## SECURITIES AND EXCHANGE COMMISSION

# **FORM 20-F**

Annual and transition report of foreign private issuers pursuant to sections 13 or 15(d)

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## **FILER**

## **Telesat Canada**

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

#### FORM 20-F

(Mark	One)
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REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2018

OR

□ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

 $_{\square}$  SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

to

**Date of Event Requiring This Shell Company Report** 

For the transition period from

Commission File Number 333-159793-01

## TELESAT CANADA

(Exact Name of Registrant as Specified in Its Charter)

#### Not Applicable

(Translation of Registrant's Name into English)

#### Canada

(Jurisdiction of Incorporation or Organization)

#### 160 Elgin Street, Suite 2100, Ottawa, Ontario, Canada K2P 2P7

(Address of Principal Executive Offices)

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(Name, Telephone, E-mail and/or Facsimile Number and Address of Company Contact Person)

Title of Each Class	of Each Exchange on Whi	ge on Which Registered					
None		None					
Securities registered or to be	e registered pursuant to Se	ction 12(g) of the Act.					
	None (Title of Class)						
Securities for which there is a repo	orting obligation pursuant	to Section 15(d) of the Act					
	<b>None</b> (Title of Class)						
Indicate the number of outstanding shares of each of the covered by the annual report: Common Shares — 74,252,4 Preferred Shares — 38,431,311; and Voting Participating I	460; Director Voting Prefe	rred Shares — 1,000; Non-					
Indicate by check mark if the registrant is a well-know	n seasoned issuer, as defir	ned in Rule 405 of the Secu	rities Act. Yes   No   No				
If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes $\boxtimes$ No $\square$							
Note — Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.							
Indicate by check mark whether the registrant (1) has f Exchange Act of 1934 during the preceding 12 months (or and (2) has been subject to such filing requirements for the	for such shorter period th	at the registrant was require					
Indicate by check mark whether the registrant has subspursuant to Rule 405 of Regulation S-T (§ 232.405 of this registrant was required to submit such files). Yes $\boxtimes$ No $\square$		-					
Indicate by check mark whether the registrant is a large growth company. See definition of "large accelerated filer" Exchange Act. (Check one):							
Large accelerated filer □ Accelerated filer □ Non-accelerated filer □ Emerging growth □ company							
If an emerging growth company that prepares its finance the registrant has elected not to use the extended transic standards† provided pursuant to Section 13(a) of the E	tion period for complying		•				
† The term "new or revised financial accounting standards Codification after A	• •	ssued by the Financial Acco	ounting Standards				
Indicate by check mark which basis of accounting the	registrant has used to prep	are the financial statements	included in this filing:				
	Reporting Standards as issuccounting Standards Board		l				
If "Other" has been checked in response to the previou registrant has elected to follow. □ Item 17 □ Item 18	s question, indicate by che	eck mark which financial st	atement item the				

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes $\square$ No $\blacksquare$
(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)
Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes $\square$ No $\square$

## TELESAT CANADA

## TABLE OF CONTENTS

		Page
	<u>PART I</u>	
Item 1.	Identity of Directors, Senior Management and Advisers	<u>1</u>
Item 2.	Offer Statistics and Expected Timetable	<u>1</u>
Item 3.	Key Information	<u>1</u>
Item 4.	<u>Information on the Company</u>	<u>23</u>
Item 4A.	<u>Unresolved Staff Comments</u>	<u>47</u>
Item 5.	Operating and Financial Review and Prospects	<u>48</u>
Item 6.	<u>Directors, Senior Management and Employees</u>	<u>66</u>
Item 7.	Major Shareholders and Related Party Transactions	<u>73</u>
Item 8.	Financial Information	<u>76</u>
Item 9.	The Offer and Listing	<u>77</u>
<u>Item 10.</u>	Additional Information	<u>78</u>
<u>Item 11.</u>	Quantitative and Qualitative Disclosures About Market Risk	<u>82</u>
<u>Item 12.</u>	<u>Description of Securities Other than Equity Securities</u>	<u>82</u>
	<u>PART II</u>	
<u>Item 13.</u>	<u>Defaults, Dividend Arrearages and Delinquencies</u>	<u>83</u>
<u>Item 14.</u>	Material Modifications to the Rights of Security Holders and Use of Proceeds	<u>83</u>
<u>Item 15.</u>	Controls and Procedures	<u>83</u>
<u>Item 16A.</u>	Audit Committee Financial Expert	<u>83</u>
<u>Item 16B.</u>	Code of Ethics	<u>84</u>
<u>Item 16C.</u>	Principal Accountant Fees and Services	<u>84</u>
<u>Item 16D.</u>	Exemptions from the Listing Standards for Audit Committees	<u>84</u>
<u>Item 16E.</u>	Purchases of Equity Securities by the Issuer and Affiliated Purchasers	<u>84</u>
<u>Item 16F.</u>	Change in Registrant's Certifying Accountant	<u>85</u>
<u>Item 16G.</u>	<u>Corporate Governance</u>	<u>85</u>
<u>Item 16H.</u>	Mine Safety Disclosure	<u>85</u>
	<u>PART III</u>	
<u>Item 17.</u>	<u>Financial Statements</u>	<u>86</u>
<u>Item 18.</u>	<u>Financial Statements</u>	<u>86</u>
<u>Item 19.</u>	<u>Exhibits</u>	<u>86</u>
Index To Co	onsolidated Financial Statements	<u>F-1</u>

Effective January 1, 2017, Telesat Holdings Inc. ("Holdings") completed a corporate reorganization pursuant to which Holdings amalgamated with Telesat Interco Inc. ("Telesat Interco") and immediately thereafter the newly amalgamated company amalgamated with Telesat Canada (the "Amalgamation"). The continuing entity, existing under the laws of Canada, is named Telesat Canada.

In this Annual Report, apart from in the audited consolidated financial statements beginning at page F-1, references to "Telesat" include its predecessors Holdings, Telesat Interco and the former Telesat Canada, which were amalgamated in the Amalgamation. References to Holdings, or to Telesat Interco together with Telesat Canada, refer to the corporate entities that existed prior to the Amalgamation.

References to the "Senior Notes" mean the 8.875% Senior Notes due in November 2024 issued by Telesat Canada and Telesat LLC, as the Co-Issuer.

References to the "Senior Secured Credit Facilities" mean the two outstanding secured credit facilities comprising a revolving facility maturing in November 2021 and Term Loan B maturing in November 2023.

References to the "6.0% Senior Notes" mean the 6.0% Senior Notes originally due in May 2017 issued by Telesat Canada and Telesat LLC, as the Co-Issuer, which were repaid in November 2016.

References to the "former senior secured credit facilities" mean the previously four outstanding secured credit facilities comprising a Term Loan A and a revolving facility originally maturing in March 2017 and two Term Loan B facilities originally maturing in March 2019, which were repaid in full in November 2016.

#### PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Unless we indicate otherwise, financial information in this Annual Report has been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). IFRS differs in some respects from United States generally accepted accounting principles, ("U.S. GAAP") or ("United States GAAP"), and thus our financial statements may not be comparable to the financial statements of United States companies.

We present our historical financial statements in Canadian dollars, which is the presentation currency of the Company. All figures reported in this Annual Report are in Canadian dollars, except where we indicate otherwise, and are referenced as "CAD\$," "\$" and "dollars". This Annual Report contains a translation of some Canadian dollar amounts into United States dollars at specified exchange rates solely for your convenience.

#### MARKET, RANKINGS AND OTHER DATA

Unless otherwise indicated, we obtained the industry, market and competitive position data, and other statistical information, contained in this Annual Report from our own internal estimates and research as well as from industry and general publications and third party research, surveys and studies. Publications, research reports, studies and surveys generally state that they have obtained information from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe that these publications, studies and surveys are reliable, we have not independently verified information obtained from third party sources. While we believe our internal company research and estimates are reliable, they have not been verified by an independent third party. As a result, you should be aware that industry, market, competitive position and other similar data and information set forth in this Annual Report, and estimates and beliefs based on such data and information, may not be reliable.

#### FORWARD-LOOKING STATEMENTS

This Annual Report contains statements that constitute "forward-looking statements." When used in this Annual Report, statements which are not historical in nature, or which contain the words "aim," "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "possible," "project," "seek," "should," "target," "would" or similar expressions, are forward-looking statements.

Forward-looking statements appear in a number of places and include statements with respect to, among other things:

- our future growth and profitability;
- our competitive strengths;
- development of our planned LEO constellation; and
- our business strategy and the trends we anticipate in the industries and economies in which we operate.

These forward-looking statements are based on our current expectations and are subject to a number of risks, uncertainties and assumptions. These statements are not guarantees of future performance and are subject to risks, uncertainties and other factors, some of which are beyond our control, are difficult to predict, and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements. Important factors that could cause actual results to differ materially from those in forward-looking statements include:

Our in-orbit satellites may fail to operate as expected due to operational anomalies resulting in lost revenues, increased costs and/or termination of contracts;

- Changes in consumer demand for traditional television services and expansion of terrestrial networks have adversely impacted the growth in subscribers to DTH television services in North America, which may adversely impact our future revenues;
- Fluctuations in available satellite capacity could adversely affect our results;
  We are subject to significant and intensifying competition within the satellite industry and from other providers of
- communications capacity. Our failure to compete effectively would result in a loss of revenues and a decline in profitability, which would adversely affect our results of operations, business prospects and financial condition;
- Changes in technology could have a material adverse effect on our results of operations, business prospects and financial condition;
- There are numerous risks and uncertainties associated with our planned LEO constellation, and we may ultimately choose to not proceed with the project, we may proceed with the project and it may not be successful, or, irrespective of the foregoing, our pursuit of a LEO constellation may negatively impact our existing business, all of which could have a material adverse effect on
- The actual orbital maneuver lives of our satellites may be shorter than we anticipate, and we may be required to reduce available capacity on our satellites prior to the end of their orbital maneuver lives;

our operations, business prospects, financial condition and our ability to repay our debt;

- Our insurance will not protect us against all satellite-related losses. Further, we may not be able to renew insurance on our
- existing satellites or obtain insurance on future satellites on acceptable terms or at all, and, for certain of our existing satellites, we have elected to forego obtaining insurance;
- We derive a substantial amount of our revenues from only a few of our customers. A loss of, or default by, one or more of these major customers, or a material adverse change in any such customer's business or financial condition, could materially reduce
- major customers, or a material adverse change in any such customer's business or financial condition, could materially reduce our future revenues and contracted backlog;
- Our business is capital intensive and we may not be able to raise adequate capital to finance our business strategies, or we may be able to do so only on terms that significantly restrict our ability to operate our business;
- We operate in a highly regulated industry and government regulations may adversely affect our ability to sell our services, or increase the expense of such services or otherwise limit our ability to operate or grow our business;
- Our operations may be limited or precluded by ITU rules or processes, and we are required to coordinate our operations with those of other satellite operators;
  - Our satellite launches may be delayed, we may suffer launch failures or our satellites may fail to reach their planned orbital
- locations. Any such issue could result in the loss of a satellite or cause significant delays in the deployment of the satellite which could have a material adverse effect on our results of operations, business prospects and financial condition;
- If we do not make use of our spectrum rights by specified deadlines, or do not continue to use the spectrum rights we currently use, these rights may become available for other satellite operators to use;
- Replacing a satellite upon the end of its service life will require us to make significant expenditures and may require us to obtain shareholder approval;
- Significant changes in exchange rates could have a material adverse effect on our financial results;
- Significant changes in exchange rates could materially increase our interest and other payment obligations under our financing arrangements;
- We may pursue acquisitions, dispositions and strategic transactions which could result in the incurrence of additional costs, liabilities or expenses in connection with the implementation of such transactions:
- Reductions in government spending could reduce demand for our services;

- We may experience a failure of ground operations infrastructure or interference with our satellite signals that impairs the
- commercial performance of, or the services delivered over, our satellites or the satellites of other operators for whom we provide ground services, which could result in a material loss of revenues;
- Interruption or failure of, or cyber-attacks on, our information technology and communication systems could hurt our ability to operate our business effectively, which could harm our business and operating results;
  - Our dependence on outside contractors could result in delays related to the design, manufacture and launch of our new
- satellites, or could limit our ability to sell our services to the U.S. Department of Defense, which could adversely affect our operating results and prospects;
- Our future reported net income and asset values could be adversely affected by impairments of the value of goodwill and intangible assets;
- We could experience the departure of key employees or may be unable to recruit the employees needed for our success;
- We are subject to risks associated with doing business internationally;
- Changes in tax laws and unanticipated tax liabilities could adversely affect our profitability.
- Our failure to maintain or obtain authorizations under and comply with the U.S. export control and trade sanctions laws and regulations could have a material adverse effect on our results of operations, business prospects and financial condition;
- The soundness of financial institutions and counterparties could adversely affect us; and
- The content of third-party transmissions over our satellites may affect us since we could be subject to sanctions by various governmental entities for the transmission of certain content.

We believe these forward-looking statements are reasonable; however, you should not place undue reliance on any forward-looking statements, which are based on current expectations. Furthermore, forward-looking statements speak only as of the date they are made. If any of these risks or uncertainties materialize, or if any of our underlying assumptions are incorrect, our actual results may differ significantly from the results that we express in or imply by any of our forward-looking statements. These and other risks are detailed in this Annual Report, including, without limitation, those described under "Risk factors." We do not undertake any obligation to update or revise these forward-looking statements after the date of this Annual Report to reflect future events or circumstances. We qualify any and all of our forward-looking statements by these cautionary factors.

#### 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 following information is only selected information and should be read in conjunction with "Item 5. Operating and Financial Review and Prospects," and Telesat Canada's audited consolidated financial statements and their notes included elsewhere in this Annual Report, as well as the other financial information included herein. Historical results from any prior period are not necessarily indicative of results to be expected for any future period.

The selected consolidated financial information is comprised of information of Telesat Canada for the period of January 1, 2014 to December 31, 2018 under International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. The selected consolidated statements of income (loss) data and cash flows data for the years ended December 31, 2016 through December 31, 2018 have been derived from Telesat Canada's audited consolidated financial statements prepared in accordance with IFRS included elsewhere in this Annual Report. Certain statements of cash flows data for the year ended December 31, 2014 has been restated as described in Note 3 of Telesat Holdings Inc.'s audited consolidated financial statements in Telesat Holdings Inc. Annual Report on Form 20-F filed with the Securities and Exchange Commissions on February 25, 2016. The selected balance sheet data as at December 31, 2017 and December 31, 2018 have been derived from Telesat Canada's audited consolidated financial statements prepared in accordance with IFRS included elsewhere in this Annual Report. The selected balance sheet data as at December 31, 2014 through December 2016 and the selected consolidated statements of income (loss) data and cash flows data for the years ended December 31, 2014 and December 31, 2015 have been derived from Telesat Holdings Inc.'s audited consolidated financial statements prepared under IFRS, but which are not included in this Annual Report.

**Telesat Canada** 

# Selected Historical Consolidated Financial Information (all amounts in millions of Canadian dollars)

	Years Ended December 31,								
		2014		2015		2016		2017	2018
Statements of income (loss) data:									
Operating revenue									
Broadcast	\$	468.2	\$	492.6	\$	486.5	\$	472.8	\$ 455.1
Enterprise		430.2		434.6		420.1		430.3	428.2
Consulting and other		24.5		27.7		24.3		24.3	19.6
Total operating revenue		922.9		954.9		930.9		927.4	902.9
Operating expenses									
Operating expenses		(187.8)		(184.3)		(174.9)		(187.7)	(185.8)
Depreciation		(216.5)		(207.8)		(224.8)		(221.1)	(224.9)
Amortization		(30.8)		(27.9)		(27.7)		(26.3)	(24.3)
Other operating (losses) gains, net		(0.3)		_		(2.6)		5.9	0.7
Operating income		487.5		534.9		500.9		498.2	468.7
Other (expenses) income									
Interest expense		(206.9)		(183.3)		(198.8)		(200.1)	(237.8)
Interest and other income		3.0		4.7		6.1		3.0	16.5
Loss on refinancing		_		_		(31.9)		_	_
Gain (loss) on changes in fair value of financial instruments		48.9		6.0		7.9		60.3	(18.2)
(Loss) gain on foreign exchange		(241.1)		(540.5)		92.6		223.9	(259.1)
Tax expense		(78.2)		(88.7)		(83.9)		(80.2)	(61.1)
Net income (loss)	\$	13.2	\$	(266.9)	\$	292.9	\$	505.1	\$ (90.9)
	_				_		_		
Statements of cash flows data:									
Net cash from operating activities	\$	412.0	\$	422.4	\$	527.4	\$	486.7	\$ 466.3
Net cash used in investing activities	\$	(95.2)	\$	(193.9)	\$	(286.1)	\$	(164.6)	\$ (103.3)
Net cash used in financing activities	\$	(136.8)	\$	(80.6)	\$	(139.8)	\$	(588.8)	\$ (114.2)
Balance sheets data (end of year):									
Cash and cash equivalents	\$	497.4	\$	690.7	\$	782.4	\$	479.0	\$ 768.4
Total assets	\$	5,737.8	\$	6,004.6	\$	6,138.6	\$	5,697.6	\$ 5,884.5
Total debt (including current portion)	\$	3,545.7	\$	4,063.2	\$	3,851.6	\$	3,543.4	\$ 3,724.2
Total shareholders' equity	\$	1,131.2	\$	918.1	\$	1,194.0	\$	1,142.8	\$ 1,093.0
Common shares	\$	340.6	\$	340.6	\$	340.6	\$	26.6	\$ 26.6
Preferred shares	\$	316.3	\$	316.3	\$	318.1	\$	126.1	\$ 127.1

2

#### B. Capitalization and indebtedness.

Not applicable.

#### C. Reasons for the offer and use of proceeds.

Not applicable.

#### D. Risk factors.

You should carefully consider the risk factors set forth below as well as the other information contained in this Annual Report. The risks described below are not the only risks facing us. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial could have a material adverse effect on our results of operations, business prospects and financial condition. Any of the following risks could have a material adverse effect on our results of operations, business prospects and financial condition.

#### Risks related to our business

Our in-orbit satellites may fail to operate as expected due to operational anomalies resulting in lost revenues, increased costs and/or termination of contracts.

Satellites utilize highly complex technology and operate in the harsh environment of space and therefore are subject to significant operational risks while in orbit. The risks include in-orbit equipment failures, malfunctions and other kinds of problems commonly referred to as anomalies. Satellite anomalies include, for example, circuit failures, transponder failures, solar array failures, telemetry transmitter failures, battery cell and other power system failures, satellite control system failures and propulsion system failures. Some of our satellites have had malfunctions and other anomalies in the past. See "Property, plants and equipment — In-orbit satellites" for more information relating to our significant anomalies and their impact on the health of our satellites. Acts of war, terrorism, magnetic, electrostatic or solar storms, space debris, satellite conjunctions or micrometeoroids could also damage our satellites.

Despite working closely with satellite manufacturers to determine the causes of anomalies and mitigate them in new satellites and to provide for intrasatellite redundancies for certain critical components to minimize or eliminate service disruptions in the event of failure, anomalies are likely to be experienced in the future, whether due to the types of anomalies described above or arising from the failure of other systems or components, and intrasatellite redundancy may not be available upon the occurrence of such anomalies. We cannot assure you that, in these cases, it will be possible to restore normal operations. Where service cannot be restored, the failure could cause the satellite to have less capacity available for sale, to suffer performance degradation or to cease operating prematurely, either in whole or in part.

Any single anomaly or series of anomalies or other failure (whether full or partial) of any of our satellites could cause our revenues, cash flows and backlog to decline materially, could require us to repay prepayments made by customers of the affected satellite and could have a material adverse effect on our relationships with current customers and our ability to attract new customers for satellite services. A failure could result in a customer terminating its contract for service on the affected satellite. If we are unable to provide alternate capacity to an affected customer, the customer may decide to procure all or a portion of its future satellite services from an alternate supplier or the customer's business may be so adversely affected by the satellite failure that it may not have the financial ability to procure future satellite services. It may also require that we expedite our planned replacement program, adversely affecting our profitability, increasing our financing needs and limiting the availability of funds for other business purposes. Finally, the occurrence of anomalies may adversely affect our ability to insure satellites at commercially reasonable premiums, if at all, and may cause insurers to demand additional exclusions in policies they issue.

Changes in consumer demand for traditional television services and expansion of terrestrial networks have adversely impacted the growth in subscribers to DTH television services in North America, which may adversely impact our future revenues.

A substantial amount of our revenue is earned from customers who use our services to provide DTH television services to the public in North America. For various reasons, the number of DTH subscribers to whom our customers provide services has been decreasing. In many regions of the world, including North America, the terrestrial networks with which we compete continue to expand. Terrestrial networks have advantages over traditional DTH services for the delivery of two-way services, such as on demand video services. Moreover, one of our largest DTH customers also has a substantial fiber terrestrial broadcast distribution network that it is continuing to expand, which has led to certain of their own DTH customers migrating to their terrestrial network. The migration of DTH customers to

3

terrestrial networks, in order to access improved two-way services or for other reasons, could decrease the demand for our services,

adversely impacting our future revenue and financial performance.

The growth of "over-the-top" ("OTT") video distribution (e.g., Netflix) may also have an adverse impact on our business. OTT distribution is an on-demand (i.e. non-linear) platform that provides delivery of broadcasting services to consumers through an internet service provider that may not be involved in the control or distribution of the content itself. The growth of OTT distribution may have a negative impact on the demand for the services of some of Telesat's large DTH customers, which could result in lower demand for our satellite capacity.

#### Fluctuations in available satellite capacity could adversely affect our results.

The availability of satellite capacity has fluctuated over time, characterized by periods of undersupply of capacity, followed by periods of substantial new satellite construction which is, in turn, followed by an oversupply of available capacity. The industry appears to be currently experiencing a period of oversupply. Given the number of new satellites launched over the past year and the number presently under construction, many of which contain high throughput payloads, unless we experience a corresponding increase in demand, the next several years are likely to continue to be characterized by an oversupply of capacity. In addition, changes in technology could introduce a substantial amount of new capacity into the market, further exacerbating the oversupply problem (See "Changes in technology could have a material adverse effect on our results of operations, business prospects and financial condition"). An oversupply of capacity may lead to a decrease in rates charged for satellite services which could adversely affect our results.

Developments that we expect to support the growth in demand for satellite services, such as continued growth in corporate data and internet traffic, may fail to materialize or may not occur in the manner or to the extent we anticipate.

We are subject to significant and intensifying competition within the satellite industry and from other providers of communications capacity. Our failure to compete effectively would result in a loss of revenues and a decline in profitability, which would adversely affect our results of operations, business prospects and financial condition.

We provide point-to-point and point-to-multipoint services for voice, data and video communications and for high-speed internet access. We compete against global competitors who are substantially larger than we are in terms of both the number of satellites they have in orbit as well as in terms of their revenues. Due to their larger sizes, these operators are able to take advantage of greater economies of scale, may be more attractive to customers, may (depending on the specific satellite and orbital location in question) have greater flexibility to restore service to their customers in the event of a partial or total satellite failure and may be able to offer expansion capacity for future requirements. We also compete against regional satellite operators who may enjoy competitive advantages in their local markets. As a result of the availability of export credit agency financing for projects that would not otherwise obtain financing from commercial lenders, new entrants, including governments that have traditionally purchased satellite capacity from established satellite operators, are acquiring their own satellites, which increases the amount of available satellite capacity in the marketplace and decreases the demand for our services.

We expect that a substantial portion of our ongoing business will continue to be in the Canadian domestic market. This market is characterized by increasing competition among satellite providers and rapid technological development. Historically, the Canadian regulatory framework has required the use of Canadian-licensed satellites for the delivery of DTH in Canada. It is possible that this framework could change and allow non-Canadian satellite operators that have adequate service coverage in Canadian territory to compete for future business from our DTH customers.

Our business is also subject to competition from ground based forms of communications technology. For many point-to-point and other services, the offerings provided by terrestrial companies can be more competitive than the services offered via satellite. A number of companies are increasing their ability to transmit signals on existing terrestrial infrastructures, such as fiber optic cable, DSL (digital subscriber line) and terrestrial wireless transmitters often with funding and other incentives provided by government. See "Business Overview — Competition." The ability of any of these companies to increase their capacity and/or the reach of their network significantly would likely result in a decrease in the demand for our services. Increasing availability of capacity from other forms of communications technology can create an excess supply of telecommunications capacity, decreasing the prices we would be able to charge for our services under new service contracts and thereby negatively affecting our profitability. New technology could render satellite-based services less competitive by satisfying consumer demand in other ways. We also compete for local regulatory approval in places where more than one provider may want to operate, and with other satellite operators for scarce frequency assignments and a limited supply of orbital locations.

Our failure to compete effectively could result in a loss of revenues and a decline in profitability, a decrease in the value of our business and a downgrade of our credit rating, which would restrict our access to the capital markets.

## Changes in technology could have a material adverse effect on our results of operations, business prospects and financial condition.

The implementation of new technologies that can provide increased capacity to end users at lower cost may reduce demand for our services. The introduction of first generation high throughput satellites ("HTS"), such as ViaSat-1, Jupiter 1 and Intelsat's "Epic" line of HTS, all of which are able to transmit substantially more data than preexisting satellites, may decrease demand and/or prices for traditional satellite capacity. Many of the new and replacement satellites to be deployed in the near term will be HTS satellites or include high throughput payloads. In addition, second generation HTS systems recently launched and in development purport to be capable of throughput that substantially exceeds the throughput of first generation HTS. While we own the high throughput Canadian payload on ViaSat-1, and have incorporated high throughput payloads on our Telstar 12 VANTAGE satellite, Telstar 18 VANTAGE and Telstar 19 VANTAGE satellites, the introduction of more, and more capable, HTS by other operators into the markets in which we participate could have a material adverse effect on our results of operations, business prospects and financial condition.

A number of non-geostationary orbit ("NGSO") satellite projects are in development which, if implemented successfully, could have significant advantages over geostationary satellite systems, in particular for latency sensitive applications. These projects have the potential to substantially increase the amount of available capacity in the marketplace, decreasing demand for geostationary satellite services. In addition to new satellite technologies, new projects which could compete with traditional satellite services have recently been announced, including for the provision of telecommunications services using balloons or drones.

Improvements in existing technologies could also adversely impact the demand for satellite services. For example, improvements in signal compression could allow our customers to transmit the same amount of data using a reduced amount of capacity, which could decrease demand for our services.

There are numerous risks and uncertainties associated with our planned LEO constellation, and we may ultimately choose to not proceed with the project, we may proceed with the project and it may not be successful, or, irrespective of the foregoing, our pursuit of a LEO constellation may negatively impact our existing business, all of which could have a material adverse effect on our operations, business prospects, financial condition and our ability to repay our debt.

We are currently developing an advanced, global low earth orbit ("LEO") constellation consisting of over one hundred, and potentially several hundred, satellites in NGSO. There are numerous risks and uncertainties associated with NGSO constellations generally and with Telesat's LEO constellation.

NGSO constellations are complex. In order to operate successfully and deliver a high quality service, all components of the system, both on the ground and in space, must be integrated seamlessly and efficiently. Unlike most traditional geostationary satellites currently in use which rely on legacy, space-tested hardware and established ground equipment infrastructures, much of the technology necessary for the successful operation of a LEO constellation, in particular the Telesat LEO constellation, is still in development. Our LEO constellation design incorporates leading-edge satellite technologies, including on-board data processing, multi-beam phased array antennas, and optical inter-satellite links, that have not been fully developed for space applications at the scale, levels of performance and price points that we require. In addition, in order to provide a competitive service in certain of the customer segments we plan to serve, we require advances in ground terminal design and manufacture, particularly electronic flat panel antennas capable of acquiring and tracking LEO satellites. If our LEO constellation does not deliver the required quality of service at prices that are competitive

relative to other satellite providers and alternative products, we may not be able to acquire customers and establish a successful business. It is possible that despite our concerted effort to do so, we may not be able to sufficiently overcome the technological hurdles required to complete our planned LEO constellation or we may implement our LEO constellation and, due to technological issues we did not foresee or which we did not effectively address, our LEO constellation may not operate as planned.

In order to operate our LEO constellation efficiently and in a commercially viable manner, we will require access to a sufficient amount of spectrum. We currently hold an authorization from Canada for an NGSO network in Ka-band which has global ITU priority. However, the regulatory framework relating to NGSO spectrum rights remains uncertain. Some of the international and domestic regulations governing NGSO satellites are undergoing revision or have yet to be established. Both Canada and the U.S. have recently adopted new deployment milestones for NGSO systems and the ITU is expected to adopt new deployment milestones for the bringinginto use ("BIU") and maintenance of international NGSO filings at the World Radio Conference in November 2019. New milestones could adversely impact our ability to maintain priority rights for our planned LEO constellation. In addition, while the international rules governing coordination between NGSO satellite systems are well established and rely on international filing date priority, the U.S. has adopted a different approach to NGSO-NGSO coordination that requires band splitting if NGSO operators are unable to reach a coordination agreement. As a result, the amount of spectrum that may be available to us for our LEO constellation in the U.S. is uncertain. It is possible that other jurisdictions may adopt the U.S. approach. Some of the spectrum utilized by Telesat's LEO constellation is also allocated to terrestrial fixed and mobile services and GSO satellite services. Other portions of the spectrum we plan to use are under consideration for being designated for terrestrial fixed and mobile services. While some jurisdictions have established rules for sharing the spectrum, many jurisdictions have yet to address this issue. Our ability to use shared spectrum for our LEO constellation may be adversely impacted by new rules or the absence of rules for spectrum sharing. In addition, in order to successfully sell services on our LEO constellation, we will require market access to each country in which our customers are located. It is uncertain if we will be successful in obtaining market access to all of the countries needed to make our LEO constellation commercially successful. See "We operate in a highly regulated industry and government regulations may adversely affect our ability to sell our services, or increase the expense of such services or otherwise limit our ability to operate or grow our business".

The implementation of our planned LEO constellation will require a substantial outlay of capital. We may not be able to raise sufficient capital, for any number of reasons. See "Our business is capital intensive and we may not be able to raise adequate capital to finance our business strategies, or we may be able to do so only on terms that significantly restrict our ability to operate our business" and "Risks related to our indebtedness and our Senior Notes". If we are unable to raise sufficient capital, we will not be able to build and deploy our LEO constellation. In addition, if we are successful in raising sufficient capital to fund the LEO constellation and the constellation does not operate as expected or is otherwise commercially unsuccessful, we may not be able to repay all or a substantial part of our debt.

Although we believe there is a significant market for the services we expect to provide with our LEO constellation, we may not be able to attract enough customers to make the project successful and earn a sufficient return on our investment, which could have a material adverse effect on our business prospects, financial condition and our ability to repay our debt.

The development and deployment of our LEO constellation may place a significant burden on our management and other internal resources. The diversion of management's attention and internal resources to our LEO constellation and away from our existing operations could harm our business and operating results.

If successfully implemented, our LEO constellation may decrease demand for our other satellite services. See "Changes in technology could have a material adverse effect on our results of operations, business prospects and financial condition."

The actual orbital maneuver lives of our satellites may be shorter than we anticipate, and we may be required to reduce available capacity on our satellites prior to the end of their orbital maneuver lives.

We anticipate that our satellites will have the end of orbital maneuver life dates described in "Property, plants and equipment — Inorbit satellites." For all but one of our satellites, the expected end-of-orbital maneuver life date goes beyond the manufacturer's end-of-service life date. A number of factors will affect the actual commercial service lives of our satellites, including: the amount of propellant used in maintaining the satellite's orbital location or relocating the satellite to a new orbital location (and, for newly-launched satellites, the amount of propellant used during orbit raising following launch); the durability and quality of their construction; the performance of their components; conditions in space such as solar flares and space debris; operational considerations, including operational failures and other anomalies; and changes in technology which may make all or a portion of our satellite fleet obsolete.

We have been forced to remove satellites from service prematurely in the past due to an unexpected reduction in their previously anticipated end-of-orbital maneuver life. It is possible that the actual orbital maneuver lives of one or more of our existing satellites may also be shorter than originally anticipated. Further, on some of our satellites it is anticipated that the total available payload capacity may need to be reduced prior to the satellite reaching its end-of-orbital maneuver life.

We periodically review the expected orbital maneuver lives of each of our satellites using current engineering data. A reduction in the orbital maneuver life of any of our satellites could result in a reduction of the revenues generated by that satellite, the recognition of an impairment loss and an acceleration of capital expenditures. To the extent we are required to reduce the available payload capacity prior to the end of a satellite's orbital maneuver life, our revenues from the satellite would be reduced.

Our insurance will not protect us against all satellite-related losses. Further, we may not be able to renew insurance on our existing satellites or obtain insurance on future satellites on acceptable terms or at all, and, for certain of our existing satellites, we have elected to forego obtaining insurance.

Our current satellite insurance does not protect us against all satellite-related losses that we may experience, and we do not have inorbit insurance coverage for all of the satellites in our fleet. As of December 31, 2018, the total net book value of our six in-orbit satellites for which we do not have insurance (Nimiq 1, Nimiq 2, Anik F1, Telstar 12, Telstar 18, and ViaSat-1) was approximately \$31 million. Our insurance does not protect us against business interruption, loss of revenues or delay of revenues. In addition, we do not insure the net book value of performance incentives that may be payable to a satellite's manufacturer as these are payable only to the extent that the satellite operates in accordance with contracted technical specifications. Our existing launch and in-orbit insurance policies include, and any future policies that we obtain can be expected to include, specified exclusions, deductibles and material change limitations. Typically, these insurance policies exclude coverage for damage or losses arising from acts of war, anti-satellite devices, electromagnetic or radio frequency interference and other similar potential risks for which exclusions are customary in the industry at the time the policy is written. In addition, they typically exclude coverage for satellite health-related problems affecting our satellites that are known at the time the policy is written or renewed. Any claims under existing policies are subject to settlement with the insurers and may, in some instances, be payable to our customers.

The price, terms and availability of satellite insurance has fluctuated significantly in recent years. These fluctuations may be affected by recent satellite launch or in-orbit failures and general conditions in the insurance industry. Launch and in-orbit policies on satellites may not continue to be available on commercially reasonable terms or at all. To the extent we experience a launch or in-orbit failure that is not fully insured, or for which insurance proceeds are delayed or disputed, we may not have sufficient resources to replace the affected satellite. In addition, higher premiums on insurance policies increase our costs, thereby reducing our profitability. In addition to higher premiums, insurance policies may provide for higher deductibles, shorter coverage periods, higher loss percentages required for constructive total loss claims and additional satellite health-related policy exclusions. There can be no assurance that, upon the expiration of an in-orbit insurance policy, which typically has a term of one year, we will be able to renew the policy on terms acceptable to us.

Subject to the requirements of the Senior Secured Credit Facilities and the indenture governing our Senior Notes, we may elect to reduce or eliminate insurance coverage for certain of our existing satellites, or elect not to obtain insurance policies for our future satellites, especially if exclusions make such policies ineffective, the costs of coverage make such insurance impractical or if self-insurance is deemed more cost effective.

We derive a substantial amount of our revenues from only a few of our customers. A loss of, or default by, one or more of these major customers, or a material adverse change in any such customer's business or financial condition, could materially reduce our future revenues and contracted backlog.

For the year ended December 31, 2018, our top five customers together accounted for approximately 63% of our revenues. At December 31, 2018, our top five backlog customers together accounted for approximately 84% of our backlog. If any of our major customers choose to not renew their contracts at the expiration of the existing terms or seek to negotiate concessions, particularly on price, it could have a material adverse effect on our results of operations, business prospects and financial condition. Our customers could experience a downturn in their business or find themselves in financial difficulties, which could result in their ceasing or reducing their use of our services or becoming unable to pay for services they had contracted to buy. In addition, some of our customers' industries are undergoing significant consolidation, and our customers may be acquired by each other or other companies, including by our competitors. Such acquisitions could adversely affect our ability to sell services to such customers and to any end-users whom they serve. Some customers have in the past defaulted, and our customers may in the future default, on their obligations to us due to bankruptcy, lack of liquidity, operational failure or other reasons. Such defaults could adversely affect our revenues, operating margins and cash flows. If our contracted revenue backlog is reduced due to the financial difficulties of our customers, our revenues, operating margins and cash flows would be further negatively impacted.

Our business is capital intensive and we may not be able to raise adequate capital to finance our business strategies, or we may be able to do so only on terms that significantly restrict our ability to operate our business.

Implementation of our business strategy requires a substantial outlay of capital. As we pursue our business strategies and seek to respond to developments in our business and opportunities and trends in our industry, our actual capital expenditures may differ from our expected capital expenditures. There can be no assurance that we will be able to satisfy our capital requirements in the future. In addition, if one of our satellites failed unexpectedly, there is no assurance of insurance recovery or the timing thereof and we may need to exhaust or significantly draw upon our Revolving Credit Facility or obtain additional financing to replace the satellite. If we determine we need to obtain additional funds through external financing and are unable to do so, we may be prevented from fully implementing our business strategy.

The availability and cost to us of external financing depend on a number of factors, including our credit rating and financial performance and general market conditions. Our ability to obtain financing generally may be influenced by the supply and demand characteristics of the telecommunications sector in general and of the satellite services sector in particular. Declines in our expected future revenues under contracts with customers and challenging business conditions faced by our customers are among the other factors that may adversely affect our credit and access to the capital markets. Other factors that could impact our credit rating include the amount of debt in our current or future capital structure, activities associated with strategic initiatives, the health of our satellites, the success or failure of our planned launches, our expected future cash flows and the capital expenditures required to execute our business strategy. The overall impact on our financial condition of any transaction that we pursue may be negative or may be negatively perceived by the financial markets and rating agencies and may result in adverse rating agency actions with respect to our credit rating and access to the capital markets. Long-term disruptions in the capital or credit markets as a result of uncertainty or recession, changing or increased regulation or failures of significant financial institutions could adversely affect our access to capital. A credit rating downgrade or deterioration in our financial performance or general market conditions could limit our ability to obtain financing or could result in any such financing being available only at greater cost or on more restrictive terms than might otherwise be available and, in either case, could result in our deferring or reducing capital expenditures including on new or replacement satellites.

In certain circumstances, we are required to obtain the approval of our shareholders to incur additional indebtedness. There can be no assurances that we will receive such approval, if required.

We operate in a highly regulated industry and government regulations may adversely affect our ability to sell our services, or increase the expense of such services or otherwise limit our ability to operate or grow our business.

As an operator of a global satellite system, we are regulated by government authorities in Canada, the United States, Brazil and other countries in which we operate.

In Canada, our operations are subject to regulation and licensing by ISED pursuant to the Radiocommunication Act (Canada) and by the CRTC, under the Telecommunications Act (Canada). ISED has the authority to issue licenses, establish standards, assign Canadian orbital locations, and plan the allocation and use of the radio frequency spectrum, including the radio frequencies upon which our satellites and earth stations depend. The Minister responsible for ISED has broad discretion in exercising this authority to issue licenses, fix and amend conditions of licenses, and to suspend or even revoke them. The CRTC has authority over the allocation (and reallocation) of satellite capacity to particular broadcasting undertakings. We are required to pay "universal service" charges in Canada and have certain research and development and public benefits obligations that do not apply to other satellite operators with which we compete. These obligations could change at any time.

In the United States, the Federal Communications Commission ("FCC") regulates the provision of satellite services to, from or within the United States. Certain of our satellites are owned and operated through a U.S. subsidiary and are regulated by the FCC. In addition, to facilitate the provision of FSS satellite services in C-, Ku- and Ka-band frequencies in the United States market, foreign licensed operators can apply to have their satellites either placed on the FCC's Permitted Space Station List (for certain frequencies) or be granted a declaratory ruling (for other frequencies). Our Anik Fl, Anik FlR, Anik F2, Anik F3, Telstar 14R/Estrela do Sul 2 and Telstar 19 VANTAGE satellites are currently authorized to serve the U.S. market in accordance with these procedures. The export from the United States of satellites and technical information related to satellites, earth station equipment and provision of services to certain countries are subject to State Department, Commerce Department and Treasury Department regulations, in particular the International Traffic in Arms Regulations ("ITAR"), which currently include satellites on the list of items requiring export permits. These ITAR provisions have constrained our access to technical information and have had a negative impact on our international consulting revenues. In addition, we and our satellite manufacturers may not be able to obtain and maintain necessary export authorizations, which could adversely affect our ability to procure new United States-manufactured satellites; control our existing satellites; acquire launch services; obtain insurance and pursue our rights under insurance policies; or conduct our satellite-related operations and consulting activities.

We also operate satellites through licenses granted by, and are subject to regulations in, countries other than Canada and the United States. For example, the Brazilian national telecommunications agency, ANATEL, regulates the granting of exploitation and landing rights to the operation of Brazilian and foreign satellites and their use to transport telecommunication signals. ANATEL has authorized us, through our subsidiary, Telesat Brasil Capacidade de Satélites Ltda. ("TBCS"), to operate Telstar 14R/Estrela do Sul 2, a Ku-band fixed satellite services ("FSS") satellite and Telstar 19 VANTAGE, a Ku-band and Ka-band FSS satellite at 63° WL pursuant to Concession Agreements. ANATEL has also accredited us as the legal representative in Brazil for Telstar 12 VANTAGE, Anik F1 and Anik G1. Telstar 18 and Telstar 18 VANTAGE operate at the 138° EL orbital location under agreements with APT, which has been granted the right to use the 138° EL orbital location by The Kingdom of Tonga.

In a number of countries, including Canada and the United States, regulators are considering and may adopt new spectrum allocations for terrestrial mobile broadband and 5G, including in bands that are currently allocated to satellite services. New spectrum allocations may require satellite operators to vacate or share spectrum and may limit the spectrum that is available for satellite services, which could adversely impact our business.

In addition to regulatory requirements governing the use of orbital locations, most countries regulate transmission of signals to and from their territory, and we are required to obtain and maintain authorizations to carry on business in the countries in which we operate.

If we fail to obtain or maintain particular authorizations on acceptable terms, such failure could delay or prevent us from offering some or all of our services and adversely affect our results of operations, business prospects and financial condition. In particular, we may not be able to obtain all of the required regulatory authorizations for the construction, launch and operation of any of our future satellites, for the orbital locations and spectrum for these satellites and for our ground infrastructure, on acceptable terms or at all. Even if we were able to obtain the necessary authorizations and orbital locations, the licenses we obtain may impose significant operational restrictions, or not protect us from interference that could affect the use of our satellites. Countries or their regulatory authorities may adopt new laws, policies or regulations, or change their interpretation of existing laws, policies or regulations, that could cause our existing authorizations to be changed or cancelled, require us to incur additional costs, impose or change existing pricing, or otherwise adversely affect our operations or revenues. As a result, any currently held regulatory authorizations are subject to rescission and renewal and may not remain sufficient or additional authorizations may be necessary that we may not be able to obtain on a timely basis or on terms that are not unduly costly or burdensome. Further, because the regulatory schemes vary by country, we may be subject to regulations in foreign countries of which we are not presently aware that we are not in compliance with, and as a result could be subject to sanctions by a foreign government. See "Business Overview — Government regulation."

# Our operations may be limited or precluded by ITU rules or processes, and we are required to coordinate our operations with those of other satellite operators.

The ITU, a specialized United Nations agency, regulates the global allocation of radio frequency spectrum and the registration of radio frequency assignments and any associated satellite orbit. We participate in the activities of the ITU. However, only national administrations have full standing as ITU members. Consequently, we must rely on the relevant government administrations to represent our interests.

The ITU establishes the Radio Regulations, an international treaty which contains the rules concerning frequency allocations and the priority to, coordination of, and use of, radio frequency assignments. The ITU Radio Regulations define the allocation of radio frequencies to specific uses. The ITU Radio Regulations are periodically reviewed and revised at World Radiocommunication Conferences ("WRC"), which take place typically every three to four years. Terrestrial operators are increasingly seeking additional radio frequency assignments, including frequencies currently designated for exclusive or shared use by satellite systems, to support the increasing demand for terrestrial services. The ITU is currently reviewing and may adopt at the WRC in November 2019 new international spectrum allocations for terrestrial mobile and other services. As a result, we cannot guarantee that the ITU will not change its allocation decisions and rules in the future in a way that could limit or preclude our use of some or all of our existing or future orbital locations or spectrum. See "Business Overview — Government Regulation."

The ITU Radio Regulations also establish operating procedures for satellite networks and prescribe detailed coordination, notification and recording procedures. With respect to the frequencies used by commercial satellites, the ITU Radio Regulations set forth a process for protecting earlier-registered satellite systems from interference from later-registered satellite systems. In order to comply with these rules, we must coordinate the operation of our satellites, including any replacement satellite that has performance characteristics that are different from those of the satellite it replaces, with other satellites. This process requires potentially lengthy and costly negotiations with parties who operate or intend to operate satellites that could affect or be affected by our satellites.

In certain countries, a failure to resolve coordination issues is used by regulators as a justification to limit or condition market access by foreign satellite operators. In addition, while the ITU Radio Regulations require later-in-time systems to coordinate their operations with us, we cannot guarantee that other operators will conduct their operations so as to avoid transmitting any signals that would cause harmful interference to the signals that we, or our customers, transmit. This interference could require us to take steps, or pay or refund amounts to our customers, that could have a material adverse effect on our results of operations, business prospects and financial condition. The ITU's Radio Regulations do not contain mandatory dispute resolution or enforcement regulations and neither the ITU specifically, nor international law generally, provides clear remedies if the ITU coordination process fails. Failure to coordinate our satellites' frequencies successfully or to obtain or maintain other required regulatory approvals could have an adverse effect on our business operations, prospects and financial condition, as well as on the value of our business.

