	13,386	

### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

For the years ended August 31, 2017, 2018 and 2019, rental expenses under operating leases amounted to \$2,945,000, \$3,884,000 and \$4,026,000 respectively.

The company also entered into license agreements for certain intellectual property which expire at various dates through 2022:

	 As at August 31,				
	 2019		2018		
No later than 1 year	\$ 2,289	\$	1,492		
Later than 1 year and no later than 5 years	2,444		1,982		
	\$ 4,733	\$	3,474		

#### 14 Share Capital

Authorized – unlimited as to number, without par value

Subordinate voting and participating, bearing a non-cumulative dividend to be determined by the Board of Directors, ranking *pari passu* with multiple voting shares

Multiple voting and participating, entitling to 10 votes each, bearing a non-cumulative dividend to be determined by the Board of Directors, convertible at the holder's option into subordinate voting shares on a one-for-one basis, ranking *pari passu* with subordinate voting shares

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

The following table summarizes the company's share capital activity:

	Multiple Vo	oting Shares	Subordinate		
	Number	Amount	Number	Amount	Total amount
Balance as at September 1, 2016	31,643,000	\$ 1	21,917,942	\$ 85,515	\$ 85,516
Issuance of share capital Redemption of restricted share	-	_	793,070	3,490	3,490
units (note 16) Redemption of deferred share	_	_	327,859	_	-
units (note 16) Reclassification of stock-based compensation costs to share	_	-	29,906	_	-
capital upon exercise of stock awards	_	_	_	1,405	1,405
Balance as at August 31, 2017	31,643,000	1	23,068,777	90,410	90,411
Redemption of restricted share units (note 16) Redemption of deferred share	-	-	345,883	-	-
units (note 16) Reclassification of stock-based compensation costs to share capital upon exercise of stock	-	-	58,335	-	-
awards				1,526	1,526
Balance as at August 31, 2018	31,643,000	1	23,472,995	91,936	91,937
Redemption of restricted share units (note 16) Redemption of share capital	<b>-</b>	<del>-</del>	317,072 (86,392)	_ (337)	_ (337)
Reclassification of stock-based compensation costs to share capital upon exercise of stock			(33,332)	(557)	(337)
awards				1,106	1,106
Balance as at August 31, 2019	31,643,000	\$ 1	23,703,675	\$ 92,705	\$ 92,706

a) On January 8, 2019, the company announced that its Board of Directors had approved a share repurchase program, by way of a normal course issued bid on the open market of up to 6.3% of the issued and outstanding subordinate voting shares, representing 1,200,000 subordinate voting shares at the prevailing market price. The normal course issuer bid started on January 14, 2019 and will end on January 13, 2020 or earlier if the company repurchases the maximum number of shares permitted. All shares repurchased under the bid will be cancelled.

### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### 15 Accumulated Other Comprehensive Loss

Changes in accumulated other comprehensive loss are as follows:

	Foreign currency translation adjustment		 sh-flow ledge	cumulated other prehensive loss	
Balance as at September 1, 2016	\$	(49,136)	\$ 562	\$	(48,574)
Foreign currency translation adjustment		8,262	-		8,262
Changes in unrealized gains/losses on forward exchange contracts, net of deferred income taxes			 1,347		1,347
Balance as at August 31, 2017		(40,874)	1,909		(38,965)
Foreign currency translation adjustment		(6,491)	· –		(6,491)
Changes in unrealized gains/losses on forward exchange					
contracts, net of deferred income taxes		_	 (1,894)		(1,894)
Delance as at August 21, 2019		(47.265)	1 -		(47.250)
Balance as at August 31, 2018		(47,365)	15		(47,350)
Foreign currency translation adjustment Changes in unrealized gains/losses on forward exchange		(4,177)	_		(4,177)
contracts, net of deferred income taxes			 16		16
Balance as at August 31, 2019	\$	(51,542)	\$ 31	\$	(51,511)

#### 16 Stock-Based Compensation Plans

The following table summarizes the stock-based compensation costs recognized for employee services received during the years ended August 31, 2017, 2018 and 2019:

	Years ended August 31,						
		2019		2018		2017	
Stock-based compensation costs arising from equity-settled awards Stock-based compensation costs arising from	\$	1,849	\$	1,770	\$	1,439	
cash-settled awards		(18)		(22)		38	
	\$	1,831	\$	1,748	\$	1,477	

The maximum number of additional subordinate voting shares issuable under the Long-Term Incentive Plan and the Deferred Share Unit Plan cannot exceed 11,792,893 shares. The maximum number of subordinate voting shares that may be granted to any individual on an annual basis cannot exceed 5% of the number of outstanding subordinate voting shares. The company settles equity-settled awards through the issuance of common shares from treasury.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### **Long-Term Incentive Plan**

The company established the Long-Term Incentive Plan for its directors, executive officers and employees and those of its subsidiaries, as determined by the Board of Directors. Up to January 2019, the plan included stock options and restricted share units. On January 2019, the plan was amended to include performance share units. The plan was approved by the shareholders of the company.

#### Stock options

The exercise price of stock options granted under the Long-Term Incentive Plan is the market price of the common shares on the date of grant. Stock options granted under the plan expire 10 years from the date of grant and generally vest over a four-year period, being the required period of service from employees, generally with 25% vesting on an annual basis commencing on the first anniversary of the date of grant. As at August 31, 2018 and 2019, the company had no outstanding or exercisable stock options.

#### Restricted share units (RSUs)

RSUs are stock awards that rise and fall in value based on the market price of the company's subordinate voting shares and are redeemable for actual subordinate voting shares. Vesting dates are also established by the Board of Directors on the date of grant. The vesting dates are subject to a minimum term of three years and a maximum term of 10 years from the award date, being the required period of service from employees. Fair value of RSUs equals the market price of the common shares on the date of grant.

The following table summarizes RSU activity for the years ended August 31, 2017, 2018 and 2019:

Years ended August 31,					
2019	2018	2017			
1,615,152	1,611,330	1,551,555			
632,931	420,621	527,143			
(317,072)	(345,883)	(327,859)			
(94,565)	(70,916)	(139,509)			
1,836,446	1,615,152	1,611,330			
	2019 1,615,152 632,931 (317,072) (94,565)	2019     2018       1,615,152     1,611,330       632,931     420,621       (317,072)     (345,883)       (94,565)     (70,916)			

None of the RSUs outstanding as at August 31, 2018 and 2019 were redeemable. The weighted average grant-date fair value of RSUs granted during the years ended August 31, 2017, 2018 and 2019 amounted to \$4.54, \$4.22 and \$3.30 respectively.

The weighted-average market price of the shares at the date of redemption of RSUs redeemed during the years ended August 31, 2017, 2018 and 2019, was \$4.55, \$4.19 and \$3.20 respectively.

#### Performance share units (PSUs)

PSUs are stock awards that rise and fall in value based on the market price of the company's subordinate voting shares and are redeemable for actual subordinate voting shares. Vesting dates are also established by the Board of Directors on the date of grant. The vesting dates are subject to a minimum term of three years and a maximum term of 10 years from the award date, being the required period of service from employees. Fair value of PSUs equals the market price of the common shares on the date of grant. The ultimate number of PSUs to be granted is subject to the attainment of targets on the vesting date. As at August 31, 2019, the company had no outstanding PSUs.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### **Deferred Share Unit Plan**

The company established a Deferred Share Unit (DSU) Plan for the members of the Board of Directors as part of their annual retainer fees. Each DSU entitles the Board members to receive one subordinate voting share. DSUs are acquired on the date of grant and are redeemed in subordinate voting shares when the Board member ceases to be a director of the company. This plan was approved by the shareholders of the company.

The following table summarizes DSU activity for the years ended August 31, 2017, 2018 and 2019:

	Yea	Years ended August 31,				
	2019	2018	2017			
Outstanding – Beginning of year	181,689	174,279	159,127			
Granted	69,818	65,745	45,058			
Redeemed	_	(58,335)	(29,906)			
Outstanding – End of year	251,507	181,689	174,279			

As at August 31, 2017, 2018 and 2019, none of the DSUs outstanding were redeemable. The weighted average grant-date fair value of DSUs granted during the years ended August 31, 2017, 2018 and 2019 amounted to \$4.53, \$4.10 and \$3.64 respectively.

The weighted-average market price of the shares at the date of redemption of DSUs redeemed during the years ended August 31, 2017 and 2018 was \$5.02 and \$4.29 respectively.