Our satellite launches may be delayed, we may suffer launch failures or our satellites may fail to reach their planned orbital locations. Any such issue could result in the loss of a satellite or cause significant delays in the deployment of the satellite which could have a material adverse effect on our results of operations, business prospects and financial condition.

Delays in launching satellites and in the deployment of satellites are not uncommon and result from construction delays, the unavailability of reliable launch opportunities with suppliers, delays in obtaining required regulatory approvals and launch failures. If satellite construction schedules are not met, a launch opportunity may not be available at the time the satellite is ready to be launched. Satellites are also subject to certain risks related to failed launches. Launch vehicles may fail. Launch failures result in significant delays in the deployment of satellites because of the need to construct replacement satellites, which typically takes up to 30 months or longer, and to obtain another launch vehicle. A delay or perceived delay in launching a satellite, or replacing a satellite, may cause our current customers to move to another satellite provider if they determine that the delay may cause an interruption in continuous service. In addition, our contracts with customers who purchase or reserve satellite capacity may allow the customers to terminate their contracts in the event of a delay. Any such termination would require us to refund any prepayment we may have received, and would result in a reduction in our contracted backlog and would delay or prevent us from securing the commercial benefits of the new satellite. Launch vehicles may also underperform, in which case the satellite may be lost or, if it can be placed into service by using its onboard propulsion systems to reach the desired orbital location, will have a shorter useful life. Any launch failure, underperformance, delay or perceived delay could have a material adverse effect on our results of operations, business prospects and financial condition.

If we do not make use of our spectrum rights by specified deadlines, or do not continue to use the spectrum rights we currently use, these rights may become available for other satellite operators to use.

Our in-orbit satellites do not currently occupy all of the geostationary orbital ("GSO") locations for which we have obtained regulatory authorizations. In some cases, the Telesat satellite that occupies a GSO location is not designed to use all of the frequency spectrum for which we have been authorized. Similarly, Telesat has been granted regulatory authorizations for certain spectrum in non-geostationary orbits ("NGSO") that are not yet occupied at all or in which the full complement of satellites have not yet been deployed.

In accordance with the ITU Radio Regulations, governments have rights to use certain GSO orbital locations and NGSO orbits and the associated radio frequencies. Certain of these governments have in turn authorized Telesat to use GSO locations, NGSO orbits, and associated radio frequencies in addition to those used by our current satellites. Under the ITU Radio Regulations, we must bring into use ("BIU") these orbital locations, orbits, and frequency assignments within a fixed period of time, or the governments in question would lose their international priority rights, and the GSO orbital location or NGSO orbits, and associated frequencies, likely would become available for use by another satellite operator. In addition to ITU requirements, the governments that have authorized us to use these orbital resources have generally conditioned such use on our meeting certain milestones, including making use of the orbital spectrum by a specified time.

If we are unable to place satellites into currently unused GSO locations or into NGSO orbits in a manner that satisfies the ITU Radio Regulations and national regulatory requirements, or if the ITU or national regulatory requirements were to change, or if we are unable to maintain satellites or make use of all of the spectrum for which we have been authorized at the GSO locations that we currently use, we may lose our rights to use these orbital resources and they would become available for other satellite operators to use. The loss of one or more of our orbital resources could negatively affect our plans and our ability to implement our business strategy.

Replacing a satellite upon the end of its service life will require us to make significant expenditures and may require us to obtain shareholder approval.

To ensure no disruption in our business and to prevent loss of customers, we will be required to commence construction of a replacement satellite approximately five years prior to the expected end of service life of the satellite then in orbit. Typically, it costs in the range of US\$250 million to US\$300 million to construct, launch and insure a GEO satellite. There is no assurance that we will have sufficient cash, cash flow or be able to obtain third party or shareholder financing to fund such expenditures on favorable terms, if at all, or that we will obtain shareholder approval to procure replacement satellites. Certain of our satellites are nearing their expected end-of-orbital maneuver lives. See "Property, plants and equipment — In-orbit satellites" for more information on the expected end-of-orbital maneuver lives of our satellites. Should we not have sufficient funds available to replace those satellites or should we not receive approval from our shareholders to purchase replacement satellites, it could have a material adverse effect on our results of operations, business prospects and financial condition.

#### Significant changes in exchange rates could have a material adverse effect on our financial results.

Our main foreign currency exposures as at December 31, 2018 lie in our U.S. dollar denominated debt financing and cash and cash equivalents. In addition, approximately 50% of our revenue, 30% of our operating expenses, 100% of our interest expense on indebtedness and the majority of our capital expenditures were denominated in U.S. dollars for the twelve months ended December 31, 2018.

As a result of a decrease in the value of the Canadian dollar against the U.S. dollar at December 31, 2018 compared to December 31, 2017, we recorded a foreign exchange loss of approximately \$259 million. A five percent increase (decrease) in the value of the U.S. dollar against the Canadian dollar would have increased (decreased) our indebtedness and increased (decreased) our net loss as at December 31, 2018 by \$193 million. A five percent increase (decrease) in the value of the U.S. dollar against the Canadian dollar would have increased (decreased) our cash and cash equivalents by \$29 million, decreased (increased) our net loss by \$25 million and increased (decreased) our other comprehensive income by \$4 million as at December 31, 2018. In addition, for the twelve months ended December 31, 2018, a five percent increase (decrease) in the value of the U.S. dollar against the Canadian dollar would have increased (decreased) revenue by \$23 million, operating expenses by \$3 million and interest expense by \$11 million. These analyses assume that all other variables remain constant.

A portion of our revenues come from contracts which are denominated in Brazilian Reais. Any decrease in the value of the Brazilian Reais against the Canadian dollar would reduce our revenues.

Significant changes in exchange rates could materially increase our interest and other payment obligations under our financing arrangements.

As at December 31, 2018, the Canadian dollar equivalent of our debt, excluding deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment, was \$3,854 million.

As at December 31, 2018, if the value of the Canadian dollar against the U.S. dollar increased (decreased) by \$0.01, our indebtedness would have decreased (increased) by \$28 million.

Changes in exchange rates impact the amount that we pay in interest, and may significantly increase the amount that we are required to pay in Canadian dollar terms to redeem the Senior Notes, either at maturity, or earlier if redemption rights are exercised or other events occur which require us to offer to purchase the Senior Notes prior to maturity, and to repay funds drawn under the Senior Secured Credit Facilities.

For the twelve months ended December 31, 2018, approximately 50% of our revenues were received in currencies other than the U.S. currency, the majority of which were in Canadian currency. The revenues that we receive in U.S. currency may mitigate a portion of our exchange rate risk, but do not fully protect us from that risk.

We may pursue acquisitions, dispositions and strategic transactions which could result in the incurrence of additional costs, liabilities or expenses in connection with the implementation of such transactions.

In the future, we may pursue acquisitions, dispositions and strategic transactions, which may include joint ventures and strategic relations, as well as business combinations or the acquisition or disposition of assets. Acquisitions, dispositions and strategic transactions involve a number of risks, including: potential disruption of our ongoing business; distraction of management; may result in our being more leveraged; the anticipated benefits and cost savings of those transactions may not be realized fully or at all or may take longer to realize than expected; increasing the scope and complexity of our operations; and loss or reduction of control over certain of our assets.

The presence of one or more material liabilities of an acquired company that are unknown to us at the time of acquisition could have a material adverse effect on our results of operations, business prospects and financial condition. A strategic transaction may result in a significant change in the nature of our business, operations and strategy. In addition, we may encounter unforeseen obstacles or costs in implementing a strategic transaction.

We continue to evaluate the performance of all of our businesses and may sell businesses or assets. Such a sale could include a strategic disposition of one or more of our satellites. In addition to the risks listed above that may occur with any acquisition, disposition

or strategic transaction, a satellite divestiture could result in a loss of revenues or significant write-offs, including those related to goodwill and other intangible assets, which could have a material adverse effect on our financial condition, results of operations and cash flows. There can be no assurance that we will be successful in addressing these or any other significant risks encountered.

#### Reductions in government spending could reduce demand for our services.

Governments, in particular the U.S. government, purchase a substantial amount of satellite services from commercial satellite operators, including Telesat. Many governments provide funding for satellite services that are used to provide broadband connectivity to rural and remote communities and those with limited terrestrial infrastructure. To the extent these governments reduce spending on satellite services, as a result of the need to reduce overall spending during periods of fiscal restraint, to reduce budget deficits or otherwise, demand for our services could decrease which could adversely affect our revenue, the prices we are able to charge for our services and our results.

We may experience a failure of ground operations infrastructure or interference with our satellite signals that impairs the commercial performance of, or the services delivered over, our satellites or the satellites of other operators for whom we provide ground services, which could result in a material loss of revenues.

We operate an extensive ground infrastructure including our satellite control centre in Ottawa, our main earth station and back up satellite control facility at Allan Park, nine earth stations throughout Canada, one teleport located in the United States and one in Brazil. These ground facilities are used for controlling our satellites and/or for the provision of end-to-end services to our customers.

We may experience a partial or total loss of one or more of these facilities due to natural disasters (tornado, flood, hurricane or other such acts of God), fire, acts of war or terrorism or other catastrophic events. A failure at any of these facilities would cause a significant loss of service for our customers. Additionally, we may experience a failure in the necessary equipment at the satellite control centre, at the back-up facility, or in the communications links between these facilities and remote earth station facilities. A failure or operator error affecting tracking, telemetry and control operations might lead to a breakdown in the ability to communicate with one or more satellites or cause the transmission of incorrect instructions to the affected satellite(s), which could lead to a temporary or permanent degradation in satellite performance or to the loss of one or more satellites. Intentional or non-intentional electromagnetic or radio frequency interference could result in a failure of our ability to deliver satellite services to our customers. A failure at any of our facilities or in the communications links between our facilities or interference with our satellite signal could cause our revenues and backlog to decline materially and could adversely affect our ability to market our services and generate future revenues and profit.

We purchase equipment from third party suppliers and depend on those suppliers to deliver, maintain and support these products to the contracted specifications in order for us to meet our service commitments to our customers. We may experience difficulty if these suppliers do not meet their obligations to deliver and support this equipment. We may also experience difficulty or failure when implementing, operating and maintaining this equipment, or when providing services using this equipment. This difficulty or failure may lead to delays in implementing services, service interruptions or degradations in service, which could cause our revenues and backlog to decline materially and could adversely affect our ability to market our services and generate future revenues and profit.

Interruption or failure of, or cyber-attacks on, our information technology and communication systems could hurt our ability to operate our business effectively, which could harm our business and operating results.

Our ability to operate our business depends, in part, on the continuing operation of our information technology and communications systems, which are an integral part of our business. We rely on our information and communications systems, as well as on software applications developed internally and externally, to effectively manage our accounting and financial functions, including maintaining our internal controls, operate our satellites and satellites for third parties, provide consulting services to customers, transmit our customer's proprietary and/or confidential content and assist with other operations, among other things. Although we take steps to secure our information technology and communications systems, including our computer systems, intranet and internet sites, email and other telecommunications and data networks, the security measures we have implemented have not always been effective.

While we continue to bolster our systems with additional security measures and, working with external experts, mitigate the risk of security breaches, our systems may be vulnerable to theft, loss, damage and interruption from a number of potential sources and events, including unauthorized access or security breaches, inclement weather, natural or man-made disasters, earthquakes, explosions, terrorist attacks, floods, fires, cyber-attacks, computer viruses, power loss, telecommunications or equipment failures, transportation interruptions, accidents or other disruptive events or attempts to harm our systems. In addition, our facilities are potentially vulnerable to break-ins, sabotage and intentional acts of vandalism. Our disaster recovery planning cannot account for all eventualities. Our business and operations could be adversely affected if, as a result of a significant cyber event or otherwise, our operations are disrupted or shutdown, confidential or proprietary information is stolen or disclosed, we lose customers, we incur costs or are required to pay fines in connection with confidential or export-controlled information that is disclosed, we must dedicate significant resources to system repairs or increase cyber security protection or we otherwise incur significant litigation or other costs as a result of any such event. While our insurance coverage could offset losses relating to some of these types of events, to the extent any such losses are not covered by insurance, a serious disruption to our systems could significantly limit our ability to manage and operate our business efficiently, which in turn could have a material adverse effect on our business, reputation, results of operations and financial condition.

Our dependence on outside contractors could result in delays related to the design, manufacture and launch of our new satellites, or could limit our ability to sell our services to the U.S. Department of Defense, which could adversely affect our operating results and prospects.

Any delays in the design, construction or launch of our satellites could have a material adverse effect on our business, financial condition and results of operations. There is a limited number of manufacturers that are able to design and build satellites according to the technical specifications and standards of quality we require, including Airbus Defence and Space, Thales Alenia Space, Boeing, Lockheed Martin, MELCO, Orbital and SS/L. We also rely on the manufacturers of our satellites to provide support throughout the life of the satellite in the event it should suffer an anomaly. If any of our manufacturer's business fail it could adversely impact our ability to overcome a satellite anomaly and maintain our satellites in service, in whole or in part. There is also a limited number of suppliers able to launch such satellites, including International Launch Services, Arianespace, Mitsubishi Heavy Industries, SpaceX and Lockheed Martin. Should any of our manufacturers' or launch suppliers' businesses fail, it would reduce competition and could increase the cost of satellites and launch services. Adverse events with respect to any of our manufacturers or launch suppliers could also result in the delay of the design, construction or launch of our satellites. For example, many of our past launches were provided by International Launch Services, an entity owned by the Russian government. In response to the ongoing situation involving the Russian Federation in the Ukraine, various governments have implemented economic and other sanctions against Russia and its interests. U.S. law requires satellite manufacturers to obtain a license from the U.S. government for the exportation of certain prescribed U.S. technologies, if the exportation of the technology is to a Russian counterparty. Virtually all satellites manufactured outside of China contain prescribed U.S. technology. Should the U.S. implement sanctions which would have the effect of blocking the export of satellites containing prescribed U.S. technologies to Russian-controlled launch providers, it would lead to a reduction in launch alternatives and, as a result, could lead to increased launch costs or delays in the future, which could have an adverse impact on our business. In addition, in December 2017, the U.S. government adopted new legislation that prohibits the U.S. Secretary of Defense from procuring satellite services using satellites that were launched on a Russian launch vehicle.

General economic conditions may also affect the ability of our manufacturers and launch suppliers to provide services on commercially reasonable terms or to fulfill their obligations in terms of manufacturing schedules, launch dates, pricing or other items. Even where alternate suppliers for such services are available, we may have difficulty identifying them in a timely manner, we may incur significant additional expense in changing suppliers, and this could result in difficulties or delays in the design, construction or launch of our satellites.

# Our future reported net income and asset values could be adversely affected by impairments of the value of goodwill and intangible assets.

The assets listed on our consolidated balance sheet as at December 31, 2018 include goodwill with a carrying value of approximately \$2,447 million and other intangible assets with a carrying value of approximately \$811 million. Goodwill and other intangible assets are qualitatively assessed for indicators of impairment. If the qualitative assessment concludes an indication of impairment, a quantitative impairment test of goodwill and other intangible assets (such as orbital locations) with indefinite useful lives is undertaken. We measure for the quantitative impairment test using a projected discounted cash flow method and confirm the assessment using other valuation methods. If the asset's carrying value is more than its recoverable amount, the difference is recorded as a reduction in the amount of the asset on the balance sheet and an impairment charge in the statement of (loss) income. Quantitative testing for impairment requires significant judgment by management to determine the assumptions used in the impairment analysis. Any changes in the assumptions used could have a material impact on the impairment analysis and result in an impairment charge. We cannot predict whether an event that triggers impairment will occur, when it will occur or how it will affect the reported asset values. If our goodwill or other intangible assets are deemed to be impaired in whole or in part, we could be required to reduce or write-off such assets, which could have a material adverse effect on our financial condition.

#### We could experience the departure of key employees or may be unable to recruit the employees needed for our success.

We rely on a number of key employees, including members of our management and certain other employees possessing unique experience in technical and commercial aspects of the satellite services business. If we are unable to retain these employees, it could be difficult to replace them. In addition, our business, with its constant technological developments, must continue to attract highly qualified and technically skilled employees. In the future, if we were unable to retain or replace our key employees, or if we were unable to attract new highly qualified employees, it could have a material adverse effect on our results of operations, business prospects and financial condition.

#### We are subject to risks associated with doing business internationally.

Our operations internationally are subject to risks that are inherent in conducting business globally. We are subject to compliance with the United States Foreign Corrupt Practices Act ("FCPA") and other similar anti-corruption laws, which generally prohibit companies and their intermediaries from making improper payments to foreign government officials for the purpose of obtaining or retaining business. While our employees and contractors are required to comply with these laws, we cannot be sure that our internal policies and procedures will always protect us from violations of these laws, despite our commitment to legal compliance and corporate ethics. Violations of these laws may result in severe criminal and civil sanctions as well as other penalties, and the Securities and Exchange Commission and U.S. Department of Justice have increased their enforcement activities with respect to the FCPA. The occurrence or allegation of these types of risks may adversely affect our business, performance, financial condition, and results of operations.

#### Changes in tax laws and unanticipated tax liabilities could adversely affect our profitability.

We are subject to income taxes in Canada and numerous foreign jurisdictions. Our effective income tax rate could be adversely affected in the future by a number of factors, including changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, changes in tax laws, and the outcome of income tax audits in various jurisdictions around the world. Many of the countries in which we do business have or are expected to adopt changes to tax laws as result of the Base Erosion and Profit Shifting final proposals from the Organization for Economic Co-operation and Development and specific country anti-avoidance initiatives. Such tax law changes increase uncertainty and may adversely affect our tax provision. We regularly assess all of these matters to determine the adequacy of our tax provision, which is subject to significant judgment.

Our failure to maintain or obtain authorizations under and comply with the U.S. export control and trade sanctions laws and regulations could have a material adverse effect on our results of operations, business prospects and financial condition.

The export of satellites and technical data related to satellites, earth station equipment and provision of services are subject to U.S. export control and economic sanctions laws, implemented by U.S. State Department, Commerce Department and Treasury Department regulations. If we do not maintain our existing authorizations or obtain necessary future authorizations under the export control laws and regulations of the United States, we may be unable to export technical data or equipment to non-U.S. persons and companies, including to our own non-U.S. employees, as required to fulfill existing contracts. If we do not maintain our existing authorizations or obtain necessary future authorizations under the trade sanctions laws and regulations of the United States, we may not be able to provide satellite capacity and related administrative services to certain countries subject to U.S. sanctions. Our ability to acquire new United States-manufactured satellites, procure launch services and launch new satellites, operate existing satellites, obtain insurance and pursue our rights under insurance policies or conduct our satellite-related operations and consulting activities could also be negatively affected if we and our suppliers are not able to obtain and maintain required U.S. export authorizations.

#### The soundness of financial institutions and counterparties could adversely affect us.

We have exposure to many different financial institutions and counterparties (including those under our credit, financing and insurance arrangements), including brokers and dealers, commercial banks, investment banks, insurance providers and other institutions and industry participants. We are exposed to risk, including credit risk resulting from many of the transactions we execute in connection with our hedging activities, in the event that any of our lenders or counterparties, including our insurance providers, are unable to honor their commitments or otherwise default under an agreement with us.

The content of third-party transmissions over our satellites may affect us since we could be subject to sanctions by various governmental entities for the transmission of certain content.

We provide satellite capacity for transmissions by third parties. We do not decide what content is transmitted over our satellites, although our contracts generally provide us with rights to prohibit certain types of content or to cease transmission or permit us to require our customers to cease their transmissions under certain circumstances. A governmental body or other entity may object to some of the content carried over our satellites, such as "adult services" video channels or content deemed political in nature. Issues arising from the content of transmissions by these third parties over our satellites could affect our future revenues, operations or our relationship with certain governments or customers.

#### Risks related to our indebtedness and our Senior Notes

Our substantial debt may adversely affect our cash flow and prevent us from fulfilling our obligations under the Senior Notes and our other outstanding indebtedness.

We have a significant amount of debt. As at December 31, 2018, we had total debt of US\$2,826 million and up to US\$200 million of unused available revolving capacity under the Senior Secured Credit Facilities.

Our substantial amount of debt may have important consequences. For example, it may: make it more difficult for us to satisfy our obligations under the Senior Notes; increase our vulnerability to general adverse economic and industry conditions; require us to dedicate a substantial portion of our cash flow from operations to make interest and principal payments on our debt, thereby limiting the availability of our cash flow to fund future capital expenditures, working capital and other general corporate requirements; limit our flexibility in planning for, or reacting to, changes in our business and in the industries that we service; place us at a competitive disadvantage compared with competitors that have less debt; and limit our ability to borrow additional funds, even when necessary to maintain adequate liquidity.

In addition, a substantial portion of our available borrowings bear interest at variable rates. If market interest rates increase, variable-rate debt will create higher debt service requirements, which may adversely affect our cash flow. While we may enter into agreements limiting our exposure to higher interest rates, any such agreements may not offer adequate protection from this risk.

Despite our current levels of debt, we may incur substantially more debt. This may further exacerbate the risks associated with our substantial debt as described herein and prevent us from fulfilling our obligations under the Senior Notes.

We may incur additional debt in the future. The terms of our Senior Secured Credit Facilities and the indenture governing our Senior Notes will allow us to incur substantial amounts of additional debt, subject to certain limitations. If new debt is added to our current debt levels, the related risks discussed in this "Risk factors" section may be magnified.

Our Senior Notes are effectively subordinated to the Co-Issuers' and the guarantors' indebtedness under the Senior Secured Credit Facilities and any other future secured debt to the extent of the value of the assets securing such debt.

Our Senior Notes, and each guarantee of the Senior Notes, are unsecured and therefore are effectively subordinated to any secured debt that the Co-Issuers or the guarantors may incur to the extent of the value of the assets securing such debt. In the event of a bankruptcy, insolvency or similar proceeding involving a Co-Issuer (as and to the extent applicable to Telesat Canada) or guarantor, the assets which serve as collateral for any secured debt will be available to satisfy the obligations under the secured debt before any payments are made on the Senior Notes. As a result, the holders of our Senior Notes may receive less, ratably, than the holders of secured debt in the event of the Co-Issuers' or the guarantors' bankruptcy, insolvency, liquidation, reorganization, dissolution or other winding up and the Notes may not be repaid. As at December 31, 2018, we had outstanding secured indebtedness of US\$2,326 million and US\$200 million of unused available revolving capacity under the Senior Secured Credit Facilities (not giving effect to US\$0.2 million of outstanding letters of credit). Our Senior Notes are effectively subordinated to any borrowings under our current or future senior credit facilities and our other secured debt to the extent of the value of the assets securing such debt. See also "We may not be able to generate sufficient cash to service all of our indebtedness."

Not all of our subsidiaries guarantee our Senior Notes, and the assets of our non-guarantor subsidiaries may not be available to make payments on our Senior Notes. The Notes will be structurally subordinated to all obligations of the Co-Issuers' existing and future subsidiaries that are not and do not become guarantors of the Notes.

The guarantors of our Senior Notes do not include all of our subsidiaries. Additionally, not all of our future restricted subsidiaries (i.e., subsidiaries required to comply with the covenants in the indenture governing our Senior Notes) will be required to guarantee our Senior Notes. The indenture provides that each existing and future restricted subsidiary that guarantees our obligations under the Senior Secured Credit Facilities or under certain publicly or privately issued debt securities of Telesat Canada or any restricted subsidiary will guarantee our Senior Notes.

Payments on our Senior Notes are only required to be made by the Co-Issuers and the guarantors. As a result, no payments are required to be made from assets of subsidiaries that do not guarantee our Senior Notes, unless those assets are transferred by dividend or otherwise to the Co-Issuers or a guarantor. Also, our Senior Notes are structurally subordinated to all liabilities of non-guarantor subsidiaries. In the event of a bankruptcy, liquidation or reorganization of any of our non-guarantor subsidiaries, these non-guarantor subsidiaries will pay the holders of their debts and their trade creditors before they will be able to distribute any of their assets to us.

In addition, the indenture governing our Senior Notes, subject to some limitations, permits these subsidiaries to incur additional indebtedness and will not contain any limitation on the amount of other liabilities, such as trade payables, that may be incurred by these subsidiaries.

Our subsidiaries that provide guarantees of our Senior Notes will be automatically released from those guarantees upon the occurrence of certain events, including the following: the designation of that guarantor as an unrestricted subsidiary; the release or discharge of any guarantee or indebtedness that resulted in the creation of the guarantee of our Senior Notes by such guarantor; or the sale or other disposition (by amalgamation, merger or otherwise), including the sale of substantially all the assets, of that guarantor.

In addition, any guarantee of our Senior Notes will be released in the event such guarantee is released under the Senior Secured Credit Facilities and certain other publicly or privately issued debt securities. Any guarantee of our Senior Notes will also be suspended during any time in which the Notes are rated investment grade by both Moody's Investors Service, Inc. and Standard & Poor's Ratings Group Inc. and no default or event of default has occurred or is continuing.

If any guarantee is released (or during any period in which any guarantee is suspended), no holder of our Senior Notes will have a claim as a creditor against that subsidiary, and the indebtedness and other liabilities, including trade payables and preferred stock, if any, whether secured or unsecured, of that subsidiary will be structurally senior to the claim of any holders of our Senior Notes.

The agreements governing our debt, including the indenture governing our Senior Notes and the credit agreement governing our Senior Secured Credit Facilities, contain various covenants that impose restrictions on us that may affect our ability to operate our business and to make payments on our Senior Notes.

The agreements governing our debt, including the indenture governing our Senior Notes and the Credit Agreement impose operating and financial restrictions on our activities. For example, the revolving credit facility requires us to comply with a first lien net leverage ratio of 5.75:1.00, tested quarterly when any borrowings are outstanding. The indenture governing our Senior Notes, the Credit Agreement and future debt agreements may also limit or prohibit our ability to, among other things:

- incur additional debt and issue disqualified stock and preferred shares;
- create liens;
- pay dividends, acquire shares of capital stock, make payments on subordinated debt or make investments;
- create or permit to exist specified restrictions on our ability to receive distributions from restricted subsidiaries;
- make certain investments;
- issue guarantees;
- issue or sell the capital stock of restricted subsidiaries;
- sell or exchange assets;

- modify or cancel our satellite insurance;
- enter into certain transactions with affiliates; and
- effect mergers.

These restrictions on our ability to operate our business could seriously harm our business by, among other things, limiting our ability to take advantage of financing, merger and acquisition and other corporate opportunities.

Various risks, uncertainties and events beyond our control could affect our ability to comply with these covenants and maintain this financial ratio. Failure to comply with any of the covenants in our existing or future financing agreements could result in a default under those agreements and under other agreements containing cross-default provisions. A default would permit lenders to accelerate the maturity for the debt under these agreements and to foreclose upon any collateral securing the debt. Under these circumstances, we might not have sufficient funds or other resources to satisfy all of our obligations, including our obligations under the Senior Notes.

The limitations imposed by financing agreements on our ability to incur additional debt and to take other actions might significantly impair our ability to obtain other financing. To service our debt and to fund planned capital expenditures, we will require a significant amount of cash, which may not be available to us.

Our ability to make payments on, or repay or refinance our debt, including our Senior Notes, and to fund planned capital expenditures will depend largely upon our future operating performance. Our future performance, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. In addition, our ability to borrow funds in the future to make payments on our debt will depend on the satisfaction of the covenants in the Senior Secured Credit Facilities and in the indenture governing our Senior Notes and other agreements we may enter into in the future. In addition, if any borrowings are outstanding under the revolving credit facility, we will be required to comply with a first lien net leverage ratio of 5.75:1.00, tested quarterly, and failure to comply will result in an event of default under the revolving credit facility. The indenture governing our Senior Notes and the Credit Agreement contain limitations on our ability to incur additional debt. We cannot assure you that our business will generate sufficient cash flow from operations or that future borrowings will be available to us under the Senior Secured Credit Facilities or from other sources in an amount sufficient to enable us to pay our debt, including our Senior Notes, or to fund our other liquidity needs. As of December 31, 2018, we had US\$200 million of unused available revolving capacity under our Senior Secured Credit Facilities (not giving effect to US\$0.2 million of outstanding letters of credit). In addition, our ability to raise additional capital to refinance our debt or to fund our operations is dependent on capital market conditions.

If our cash flows and capital resources are insufficient to service our indebtedness, we may be forced to reduce or delay capital expenditures, sell assets, seek additional capital or restructure or refinance our indebtedness, including our Senior Notes. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition at such time. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. In addition, the terms of existing or future debt agreements, including the Senior Secured Credit Facilities and the indenture governing our Senior Notes, may restrict us from adopting some of these alternatives. In the absence of such operating results and resources, we could face substantial liquidity problems and might be required to dispose of material assets or operations to meet our debt service and other obligations. We may not be able to consummate those dispositions for fair market value or at all. Furthermore, any proceeds that we could realize from any such dispositions may not be adequate to meet our debt service obligations then due.

#### We may not be able to generate sufficient cash to service all of our indebtedness.

Our ability to make scheduled payments on or refinance our debt obligations depends on our financial condition and operating performance, which are subject to prevailing economic, industry and competitive conditions and to certain financial, business, legislative, regulatory and other factors beyond our control (as well as and including those factors discussed under "Risks related to our business" above). We may be unable to maintain a level of cash flow from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness, including our Senior Notes.

If our cash flow and capital resources are insufficient to fund our debt service obligations, we could face substantial liquidity problems and could be forced to reduce or delay investments and capital expenditures or to dispose of material assets or operations, seek additional debt or equity capital or restructure or refinance our indebtedness, including our Senior Notes. We may not be able to effect any such alternative measures on commercially reasonable terms or at all and, even if successful, those alternative actions may not allow us to meet our scheduled debt service obligations. The Credit Agreement and the indenture governing our Senior Notes will restrict our ability to dispose of assets and use the proceeds from those dispositions and may also restrict our ability to raise debt or equity capital to be used to repay other indebtedness when it becomes due. We may not be able to consummate those dispositions or obtain proceeds in an amount sufficient to meet any debt service obligations then due.

Our inability to generate sufficient cash flow to satisfy our debt obligations, or to refinance our indebtedness on commercially reasonable terms or at all, would materially and adversely affect our financial position and results of operations and our ability to satisfy our obligations under our Senior Notes.

If we cannot make scheduled payments on our debt, we will be in default and holders of our Senior Notes could declare all outstanding principal and interest to be due and payable, the lenders under the Senior Secured Credit Facilities could terminate their commitments to loan money and declare all principal and interest to be due and payable, our secured lenders (including the lenders under the Senior Secured Credit Facilities) could foreclose against the assets securing their borrowings and we could be forced into bankruptcy or liquidation (as and to the extent applicable to Telesat Canada). All of these events could result in your losing your entire investment in our Senior Notes.

We may be unable to make a change of control offer required by the indenture governing our Senior Notes, which would cause defaults under the indenture and the Senior Secured Credit Facilities.

The terms of our Senior Notes will require us to make an offer to purchase our Senior Notes upon the occurrence of a Change of Control Triggering Event (as defined in the indenture) at a purchase price equal to 101% of the principal amount of our Senior Notes, plus accrued and unpaid interest and additional amounts, if any, to, but excluding, the date of the repurchase. Additionally, under the Senior Secured Credit Facilities, a change of control (as defined therein) will constitute an event of default that will permit the lenders to accelerate the maturity of all outstanding principal and interest and terminate their commitments to lend. In addition, our other financing arrangements may require repayment of amounts outstanding in the event of a change of control and may, therefore, limit our ability to fund the repurchase of our Senior Notes in certain circumstances. It is possible that we will not have sufficient funds at the time of the Change of Control Triggering Event to make the required repurchase of our Senior Notes or that restrictions in future financing agreements will not allow the repurchases.

Our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

Borrowings under the Senior Secured Credit Facilities will be at variable rates of interest and will expose us to interest rate risk. Assuming all revolving loans are fully drawn, each quarter percentage point change in interest rates would result in a \$6 million change in annual interest expense on indebtedness under the Senior Secured Credit Facilities. We have entered into, and in the future we may enter into, interest rate swaps that involve the exchange of floating for fixed rate interest payments in order to reduce interest rate volatility. However, we may not maintain interest rate swaps with respect to all or any of our variable rate indebtedness, and any swaps we enter into may not fully mitigate our interest rate risk, may prove disadvantageous or may create additional risks, including risks discussed in "Risks related to our business" above.

Because of the Telesat Canada Reorganization and Divestiture Act, a Canadian act uniquely applicable to Telesat Canada (but not the guarantors, our other subsidiaries or Telesat LLC), Telesat Canada may not have access to the usual protections from creditors and other rights available to insolvent persons, and creditors, including holders of our Senior Notes, may not have recourse to the usual rights, remedies and protections under applicable bankruptcy and insolvency laws generally available to creditors of insolvent persons.

Under the Telesat Canada Reorganization and Divestiture Act ("Telesat Divestiture Act"), Telesat Canada (as a corporate entity) is subject to certain special conditions and restrictions. The Telesat Divestiture Act provides that no legislation relating to the solvency or winding-up of a corporation applies to Telesat Canada and in no case shall the affairs of Telesat Canada be wound up unless authorized by an Act of the Parliament of Canada. As a result of such legislative provisions, Telesat Canada and its creditors, including creditors under the Senior Secured Credit Facilities, and holders of our Senior Notes may not have recourse to the usual rights, remedies and protections under applicable bankruptcy and insolvency laws, including the imposition of a stay of proceedings, or a regulated and orderly process to settle or compromise claims and make distributions to creditors, or recourse to fraudulent preference, transfer at undervalue or fraudulent conveyance laws. The effect of the Telesat Divestiture Act upon an insolvency of Telesat Canada has not been considered by a Canadian court and, accordingly, the application of Canadian federal bankruptcy and insolvency laws and provincial receivership and fraudulent conveyance and assignment and preference laws, and the exercise by a Canadian court of any judicial discretion which could affect the enforcement of rights and remedies or other equitable relief against Telesat Canada in the context of an insolvency, is uncertain. To the extent bankruptcy and insolvency laws do not apply to Telesat Canada, its creditors may individually seek to pursue any available rights or remedies, as secured or unsecured creditors as the case may be, against Telesat Canada and its assets. The assets of Telesat Canada only (including its shares in its subsidiaries) are subject to the Telesat Divestiture Act, but the assets of the guarantors, including the subsidiary guarantors, are not. These restrictions may have a material impact on the sale of Telesat Canada or its assets in any bankruptcy or reorganization scenario and on any proceeding to realize value from Telesat Canada or its assets.

Insolvency laws of jurisdictions outside the United States may preclude holders of our Senior Notes from recovering payments due under our Senior Notes.

The Co-Issuers and the guarantors are incorporated in a variety of jurisdictions, some of which are jurisdictions other than the United States. In addition, the parties to certain key agreements affecting the rights of the holders of our Senior Notes and their ability to recover under our Senior Notes are incorporated in jurisdictions other than the United States. The insolvency laws of some of these other jurisdictions may not be as favorable to the holders of our Senior Notes as the laws of the United States or other jurisdictions.

The guarantees associated with our Senior Notes may not be enforceable because of fraudulent preference, transfer at undervalue or fraudulent conveyance laws.

Fraudulent preference, transfer at undervalue and fraudulent conveyance laws in the United States and Canada have been enacted for the protection of creditors. Under these fraudulent preference, transfer at undervalue or fraudulent conveyance laws, a United States or Canadian court could subordinate the guarantees granted under the indenture governing our Senior Notes to the guaranters' present and future indebtedness and a United States or Canadian court could take other actions detrimental to your interests as a holder of our Senior Notes, including voiding the guarantees and payments made under the guarantees. The United States or Canadian courts could take that action if it found that at the time the guarantee was incurred, such guarantor:

- incurred this debt with the intent of hindering, delaying, defeating or defrauding current or future creditors or incurred the debt with a view to, or having the effect of, preferring one set of creditors over other creditors;
- received less than reasonably equivalent value or fair consideration for incurring this debt and the guarantor;
- was insolvent or was rendered insolvent by reason of the related financing transactions;

- was engaged, or about to engage, in a business or transaction for which its remaining assets constituted unreasonably small capital to carry on its business; or
- intended to incur, or believed that it would incur, debts beyond its ability to pay these debts as they mature, as all of the foregoing terms are defined in or interpreted under the relevant fraudulent transfer or conveyance statutes.

The measure of insolvency for purposes of the foregoing considerations will vary depending upon the law of the jurisdiction that is being applied in any such proceeding. Generally, an entity would be considered insolvent if, at the time it incurred the debt or issued the guarantee:

- it could not pay its debts or contingent liabilities as they become due;
- the sum of its debts, including contingent liabilities, is greater than its assets, at fair valuation;
- it cannot or has not paid its debts or obligations as they generally become due; or
- the present fair saleable value of its assets is less than the amount required to pay the probable liability on its total existing debts and liabilities, including contingent liabilities, as they become absolute and mature.

If a guarantee is voided as a fraudulent preference, transfer at undervalue or fraudulent conveyance or found to be unenforceable for any other reason, you will not have a claim against that guaranter and will only be our creditor or that of any guaranter whose obligation was not set aside or found to be unenforceable. In addition, the loss of certain guarantees will constitute a default under the indenture governing our Senior Notes, which default could cause all outstanding Senior Notes to become immediately due and payable and would likewise trigger a default under the Senior Secured Credit Facilities.

#### We believe that the guarantors:

- did not have the intent of hindering, delaying or defrauding any creditors;
- did not receive less than reasonably equivalent value or fair consideration for incurring the debt;
- were not insolvent or rendered insolvent by the incurrence;
- had sufficient capital to run our or their businesses effectively;
- were able to pay obligations on our Senior Notes and the guarantees, together with their other debts, as they mature or become
- did not incur the debt with a view to, nor did the incurrence have the effect of, giving a preference over any other creditors.

In reaching the foregoing conclusions we have relied upon our analyses of internal cash flow projections and estimated values of the assets and liabilities of the guarantors. In addition, we have relied on a limitation to be contained in the guarantors' guarantees that limits each guarantee as necessary to prevent it from constituting a fraudulent conveyance under applicable law. However, a court passing judgment on these questions might not reach the same conclusions. See also "Because of the Telesat Canada Reorganization and Divestiture Act, a Canadian act uniquely applicable to Telesat Canada (but not the guarantors, our other subsidiaries or Telesat LLC), Telesat Canada may not have access to the usual protections from creditors and other rights available to insolvent persons, and creditors, including holders of our Senior Notes, may not have recourse to the usual rights, remedies and protections under applicable bankruptcy and insolvency laws generally available to creditors of insolvent persons."

Because each guarantor's liability under its guarantee may be reduced to zero, voided or released under certain circumstances, the holders of our Senior Notes may not receive any payments from some or all of the guarantors.

The holders of our Senior Notes have the benefit of the guarantees of the guarantors. However, the guarantees by the guarantors are limited to the maximum amount that the guarantors are permitted to guarantee under applicable law. As a result, a guarantor's liability under its guarantee could be reduced to zero, depending on the amount of other obligations of such guarantor. In particular, in certain jurisdictions, a guarantee issued by a company that is not in the company's interests, the burden of which exceeds the benefit to the company, or which is entered into within a certain period prior to insolvency or bankruptcy, may not be valid and enforceable. Further, under the circumstances discussed more fully above, a court under Federal or state fraudulent conveyance and transfer statutes or Canadian court under federal or provincial legislation relating to fraudulent conveyance or fraudulent preferences could void the obligations under a guarantee or further subordinate it to all other obligations of the guarantor. In addition, you will lose the benefit of a particular guarantee if it is released under certain circumstances.

#### The reoffering and resale of our Senior Notes is subject to significant legal restrictions.

Our Senior Notes have not been, and will not be, registered under the Securities Act or any state securities laws. As a result, holders of our Senior Notes may reoffer or resell our Senior Notes only if: there is an applicable exemption from the registration requirements of the Securities Act and applicable state laws that applies to the circumstances of the offer and sale; or the Senior Notes are sold pursuant to an effective registration statement.

We are not required and do not intend to register our Senior Notes for resale under the Securities Act, the securities laws of any state or any other jurisdiction. Furthermore, we are not required and do not intend to offer to exchange our Senior Notes for notes registered under the Securities Act, the laws of any state or any other jurisdiction.

#### You should not rely on Telesat LLC in evaluating an investment in our Senior Notes.

Telesat LLC was formed in connection with the initial funding of the Telesat Canada Acquisition in 2007 and for the issuance of notes and currently has no independent operations and no assets and generally will be prohibited from engaging in any material business activities, except in connection with the incurrence of indebtedness permitted under the indenture governing our Senior Notes, including guaranteeing or borrowing under the Senior Secured Credit Facilities, and activities incidental thereto. You should therefore not rely upon Telesat LLC in evaluating whether to invest in our Senior Notes.

# A lowering or withdrawal of the ratings assigned to our Senior Notes by rating agencies may increase our future borrowing costs and reduce our access to capital.

Our Senior Notes have a non-investment grade rating, and any rating assigned could be lowered or withdrawn entirely by a rating agency if, in that rating agency's judgment, future circumstances relating to the basis of the rating, such as adverse changes, so warrant. Consequently, real or anticipated changes in our credit ratings will generally affect the market value of our Senior Notes.

Credit ratings are not recommendations to purchase, hold or sell our Senior Notes. Additionally, credit ratings may not reflect the potential effect of risks relating to the structure or marketing of our Senior Notes. Any future lowering of our ratings likely would make it more difficult or more expensive for us to obtain additional debt financing. If any credit rating initially assigned to our Senior Notes is subsequently lowered or withdrawn for any reason, you may not be able to resell your Senior Notes at a favorable price or at all.

# Many of the covenants in the indenture governing our Senior Notes will not apply during any period in which our Senior Notes are rated investment grade by both Moody's and Standard & Poor's.

Many of the covenants in the indenture governing our Senior Notes will not apply to us during any period in which our Senior Notes are rated investment grade by both Moody's and Standard & Poor's, provided at such time no default or event of default has occurred and is continuing. Such covenants restrict, among other things, our ability to pay distributions, incur debt and enter into certain other transactions. There can be no assurance that our Senior Notes will ever be rated investment grade, or that if they are rated investment grade, that our Senior Notes will maintain these ratings. However, suspension of these covenants would allow us to engage in certain transactions that would not be permitted while these covenants were in force. To the extent the covenants are subsequently reinstated, any such actions taken while the covenants were suspended would not result in an event of default under the indenture governing our Senior Notes.

#### Our significant shareholders may have interests that conflict with the interests of the holders of our Senior Notes.

As at December 31, 2018, Loral owned approximately 63% of the economic interest of Telesat Canada, and PSP Investments owned approximately 36%. We are controlled by our board of directors which is comprised of ten members, three nominated by Loral, three nominated by PSP Investments and four independent directors selected by a nominating committee comprised of one PSP Investments nominee, one Loral nominee and one of the independent directors then in office. Loral and PSP Investments together can effectively control any vote. Additionally, Loral has veto rights with respect to certain decisions that require shareholder approval. Circumstances may occur in which the interests of our shareholders could be in conflict with the interests of the holders of the Senior Notes. For example, our shareholders, subject to the limitations in the indenture governing our Senior Notes and the credit agreement governing our Senior Secured Credit Facilities, could approve the payment of dividends or other distributions to our shareholders, reducing the cash we have available to pay our debts, including the Notes. In addition, our shareholders may have an interest in pursuing acquisitions, divestitures, additional financing or monetization activities or other transactions that, in their judgment, could enhance their equity investment even though such transactions might involve risks to the holders of our Senior Notes if the transactions resulted in our acquiring more debt or significantly changed the nature of our business operations or strategy. In addition, if we encounter financial difficulties, or we are unable to pay our debts as they mature, the interests of our shareholders might conflict with those of the holders of our Senior Notes. In that situation, for example, the holders of our Senior Notes might want us to raise additional equity from existing shareholders or other investors to reduce our leverage and pay our debts, while existing shareholders might not want to increase their investment in us or have their ownership diluted and may instead choose to take other actions, such as selling our assets.

In addition, we have been advised that Loral and PSP have entered into discussions regarding potential strategic transactions and certain governance matters related to Telesat. Loral's public disclosure indicates that it remains interested in and, when market conditions are favorable and if PSP agrees, it plans to continue to pursue a strategic transaction, such as monetizing its interest in Telesat through the combination of Loral and Telesat into one public company or through the sale of Loral. There can be no assurance as to when or whether Loral and PSP may be able to conclude any strategic transaction or that any strategic initiatives or transactions involving Telesat may occur. Purchasers of our Senior Notes should consider the implications of any such potential transactions when making a decision to invest in the Notes.

Pending the outcome of the discussions between Loral and PSP, Loral, PSP and Telesat entered into an agreement which preserves the parties' right to assert against one another legal claims relating to Telesat. We were advised by Loral that Telesat was included as a party to the agreement solely because Loral believes that, as a technical matter of Canadian law and for purposes of potentially seeking equitable relief, Telesat may be a necessary party. Although we were further advised by Loral and PSP that neither of them intends to seek monetary damages against Telesat and we are not aware of any basis upon which Loral or PSP could seek monetary damages against us, there can be no assurance that Loral and/or PSP will not seek monetary damages against Telesat in the future. There can be no assurance that, if the agreement lapses, Loral and PSP will not pursue legal claims against one another relating to Telesat.

Various funds affiliated with MHR hold, as at December 31, 2018, approximately 39.9% of Loral's outstanding voting common stock and 58.4% of Loral's total outstanding voting and non-voting common stock. Mark H. Rachesky, M.D., chairman of our board of directors and non-executive chairman of the board of directors of Loral, is the co-founder and president of MHR.