#### **Stock Appreciation Rights Plan**

The company established the Stock Appreciation Rights Plan for certain employees. Under that plan, eligible employees are entitled to receive a cash amount equivalent to the difference between the market price of the common shares on the date of exercise and the exercise price determined on the date of grant. Stock appreciation rights granted under the plan expire 10 years from the date of grant and generally vest over a four-year period, being the required period of service from employees. This plan was approved by the shareholders of the company.

The liability arising from stock appreciation rights as at August 31, 2018 and 2019 amounted to \$93,000 and \$77,000 respectively and is recorded in accounts payable and accrued liabilities in the consolidated balance sheets. Stock appreciation rights are immaterial to the company's consolidated financial statements.

#### 17 Related-Party Disclosures

#### **Ultimate controlling shareholder**

Mr. Germain Lamonde, the company's Executive Chairman, is the company's ultimate controlling shareholder.

#### Compensation of key management personnel

	 Years ended August 31,					
	 2019		2018		2017	
Salaries and short-term employee benefits Stock-based compensation costs	\$ 4,029 1,175	\$	3,985 1,047	\$	3,715 775	
	\$ 5,204	\$	5,032	\$	4,490	

Key management personnel includes senior management and directors.

# **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

### 18 Statements of Earnings

#### Sales

Sales are as follows:

	Years ended August 31,						
		2019	_	2018		2017	
Test and measurement	\$	204,693	\$	197,423	\$	193,863	
Service assurance, systems and services		82,788		71,248		49,906	
Foreign exchange gains (losses) on forward exchange							
contracts		(591)		875		(468)	
Total sales for the year	\$	286,890	\$	269,546	\$	243,301	

### Net research and development

Net research and development expenses comprise the following:

	Years ended August 31,						
		2019		2018		2017	
Gross research and development expenses	\$	57,972	\$	65,243	\$	53,124	
Research and development tax credits and grants		(7,419)		(8,089)		(5,956)	
Net research and development expenses for the year	\$	50,553	\$	57,154	\$	47,168	

# Depreciation and amortization

Depreciation and amortization expenses by functional area are as follows:

	Years ended August 31,					
		2019		2018		2017
Cost of sales						
Depreciation of property, plant and equipment	\$	1,862	\$	2,077	\$	1,522
Amortization of intangible assets		7,186		9,212		2,652
		9,048		11,289		4,174
Selling and administrative expenses						
Depreciation of property, plant and equipment		1,354		902		530
Amortization of intangible assets		1,043		592		251
		2,397		1,494		781
Net research and development expenses						
Depreciation of property, plant and equipment		2,253		2,465		1,850
Amortization of intangible assets		783		523		386
	<u>-</u>	3,036		2,988	<u>-</u>	2,236
	\$	14,481	\$	15,771	\$	7,191
Depreciation of property, plant and equipment	\$	5,469	\$	5,444	\$	3,902
Amortization of intangible assets		9,012		10,327		3,289
Total depreciation and amortization expenses for the year	\$	14,481	\$	15,771	\$	7,191

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### **Employee compensation**

Employee compensation comprises the following:

	Years ended August 31,						
		2019		2018		2017	
Salaries and benefits	\$	136,059	\$	134,453	\$	115,832	
Restructuring charges		3,305		2,072		3,509	
Stock-based compensation costs		1,831		1,748		1,414	
Total employee compensation for the year	\$	141,195	\$	138,273	\$	120,755	

Restructuring charges by functional area are as follows:

	Years ended August 31,						
		2019		2018		2017	
Cost of sales	\$	304	\$	517	\$	1,697	
Selling and administrative expenses		495		673		1,150	
Net research and development costs		2,506		3,219		2,232	
Interest and other expense		_		150		_	
Income taxes		(63)		(1,150)		-	
Total restructuring charges for the year	\$	3,242	\$	3,409	\$	5,079	

Stock-based compensation costs by functional area are as follows:

	Years ended August 31,							
		2019		2018		2017		
Cost of sales	\$	136	\$	143	\$	121		
Selling and administrative expenses		1,375		1,217		1,052		
Net research and development expenses		320		388		304		
Total stock-based compensation costs for the year	\$	1,831	\$	1,748	\$	1,477		

#### 19 Other Disclosures

#### Other assets

As at August 31, 2018 and 2019, the carrying value of contract assets amounted to \$2,279,000 and \$3,083,000 respectively and were presented in other current assets in the consolidated balance sheets. Contract assets represent unbilled work in progress.

#### **Deferred revenue**

As at August 31, 2019, the company had total deferred revenue of \$33,478,000, which represents the aggregate total contract price allocated to undelivered performance obligations. The company expects to recognize \$24,422,000 of this amount during the next 12 months and expects to recognize the remaining \$9,056,000 thereafter.

#### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

The company expects that the amount of deferred revenue will change from quarter to quarter for several reasons, including the specific timing, duration and size of large customer support and service agreements, varying billing cycles of such agreements, the specific timing of customer renewals, and foreign currency fluctuations. The company did not have any significant financing components, variable consideration or performance obligations satisfied in a prior period recognized during the year ended August 31, 2019.

During the year ended August 31, 2019, sales include an amount of \$16,556,000 that was included in the carrying value of deferred revenue as at August 31, 2018.

#### **Defined contribution pension plans**

The company maintains separate defined contribution pension plans for certain eligible employees. These plans, which are accounted for on an accrual basis, are summarized as follows:

Canadian defined contribution pension plan

The company maintains a plan for certain eligible employees residing in Canada, under which the company may elect to match the employees' contributions up to a maximum of 4% of an employee's gross salary. Cash contributions to this plan and expenses for the years ended August 31, 2017, 2018 and 2019, amounted to \$1,571,000, \$1,610,000 and \$1,592,000 respectively.

US defined contribution pension plan (401K plan)

The company maintains a 401K plan for eligible employees residing in the U.S. Under this plan, the company must contribute an amount equal to 3% of an employee's current compensation. In addition, eligible employees may contribute up to the lesser of 1% of eligible compensation or the statutorily prescribed annual limit to the 401K plan. The 401K plan permits but does not require the company to make additional matching contributions to the 401K plan on behalf of the eligible participants, subject to a maximum of 50% of the first 6% of the participant's current compensation subject to certain legislated maximum contribution limits. During the years ended August 31, 2017, 2018 and 2019, the company recorded cash contributions and expenses totaling \$630,000, \$591,000 and \$460,000 respectively.

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### 20 Income Taxes

The reconciliation of the income tax provision (recovery) calculated using the combined Canadian federal and provincial statutory income tax rate with the income tax provision in the consolidated financial statements is as follows:

	Years ended August 31,							
		2019		2018		2017		
Income tax provision (recovery) at combined Canadian								
federal and provincial statutory tax rate (27%)	\$	774	\$	(1,775)	\$	2,014		
Increase (decrease) due to:								
Foreign income/loss taxed at different rates		13		452		(900)		
Non-deductible loss (non-taxable income)		10		(69)		(245)		
Non-deductible expenses		594		1,285		981		
Change in tax rates		_		167		(10)		
Effect of the US tax reform (1)		_		1,528		_		
Foreign exchange effect of translation of foreign								
subsidiaries in the functional currency		63		(16)		176		
Recognition of previously unrecognized deferred income								
tax assets (note 4)		(2,383)		(560)		_		
Utilization of previously unrecognized deferred income								
tax assets		(964)		(627)		(46)		
Unrecognized deferred income tax assets on temporary								
deductible differences and unused tax losses		5,761		6,100		4,659		
Other		1,478		(807)		(21)		
Income tax provision for the year	\$	5,346	\$	5,678	\$	6,608		

(1) On December 22, 2017, the US tax reform ("Tax Cuts and Jobs Act") was substantively enacted and reduces the maximum corporate income tax rate from 35% to 21%, effective January 1, 2018. Based on management's estimate of deferred tax assets expected to be used in fiscal 2018 and beyond against taxable income in the United States, the company recorded a deferred income tax expense of \$1,528,000 in the consolidated statement of earnings for the year ended August 31, 2018 to account for the effect of this substantively enacted tax rate.