#### Item 4. Information on the Company

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

Telesat Interco was incorporated under the CBCA on November 23, 2006 in contemplation of an acquisition of Telesat Canada and the related transfer of Loral Skynet to Telesat Canada, which we refer to as "the Telesat Canada transaction." Telesat Canada was originally formed in 1969 by the Telesat Canada Act, or the Telesat Act. In 1972, Telesat Canada launched the world's first domestic commercial satellite in geostationary orbit and continued as a pioneer in technical and commercial innovation with the first commercial Ku-band satellite in 1978, Canada's first DBS satellite in 1999 and the first consumer 2-way Ka-band broadband internet service via satellite in 2004. Since the mid-1970's, Telesat has provided satellite services for voice, data and broadcast communications across Canada, including the far north, bringing to those isolated areas services similar to ones available in major centres. As part of its government divestiture, pursuant to the Telesat Divestiture Act, Telesat Canada was continued on March 27, 1992 under the CBCA, the Telesat Act was repealed and the government sold its shares in Telesat Canada to Alouette Telecommunications Inc. ("Alouette"), which subsequently became a wholly-owned subsidiary of BCE. Alouette was amalgamated with Telesat Canada on January 1, 2007 under the name "Telesat Canada." On October 31, 2007, Telesat Canada amalgamated with 436320 Canada Inc., a wholly-owned subsidiary of Telesat Interco, to continue as Telesat Canada.

Loral Skynet, a Delaware corporation, was a wholly-owned subsidiary of Loral Space & Communications Holdings Corporation, a Delaware corporation ("LSC Holdings"). Through earlier mergers and acquisitions, Loral Skynet traces its history to two of the originating businesses in United States satellite communications with more than 40 years of experience: AT&T Skynet and Orion Satellite Corporation ("Orion").

AT&T Skynet and its predecessor organizations in AT&T Bell Laboratories launched the satellite industry by demonstrating the first trans-Atlantic satellite delivery of television on Telstar 1 in 1962. Through the 1970s, 1980s and 1990s, AT&T Skynet provided industry-leading telephone and television services in the United States for AT&T and leading television broadcasters and cable operators on the Comstar and Telstar series of satellites. In 1997, AT&T Skynet was acquired from AT&T by LSC Holdings, became Loral Skynet, and expanded from United States only to global satellite operations. Orion was formed in 1988 for the purpose of launching international VSAT services and expanding newly enabled "separate system" international services. In 1994, Orion launched Orion 1, which provided early trans-Atlantic VSAT services between the United States and Europe. Orion was the second United States licensed "separate system" authorized to compete directly with Intelsat for certain types of international satellite services. Orion was acquired by LSC Holdings in 1998 and merged operationally with Loral Skynet in 1999. In July 2003, Loral Space & Communications Ltd. ("Old Loral") and its subsidiaries, including the predecessor business that constitutes Loral Skynet, sought protection under chapter 11 of the United States federal bankruptcy code. Loral and Loral Skynet succeeded to the business of Old Loral in connection with a chapter 11 plan of reorganization when Old Loral emerged from bankruptcy in November 2005.

### The Telesat Canada Acquisition

On October 31, 2007, Telesat Interco, a Canadian company and wholly-owned subsidiary of Holdings, a Canadian company indirectly owned by PSP Investments and Loral, acquired 100% of the stock of Telesat Canada and certain other assets from BCE for \$3.25 billion (approximately US\$3.42 billion at an October 31, 2007 exchange rate of USD\$1.00/\$0.9499) (the "Telesat Canada Acquisition").

PSP Investments, through its wholly-owned subsidiary, Red Isle Private Investments Inc. ("Red Isle"), contributed to Holdings US\$525 million in cash in exchange for (a) shares of 7% fixed rate senior non-convertible PIK mandatorily redeemable preferred stock of Holdings, (b) common shares of Holdings representing approximately 30% of the participating equity of Holdings, and (c) voting participating preferred shares of Holdings representing approximately 6% of the participating equity of Holdings. The voting participating preferred shares are convertible into common shares on a one-for-one basis and have all of the rights of common shares, except that they do not have the right to vote for the election of directors of Telesat Canada. The voting participating preferred shares do not have any liquidation preference or dividend rights above the common shares. In a related transaction, Red Isle transferred to Holdings \$55,163,172, representing the market value of certain foreign exchange contracts entered into by Red Isle, in exchange for the issuance to Red Isle of a portion of the 36% equity shareholding acquired by Red Isle, in the form of voting participating preferred shares. We refer to these equity contributions as the "Equity Financing."

### **The Skynet Transaction**

On October 31, 2007, in connection with the Telesat Canada acquisition, Loral Skynet transferred substantially all of its assets (the "Loral Skynet Business") to Holdings pursuant to an asset transfer agreement (the "Asset Transfer Agreement"). In exchange for the transfer of such assets, Holdings issued to a subsidiary of Loral common shares representing 33<sup>1</sup>/<sub>3</sub>% of all voting and participating equity rights outstanding after such issuance and non-voting participating preferred shares representing 30<sup>2</sup>/<sub>3</sub>% of all participating equity of Holdings outstanding after such issuance. The non-voting participating preferred shares of Holdings acquired by a subsidiary of Loral are convertible into common shares on a one-for-one basis if held by a shareholder that is "Canadian" for Canadian regulatory purposes. These non-voting participating preferred shares do not have any liquidation preference or dividend rights above common shares of Telesat Canada.

In addition, on October 31, 2007, Skynet Satellite Corporation ("SSC"), a Delaware corporation which became an indirect wholly-owned subsidiary of Holdings as of the closing of the Asset Transfer Agreement, purchased from Loral Skynet certain other assets and assumed certain liabilities of Loral Skynet for the purchase price of US\$25,472,000 in marketable securities pursuant to the terms of an asset purchase agreement (the "Asset Purchase Agreement"). We refer to the transfer of the Loral Skynet Business to us pursuant to the Asset Transfer Agreement and the Asset Purchase Agreement as the Skynet Transaction.

Holdings also, subject to certain exceptions, assumed the liabilities of the Loral Skynet Business.

## **Telesat Reorganization**

Immediately following the Telesat Canada acquisition, (i) all of the shares of Telesat Canada acquired by Telesat Interco in the Telesat Canada acquisition were transferred to 4363230 Canada Inc. in exchange for the issuance to Telesat Interco of common shares of 4363230 Canada Inc.; (ii) 4363230 Canada Inc. and Telesat Canada were amalgamated under the name "Telesat Canada"; and (iv) the Loral Skynet Business acquired by Holdings was transferred to Telesat Interco, and then to Telesat Canada, in exchange for the issuance to Telesat Interco of common shares of Telesat Canada. These transactions are referred to as the "Telesat Reorganization."

As a result of the Telesat Reorganization all of the assets of Telesat Canada before its amalgamation became the assets of the amalgamated Telesat Canada, the Loral Skynet Business became owned by Telesat Canada and Telesat Canada became a wholly-owned subsidiary of Telesat Interco.

### **Telesat Amalgamation**

Effective January 1, 2017, Holdings completed a corporate reorganization pursuant to which Holdings amalgamated with Telesat Interco Inc. and immediately thereafter the newly amalgamated company amalgamated with Telesat Canada. The continuing entity, existing under the laws of Canada, is named Telesat Canada. As a result of the amalgamation, the share capital of Holdings became the share capital of Telesat Canada.

As at December 31, 2018, Loral indirectly held shares in Telesat Canada effectively representing approximately 62.7% of the economic interests and 32.6% of the voting power of Telesat Canada and PSP Investments indirectly held shares effectively representing approximately 36.2% of the economic interests, 67.4% of the voting power, other than in respect of the election of directors, and together with two other Canadian shareholders, 67.4% of the voting power for the election of directors, of Telesat Canada. As at December 31, 2018, certain current and former Telesat employees held shares representing 1.1% of the economic interests of Telesat Canada.

## **Additional Information on the Company**

Our filings with the Securities and Exchange Commission are available at http://www.sec.gov. We also maintain a website at https://www.telesat.com, which provides additional information about the Company. The information contained in, or that can be accessed through, our website is not a part of this Annual Report on Form 20-F.

## **B.** Business overview

We are a leading global satellite operator. Our satellite fleet and ground infrastructure provide a powerful platform supporting (i) strong video distribution and DTH neighborhoods in North America characterized by long-term contracts with blue chip customers and significant contractual backlog, (ii) an efficient enterprise and government services business that provides customers in Canada with end-to-end communications services and (iii) satellite services for customers outside of North America for backhaul, corporate networks, maritime and aero services, and video distribution and contribution.

Through our deep commitment to customer service and focus on innovation and engineering excellence, we have developed strong relationships with a diverse range of high-quality customers, including many of the world's preeminent video and data service providers. Our current customers include North American DTH providers Bell TV, Shaw Direct and EchoStar/DISH Network, and leading international telecommunications service providers SpeedCast, Telefonica, Vodafone, BT, Panasonic Avionics, Global Eagle and Omni Access.

Our North American Broadcast and Enterprise Services customer service contracts are typically multi-year in duration and, in the past, we have successfully contracted all or a significant portion of a satellite's capacity prior to commencing construction. As a result, we had approximately \$3.7 billion in contracted revenue backlog as at December 31, 2018. See "Sales and marketing — Revenue backlog" for additional information.

Our state-of-the art satellite fleet is comprised of 17 geostationary satellites offering global coverage with a concentration over the Americas. See "Property, plants and equipment — In-orbit satellites" for details. Our Nimiq 1 and Nimiq 2 satellites are primarily used to provide short-term services to other operators who use the satellites at their designated orbital locations to preserve their spectrum rights. Our Telstar 18 VANTAGE satellite is now operational, having replaced Telstar 18 and is providing expanded services from the 138° EL orbital location. Our Telstar 19 VANTAGE satellite is now operational and is colocated with Telstar 14R/Estrela do Sul 2 expanding upon the services we are able to provide from our 63° WL orbital location. In addition, in January 2018 we launched a Kaband satellite into low earth orbit ("LEO") as part of our plans to deploy an advanced, global LEO constellation. This satellite is being used to perform testing and live demonstrations of certain features of our LEO system design with existing Telesat customers and potential suppliers of Telesat LEO system hardware. These satellite leaders will be able to experience key advantages of the Telesat's LEO system — including ultra-low latency and high speeds — and assess the role Telesat's constellation can play in their next-generation broadband networks. We also manage the operation of additional satellites for third parties.

We believe our global satellite fleet, access to desirable spectrum rights, and strong relationships with our customers underpin our established, predictable core business, and provide us with the opportunity to capitalize on the growth drivers in the satellite industry and the markets we serve.

### **Industry Overview and Trends**

We compete in the market for the provision of voice, data, video and internet connectivity services worldwide. Services of this type are provided using various technologies, including satellite networks. We currently operate in the FSS sector of the satellite industry. Operators in the FSS sector provide communications links between fixed points on the earth's surface, referred to as point-to-point services, and from one point to multiple points, referred to as point-to-multipoint services. Increasingly, the FSS sector is also providing services to mobile platforms, such as ships and airplanes. Over the last several decades, deregulation and privatization have significantly reshaped the FSS sector. In addition, the sector has undergone consolidation, with regional and national operators being acquired by larger companies or seeking to partner with other providers. In addition, there have been many new, smaller entrants, including many governmental operators, launching national or regional satellite programs.

## Satellite Systems

A generic satellite system consists of a space segment and an earth segment. The "space segment" is comprised of the satellites and the TT&C systems and facilities used to control and monitor the satellites. The "earth segment" is made up of all of the communication earth stations and other devices that access operational satellites. A satellite has two primary components: the communications payload and the spacecraft bus. In its simplest form, the communications payload consists of the antennas and transponders which receive the signals from earth at one frequency, amplify them, and transmit them back to earth at a different frequency. The spacecraft bus is essentially comprised of all of the non-communications equipment, including the electrical and TT&C subsystems, the propulsion and thermal subsystems and the spacecraft structure itself.

Satellites in geosynchronous orbit ("GEO") circle the earth from orbital locations approximately 22,300 miles (35,700 kilometers) above the equator. The speed at which they orbit the earth corresponds to the speed of the earth's rotation. As a result, each geosynchronous satellite in essence "blankets" a fixed geographic area with its signals, and an earth station antenna on the earth can communicate continuously with a particular satellite if it is pointed to, and has an unobstructed view of, that satellite's orbital location. An individual satellite can be designed to communicate with major portions of the earth via large, geographically dispersed beams, to focus its coverage more specifically on particular markets or regions through regional or spot beams, or to use a portion of its total capacity for each type of coverage.

The non-geostationary orbit, or NGSO, includes satellites operating in Low Earth Orbit, or LEO, with an altitude typically between 500 and 870 miles (800 to 1400 kilometers) and satellites operating in Medium Earth Orbit, or MEO, that is between the LEO and GEO orbits. Unlike geosynchronous satellites that operate in a fixed orbital location above the equator, LEO and MEO satellites travel around the earth at high velocities requiring antennas on the ground to track their movement. LEO satellite systems have the potential to offer a number of advantages over GEO satellites to meet growing requirements for broadband services, both consumer and commercial, by providing increased data speeds and capacity, global coverage, and latency on par with or potentially better than terrestrial services.

### Satellite Communication Benefits

Satellite operators compete with terrestrial network operators (e.g., cable, DSL, fiber optic, cellular/wireless and microwave transmission) in the market for video, data and voice communication services. We believe that satellite services have several advantages over these competing communication platforms, including:

- satellite remains a cost-effective and efficient means to deliver a signal (TV, radio, internet) to hundreds or millions of locations in a large geographic area;
- the ability to provide ubiquitous coverage over a large geographic region allowing for the addition of sites at a lower marginal cost. Unlike cable and fiber lines, satellites can readily provide broadcast and communication services over large areas and to remote locations where the population density may not be high enough to warrant the expense of building a terrestrial-based communications network:
- the ability to deploy communications quickly in locations where little or no infrastructure is available, for example in the case of natural disaster response; and
- the ability to bypass shared and congested terrestrial links, further enhancing network performance.

Terrestrial alternatives, such as fiber optic cable, are superior to satellite in some circumstances and can be used in conjunction with satellite to provide a hybrid network that makes use of the inherent advantages of both technologies. Generally, in areas well-served by terrestrial networks or for point-to-point communications, terrestrial alternatives may have a cost advantage, while more dispersed, point-to-multipoint communications may be better served by satellite. See "Competition" for additional information about terrestrial based-services.

Supply and Demand Dynamics for Fixed Satellite Services

Satellite operators typically provide services on their satellites to customers who use the capacity for their own communications requirements or to provide satellite-based services to customers further down the distribution chain.

#### Demand

Demand for satellite services is primarily driven by: economic growth, both generally and within a particular geographic area; growth in product or service markets; growth in demand for bandwidth-intensive applications; and improved regulatory access to new and existing markets.

Key factors expected to drive satellite services growth in the coming decade are as follows:

- Consumer broadband As demand for high speed internet services continues to grow, many regions in the developed and underdeveloped world continue to lack terrestrial communications infrastructure that can deliver required speeds and reliability. Backhaul Satellites allow telecom operators to expand the reach of their fixed and mobile networks to locations not served,
- or under served, by terrestrial networks by connecting these off-network locations to their main networks. Growing demand for fixed and mobile data is anticipated to drive growth for satellite backhaul services.

- Corporate networks As economic growth accelerates in parts of the world with poor terrestrial infrastructure, corporate enterprises expanding their activities in these regions drive demand for increased satellite capacity.
  - Maritime and Aeronautical services As broadband connectivity becomes more central to businesses and individuals, the need to stay connected has spread to locations that cannot readily access terrestrial networks. Commercial maritime vessels including cruise ships, cargo carriers, container vessels and oil tankers are making greater use of satellite services to provide
- reliable broadband to passengers, improve operations and support crew morale. In aeronautical markets, satellite broadband for passenger and crew communications is also growing and has become a significant driver of demand as airlines around the world continue to implement in-flight Wi-Fi in passenger cabins along with secure broadband for the cockpit.
  - Video services In developing markets, such as Latin America, Sub-Saharan Africa and parts of Asia, satellite operators are experiencing increased demand for satellite capacity for both video distribution and contribution. Although highly developed markets of North America and Western Europe have recently experienced a small decline in satellite capacity demand for video services, the global demand outlook is more favorable and is being driven by a growing number of HDTV channels, which
- services, the global demand outlook is more favorable and is being driven by a growing number of HDTV channels, which require two-to-three times more bandwidth than standard definition channels. New forms of content and enhanced services such as Ultra HD are also expected to drive demand for capacity.
- Government digital inclusion Digital inclusion projects government supported initiatives to bring broadband services
   to rural and remote communities and those with limited terrestrial infrastructure are important and growing in both developed and developing nations.
  - **Resource sector** Satellite services demand in the resource sector has largely been driven by oil and gas exploration, and the level of such exploration has largely been driven by global economic growth. Increased oil supply and reduced economic growth in many countries have led to decreased prices and a slowdown in exploration and production in much of the world. As a result, a number of energy projects have been scaled back or put on hold, which has adversely affected demand for satellite
- capacity used by the networks that support these projects. To the extent that levels of exploration and extraction were to increase, we expect it may drive demand for our satellite services. In addition, the current and increasing focus on safety concerns in the resource sector is leading to the implementation of diverse, redundant communications for monitoring and control of resource infrastructure (for example, pipelines), including video, which may drive demand for increased satellite services.
  - Military satellite communications ("Milsatcom") The U.S. Government is the single largest user of commercial satcom and most of this use relates to U.S. Department of Defense (DoD) operations. Global defense spending has been growing for five consecutive years and analysts report that 2018 saw the highest spending levels since the end of the Cold War. This is
- expected to drive increased global requirements for commercial Milsatcom. Commercial satellites support secure communications, surveillance, reconnaissance, mobile communications, including support for Unmanned Aerial Vehicles (UAVs), logistics, troop welfare and a host of other services.
  - Internet of things A vast number of physical objects factories, appliances, machinery, electric grids and other infrastructure now have the capability to monitor their environment, report status, receive instructions, and take action based on information they receive. This is all part of the Internet of Things ("IoT") that already has billions of devices in use
- worldwide and which is forecasted to grow at a 17 percent average yearly rate to 2025. Reliable communications are essential for IoT to work and, while most IoT connections will likely be by terrestrial wireless, the growth in the number of connected devices is expected to drive increased demand for satellite services.

Supply

Satellite capacity supply is impacted by the scarcity of radio spectrum and financial, regulatory and other barriers to entry that characterize the satellite services industry. There is limited radio frequency spectrum available to commercial communications satellite operators. As a result, a limited number of satellites can be placed into service over any particular geographic area. New entrants must face the significant capital costs of procuring a satellite and must maintain the financial and highly specialized technical resources required to operate a satellite system and market its services. Other regulatory requirements must also be satisfied before a new entrant can provide services to, from, or within a specific country.

Available supply of satellite capacity varies significantly by region, frequency and customer requirements. Existing satellite operators that have orbital locations with a significant number of remote satellite dishes pointed at them have a meaningful competitive advantage over potential new entrants. With respect to video distribution, "neighborhoods" develop where many thousands of cable headends or millions of consumer satellite dishes are pointed at a specific orbital location or locations. Due to the often prohibitive cost of re-pointing dishes, video distribution networks and other networks with a significant number of remote satellite sites have a strong preference for securing expansion satellite capacity from satellites located at the orbital location(s), or neighborhoods, at which their or their customers' satellite dishes are pointed.

HTS capacity is becoming increasingly available. HTS rely on multiple spot beams and frequency reuse to deliver greatly increased throughput versus traditional satellites for the same amount of allocated frequency. Many of the new and replacement satellites to be deployed in the near term will be high throughput satellites or will include high throughput payloads. In addition, second generation HTS systems recently launched and in development purport to be capable of throughput that substantially exceeds the throughput of first generation HTS. Also, new entrants, many with the support of export credit agency financing, have brought and are bringing additional capacity to the market. This is expected to result in a significant increase in the supply of satellite capacity.

A number of global NGSO satellite systems, including our own, have been announced and are now in development. As these new systems are deployed they may significantly increase the supply of services that will compete with traditional satellite services.

### **Competitive strengths**

Our business is characterized by the following key competitive strengths:

Leading Global Satellite Operator

We are a leading global satellite operator and the largest satellite operator in Canada, with a strong and stable business. We have a leading position as a provider of satellite services in the North American video distribution market. We provide services to both of the major DTH providers in Canada, Bell TV and Shaw Direct, which together have approximately 2.0 million subscribers, as well as to EchoStar (DISH Network) in the United States, which has approximately 10.3 million subscribers. Our international satellites are well positioned to serve a number of growing markets and serve a range of important customers in those markets.

Blue Chip Customer Base

We offer our broad suite of satellite services to more than 400 customers worldwide, which include some of the world's leading DTH service providers, ISPs, network service integrators, telecommunications carriers, corporations and government agencies. Over almost 50 years of operation, we have established long-term, collaborative relationships with our customers and have developed a reputation for creating innovative solutions and providing services essential for our customers to reach their end users. Our customers represent some of the strongest and most financially stable companies in their respective industries. A number of these customers have historically committed to long-term contracts for our services, which enhances the predictability of our future revenues and cash flows and supports our future growth. Our customers include:

- Broadcast: North American DTH providers Bell TV, Shaw Direct, EchoStar (DISH Network), and leading telecommunications and media firms such as AMC Networks International, Bell Media and NBC Universal.
- Enterprise: Bell Canada, BT, Claro S.A., ViaSat, SpeedCast, Global Eagle, Leidos Innovations, SSI Micro, Northwestel, Panasonic, Suncor and Xplornet Communications.
- Consulting: Airbus, Lockheed Martin, MDA Geospatial Services, Mitsubishi Electric and ViaSat.

Large Contracted Backlog and Young Satellite Fleet Underpin Anticipated Growth and High Revenue Visibility

Historically, we have been able to generate strong cash flows from our operating activities due to the high operating margins in the satellite industry and our disciplined control of expenses. The stability of our cash flows is underpinned by our large revenue backlog. As at December 31, 2018, we had contracted backlog for future services of approximately \$3.7 billion, which represents a multiple of approximately 4.1 times revenue for the twelve months ended December 31, 2018. Of the approximately \$3.7 billion backlog, we anticipate that approximately 20% will be recognized as revenue in 2019 and the balance to be recognized in 2020 and thereafter. Historically, we have been able to generate significant backlog by entering into long-term contracts with our customers, in some cases for all or substantially all of a satellite's orbital maneuver life. In addition to this backlog, we have historically experienced a high proportion of contract renewals. Together these two factors have produced ongoing, stable cash flows.

Many of our satellites are relatively new and will not need to be replaced for a significant period of time, which defers replacement capital expenditures.

### Portfolio of Orbital Real Estate

Our satellites occupy attractive orbital locations that provide us with an advantageous position in the markets in which we operate due to the scarcity of available satellite spectrum and the strong neighborhoods we have developed at these locations. Access to these orbital locations, coupled with the high capital intensity of the satellite industry, creates barriers to entry in those markets. We are licensed by the Department of Innovation, Science and Economic Development Canada ("ISED") to occupy a number of key orbital locations that are well-suited to serve the Americas and support our leading position in North America. Our international satellites also occupy highly desirable orbital locations that enable broad pan-regional service with interconnectivity between regions, making them attractive for both intra- and inter-regional services. We have rights to additional spectrum, including at certain existing orbital locations.

We also have rights to use Ka-band and V-band to operate a global LEO satellite constellation. LEO satellite systems have the potential to offer a number of advantages over GEO satellites to meet growing requirements for broadband services by providing increased data speeds and capacity, global coverage, and latency on par with or potentially better than terrestrial services. Our first LEO satellite was launched in January 2018 and being used to support live demonstrations of certain features of our LEO system design with existing Telesat customers and potential suppliers of Telesat LEO system hardware. These satellite leaders will be able to experience key advantages of the Telesat's LEO system — including ultra-low latency and high speeds – and assess the role Telesat's constellation can play in their next-generation broadband networks.

Global Operations Provide Revenue Diversification and Economies of Scale

The combination of our North American broadcast and enterprise services businesses and our international business offers diversity in terms of both the customers and regions served as well as the services provided.

Moreover, as the operator of a fleet of 17 satellites plus multiple other satellites for third parties, we have attained meaningful scale to allow us to leverage our relatively fixed cost base to achieve substantial operating margins.

## **Business strategy**

We are committed to continuing to provide the strong customer service and focus on innovation and technical expertise that have allowed us to successfully build our business to date. Building on our existing activities and large contracted revenue backlog, we will continue to focus on increasing the utilization of our existing satellite capacity, maintaining our operating efficiency and, in a disciplined manner, using our strong cash flows to grow our in-orbit satellite capacity and strengthen our business.

Continue to Grow Our Core Business

We believe our satellite fleet offers a strong combination of existing backlog and available capacity that provides a solid foundation upon which we will seek to grow our revenues and cash flows. To achieve this growth, we will seek to capture the anticipated increased demand for satellite services and capacity, particularly in the enterprise services market, from requirements such as maritime and aeronautical, government services, and supporting carrier and enterprise networks.

Follow a Disciplined Satellite Expansion Strategy

We will continue to focus on capturing the anticipated increase in worldwide demand for satellite services through a disciplined satellite expansion program that should drive incremental contracted backlog and cash flows, and further leverage the Company's fixed cost structure. In 2018 Telesat launched two new geostationary satellites:

Telstar 18 VANTAGE, a powerful, state-of-the-art, multi-mission satellite was successfully launched in September 2018 to replace Telstar 18 at 138° EL. This new satellite replaces and expands on Telesat's Telstar 18 satellite through extensive C-band capacity over Asia, Ku-band HTS spot beams over Indonesia and Malaysia, and its five additional regional Ku-band beams. Telstar 18 VANTAGE's innovative Ku-band payloads of HTS spot beams and focused regional beams provide customers operating in, Mongolia, Indochina, Indonesia, Australia & New Zealand and the Pacific Ocean with greater choice and flexibility in deploying high performing broadband networks. Our longstanding partner at the 138° EL location, APT, will use 57.5% of the satellite's capacity in exchange for providing 57.5% of the capital for the satellite program.

Telstar 19 VANTAGE, a powerful, multi-mission, high throughput satellite was successfully launched in July 2018, bringing additional capacity to the 63° WL orbital location where we operate our Telstar 14R/Estrela do Sul 2 satellite. The satellite offers a high degree of flexibility with coverage of Brazil, the Andean Region, the Caribbean, the North Atlantic Ocean and Northern Canada. Hughes Network Systems LLC ("HNS") has entered into a long-term contract for Telstar 19 VANTAGE Ka-band capacity to expand its broadband satellite services for consumers and businesses in South America. Telesat also has long term contracts for the entire Ka-band capacity of Telstar 19 VANTAGE over Northern Canada, including providing Bell Canada subsidiary Northwestel with the HTS spot beam capacity required to enhance broadband connectivity for all 25 communities in Nunavut, Canada's northernmost territory.

## Further Develop Our Planned LEO Constellation

We will continue to advance our LEO constellation plans. In January 2018, we successfully launched our first LEO satellite, an important milestone in our development of a state-of-the-art, high capacity LEO constellation that will deliver transformative, fiber-like broadband to commercial and government users worldwide. This Phase 1 LEO satellite is now demonstrating certain features of our LEO system design, in particular the capability of the satellite and customer terminals to deliver a low-latency broadband experience. We have installed ground infrastructure at our teleport in Allan Park in Canada to support testing with existing customers and potential suppliers of Telesat LEO system hardware who have been participating in trials since the second half of 2018. In July and August 2018, we entered into agreements with two leading satellite manufacturing teams, Airbus Defence and Space and a consortium of Thales Alenia Space and Maxar Technologies, to further develop system designs for Telesat's LEO constellation. The two teams will complete their preliminary designs, address key hardware and software development items, and perform a series of technical reviews. Later in 2019, we expect to receive firm proposals for manufacture and launch support of Telesat's LEO satellites and deployment of the ground system infrastructure.

### Our services

We earn the majority of our revenues by providing satellite-based services to customers, who use these services for their own communications requirements or to provide services to customers further down the distribution chain for video and data services. We also earn revenue by providing ground-based transmit and receive services, selling equipment, installing, managing and maintaining satellite networks, and providing consulting services in the field of satellite communications. In this document, we categorize our revenues into: Broadcast, Enterprise and Consulting and other.

For the twelve months ended December 31, 2018, we derived revenues from the following services:

	Twelve Months ended
	December 31, 2018
Broadcast	50%
Enterprise	48%
Consulting and other	2%

**Broadcast:** Our broadcast services business provided approximately 50% of our revenues for the twelve months ended December 31, 2018. These services include:

- DTH. Both Canadian DTH service providers (Bell TV and Shaw Direct) use our satellites as a distribution platform for their services, delivering television programming, audio and information channels directly to customers' homes. In addition, our satellites are used by EchoStar/DISH Network for DTH services in the United States.
  - *Video distribution and contribution*. Broadcasters, cable networks and DTH service providers use our satellites for the full-time transmission of television programming. Additionally, we provide certain broadcasters and DTH service providers
- bundled, value-added services that include satellite capacity, digital encoding of video channels, authorization services and uplinking and downlinking services to and from our satellites and earth station facilities.
  - Occasional use services. Occasional use services consist of satellite transmission services for the timely broadcast of video
- news, sports and live event coverage on a short-term basis enabling broadcasters to conduct on-the-scene transmissions using small, portable antennas.

*Enterprise:* Our enterprise services provided approximately 48% of our revenues for the twelve months ended December 31, 2018. These services include:

Telecommunication carrier and integrator services: We provide satellite capacity and end-to-end services for data and voice transmission to telecommunications carriers and integrators located throughout the world. These services include space segment services and terrestrial facilities for broadband, internet backhaul, cellular backhaul and services such as rural telephony to telecommunications carriers and network services integrators around the world.

Government services: The United States Government is the largest single consumer of fixed satellite services in the world, and a user of our international satellites. We provide services to the United States Government through government service integrators, rather than directly to United States Government agencies. We are also a significant provider of satellite services to the Canadian Government.

Broadband services: We provide Ka-band satellite capacity in Canada primarily to Bell Canada subsidiary Northwestel, which uses it to enhance broadband connectivity for all 25 communities in Nunavut, Canada's northernmost territory and to Xplornet, which uses it to provide two-way broadband internet services and in the United States, to ViaSat, which uses it to provide similar services. We also provide Ka-band and Ku-band satellite capacity to HNS, which uses it to provide two-way broadband internet services in South America.

*Resource services:* We provide communications services to geographically diverse locations, both on and off shore, for the oil and gas and mining industries.

*Maritime and aeronautical services:* We are increasingly providing satellite capacity to customers serving the growing maritime and aeronautical markets, bringing broadband communications services to commercial airplanes and vessels.

Retail services: We operate VSAT and hybrid VSAT/terrestrial networks in Canada providing end-to-end services including installation and maintenance of the end user terminal, maintenance of the VSAT hub, and provision of satellite capacity. These networks include the support of point-of-sale and other applications at thousands of retail petroleum sites.

Satellite operator services: We provide services to other satellite operators in the form of partial channel satellite capacity, full transponder satellite capacity and, on occasion, the relocation and use of an entire satellite at their designated orbital location to preserve their spectrum rights.

**Consulting and other:** Our consulting and other category provided approximately 2% of our revenues for the twelve months ended December 31, 2018. Our consulting operations allow us to realize operating efficiencies by leveraging our existing employees and the facility base dedicated to our core satellite communication business. With almost fifty years of engineering and technical experience, we are a leading consultant in establishing, operating and upgrading satellite systems worldwide.

We also benefit from revenue diversity in terms of the geographic location of our customers. For the twelve months ended December 31, 2018, we derived revenues, based on the billing address of the customer, in the following geographic regions:

	Twelve Mo ended	
	December 2018	
	(in CAD\$ in r	nillions)
North America	\$	737
Latin America and Caribbean	\$	75
Europe, Middle East and Africa	\$	61
Asia and Australia	\$	30

### Sales and Marketing

We have organized our sales effort by region. Our account teams typically include an experienced sales executive, supported by an application engineering team that provides both pre-sale and post-sale technical advice and consultation to our customers. Our sales staff is partially compensated based on meeting and exceeding individual revenue quota targets.

We sell our services worldwide primarily through a direct sales force located at our headquarters in Ottawa and at our regional offices including our offices in London, Singapore, Rio de Janeiro, Washington (D.C.) and Toronto.

#### **Contracts**

We have generally sold satellite transponder capacity, ground services and end-to-end managed services to our customers using three different contractual arrangements:

- Service agreements: The most common type of agreement that we have entered into for the provision of satellite capacity, ground services and end-to-end managed services is the service agreement. In our service agreements, a customer commits to purchase a specific type of capacity or service. These service agreements contain terms that are generally consistent with industry practices and, for our North American DTH customers, are often for the entire manufacturer's service life of a satellite. Typically, our service agreements can only be terminated by our customers prior to the expiration date in the event of a continued period of service interruption.
- Transponder purchase and operating services agreements: We have also entered into transponder purchase and operating services agreements with a number of our customers to provide them with access to capacity on Anik F1, Anik F1R and Anik F2. We refer to these transponder purchase and operating services agreements as "condominium style" agreements as the customer purchases the transponder on the satellite and then pays us ongoing operating fees for the life of the satellite. Typically,
- our customers are only entitled to terminate these transponder purchase and operating agreements in the event of a transponder failure. If such an event were to occur, barring a specified degree of negligence or misconduct on our part, our customers may no longer be required to pay us the ongoing operating fees, but would not be entitled to be reimbursed other fees paid by them in connection with the purchase of the transponder. We have not entered into any transponder purchase and operating services agreements since 2005.
- License agreements: We have also entered into a license arrangement for the majority of the Ka-band capacity on Anik F2. This license agreement provides our customer with the exclusive right to access and use the licensed Ka-band capacity for the life of the satellite. Payment for the license has been received and we have no obligation to reimburse such payment in the event of service interruption.

We plan to sell satellite capacity in the future through service agreements or, in unique circumstances, through exclusive license agreements.

## Revenue Backlog

Contracted revenue backlog represents our expected future revenue from existing service contracts (without discounting for present value), including any deferred revenue that we will recognize in the future in respect of cash already received. The significant majority of our contracted revenue backlog is generated from service or other agreements for satellite capacity. We do not include revenue beyond the stated expiration date of a contract regardless of the potential for a renewal. As at December 31, 2018, our contracted backlog was approximately \$3.7 billion. This amount includes approximately \$503 million of customer prepayments that Telesat has already received.

Generally, following the successful launch of a satellite, if the satellite is operating nominally, our customers may only terminate their service agreements for satellite capacity by paying us all, or substantially all, of the payments that would have otherwise become due over the term of the service agreement. However, if certain of our existing satellites were to experience a significant launch delay, launch or in-orbit failure, or otherwise fail to operate as anticipated, our customers may be entitled to terminate their agreement and we may be obligated to return a portion of the customer prepayments made under service agreements for that satellite and reduce the associated contracted revenue from the revenue backlog. Those repayments would be funded by any insurance proceeds we may receive, cash on hand, cash equivalents and/or funds available under our Revolving Credit Facility.

Our actual realized revenues may differ from the revenues we expect to realize based on our contractual backlog, and such differences may be material. See "Risk factors — Risks related to our business" for a discussion of some of the factors that may affect our revenues.

### **Patents and Proprietary Rights**

As of December 31, 2018, we owned eighteen issued patents, five of which are in the United States. These patents expire between 2019 and 2032. We also have several pending domestic and international patent applications.

There can be no assurance that infringement of existing third party patents has not occurred or will not occur. Additionally, because the patent application process is confidential, there can be no assurance that third parties, including competitors, do not have patents pending that could result in issued patents which we may infringe. In such event, we may be restricted from continuing the infringing activities, which could adversely affect our business, or we may be required to obtain a license from a patent holder and pay royalties, which would increase our cost of doing business.

## Research and Development

Our research and development expenditures are incurred for the studies associated with advanced satellite system designs, and experimentation and development of space, satellite and ground communications products. This includes the development of our planned LEO constellation.

### Competition

We are a leading global FSS operator in a highly competitive industry, and we compete against other global, regional and national satellite operators and with providers of terrestrial-based communications services.

Fixed Satellite Operators

Other global satellite operators are Intelsat S.A. ("Intelsat"), SES S.A. ("SES"), Eutelsat S.A. ("Eutelsat"), and Inmarsat. We also compete with a number of nationally or regionally focused FSS operators around the world.

Intelsat, SES and Eutelsat are each substantially larger than we are in terms of both the number of satellites they have in-orbit as well as their revenues. We believe that Intelsat and its subsidiaries and SES and its subsidiaries each have global fleets of over fifty satellites, and that Eutelsat and its subsidiaries have a fleet of almost forty satellites. Due to their larger sizes, these operators may be able to take advantage of greater economies of scale, may be more attractive to customers, and may (depending on the specific satellite and orbital location in question) have greater flexibility to restore service to their customers in the event of a partial or total satellite failure. In addition, their larger sizes may enable them to devote more resources, both human and financial, to sales, operations, product development, and strategic alliances and acquisitions.

Regional and domestic providers: We also compete against regional FSS operators, including:

- in North America: ViaSat, HNS/EchoStar, Hispasat and Arsat;
  - in Europe, Middle East, Africa: Avanti, Arabsat, Es'hailsat, Nilesat, Gazprom, Hellas-Sat, RSCC, Yahsat, Turksat and Spacecom;
- in Asia: AsiaSat, Measat, Thaicom, APT, PT Telkom, Optus, SKY Perfect JSAT and Asia Broadcast Satellite; and
- in Latin America: Star One, Arsat and Hispamar.

A number of other countries have domestic satellite systems that we compete against in those markets.

The Canadian Government opened Canadian satellite markets to foreign satellite operators as part of its 1998 World Trade Organization commitments to liberalize trade in basic telecommunications services. As of January 2019, approximately 90 non-Canadian licensed geo-stationary satellites and non-geostationary satellite constellations are listed as having been approved for use in Canada. Four of these geo-stationary satellites are Telesat satellites licensed by other administrations and one is a satellite on which we own the Canadian-coverage capacity.

In addition, the FSS and the Mobile Satellite Services ("MSS") sectors which have historically served distinct customer requirements, are converging. As a result, we face competition from MSS operators that include Inmarsat, which offers a high throughput Ka-band service using a global constellation of four geostationary satellites. The growth in satellite service providers using or planning to use Ka-band, including Avanti Communications, SES/O3b, ViaSat, Eutelsat, HNS/EchoStar, Inmarsat, Yahsat and others, will result in increased competition.

Many of the new and replacement satellites expected to be deployed in the near term will be high throughput satellites or will include high throughput payloads. In addition, second generation HTS systems recently launched and in development purport to be capable of throughput that substantially exceeds the throughput of first generation HTS. This may result in a significant increase in satellite capacity, which may further increase competition.

New Technologies

Over the past few years, in addition to Telesat's LEO constellation, a number of other global NGSO satellite systems have been announced and are now in various stages of development. These include proposed systems from OneWeb, SpaceX, SES/O3b and LeoSat, among others. In addition, a number of other non-terrestrial systems using drones or balloons have also been announced. As these new systems are deployed, they may significantly increase the supply of services that will compete with Telesat's LEO constellation as well as traditional satellite services.

Terrestrial Service Providers

Providers of terrestrial-based communications services compete with satellite operators. Increasingly, in developed and developing countries alike, governments are providing funding and other incentives to encourage the expansion of terrestrial networks resulting in increased competition for satellite operators.

Consulting Services

The market for satellite consulting services is generally comprised of a few companies qualified to provide advice to governments, satellite operators, spacecraft manufacturers, and other industry participants on a range of technical and commercial matters related to satellite communications and earth observation. Our competitors are primarily United States and European-based companies.

#### **Government Regulation**

Canadian Regulatory Environment

The Telesat Divestiture Act

Telesat Canada was originally established by the Government of Canada in 1969 under the Telesat Canada Act. As part of the Canadian government's divestiture of its shares in Telesat Canada, pursuant to the Telesat Canada Reorganization and Divestiture Act (1991) (the "Telesat Divestiture Act"), Telesat Canada was continued on March 27, 1992 as a business corporation under the CBCA, the Telesat Canada Act was repealed and the Canadian government sold its shares in Telesat Canada. The Telesat Divestiture Act provides that no legislation relating to the solvency or winding-up of a corporation applies to Telesat Canada and that its affairs cannot be wound up unless authorized by an Act of Parliament. See "Risk factors — Risks related to our indebtedness and our Senior Notes — Because of the Telesat Canada Reorganization and Divestiture Act, a Canadian act uniquely applicable to Telesat Canada (but not the guarantors, our other subsidiaries or Telesat LLC), Telesat Canada may not have access to the usual protections from creditors and other rights available to insolvent persons, and creditors, including holders of our Senior Notes, may not have recourse to the usual rights, remedies and protections under applicable bankruptcy and insolvency laws generally available to creditors of insolvent persons." In addition, Telesat Canada and its shareholders and directors cannot apply for Telesat Canada's continuation in another jurisdiction or dissolution unless authorized by an Act of Parliament.

Telecommunications Regulation

We are subject to regulation by government authorities in Canada, the United States and other countries in which we operate and are subject to the frequency coordination process of the ITU. Our ability to provide satellite services in a particular country or region is subject also to the technical constraints of our satellites, international coordination, local regulation including as it applies to securing landing rights and licensing requirements.

### The Telecommunications Act

Telesat Canada is a Canadian carrier under the Telecommunications Act (Canada), or the Telecom Act. The Telecom Act authorizes the CRTC to regulate various aspects of the provision of telecommunications services by us and other telecommunications service providers. Telesat is currently not subject to detailed rate regulation, however the CRTC has retained its powers under the Telecom Act to impose price regulation or other regulatory measures on Telesat in the future, as necessary. In addition, Section 28(2) of the Telecom Act provides that the CRTC may allocate satellite capacity to particular broadcasting undertakings if it is satisfied that the allocation will further the implementation of the broadcasting policy for Canada. The exercise by the CRTC of its rights under section 28(2) of the Telecommunications Act could affect our relationship with existing customers, which could have a material adverse effect on our results of operations, business prospects and financial condition.

## Radiocommunication Act

Our operations are also subject to regulation and licensing by ISED pursuant to the Radiocommunication Act (Canada). ISED has the authority to issue spectrum and earth station licenses and establish policies and standards related to the radio frequencies upon which our satellites and earth stations depend. The Minister responsible for ISED has broad discretion in exercising this authority to issue licenses, fix and amend conditions of licenses, and to suspend or even revoke them. Some of the spectrum licenses under which we operate the Anik and Nimiq satellites require us to comply with research and development and other industrial and public benefit commitments, to pay annual spectrum license fees, and to provide all-Canada satellite coverage.

ISED traditionally licensed satellite radio spectrum using a competitive licensing process. In 2012, ISED conducted a public consultation on the licensing framework for FSS and BSS in Canada. As a result of the consultation, changes in policy were announced in November 2013. Effective January 6, 2014, all FSS and BSS licenses are awarded to qualified applicants on a first-come, first-served basis, and spectrum licenses have replaced radio licenses. The term of spectrum licenses is 20 years, with a high expectation of renewal. ISED may, however, issue licenses with a shorter term. Satellite and terrestrial operators are seeking additional spectrum to accommodate the expected growth in demand for broadband services and 5G networks. ISED is considering and may adopt new spectrum allocations for terrestrial services that require satellite operators to vacate or share spectrum and may limit the spectrum that is available for satellite services.

The Canadian Government opened Canadian satellite markets to foreign satellite operators as part of its 1998 World Trade Organization ("WTO") commitments to liberalize trade in basic telecommunications services, with the exception of DTH television services provided through FSS or DBS facilities. Satellite digital audio radio service markets were also closed to foreign entry until 2005. In September 2005, the Canadian Government revised its satellite-use policy to permit the use of foreign-licensed satellites for digital audio radio services in Canada. Further liberalization of the policy may occur and could result in increased competition in Canadian satellite markets. See "Competition" for more information about our competitors in the Canadian satellite market.

### Contribution Collection Mechanism

Since November 2000, pursuant to the CRTC's Decision CRTC 2000-745, virtually all telecommunications service providers are required to pay contribution charges based on their Canadian telecommunications service revenues, minus certain deductions (e.g., terminal equipment sales and inter-carrier payments). The contribution rate varies from year to year. It was initially set at 4.5% of eligible revenues but was significantly reduced in subsequent years. The rate for 2018 was 0.54%. An interim rate of 0.60% has been established by the CRTC for 2019.

United States Regulatory Environment

The FCC regulates the provision of satellite services to, from, or within the United States.

We have chosen to operate our U.S.-licensed satellites, Telstar 11N, Telstar 12 and Telstar 12 VANTAGE, on a non-common carrier basis. Consequently, they are not subject to rate regulation or other common carrier regulations enacted under the Communications Act of 1934. We pay FCC filing fees in connection with our space station and earth station applications and annual fees to defray the FCC's regulatory expenses. Annual and quarterly status reports must be filed with the Universal Service Administrative Company covering interstate/international telecommunications revenues. Based on these reports, USAC assesses us for contributions to the FCC's Universal Service Fund ("USF"). Payments to the USF are made on a quarterly and annual basis. The USF contribution rate is adjusted quarterly and is proposed to be set at 20% for the first quarter of 2019. At the present time, the FCC does not assess USF contributions

with respect to bare transponder capacity (i.e., agreements for space segment only). Telesat's United States telecom revenues that are subject to USF contribution requirements are currently small, and our USF payments are not material.
36

We also own and operate the portion of the ViaSat-1 satellite (115° WL) payload that is capable of providing service within Canada. The ViaSat-1 satellite is licensed by the U.S.

The FCC currently grants geostationary-like satellite authorizations on a first-come, first-served basis to applicants who demonstrate that they are legally and technically qualified and that the public interest will be served by the grant. In contrast, applications for non-geostationary-like satellite authorizations are dealt with through processing rounds, initiated by public notice or the submission of a lead application. Under licensing and market access rules, a bond must be posted, starting at US\$1 million when a geostationary satellite or non-geostationary satellite constellation authorization is granted and escalating to up to US\$3 million in the case of a geostationary satellite and US\$5 million in the case of a non-geostationary satellite constellation. The entire amount of the bond may be forfeited if there is failure to meet the FCC's milestone for the launch and commencement of operations of the geostationary satellite or the milestones for the deployment and operation of 50% of the satellites in a non-geostationary satellite constellation. According to current licensing rules and policies, the FCC will issue new satellite licenses for an initial 15 year term and will provide a licensee with an "expectancy" that a subsequent license will be granted for the replacement of an authorized satellite using the same frequencies. At the end of the 15 year term, a satellite that has not been replaced, or that has been relocated to another orbital location following its replacement, may be allowed to continue operations for a limited period of time subject to certain restrictions. As in other jurisdictions, the FCC is considering and may adopt new spectrum allocations for terrestrial mobile broadband and 5G, including in bands that are currently allocated to satellite services. New spectrum allocations may require satellite operators to vacate or share spectrum and may limit the spectrum that is available for satellite services.

To facilitate the provision of FSS in C-, Ku-, Ka- and V-band frequencies in the United States market, foreign licensed operators can apply to have their satellites either placed on the FCC's Permitted Space Station List (for certain frequencies) or be granted a declaratory ruling (for other frequencies). The bond and milestone requirements for US-licensed satellites apply equally to authorized foreign-licensed satellites. Our Anik F1, Anik F1R, Anik F2, Anik F3, Telstar 14R/Estrela do Sul 2, Telstar 19 VANTAGE satellites and our Ka-and V-band LEO constellations are currently authorized to serve the U.S. market in accordance with these procedures.

The United States made no WTO commitment to open its DTH, DBS or digital audio radio services to foreign competition, and instead indicated that provision of these services by foreign operators would be considered on a case-by-case basis, based on an evaluation of the effective competitive opportunities open to United States operators in the country in which the foreign satellite was licensed (i.e., an ECO-sat test) as well as other public interest criteria. While Canada currently does not satisfy the ECO-sat test in the case of DTH and DBS service, the FCC has found, in a number of cases, that provision of these services into the United States using Canadian-licensed satellites would provide significant public interest benefits and would therefore be allowed. In cases involving us, United States service providers Digital Broadband Applications Corp., DIRECTV and EchoStar have all received FCC approval to access Canadian-authorized satellites under Telesat's direction and control in Canadian-licensed orbital locations to provide DTH-FSS or DBS service into the United States.

The approval of the FCC for the Telesat Canada acquisition and the Skynet Transaction was conditioned upon Telesat's compliance with commitments made to the Department of Justice, the Federal Bureau of Investigation and the Department of Homeland Security relating to the availability of certain records and communications in the United States in response to lawful United States law enforcement requests for such access.

The export of United States-manufactured satellites and technical information related to satellites, earth station equipment and provision of services to certain countries are subject to State Department, Commerce Department and Treasury Department regulations.

In 1999, the United States State Department published amendments to the International Traffic in Arms Regulations ("ITAR") which included satellites on the list of items requiring export licenses. Effective November 2014, further amendments to the ITAR transferred jurisdiction of certain satellites and related technology to the Export Administration Regulations administered by the Commerce Department, which also impose license requirements in specified circumstances. The ITAR provisions may limit our access to certain technical information and may have a negative impact on our international consulting revenues.

### Brazil Regulatory Environment

The Brazilian national telecommunications agency, ANATEL, grants exploitation rights for Brazilian satellites to companies incorporated and existing in Brazil who participate in specific auctions conducted by ANATEL and who demonstrate that they are legally, technically and financially qualified and that the public interest will be served by the grant. ANATEL may also grant exploitation and landing rights for foreign satellites when the public interest is evidenced, provided that the applicant company provides certain specific technical information on the relevant satellite and appoints a legal representative in Brazil (i.e., a company incorporated and existing in Brazil). The landing rights of foreign satellites shall be granted to the owner of the space segment or the company who holds the right to operate it, in whole or in part, but the satellite capacity may only be sold or negotiated in Brazil through the local legal representative. In exploitation and landing rights of Brazilian and foreign satellites, the rights are granted on an onerous basis and are valid for 15 years for Brazilian satellites (renewable once for an additional 15 years) and up to 15 years for foreign satellites (renewable once for an additional equal period).

ANATEL has authorized us, through our subsidiary, Telesat Brasil Capacidade de Satélites Ltda. ("TBCS"), to operate a Ku-band FSS satellite at the 63° WL orbital location. In December 2008, TBCS entered into a new 15 year Concession Agreement with ANATEL which obligates TBCS to operate the satellite in accordance with Brazilian telecommunications law and contains provisions to enable ANATEL to levy fines for failure to perform according to the Concession Agreement terms. In May 2015, TBCS was the successful bidder in an ANATEL auction for Ka-Band and Planned Ku-band frequency rights at the 63° WL orbital location and the associated 15 year Concession Agreements were signed on March 2, 2016. Our Estrela do Sul 2 and Telstar 19 VANTAGE satellites are located at 63° WL and make use of these frequency rights.

In addition, ANATEL has accredited TBCS as legal representative in Brazil of three non-Brazillian satellites: Telstar 12 VANTAGE, Anik F1, and Anik G1.

Tonga Regulatory Environment

We own Telstar 18 and its replacement Telstar 18 VANTAGE, which currently operate at the 138° EL orbital location under an agreement with APT. APT has been granted the right to use the C- and Ku-band frequencies at the 138° EL orbital location by The Kingdom of Tonga. APT is the direct interface with the Tonga regulatory bodies. Because we have gained access to this orbital location through APT, there is greater uncertainty with respect to our ability to maintain access to this orbital location and the frequencies. Telstar 18 VANTAGE also includes Ka-band frequencies that operate under rights provided to Telesat by the United Kingdom.

United Kingdom Regulatory Environment

We own and operate the portion of the ViaSat-1 satellite (115° WL) payload that is capable of providing service within Canada. ViaSat-1 operates in accordance with a license granted by the FCC in the United States. However, by virtue of an intergovernmental arrangement between the United States and the United Kingdom, ViaSat-1 operates in accordance with ITU networks filed by the United Kingdom regulatory agency, OFCOM, on behalf of the Isle of Man. The Isle of Man is a British Crown Dependency and Isle of Man satellite frequency filings are filed with the ITU by OFCOM. ManSat Ltd. has been granted rights by the Isle of Man Government to manage all aspects of Isle of Man satellite frequency filings. Both Telesat and ViaSat have a commercial relationship with ManSat. ViaSat and Telesat have agreed to cooperate in their dealings with ManSat with respect to the ViaSat-1 satellite for OFCOM and ITU purposes. The Ka-band and portions of the Ku-band frequencies on Telstar 12 VANTAGE, portions of the Ka-band frequencies on Telstar 18 VANTAGE and the Ka-band frequencies on Telstar 19 VANTAGE, are also filed with the ITU by ManSat on behalf of Telesat.

## Landing Rights and Other Regulatory Requirements

Many countries regulate satellite transmission signals to, and for uplink signals from, their territory. Telesat has landing rights in major market countries worldwide. In many jurisdictions, landing rights are granted on a per satellite basis and applications must be made to secure landing rights on replacement satellites.

International Regulatory Environment-International Telecommunication Union (ITU)

The ITU, a Specialized Agency of the United Nations, is responsible for administering access by member states to frequencies in the radio portion of the electromagnetic spectrum. The ITU Radio Regulations set forth the process that member states must follow to secure rights for satellites to use frequencies and the obligations and restrictions that govern such use. The process includes, for example, a "first-come, first-served" system for gaining access to certain frequencies and time limits for bringing the frequencies into use. Other frequencies at specified orbital locations have been reserved in perpetuity for individual administrations' use.

Canada, the United States and other member states have rights to use certain frequencies. Telesat has been authorized by its ITU filing administrations Canada, USA, Brazil, and United Kingdom of Great Britain and Northern Ireland to use certain frequencies. In addition, through commercial arrangements, Telesat has the right to use certain frequencies for which the Kingdom of Tonga has the rights. Authorized frequencies include those already used by our current satellites, and additional frequencies at various geostationary orbital locations or in non-geostationary constellations that must be brought into use within specified time limits.

The ITU Radio Regulations govern the process used by satellite operators to coordinate their operations with other satellite operators to avoid harmful interference. Each member state is required to give notice of, coordinate, and register its proposed use of radio frequency assignments with the ITU. The filing and registration process is administered by the ITU Radiocommunications Bureau (the "ITU-BR").

Once a member state has filed with the ITU its proposed use of frequencies, other member states inform that member state and the ITU-BR of any intended use that has the potential to cause interference to either existing operations, or operations that may occur in accordance with priority rights. The member states are then obligated to negotiate with each other in an effort to coordinate the proposed uses and resolve interference concerns. If all outstanding issues are resolved in accordance with the various procedures of the ITU Radio Regulations, the frequencies are entered into the ITU's Master Register ("MIFR"). Registered frequencies are entitled under international law to interference protection from subsequent or nonconforming uses.

Under the ITU Radio Regulations, a member state that places a satellite or any ground station into operation without completing coordination could be vulnerable to interference from other systems and may have to alter the operating parameters of its satellite or ground station if harmful interference occurs to other users already entered in the MIFR or that have priority rights.

The process of ITU filing and notification in the MIFR of frequencies spans a period of seven to eight years, or longer, depending upon the frequency band and the various provisions of the ITU Radio Regulations that may be invoked. Telesat's authorized frequencies are in various stages of the coordination and notification process. Many frequencies have completed the process and have been registered in the MIFR. In other cases, coordination is on-going so that entry into the MIFR is pending. This is typical for satellite operators. Depending upon the outcome of coordination discussions with other satellite operators, Telesat may need to make concessions in terms of how a frequency may be used. This, in turn, could have a material adverse impact on our financial condition, as well as on the value of our business. The failure to reach an appropriate arrangement with such satellite operators may render it impossible to secure entry into the MIFR and result in substantial restrictions on the use and operations of our existing satellites. In the event disputes arise during the coordination process or thereafter, the ITU Radio Regulations set forth procedures for resolving disputes but do not contain a mandatory dispute resolution mechanism or an enforcement mechanism. Rather, the rules invite a consensual dispute resolution process for parties to reach a mutually acceptable agreement. Neither the rules nor international law provide a clear remedy for a party where this voluntary process fails.

The ITU is considering and may adopt at the World Radio Conference in November 2019, new international spectrum allocations to terrestrial mobile, satellite and other services. New international spectrum allocations may require satellite operators to vacate or share spectrum and may limit the spectrum that is available for satellite services. Although non-governmental entities, including Telesat, participate at the ITU, only national administrations have full standing as ITU members. Consequently, we must ultimately rely on the administrations of Canada, the United States, Brazil, the United Kingdom and the Kingdom of Tonga to represent our interests, including submitting and coordinating the ITU satellite networks that provide frequency information within the ITU process described above. See "Risk factors — Risks related to our business" for a discussion on how the international regulatory environment may affect our revenues.

## Regulatory Environment for NGSO satellites

Some of the international and domestic regulations governing NGSO satellites are undergoing revision or have yet to be established. Both Canada and the U.S. have recently adopted new deployment milestones for NGSO systems and the ITU is expected to adopt new deployment milestones for the maintenance of international NGSO filings at the World Radio Conference in November 2019. New international milestones could limit Telesat's ability to maintain international priority rights for its LEO constellation. In addition, while the international rules governing coordination between NGSO satellite systems are established and rely on international filing date priority, the U.S. has adopted a different approach to NGSO-NGSO coordination that requires band splitting if NGSO operators are unable to reach a coordination agreement. As a result, the amount of spectrum that may be available to Telesat's LEO constellation in the U.S. is uncertain. It is possible that other jurisdictions may adopt the U.S. approach to coordination between NSGO systems. Some of the spectrum utilized by Telesat's LEO constellation is also allocated to terrestrial fixed and mobile services and GSO satellite services. While jurisdictions such as the U.S. have established rules for sharing the spectrum, many jurisdictions have yet to address this issue. Telesat's ability to use shared spectrum for its LEO constellation may be impacted by new rules or the absence of rules for spectrum sharing.

## **Capital Expenditures**

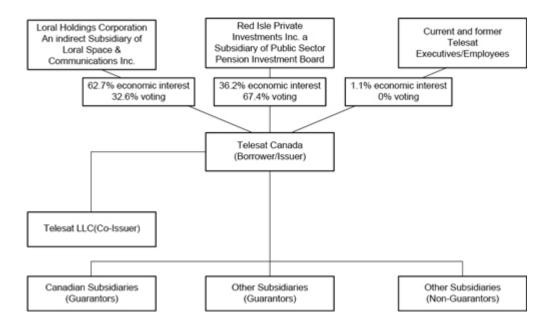
For a description of our principal capital expenditures during the past three fiscal years, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources."

### **Property**

We own or lease, as described, the satellites and other property identified under "Property, plants and equipment — In-Orbit Satellites", "Property, plants and equipment — Rights to Other Satellites" and "Property, plants and equipment — Satellite Operations and Related Facilities — Satellite Control Centre and Earth Station Facilities."

### C. Organizational structure.

Our corporate structure, as of December 31, 2018, is as follows:



- (1) PSP Investments holds 29.4% of the shares eligible to vote for directors; the remaining 38.0% of shares eligible to vote for directors is held by two independent individuals.
  - Telesat LLC, a Delaware limited liability company, is a wholly-owned subsidiary of Telesat Canada and exists primarily for the
- (2) purpose of serving as a co-issuer of Telesat Canada's Senior Notes due November 17, 2024 and co-borrower under our Senior Secured Credit Facilities.

### D. Property, plants and equipment.

### In-orbit satellites

Our state-of-the art satellite fleet is comprised of 17 geostationary satellites offering global coverage with a concentration over the Americas. Our Nimiq 1 and Nimiq 2 satellites are primarily used to provide short-term services to other operators who use the satellites at their designated orbital locations to preserve their spectrum rights.

Our operations and engineering personnel are actively involved in all stages of the lifecycle of a satellite from the design through the deorbiting of the satellites that we procure. Our personnel work directly with our contractors at the contractor's site to provide technical input and monitor progress during the satellite's design, construction and launch phases. Our personnel operate all of our owned satellites throughout the life of the satellite. We monitor earth station operations and around-the-clock satellite control and network operations in order to respond when problems occur. In addition, we have in place contingency plans, which we review on a regular basis, for technical problems that may occur during the life of a satellite. We also work closely with earth station manufacturers to test and implement the earth stations that we procure, and to resolve technical problems as they arise.

End of Oubital

The table below summarizes selected data relating to our owned in-orbit satellite capacity as of December 31, 2018:

	Orbital Location Regions Covered	Launch Date	Manufacturer's End-of-Service Life	End-of-Orbital Maneuver Life <sup>(1)</sup>	Model
Anik F1	107.3° WL South America	November 2000	2016	2022	BSS702 (Boeing)
Anik F1R	107.3° WL North America	September 2005	2020	2022	E3000 (EADS Astrium)
Anik F2	111.1° WL Canada, Continental United States	July 2004	2019	2027	BSS702 (Boeing)
Anik F3	118.7° WL Canada, Continental United States	April 2007	2022	2026	E3000 (EADS Astrium)
Anik G1	107.3° WL Canada South America	April 2013	2028	2039	SS/L 1300
Nimiq 1	Not Applicable <sup>(2)</sup>	May 1999	2011	2021 <sup>(4)</sup>	A2100 AX (Lockheed Martin)
Nimiq 2	Not Applicable <sup>(2)</sup>	December 2002	2015	2024 <sup>(5)</sup>	A2100 AX (Lockheed Martin)
Nimiq 4	82° WL Canada	September 2008	2023	2027	E3000 (EADS Astrium)
Nimiq 5	72.7° WL Canada, Continental United States	September 2009	2024	2035	SS/L 1300
Nimiq 6	91.1° WL Canada 37.55° WL North and	May 2012	2027	2048	SS/L 1300
Telstar 11N	Central America, Europe, Africa and the maritime Atlantic Ocean region 109.2° WL Southern	February 2009	2024	2026	SS/L 1300
Telstar 12	United States, South and Central America 15° WL Eastern United	October 1999	2012	2027 <sup>(5)</sup>	SS/L 1300
Telstar 12 VANTAGE	States, SE Canada, Europe, Russia, Middle East, South Africa, portions of South and Central America	November 2015	2030	2032	E3000 (Airbus)
Telstar 14R/Estrela do Sul 2	63° WL Brazil and portions of Latin America, North America, Atlantic Ocean	May 2011	2026	2024	SS/L 1300
Telstar 18 <sup>(3)</sup>	138° EL India, South East Asia, China, Australia and Hawaii	June 2004	2017	2022 <sup>(5)</sup>	SS/L 1300

Telstar 18 VANTAGE <sup>(6)</sup>	138° EL India, South East Asia, Indonesia/Malaysia, China, Australia/New Zealand, North Pacific and Hawaii	September 2018	2033	2040	SS/L 1300
Telstar 19 VANTAGE	63° WL Brazil and portions of Latin America, North America, Atlantic Ocean, Caribbean	July 2018	2033	2036	SS/L 1300
LEO 1	NGSO polar	January 2018	2021	2021	SSTL

Our current estimate of when each satellite will be decommissioned, taking account of anomalies and malfunctions the satellites have experienced to date and other factors such as remaining fuel levels, consumption rates and other available engineering data. These estimates are subject to change and it is possible that the actual orbital maneuver life of any of these satellites will be shorter than we currently anticipate. Further, it is anticipated that the payload capacity of each satellite may be reduced prior to the estimated end of orbital maneuver life. For example, we currently anticipate that we will need to commence the turndown of transponders on Anik F1 prior to the End-of-Orbital Maneuver Life, as a result of further degradation in available power. See "Risk factors — Risks related to our business — The actual orbital maneuver lives of our satellites may be shorter than we anticipate, and we may be required to reduce available capacity on our satellites prior to the end of their orbital maneuver lives."

(2) Nimiq 1 and Nimiq 2 are currently located in non-Telesat orbital slots.

- 54% of the transponders on the satellite are leased to APT (the "APT transponders"), through the end of life of the satellite in consideration for APT's funding a portion of the satellite's cost. This transaction was accounted for as a sales-type lease, because substantially all of the benefits and risks incident to the ownership of the leased transponders were transferred to APT. We have
- (3) agreed with APT among other things that if we are able to obtain the necessary approvals and licenses from the U.S. government under U.S. export laws, we would transfer title to the APT transponders on Telstar 18 to APT, as well as a corresponding interest in the elements on the satellite that are common to or shared by the APT transponders and our transponders. Telesat acquired two transponders from APT for an additional payment in August 2009.
- (4) Inclined orbit operations may be utilized to reach the projected End of Orbital Maneuver Life for Nimiq 1 in the event the satellite is relocated. The start of inclined orbit operations will be selected accordingly.
- (5) End of Orbital Maneuver life for these satellites has been extended through inclined orbit operations which reduces fuel consumption through the elimination of north-south stationkeeping.
- (6) Telesat International Limited ("TIL"), a subsidiary of Telesat Canada, and APT have entered into agreements relating to the Telstar 18 VANTAGE satellite, which are accounted for as a joint operation, whereby TIL's interest is 42.5%.

We are currently evaluating mission extension services that have the potential to prolong the orbital maneuver lives of certain of our satellites. However, there can be no assurance that we will contract for the use of these mission extension services or that, if we do so, the services will be successful.

Nimiq Satellites

A number of LM A2100 series of satellites have suffered similar in-orbit failures of circuits on their solar arrays. Lockheed Martin has determined that Nimiq 1 and Nimiq 2 are in the family of spacecraft that is susceptible to this anomaly.

Our Nimiq 1 has suffered a number of solar array circuit/string failures, resulting in a reduction of total available power. At this time, the solar array power continues to support operations. In addition, our Nimiq 1 has suffered a number of battery cell failures which have required some adjustments to the spacecraft's operations to support the provision of satellite services, including reducing the number of transponders available for use during periods of solar eclipse. Nimiq 1 has also experienced thruster anomalies that have required some adjustments to the spacecraft's operations but have not impacted service.

In February 2003, Nimiq 2 experienced an anomaly affecting the available power on the satellite. Lockheed Martin, the satellite's manufacturer, concluded the most likely cause of this anomaly was an electrical short-circuit caused by foreign object debris located in a single power-carrying connector. As a result of this anomaly, the south solar array power cannot be recovered. In addition, Nimiq 2 has experienced solar array circuit failures, resulting in a significant reduction of available power. These failures have substantially reduced the number of transponders we can operate at saturation and it is currently expected that the available capacity will be further reduced over time. In April 2005, another satellite operator reported that a satellite of the same series as Nimiq 2 suffered a solar array anomaly that resulted in the complete loss of one array and a corresponding 50% reduction in available satellite power. Lockheed Martin, the manufacturer, has traced the most likely cause of this failure to a component on the solar array drive. Unlike Nimiq 1, Nimiq 2 has this component in its remaining functioning solar array. If this same component failed on the functioning array of Nimiq 2, it would result in a total loss of service on the satellite.

Anik Satellites

Anik F1 was designed with the capability to cover both North America and South America from the 107.3° WL orbital location. In August 2001, Boeing, the manufacturer of the Anik F1 satellite, advised us of a gradual decrease in available power on-board the satellite. Boeing investigated the cause of the power loss and reported that the power will continue to degrade. We procured a replacement satellite, Anik F1R, which was launched in 2005. The North American traffic on Anik F1 was transferred to Anik F1R. We now use Anik F1 to provide coverage of South America only.

We have experienced and continue to experience intermittent anomalies with certain amplifiers in the Ka-band and Ku-band payloads on Anik F2. Boeing, the manufacturer, has completed its investigation of these anomalies. The majority of the affected Ka-band units continue to remain in service through modifying operational configurations. The Ku-band traveling-wave-tube amplifiers ("TWTAs") that were affected as a result of these anomalies have failed. All but two of the failed transponders were replaced using spares and many of the Ku-band TWTAs currently in service have no further spares left to replace them should they fail. Anik F2 has

experienced an anomaly with one of its two telemetry transmitters. While the failure of a single telemetry transmitter does not impact satellite operations or the service we provide to our customers, in the event we are unable to restore any redundancy and the second telemetry transmitter were to fail we would cease receiving important information from the satellite regarding its position in orbit and health and our ability to operate the satellite would be adversely affected. A software patch for the satellite was developed by Boeing to provide telemetry to support operations in the event of a failure of the second transmitter and was implemented on the satellite in February 2013. Our Anik F2 satellite has also experienced an anomaly on one of the station-keeping thrusters. However, this thruster anomaly has had no impact on service and continues to support operations.

There is a small Ka-band payload on Anik F3 which experienced an anomaly following launch. We implemented a plan to remedy the effect of this anomaly and the Ka-band payload is currently operational.

Telstar Satellites

Telstar 12 has experienced losses of power from its solar arrays. These losses of power have not resulted in any operational impact or reduction in the number of available transponders to date. Telstar 12 experienced a loss of one of two command receivers. Full command-receiver redundancy was subsequently restored through the loading of a software upgrade. Telstar 12 has experienced a loss of some redundant equipment that has not impacted satellite operations to date.

Telstar 12 VANTAGE began to suffer from degraded performance of four channels in late December 2016 due to increased noise levels. Following an investigation with the satellite manufacturer, the root cause of the anomaly was determined. As a result of this degradation, two channels on T12V are no longer usable. In 2017, Telesat received insurance proceeds in connection with this anomaly. Degradation of performance was observed on additional channels in May 2018 due to increased noise levels. The satellite manufacturer investigation concluded that the root cause of the anomaly was similar to the 2016 anomaly. The channels continue to support service. In the event of further degradation we may lose the capability to continue to use two channels.

Telstar 14R/Estrela do Sul 2's North solar array was damaged after launch and only partially deployed, diminishing the power and expected orbital maneuver life of the satellite. At the beginning of July 2011, the satellite began commercial service with substantially reduced available transponder capacity and with an expected end-of-orbital maneuver life reduced to 2024. It is currently expected that the available transponder capacity will be reduced over time. If the damaged solar array on Telstar 14R/Estrela do Sul 2 were to unexpectedly deploy in the future this could result in a loss of capability to provide service. In September 2016, the primary gyro utilized to maintain operational pointing of the satellite exhibited degraded performance. The backup gyro unit was switched into service and is currently in operation. A ground based system has been implemented which provides the capability to operate the satellite in the absence of a functioning on board gyro. This system will reduce the demands on the backup gyro unit and provide redundancy.

Telstar 18 has experienced a failure of one of its two telemetry transmitters. A software patch for the satellite has been developed by SS/L to provide telemetry to support operations in the event of a failure of the second transmitter. This patch was implemented on the spacecraft in 2011. Telstar 18 has experienced a loss of some other redundant equipment that has not impacted satellite operations to date.

In general, our satellites are exposed to the potential risk of loss. See "Risk factors — Risks related to our business — Our in-orbit satellites may fail to operate as expected due to operational anomalies resulting in lost revenues, increased costs and/or termination of contracts" for more information about the risks of loss associated with satellite anomalies.

# **Rights to Other Satellites**

In addition, we have rights to satellite capacity on other satellites, including the Ka-band Canadian payload consisting of nine user beams on ViaSat-1.

## **Other Orbital Spectrum**

We have been authorized by governments to operate using additional frequencies at some of the orbital locations where we are currently operating a satellite. In addition, we have been authorized by governments to operate at other orbital locations where we currently do not have a satellite in service as well as a global LEO constellation in Ka-band and V-band.

There can be no assurance that we will make use of all spectrum available to us.

In general, our satellites are subject to various regulatory authorities and to the rights of other operators. See "Risk factors — Risks related to our business — Our operations may be limited or precluded by ITU rules or processes, and we are required to coordinate our operations with those of other satellite operators" for more information about these risks.

### **Satellite Control Centre and Earth Station Facilities**

Our primary Satellite Control Centre ("SCC") is located at our headquarters in Ottawa, Ontario. The SCC is the hub for our satellite-related activities. The facility is staffed 24 hours per day and currently operates 17 Telesat owned satellites: Anik F1, Anik F1R, Anik F2, Anik F3, Anik G1, Nimiq 1, Nimiq 2, Nimiq 4, Nimiq 5, Nimiq 6, Telstar 11N, Telstar 12, Telstar 12 VANTAGE, Telstar 18, Telstar 18 VANTAGE and LEO 1. Telesat also operates ViaSat-1, as well as numerous other satellites for third parties from our SCC in Ottawa. We operate our Telstar 14R/Estrela do Sul 2 satellite and our Telstar 19 VANTAGE satellite from our SCC in Rio de Janeiro, Brazil.

In the fourth quarter of 2018, Telesat moved its headquarters from 1601 Telesat Court, Ottawa to 160 Elgin Street, Ottawa. We lease approximately 54,488 rentable square feet in our new headquarters. The total rentable square feet will increase to approximately 75,900 when we take on additional contiguous space in the third quarter of 2020. The lease for Telesat's new headquarters expires on July 31, 2029. Telesat has two options to extend the lease for an additional five years each.

The Allan Park earth station, located northwest of Toronto, Ontario on approximately 65 acres of owned land, houses a customer support centre and a technical control centre. This facility is the single point of contact for our customers internationally and is also the main earth station complex providing TT&C services for the satellites that we operate. The Allan Park earth station also houses our back-up satellite control centre for the Nimiq and Anik satellites. The back-up satellite control centre for the Telstar satellites is located at the Mount Jackson earth station. We would have the functional ability to restore satellite control services via the Allan Park and Mount Jackson back-up control centres if our primary SCCs became disabled.

In addition to the Ottawa headquarters and the Allan Park earth station, we operate a number of other earth stations, including the following:

Earth Stations	Earth Station Lands Owned/Leased by Us or Our Subsidiaries
Vancouver, British Columbia, Canada	Owned
Calgary, Alberta, Canada	Owned
Winnipeg, Manitoba, Canada	Owned
Montreal, Quebec, Canada	Owned
Toronto, Ontario, Canada	Leased
Mount Jackson, Virginia, USA	Owned
Belo Horizonte, Brazil	Owned
Iqaluit, Nunavut, Canada	Leased
Fort McMurray, Alberta, Canada	Leased
Saskatoon, Saskatchewan, Canada	Leased
St. John's, Newfoundland, Canada	Leased

In addition to these facilities, we lease facilities for administrative and sales offices in various locations throughout Canada and the United States as well as in Brazil, England and Singapore.

### **Satellite Operations Risk Management**

Satellites utilize highly complex technology and operate in the harsh environment of space and, accordingly, are subject to significant operational risks while in orbit. These risks include anomalies that have occurred in our satellites and the satellites of other operators. Once our satellites are in orbit, there is a risk that a failure could prevent them from completing their commercial mission of providing uninterrupted service to customers. See "Risk factors — Risks related to our business — Our in-orbit satellites may fail to operate as expected due to operational anomalies resulting in lost revenues, increased costs and/or termination of contracts."

To ensure continuity of service to our customers, we engineer satellites with on-board redundancies by including spare equipment on the satellite, conduct standard testing programs that provide high confidence of performance levels, and purchase insurance.

Our primary consideration in managing our satellite telecommunications systems is to provide reliable and cost-effective services to our customers. We endeavor to limit the assumption of risk to activities under our control. Our space risk management program has been designed to achieve these objectives.

# Non-Insurance Risk Management Initiatives

The risk management program begins at the technical analysis and design stage of the satellites. We engineer certain redundancy on-board every satellite. Furthermore, we are involved in overseeing the manufacture of all of our satellites. We require the manufacturer and its subcontractors to follow assembly and quality assurance programs. We secure and maintain access to work performed by the satellite manufacturer and its subcontractors for the purpose of observing the quality and progress of such work. Comprehensive testing is conducted at the manufacturer's or a subcontractor's plant which must meet industry standards and, in many cases, be supervised by our engineering personnel. Our engineering personnel review program management and construction schedules, engineering, design, manufacturing and integration and testing activities at both the manufacturer's and subcontractor's sites. After construction is complete, we conduct final acceptance inspections of all deliverable items.

We believe it is crucial to have knowledge and insight into the launch vehicles being used to launch our satellites. Our engineering personnel are on site before and during all launches to observe that all checks and integration steps are completed.

We believe that these quality assurance and manufacturing process monitoring programs help us reduce the risk of satellite failures and anomalies and result in lower launch and in-orbit insurance costs.

## **Emergency Committee**

Protecting and maintaining service to customers is of vital importance to us. Our emergency committee is responsible for managing the restoration of services in the event of an actual or threatened critical condition, such as a satellite failure, the loss of telemetry and tracking ability or the loss of earth station functionality. Despite our efforts, satellite failures or other anomalies may occur. See "Risk factors — Risks related to our business — Our in-orbit satellites may fail to operate as expected due to operational anomalies resulting in lost revenues, increased costs and/or termination of contracts." We may also experience a failure of our ground operations infrastructure. See "Risk factors — Risks related to our business — We may experience a failure of ground operations infrastructure or interference with our satellite signals that impairs the commercial performance of, or the services delivered over, our satellites or the satellites of other operators for whom we provide ground services, which could result in a material loss of revenues."

### **Satellite Insurance**

We are required to maintain certain satellite insurance under the covenants of the Senior Secured Credit Facilities and under the indenture governing the Senior Notes. In addition, we may purchase additional insurance as we deem appropriate.

Satellite insurance falls into three categories: Pre-Launch Insurance, Launch Insurance and In-Orbit Insurance.

Pre-Launch Insurance

Pre-launch insurance is typically purchased by the satellite manufacturer. We manage our pre-launch risks (i.e. risks during the manufacturing and transport phase) primarily through our contractual arrangements with the satellite manufacturer.

Launch Insurance

The procurement of satellite launch insurance is, and has been, an integral part of our risk management program. It has been our practice to insure our launches where we bear the risk of loss. Typically, our launch insurance has covered the following events during the period of coverage: (i) delivery from the launch pad to orbit; (ii) separation from the launch vehicle; (iii) drift orbit maneuvers; (iv) solar array and antenna deployment; and (v) testing and commissioning.

In-orbit Insurance

In-orbit (life) insurance provides coverage for total and/or partial losses during the operating phase of a satellite. In-orbit insurance may be purchased at the same time launch insurance is procured (for new satellites) or once the satellite is in orbit, in the case of existing satellites, subject to functionality and insurance market conditions. Premium rates are dependent on the operating condition of the satellite and other satellites of the same design or using the same components as well as prevailing insurance market conditions. Typically, these insurance policies exclude coverage for damage arising from acts of war, anti-satellite devices, lasers, and other similar potential risks for which exclusions are customary in the industry at the time the policy is written. In addition, they typically exclude coverage for satellite health-related problems affecting our satellites and other satellites of the same design or using the same components that are known at the time the policy is written.

Insurance Coverage

We comply with the requirements to maintain satellite insurance under the terms of the Senior Secured Credit Facilities and indenture that governs the Senior Notes. Under the most restrictive of these covenants, we are required to maintain insurance equal to a minimum of 33% of the aggregate net book value of any individual and 50% of the aggregate net book value of all in-orbit satellites. We have arranged in-orbit insurance policies that generally expire in November 2019.

We may discontinue or change our in-orbit insurance practices in the future, subject to the requirements of the Senior Secured Credit Facilities and indenture that governs the Senior Notes. Some of our satellite in-orbit insurance policies contain deductibles or coverage exclusions related to potential future failures of certain specific on-board components.

	We do not insure	our interests in	ı Anik F1, Nin	niq 1, Nimio	<sub>l</sub> 2, Telsta	r 12 or Tel	lstar 18.	We also do	o not insure	our capa	city on
Via	Sat-1.										

# **Item 4A. Unresolved Staff Comments**

None.

## Item 5. Operating and Financial Review and Prospects

### A. Operating results

#### MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with Telesat Canada's audited consolidated financial statements beginning at Page F-1 of this Annual Report.

On January 1, 2017, Telesat Holdings Inc. completed a corporate reorganization, of companies under common control, pursuant to which Telesat Holdings Inc. amalgamated with Telesat Interco Inc. and immediately thereafter the newly amalgamated company amalgamated with Telesat Canada. The continuing entity, existing under the laws of Canada, is named Telesat Canada. The reorganization has been accounted for as a continuation of Telesat Holdings Inc.

As used in this management's discussion and analysis of financial condition and results of operations ("MD&A"), unless the context states or requires otherwise, references to "Telesat," "Company," "we," "our" and "us" refer to Telesat Canada (formerly Telesat Holdings Inc.) and its subsidiaries. Unless the context states or requires otherwise, reference herein to "the consolidated financial statements" or "the financial statements" or similar terms refer to Telesat Canada's audited consolidated financial statements included herein.

Except for the historical information contained in the following MD&A, the matters discussed below are not based on historical fact and are "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995. In addition, we, or our representatives, have made and may continue to make forward-looking statements, orally or in writing, in other contexts. These forward-looking statements can be identified by the use of words such as "believes," "expects," "plans," "may," "will," "would," "could," "should," "anticipates," "estimates," "well positioned," "project," "targeted," "intend," "pursue" or "outlook" or other variations of these words. These statements are not guarantees of future performance and involve risks and uncertainties that are difficult to predict or quantify. Actual events or results may differ materially as a result of a wide variety of factors and conditions, many of which are beyond our control. For a detailed discussion of these and other factors and conditions, please refer to "Item 3D. — Risk factors". We undertake no obligation to update any forward-looking statements.

The dollar amounts presented in this Annual Report are in Canadian dollars unless otherwise specified.

Certain totals, subtotals and percentages may not reconcile due to rounding.

The information contained in this MD&A takes into account information available up to February 28, 2019, unless otherwise noted.

### **OVERVIEW OF THE BUSINESS**

We are a leading global fixed satellite services operator. We provide our satellite and communications services from a fleet of satellites that occupy Canadian and other orbital locations. We are organized into one operating segment, the satellite services business; however, we provide our services through three business categories: Broadcast, Enterprise and Consulting and other.

The satellite services business is capital intensive and the build-out of a satellite fleet requires substantial time and investment. Once the investment in a satellite is made, the incremental costs to maintain and operate the satellite are relatively low over the life of the satellite, with the exception of in-orbit insurance. We have been able to generate a large contracted revenue backlog by entering into long-term contracts with some of our customers for all or substantially all of a satellite's life. Historically, this has resulted in revenue from the satellite services business being fairly predictable.

As at December 31, 2018, we provided satellite services to customers from our fleet of 17 in-orbit geostationary satellites as well as our Canadian payload on the ViaSat-1 satellite. In January 2018, we launched a Ka-band satellite into LEO as part of our plan to deploy a state-of-the-art, high capacity LEO constellation that will deliver transformative, low latency, fiber-like broadband to commercial and government users worldwide. We also manage the operations of additional satellites for third parties.

Telesat and its affiliates operate satellites pursuant to authorizations granted by governments, including those of Canada, the United States, Brazil, the Kingdom of Tonga and the United Kingdom, to access and use certain geostationary orbital locations and associated

regulations.				
	48			

spectrum resources. The use of these orbital locations, as well as our other operations, is subject to a variety of Canadian and international

#### Revenue

We earn most of our revenue by providing video and data services using satellite transponder capacity. We also earn revenue by providing ground-based transmit and receive services, selling equipment, managing satellite networks, and providing consulting services in the field of satellite communications.

We recognize revenue from satellite services on a monthly basis as services are performed in an amount that reflects the consideration we expect to receive in exchange for those services. Telesat accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability is considered probable.

Consulting revenue for cost plus contracts is recognized as the approved time and labor is completed by Telesat. The percentage of completion method is used to recognize consulting revenue for fixed price contracts. Equipment sale revenue is recognized when the customer obtains control of the equipment, being at the time the equipment is delivered to and accepted by the customer.

## **Expenses**

Our operating expenses consist of labor, the cost of which has historically been relatively stable, and variable operating expenses which include in-orbit insurance and direct-billed expenses, such as third-party contractor services.

Interest expense is significant and arises principally from our Senior Secured Credit Facilities and our Senior Notes. Foreign exchange gains or losses incurred on the translation our U.S. dollar denominated indebtedness and the gains or losses on financial instruments resulting from variations in the fair value of interest rate swaps, the prepayment option on our Senior Notes and embedded derivative related to the interest rate floor included on our U.S. Term Loan B Facilities remain significant components of our total expenses.

Other significant operating expenses include the straight-line depreciation of the cost of each of our satellites over their useful lives and amortization expense related to various finite-life intangible assets.

## **OPERATING HIGHLIGHTS OF 2018**

## LEO Constellation

In January 2018, we successfully launched our LEO 1 satellite.

In May 2018, orbit raising and payload testing on the LEO 1 satellite was completed and the satellite was ready to support live demonstrations of its capabilities. Live, over-the-air trials on LEO 1 were done in collaboration with our existing customers and potential suppliers of Telesat LEO system hardware.

In July and August 2018, we entered into agreements with two leading satellite manufacturing teams, Airbus Defence and Space and a consortium of Thales Alenia Space and Maxar Technologies, to further develop system designs for Telesat's LEO constellation. The two teams will complete their preliminary designs, address key hardware and software development items, and perform a series of technical reviews. Later in 2019, we expect to receive firm proposals for manufacture and launch support of Telesat's LEO satellites and deployment of the ground system infrastructure.

## Telstar 19 VANTAGE

In August 2018, commercial service began on the Telstar 19 VANTAGE satellite operating at the 63 degrees West orbital location. Telstar 19 VANTAGE had been successfully launched in July 2018.

### Telstar 18 VANTAGE

In October 2018, commercial service began on the Telstar 18 VANTAGE satellite operating at the 138 degrees East orbital location. Telstar 18 VANTAGE had been successfully launched in September 2018.

### Creation of C-Band Alliance

	49		

#### **FUTURE OUTLOOK**

Our desirable spectrum rights, commitment to providing the highest level of customer service, deep technical expertise and culture of innovation have enabled us to successfully develop our business to date. Leveraging these strengths and building on our existing contractual revenue backlog, our focus is on profitably growing our business by increasing the utilization of our in-orbit satellites and, in a disciplined manner, deploying expansion satellite capacity where we anticipate there will be strong market demand. In August 2018, commercial service began on our Telstar 19 VANTAGE, which was launched in July 2018. In October 2018, commercial service began on our Telstar 18 VANTAGE satellite, which was launched in September 2018. In addition, in January 2018, we launched a Ka-band satellite into LEO in our plan to develop a state-of-the-art, high capacity LEO constellation that will deliver transformative, low latency, fiber-like broadband to commercial and government users worldwide.

We believe we are well-positioned to serve our customers and the markets in which we participate. We actively pursue opportunities to develop new satellites, particularly in conjunction with current or prospective customers who will commit to long-term service agreements prior to the time the satellite construction contract is signed. Although we regularly pursue opportunities to develop new satellites, we do not procure additional or replacement satellites until we believe there is a demonstrated need and a sound business plan for such satellite capacity.

Leading into 2019, we remain focused on increasing the utilization of our existing satellites, the development of our global LEO constellation, and identifying and pursuing opportunities to invest in expansion satellite capacity, all while maintaining our operating discipline.

#### RESULTS OF OPERATIONS

## Review of financial performance

Our net loss for the year ended December 31, 2018, was \$91 million compared to net income of \$505 million for the prior year. The decrease of \$596 million was principally due to the U.S. dollar strengthening during the year relative to the Canadian dollar, negatively impacting the translation of our U.S. dollar indebtedness into Canadian dollars, combined with an unfavorable change in fair value of financial instruments.

Our net income for the year ended December 31, 2017, was \$505 million compared to net income of \$293 million for the prior year. The increase of \$212 million was principally due to a higher non-cash gain on foreign exchange, which was primarily a result of U.S. dollar weakening during the year relative to the Canadian dollar positively impacting the translation of our U.S. dollar denominated indebtedness into Canadian dollars, a favorable change in the fair value of financial instruments and a loss on refinancing in 2016.

Below are the foreign exchange rates used for our audited consolidated financial statements and this MD&A:

	2018	2017	2016
USD to CAD spot rate as at December 31,	1.3637	1.2571	1.3441
USD to CAD average rate for the year ended December 31,	1.2912	1.3036	1.3253

#### Revenue

(in millions of Canadian dollars except percentages)	 Year	s end	ed Decemb	er 31	,	% Increase (Decrease) 2018 vs. 2017
	2018		2017		2016	
Broadcast	\$ 455	\$	473	\$	487	(4)%
Enterprise	428		430		420	%
Consulting and other	20		24		24	(19)%
Revenue	\$ 903	\$	927	\$	931	(3)%

Total revenue for the year ended December 31, 2018, decreased by \$24 million to \$903 million compared to \$927 million for the prior year.

Revenue from Broadcast services decreased by \$18 million for the year ended December 31, 2018, when compared to the prior year. The decrease was primarily due to a reduction of service for certain North American customers combined with an unfavorable foreign exchange impact on the conversion of our U.S. dollar denominated revenue into Canadian dollar equivalent.

Revenue from Enterprise services decreased by \$2 million for the year ended December 31, 2018, when compared to the prior year. The decrease was primarily due to a decrease in short-term services provided to other satellite operators, end of service or reduction of services for certain North American customers and an unfavorable foreign exchange impact on the conversion of our U.S. dollar denominated revenue into Canadian dollar equivalent. This decrease was partially offset by higher revenue due to the impact of the implementation of IFRS 15, combined with revenue related to our Telstar 19 VANTAGE satellite, which entered commercial service in August 2018.

Consulting and other revenue decreased by \$5 million for the year ended December 31, 2018, when compared to the prior year. The decrease was primarily due to lower consulting activity when compared to the prior year.

Total revenue for the year ended December 31, 2017, decreased by \$3 million to \$927 million compared to \$931 million for the prior year.

Revenue from Broadcast services decreased by \$14 million for the year ended December 31, 2017, when compared to the prior year. The decrease was mainly due to an end of service or a reduction of service for certain North American customers, lower equipment sales, and an unfavorable foreign exchange impact on the conversion of our U.S. dollar denominated revenue resulting from a weaker U.S. dollar to Canadian dollar average exchange rate for the year ended December 31, 2017, when compared to the prior year.

Revenue from Enterprise services increased by \$10 million for the year ended December 31, 2017, when compared to the prior year. The increase was primarily due to short-term services provided to other satellite operators, higher revenue from the mobility sector, partially offset by the end of service or reduction of services for certain customers.

Consulting and other revenue remained constant for the year ended December 31, 2017, when compared to the prior year.

### **Expenses**

(in millions of Canadian dollars except percentages)	Years	% Increase (Decrease) 2018 vs. 2017		
	 2018	2017	2016	
Depreciation	\$ 225	\$ 221	\$ 225	2%
Amortization	24	26	28	(8)%
Operating expenses	186	188	175	(1)%
Other operating (gains) losses, net	 (1)	(6)	 3	(87)%
Total expenses	\$ 434	\$ 429	\$ 431	1%

### Depreciation

Depreciation of satellites, property and other equipment increased by \$4 million for the year ended December 31, 2018, when compared to the prior year. The increase in depreciation was primarily due to depreciation on our Telstar 19 VANTAGE satellite, which began commercial service in August 2018, and depreciation on our Telstar 18 VANTAGE satellite, which began commercial service in October 2018. This increase was partially offset by a decrease in depreciation due to the end of useful life, for accounting purposes, of our Telstar 18 satellite in 2017.