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

	Years ended August 31,						
		2019		2018		2017	
The income tax provision consists of the following:							
Current							
Current income taxes	\$	7,449	\$	4,310	\$	5,554	
Deferred							
Deferred income taxes relating to the origination and reversal of temporary differences		(4,517)		(3,545)		(3,559)	
Benefit arising from previously unrecognized tax losses and deductible temporary differences Utilization of previously unrecognized deferred income		(2,383)		(560)		_	
tax assets		(964)		(627)		(46)	
		(7,864)		(4,732)	-	(3,605)	
Unrecognized deferred income tax assets on temporary deductible differences and unused tax							
losses		5,761		6,100		4,659	
		(2,103)		1,368		1,054	
Income tax provision for the year	\$	5,346	\$	5,678	\$	6,608	

The changes in deferred income tax assets and liabilities for the year ended August 31, 2018 are as follows:

		Balance as at tember 1, 2017	Credited (charged) to the statement of earnings		Credited (charged) to shareholders' equity		(charged) to shareholders' Business				Foreign currency translation adjustment		Balance as at august 31, 2018
Deferred income tax assets													
Long-lived assets	\$	1,802	\$	200	\$	_	\$	-	\$	(77)	\$ 1,925		
Provisions and accruals		3,772		(250)		554		-		(113)	3,963		
Deferred revenue		2,890		(101)		_		-		(73)	2,716		
Research and development													
expenses		2,731		(101)		-		-		(106)	2,524		
Losses carried forward		4,241		(2,633)		-		3,687		(222)	5,073		
Deferred income tax liabilities													
Long-lived assets		(1,002)		1,903		-	(	(7,889)		527	(6,461)		
Research and development													
tax credits		(10,995)		(386)						445	 (10,936)		
Total	\$	3,439	\$	(1,368)	\$	554	\$	(4,202)	\$	381	\$ (1,196)		
Classified as follows:													
Deferred income tax assets	\$	6,555									\$ 4,714		
Deferred income tax liabilities	•	(3,116)									(5,910)		
	\$	3,439									\$ (1,196)		

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

The changes in deferred income tax assets and liabilities for the year ended August 31, 2019 are as follows:

			C	redited						
	1	Balance	(charged)		Credited		Foreign		Balance	
	as at			to the	(cha	rged) to	currency		as at	
	Sep	otember 1,	st	atement	shar	eholders'	translation		August 31,	
		2018	of	earnings		quity	adj	ustment		2019
Deferred income tax assets										
Long-lived assets	\$	1,925	\$	2,695	\$	_	\$	(52)	\$	4,568
Provisions and accruals		3,963		446		67		15		4,491
Deferred revenue		2,716		490		-		(36)		3,170
Research and development expenses		2,524		(149)		_		(45)		2,330
Losses carried forward		5,073		(2,751)		-		(176)		2,146
Deferred income tax liabilities										
Long-lived assets		(6,461)		1,710		-		345		(4,406)
Research and development tax credits		(10,936)		(338)		_		198		(11,076)
Total	\$	(1,196)	\$	2,103	\$	67	\$	249	\$	1,223
Classified as follows:										
Deferred income tax assets	\$	4,714							\$	4,821
Deferred income tax liabilities		(5,910)								(3,598)
	\$	(1,196)							\$	1,223
									_	

Unrecognized deferred income tax assets on temporary deductible differences and unused tax losses are as follows:

	 As at August 31,						
	 2019		2018				
Temporary deductible differences	\$ 241	\$	1,435				
Losses carried forward	39,721		42,361				
	\$ 39,962	\$	43,796				

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

As at August 31, 2019, the year of expiry of operating losses for which no deferred income tax assets were recognized in the consolidated balance sheet are as follows, presented by tax jurisdiction:

Year of expiry	Finland		and France Spain		<u>Spain</u>		Unit	ted States	Jnited ngdom
2020	\$	3,397	\$	_	\$	_	\$	_	\$ _
2021		6,345		_		_		1,958	_
2022		11,001		_		_		7,435	_
2023		7,127		_		_		1,972	_
2024		5,502		_		_		1,351	_
2025		6,859		_		_		1,351	_
2026		235		_		_		1,351	_
2027		1,425		_		_		1,351	_
2028		_		_		_		2,447	_
2030		_		_		_		2,713	_
2031		_		_		_		109	_
2033		_		_		_		4,681	_
2034		_		_		_		4,851	_
2035		_		_		_		2,616	_
2036		_		_		_		8,501	_
2037		_		_		_		9,660	_
2038		_		_		_		7,997	_
Indefinite		_		35,839		6,100		_	4,461
	\$	41,891	\$	35,839	\$	6,100	\$	60,344	\$ 4,461

Furthermore, as at August 31, 2019, the company had available capital losses in Canada amounting to \$49,363,000 (CA\$65,622,000) at the federal level and \$52,545,000 (CA\$69,853,000) at the provincial level for which no deferred income tax assets were recognized. These losses can be carried forward indefinitely against capital gains.