Depreciation of satellites, property and other equipment decreased by \$4 million for the year ended December 31, 2017, when compared to the prior year. The decrease in depreciation was primarily due to the end of the useful life, for accounting purposes, of our Telstar 18 satellite in 2017.

#### **Amortization**

Amortization of intangible assets decreased by \$2 million for the year ended December 31, 2018, when compared to the prior year. The decrease was primarily related to the end of useful life, for accounting purposes, of certain customer relationships in the third quarter of 2018.

Amortization of intangible assets decreased by \$1 million for the year ended December 31, 2017, when compared to the prior year. The decrease primarily related to lower amortization of intangible assets related to revenue backlog.

#### Other Operating (Gains) Losses, Net

Other operating (gains) losses, net decreased by \$5 million for the year ended December 31, 2018, when compared to the prior year. Operating gains for the year ended December 31, 2018 related to a one-time non-recurring gain while for the year ended December 31, 2017 the operating gains primarily related to insurance proceeds received.

Other operating (gains) losses, net increased by \$8 million for the year ended December 31, 2017, when compared to the prior year. The increase were primarily related to insurance proceeds received in 2017.								
	51							

### **Operating Expenses**

(in millions of Canadian dollars except percentages)	Year	s enc	led Decemb	er 31	,	% Increase (Decrease) 2018 vs. 2017
	 2018		2017		2016	
Compensation and employee benefits	\$ 98	\$	85	\$	72	16%
Other operating expenses	46		43		39	6%
Cost of sales	42		60		64	(30)%
Operating expenses	\$ 186	\$	188	\$	175	(1)%

Total operating expenses decreased by \$2 million for the year ended December 31, 2018, when compared to the prior year.

Compensation and employee benefits increased by \$13 million for the year ended December 31, 2018, in comparison to the prior year. The increase was primarily due to higher share-based compensation, partially offset by a special payment made in the first quarter of 2017 to stock option holders in connection with the cash distribution made to our shareholders.

Other operating expenses increased by \$3 million for the year ended December 31, 2018, in comparison to the prior year, primarily due to higher professional fees.

Cost of sales decreased by \$18 million for the year ended December 31, 2018, when compared to the prior year. The decrease was primarily due to the impact of the implementation of IFRS 15, lower consulting expenses combined with lower expenses following the disposition of a subsidiary in the third quarter of 2017. This was partially offset by higher equipment and installation costs primarily related to higher revenue from a North American customer.

Total operating expenses increased by \$13 million for the year ended December 31, 2017, when compared to the prior year.

Compensation and employee benefits increased by \$13 million for the year ended December 31, 2017, in comparison to the prior year. The increase was primarily due to compensation expense associated with the special payments to stock option holders as well as higher performance based compensation, partially offset by lower share-based compensation.

Other operating expenses increased by \$4 million for the year ended December 31, 2017, in comparison to the prior year, primarily due to higher professional fees.

Cost of sales decreased by \$4 million for the year ended December 31, 2017, when compared to the prior year. The decrease was mainly due to lower third-party satellite capacity expenses.

## Interest Expense

(in millions of Canadian dollars except percentages)	Year	ι,	% Increase (Decrease) 2018 vs. 2017		
	 2018	2017		2016	
Debt service costs	\$ 224	\$ 212	\$	198	6%
Interest expense on significant financing component	27	_		_	100%
Interest expense on satellite performance incentive payments	4	5		5	(13)%
Interest expense on employee benefit plans	1	2		2	(2)%
Capitalized interest	(19)	(18)		(6)	4%
Interest expense	\$ 238	\$ 200	\$	199	19%

Interest expense included interest related to our debt, net of capitalized interest, as well as, interest related to our derivative instruments, significant financing on certain revenue agreements, satellite performance incentive payments and employee benefit plans.

Debt service costs, which included interest expense on indebtedness and derivative instruments, increased by \$12 million for the year ended December 31, 2018, when compared to the prior year. The increase in debt service costs was primarily due to a higher average

ncrease was partially offset by higher net interest received on our interest rate swaps in 2018 compared to the prior year combine	ed wi
he impact of the principal repayments on our Senior Secured Credit Facilities.	

interest rate on our Senior Secured Credit Facilities combined with the amortization on our net gain on repricing/repayment in 2018. This

Debt service costs, which included interest expense on indebtedness and derivative instruments, increased by \$14 million for the year ended December 31, 2017, when compared to the prior year. The change in interest on indebtedness and derivative instruments was primarily due to higher interest on our Senior Secured Credit Facilities and Senior Notes.

Interest expense on significant financing component increased by \$27 million for the year ended December 31, 2018, when compared to the prior year. The changes in interest expense were a result of the implementation of IFRS 15 on January 1, 2018, and relates to the interest expense recognized on certain customer contracts with a significant financing component.

Interest on satellite performance incentive payments decreased by \$1 million for the years ended December 31, 2018 and 2017, when compared to the prior years, primarily due to declining balances of satellite performance incentive liabilities.

Interest expense on employee benefit plans remained constant for the years ended December 31, 2018 and 2017, when compared to the prior years.

Capitalized interest increased by \$1 million and \$12 million for the years ended December 31, 2018 and 2017, when compared to the prior years, primarily due to an increase in accumulated capital expenditures relating to our satellites under construction.

### Loss on Refinancing

The loss on refinancing of \$32 million for the year ended December 31, 2016, related to the write-off of deferred financing costs, interest rate floors, prepayment option and premiums on our former senior secured credit facilities and 6.0% Senior Notes as a result of the refinancing in November 2016.

There were no refinancing transactions during the years ended December 31, 2018 and 2017.

#### Interest and Other Income

(in millions of Canadian dollars)		Year	s ende	d Decembe	er 31,	
	20	18		2017	2	016
Interest and other income	\$	16	\$	3	\$	6

Interest and other income increased by \$13 million for the year ended December 31, 2018, when compared to the prior year. The increase was primarily due to a gain on the repricing of our Term Loan B - U.S. Facility in April 2018, an increase in interest income on cash and short-term investments and a one-time non-recurring expense that occurred in the second quarter of 2017. This was partially offset by a loss resulting from the \$50 million U.S. dollars voluntary payment on our Term Loan B - U.S. Facility in the first quarter of 2018.

Interest and other income decreased by \$3 million for the year ended December 31, 2017, when compared to the prior year. The decrease was due to a one-time non-recurring expense that occurred in the second quarter of 2017.

### Foreign Exchange and Derivatives

(in millions of Canadian dollars)	Years ended December 31,										
	 2018	2017		2016							
(Loss) gain on changes in fair value of financial instruments	\$ (18) \$	60	\$	8							
(Loss) gain on foreign exchange	\$ (259) \$	224	\$	93							

The \$18 million loss on changes in fair value of financial instruments for the year ended December 31, 2018, represented a negative change of \$79 million compared to the prior year. The loss on changes in fair value of financial instruments primarily reflected changes in the fair values of our interest rate swaps, interest rate floor on our Senior Secured Credit Facilities, and the prepayment option on our Senior Notes, as a result of changes in key economic variables, such as foreign exchange rates, credit spreads and swap rates.

The \$60 million gain on changes in fair value of financial instruments for the year ended December 31, 2017, represented a positive change of \$52 million compared to the prior year. The gain on changes in fair value of financial instruments primarily reflected changes in the fair values of our interest rate swaps, interest rate floor on our Senior Secured Credit Facilities, and the prepayment option on our Senior Notes, as a result of changes in key economic variables, such as foreign exchange rates, credit spreads and swap rates.

The foreign exchange loss for the year ended December 31, 2018, was \$259 million compared to a foreign exchange gain of \$224 million for 2017 resulting in a negative change of \$483 million. The loss for the year ended December 31, 2018, was mainly the result of a stronger U.S. dollar to Canadian dollar spot rate as at December 31, 2018 (\$1.3637) compared to the spot rate as at December 31, 2017 (\$1.2571) and the resulting unfavorable impact on the translation of our U.S. dollar denominated indebtedness.

The foreign exchange gain for the year ended December 31, 2017, was \$224 million compared to a foreign exchange gain of \$93 million for 2016 resulting in a positive change of \$131 million. The gain for the year ended December 31, 2017, was mainly the result of a weaker U.S. dollar to Canadian dollar spot rate as at December 31, 2017 (\$1.2571) compared to the spot rate as at December 31, 2016 (\$1.3441) and the resulting favorable impact on the translation of our U.S. dollar denominated indebtedness.

#### Income Taxes

(in millions of Canadian dollars)	Years ended December 31,										
		2018	2017			2016					
Current tax expense	\$	99	\$	112	\$	76					
Deferred tax (recovery) expense		(38)		(31)		8					
Tax expense	\$	61	\$	80	\$	84					

The tax expense for the year ended December 31, 2018, was \$19 million lower than the prior year. The decrease was mainly due to lower operating income and higher interest expense in 2018 compared to 2017.

The tax expense for the year ended December 31, 2017, was \$4 million lower than the prior year. The decrease was mainly due to a decrease in operating income and an increase in interest expense in 2017, combined with the effect of the U.S. tax rate reduction.

#### Backlog

Contracted revenue backlog ("backlog") represents our expected future revenue from existing service contracts (without discounting for present value) including any deferred revenue that we will recognize in the future in respect of cash already received. The majority of our contracted revenue backlog is generated from contractual agreements for satellite capacity. We do not include revenue beyond the stated expiration date of a contract regardless of the potential for a renewal. As at December 31, 2018, our contracted backlog was approximately \$3.7 billion. The calculation of contracted backlog as at December 31, 2018, reflects the revenue recognition policy adopted under IFRS 15.

Generally, following the successful launch of a satellite, if the satellite is operating nominally, our customers may only terminate their service agreements for satellite capacity by paying us all, or substantially all, of the payments that would have otherwise become due over the term of the service agreement. However, if certain of our existing satellites were to experience a significant launch delay, launch or in-orbit failure, or otherwise fail to operate as anticipated, our customers may be entitled to terminate their agreement and we may be obligated to return all or a portion of the customer prepayments made under service agreements for that satellite and reduce the associated contractual revenue from revenue backlog. Any repayments under such conditions would be funded by insurance proceeds we may receive, cash on hand, short-term investments, and funds available under our Revolving Credit Facility.

We expect our backlog as at December 31, 2018 to be recognized as follows:

(in millions of Canadian dollars)	2	019	2020	2021		 2022 2023		2023	Thereafter	
Backlog	\$	759	\$ 606	\$	504	\$ 434	\$	380	\$	1,031

## LIQUIDITY AND CAPITAL RESOURCES

## Cash and Available Credit

As at December 31, 2018, we had \$768 million of cash and short-term investments, including \$187 million held in an unrestricted subsidiary, as well as approximately \$200 million U.S. dollars (or Canadian dollar equivalent) borrowing availability under our Revolving Credit Facility.

#### Cash Flows from Operating Activities

Cash generated from operating activities for the year ended December 31, 2018, was \$466 million, a \$20 million decrease	compared
to the prior year. The decrease was primarily due to lower operating income combined with higher net income tax payments	. This was
partially offset by a positive change in working capital and lower interest paid.	

Cash generated from operating activities for the year ended December 31, 2017, was \$487 million, a \$41 million decrease compared to the prior year. The decrease was primarily due to higher interest payments and lower customer prepayments, partially offset by lower income taxes paid and no repurchase of stock options occurring in 2017.

### Cash Flows used in Investing Activities

Cash used in investing activities for the year ended December 31, 2018, was \$103 million. This consisted of \$67 million of expenditures on satellite programs, \$20 million of payments for intangible assets, as well as \$16 million of payments for property and other equipment.

Cash used in investing activities for the year ended December 31, 2017, was \$165 million. This consisted of \$136 million of expenditures on satellite programs, \$18 million of payments for intangible assets, as well as \$11 million of payments for property and other equipment.

Cash used in investing activities for the year ended December 31, 2016, was \$286 million. This consisted of \$237 million of expenditures on satellite programs, \$42 million of payments for intangible assets, as well as \$7 million of payments for property and other equipment.

### Cash Flows used in Financing Activities

Cash used in financing activities for the year ended December 31, 2018, was \$114 million. This was mostly related to the debt issue costs in connection with the repricing of the Senior Secured Credit Facilities and repayments made on our Senior Secured Credit Facilities.

Cash used in financing activities for the year ended December 31, 2017, was \$589 million. This was mostly related to a cash distribution to shareholders, as a reduction of stated capital, the debt issue costs in connection with the repricing of the Senior Secured Credit Facilities and mandatory principal repayments made on our Senior Secured Credit Facilities.

Cash used in financing activities for the year ended December 31, 2016, was \$140 million. This was mostly related to the repayment of our former senior secured credit facilities and 6.0% Senior Notes and payment of debt issue costs upon refinancing in November 2016, mandatory repayments made on our former senior secured credit facilities, and payment of satellite performance incentives payments. These outflows were partially offset by the proceeds from Senior Secured Credit Facilities and 8.875% Senior Notes.

## Liquidity

A large portion of our annual cash receipts are reasonably predictable because they are primarily derived from an existing backlog of long-term customer contracts and high contract renewal rates. We believe cash and short-term investments as at December 31, 2018, cash flows from operating activities, and drawings on the Revolving Credit Facility under our Senior Secured Credit Facilities will be adequate to meet our expected cash requirements for at least the next twelve months for activities in the normal course of business, including our capital requirements and required interest and principal payments on our indebtedness.

The construction of any satellite replacement or expansion program will require significant capital expenditures. We may choose to invest in new satellites to further grow our business. Cash required for current and future satellite construction programs may be funded from some or all of the following: cash and short-term investments, cash flows from operating activities, cash flows from customer prepayments or through borrowings on the Revolving Credit Facility under our Senior Secured Credit Facilities. In addition, we may sell certain satellite assets and, in accordance with the terms and conditions of our Senior Secured Credit Facilities, reinvest the proceeds in replacement satellites or pay down indebtedness under the Senior Secured Credit Facilities. Subject to market conditions and subject to compliance with the terms and conditions of our Senior Secured Credit Facilities and the financial leverage covenant tests therein, we may also have the ability to obtain additional secured or unsecured financing to fund current or future satellite construction. However, our ability to access these sources of funding is not guaranteed, and therefore, we may not be able to fully fund additional replacement or new satellite construction programs.

#### **D**EBT

Senior Secured Credit Facilities

The obligations under the Credit Agreement and the guarantees of those obligations are secured, subject to certain exceptions, by a first priority security interest in the assets of Telesat and certain of our subsidiaries ("Guarantors"). The Credit Agreement contains covenants that restrict the ability of Telesat and the Guarantors to take specified actions, including, among other things and subject to certain significant exceptions: creating liens, incurring indebtedness, making investments, engaging in mergers, selling property, paying dividends, entering into sale-leaseback transactions, creating subsidiaries, repaying subordinated debt or amending organizational documents. The Credit Agreement also requires Telesat and the Guarantors to comply with a maximum first lien leverage ratio and contains customary events of default and affirmative covenants, including an excess cash sweep, that may require us to repay a portion of the outstanding principal under our Senior Secured Credit Facilities prior to the stated maturity.

Our Senior Secured Credit Facilities are comprised of the following facilities:

### i — Revolving Credit Facility

Our Revolving Credit Facility ("Revolving Facility") is a \$200 million loan facility available in either U.S. dollar or Canadian dollar equivalent, maturing on November 17, 2021. Loans under the Revolving Facility bear interest at a floating interest rate. For Canadian Prime Rate and Alternative Base Rate ("ABR") loans, an applicable margin ranging from 1.5% to 2.00% is applied to the Prime Rate and ABR as these interest rates are defined in the Senior Secured Credit Facilities. For Bankers Acceptance ("BA") Loans and Eurodollar Loans, an applicable margin ranging from 2.50% to 3.00% is applied to either the BA interest rate or LIBOR. The rates on the Revolving Facility vary depending upon the results of the first lien leverage ratio. Our Revolving Facility currently has an unused commitment fee of 40 basis points. As at December 31, 2018, other than approximately \$0.3 million in drawings related to letters of credit, there were no borrowings under this facility.

#### ii — Term Loan B — U.S. Facility

Our Term Loan B — U.S. Facility ("U.S. TLB Facility") is a USD \$2,430 million loan maturing on November 17, 2023.

As at December 31, 2018, USD \$2,326 million of this facility was outstanding, which represents the full amount available following mandatory repayments. As at December 31, 2018, the terms of the outstanding borrowings under our U.S. TLB Facility bear interest at a floating rate of either: (i) LIBOR as periodically determined for interest rate periods selected by Telesat in accordance with the terms of the Senior Secured Credit Facilities, but not less than 0.75%, plus an applicable margin of 2.50%; or (ii) Alternative Base Rate as determined in accordance with the terms of the Senior Secured Credit Facilities plus an applicable margin of 1.50%.

On February 1, 2017, we amended the Senior Secured Credit Facilities to reduce the applicable margin to 3.00% from 3.75% on the then outstanding USD \$2,424 million. As a result of the implementation of IFRS 9, a gain on the February 1, 2017 repricing of \$36 million was recorded against the January 1, 2018 opening balance of accumulated earnings and current and long-term indebtedness. The gain on repricing recorded against the indebtedness is subsequently amortized to interest expense using the effective interest method.

On March 29, 2018, a voluntary payment of \$50 million U.S. dollars was made on the U.S. TLB Facility. This resulted in the recognition of a loss of \$3 million which was recorded against interest and other income and indebtedness. The loss on repayment recorded against the indebtedness is subsequently amortized to interest expense using the effective interest method.

On April 26, 2018, we amended the Senior Secured Credit Facilities to reduce the applicable margin to 2.50% on the then outstanding USD \$2,344 million. This resulted in a gain on repricing of \$7 million which was recorded against interest and other income and indebtedness. The gain on repricing recorded against the indebtedness is subsequently amortized to interest expense using the effective interest method.

The mandatory principal repayments on our U.S. TLB Facility are one quarter of 1.00% of the value of the loan at the time of the repricing on April 26, 2018, which must be paid on the last day of each quarter.

### Senior Notes

Our Senior Notes, in the amount of USD\$500 million, bear interest at an annual rate of 8.875% and are due November 17, 2024. They include covenants or terms that restrict our ability to, among other things, incur additional indebtedness, incur liens, pay dividends or make certain other restricted payments, investments or acquisitions, enter into certain transactions with affiliates, modify or cancel our satellite insurance, effect mergers with another entity, and redeem our Senior Notes, without penalty, before November 15, 2022, in each case subject to exceptions provided in the Senior Notes indenture.

As at December 31, 2018, we were in compliance with the financial covenants of our Senior Secured Credit Facilities and the indenture governing our Senior Notes.

#### **Debt Service Cost**

The interest expense on our Senior Secured Credit Facilities, Senior Notes and interest rate swaps, excluding the impact of the amortization of deferred financing costs, interest rate floors, prepayment options and net gain on repricing/repayment for the year ended December 31, 2018 was \$201 million.

#### Derivatives

We use, from time to time, interest rate and currency derivatives to manage our exposure to changes in interest rates and foreign exchange rates.

As at December 31, 2018, we had four outstanding interest rate swaps which hedge the interest rate risk on USD \$1,800 million of U.S. denominated Term Loan B borrowings. As at December 31, 2018, the fair value of the interest rate swaps was an asset of \$35 million. These contracts, which mature between September 2019 and September 2022, are at fixed interest rates ranging from 1.72% to 2.04%, excluding applicable margin.

We also have embedded derivatives that are accounted for separately at fair value. These embedded derivatives are related to a prepayment option included on our Senior Notes, as well as an interest rate floor included on our U.S. TLB Facility. As at December 31, 2018, the fair value of the embedded derivative related to the prepayment option on our Senior Notes was an asset of \$17 million and the fair value of the embedded derivative related to the interest rate floor was a liability of \$6 million.

The changes in the fair value of these embedded derivatives are recorded on our consolidated statements of (loss) income as a gain or loss on changes in fair value of financial instruments and are non-cash.

All derivative instruments are measured at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market under current market conditions at the measurement date. Where possible, fair values are based on the quoted market values in an active market. In the absence of an active market, we determine fair values based on prevailing market rates (bid and ask prices, as appropriate) for instruments with similar characteristics and risk profiles or internal or external valuation models, such as option pricing models and discounted cash flow analysis, using observable market-based inputs.

These estimates are affected significantly by the assumptions for the amount and timing of estimated future cash flows and discount rates, which all reflect varying degrees of risk. Potential income taxes and other expenses that would be incurred on disposition of our derivative instruments are not reflected in the fair values. The fair values also include an adjustment related to the counterparty credit risk. As a result, the fair values are not necessarily the net amounts that would be realized if these instruments were actually settled.

#### CAPITAL EXPENDITURES

We have entered into contracts for the development of our LEO constellation and other capital expenditures. The outstanding commitments associated with these contracts were approximately \$22 million as at December 31, 2018. These expenditures may be funded from some or all of the following: cash and short-term investments, cash flow from operating activities, cash flow from customer prepayments or funds available under our Revolving Credit Facility.

### CONTRACTUAL OBLIGATIONS AND OTHER COMMERCIAL COMMITMENTS

The following table summarizes our contractual obligations as at December 31, 2018, that are due in each of the next five years and after 2023. This table does not include any future satellite expenditures not committed to at year end.

(in millions of Canadian dollars)	)	2019	2020	2021	2022	2023	Thereafter	Total
Satellite performance incentive payments, including interest	\$	14	\$ 11	\$ 10	\$ 9	\$ 8	\$ 24	\$ 77
Senior Secured Credit Facilities and Notes <sup>(1)</sup>		32	32	32	32	3,044	682	3,854
Interest on long-term indebtedness		232	230	228	225	204	61	1,181
Operating property lease commitments		3	3	4	3	3	17	34
Commitments for capital expenditures <sup>(2)</sup>		22	_	_	_	_	_	22
Other operating commitments		19	11	9	4	3	8	54
Contributions to employment benefit plans <sup>(3)</sup>		7	_	_	_	_	_	7
Decommissioning liabilities		1	_	_	_	_	3	4
Customer and other deposits		2	_	_	_	_	_	2
Other financial liabilities, including interest		4	 _	_	 _	 _	1	5
	\$	336	\$ 287	\$ 283	\$ 273	\$ 3,262	\$ 796	\$ 5,240

- (1) See Note 24 of our audited consolidated financial statements. Excludes interest, deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment.
- (2) The commitments for capital expenditures are related to the development of our LEO constellation and other capital expenditures (see Note 31 of our audited consolidated financial statements).
- (3) See Note 29 of our audited consolidated financial statements.

Our future contributions to the pension plans past 2019, future income tax liabilities and uncertain tax positions, have not been included in the table as the timing and amount of cash required cannot be accurately determined as:

- future contributions to the pension plans depend largely on the result of actuarial valuations that are performed periodically and on the investment performance of the pension fund assets; and
- future payments of income taxes depend on the amount of taxable earnings and on whether there are tax loss carry forwards available to reduce income tax liabilities.

Deferred revenue has not been included in the table above because it does not represent future cash payments (see Notes 21 and 23 of our audited consolidated financial statements).

#### MARKET RISK

#### Credit Risk Related to Financial Instruments

Financial instruments that potentially subject us to a concentration of credit risk consist of cash and short-term investments, accounts receivable, derivative assets and other assets. Cash and short-term investments are invested with high quality financial institutions and are governed by our corporate investment policy, which aims to reduce credit risk by restricting investments to high-grade, mainly U.S. dollar and Canadian dollar denominated investments. Credit checks are performed to minimize exposure to any one customer. We are exposed to credit risk if counterparties to our derivative instruments are unable to meet their obligations. It is expected that these counterparties will be able to meet their obligations as they are institutions with strong credit ratings, but we still periodically monitor their credit risk and credit exposure.

### Foreign Exchange Risk

Our operating results are subject to fluctuations as a result of exchange rate variations to the extent that transactions are made in currencies other than Canadian dollars. The most significant impact of variations in the exchange rate is on our U.S. dollar denominated indebtedness and cash and short-term investments. In addition, a portion of our revenue and expenses, as well as the majority of our capital expenditures are denominated in U.S. dollars. As a result, the volatility of the U.S. currency exposes us to foreign exchange risks.

For the year ended December 31, 2018, we recorded a mainly non-cash foreign exchange loss of approximately \$259 million due to a stronger U.S. to Canadian dollar spot rate (\$1.3637) compared to December 31, 2017 (\$1.2571).

For the year ended December 31, 2017, we recorded a mainly non-cash foreign exchange gain of approximately \$224 million due to a weaker U.S. to Canadian dollar spot rate (\$1.2571) compared to December 31, 2016 (\$1.3441).

The approximate amount of our revenue and certain expenses denominated in U.S. dollars, as a percentage of their overall balance, is summarized in the table below:

Years ended December 31,	2018	2017	2016
Revenue	50%	52%	51%
Operating expenses	30%	42%	41%
Interest on our indebtedness	100%	100%	90%

We use, from time to time, the following instruments to manage our exposure to foreign exchange risk:

- forward currency contracts to hedge foreign exchange risk on anticipated cash flows, mainly related to the construction of satellites and interest payments; and
- currency derivative instruments to hedge the foreign exchange risk on our U.S. dollar denominated indebtedness.

Our policy is that we do not use derivative instruments for speculative purposes. As at December 31, 2018, we have no forward currency contracts nor any currency derivative instruments.

A five percent increase (decrease) in the value of the U.S. dollar against the Canadian dollar would have increased (decreased) our indebtedness and increased (decreased) our net loss as at December 31, 2018 by \$193 million.

A five percent increase (decrease) in the value of the U.S. dollar against the Canadian dollar would have increased (decreased) our cash and cash equivalents by \$29 million, decreased (increased) our net loss by \$25 million and increased (decreased) our other comprehensive income by \$4 million as at December 31, 2018.

A five percent increase (decrease) in the value of the U.S. dollar against the Canadian dollar would have increased (decreased) our revenue and certain expenses for the year ended December 31, 2018, as summarized in the table below:

(In millions of Canadian dollars)

Revenue	\$ 23
Operating expenses	\$ 3
Interest on our indebtedness	\$ 11

The sensitivity analyses above assume that all other variables remain constant.

Through our U.S. dollar denominated indebtedness, we are exposed to foreign exchange fluctuations. The following table contains our existing U.S. dollar denominated indebtedness balances at the beginning of each respective period, which are net of our scheduled debt repayments, and based on the foreign exchange rate as at December 31, 2018.

(CAD millions, beginning of year)	2019	2020	2021	2022	2023	Thereafter
U.S. TLB Facility	\$ 3,172	\$ 3,140	\$ 3,108	\$ 3,076	\$ 3,044	
Senior Notes	682	 682	 682	682	 682	682
U.S. dollar denominated debt balances	\$ 3,854	\$ 3,822	\$ 3,790	\$ 3,758	\$ 3,726	\$ 682

#### Interest Rate Risk

We are exposed to interest rate risk on our cash and short-term investments and on our indebtedness, a portion of the indebtedness which includes a variable interest rate. Changes in the interest rates could impact the amount of interest that we receive or are required to pay.

We use, from time to time, interest rate swaps to hedge the interest rate risk related to our indebtedness.

Our policy is that we do not use derivative instruments for speculative purposes. In October 2017, we entered into four interest rate swaps which hedge the interest rate risk on USD \$1,800 million of borrowings under our U.S. TLB Facility. These contracts, which mature between September 2019 and September 2022, are at fixed interest rates ranging from 1.72% to 2.04%, excluding applicable margin.

If the interest rates on our unhedged variable rate debt increased (decreased) by 0.25%, excluding the potential impact of the interest rate floor, the result would be an increase (decrease) of \$2 million to our net loss for year ended December 31, 2018.

As at December 31, 2018, through our U.S. TLB Facility we are exposed to interest rate fluctuations. The following table contains the balance of the U.S. TLB facility at the beginning of each respective period, net of our scheduled repayments, and based on the foreign exchange rate as at December 31, 2018.

(CAD millions)	2019	 2020	 2021	 2022	2023	Thereafter
U.S. TLB Facility <sup>(1)</sup>	\$ 3,172	\$ 3,140	\$ 3,108	\$ 3,076	\$ 3,044	
Interest rate derivative variable to fixed <sup>(2)</sup>	(2,455)	(1,841)	(1,227)	(614)	_	
Debt exposed to variable interest rate after interest rate derivatives	\$ 717	\$ 1,299	\$ 1,881	\$ 2,462	\$ 3,044	_

- (1) U.S. TLB Facility is USD denominated and bears interest at Libor with a 0.75% floor plus a spread.
- (2) USD \$1,800 million notional, variable rate is greater of Libor or 0.75%. The weighted average fixed rate (before spread) varies by year and ranges from 1.89% to 2.04%.

#### Guarantees

In the normal course of business, we enter into agreements that provide for indemnification and guarantees to counterparties in transactions involving sales of assets, sales of services, purchases and development of assets, securitization agreements and operating leases. The nature of almost all of these indemnifications prevents us from making a reasonable estimate of the maximum potential amount that we could be required to pay counterparties. As a result, we cannot determine how they could affect future liquidity, capital resources or our credit risk profile. We have not made any significant payments under these indemnifications in the past. For more information, see Note 31 of our audited consolidated financial statements.

## RELATED PARTY TRANSACTIONS

As at December 31, 2018, related parties consisted of PSP Investments and Loral, our common shareholders, together with their subsidiaries and affiliates. In addition to the documents related to the Telesat Canada Acquisition, we have also entered into various commercial arrangements with Loral and subsidiaries and affiliates of Loral. For more information, see Note 33 of our audited consolidated financial statements.

## **NON-IFRS MEASURES**

## Consolidated EBITDA for Covenant Purposes

Under the terms of the Credit Agreement for our Senior Secured Credit Facilities, we are required to comply with a senior secured leverage ratio maintenance covenant as well as with other financial ratio covenants that impact, among other items, our ability to incur debt and make dividend payments.

If our Revolving Credit Facility is drawn, our Credit Agreement requires us to comply with a first lien net leverage ratio of 5.75:1.00, tested quarterly, and failure to comply will result in an event of default. We refer to this first lien net leverage ratio as the Consolidated Total Secured Debt to Consolidated EBITDA for Covenant Purposes ratio.

Our Credit Agreement limits, among other items, our ability to incur debt and make dividend payments if the total leverage ratio is above 4.50:1.00, with certain exceptions. We refer to this total leverage ratio as the Consolidated Total Debt for Covenant Purposes to Consolidated EBITDA for the purposes of our Senior Secured Credit Facilities.

Our Consolidated Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA") for Covenant Purposes is defined as net income (loss) for Telesat and Restricted Subsidiaries plus interest expense, net of cash interest income earned on cash and cash equivalents, depreciation expense, amortization expense, extraordinary losses and unusual and non-recurring charges, non-cash charges, any expenses or charges incurred in connection with any issuance of debt, any impairment charges or asset write off, foreign withholding taxes paid or accrued, non-cash charges related to share-based compensation expense and consulting fees payable to Loral. Additional sums which may be added include projected cost savings from an acquisition and lost revenue which may have been earned by satellites that have been subject to an insured loss. Deductions which are made in calculating Consolidated EBITDA for Covenant Purposes include extraordinary, non-recurring gains and losses and non-cash gains and losses.

Further adjustments are made to account for income from Unrestricted Subsidiaries, and currency gains and losses (including non-cash gains or losses on derivative contracts). Unrestricted Subsidiaries are (a) any Subsidiary of Telesat that is formed or acquired after the closing date of the Credit Agreement, provided that such Subsidiary is designated as an Unrestricted Subsidiary, and (b) any Restricted Subsidiary subsequently re-designated as an Unrestricted Subsidiary.

Consolidated EBITDA for Covenant Purposes is not a presentation made in accordance with IFRS, is not a measure of financial condition or profitability, and should not be considered as an alternative to (1) net income (loss) determined in accordance with IFRS or (2) cash flows from operating activities determined in accordance with IFRS. Additionally, Consolidated EBITDA for Covenant Purposes is not intended to be a measure of free cash flow for management's discretionary use as it does not include certain cash requirements for such items as interest payments, tax payments and debt service requirements. We believe that the inclusion of Consolidated EBITDA for Covenant Purposes herein is appropriate to provide additional information concerning the calculation of the financial ratio maintenance covenant and other covenants on our Senior Secured Credit Facilities. Consolidated EBITDA for Covenant Purposes is a material component of these covenants. Non-compliance with the financial ratio maintenance covenant contained in our Senior Secured Credit Facilities could result in the requirement to immediately repay all amounts outstanding. This presentation of Consolidated EBITDA for Covenant Purposes is not companies use identical calculations of EBITDA. We believe the disclosure of the calculation of Consolidated EBITDA for Covenant Purposes provides information that is useful to an investor's understanding of our liquidity and financial flexibility.

The following is a reconciliation of net loss, which is an IFRS measure of our operating results, to Consolidated EBITDA for Covenant Purposes, as defined in the Credit Agreement and the calculation of the ratio of Consolidated Total Secured Debt to Consolidated EBITDA for Covenant Purposes as defined in the Credit Agreement. The terms and related calculations are defined in the Credit Agreement, a copy of which is publicly available at <a href="https://www.sec.gov">www.sec.gov</a>.

(in CAD millions)	Dece	er Ended ember 31, 2018
Net loss	\$	(91)
Impact of unrestricted subsidiary		(10)
Consolidated loss for Covenant Purposes		(101)
Plus:		
Income taxes (Note 1)		58
Interest expense (Note 1)		196
Depreciation and amortization expense (Note 1)		249
Non-cash share-based compensation		30
Other		35
Increased by:		
Non-cash losses on changes in fair value of financial instruments and swap obligations and cash losses on the value of swap obligations		18
Non-cash losses resulting from changes in foreign exchange rates		271
Consolidated EBITDA for Covenant Purposes	\$	755

Note 1: Tax, interest, depreciation and amortization expense for covenant purposes excludes certain specific expenses as defined in the Credit Agreement. As a result, these items in the covenant calculation do not reconcile to the financial statement line items.

Consolidated Total Secured Debt and Consolidated Debt for Covenant Purposes

Consolidated Total Debt for Covenant Purposes and Consolidated Total Secured Debt for Covenant Purposes are non-IFRS measures. We believe that the inclusion of Consolidated Total Debt for Covenant Purposes and Consolidated Total Secured Debt for Covenant Purposes herein are appropriate to provide additional information concerning the calculation of the financial ratio maintenance and other covenants under our Senior Secured Credit Facilities and provides information that is useful to an investor's understanding of our compliance with these financial covenants.

The following is a reconciliation of our Consolidated Total Debt for Covenant Purposes and Consolidated Total Secured Debt for Covenant Purposes to Indebtedness:

(in \$ millions)	As at December 31, 2018			
U.S. dollar denominated debt				
Term Loan B U.S Facility (USD)	\$	2,326		
8.875% Senior Notes (USD)		500		
		2,826		
Foreign exchange adjustment		1,028		
Subtotal (CAD)		3,854		
Deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment (CAD)		(130)		
Indebtedness	\$	3,724		
(in CAD \$ millions)				
Indebtedness	\$	3,724		
Adjustments for covenant purposes:				
Deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment (CAD)		130		
less: Cash and cash equivalents (max. \$100 million USD)		(136)		
Consolidated Total Debt for Covenant Purposes	\$	3,718		
Consolidated Total Debt for Covenant Purposes	\$	3,718		
less: Unsecured debt (8.875% Senior Notes)		(682)		
Consolidated Total Secured Debt for Covenant Purposes	\$	3,036		

As at December 31, 2018, the Consolidated Total Debt for Covenant Purposes to Consolidated EBITDA ratio, for the purposes of our Senior Secured Credit Facilities was 4.93:1.00. The Consolidated Total Secured Debt to Consolidated EBITDA for Covenant Purposes ratio, for the purposes of our Senior Secured Credit Facilities, was 4.02:1.00.

### CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES

The preparation of financial statements in accordance with IFRS requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as at the date of the financial statements, and the amounts of revenue and expenses reported for the year. Actual results could differ from these estimates under different assumptions and conditions. For more details on these estimates, refer to Note 5 of our audited consolidated financial statements.

### Critical judgments in applying accounting policies

Deferred revenue

Certain of our revenue agreements were noted to have a significant financing component. Judgment by management is required to determine the discount rate used in the significant financing component calculation.

Uncertain income tax positions

We operate in numerous jurisdictions and are subject to country-specific tax laws. We use significant judgment when determining the worldwide provision for tax, and estimate provisions for uncertain tax positions as the amounts expected to be paid based on a qualitative assessment of all relevant factors. In the assessment, we consider risk with respect to tax matters under active discussion, audit, dispute or appeal with tax authorities, or which are otherwise considered to involve uncertainty. We review the provisions at each balance sheet date.

### Critical accounting estimates and assumptions

Derivative financial instruments measured at fair value

Derivative financial assets and liabilities are measured at fair value. When quoted market values are unavailable for our financial instruments, and in the absence of an active market, we determine fair value for financial instruments based on prevailing market rates (bid and ask prices, as appropriate) for instruments with similar characteristics and risk profiles or we make use of internal or external valuation models, such as option pricing models and discounted cash flow analysis, using observable market-based inputs. The determination of fair value is significantly impacted by the assumptions used for the amount and timing of estimated future cash flows and discount rates. As a result, the fair value of financial assets and liabilities, and the amount of gains or losses on changes in fair value recorded to net (loss) income could vary.

Impairment of goodwill

Goodwill represented \$2,447 million of our total assets as at December 31, 2018. Determining whether goodwill is impaired using a quantitative approach requires an estimation of our value, which requires us to estimate the future cash flows expected to arise from operations and to make assumptions regarding economic factors, tax rates, and annual growth rates. Actual operating results and our related cash flows could differ from the estimates used for the impairment analysis.

Impairment of intangible assets

Intangible assets represented a significant portion of our total assets as at December 31, 2018. We test intangible assets for impairment annually or more frequently if indicators of impairment or reversal of a prior impairment loss exist. The quantitative impairment analysis requires us to estimate the future cash flows expected to arise from operations, and to make assumptions regarding economic factors, discount rates, tax rates, and annual growth rates. Significant judgments are made in establishing these assumptions. Actual operating results and our related cash flows could differ from the estimates used for the impairment analysis.

Employee benefits

The cost of defined benefit pension plans, other post-employment benefits, and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions which may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates, future pension increases and return on plan assets. Due to the complexity of the valuation, the underlying assumptions, and its long-term nature, the defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed annually.

## Share-based compensation

The expense for stock options is based on the fair value of the awards granted using the Black-Scholes option pricing model. The Black-Scholes option pricing model includes estimates of the dividend yield, expected volatility, risk-free interest rate and the expected life in years. Any changes in these estimates may have a significant impact on the amounts reported.

Determination of useful life of satellites and finite life intangible assets

The estimated useful life and depreciation method for satellites and finite life intangible assets are reviewed annually, with the effect of any changes in estimate being accounted for on a prospective basis. Any change in these estimates may have a significant impact on the amounts reported.

Income taxes

We assess the recoverability of deferred tax assets based upon an estimation of our projected taxable income using enacted or substantially enacted tax laws, and our ability to utilize future tax deductions before they expire. Actual results could differ from expectations.

### ACCOUNTING STANDARDS

### Changes in Accounting Policies

We have prepared our consolidated financial statements in accordance with IFRS. For more on the impacts of the following changes in accounting policy, please refer to Note 3 of our audited consolidated financial statements.

IFRS 15, Revenue from Contracts with Customers

We adopted IFRS 15, Revenue from Contracts with Customers ("IFRS 15"), with a date of initial adoption of January 1, 2018. Under the standard, revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration we expect to receive in exchange for those goods and services. In addition, the standard requires disclosure of the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. We elected to adopt IFRS 15 using a modified retrospective approach with the cumulative effect of initially applying the standard being recorded as an adjustment to the opening balance of accumulated earnings. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those years.

The main impacts of this standard relates to the following:

- an adjustment to the promised amount of consideration for effects of the time value of money for prepayment contracts with a significant financing component. This resulted in an increase in deferred tax assets, satellites, property and other equipment, both the other current and long-term liabilities, reserves and a decrease to accumulated earnings and deferred tax liabilities as of January 1, 2018; and
- an adjustment is required for certain contracts in which we would be considered as an agent under the new revenue standard as opposed to a principal under the former standard. This change had no impact on the balance sheet as at January 1, 2018.

We elected to use the practical expedient where the effect of all modifications to a contract prior to January 1, 2018 need not be separately evaluated.

### IFRS 9, Financial Instruments

We have adopted IFRS 9, Financial Instruments ("IFRS 9"), with a date of initial adoption of January 1, 2018. IFRS 9 uses a single approach to determine whether a financial asset is measured at amortized cost or fair value, replacing multiple rules in IAS 39. The approach in IFRS 9 is generally based on how an entity manages its financial assets in the context of its business model and the contractual cash flow characteristics of the financial assets. Impairments of financial assets are determined using a single impairment model that requires entities to recognize expected credit losses without requiring a triggering event to occur. The new impairment model applies to financial assets measured at amortized cost or fair value through other comprehensive income ("FVTOCI"), except for investments in equity instruments, and to contract assets. IFRS 9 largely retains the existing requirements under IAS 39 for the classification and measurement of financial liabilities, with the exception of the following change applicable to us:

• IFRS 9 changes the accounting for non-substantial modifications of financial liabilities. Under IFRS 9, when a financial liability is modified but not derecognized, we recalculate the amortized cost of the modified financial liability by discounting the modified

contractual cash flows using the original effective interest rate. Any adjustment to the amortized cost of the financial liability is recognized on the statement of loss.
64

This standard is applied retrospectively with the cumulative effect of initially applying the standard being recorded as an adjustment to the opening balance of accumulated earnings as at January 1, 2018. We have not restated comparative years.

The main impact of the adoption of IFRS 9 was the following:

The change in accounting for non-substantial modifications of financial liabilities resulted in an amount recognized relating to the repricing of the Term Loan B — U.S. Facility which reduced the applicable margin from 3.75% to 3.00% on February 1, 2017. This resulted in an increase in deferred tax assets, deferred tax liabilities and accumulated earnings and a decrease in indebtedness on January 1, 2018.

The new expected credit loss model had an insignificant impact on the Company's impairment allowance.

## IFRS 2, Share-Based Payments

We adopted the amendments to IFRS 2, Share-Based Payments ("IFRS 2"), with a date of initial adoption of January 1, 2018. These amendments clarify the accounting treatment and disclosure requirements for certain types of share-based payment transactions, including cash settled share-based payment transactions, share-based payment transactions with a net settlement feature for withholding tax obligations, as well as modifications of share-based payment transactions from cash settled to equity settled. These amendments had no impact on our audited consolidated financial statements.

## Recent IFRS Accounting Pronouncements

The International Accounting Standards Board ("IASB") periodically issues new and amended accounting standards. The new and amended standards determined to be applicable to us are disclosed below. The remaining new and amended standards have been excluded as they are not applicable.

#### Leases

IFRS 16, Leases ("IFRS 16") was issued by the IASB in January 2016, and will replace IAS 17, Leases and related interpretations on leases. IFRS 16 will require a lessee to recognize a right-of-use asset and lease liability for all leases with a term of more than 12 months. The standard will also require that the depreciation of the lease assets be recorded separately from the interest expense on the lease liabilities on the statement of income. For lessors, IFRS 16 substantially carries forward the requirements of IAS 17. IFRS 16 also aligns the definition of a lease with the control based approach in IFRS 15.

Companies can elect to use either a retrospective approach with a restatement of comparative information or a modified retrospective approach with the cumulative effect of initial application shown in retained earnings instead of the restatement of the comparative information. We have elected to use a modified retrospective approach on adoption.

Based on the evaluations to date, we have identified the following areas that will be affected:

- A material amount will be required to be recognized for contracts that we have entered into as the lessee. We anticipate that this will result in an increase in satellites, property and other equipment and other current and long-term liabilities as at January 1, 2019. On the balances to be capitalized on January 1, 2019, going forward this will result in lower operating expenses and higher interest and depreciation expenses; and
- Additional disclosures will be required for the new standards.

The standard is effective for annual periods beginning on or after January 1, 2019. We have not yet finalized the quantification of the above noted impacts of this adoption as we continue to evaluate the impact of IFRS 16 and emerging guidance.

## Income Taxes

IFRIC 23, Uncertainty over Income Taxes Treatments was issued by the IASB in June 2017. The interpretation clarifies how to apply the recognition and measurement requirements in *IAS 12, Income Taxes* when there is uncertainty over income tax treatments. This interpretation is effective for annual reporting periods beginning on or after January 1, 2019. This interpretation is not expected to have an impact on our consolidated financial statements.

### Item 6. Directors, Senior Management and Employees

### A. Directors and senior management.

In the following table are listed the (1) names, (2) ages as of December 31, 2018 and (3) positions of the individuals who serve as the directors and senior management of Telesat, along with the date that each individual was elected or appointed:

Date Elected or Appointed a

			Director or
Name	Age	Title	Member of Senior Management
Directors			8
Mark H. Rachesky, M.D. <sup>(1)</sup>	59	Chairman of the Board	October 31, 2007
Michael B. Targoff <sup>(2)</sup>	74	Director	October 31, 2007
Henry (Hank) Intven	70	Director	October 31, 2007
David Bernardi	56	Director	July 25, 2017
Michael Boychuk <sup>(2)</sup>	63	Director	July 17, 2015
Guthrie Stewart <sup>(1)</sup>	63	Director	August 8, 2016
John P. (Jack) Cashman	78	Director	October 31, 2007
Colin D. Watson <sup>(2)</sup>	77	Director, Chair of Audit Committee	October 31, 2007
Clare R. Copeland <sup>(1)</sup>	82	Director, Chair of Compensation and Corporate Governance Committee	October 31, 2007
Richard Fadden	67	Director	August 3, 2016
Senior Management*			
Daniel S. Goldberg	53	President and Chief Executive Officer	September 18, 2006
Michèle Beck	53	Vice President, North American Sales	January 1, 2013
Michel G. Cayouette	60	Chief Financial Officer and Treasurer	September 17, 2008
Christopher S. DiFrancesco	55	Vice President, General Counsel and Secretary	January 5, 2009
Thomas E. Eaton, Jr.	63	Vice President, International Sales	September 11, 2014
Patrick M. Enright	60	Vice President, Network Operations	December 1, 2004
John Flaherty	53	Vice President, Business Planning & Marketing	January 1, 2013
Erwin Hudson	62	Vice President, Telesat LEO	April 25, 2017
Michael C. Schwartz	54	Senior Vice President, Corporate & Business Development	November 30, 2015
David N. Wendling	56	Chief Technical Officer	October 31, 2007

<sup>(1)</sup> Member of Compensation and Corporate Governance Committee.

There are no family relationships among any of the directors or members of senior management. Except for the Shareholders Agreement described in "Related party transactions", pursuant to which each of Loral and PSP have the right to nominate three directors of Telesat, there are no material arrangements or understandings with major shareholders or between any two or more directors or members of senior management pursuant to which any person was selected as a director or member of senior management.

Each of the directors has served in his respective capacity since his election, and we expect that he will serve until the next annual meeting of shareholders, unless his office is earlier vacated in accordance with the by-laws of the corporation or with the provisions of the Canada Business Corporations Act (the "CBCA").

Each member of senior management is appointed by the board to serve, subject to the discretion of the board, until his successor is appointed or he resigns.

<sup>(2)</sup> Member of Audit Committee.

<sup>\*</sup> Ellen Hols, former Vice President Government Affairs, left effective June 23, 2018.

The following is a brief description of the principal business activities of the directors and members of senior management.

#### **Directors**

Mark H. Rachesky, M.D. is the founder of MHR Fund Management LLC and has been its President since its inception in 1996. He has been Non-executive Chairman of the Board of Directors of Loral since 2006 and is Chairman of the Compensation Committee and a member of the Executive Committee of Loral. Dr. Rachesky is Non-executive Chairman of the Board and a member of the Strategic Advisory Committee and Compensation Committee of Lions Gate Entertainment Corp., and a Director and member of the Nominating and Governance Committee and Co-Chairman of the Finance Committee of Navistar International Corporation, and a Director, and member of the Governance and Nominating Committee and the Compensation Committee of Emisphere Technologies, Inc., and a Director, and member of the Compensation, Corporate Governance, and Nominating Committees of Titan International Inc.

*Michael B. Targoff* has been Vice Chairman of Loral Space & Communications since November 2005, a consultant to Loral since December 2012 and was Chief Executive Officer from 2006 to 2012, and President from 2008 to 2012. From 1998 to 2006, Mr. Targoff was founder and principal of Michael B. Targoff & Co., a private investment company.

Henry (Hank) Intven is principal of Haro Strait Consulting Inc. For twenty-five years, he was a partner in the Toronto office of McCarthy Tétrault LLP, a leading Canadian law firm. He has held a number of senior advisory and executive positions with the Canadian Government and the Canadian Radio-television and Telecommunications Commission. Over the past 35 years, he has advised businesses and governments on many of the major commercial, regulatory and policy developments in the Canadian telecommunications industry. He has also advised on business, policy and regulatory matters involving the telecommunications industry in more than 20 other countries.

David Bernardi has been employed as the Chief Technology Officer of Telesystem Ltd., a Canadian private capital corporation since 2000. Mr. Bernardi is also a Managing Partner in three funds controlled by Telesystem which have invested in early-stage Canadian technology companies. Mr. Bernardi currently serves on the board of directors of the following companies: Averna Technologies, Inc., CVT Corp Transmission Inc., NorthStar Earth & Space Inc., The Fox Group, Inc., and Metafoam Technologies Inc. Until its sale to Cisco Systems Inc. in February 2018, Mr. Bernardi was a Director of NASDAQ-listed Broadsoft Inc. He also serves as a Director of Centech, a Montreal-based university-affiliated startup incubator. Mr. Bernardi holds an ICD.D designation from the Institute of Corporate Directors of Canada.

Michael T. Boychuk was, from July 2009 to June 2015, President of Bimcor Inc., the pension fund investment manager for the Bell Canada group of companies. From 1999 to 2009, he was Senior Vice-President and Treasurer of BCE Inc. and Bell Canada, being responsible for all Treasury and Capital Markets activities of the BCE group of companies and, until 2005, he was also responsible for all mergers and acquisition activities. He joined BCE in 1997 as President and Chief Executive Officer of BCE Capital, the venture capital arm of BCE Inc. Mr. Boychuk began his career with KPMG (Peat Marwick) and later joined the Montreal Trust Company where he held progressively senior positions until 1993. From 1994 to 1997, he co-founded Manitex Capital Inc., a private equity merchant bank. He currently is a member of the Board of Directors of the Laurentian Bank of Canada (Chair, Audit Committee), GDI Integrated Services (Chair Audit Committee) and Corus Entertainment. Mr. Boychuk also serves as a member of the Board and Audit Committee of Cadillac Fairview Corporation. He is also a member of the Investment Advisory Committee of Nunavut Trust, the McConnell Foundation and the McGill Pension Investment Committee (Chair). Mr. Boychuk is a Governor of McGill University and a member of the Audit Committee. He is also a member of the International Advisory Board of the Faculty of Management of McGill University.

Guthrie Stewart is currently the Senior Vice President and Global Head of Private Investments for PSP Investments, a position he has held since joining PSP Investments in 2015. Prior to joining PSP Investments, Mr. Stewart was a director and advisor for a number of public and private enterprises and investment funds. He was also a partner at Edgestone Capital. Prior to that, Mr. Stewart spent 15 years in executive roles in the telecommunications industry, including as President and CEO of Teleglobe Canada. Prior to Teleglobe, he was an officer of BCE Mobile Communications Inc. Mr. Stewart began his career as a corporate and acquisitions lawyer in Toronto with Osler.

John (Jack) P. Cashman is chairman of Aventamed D.A.C., a medical device company located in Ireland. He is also a member of Irrus Investments Limited, located in Limerick, Ireland; the Medtech Syndicate, located in Galway, Ireland and is the Medtech representative and a Director in Capsos Medical, a medical device company located in Galway, Ireland. Until February 2014, he was the Non-Executive Chairman of Vectura Group plc. U.K. (LSE: VEC). From 2002 – 2005, he was the Chairman of Advanced Surgical Concepts Ltd., Ireland, and a director of Bespak plc. Mr. Cashman is also the former Chairman and joint CEO of R.P. Scherer Corporation.

*Colin D. Watson* is currently a director of Mason Capital Ltd. He was President and CEO of Rogers Cablesystems (1979 – 1996), Spar Aerospace (1996 – 1999) and Vector Aerospace (2003 – 2005). He was also Vice Chairman of Spar Aerospace Limited from 2000 to 2002.

Clare R. Copeland is the CEO and Vice Chairman of Falls Management Company, a commercial development and casino in Niagara Falls, Ontario. He held the position of Chairman of Toronto Hydro Corporation, a Canadian electricity provider, from 1999 to 2013. Between 2000 and 2002, he was Chairman and Chief Executive Officer of OSF Inc., a manufacturer of retail store interiors. He is also on the Boards of RioCan, MDC Corp. and Chesswood Inc. He was President and Chief Executive Officer of People's Jewellers Corporation (1993 – 1999), Chairman of Sun Media (1997 – 1999), President and CEO of Granada Canada Limited (1984 – 1988) and Chairman of Ontario Place (1987 – 1997). He has also held several senior management positions, including Chief Operating Officer with Zale Corporation (1991 – 1993).

Richard Fadden was the National Security Advisor to the Prime Minister of Canada from January 2015 to March 2016. Previously he was the Deputy Minister of National Defence starting in 2013 and served as the Director of the Canadian Security Intelligence Service from 2009 until 2013. Mr. Fadden has also served as the Deputy Minister for Citizenship and Immigration Canada from 2006 to 2009, the Deputy Minister of Natural Resources Canada from 2005 to 2006, President of the Canadian Food Inspection Agency from 2002 to 2005, and Deputy Clerk and Counsel in the Privy Council Office from 2000 to 2002, during which time he assumed the additional duties of Security and Intelligence Coordinator in February 2001. Earlier in his career, Mr. Fadden worked in a variety of positions throughout the Government of Canada including in the Department of External Affairs, the Office of the Auditor General of Canada, Natural Resources Canada and the Treasury Board Secretariat. He is chairman of ADGA Group's Strategic Advisory Council since November, 2018, a Strategic Advisor to Awz HLS Fund and a Director of Cyber Defence Corporation.

### Senior management

Daniel S. Goldberg became Telesat's President and Chief Executive Officer in September 2006. Prior to September 2006, Mr. Goldberg served as Chief Executive Officer of SES New Skies, a position he held since March 2006 following the purchase of New Skies by SES. Mr. Goldberg served as the Chief Executive Officer of New Skies Satellites from 2002 to 2006 and prior to that as Chief Operating Officer of New Skies since February 2000. Prior to that time, he had served as New Skies General Counsel since 1998. Prior to joining New Skies, Mr. Goldberg worked at PanAmSat as the Associate General Counsel and Vice President of Government and Regulatory Affairs during 1998. From 1993 to 1997, he was an associate at Goldberg, Godles, Wiener & Wright, a law firm in Washington, D.C. Mr. Goldberg is a member of the Board of Directors of MDC Partners. Mr. Goldberg received a Bachelor of Arts degree from the University of Virginia, graduating with highest honors, and a Juris Doctor degree, cum laude, from Harvard Law School.

Michèle Beck joined Telesat in 1987 as a project engineer in the Broadband Development Group. In 1994, she joined the Canadian Cable Telecommunications Association as Director Engineering and was subsequently promoted to Vice President in 1996. In March 2006, Ms. Beck returned to Telesat as the Director, Engineering responsible for all satellite service offerings. In 2009, she became Director of North American Enterprise and Government Sales and in January 2013 was promoted to Vice President, North American Sales. She holds a Bachelor of Applied Science, Electrical Engineering from the University of Ottawa.

Michel G. Cayouette became Telesat's Chief Financial Officer and Treasurer in 2008. Prior to that, Mr. Cayouette was Managing Partner of Gordon Blake, LLC since 2003. From 2002 to 2003, he served as Chief Financial Officer of Flag Telecom Holdings Ltd. From January 2001 to November 2001, he served as Executive Vice President and Chief Financial Officer of TIW Asia N.V. From 1992 to 2000, he held several senior executive positions for Teleglobe Communications Corporation and Teleglobe Inc. Mr. Cayouette is a chartered accountant and a certified public accountant. He holds a Master of Business Administration degree and a Bachelor of Administration degree from the University of Montreal (École des Hautes Études Commerciales).

Christopher S. DiFrancesco became Telesat's Vice President, General Counsel and Secretary in 2009. Prior to that, Mr. DiFrancesco served as Senior Vice President, Legal, General Counsel and Secretary of Corel Corporation, a position he held since 2006. From 2003 to 2006, he served as Corel Corporation's Vice President, Legal, General Counsel and Secretary, and as Corporate Counsel from 2000 to 2003. From 1998 to 2000, he served as Associate Counsel for the National Hockey League Players' Association. From 1989 to 1998, he was an Articling Student and then Associate with the law firm of Gowling Lafleur Henderson. He holds a Bachelor of Engineering Science in Mechanical Engineering and a Bachelor of Laws from the University of Western Ontario.

Thomas E. Eaton Jr. joined Telesat in 2014 as Vice-President, International Sales. Before joining Telesat, Mr. Eaton was President of Harris CapRock Communications and an officer of Harris Corp from 2011 to 2013, Chief Operating Officer of Harris CapRock Communications from 2010 to 2011, and President of CapRock Government Solutions from 2007 to 2010. Previously, he served as President of G2 Satellite Solutions, a wholly-owned subsidiary of PanAmSat, and Executive Vice-President of PanAmSat from 2002 to 2007, and as Executive Vice-President of Global Sales and Marketing from 2000 to 2002. Mr. Eaton was Vice-President of Global Sales and Marketing for Intelsat from 1995 to 2000, and served as co-founder and Vice-President, Sales and Marketing for Integrated Network Services, Inc. from 1992 to 1995. He holds a Master of Business Administration from Mercer University and a Bachelor of Business Administration, Accounting from the University of Georgia.

Patrick M. Enright joined Telesat in 1981, and held progressively responsible management positions until being appointed Vice President, Network Services in 2004 with a title change to Vice President, Network Operations in 2008. Mr. Enright holds a diploma in Electronic Engineering Technology from Conestoga College of Applied Arts and Technology. He is a graduate of the Western Executive Program, University of Western Ontario, as well as a graduate of the Executive Management Development Program from the Banff Centre for Management.

*Erwin Hudson* joined Telesat in 2017 as Vice President, Telesat LEO. Prior to joining Telesat, Mr. Hudson was at ViaSat Inc. where he was Sr. Vice President, ViaSat Australia from 2012 to 2017. Between 2000 and 2012, Mr. Hudson held positions at WildBlue Communications including President and Chief Technology Officer. WildBlue was acquired by ViaSat in 2009. Prior to WildBlue, Mr. Hudson was a senior executive at Space Systems Loral from 1998 to 2000 and, before that he was Director, Satellite Communications at TRW Space & Electronics. Mr. Hudson was at TRW from 1980 to 1998. Mr. Hudson earned a Bachelor's Degree in Electrical Engineering from North Carolina State University, a Master's Degree in Electrical Engineering from The Ohio State University and a Professional Engineers Degree in Electrical Engineering from the University of Southern California.

*John Flaherty* joined Telesat in 1987, and since that time has held a variety of positions in Finance, Business Development and Marketing including the Director, South America from 2006 to 2007 and the Director, Planning and Marketing from 2007 to 2012. Mr. Flaherty was appointed Vice President, Business Planning & Marketing in 2013. He holds a Master of Business Administration from Queen's University as well as a Bachelor of Arts, major in Economics from Carleton University.

Michael C. Schwartz rejoined Telesat in 2015 as Senior Vice President, Corporate & Business Development. From 2013 to 2015, he served as Senior Vice President, Corporate Strategy and Development with Sprint Corporation, after having served as Vice President, Marketing, Corporate Development & Regulatory of Telesat from 2007. Mr. Schwartz joined Telesat from SES New Skies, where he served as Senior Vice President of Marketing and Corporate Development, a position he held since 2006 following the purchase of New Skies Satellites by SES. Prior to that, Mr. Schwartz served in the same position for New Skies Satellites since 2003. Prior to joining New Skies Satellites, he served as Chief Development and Financial Officer of Terabeam Corporation (Terabeam), responsible for business and corporate development as well as financial operations. Prior to Terabeam, he was a co-founder and President of an Internet infrastructure company, which was sold in 2000. He also held two senior positions at AT&T Wireless Services, most recently as Vice President of Acquisitions and Development. Mr. Schwartz graduated magna cum laude from Harvard University in physics and magna cum laude from Harvard Law School.

**David N. Wendling** joined Telesat in 1986, and has held a variety of key positions within the Space Systems Department prior to being appointed Vice President, Space Systems in 2007 with a title change to Vice President Space and Network Engineering in 2008 and to Chief Technical Officer in 2013. Mr. Wendling holds a Bachelor of Applied Science from the University of Waterloo. He is registered as a Professional Engineer with the Professional Engineers of Ontario.

### B. Compensation.

### **Director Compensation**

Loral and PSP Investments are each entitled to nominate three directors to the board. None of those six directors who are shareholder nominees are paid a fee by us for their services as directors.

During the fiscal year ended December 31, 2018, the aggregate fees paid to the other four directors by us were approximately \$521,000.

These four independent directors are each paid an annual fee of \$110,000 by us. In addition to the annual fee, the Chair of the Audit Committee, and the Chair of the Corporate Governance Committee are each paid \$15,000 by us. During the fiscal year ended December 31, 2018, the Chair of the Corporate Governance Committee was paid additional compensation of \$18,000 by us. For each attendance at a meeting of the board or a board committee, each director who is paid the annual fee is also paid a meeting fee of \$1,500 by us. Directors may be offered a right to elect to participate in one or more compensation plans which may be developed by us, in which case the annual fee of the participating director may be reduced by any value attributed to such right of participation. All directors are entitled to be reimbursed for travel and other expenses properly incurred by them in attending meetings of the board or of any committee of the board.

The directors of Telesat Canada are also members of the board of managers of Telesat LLC. They do not receive additional remuneration from us for acting in that capacity.

# **Senior Management Compensation**

The aggregate salary and benefits paid by us to Telesat's senior management for the year ended December 31, 2018 amounted to approximately \$16.4 million. The aggregate salary and benefits paid by us to the five highest-paid officers of Telesat for the fiscal year ended December 31, 2018 was approximately \$13.7 million.

As a Canadian company that is not a reporting issuer under the securities legislation of any jurisdiction in Canada, Telesat is not required to publicly disclose individual compensation information either as a requirement under its governing statute or under any securities legislation. Telesat does not publicly disclose individual compensation information in Canada.

In addition, the current service costs set aside or accrued by us during 2018 to provide pension, retirement or similar benefits to senior management of Telesat amounted to approximately \$1.6 million.

### **Directors' and Senior Management's Indemnity Payments**

We have entered into indemnity agreements with Telesat's directors and members of senior management that may require us to indemnify them against certain liabilities that may arise by reason of their status or service as our directors or members of senior management. No indemnity payments were made to directors and/or senior management in 2018.

#### C. Board practices.

## **Board of Directors**

The board currently consists of ten members. Each director is elected annually, and we expect that he will serve until the next annual meeting of shareholders, unless his office is earlier vacated in accordance with the by-laws of the corporation or with the provisions of the CBCA. Each of the directors has served in his respective capacity since his election; see "Item 6A. Directors and Senior Management" for the period during which each director and member of senior management has served in that office.

### **Directors' Service Contracts**

There are no director service contracts between Telesat and its directors providing for benefits upon termination of employment.

70

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

Our board has an Audit Committee, and a Compensation and Corporate Governance Committee.

Audit Committee.

Our Audit Committee is comprised of Messrs. Boychuk, Targoff and Watson. Mr. Watson is the chair of the committee.

The principal duties and responsibilities of our Audit Committee, which are included in our Audit Committee charter, are to assist the board in its oversight of:

- the integrity of the corporation's financial statements and related information;
- the corporation's compliance with applicable legal and regulatory requirements;
- the independence, qualifications and appointment of the corporation's auditor;
- management responsibility for reporting on internal controls and risk management; and
- the administration, funding and investment of the corporation's pension plans and fund.

Our Audit Committee is also responsible for:

- appointing, compensating, retaining and overseeing the work of the corporation's principal accounting firm; establishing procedures for (a) the receipt, retention and treatment of complaints received by the corporation regarding
- accounting, internal controls or auditing matters and (b) confidential, anonymous submission of complaints by employees regarding questionable accounting or auditing matters;
- pre-approving all engagements for permitted non-audit services provided by the corporation's auditor to the corporation; and
- reviewing and discussing the annual consolidated financial statements with management.

The Audit Committee has the authority to engage outside counsel and other outside advisors as it deems appropriate to assist it in the performance of its functions.

Compensation and Corporate Governance Committee

Our Compensation and Corporate Governance Committee is comprised of Messrs. Copeland and Stewart and Dr. Rachesky. Mr. Copeland is the chair of the committee.

The principal duties and responsibilities of our Compensation and Corporate Governance Committee, which are included in our Compensation and Corporate Governance Committee charter, are to assist the board in its oversight of:

- the compensation, nomination, evaluation and succession of officers and other management personnel;
- developing and implementing the corporation's corporate governance guidelines;
- identifying individuals qualified to become board members;
- determining the composition of the board of directors and its committees;
- determining the directors' remuneration for board and committee service; and
- overseeing the corporation's policies concerning business conduct, ethics, and other matters, and if required, public disclosure of material information.

#### D. Employees.

As of December 31, 2018, Telesat and its subsidiaries had approximately 387 full and part-time employees, approximately 3.4% of whom are subject to collective bargaining agreements. Our employee body is primarily comprised of professional engineering, sales and marketing staff, administrative staff and skilled technical workers. Telesat considers its employee relations to be good.

#### E. Share ownership.

The following table presents information regarding the ownership of certain classes of shares of Telesat Canada by our directors and senior management as of December 31, 2018.

Name (Title)	Common	Voting Participating Preferred	Non-Voting Participating Preferred	Director Voting Preferred	Percentage of Class
Mark H. Rachesky,					
M.D. <sup>(1)</sup>	_	_	_	_	_
Michael B. Targoff	_	_	_	_	_
Hank Intven	_	_	_	_	_
Michael Boychuk	_	_	_	_	_
David Bernardi	_	_	_	_	
Guthrie Stewart	_	_	_	_	_
John P. (Jack) Cashman	_	_	_	820	82%
Colin D. Watson	_	_	_	180	18%
Clare R. Copeland	_	_	_	_	
Richard Fadden	_	_	_	_	_
Daniel S. Goldberg	_	_	467,940	_	1.2%
Michèle Beck	_	_	_	_	_
Michel G. Cayouette	_	_	87,787	_	0.2%
Christopher S.					
DiFrancesco					
Patrick M. Enright	_	_	_	_	
Thomas E. Eaton, Jr.	_	_	_	_	_
John Flaherty	_	_	_	_	
Erwin Hudson	_	_	_	_	_
Michael C. Schwartz	_		383,034	_	1.0%
David N. Wendling	_	_	_	_	_

Various funds affiliated with MHR hold, as at December 31, 2018, approximately 39.9% of Loral's outstanding voting common (1) stock and 58.4% of Loral's total outstanding voting and non-voting common stock. Mark H. Rachesky, M.D., chairman of our board of directors and non-executive chairman of the board of directors of Loral, is the co-founder and president of MHR.

# **Telesat Canada Stock Options**

In September 2008 and April 2013, Telesat Holdings adopted stock incentive plans for certain key employees. The plans provide for the grant of up to 16,553,779 options, of which 3,280,000 were authorized in 2018, to purchase non-voting participating preferred shares of Telesat Canada convertible into common shares of Telesat Canada.

Under both plans, two different types of stock options may be granted: time-vesting options and performance-vesting options. The time-vesting options generally become vested and exercisable over a five-year period by 20% annual increments. The performance-vesting options become vested and exercisable over a five-year period, provided that Telesat has achieved or exceeded an annual or cumulative target consolidated EBITDA established by the board of directors. The exercise period of the stock options expires 10 years from the grant date. The exercise price of each share underlying the options will be the higher of a fixed price, established by the board of directors on the grant date, and the fair market value of a non-voting participating preferred share on the grant date. Both plans authorize the board of directors to grant tandem SARs, at their discretion.

In August 2017, Telesat authorized the exchange of 805,835 performance-vesting options for 805,835 time-vesting options. The exchanged amounts included 715,383 unvested performance-vesting options which were exchanged for an equal amount of unvested time-vesting options. A portion of the new unvested time-vesting options will vest upon the next anniversary date of the option holder with remaining vested evenly over a three-year period commencing on the sixth anniversary date.

As at December 31, 2018, there were 7,534,966 options outstanding under both plans (of which 4,121,222 were vested). The weighted average remaining life of these outstanding options was eight years and the weighted average exercise price of the outstanding options granted to senior management is \$24.09. There are 286,147 and 115,577 remaining options available for grant under the 2008 and 2013 plans, respectively.

In connection with the \$387 million U.S dollar cash distribution to our shareholders, effective January 25, 2017, a special payment was authorized to option holders of \$12.8 million U.S. dollars. Of this balance, \$11.3 million U.S. dollars has cumulatively been recorded as an operating expense, of which \$11.2 million U.S. dollars has been paid. The remaining payments will be made in subsequent periods subject to certain conditions being met.

#### Item 7. Major Shareholders and Related Party Transactions

#### A. Major shareholders.

The following table sets forth the ownership of shareholders that are the beneficial owners of 5% or more of each class of shares of Telesat Canada as of December 31, 2018.

Name (Title)	Common (C)	Voting Participating Preferred (VPP)	Non-Voting Participating Preferred (NPP)	Director Voting Preferred (DVP)	Percentage of Class
Red Isle Private Investments Inc. (1)	35,172,218	7,034,444	1,136,346	_	C: 47.4%
					VPP: 100% NPP: 3.0%
Loral Holdings Corporation <sup>(1)</sup>	39,080,242	_	35,953,824	_	C: 52.6%
					NPP: 93.6%
John P. (Jack) Cashman	_	_	_	820	DVP: 82%
Colin D. Watson	_	_	_	180	DVP: 18%

- (1) Each of Red Isle's and Loral's economic and voting interests on a combined basis taking into account the number and classes of shares owned by each of them are described below.
- Various funds affiliated with MHR hold, as at December 31, 2018, approximately 39.9% of Loral's outstanding voting common (2) stock and 58.4% of Loral's total outstanding voting and non-voting common stock. Mark H. Rachesky, M.D., chairman of our board of directors and non-executive chairman of the board of directors of Loral, is the co-founder and president of MHR.

PSP Investments is a Canadian crown corporation established to invest the amounts transferred by the federal government equal to the proceeds of the net contributions since April 1, 2000, for the pension plans of the Public Service, the Canadian Forces and the Royal Canadian Mounted Police, and since March 1, 2007, for the Reserve Force Pension Plan. PSP Investments holds its interest in Telesat Canada through a wholly-owned subsidiary, Red Isle Private Investments Inc. ("Red Isle"), a corporation organized under the CBCA. Red Isle's interest in Telesat Canada is a 36.2% equity interest, a 67.4% voting interest on all matters except for the election of directors, and a 29.4% voting interest for the election of directors. PSP Investments' principal offices are at 1250 Boulevard René Lévesque West, Suite 900, Montreal, Quebec, Canada, H3B 4W8 and its registered offices are at 1 Rideau Street, 7<sup>th</sup> Floor, Ottawa, Ontario, Canada, K1N 8S7.

Loral is a Delaware corporation. Loral participates in satellite services operations through its ownership of a 62.7% equity interest in Telesat Canada and a 32.6% voting interest on all matters (in each case as at December 31, 2018). Loral's principal offices are located at 600 Fifth Avenue, 16th Floor, New York, New York 10020. Loral's registered office in the State of Delaware is located at 1209 Orange Street, Wilmington County of New Castle, Delaware 19801. Various funds affiliated with MHR hold, as at December 31, 2018, approximately 39.9% of Loral's outstanding voting common stock and 58.4% of Loral's total outstanding voting and non-voting common stock. Mark H. Rachesky, M.D., chairman of our board of directors and non-executive chairman of the board of directors of Loral, is the co-founder and president of MHR.

John P. Cashman is a Canadian citizen, residing in the City of Toronto, in the Province of Ontario. Mr. Cashman holds director voting preferred shares having a 31.1% voting interest for the election of directors only in Telesat Canada. These shares have liquidation preference and dividend rights above common shares of Telesat Canada. Mr. Cashman is an independent director of Telesat Canada.

Colin D. Watson is a Canadian citizen, residing in the City of Toronto, in the Province of Ontario. Mr. Watson holds director voting preferred shares having a 6.8% voting interest for the election of directors only in Telesat Canada. These shares have liquidation preference and dividend rights above common shares of Telesat Canada. Mr. Watson is an independent director of Telesat Canada.

#### B. Related party transactions.

Consulting Services Agreement

On October 31, 2007, Loral and Telesat Canada entered into a consulting services agreement (the "Consulting Agreement"). Pursuant to the terms of the Consulting Agreement, Loral agreed to provide non-exclusive consulting services in relation to the business of Loral Skynet which was transferred to Telesat Canada as part of the Skynet Transaction, as well as with respect to certain aspects of our satellite communications business. The Consulting Agreement had an initial term of seven years and was automatically renewed on October 31, 2014 for an additional seven-year term. In exchange for Loral's agreement to provide services under the Consulting Agreement, we pay Loral an annual fee of US\$5 million, payable quarterly in arrears on the last day of March, June, September and December of each year during the term of the Consulting Agreement.

The services available from Loral can include providing advice as to business objectives, strategies, implementation of a synergy plan after the Skynet Transaction, the transferred assets, satellite orbital locations outside of Canada, capital structure and financing, satellite expert personnel and general personnel matters. Furthermore, for additional fees, we may request assistance from Loral with respect to certain areas, including benefits administration, insurance and risk management, auditing, human resources, treasury operations, and, in the United States, public relations, regulatory, tax and legal compliance if the provision of such organizational services at the agreed price is approved by a majority of our directors, excluding Loral nominees. The amounts of such additional payments are limited by the provisions of the Notes.

Under the terms of the Consulting Agreement, we indemnify Loral from certain liabilities arising out of the Consulting Agreement, provided that Loral (or its representative, employee or affiliate, if applicable) has not committed fraud or misconduct in relation to the matters giving rise to the indemnification claim.

Shareholders Agreement

On October 31, 2007, in connection with the Telesat Canada acquisition, PSP Investments, Red Isle, Loral, LSC Holdings, Loral Holdings Corporation, a Delaware corporation ("Loral Holdings"), Loral Skynet, John P. Cashman, Colin D. Watson, Telesat Interco, Holdings, Telesat Canada and MHR entered into a shareholders agreement (the "Shareholders Agreement").

The Shareholders Agreement provides for, among other things, the manner in which the affairs of Telesat and its subsidiaries will be conducted and the relationships among the parties and future shareholders of Telesat. Specifically, with respect to Telesat, the Shareholders Agreement provides for its capital structure, the number and election of members of the board of directors, the meetings of directors, the required vote of the board of directors to take certain actions, the approval of the Skynet Transaction, the officers, and the rights of certain shareholders to appoint observers to the board of directors. The Shareholders Agreement also approves an initial business plan, provides for the preparation and approval of annual budgets and business plan updates and procedures for the purchase of equipment, products and services from Loral and its affiliates, an agreement by Loral not to engage in a competing satellite communications business and agreements by the shareholders not to solicit employees of Telesat or any of its subsidiaries. Additionally, the Shareholders Agreement details the matters requiring shareholder approval or the approval of a shareholder, provides for preemptive rights for certain shareholders upon the issuance of certain shares of capital stock of Telesat and provides for either PSP Investments or Loral to cause Telesat to conduct an initial public offering of its equity shares. The Shareholders Agreement also restricts the ability of holders of certain shares to transfer them unless certain conditions are met or approval of the transfer is approved by directors, provides for a right of first offer to equity shareholders if a holder of equity shares wishes to sell them to a third party, provides for, in certain circumstances, tag-along rights in favor of non-Loral shareholders if Loral sells equity shares, drag-along rights in favor of Loral in case Loral enters into an agreement to sell all of its Telesat equity securities and drag-along rights in favor of PSP Investments for the sale of Telesat if Loral undergoes a change of control. Also, the Shareholders Agreement provides for PSP Investments and Loral to have the right to require the other party to sell all of its equity shares or voting shares to PSP Investments or to a designee of Loral, as applicable, under certain circumstances.

The Shareholders Agreement provides for a board of directors of Telesat consisting of 10 directors, three nominated by Loral, three nominated by PSP Investments and four independent directors selected by a nominating committee comprised of one PSP Investments nominee, one Loral nominee and one of the independent directors then in office. Loral has nominated Messrs. Rachesky, Targoff and Intven. PSP has nominated Messrs. Bernardi, Stewart and Boychuk. Each shareholder is obligated to vote all shares for the election of the directors nominated by the nominating process. Each shareholder of Telesat agreed to certain covenants, particularly with respect to: voting of shares in certain circumstances, compliance by such party's subsidiaries with the Shareholders Agreement and keeping certain information confidential. The Shareholders Agreement provides to Loral the right of approval over many large capital expenditures, including, approval over purchases and/or financing of new satellites by us, under certain circumstances.

In connection with the Telesat Canada acquisition, Loral agreed to indemnify Telesat for any tax liabilities for taxation years prior to 2007 and Telesat agreed to indemnify Loral for the settlement of any tax receivables for taxation years prior to 2007.

In May 2016, Loral, PSP and Telesat entered into an agreement which preserves the parties' right to assert against one another legal claims relating to Telesat. We are advised by Loral that Telesat was included as a party to the agreement solely because Loral believes that, as a technical matter of Canadian law and for purposes of potentially seeking equitable relief, Telesat may be a necessary party. We are further advised by Loral and PSP that neither of them intends to seek monetary damages against Telesat and we are not aware of any bases upon which Loral or PSP could seek monetary damages against us.

Accession Agreement

Coincident with their exercise of share appreciation rights and receipt of non-voting participating preferred shares, current members of senior management, Daniel S. Goldberg, Michael Schwartz and Michel G. Cayouette, as well as certain former members of senior management, entered into Accession Agreements pursuant to which they agreed to be bound by certain provisions of the Shareholders Agreement.

Administration Fee

Loral's employees and retirees participate in certain welfare plans sponsored or managed by Telesat. Loral pays Telesat an annual administrative fee of US\$100,000 and reimburses Telesat for the plan costs attributable to Loral participants.

#### Loral Nominee Director

McCarthy Tétrault LLP has acted as Canadian counsel to Loral, Telesat Interco and Holdings in connection with the Telesat Canada acquisition, the offering of prior series of notes and other matters, and may act for Telesat Canada on other matters in the future. Mr. Hank Intven, who was counsel with McCarthy Tétrault LLP until July 2018, is a director of Telesat Canada. See "Directors and senior management." In 2018, the aggregate amount of expenses incurred by Telesat Canada and its subsidiaries for services received from McCarthy Tétrault LLP was approximately \$7,000.

Goldberg, Godles, Wiener & Wright

Henry Goldberg, the father of Daniel Goldberg, the President and Chief Executive Officer of Telesat Canada, is a partner in the law firm Goldberg, Godles, Wiener & Wright, which handles certain matters for Telesat Canada and its subsidiaries. In 2018, the aggregate amount of expenses incurred by Telesat Canada and its subsidiaries for services received was approximately US\$850,000.

#### C. Interests of experts and counsel.

Not applicable.

#### **Item 8. Financial Information**

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

See our Consolidated Financial Statements beginning at page F-1.

# **Legal Proceedings**

We frequently participate in proceedings before national telecommunications regulatory authorities. See "Government Regulation." In addition, we may also become involved from time to time in other legal proceedings arising in the normal course of our business.

We are subject to audits by taxing authorities in the various jurisdictions in which we operate. In Brazil, we are currently involved in a number of disputes with the Brazilian tax authorities who have alleged that additional taxes are owed on revenue earned by our Brazilian subsidiaries for the period 2003 to 2012. The disputes relate to the Brazilian tax authorities' characterization of our revenue. Additional taxes and interest of approximately \$38.9 million have been assessed by Brazilian tax authorities and we have challenged those assessments. We believe the likelihood of an unfavorable outcome in these disputes is remote and, as such, no reserve has been established.

In Canada, the taxing authorities have assessed \$9 million relating to transfer pricing issues for the years 2009 and 2012. Both disputes relate to Canadian tax authorities repricing certain transactions between us and our subsidiaries. We have paid 50% of the outstanding amount to formally object. We believe an unfavorable outcome in these disputes is remote and, as such, no reserve has been established.

Other than the above, we are not aware of any proceedings outstanding or threatened as of the date hereof by or against us or relating to our business which may have, or have had in the recent past, significant effects on our financial position or profitability.

#### **Environmental Matters**

We are subject to various laws and regulations relating to the protection of the environment and human health and safety (including those governing the management, storage and disposal of hazardous materials). Some of our operations require continuous power supply, and, as a result, current and past operations at our earth stations and other technical facilities include fuel storage, and batteries for back-up generators and uninterruptible power systems. As an owner or operator of property and in connection with current and historical operations at some of our sites, we could incur costs, including cleanup costs, fines, sanctions and third-party claims, as a result of violations of or liabilities under environmental laws and regulations. We are not aware, however, of any environmental matters outstanding or threatened as of the date hereof by or against us or relating to our business which would be material to our financial condition or results of operations.

#### **Dividend Policy**

Common Shares

In 2018, no dividends on the common shares were declared. Dividends will be declared subject to the requirements of the CBCA, and paid as permitted by the Senior Secured Credit Facilities and the indenture governing the Senior Notes.

Voting Participating Preferred Shares

In 2018, no dividends on the voting participating preferred shares were declared. Dividends will be declared subject to the requirements of the CBCA, and paid as permitted by the Senior Secured Credit Facilities and the indenture governing the Senior Notes.

Non-Voting Participating Preferred Shares

In 2018, no dividends on the non-voting participating preferred shares were declared. Dividends will be declared subject to the requirements of the CBCA, and paid as permitted by the Senior Secured Credit Facilities and the indenture governing the Senior Notes.

Director Voting Preferred Shares

In January, 2019, dividends on the director voting preferred shares were declared and subsequently paid in February, 2019 for the period November 1, 2017 to October 31, 2018 in the amount of \$10,000. Dividends for future periods will be declared subject to the requirements of the CBCA, and paid as permitted by the Senior Secured Credit Facilities and the indenture governing the Senior Notes.

#### B. Significant Changes.

Except as disclosed elsewhere in this Annual Report, no significant changes have occurred since the date of the annual financial statements included in this Annual Report.

# Item 9. The Offer and Listing

#### A. Offer and listing details.

Not applicable.

#### B. Plan of distribution.

Not applicable.

#### C. Markets.

Our common shares are not traded on any stock exchanges or other regulated markets.

# D. Selling shareholders.

Not applicable.

#### E. Dilution.

Not applicable.

#### F. Expenses of the issue.

Not applicable.

#### **Item 10. Additional Information**

#### A. Share capital.

Not applicable.

#### B. Memorandum and articles of association.

#### **Telesat Canada**

*Register, Entry Number and Purposes*. Telesat Canada's Articles of Amalgamation are registered with DISED under Certificate No. 1004445-8 under the CBCA. There are no restrictions in Telesat Canada's Articles of Amalgamation on the type of business that it may carry on. Neither Telesat Canada's articles nor its by-laws contain a description of its objects and purposes.

Directors' Powers. The Shareholders Agreement provides for, among other things, Telesat Canada's capital structure, the number and election of members of the board of directors, the meetings of directors, the required vote of the board of directors to take certain actions, the officers, and the rights of certain shareholders to appoint observers to the board of directors. See "Related party transactions — Shareholders Agreement." Pursuant to the Shareholders Agreement, at any meeting at which Telesat Canada's board of directors considers any question involving a material agreement or transaction or proposed material agreement or transaction with Telesat Canada to which an interested shareholder is a party, any director nominee of that interested shareholder shall be required by the chairperson to leave the meeting while the matter is being considered, unless such requirement is waived by a majority vote of the disinterested directors, and shall abstain from voting thereon.

According to its by-laws, the directors of Telesat Canada may be paid such remuneration for their services as the board of directors may from time to time determine. However, the Shareholders Agreement provides that no director who is a shareholder nominee shall receive compensation for his services as a director (other than reimbursement for expenses). Neither Telesat Canada's articles nor its by-laws (a) require an independent quorum for voting on director compensation; (b) set out a mandatory retirement age for Telesat Canada's directors; or (c) require the directors to own securities of Telesat Canada in order to serve as directors.

Telesat Canada's by-laws provide that, without limiting the borrowing powers as set forth in the CBCA, the board of directors may (a) borrow money upon the credit of Telesat Canada; (b) issue, reissue, sell or pledge bonds, debentures, notes or other evidences of indebtedness or guarantee of Telesat Canada, whether secured or unsecured; (c) give a guarantee on behalf of Telesat Canada to secure performance of any present or future indebtedness, liability or obligation of any person; and (d) charge, mortgage, hypothecate, pledge, or otherwise create a security interest in all or any currently owned or subsequently acquired real or personal, movable or immovable, property of Telesat Canada, including book debts, rights, powers, franchises and undertakings, to secure any such bonds, debentures, notes or other indebtedness, liability or obligation of the corporation. The by-laws do not limit or restrict the borrowing of money by Telesat Canada on bills of exchange or promissory notes made, drawn, accepted or endorsed by or on behalf of Telesat Canada.

Rights, Preferences and Restrictions Attaching to Each Class of Telesat Canada's Shares. The authorized share capital of Telesat Canada is comprised of: (i) an unlimited number of common shares, of voting participating preferred shares, of non-voting participating preferred shares, of redeemable common shares, and of redeemable non-voting participating preferred shares, (ii) 1,000 director voting preferred shares, and (iii) 325,000 senior preferred shares. There are no outstanding redeemable common shares, redeemable non-voting participating preferred shares, or senior preferred shares. Below is a description of the rights, preferences and restrictions attaching to each outstanding class of Telesat Canada's shares. There are no provisions for sinking funds, and no class of shares is subject to further

capital calls by Telesat Canada. The Telesat Canada articles and by-laws do not provide for cumulative voting. The members of Telesat Canada's board of directors are not replaced at staggered intervals but are elected annually.						
		78				

#### Common Shares

The holders of common shares are entitled to receive notice of and to attend all annual and special meetings of the shareholders of Telesat Canada and to one vote in respect of each common share held on all matters at all such meetings, except in respect of a class vote applicable only to the shares of any other class, in respect of which the common shareholders shall have no right to vote. The holders of common shares are entitled to receive dividends as may be declared by the board of directors of Telesat Canada, and are entitled to share in the distribution of the assets of Telesat Canada upon liquidation, winding-up or dissolution, subject to the rights, privileges and conditions attaching to any other class of shares ranking in order of priority. The common shares are convertible at the holders' option, at any time, into voting participating preferred shares or non-voting participating preferred shares, on a one-for-one basis. The common shares have no par value. There are no provisions for redemption of common shares. Each holder of common shares entitled to vote at an annual or special meeting of the shareholders is entitled to cast one vote for each share held.

Voting Participating Preferred Shares

The rights, privileges and conditions of the voting participating preferred shares are identical in all respects to those of the common shares, except for the following:

- The holders of voting participating preferred shares are not entitled to vote at meetings of the shareholders of Telesat Canada on resolutions electing directors.
  - For all other meetings of the shareholders of Telesat Canada, the holders of voting participating preferred shares are entitled to a variable number of votes per voting participating preferred share based on the number of voting participating preferred shares,
- non-voting participating preferred shares and redeemable non-voting participating preferred shares outstanding on the record date of the given meeting of the shareholders of Telesat Canada.
  - The voting participating preferred shares are convertible, at any time, at the holders' option into common shares or non-voting participating preferred shares on a one-for-one basis as long as the result of such conversion does not cause Telesat Canada to cease to be a "qualified corporation" within the meaning of the Canadian Telecommunication Common Carrier Ownership and

The voting participating preferred shares have no par value.

Control Regulations pursuant to the Telecommunications Act (Canada).

Non-Voting Participating Preferred Shares

The rights, privileges and conditions of the non-voting participating preferred shares are identical in all respects to those of the common shares, except for the following:

- The holders of non-voting participating preferred shares are not entitled to vote on any matter at meetings of the shareholders of Telesat Canada, except in respect of a class vote applicable only to the non-voting participating preferred shares.

  The non-voting participating preferred shares are convertible, at any time, at the holders' option into common shares or voting
- participating preferred shares on a one-for-one basis as long as the result of such conversion does not cause Telesat Canada to cease to be a "qualified corporation" within the meaning of the Canadian Telecommunication Common Carrier Ownership and Control Regulations pursuant to the Telecommunications Act (Canada).

The non-voting participating preferred shares have no par value.

#### Director Voting Preferred Shares

The rights, privileges and conditions of the director voting preferred shares are identical in all respects to those of the common shares, except for the following:

- The holders of director voting preferred shares are entitled to receive notice of and to attend all meetings of the shareholders of Telesat Canada at which directors of Telesat Canada are to be elected. The holders of director voting preferred shares are not entitled to attend meetings of the shareholders of Telesat Canada and have no right to vote on any matter other than the election of directors of Telesat Canada.
- The holders of director voting preferred shares are entitled to receive annual non-cumulative dividends of \$10 per share if declared by the Board of Directors of Telesat Canada, in priority to the payment of dividends on the common shares, voting participating preferred shares, non-voting participating preferred shares, redeemable common shares, and redeemable non-voting participating preferred shares, but after payment of any accrued dividends on the senior preferred shares.

  In the event of liquidation, wind-up or dissolution, the holders of director voting preferred shares are entitled to receive \$10 per
- share in priority to the payment of dividends on the common shares, voting participating preferred shares, non-voting participating preferred shares, redeemable common shares, and redeemable non-voting participating preferred shares, but after payment of any accrued dividends on the senior preferred shares.
- The director voting preferred shares are redeemable at the option of Telesat Canada, at any time, at a redemption price of \$10 per share.

The director voting preferred shares have a nominal stated value.