As at August 31, 2019, non-refundable research and development tax credits recognized in the consolidated balance sheet amounted to \$38,947,000. In order to recover these non-refundable research and development tax credits, the company needs to generate approximately \$260,000,000 (CA\$345,000,000) in pre-tax earnings at the Canadian federal level. In order to generate \$260,000,000 in pre-tax earnings at the Canadian federal level over the estimated recovery period of 16 years, the company must generate a pre-tax earnings compound annual growth rate (CAGR) of 1%, which the company believes is probable. The company's non-refundable research and development tax credits can be carried forward over a 20-year period.

As at August 31, 2019, no income taxes were recognized on taxable temporary differences of \$23,111,000; such taxes would be payable on the unremitted earnings of certain of the company's subsidiaries, as the company has determined that:

- (1) Undistributed profits of its foreign subsidiaries will not be distributed in the foreseeable future; and
- (2) Undistributed profits of its domestic subsidiaries will not be taxable when distributed.

### **Notes to Consolidated Financial Statements**

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

#### 21 Earnings per Share

The following table summarizes the reconciliation of the basic weighted average number of shares outstanding and the diluted weighted average number of shares outstanding:

	Years ended August 31,				
	2019	2018	2017		
Basic weighted average number of shares outstanding (000's) Plus dilutive effect of (000's):	55,325	54,998	54,423		
Restricted share units	_	_	979		
Deferred share units	_	_	153		
Diluted weighted average number of shares outstanding (000's)	55,325	54,998	55,555		
Stock awards excluded from the calculation of the diluted weighted average number of shares outstanding because their exercise price was greater than the average market price of the common shares, or their inclusion would					
be antidilutive (000's)	1,701	1,799			

For the years ended August 31, 2018 and 2019, the diluted amount per share was the same amount as the basic amount per share since the dilutive effect of restricted share units and deferred share units was not included in the calculation; otherwise, the effect would have been antidilutive. Accordingly, the diluted amount per share for these periods was calculated using the basic weighted average number of shares outstanding.

#### 22 Segment Information

Sales to external customers by geographic region are detailed as follows:

	Years ended August 31,					
		2019		2018		2017
United States	\$	106,607	\$	100,225	\$	97,186
Canada		15,913		18,425		22,586
Other		21,391		16,743		14,951
Americas		143,911		135,393		134,723
United Kingdom		16,438		17,508		11,799
Other		76,285		67,169		50,302
Europe, Middle East and Africa		92,723		84,677		62,101
China		27,620		20,724		22,312
Other		22,636		28,752		24,165
Asia-Pacific		50,256		49,476		46,477
	\$	286,890	\$	269,546	\$	243,301

(tabular amounts in thousands of US dollars, except share and per share data and as otherwise noted)

Sales were allocated to geographic regions based on the country of residence of the related customers.

Long-lived assets by geographic region are detailed as follows:

	As	at August 31, 20	19	As at August 31, 2018						
	Property, plant and equipment	Intangible assets	Goodwill	Property, plant and equipment	Intangible assets	Goodwill				
Canada	\$ 29,517	\$ 5,675	\$ 17,487	\$ 32,107	\$ 5,668	\$ 4,481				
United States	7	_	_	1,677	435	13,327				
Finland	331	446	8,547	473	380	8,704				
France	1,896	12,788	5,600	2,401	19,330	5,909				
United Kingdom	640	2,706	7,014	755	4,005	7,471				
India	4,249	23	_	4,021	28	_				
China	2,667	16	_	2,822	20	_				
Other	57	_	_	54	_	_				
	\$ 39,364	\$ 21,654	\$ 38,648	\$ 44,310	\$ 29,866	\$ 39,892				