Procedures to Change the Rights of Shareholders. In order to change the rights of the shareholders as contained in Telesat Canada's Articles of Amalgamation, an amendment to the Articles of Amalgamation is required. Such an amendment would require, in addition to any shareholder approval required as a mandatory provision of the CBCA, (a) with respect to any amendment not excepted by the Shareholders Agreement, the approval of each of PSP Investments and Loral; (b) with respect to changes to the rights, privileges, restrictions, and conditions of the common shares, voting participating preferred shares, non-voting participating preferred shares, redeemable common shares or redeemable non-voting participating preferred shares, the approval of two-thirds of each such class affected by such amendment voting as a separate class and the approval of two-thirds of the common shares, voting participating preferred shares, non-voting participating preferred shares, redeemable common shares or redeemable non-voting participating preferred shares voting together as a class; (c) with respect to changes to the rights, privileges, restrictions, and conditions of the director voting preferred shares, the approval of two-thirds of the director voting preferred shares voting as a separate class and the approval of twothirds of the common shares, voting participating preferred shares, non-voting participating preferred shares, redeemable common shares or redeemable non-voting participating preferred shares voting together as a class; and (d) with respect to changes to the rights, privileges, restrictions, and conditions of the senior preferred shares, the approval of two-thirds of the senior preferred shares voting as a separate class, except that (i) an increase to the number of senior preferred shares or (ii) the creation of a new class of shares having priority, or ranking pari passu, as to dividends or liquidation shall not require consent of the senior preferred shares. The Shareholders Agreement of Telesat Canada may not be amended without the written consent of both PSP Investments and Loral and, for the amendment of certain provisions, the additional consent of MHR.

Shareholder Meetings. The CBCA provides that Telesat Canada must hold an annual general meeting not later than fifteen months after holding the last preceding annual meeting but no later than six months after the end of Telesat Canada's preceding financial year. The board of directors or the chairman of the board of directors has the power to call a special meeting of shareholders at any time.

If Telesat Canada has only one shareholder or only one holder of any class or series of shares, the shareholder present in person or represented by proxy constitutes a meeting. Otherwise, subject to the CBCA, a quorum of shareholders is two persons, present in person, each being a shareholder or proxy holder, and together representing by proxy at least 51% of the outstanding shares of Telesat Canada carrying voting rights at the meeting, provided that at least 51% of the voting rights of outstanding shares represented at the meeting are at all times held by Canadians.

The only persons entitled to be present at a meeting of shareholders are those entitled to vote at that meeting, the directors, officers and auditor of Telesat Canada and others who, although not entitled to vote, are entitled or required under any provision of the CBCA, or Telesat Canada's articles or by-laws to be present at the meeting. Any other person may be admitted only on the invitation of the chairman of the meeting or with the consent of the meeting.

Limitations on Rights to Own Securities. The articles of Telesat Canada provide that Non-Canadians (as the term is defined in Section 2 of the Canadian Telecommunications Common Carrier Ownership and Control Regulations promulgated pursuant to the Telecommunications Act, or "Canadian Ownership Regulations") may not hold, beneficially own or control, directly or indirectly, otherwise than by way of security only, in the aggregate voting shares to which are attached more than 33 <sup>1</sup>/<sub>3</sub> per cent of the votes that may ordinarily be cast at a meeting of Telesat Canada's shareholders.

Impediments to Change of Control. There are no provisions of Telesat Canada's articles or by-laws that would have an effect of delaying, deferring or preventing a change in control of Telesat Canada and that would operate only with respect to a merger, acquisition or corporate restructuring involving Telesat Canada.

Shareholder Ownership Disclosure. Neither Telesat Canada's articles nor its by-laws contain a provision governing the ownership threshold above which shareholder ownership must be disclosed. Telesat Canada's by-laws do, however, require each person in whose name shares are registered to furnish an affidavit or a declaration in accordance with the Canadian Ownership Regulations or the articles, if requested in writing by a director of Telesat Canada with the authorization of the board of directors.

Significant Differences with Applicable U.S. Law. None.

Special Conditions for Changes in Capital. None.

#### C. Material contracts.

Set forth below is a list of each material contract, other than contracts entered into in the ordinary course of business, to which Telesat Canada and its subsidiaries is a party, for the two years immediately preceding publication of this Annual Report:

- Indenture, dated November 17, 2016, with respect to Telesat Canada's 8.875% Senior Notes due 2024, among Telesat Holdings, Telesat, Telesat LLC, as co-issuer, the guarantors party thereto and The Bank of New York Mellon, as Trustee.
  - Amendment No. 5 dated April 26, 2018 to the Credit Agreement, dated as of March 28, 2012, as amended by Amendment No. 1 on April 2, 2013, as further amended by Amendment No. 2 on November 17, 2016, as further amended by Amendment No. 3
- on December 19, 2016, and as further amended by Amendment No. 4 on February 1, 2017, by and among Telesat Canada, Telesat LLC, the guarantors party thereto, the lenders party thereto and JP Morgan Chase Bank, N.A., as administrative agent, collateral agent, swingline lender and L/C Issuer.

# D. Exchange controls.

There are no governmental laws, decrees or regulations in Canada relating to restrictions on the export or import of capital, or Canadian exchange restrictions affecting the remittance of dividends, interest, royalties or similar payments to non-resident holders of our securities.

#### E. Taxation.

Not applicable.

# F. Dividends and paying agents.

Not applicable.

#### G. Statement by experts.

Not applicable.

#### H. Documents on display.

The documents concerning the Company which are referred to in this Annual Report may be inspected at the principal executive offices of the Company.

# I. Subsidiary Information.

Not applicable.

# Item 11. Quantitative and Qualitative Disclosures About Market Risk

#### A. Quantitative information about market risk.

The information called for by this Item may be found in "Item 5. Operating and Financial Review and Prospects".

# B. Qualitative information about market risk.

The information called for by this Item may be found in "Item 5. Operating and Financial Review and Prospects".

#### Item 12. Description of Securities Other than Equity Securities

Not applicable.

#### **PART II**

# Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

#### Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

Not applicable.

#### Item 15. Controls and Procedures

#### **Evaluation of Disclosure Controls and Procedures**

"Disclosure controls and procedures", as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934, as amended ("Exchange Act"), are designed to provide reasonable assurance that information required to be disclosed is accumulated and communicated to management in a timely manner. As of December 31, 2018, Telesat conducted an evaluation under the supervision and with the participation of its management, including its Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of its disclosure controls and procedures. Based on this evaluation, Telesat's Chief Executive Officer and Chief Financial Officer concluded that Telesat's disclosure controls and procedures were effective as of December 31, 2018 to provide reasonable assurance that information required to be disclosed by it in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

# Management's Report on Internal Control over Financial Reporting

Telesat's management is responsible for establishing and maintaining adequate "internal control over financial reporting", as such term is defined in Rule 13a-15(f) of the Exchange Act. 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 as issued by the International Accounting Standards Board. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements in a timely manner, and can provide only reasonable assurances that the objectives of the control system have been met. 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 deterioration in the degree of compliance with the underlying policies and procedures.

An evaluation of the effectiveness of Telesat's internal control over financial reporting was conducted by Telesat's management, under the supervision and with the participation of Telesat's Chief Executive Officer and Chief Financial Officer, based on the framework set forth in the *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. Based on this evaluation, Telesat's Chief Executive Officer and Chief Financial Officer have concluded that Telesat's internal control over financial reporting was effective as of December 31, 2018.

This annual report does not include an attestation report of Telesat's independent registered public accounting firm regarding internal control over financial reporting. Management's report on internal control over financial reporting was not subject to attestation by our independent registered public accounting firm pursuant to the exemption for public companies whose public market capitalization is less than USD \$75 million in the Dodd-Frank Act signed on July 21, 2010.

#### **Changes in Internal Control over Financial Reporting**

During the period covered by this annual report, there have been no changes in Telesat's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, its internal control over financial reporting.

# Item 16A. Audit Committee Financial Expert

Our Audit Committee is composed of Messrs. Targoff, Boychuk and Watson. Telesat Canada's board of directors has determined that Mr. Watson is an "audit committee financial expert". Based upon the listing standards of the Nasdaq, we believe that Mr. Watson is, and Messrs. Targoff and Boychuk are not, considered independent as that term is defined in the Nasdaq listing standards.

#### Item 16B. Code of Ethics

Telesat Canada has adopted a written code of ethics that applies to all of its employees. A copy of the Code of Business Conduct is available, free of charge, on Telesat Canada's website located at *www.telesat.com*. If any amendments are made to this Code of Business Conduct other than technical, administrative, or other non-substantive amendments, or if any waivers, including implicit waivers, from a provision of this Code of Business Conduct are granted to Telesat Canada's Chief Executive Officer, Chief Financial Officer or other finance executives, Telesat Canada will disclose the nature of the amendment or waiver, its effective date and to whom it applies on its website or in a report on Form 6-K or other similar form filed with the SEC. There were no material amendments to, or waivers of, the Code of Business Conduct during our fiscal year ended December 31, 2018.

#### Item 16C. Principal Accountant Fees and Services

Deloitte LLP ("Deloitte") acted as the principal independent registered public accounting firm for Telesat Canada for the years ended December 31, 2018 and December 31, 2017. Set forth below is a breakdown of fees for services rendered during those years.

	Y	Years ended Dece				
		2018				
(In thousands of Canadian dollars)						
Audit fees	\$	1,043	\$	939		
Audit related fees				_		
Tax fees		139		125		
All other fees		3		4		
Total	\$	1,185	\$	1,068		

Our Audit Committee must approve all audit, audit-related and permitted non-audit services to be provided by Deloitte and their related fees. Fees related to the annual audits of our consolidated financial statements are specifically approved by the Audit Committee on an annual basis. All fees for other audit and audit-related services are pre-approved annually or more frequently, if required. The Audit Committee has considered whether the provision of non-audit services is compatible with maintaining Deloitte's independence.

#### **Audit Fees**

Audit fees were for professional services rendered by Deloitte for the audit of our annual financial statements and for the reviews of our quarterly financial statements for the years ended December 31, 2018 and 2017. The audit fees also include fees for the audits of our pension plans and for other miscellaneous audits.

#### **Audit Related Fees**

Audit related fees relate are assurance and reasonably related to the performance of the audit of the annual financial statements that were not included in the above audit fees. There were no audit related fees for the years ended December 31, 2018 and 2017.

#### Tax Fees

The 2018 and 2017 tax fees include amounts related to Scientific Research & Experimental Development tax credit services.

#### All Other Fees

The 2018 and 2017 other fees related to access to on-line accounting research services.

#### Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

#### Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Not applicable.

Item 16F. Change in Registrant's Certifying Accountant
Not applicable.
Item 16G. Corporate Governance
Not applicable.
Item 16H. Mine Safety Disclosure
Not applicable.

85

# PART III

# **Item 17. Financial Statements**

See our Audited Consolidated Financial Statements beginning at page F-1.

# **Item 18. Financial Statements**

Not applicable.

# Item 19. Exhibits

1.1 Certificate of Formation, dated September 7, 2007, and Certificate of Amendment to Certificate of	Formation,
dated October 12, 2007, of Telesat LLC <sup>(3)</sup>	
<u>1.2</u> <u>Limited Liability Company Agreement of Telesat LLC, dated October 31, 2007<sup>(3)</sup></u>	
1.3 Certificate and Articles of Amalgamation of Telesat Holdings Inc., dated as of January 1, 2017 <sup>(13)</sup>	
1.4 Certificate and Articles of Amalgamation of Telesat Canada, dated as of January 1, 2017 <sup>(13)</sup>	
1.5 By-Law No. 1 of Telesat Canada, dated as of January 1, 2017 <sup>(13)</sup>	
2.1 Indenture, dated November 17, 2016, with respect to Telesat Canada's 8.875% Senior Notes due 2 Telesat Holdings, Telesat, Telesat LLC, as co-issuer, the guarantors party thereto and The Bank of	
Mellon, as Trustee <sup>(11)</sup> 2.2 First Supplemental Indenture, dated as of December 29, 2016, with respect to Telesat Canada's 8.8	2750/ Camian
Notes due 2024, among Telesat Canada, Telesat LLC, as co-issuer, the guarantors party thereto and	
of New York Mellon, as Trustee <sup>(13)</sup> 4.1 Adjustment Agreement, dated as of October 29, 2007, between Telesat Interco Inc. (formerly 436)	3213
Canada Inc.), BCE Inc, and Telesat Canada <sup>(2)</sup>	<u> </u>
4.2 Shareholders Agreement, dated as of October 31, 2007, between Public Sector Pension Investmen	t Board,
Red Isle Private Investments Inc., Loral Space & Communications Inc., Loral Space & Co	ations
Holdings Corporation, Loral Holdings Corporation, Loral Skynet Corporation, John P. Cashman, G.	
Watson, Telesat Holdings Inc, (formerly 4363205 Canada Inc.), Telesat Interco Inc. (formerly 436	<u>3213</u>
Canada Inc.), Telesat Canada and MHR Fund Management LLC <sup>(2)</sup> Consulting Services Agreement, dated as of October 31, 2007, by and between Loral Space &	
4.3 Consulting Services Agreement, dated as of October 31, 2007, by and between Loral Space & Communications Inc. and Telesat Canada <sup>(2)</sup>	
4.4 Form of Indemnity Agreement by and among Telesat Canada, Telesat Holdings Inc., Telesat Interd	o Inc. and
Officers and Directors <sup>(3)</sup>	o me. una
4.5 Indemnity Agreement dated as of October 31, 2007 by and among Loral Space & Communication	s Inc.,
Telesat Canada, Telesat Holdings Inc., Telesat Interco Inc. and Henry (Hank) Intven <sup>(2)</sup>	
4.6 Acknowledgement and Indemnity Agreement, dated as of October 31, 2007, between Loral Space Communications Inc., Telesat, Telesat Holdings Inc. (formerly 4363205 Canada Inc.), Telesat Inte	
(formerly 4363213 Canada Inc.) and McCarthy Tétrault LLP <sup>(2)</sup>	
4.7 Grant Agreement, dated as of May 20, 2011, by and among Telesat Holdings Inc., Telesat Canada,	Loral
Space & Communications Inc, the Public Sector Pension Investment Board, 4440480 Canada Inc.	and Daniel
$\underline{\text{Goldberg}^{(5)}}$	
4.8 Grant Agreement, dated as of May 31, 2011, by and among Telesat Holdings Inc., Telesat Canada.	
Space & Communications Inc, the Public Sector Pension Investment Board, 4440480 Canada Inc.	and Michel
G. Cayouette <sup>(5)</sup> 4.9 Grant Agreement, dated as of May 31, 2011, by and among Telesat Holdings Inc., Telesat Canada.	Loral
Space & Communications Inc., the Public Sector Pension Investment Board, 4440480 Canada Inc.	
Michael C. Schwartz <sup>(5)</sup>	

4.10 Grant Agreement, dated as of November 18, 2013, by and among Telesat Holdings Inc., Telesat Canada, Loral Space & Communications Inc., the Public Sector Pension Investment Board, 4440480 Canada Inc. and Daniel Goldberg<sup>(9)</sup>

Exhibit No.	Description
4.11	Grant Agreement, dated as of November 18, 2013, by and among Telesat Holdings Inc., Telesat Canada, Loral Space & Communications Inc., the Public Sector Pension Investment Board, 4440480 Canada Inc. and
4.12	Michel G. Cayouette <sup>(9)</sup> Grant Agreement, dated as of January 28, 2016, by and among Telesat Holdings Inc., Telesat Canada, Loral Space & Communications Inc., the Public Sector Pension Investment Board, 4440480 Canada Inc. and Michael C. Schwartz <sup>(10)</sup>
4.13	Grant Agreement, dated as of September 6, 2018, by and among Telesat Canada, Loral Space & Communications Inc., the Public Sector Pension Investment Board, 4440480 Canada Inc. and Erwin C. Hudson <sup>(14)</sup>
4.14	Form of Accession Agreement to the Unanimous Shareholders' Agreement by and among Telesat Holdings,
4.15	Inc. and Daniel S. Goldberg, Michel G. Cayouette, Paul Bush and Michael Schwartz <sup>(8)</sup> Grant Agreement, dated as of November 28, 2018, by and among Telesat Canada, Loral Space & Communications Inc., the Public Sector Pension Investment Board, 4440480 Canada Inc. and Daniel
<u>4.16</u>	Goldberg <sup>(15)</sup> Award Agreement for Restricted Share Units, dated as of November 28, 2018, by and among Telesat Canada, Loral Space & Communications Inc., the Public Sector Pension Investment Board, 4440480 Canada
4.17	Inc. and Daniel Goldberg <sup>(15)</sup> Grant Agreement, dated as of November 28, 2018, by and among Telesat Canada, Loral Space & Communications Inc., the Public Sector Pension Investment Board, 4440480 Canada Inc. and Daniel
4.18	Goldberg <sup>(15)</sup> Credit Agreement, dated as of March 28, 2012, by and among Telesat Holdings, Inc., Telesat Canada, Telesat LLC, the guarantors party thereto, JP Morgan Chase Bank, N.A., as administrative agent, and the other
4.19	lenders party thereto <sup>(6)</sup> Amendment No. 1, dated as of April 2, 2013, to the Credit Agreement dated as of March 28, 2012, by and among Telesat Holdings Inc., Telesat Canada, Telesat LLC, the guarantors party thereto, JP Morgan Chase
4.20	Bank, N.A., as administrative agent, and the other lenders party thereto <sup>(7)</sup> Amendment No. 2, dated as of November 17, 2016, to the Credit Agreement dated as of March 28, 2012, as amended by Amendment No. 1 on April 2, 2013 by and among Telesat Holdings Inc., Telesat Canada, Telesat LLC, the guarantors party thereto, the lenders party thereto and JP Morgan Chase Bank, N.A., as
4.21	administrative agent, collateral agent, swingline lender and L/C Issuer. (11)  Amendment No. 3 dated December 19, 2016 to the Credit Agreement, dated as of March 28, 2012, as amended by Amendment No. 1 on April 2, 2013, as further amended by Amendment No. 2 on November 17, 2016, by and among Telesat Canada, Telesat LLC, the guarantors party thereto, the lenders party thereto and
4.22	JP Morgan Chase Bank, N.A., as administrative agent, collateral agent, swingline lender and L/C Issuer. (12) Amendment No. 4 dated February 1, 2017 to the Credit Agreement, dated as of March 28, 2012, as amended by Amendment No. 1 on April 2, 2013, as further amended by Amendment No. 2 on November 17, 2016, and as further amended by Amendment No. 3 on December 19, 2016, by and among Telesat Canada, Telesat
4.23	LLC, the guarantors party thereto, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, collateral agent, swingline lender and L/C Issuer. (12)  Amendment No. 5 dated April 26, 2018 to the Credit Agreement, dated as of March 28, 2012, as amended by Amendment No. 1 on April 2, 2013, as further amended by Amendment No. 2 on November 17, 2016, as further amended by Amendment No. 3 on December 19, 2016, and as further amended by Amendment No. 4 on February 1,2017, by and among Telesat Canada, Telesat LLC, the guarantors party thereto, the lenders
4.24	party thereto and JP Morgan Chase Bank, N.A., as administrative agent, collateral agent, swingline lender and L/C Issuer. (16) Share Purchase Agreement among 4363213 Canada Inc., BCE Inc. and Telesat Canada dated December 16,
4.25	2006 <sup>(1)</sup> Space Segment Assignment and Assumption Agreement, dated as of March 1, 2011, by and among Telesat  IOM Limited and Loral Space & Communications Inc. <sup>(4)</sup>

4.26	Gateway Facilities Assignment and Assumption Agreement, dated as of March 1, 2011, by and among
	Telesat Canada, Loral Space & Communications Inc. and Loral Canadian Gateway Corporation <sup>(4)</sup>
4.27	Barrett Assignment Agreement, dated as of March 1, 2011, by and among Telesat (IOM) Limited and Loral
	Space & Communications Inc. (4)
<u>4.28</u>	Guarantee Novation Agreement, dated as of August 3, 2012, by and among Loral Space & Communications
	Inc., MacDonald, Dettwiler and Associates Ltd. and Telesat Canada <sup>(8)</sup>
8.1*	<u>List of Subsidiaries</u>
12.1*	Section 302 Certification of Chief Executive Officer
12.2*	Section 302 Certification of Chief Financial Officer
13.1*	Section 906 Certification of Chief Executive Officer
13.2*	Section 906 Certification of Chief Financial Officer

- (1) Incorporated by reference from the Current Report on Form 8-K of Loral Space & Communications Inc. filed on December 21, 2006.
- (2) Incorporated by reference from the Current Report on Form 8-K of Loral Space & Communications Inc. filed on November 2, 2007.
- (3) Incorporated by reference from the Form F-4 of Telesat Canada filed on June 5, 2009.
- (4) Incorporated by reference from the Annual Report on Form 20-F of Telesat Canada filed on March 3, 2011.
- (5) Incorporated by reference from the Current Report on Form 8-K of Loral Space & Communications Inc. filed on June 13, 2011.
- (6) Incorporated by reference from the Report of Foreign Issuer on Form 6-K of Telesat Canada filed on March 29, 2012.
- (7) Incorporated by reference from the Report of Foreign Issuer on Form 6-K of Telesat Holdings Inc. filed on April 2, 2013.
- (8) Incorporated by reference from the Annual Report on Form 20-F of Telesat Holdings Inc. filed on February 21, 2013.
- (9) Incorporated by reference from the Current Report on Form 8-K of Loral Space & Communications Inc. filed on November 20, 2013.
- (10) Incorporated by reference from the Current Report on Form 8-K of Loral Space & Communications Inc. filed on January 29, 2016.
- (11) Incorporated by reference from the Report of Foreign Issuer on Form 6-K of Telesat Holdings Inc. filed on November 17, 2016.
- (12) Incorporated by reference from the Report of Foreign Issuer on Form 6-K of Telesat Canada (Formerly Telesat Holdings Inc.) filed on February 2, 2017.
- (13) Incorporated by reference from the Annual Report on Form 20-F of Telesat Canada filed on March 2, 2017.
- (14) Incorporated by reference from the Current Report on Form 8-K of Loral Space & Communications Inc. filed on September 6, 2018.
- (15) Incorporated by reference from the Current Report on Form 8-K of Loral Space & Communications Inc. filed on November 29, 2018.
- (16) Incorporated by reference from the Report of Foreign Issuer on Form 6-K of Telesat Canada filed on April 26, 2018.
- \* Filed herewith.

# **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.

# **Telesat Canada**

/s/ Daniel S. Goldberg

Name: Daniel S. Goldberg

Title: President and Chief Executive Officer

Date: March 1, 2019

89

# **Telesat Canada**

# **Index To Consolidated Financial Statements**

Report of Independent Registered Public Accounting Firm	<u>F-2</u>
Consolidated Statement of (Loss) Income	<u>F-3</u>
Consolidated Statements of Comprehensive (Loss) Income	<u>F-4</u>
Consolidated Statements of Changes in Shareholders' Equity	<u>F-5</u>
Consolidated Balance Sheets	<u>F-6</u>
Consolidated Statements of Cash Flows	<u>F-7</u>
Notes to the 2018 Consolidated Financial Statements	<u>F-8</u>

F-1

# Deloitte.

# Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Telesat Canada

## **Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of Telesat Canada and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of (loss) income, consolidated statements of comprehensive (loss) income, consolidated statements of changes in shareholders' equity, and consolidated statements of cash flows, for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with International Reporting Standards as issued by the International Accounting Standards Board.

# **Change in Accounting Principles**

As discussed in Note 3 to the financial statements, the Company has changed its method of accounting for revenue from contracts with customers and for accounting for financial instruments in fiscal year 2018 due to the adoption of the new revenue standard and new financial instruments standard, respectively.

#### **Basis for Opinion**

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements 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 U.S. 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte LLP Chartered Professional Accountants Licensed Public Accountants Toronto, Canada February 28, 2019

We have served as the Company's auditor since 1993.

Telesat Canada Consolidated Statements of (Loss) Income For the years ended December 31

(in thousands of Canadian dollars)	Notes	 2018	2017		2	2016
Revenue	6	\$ 902,932	\$ 927,40	)7 5	\$	930,854
Operating expenses	7	(185,827)	(187,6)	37)		(174,923)
		717,105	739,7	20		755,931
Depreciation		(224,851)	(221,0:	58)		(224,773)
Amortization		(24,305)	(26,3)	30)		(27,690)
Other operating gains (losses), net	8	743	5,90	)2		(2,565)
Operating income		468,692	498,2	34		500,903
Interest expense	9	(237,786)	(200,14	44)		(198,815)
Loss on refinancing	24	-		-		(31,850)
Interest and other income		16,498	3,00	)4		6,078
(Loss) gain on changes in fair value of financial instruments		(18,205)	60,30	)6		7,877
(Loss) gain on foreign exchange		(259,079)	223,89	98		92,613
(Loss) income before tax		(29,880)	585,29	98		376,806
Tax expense	10	(61,056)	(80,24	<b>4</b> 5)		(83,906)
Net (loss) income		\$ (90,936)	\$ 505,0	53	\$	292,900

Telesat Canada Consolidated Statements of Comprehensive (Loss) Income For the years ended December 31

(in thousands of Canadian dollars)	Notes	2018		2017	2016	
		_			_	
Net (loss) income		\$	(90,936)	\$ 505,053	\$	292,900
Other comprehensive income (loss)						
Items that may be reclassified into profit or loss						
Foreign currency translation adjustments			44,459	(48,563)		(1,765)
Items that will not be reclassified into profit or loss						
Actuarial gains (losses) on employee benefit plans	29		7,755	(5,171)		5,100
Tax (expense) recovery			(2,031)	673		(1,424)
Other comprehensive income (loss)			50,183	(53,061)		1,911
Total comprehensive (loss) income		\$	(40,753)	\$ 451,992	\$	294,811

Telesat Canada Consolidated Statements of Changes in Shareholders' Equity

(in thousands of Canadian dollars) !	Notes	Common shares	Preferred shares	Total share capital	Accumulated earnings	Equity-settled employee benefits reserve	Foreign currency translation reserve		Total shareholders' equity
Balance as at January 1, 2016		\$ 340,602	\$ 316.272	\$ 656,874	\$ 188,479	\$ 32.265	\$ 40,510	\$ 72,775	\$ 918,128
Net income		540,002	φ 310,∠/2	\$ 030,874	\$ 188,479 292,900	φ 32,203	40,310	φ 12,113	292,900
Dividends declared on preferred			-	-	,	-	-	-	
shares	25	-	-	-	(10)	-	-	-	(10
Repurchase of stock options	28	-	-	-	(15,913)	(8,745)	-	(8,745)	(24,658
Issuance of share capital	25	-	1,861	1,861	(1,269)	(592)	-	(592)	-
Other comprehensive income									
(loss), net of tax expense of		-	-	-	3,676	-	(1,765)	(1,765)	1,911
\$1,424									
Share-based compensation		-				5,770		5,770	5,770
Balance as at December 31, 2016		\$ 340,602	\$ 318,133	\$ 658,735	\$ 467,863	\$ 28,698	\$ 38,745	\$ 67,443	\$ 1,194,041
Balance as at January 1, 2017		\$ 340,602	\$ 318,133	\$ 658,735	\$ 467,863	\$ 28,698	\$ 38,745	\$ 67,443	\$ 1,194,041
Net income		-	-	-	505,053	-	-	-	505,053
Dividends declared on preferred shares	25	-	-	-	(10)	-	-	-	(10
Return of capital	25	(314,022)	(192,113)	(506,135)	) -	-	-	-	(506,135
Issuance of share capital on stock option exercise	25	-	82	82	-	(5)	-	(5)	77
Other comprehensive loss, net of tax recovery of \$673		-	-	-	(4,498)	-	(48,563)	(48,563)	(53,061
Share-based compensation						2,856		2,856	2,856
Balance as at December 31, 2017		\$ 26,580	\$ 126,102	\$ 152,682	\$ 968,408	\$ 31,549	\$ (9,818)	\$ 21,731	\$ 1,142,821
Balance as at January 1, 2018		\$ 26,580	\$ 126,102	\$ 152,682	\$ 968,408	\$ 31,549	\$ (9,818)	\$ 21,731	\$ 1,142,821
Net loss		-	-	-	(90,936)	-	-	-	(90,936
Issuance of share capital on									
exercise of stock appreciation rights	25	-	1,024	1,024	(1,079)	(339)	-	(339)	(394
Cumulative effect adjustment	3	-	-	-	(38,516)	) -	322	322	(38,194
Other comprehensive income,					5.704		44.450	44.450	£0.102
net of tax expense of \$2,031		-	-	-	5,724	-	44,459	44,459	50,183
Share-based compensation				-	-	29,505		29,505	29,505
Balance as at December 31, 2018		\$ 26,580	\$ 127,126	\$ 153,706	\$ 843,601	\$ 60,715	\$ 34,963	\$ 95,678	\$ 1,092,985

# **Telesat Canada Consolidated Balance Sheets**

(in thousands of Canadian dollars)	Notes	Decen	<b>December 31, 2018</b>		<b>December 31, 2017</b>	
Assets						
Cash and cash equivalents	30	\$	768,433	\$	479,045	
Trade and other receivables	11	Ψ	45,631	Ψ	64,986	
Other current financial assets	12		18,779		2,437	
Prepaid expenses and other current assets	13		16,381		8,503	
Total current assets		_	849,224		554,971	
Satellites, property and other equipment	6, 16		1,703,039		1,791,847	
Deferred tax assets	10		10,799		4,617	
Other long-term financial assets	6, 14		55,755		83,531	
Other long-term assets	6, 15		7,912		3,056	
Intangible assets	6, 17		811,154		812,995	
Goodwill	18		2,446,603		2,446,603	
Total assets		\$	5,884,486	\$	5,697,620	
T - 1904						
Liabilities	10	ф	20.650	Φ.	25.010	
Trade and other payables	19	\$	30,659	\$	37,919	
Other current financial liabilities	20		26,386		26,355	
Other current liabilities	21		113,289		77,324	
Current indebtedness	24		7,888		14,486	
Total current liabilities	2.1		178,222		156,084	
Long-term indebtedness	24		3,716,340		3,528,891	
Deferred tax liabilities	10		406,900		445,114	
Other long-term financial liabilities	22		54,521		58,831	
Other long-term liabilities	23		435,518		365,879	
Total liabilities			4,791,501		4,554,799	
Shareholders' Equity						
Share capital	25		153,706		152,682	
Accumulated earnings			843,601		968,408	
Reserves			95,678		21,731	
Total shareholders' equity			1,092,985		1,142,821	
Total liabilities and shareholders' equity		\$	5,884,486	\$	5,697,620	

# Telesat Canada Consolidated Statements of Cash Flows For the years ended December 31

(in thousands of Canadian dollars)	Notes	2018		2017		2016	
Cash flows from operating activities							
Net (loss) income		\$ (90,93	6) \$	505,053	\$	292,900	
Adjustments to reconcile net (loss) income to cash flows from							
operating activities							
Depreciation		224,85	1	221,058		224,773	
Amortization		24,30	5	26,330		27,690	
Tax expense	10	61,05	6	80,245		83,906	
Interest expense	9	237,78	6	200,144		198,815	
Interest income		(12,41	5)	(6,024)		(6,700)	
Loss (gain) on foreign exchange		259,07	9	(223,898)		(92,613)	
Loss (gain) on changes in fair value of financial instruments		18,20	5	(60,306)		(7,877)	
Share-based compensation	28	29,50		2,856		5,770	
Loss on disposal of assets	8	35		269		2,565	
Loss on refinancing	24		-	-		31,850	
Other		(91,58	(0)	(49,040)		(36,966)	
Income taxes paid, net of income taxes received	30	(106,30		(62,991)		(120,472)	
Interest paid, net of capitalized interest and interest received	30	(176,41		(195,248)		(152,261)	
Repurchase of stock options	28	,	-	-		(24,658)	
Operating assets and liabilities	30	88,81	3	48,252		100,637	
Net cash from operating activities		466,29		486,700		527,359	
Cash flows used in investing activities		100,22	<u> </u>	100,700	_	321,337	
Satellite programs, including capitalized interest		(67,38	7)	(135,986)		(236,834)	
Purchase of property and other equipment		(15,99		(10,616)		(6,977)	
Purchase of intangible assets		(19,92		(18,011)		(42,285)	
					_		
Net cash used in investing activities		(103,30	<u>''</u> ) _	(164,613)		(286,096)	
Cash flows used in financing activities	20	(0.4.0)	11	(21 (20)		(4.000.256)	
Repayment of indebtedness	30	(94,95	1)	(31,620)		(4,008,356)	
Proceeds from indebtedness	30	(10.16	-	- (40.065)		3,935,576	
Payment of debt issue costs	30	(10,19	0)	(42,867)		(58,141)	
Return of capital to shareholders	20	/	-	(506,135)		- (20)	
Capital lease payments	30		9)	(30)		(30)	
Satellite performance incentive payments	30	(9,03	7)	(8,436)		(8,934)	
Settlement of derivatives			-	207		130	
Proceeds from exercise of stock options			-	77		-	
Dividends paid on preferred shares				(10)		(10)	
Net cash used in financing activities		(114,20	<u> </u>	(588,814)		(139,765)	
Effect of changes in exchange rates on cash and cash equivalents		40,60	<u></u>	(36,634)		(9,818)	
Increase (decrease) in cash and cash equivalents		289,38	8	(303,361)		91,680	
Cash and cash equivalents, beginning of year		479,04		782,406		690,726	
Cash and cash equivalents, end of year	30	\$ 768,43		479,045	\$	782,406	

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

#### 1. BACKGROUND OF THE COMPANY

On January 1, 2017, Telesat Holdings Inc. completed a corporate reorganization, of companies under common control, pursuant to which Telesat Holdings Inc. amalgamated with Telesat Interco Inc. and immediately thereafter the newly amalgamated company amalgamated with Telesat Canada. The continuing entity, existing under the laws of Canada, is named Telesat Canada. The reorganization has been accounted for as a continuation of Telesat Holdings Inc.

Telesat Canada (the "Company" or "Telesat") is a Canadian corporation. Telesat is a leading global satellite operator providing reliable and secure satellite-delivered communication solutions worldwide to broadcast, telecom, corporate and government customers. Headquartered in Ottawa, Canada, the Company's state-of-the-art fleet consists of 17 geostationary satellites and the Canadian payload on ViaSat-1. In 2018, an additional satellite was launched into low earth orbit ("LEO") as part of Telesat's plans to deploy an advanced, global LEO constellation.

As at December 31, 2018, Loral Space and Communications Inc. ("Loral") and Canada's Public Sector Pension Investment Board ("PSP Investments") indirectly held economic interests in Telesat of approximately 63% and 36%, respectively, with the remaining economic interest held by various individuals. Loral indirectly held a voting interest of 33% on all matters including the election of directors. PSP Investments indirectly held a voting interest of 67% on all matters except for the election of directors, and a 29% voting interest for the election of directors. The remaining voting interest of 38% for the election of directors is held by shareholders of the Company's Director Voting Preferred Shares.

Unless the context states or requires otherwise, references herein to the "financial statements" or similar terms refer to the audited consolidated financial statements of Telesat Canada.

On February 28, 2019, these financial statements were approved by the Audit Committee of the Board of Directors and authorized for issue.

### 2. BASIS OF PRESENTATION

## Statement of Compliance

The consolidated financial statements were prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). With the exception of the changes in accounting policies outlined in Note 3, the accounting policies described in Note 4 were consistently applied to all the years presented.

### Basis of Consolidation

Subsidiaries

These consolidated financial statements include the results of the Company and subsidiaries controlled by the Company. Control is achieved when the Company has power over an entity, has exposure, or rights to variable returns from its involvement with an entity, and has the ability to use the power over an entity to affect the amount of its return. The most significant subsidiaries are listed in Note 32.

Joint arrangements

A joint operation is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to their share of the assets and revenue, and obligations for the liabilities and expenses, relating to the arrangement.

The Company's consolidated financial statements include the Company's share of the assets, liabilities, revenue and expenses of its interest in joint operations.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

#### 3. CHANGES IN ACCOUNTING POLICIES

#### IFRS 15, Revenue from Contracts with Customers

The Company has adopted IFRS 15, *Revenue from Contracts with Customers* ("IFRS 15"), with a date of initial adoption of January 1, 2018. Under the standard, revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration the entity expects to receive in exchange for those goods and services. In addition, the standard requires disclosure of the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. The Company has elected to adopt IFRS 15 using a modified retrospective approach with the cumulative effect of initially applying the standard being recorded as an adjustment to the opening balance of accumulated earnings. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those years.

The main impacts of this standard relate to the following:

- an adjustment to the promised amount of consideration for effects of the time value of money for prepayment contracts with a significant financing component. This resulted in an increase in deferred tax assets, satellites, property and other equipment, both other current and long-term liabilities, reserves and a decrease to accumulated earnings and deferred tax liabilities as of January 1, 2018; and
- an adjustment is required for certain contracts in which the Company would be considered as an agent under the new
  revenue standard as opposed to a principal under the former standard. This change had no impact on the balance sheet as at January 1, 2018.

The impacts on the balance sheet from the changes relating to IFRS 15 have been summarized below in the Impact on Opening Balance Sheet section.

The Company has elected to use the practical expedient where the effect of all modifications to a contract prior to January 1, 2018 need not be separately evaluated.

#### IFRS 9, Financial Instruments

The Company has adopted IFRS 9, *Financial Instruments* ("IFRS 9"), with a date of initial adoption of January 1, 2018. IFRS 9 uses a single approach to determine whether a financial asset is measured at amortized cost or fair value, replacing multiple rules in IAS 39. The approach in IFRS 9 is generally based on how an entity manages its financial assets in the context of its business model and the contractual cash flow characteristics of the financial assets. Impairments of financial assets are determined using a single impairment model that requires entities to recognize expected credit losses without requiring a triggering event to occur. The new impairment model applies to financial assets measured at amortized cost or fair value through other comprehensive income ("FVTOCI"), except for investments in equity instruments, and to contract assets. IFRS 9 largely retains the existing requirements under IAS 39 for the classification and measurement of financial liabilities, with the exception of the following change applicable to the Company:

IFRS 9 changes the accounting for non-substantial modifications of financial liabilities. Under IFRS 9, when a financial liability is modified but not derecognized, the Company recalculates the amortized cost of the modified financial liability by discounting the modified contractual cash flows using the original effective interest rate. Any adjustment to the amortized cost of the financial liability is recognized on the statement of income.

This standard is applied retrospectively with the cumulative effect of initially applying the standard being recorded as an adjustment to the opening balance of accumulated earnings as at January 1, 2018. The Company has not restated comparative years.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 3. CHANGES IN ACCOUNTING POLICIES - (continued)

The main impact of the adoption of IFRS 9 was the following:

The change in accounting for non-substantial modifications of financial liabilities resulted in an amount recognized relating to the repricing of the Term Loan B – U.S. Facility which reduced the applicable margin from 3.75% to 3.00% on February 1, 2017. This resulted in an increase in deferred tax assets, deferred tax liabilities and accumulated earnings and a decrease in indebtedness on January 1, 2018.

The new expected credit loss model had an insignificant impact on the Company's impairment allowance.

The impact on the balance sheet from the change relating to IFRS 9 has been summarized below in the Impact on Opening Balance Sheet section.

### IFRS 2, Share-Based Payments

The Company has adopted the amendments to IFRS 2, *Share-Based Payments* ("IFRS 2"), with a date of initial adoption of January 1, 2018. These amendments clarify the accounting treatment and disclosure requirements for certain types of share-based payment transactions, including cash settled share-based payment transactions, share-based payment transactions with a net settlement feature for withholding tax obligations, as well as modifications of share-based payment transactions from cash settled to equity settled. These amendments had no impact on the consolidated financial statements.

#### Impact on Opening Balance Sheet

The following table summarizes the effect, increases (decreases), of adopting these accounting standards on the balances of the balance sheet as at January 1, 2018.

(in thousands of Canadian dollars)	I	FRS 15		IFRS 9		Total
Deferred tax assets	\$	1,263	\$	93	\$	1,356
Satellites, property and other equipment	\$	395	•		\$	395
Saterities, property and other equipment	Ψ	373	Ψ		Ψ	373
Other current liabilities	\$	21,007	\$	_	\$	21,007
	Ф		Φ	(5.540)	Ф	(5.540)
Current indebtedness	\$	_	\$	(5,549)	\$	(5,549)
Long-term indebtedness	\$	_	\$	(30,523)	\$	(30,523)
Deferred tax liabilities	\$	(21,676)	\$	9,599	\$	(12,077)
Other long-term liabilities	\$	67,087	\$	_	\$	67,087
Accumulated earnings	\$	(65,082)	\$	26,566	\$	(38,516)
Reserves	\$	322	\$	_	\$	322

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

## 3. CHANGES IN ACCOUNTING POLICIES – (continued)

### Impact on December 31, 2018 financial statements

IFRS 15 requires disclosures of the impact on the financial statements of the implementation of the standard. The impact on the balance sheet as at December 31, 2018 and the statement of loss, statement of other comprehensive loss and statement of cash flows for the year ended December 31, 2018 have been summarized below:

Balance sheet as at December 31, 2018

(in thousands of Canadian dollars)	As reported		IFRS 15 adjustments		Balance without adoption of IFR	
Satellites, property and other equipment	\$1	,703,039	\$	2,989	\$	1,700,050
Deferred tax assets	\$	10,799	\$	2,637	\$	8,162
Other current liabilities	\$	113,289	\$	15,046	\$	98,243
Deferred tax liabilities	\$	406,900	\$	(16,021)	\$	422,921
Other long-term liabilities	\$	435,518	\$	60,978	\$	374,540
Accumulated earnings	\$	843,601	\$	(54,699)	\$	898,300
Reserves	\$	95,678	\$	322	\$	95,356

Statement of loss for the year ended December 31, 2018

(in thousands of Canadian dollars)	As reported	IFRS 15 adjustments	Balance without the adoption of IFRS 15
Revenue	\$ 902,932	\$ 19,512	\$ 883,420
Operating expenses	\$(185,827)	\$ 20,558	\$ (206,385)
Depreciation	\$(224,851)	\$ 160	\$ (225,011)
Operating income	\$ 468,692	\$ 40,230	\$ 428,462
Interest expense	\$(237,786)	\$ (25,328)	\$ (212,458)
Loss before tax	\$ (29,880)	\$ 14,902	\$ (44,782)
Tax expense	\$ (61,056)	\$ (4,301)	\$ (56,755)
Net loss	\$ (90,936)	\$ 10,601	\$ (101,537)

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

## 3. CHANGES IN ACCOUNTING POLICIES – (continued)

Statement of comprehensive loss for the year ended December 31, 2018

(in thousands of Canadian dollars)	As reported	IFRS 15 adjustments	Balance without the adoption of IFRS 15
Net loss	\$ (90,936)	\$ 10,601	\$ (101,537)
Foreign currency translation adjustments	\$ 44,459	\$ (217)	\$ 44,676
Other comprehensive income	\$ 50,183	\$ (217)	\$ 50,400
Total comprehensive loss	\$ (40,753)	\$ 10,384	\$ (51,137)

Statement of cash flows for the year ended December 31, 2018

(in thousands of Canadian dollars)	As reported		IFRS 15 adjustments		Balance without the adoption of IFRS 15	
Cash flows from operating activities						
Net loss	\$	(90,936)	\$	10,601	\$	(101,537)
Adjustments to reconcile net loss to cash flows from operating activities						
Depreciation	\$	224,851	\$	(160)	\$	225,011
Tax expense	\$	61,056	\$	4,301	\$	56,755
Interest expense	\$	237,786	\$	25,328	\$	212,458
Other	\$	(91,580)	\$	(40,070)	\$	(51,510)
Interest paid, net of capitalized interest and interest received	\$	(176,417)	\$	2,046	\$	(178,463)
Net cash from operating activities	\$	466,297	\$	2,046	\$	464,251
Cash flows used in investing activities						
Satellite programs, including capitalized interest	\$	(67,387)	\$	(2,046)	\$	(65,341)
Net cash used in investing activities	\$	(103,307)	\$	(2,046)	\$	(101,261)

## 4. SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared on an historical cost basis except for certain financial instruments which were measured at their fair values, as explained in the accounting policies below. Historical cost is based on the fair value of the consideration given or received in exchange for assets or liabilities.
F-12

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

#### 4. SIGNIFICANT ACCOUNTING POLICIES – (continued)

#### Segment Reporting

The Company operates in a single industry segment, in which it provides satellite-based services to its broadcast, enterprise and consulting customers around the world. Operating segments are reported in a manner consistent with the internal reporting provided to the Company's Chief Operating Decision Maker, who is the Company's Chief Executive Officer. To be reported, a segment is usually based on quantitative thresholds but can also encompass qualitative factors management deems significant.

### Foreign Currency Translation

Unless otherwise specified, all figures reported in the consolidated financial statements and associated note disclosures are presented in Canadian dollars, which is the functional and presentation currency of the Company. Each of the subsidiaries of the Company determines their own functional currency and uses that currency to measure items on their separate financial statements.

For the Company's non-foreign operations, foreign currency non-monetary assets and liabilities are translated at their historical exchange rates, foreign currency monetary assets and liabilities are translated at the year end exchange rates, and foreign denominated revenue and expenses are translated at the average exchange rates of the month in which the transactions occurred. Gains or losses on translation of these items are recognized as a component of net (loss) income.

Upon consolidation of the Company's foreign operations that have a functional currency other than the Canadian dollar, assets and liabilities are translated at the year end exchange rate, and revenue and expenses are translated at the average exchange rates of the month in which the transactions occurred. Gains or losses on the translation of foreign subsidiaries are recognized in other comprehensive income (loss).

#### Cash and Cash Equivalents

All highly liquid investments with an original maturity of three months or less, or which are available upon demand with no penalty for early redemption, are classified as cash and cash equivalents. Cash and cash equivalents are comprised of cash on hand, demand deposits, short-term investments and restricted cash expected to be used within the next twelve months.

#### Revenue Recognition

Telesat recognizes revenue from satellite services on a monthly basis as services are performed in an amount that reflects the consideration the Company expects to receive in exchange for those services. Telesat accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability is considered probable.

Revenue from a contract to sell consulting services is recognized as follows:

- Consulting revenue for cost plus contracts is recognized as the approved time and labour is completed by Telesat.
- The percentage of completion method is used for fixed price consulting revenue contracts. The percentage completion method is measured by comparing actual cost incurred to total cost expected.

Equipment sale revenue is recognized when the customer obtains control of the equipment, being at the time the equipment is delivered to and accepted by the customer. Only equipment sales are subject to warranty or return and there is no general right of return. Historically, the Company has not incurred significant expenses for warranties.

When a transaction involves more than one product or service, revenue is allocated to each performance obligation based on its relative stand-alone selling price. Transactions are evaluated to determine whether the Company is the principal and if the transactions should be recorded on a gross or net basis.
F-13

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

#### 4. SIGNIFICANT ACCOUNTING POLICIES – (continued)

#### **Deferred Revenue**

Deferred revenue represents the Company's liability for the provision of future services and is classified on the balance sheet in other current and long-term liabilities. Deferred revenue consists of remuneration received in advance of the provision of service and in the majority of cases is recognized in income on a straight-line basis over the term of the related customer contracts. In the case of certain deferred revenue for short-term services, balances are recognized into income upon the completion or percentage completion of the related contract. Prepayments are evaluated to determine whether or not they constitute a significant financing component. The Company has elected a practical expedient whereby if the timing difference between the customer prepayment and the transfer of control of the promised goods and services is less than a year then it would not be considered as a significant financing component.

A significant financing component will only occur in the following circumstances:

- There is a timing difference between when the control of goods or services is transferred to the customer and when the customer pays for the goods;
- The timing difference between the customer prepayment and transfer of control of the promised goods and services is in excess of one year; and
- The primary reason for the prepayment is for financing purposes.

In the case of the existence of a significant financing component, the amount of the consideration is adjusted to reflect what the cash selling price of the promised service would have been if payments had occurred as control of the service was transferred to the customer. The discount rate used in determining the significant financing component is the rate that would be reflected in a separate financing transaction between the Company and the customer at contract inception.

### **Borrowing Costs**

Borrowing costs are incurred on the Company's debt financing. Borrowing costs attributable to the acquisition, production or construction of a qualifying asset are added to the cost of that asset. The Company has defined a qualifying asset as an asset that takes longer than twelve months to be ready for its intended use or sale. Capitalization of borrowing costs continues until such time that the asset is substantially ready for its intended use or sale. Borrowing costs are determined based on specific financing related to the asset, or in the absence of specific financing, the borrowing costs are calculated on the basis of a capitalization rate which is equal to the Company's weighted average cost of debt. All other borrowing costs are expensed when incurred.

### Satellites, Property and Other Equipment

Satellites, property and other equipment, which are carried at cost, less accumulated depreciation and any accumulated impairment losses, include the contractual cost of equipment, capitalized engineering costs, capitalized borrowing costs during the construction or production of qualifying assets, and with respect to satellites, the cost of launch services, and launch insurance.

Depreciation is calculated using the straight-line method over the respective estimated useful lives of the assets.

Below are the estimated useful lives in years of satellites, property and other equipment as at December 31, 2018.

	Years
Satellites	12 to 15
Property and other equipment	3 to 30

	F-14		

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

## 4. SIGNIFICANT ACCOUNTING POLICIES – (continued)

The investment in each satellite will be removed from the accounts when the satellite is retired. When other property is retired from operations at the end of its useful life, the cost of the asset and accumulated depreciation are removed from the accounts. Earnings are credited with the amount of any net salvage value and charged with any net cost of removal. When an asset is sold prior to the end of its useful life, the gain or loss is recognized immediately in other operating gains (losses), net.

In the event of an unsuccessful launch or total in-orbit satellite failure, all unamortized costs that are not recoverable under launch or in-orbit insurance are recorded in other operating gains (losses), net.

Liabilities related to decommissioning and restoration of retiring property and other equipment are measured at fair value with a corresponding increase to the carrying amount of the related asset. The liability is accreted over the period of expected cash flows with a corresponding charge to interest expense. The liabilities recorded to date have not been significant and are reassessed at the end of each reporting period. There are no decommissioning or restoration obligations for satellites.

#### Satellite Performance Incentive Payments

Satellite performance incentive payments are obligations payable to satellite manufacturers over the lives of certain satellites. The present value of the payments are capitalized as part of the cost of the satellite and recognized as part of the depreciation of the satellite.

#### Impairment of Long-Lived Assets

Tangible fixed assets and finite life intangible assets are assessed for impairment on an annual basis or more frequently when events or changes in circumstances indicate that the carrying value of an asset exceeds the recoverable amount. Tangible fixed assets and finite life intangible assets are also assessed for indicators of impairment at each reporting period.

In cases where there are indicators of impairment, the recoverable amount of the asset, which is the higher of its fair value less costs of disposal and its value in use, is determined. If it is not practicable to measure the recoverable amount for a particular asset, the Company determines the recoverable amount of the cash generating unit ("CGU") with which it is associated. A CGU is the smallest identifiable group of assets that generates cash inflows which are largely independent of the cash inflows from other assets or groups of assets.

The Company measures value in use on the basis of the estimated future cash flows to be generated by an asset or CGU. These future cash flows are based on the Company's latest business plan information approved by senior management and are discounted using rates that best reflect the time value of money and the specific risks associated with the underlying asset or assets in the CGU.

The fair value less costs of disposal is the price that would be received to sell an asset or CGU in an orderly transaction between market participants at the measurement date. For the impairment assessment, the fair value is calculated on a recurring basis and is calculated using level 3 of the fair value hierarchy.

An impairment loss is the amount by which the carrying amount of an asset or CGU exceeds its recoverable amount. When an impairment loss subsequently reverses, the carrying amount of the asset (or a CGU) is increased to the revised measure of its recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or CGU) in prior years. Impairment losses and reversals of impairment losses are recognized in other operating gains (losses), net.

#### Goodwill and Intangible Assets

The Company accounts for business combinations using the acquisition method of accounting, which establishes specific criteria for the recognition of intangible assets separately from goodwill. Goodwill represents the excess between the total of the consideration

transferred over the fair value of net assets impairment losses.	s acquired. After initi	al recognition at cost, g	goodwill is measured a	at cost less any accumul	ated
		F-15			

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

#### 4. SIGNIFICANT ACCOUNTING POLICIES – (continued)

The Company distinguishes intangible assets between assets with finite and indefinite useful lives. Intangible assets with indefinite useful lives are comprised of the Company's trade name, intellectual property, and orbital slots. These assets are carried at cost less any accumulated impairment losses. Finite life intangible assets, which are carried at cost less accumulated amortization and any accumulated impairment losses, consist of revenue backlog, customer relationships, customer contracts, concession rights, transponder rights and patents. Intangible assets with finite lives are amortized over their estimated useful lives using the straight-line method of amortization, except for revenue backlog which is based on the expected period of recognition of the related revenue.

Below are the estimated useful lives in years of the finite life intangible assets as at December 31, 2018.

	Years
Revenue backlog	12 to 17
Customer relationships	6 to 21
Customer contracts	5 to 15
Concession rights	1 to 15
Transponder rights	16
Patents	18

#### Impairment of Goodwill and Indefinite Life Intangible Assets

An assessment for impairment of goodwill and indefinite life intangible assets is performed annually, or more frequently whenever events or changes in circumstances indicate that the carrying amounts of these assets are likely to exceed their recoverable amount. Goodwill is tested for impairment at the entity level as this represents the lowest level within the Company at which the goodwill is monitored for internal management purposes, and is not larger than an operating segment. Indefinite life intangible assets have not been allocated to any CGU and are tested for impairment at the asset level.

Goodwill and indefinite life intangible assets are qualitatively assessed for indicators of impairment.

If the qualitative assessment concludes an indication of impairment, a quantitative impairment test is performed. A quantitative impairment test consists of assessing the recoverable amount of an asset, which is the higher of its fair value less costs of disposal and its value in use. For the quantitative impairment assessment, fair value is calculated on a recurring basis and is calculated using level 2 or level 3 of the fair value hierarchy depending on the valuation approach being utilized.

#### Orbital Slots

In performing the quantitative orbital slot impairment analysis, the Company determines, for each orbital slot, its fair value less costs of disposal, and its value in use on an annual basis. The higher of these two amounts is determined to be the recoverable amount. To the extent that the recoverable amount is less than the carrying value of the asset, an impairment exists and the asset is written down to its recoverable amount.

The key assumptions used in estimating the recoverable amounts of the orbital slots include:

- i) the market penetration leading to revenue growth;
- ii) the profit margin;
- iii) the duration and profile of the build-up period;
- iv) the estimated start-up costs and losses incurred during the build-up period; and

### v) the discount rate.

Fair value less costs of disposal is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. In order to determine the fair value less costs of disposal, the Company uses either a market or income approach. Under a market approach, the Company measures what an independent third party would pay to purchase the orbital slot by looking to actual market transactions for similar assets. Under an income approach, the fair value is determined to be the sum of the projected discounted cash flows over a discrete period of time in addition to the terminal value.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 4. SIGNIFICANT ACCOUNTING POLICIES – (continued)

The value in use amount is the present value of the future cash flows expected to be derived from the asset. The determination of this amount includes projections of cash inflows from the continuing use of the asset and cash outflows that are required to generate the associated cash inflows. These cash inflows are discounted at an appropriate discount rate.

Goodwill

In performing the quantitative goodwill impairment analysis, the Company assesses the recoverable amount of goodwill using the income approach as well as the market approach in the determination of the fair value of goodwill at the entity level.

Under the income approach, the sum of the projected discounted cash flows for the next five years, or a longer period if justified by the most recent financial plan approved by management, in addition to a terminal value are used to determine the fair value at the entity level. In this model, significant assumptions used include: revenue, expenses, capital expenditures, working capital, costs of disposal, terminal growth rate and discount rate.

Under the market approach, the fair value at the entity level is determined based on market multiples derived from comparable public companies. As part of this analysis, assumptions are made regarding the comparability of selected companies including revenue, earnings before interest, taxes, depreciation and amortization multiples for valuation purposes, growth rates, size and overall profitability.

Under both approaches, all assumptions used are based on management's best estimates. The discount rates are consistent with external sources of information.

Trade Name

For the purposes of quantitative impairment testing, the fair value of the trade name is determined using an income approach, specifically the relief from royalties method.

The relief from royalties method is comprised of two major steps:

- i) a determination of the hypothetical royalty rate; and
- ii) the subsequent application of the royalty rate to projected revenue.

In determining the hypothetical royalty rate in the relief from royalties method, the Company considered comparable license agreements, operating earnings benchmarks, an excess earnings analysis to determine aggregate intangible asset earnings, and other qualitative factors. The key assumptions used include the tax and discount rates.

## Intellectual Property

In performing the quantitative intellectual property impairment analysis, the Company determines its fair value less costs of disposal, and its value in use on an annual basis. The higher of these two amounts is determined to be the recoverable amount. To the extent that the recoverable amount is less than the carrying value of the asset, an impairment exists and the asset is written down to its recoverable amount.

The Company measures value in use on the basis of the estimated future cash flows to be generated by an asset. These future cash flows are based on the Company's latest business plan information approved by senior management and are discounted using rates that best reflect the time value of money and the specific risks associated with the underlying asset.

Fair value less costs of disposal is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. In order to determine the fair value less costs of disposal, the Company uses a market approach. Under a market approach, the Company measures what an independent third party would pay to purchase the intellectual property.
F-17

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

#### 4. SIGNIFICANT ACCOUNTING POLICIES – (continued)

#### Financial Instruments

Financial assets are initially recognized at fair value. Financial assets are measured using one of three measurement approaches (fair value through profit or loss ("FVTPL"), fair value through other comprehensive income ("FVTOCI"), or amortized cost). A financial asset is measured at amortized cost if it is not designated as FVTPL, it is held within a business model whose objective is to hold assets to collect contractual cash flows and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. A debt investment is measured at FVTOCI if it is not designated at FVTPL, it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amounts outstanding. On initial recognition of an equity investment that is not held for trading, the Company may irrevocably elect to present subsequent changes in the investment's fair value in OCI. This election is made on an investment by investment basis. All financial assets not classified as measured at amortized cost or FVTOCI as described above are measured at FVTPL.

The following accounting policies apply to the subsequent measurement of the Company's financial assets:

- Amortized cost: The financial assets are subsequently measured at amortized cost in accordance with the effective interest method. The amortized cost is reduced by any impairment losses; and
- FVTPL: These financial assets are subsequently measured at fair value with changes in fair value recorded in the consolidated statement of (loss) income as part of (loss) gain on changes in fair value of financial instruments.

Financial liabilities are initially measured at fair value. Financial liabilities are classified as amortized cost or FVTPL. Financial liabilities that are classified as amortized cost are measured and recorded at amortized cost in accordance with the effective interest method. Financial liabilities classified as FVTPL are subsequently measured at fair value with changes in fair value recorded in the consolidated statement of (loss) income as part of the (loss) gain on changes in fair value of financial instruments.

The Company has used derivative financial instruments to manage its exposure to foreign exchange risk associated with debt denominated in foreign currencies, as well as to reduce its exposure to interest rate risk associated with debt. Currently, the Company does not designate any of its derivative financial instruments as hedging instruments for accounting purposes. All realized and unrealized gains and losses on these derivative financial instruments are recorded in the consolidated statement of (loss) income as part of (loss) gain on changes in fair value of financial instruments.

Derivatives, including embedded derivatives that must be separately accounted for, are recorded at fair value on the consolidated balance sheet at inception and marked to market at each reporting period thereafter. Derivatives embedded in financial liabilities and other non-financial instrument contracts are treated as separate derivatives when their risk and characteristics are not closely related to those of the host contract and the host contract is measured separately according to its characteristics. The Company accounts for embedded foreign currency derivatives and the related host contract as a single instrument where the contract requires payments denominated in the currency that is commonly used in contracts to procure non-financial items in the economic environment in which the Company transacts.

Transaction costs for instruments classified as FVTPL are expensed as incurred. Transaction costs that are directly attributable to the acquisition of financial assets and liabilities (other than FVTPL) are added or deducted from the fair value of the financial asset or financial liability on initial recognition.

The Company's financial assets classified as amortized cost and contract assets are subject to impairment requirements. The Company has elected to measure loss allowances for trade receivables and other contract assets at an amount equal to lifetime expected credit loss. The lifetime expected credit losses are the expected credit losses that result from possible default events over the expected life of the instrument.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 4. SIGNIFICANT ACCOUNTING POLICIES – (continued)

#### Financing Costs

The debt issuance costs related to the Senior Secured Credit Facility and the Senior Notes are included in current and long-term indebtedness and are amortized to interest expense using the effective interest method. All other debt issuance costs are accounted for as short-term and long-term deferred charges and are included in prepaid expenses and other current assets and other long-term assets. The deferred charges are amortized to interest expense on a straight-line basis over the term of the indebtedness to which they relate.

### Employee Benefit Plans

Telesat maintains one contributory and three non-contributory defined benefit pension plans which provide benefits based on length of service and rate of pay. Two of these defined-benefit plans were closed to new members in 2013. Telesat is responsible for adequately funding the defined benefit pension plans. Contributions are made based on actuarial cost methods that are permitted by pension regulatory bodies and reflect assumptions about future investment returns, salary projections and future service benefits. Telesat also provides other post-employment and retirement benefits, including health care and life insurance benefits on retirement and various disability plans, worker's compensation and medical benefits to former or inactive employees, their beneficiaries and covered dependents, after employment but before retirement, under certain circumstances. In addition, Telesat provides defined contribution pension plans, under certain circumstances, for employees who are not eligible for the defined benefit pension plans. Costs for defined contribution pension plans are recognized as an expense during the year in which the employees have rendered service entitling them to the Company's contribution.

The Company accrues the present value of its obligations under employee benefit plans and the related costs reduced by the fair value of plan assets. Pension costs and other retirement benefits are determined using the projected unit credit method prorated on service and management's best estimate of expected investment performance, salary escalation, retirement ages of employees and expected health care costs.

Pension plan assets are valued at fair value. The discount rate is based on the market interest rate of high quality bonds and is consistent with guidance described by Canadian Institute of Actuaries in June 2018 in the Revised Educational Note. Past service costs arising from plan amendments are recognized immediately to the extent that the benefits are already vested, and otherwise are amortized on a straight-line basis over the average remaining vesting period. A valuation is performed at least every three years to determine the present value of the accrued pension and other retirement benefits.

Remeasurements arising from defined benefit pension plans comprise actuarial gains and losses and the return on plan assets (excluding interest). Telesat recognizes them immediately in other comprehensive income (loss), which is included in accumulated earnings, in the year in which they occur.

The current service costs and administration fees not related to asset management are included in operating expenses. The net interest expense (income) on the net defined benefit liability (asset) for the period is calculated by applying the discount rate used to measure the defined benefit obligation at the beginning of the year to the net defined benefit liability (asset) at the beginning of the year while taking into account any changes in the net defined benefit liability (asset) during the year as a result of contributions and benefit payments. The net interest expense (income) is included in interest expense.

The pension expense for 2018 was determined based on membership data as at December 31, 2016. The accrued benefit obligation as at December 31, 2018 was determined based on the membership data as at December 31, 2017, and extrapolated one year based on December 31, 2018 assumptions. For certain Canadian post-retirement benefits, the expense for 2018 was based on membership and eligibility data as at September 30, 2015 and the accrued benefit obligations as at December 31, 2018 was based on membership data as at September 30, 2018. For certain American post-retirement benefits, the expense for 2018 was based on membership and eligibility data as at January 1, 2018. The accrued benefit obligation for certain American post-retirement benefits as at December 31, 2018 was determined based on membership data as at January 1, 2018, and extrapolated, based on December 31, 2018 assumptions. The most

recent valuation of the pension plans for plans as of December 31, 2018.	runding purposes w	as as of December 31,	2017. Valuations Will	be performed for th	e pension
		F-19			

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

#### 4. SIGNIFICANT ACCOUNTING POLICIES – (continued)

Telesat also provides health care and life insurance benefits for certain retired employees. These benefits are funded primarily on a pay-as-you-go basis, with the retiree paying a portion of the cost through contributions, deductibles and co-insurance provisions. Commencing in 2015, as a result of an amendment to one of the plans, Telesat has contributed to a health reimbursement account instead of providing the health care and life insurance benefits directly to certain retired employees.

## Share-Based Compensation Plans

The Company offers equity-settled share-based compensation plans for certain key employees under which it receives services from employees in exchange for equity instruments of the Company. The expense is based on the fair value of the awards granted using the Black-Scholes option pricing model. The expense is recognized over the vesting period, which is the period over which all of the specified vesting conditions are satisfied, with a corresponding increase in equity. For awards with graded vesting, the fair value of each tranche is recognized over the respective vesting period with a significant higher proportionate amount of the total expense being recognized earlier in the vesting period.

#### Restricted Share Units

For each restricted share unit ("RSU"), an expense is recorded over the vesting period equal to the fair value of the Non-Voting Participating Preferred shares with a corresponding increase in equity. For awards with graded vesting, the fair value of each tranche is recognized over the respective vesting period with a significant higher proportionate amount of the total expense being recognized earlier in the vesting period. RSU's are expected to be settled in Non-Vesting Participating Preferred shares of Telesat.

#### Income Taxes

Income tax expense, comprised of current and deferred income tax, is recognized in income except to the extent it relates to items recognized in other comprehensive income (loss) or equity, in which case the income tax expense is recognized in other comprehensive income (loss) or equity, respectively.

Current income tax is measured at the amount expected to be paid to the taxation authorities, net of recoveries, based on the tax rates and laws enacted or substantively enacted as at the balance sheet date.

Deferred taxes are the result of temporary differences arising between the tax bases of assets and liabilities and their carrying amount. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period when the asset is realized or the liability is settled, based on tax rates and laws that have been enacted or substantively enacted at the balance sheet date. Deferred tax assets are recognized for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that the deferred tax assets will be realized. Unrecognized deferred tax assets are reassessed at each balance sheet date and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax assets to be recovered.

Deferred tax assets are netted against the deferred tax liabilities when they relate to income taxes levied by the same taxation authority on either:

- i) the same taxable entity; or
  - different taxable entities which intend to settle current tax liabilities and assets on a net basis, or to realize the assets and settle
- ii) the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Deferred tax liabilities are recognized for all taxable temporary differences except when the deferred tax liability arises from the initial recognition of goodwill or the initial recognition of an asset or liability in a transaction which is not a business combination. For taxable temporary differences associated with investments in subsidiaries, a deferred tax liability is recognized unless the parent can control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

#### 4. SIGNIFICANT ACCOUNTING POLICIES – (continued)

#### Future Changes in Accounting Policies

The IASB periodically issues new and amended accounting standards. The new and amended standards determined to be applicable to the Company are disclosed below. The remaining new and amended standards have been excluded as they are not applicable.

Leases

IFRS 16, Leases ("IFRS 16") was issued by the IASB in January 2016, and will replace IAS 17, Leases and related interpretations on leases. IFRS 16 will require a lessee to recognize a right-of-use asset and lease liability for all leases with a term of more than 12 months. The standard will also require that the depreciation of the lease assets be recorded separately from the interest on the lease liabilities in the statement of income. For lessors, IFRS 16 substantially carries forward the requirements of IAS 17.

Companies can elect to use either a retrospective approach with a restatement of comparative information or a modified retrospective approach with the cumulative effect of initial application shown in retained earnings instead of the restatement of the comparative information. The Company has elected to use a modified retrospective approach on adoption.

Based on the evaluations to date, the Company has identified the following areas that will be affected:

- A material amount will be required to be recognized for contracts that Telesat has entered into as the lessee. Telesat anticipates that this will result in an increase in satellites, property and other equipment and other current and long-term liabilities as at January 1, 2019. On the balances to be capitalized on January 1, 2019, going forward this will result in lower operating expenses and higher interest and depreciation expenses; and
- Additional disclosure will be required for the new standard.

This standard is effective for annual periods beginning on or after January 1, 2019. The Company has not yet finalized the quantification of the above noted impacts of this adoption as it continues to evaluate the impact of IFRS 16 and emerging guidance.

Income taxes

IFRIC 23, *Uncertainty over Income Taxes Treatments* was issued by the IASB in June 2017. The interpretation clarifies how to apply the recognition and measurement requirements in IAS 12, *Income Taxes* when there is uncertainty over income tax treatments. This interpretation is effective for annual reporting periods beginning on or after January 1, 2019. This interpretation is not expected to have an impact on the Company's consolidated financial statements.

#### 5. CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES

## Critical judgments in applying accounting policies

The following are the critical judgments made in applying the Company's accounting policies which have the most significant effect on the amounts reported in the financial statements:

Deferred Revenue

The Company's accounting policy relating to deferred revenue is described in Note 4. Certain of the Company's revenue agreements were noted to include a significant financing component, Judgment by management is required to determine the discount rate used in the significant financing component calculation.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 5. CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES – (continued)

Uncertain income tax positions

The Company operates in numerous jurisdictions and is subject to country-specific tax laws. Management uses significant judgment when determining the worldwide provision for tax, and estimates provisions for uncertain tax positions as the amounts expected to be paid based on a qualitative assessment of all relevant factors. In the assessment, management considers risk with respect to tax matters under active discussion, audit, dispute or appeal with tax authorities, or which are otherwise considered to involve uncertainty. Management reviews the provisions as at each balance sheet date.

### Critical accounting estimates and assumptions

The Company makes accounting estimates and assumptions that affect the carrying value of assets and liabilities, reported net (loss) income and disclosure of contingent assets and liabilities. Estimates and assumptions are based on historical experience, current events and other relevant factors, therefore, actual results may differ and differences could be material.

The accounting estimates and assumptions critical to the determination of the amounts reported in the financial statements were as follows:

Derivative financial instruments measured at fair value

Derivative financial assets and liabilities measured at fair value were \$52.4 million and \$5.6 million, respectively, as at December 31, 2018 (December 31, 2017 — \$64.9 million and \$5.5 million, respectively).

Quoted market values are unavailable for the Company's financial instruments and, in the absence of an active market, the Company determines fair value for financial instruments based on prevailing market rates (bid and ask prices, as appropriate) for instruments with similar characteristics and risk profiles or internal or external valuation models, such as option pricing models and discounted cash flow analysis, using observable market-based inputs. The determination of fair value is significantly impacted by the assumptions used for the amount and timing of estimated future cash flows and discount rates. As a result, the fair value of financial assets and liabilities and the amount of (loss) gain on changes in fair value of financial instruments recorded to net (loss) income could vary.

Impairment of goodwill

Goodwill represented \$2,446.6 million of total assets as at December 31, 2018 and 2017. Determining whether goodwill is impaired using a quantitative approach requires an estimation of the Company's value which requires management to estimate the future cash flows expected to arise from operations and to make assumptions regarding economic factors, tax rates and annual growth rates. Actual operating results and the related cash flows of the Company could differ from the estimates used for the impairment analysis.

Impairment of intangible assets

Intangible assets represented \$811.2 million of total assets as at December 31, 2018 (December 31, 2017 — \$813.0 million). Impairment of intangible assets is tested annually or more frequently if indicators of impairment or reversal of a prior impairment loss exist. The quantitative impairment analysis requires the Company to estimate the future cash flows expected to arise from operations and to make assumptions regarding economic factors, discount rates, tax rates and annual growth rates. Significant judgments are made in establishing these assumptions. Actual operating results and the related cash flows of the Company could differ from the estimates used for the impairment analysis.

Employee benefits

The cost of defined benefit pension plans and other post-employment benefits, and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions which may differ from actual

developments in the future. These include the determination of the discount rate, future salary increases, mortality rates, future pension increases and return on plan assets. Due to the complexity of the valuation, the underlying assumptions, and its long-term nature, the defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed annually.

Share-based compensation

The expense for stock options is based on the fair value of the awards granted using the Black-Scholes option pricing model. The Black-Scholes option pricing model includes estimates of the dividend yield, expected volatility, risk-free interest rate and the expected life in years. Any changes in these estimates may have a significant impact on the amounts reported.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 5. CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES – (continued)

Determination of useful life of satellites and finite life intangible assets

The estimated useful life and depreciation method for satellites and finite life intangible assets are reviewed annually, with the effect of any changes in estimate being accounted for on a prospective basis. Any change in these estimates may have a significant impact on the amounts reported.

Income taxes

Management assesses the recoverability of deferred tax assets based upon an estimation of the Company's projected taxable income using enacted or substantially enacted tax laws, and its ability to utilize future tax deductions before they expire. Actual results could differ from expectations.

#### 6. SEGMENT INFORMATION

Telesat operates in a single reportable industry segment, in which it provides satellite-based services to its broadcast, enterprise and consulting customers around the world.

The Company derives revenue from the following services:

**Broadcast** — Direct-to-home television, video distribution and contribution, and occasional use services.

**Enterprise** — Telecommunication carrier and integrator, government, consumer broadband, resource, maritime and aeronautical, retail and satellite operator services.

**Consulting and other** — Consulting services related to space and earth segments, government studies, satellite control services, and research and development.

Revenue derived from the above services were as follows:

Years ended December 31,	 2018	 2017	2016
Broadcast	\$ 455,125	\$ 472,751	\$ 486,434
Enterprise	428,226	430,343	420,138
Consulting and other	 19,581	 24,313	 24,282
Revenue	\$ 902,932	\$ 927,407	\$ 930,854

Equipment sales included within the various services were as follows:

Years ended December 31,	 2018	 2017	2016
Broadcast	\$ 315	\$ 274	\$ 1,904
Enterprise	23,639	14,460	11,520
Consulting and other		389	_
Total equipment sales	\$ 23,954	\$ 15,123	\$ 13,424

## Geographic Information

Revenue by geographic regions was based on the point of origin of the revenue, which was the destination of the billing invoice, and was allocated as follows:

Years ended December 31,	2018	 2017	2016
Canada	\$ 417,692	\$ 415,575	\$ 426,193
United States	318,779	311,159	319,473
Europe, Middle East & Africa	61,317	80,532	64,624
Latin America & Caribbean	75,011	78,921	83,244
Asia & Australia	30,133	41,220	37,320
Revenue	\$ 902,932	\$ 927,407	\$ 930,854

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

## 6. SEGMENT INFORMATION – (continued)

The Company's satellites are in geosynchronous orbit. For disclosure purposes, the satellites and the intangible assets have been classified based on ownership. Satellites, property and other equipment and intangible assets by geographic regions were allocated as follows:

As at December 31,	 2018	 2017
Canada	\$ 821,449	\$ 976,349
Europe, Middle East & Africa	775,055	693,903
United States	103,567	118,512
All others	 2,968	 3,083
Satellites, property and other equipment	\$ 1,703,039	\$ 1,791,847
As at December 31,	2018	2017
As at December 31, Canada	\$ <b>2018</b> 734,751	\$ <b>2017</b> 734,061
,	\$	\$ 
Canada	\$ 734,751	\$ 734,061
Canada United States	\$ 734,751 41,935	\$ 734,061 39,190

Other long-term financial assets and other long-term assets by geographic regions were allocated as follows:

As at December 31,	2018	2017		
Canada	\$ 43,779	\$	72,395	
Europe, Middle East & Africa	8,043		8,059	
All others	3,933		3,077	
Other long-term financial assets	\$ 55,755	\$	83,531	
As at December 31	2018		2017	
Canada	\$ 6,925	\$	2,885	
Europe, Middle East & Africa	987		171	
Other long-term assets	\$ 7,912	\$	3,056	

Goodwill was not allocated to geographic regions.

### **Major Customers**

For the years ended December 31, 2018, 2017 and 2016, there were three significant customers each representing more than 10% of consolidated revenue.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

#### 7. OPERATING EXPENSES

Years ended December 31,	 2018	2017	2016
Compensation and employee benefits <sup>(a)</sup>	\$ 98,350	\$ 85,135	\$ 71,841
Other operating expenses <sup>(b)</sup>	45,596	42,895	39,359
Cost of sales <sup>(c)</sup>	41,881	59,657	63,723
Operating expenses	\$ 185,827	\$ 187,687	\$ 174,923

- (a) Compensation and employee benefits included salaries, bonuses, commissions, post-employment benefits and charges arising from share-based compensation. The balance for the year ended December 31, 2018 included \$1.3 million of expenses associated with a special payment to stock option holders, including associated benefit expenses (December 31, 2017 \$14.2 million, December 31, 2016 \$nil).
- (b) Other operating expenses included general and administrative expenses, marketing expenses, in-orbit insurance expenses, professional fees and facility costs.
- (c) Cost of sales included the cost of third-party satellite capacity, the cost of equipment sales and other costs directly attributable to fulfilling the Company's obligations under customer contracts.

## 8. OTHER OPERATING GAINS (LOSSES), NET

Years ended December 31,	 2018	2017	 2016
Insurance proceeds	\$ 	\$ 6,171	\$ _
Loss on disposal of assets	(353)	(269)	(2,565)
Other	 1,096	 <u> </u>	 _
Other operating gains (losses), net	\$ 743	\$ 5,902	\$ (2,565)

## 9. INTEREST EXPENSE

Years ended December 31,	 2018	 2017	2016
Interest on indebtedness	\$ 231,015	\$ 209,136	\$ 195,523
Interest on derivative instruments	(7,105)	3,071	2,303
Interest on satellite performance incentive payments	4,134	4,750	5,548
Interest on significant financing component	27,374	_	
Interest on employee benefit plans (Note 29)	1,488	1,511	1,733
Capitalized interest (Note 16)	(19,120)	(18,324)	(6,292)
Interest expense	\$ 237,786	\$ 200,144	\$ 198,815

#### 10. INCOME TAXES

Years ended December 31,	2018	2017	2016
Current tax expense	\$ 98,841	\$ 111,510	\$ 75,634
Deferred tax (recovery) expense	(37,785)	(31,265)	8,272
Tax expense	\$ 61,056	\$ 80,245	\$ 83,906

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 10. INCOME TAXES – (continued)

A reconciliation of the statutory income tax rate, which is a composite of Canadian federal and provincial rates, to the effective income tax rate was as follows with the comparatives figures being restated to conform with the presentation in the current year:

Year ended December 31,	2018		2018 2017		 2016
(Loss) income before tax	\$	(29,880)	\$	585,298	\$ 376,806
Multiplied by the statutory income tax rates		26.59%		26.60%	 26.61%
	<u> </u>	(7,945)		155,689	100,268
Income tax recorded at rates different from the Canadian tax rate		(10,823)		(9,833)	(6,410)
Permanent differences		50,458		(36,241)	15,594
Effect on deferred tax balances due to changes in income tax rates		(427)		(2,120)	(140)
Effect of temporary differences not recognized as deferred tax assets		35,416		(25,789)	(27,286)
Previously unrecognized tax losses and credits		(6,110)			
Other		487		(1,461)	1,880
Tax expense	\$	61,056	\$	80,245	\$ 83,906
Effective income tax rate		(204.34)%		13.71%	22.27%

The tax effects of temporary differences between the carrying amounts of assets and liabilities for accounting purposes and the amounts used for tax purposes are presented below with the comparatives figures being restated to conform with the presentation in the current year:

As at December 31,	2018	2017
Deferred tax assets		
Foreign tax credits	\$ 4,245	\$ 8,639
Corporate interest restriction	7,176	_
Unrealized foreign exchange losses	4,488	_
Deferred revenue	20,729	1,879
Loss carry forwards	22,316	52,911
Employee benefits	8,374	10,430
Other	1,794	13
Total deferred tax assets	\$ 69,122	\$ 73,872
As at December 31,	2018	2017
Deferred tax liabilities		
Capital assets	\$ (215,248)	\$ (244,569)
Intangible assets	(240,595)	(241,731)
Finance charges	(9,380)	(876)
Unrealized foreign exchange gains	_	(27,193)
Total deferred tax liabilities	\$ (465,223)	\$ (514,369)
Deferred tax liabilities, net	\$ (396,101)	\$ (440,497)

Deferred tax assets of \$10.8 million (December 31, 2017 — \$4.6 million) on the balance sheet relate to the Brazil and United Kingdom tax jurisdictions.

## Losses and tax credits

Foreign tax credit

	F-26		

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

#### 10. INCOME TAXES – (continued)

Loss carry forwards

The Company has Canadian capital losses carried forward of \$644.1 million, with no expiration date. No deferred tax asset has been recognized with respect to these losses as there are no capital gains anticipated.

The Company has tax losses in the United Kingdom of \$131.3 million that can be carried forward indefinitely but are subject to restrictions on their utilization. The United Kingdom legislation, introduced on April 1, 2017, restricts to a maximum of 50% the amount of profit that can be relieved with carried-forward losses. Notwithstanding, the Company will be entitled to a GBP 5 million annual allowance of unrestricted taxable income not subject to the 50% limitation. A deferred tax asset of \$22.3 million has been recognized as the Company expects the tax losses to be utilized.

#### Interest restrictions

On April 1, 2017, the United Kingdom introduced new legislation concerning interest deductibility. The legislation introduces measures to restrict a group's net interest deduction to an amount which is proportionate with the activities taxed in the United Kingdom, taking into account the amount the group borrows from third parties. Unused interest deductions may be applied against future taxable income and can be carried forward indefinitely. No deferred tax asset has been recognized for temporary differences of unused interest deductions of \$10 million. A deferred tax asset of \$7.2 million has been recognized as the Company expects to deduct these amounts against future taxable income.

#### Investments in subsidiaries

As at December 31, 2018, the Company had temporary differences of \$15.2 million associated with investments in subsidiaries for which no deferred tax liabilities have been recognized, as the Company is able to control the timing of the reversal of these temporary differences and it is not probable that these differences will reverse in the foreseeable future.

#### 11. TRADE AND OTHER RECEIVABLES

As at December 31,	2018		2017
Trade receivables	\$ 44,35	8 \$	61,177
Trade receivables due from related parties (Note 33)	2	8	82
Less: Allowance for doubtful accounts	(5,13)	5)	(2,662)
Net trade receivables	39,25	0	58,597
Other receivables	6,38	1	6,389
Trade and other receivables	\$ 45,63	1 \$	64,986

#### Allowance for doubtful accounts

The movement in the allowance for doubtful accounts was as follows:

Years ended December 31,	2018			2017
Allowance for doubtful accounts, beginning of year	\$	2,662	\$	3,514
Provisions (reversals) for impaired receivables	73			(110)
Cumulative effect adjustment <sup>(1)</sup>		2,754		_
Receivables written off		(47)		(586)
Impact of foreign exchange		(306)		(156)
Allowance for doubtful accounts, end of year	\$	5,136	\$	2,662

(1) On January 1, 2018, a reclassification of \$2.8 million was made from trade receivables to allowance for doubtful accounts as a result of the implementation of IFRS 15. There was no impact on accumulated earnings as a result of this adjustment.						
F-27						

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

#### 12. OTHER CURRENT FINANCIAL ASSETS

As at December 31,	2018	2017		
Security deposits	\$ 147	\$	2,275	
Derivative assets (Note 27)	18,632		162	
Other current financial assets	\$ 18,779	\$	2,437	

#### 13. PREPAID EXPENSES AND OTHER CURRENT ASSETS

As at December 31,	2018		2017	
Prepaid expenses <sup>(a)</sup>	\$ 2,909	\$	3,848	
Income tax recoverable	10,329	94		
Inventory <sup>(b)</sup>	2,429		2,998	
Deferred charges <sup>(c)</sup>	475		543	
Other	239		169	
Prepaid expenses and other current assets	\$ 16,381	\$	8,503	

- (a) Prepaid expenses were primarily comprised of prepaid satellite in-orbit insurance, prepaid general liability insurance and prepaid license fees.
- As at December 31, 2018, inventory consisted of \$2.2 million of finished goods (December 31, 2017 \$2.3 million) and \$0.2 (b) million of work in process (December 31, 2017 \$0.7 million). During the year, \$17.7 million was recognized as cost of equipment sales and recorded as an operating expense (December 31, 2017 \$11.7 million, December 31, 2016 \$9.8 million).
- (c) Deferred charges included deferred financing charges relating to the Revolving Credit Facility.

### 14. OTHER LONG-TERM FINANCIAL ASSETS

As at December 31,	2018		2017	
Long-term receivables	\$	12,170	\$	12,898
Security deposits		9,789		5,910
Derivative assets (Note 27)		33,796		64,723
Other long-term financial assets	\$	55,755	\$	83,531

### 15. OTHER LONG-TERM ASSETS

As at December 31,	2018		2017	
Prepaid expenses	\$	991	\$	245
Deferred charges (Note 13)		753		1,153
Income tax recoverable		5,866		1,356
Other		302		302
Other long-term assets	\$	7,912	\$	3,056

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

# 16. SATELLITES, PROPERTY AND OTHER EQUIPMENT

	Satellites	Property and other equipment	Assets under construction	Total
Cost as at January 1, 2017	\$ 3,203,103	\$ 229,208	\$ 270,768	\$ 3,703,079
Additions		3,270	139,212	142,482
Disposals/retirements	_	(2,982)	_	(2,982)
Reclassifications and transfers from assets under construction		11,816	(11,816)	
Impact of foreign exchange	(22,925)	(2,092)	(21,199)	(46,216)
Cost as at December 31, 2017	3,180,178	239,220	376,965	3,796,363
Additions	_	538	78,373	78,911
Cumulative effect adjustment (Note 3)	(4,172)	_	3,134	(1,038)
Disposals/retirements	_	(3,622)	_	(3,622)
Reclassifications and transfers from assets under construction	448,216	17,229	(465,445)	
Impact of foreign exchange	45,348	1,690	18,110	65,148
Cost as at December 31, 2018	\$ 3,669,570	\$ 255,055	\$ 11,137	\$ 3,935,762
Accumulated depreciation and impairment as at January 1, 2017	\$(1,651,321)	\$ (136,347)	\$ —	\$(1,787,668)
Depreciation	(206,439)	(14,619)	_	(221,058)
Disposals/retirements		2,564	_	2,564
Impact of foreign exchange	568	1,078	_	1,646
Accumulated depreciation and impairment as at December 31, 2017	(1,857,192)	(147,324)		(2,004,516)
Depreciation	(209,987)	(14,864)	_	(224,851)
Cumulative effect adjustment (Note 3)	1,433	_	_	1,433
Disposals/retirements		3,207	_	3,207
Impact of foreign exchange	(7,050)	(946)		(7,996)
Accumulated depreciation and impairment as at December 31, 2018	\$(2,072,796)	\$ (159,927)	\$	\$(2,232,723)
Net carrying values				
As at December 31, 2017	\$ 1,322,986	\$ 91,896	\$ 376,965	\$ 1,791,847
As at December 31, 2018	\$ 1,596,774	\$ 95,128	\$ 11,137	\$ 1,703,039

Substantially all of the Company's satellites, property and other equipment have been pledged as security as a requirement of the Company's Senior Secured Credit Facilities as at December 31, 2018 and 2017 (Note 24).

### Borrowing costs

Borrowing costs of \$19.1 million were capitalized for the year ended December 31, 2018 (December 31, 2017 — \$18.3 million, December 31, 2016 — \$6.3 million). The average capitalization rate was 7% (5% in 2017 and 2016). Of the total capitalized borrowing costs, \$0.4 million was capitalized to intangible assets for the year ended December 31, 2018 (December 31, 2017 — \$1.2 million, December 31, 2016 — \$0.3 million) with the remaining balance capitalized to satellites, property and other equipment.

In addition, a cumulative effect adjustment was recorded on January 1, 2018, as a result of the implementation of IFRS 15 due to additional interest required to be capitalized as a result of a significant financing component existing on certain revenue agreements. Net of the accumulated depreciation adjusted on January 1, 2018, the impact on satellites, property and other equipment was an increase of \$0.4 million.

**Impairment** 

No impairment v	was recognized for the years	ended December 31	2018 2017 and 2016

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

# 16. SATELLITES, PROPERTY AND OTHER EQUIPMENT – (continued)

Joint arrangements

Telesat International Limited ("TIL") and APT entered into agreements relating to the Telstar 18 VANTAGE satellite, which are accounted for as a joint operation, whereby TIL's interest is 42.5%. Telesat (IOM) Limited ("TIOM") and ViaSat Inc. entered into agreements relating to the ViaSat-1 satellite, which are accounted for as a joint operation, whereby TIOM owns the Canadian payload on the ViaSat-1 satellite.

# 17. INTANGIBLE ASSETS

The intangible assets are split between assets with finite and indefinite lives.

The indefinite life intangible assets are summarized below.

	•	Orbital slots	Trade name	_	ntellectual property	tal indefinite e intangible assets
Cost as at January 1, 2017	\$	609,397	\$ 17,000	\$	13,161	\$ 639,558
Additions					12,577	12,577
Disposals/retirements			_		_	_
Impact of foreign exchange		(2,654)	_		_	(2,654)
Cost as at December 31, 2017 and January 1, 2018		606,743	17,000		25,738	649,481
Additions		_	_		21,311	21,311
Disposals/retirements			_		_	_
Impact of foreign exchange		3,252	_		_	3,252
Cost as at December 31, 2018	\$	609,995	\$ 17,000	\$	47,049	\$ 674,044
Accumulated impairment as at January 1, 2017	\$	(1,100)	\$	\$		\$ (1,100)
Impairment		_	_		_	· —
Accumulated impairment as at December 31, 2017 and January 1, 2018		(1,100)	_		_	(1,100)
Impairment		_	_		_	_
Accumulated impairment as at December 31, 2018	\$	(1,100)	\$	\$		\$ (1,100)
Net carrying values	-					
As at December 31, 2017	\$	605,643	\$ 17,000	\$	25,738	\$ 648,381
As at December 31, 2018	\$	608,895	\$ 17,000	\$	47,049	\$ 672,944
	F-30	)				

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

# 17. INTANGIBLE ASSETS – (continued)

The finite life intangible assets are summarized below.

	Revenue backlog	Customo		Customer contracts				•		Concession rights		Other		Total finite life intangible assets	
Cost as at January 1, 2017	\$ 235,896	\$ 198,0	552	\$	23,142	\$	16,718	\$	38,575	\$	59	\$	513,042		
Additions	_		—		_		_		155		_		155		
Disposals/retirements	_		(1)		_		_		_		_		(1)		
Impact of foreign exchange	(261)	(	337)		_		_		(3,140)		_		(3,738)		
Cost as at December 31, 2017 and January 1, 2018	235,635	198,	314		23,142		16,718		35,590		59		509,458		
Additions	_		—		_		_		36		_		36		
Disposals/retirements	_		—		_		_		(94)		_		(94)		
Impact of foreign exchange	320	4	413		_		_		(2,658)		_		(1,925)		
Cost as at December 31, 2018	\$ 235,955	\$ 198,	727	\$	23,142	\$	16,718	\$	32,874	\$	59	\$	507,475		
Accumulated amortization and impairment as at January 1, 2017	\$(190,917)	\$ (108,	850)	\$	(6,335)	\$	(10,017)	\$	(2,839)	\$	(30)	\$	(318,988)		
Amortization	(8,749)	(11,	434)		(2,890)		(925)		(2,329)		(3)		(26,330)		
Disposals/retirements	_	,	1		_				_		_		1		
Impact of foreign exchange	243		141		_		_		89		_		473		
Accumulated amortization and impairment as at December 31, 2017 and January 1, 2018	(199,423)	(120,	142)		(9,225)		(10,942)		(5,079)		(33)		(344,844)		
Amortization	(8,020)	(10,	114)		(2,891)		(924)		(2,352)		(4)		(24,305)		
Disposals/retirements			_						94				94		
Impact of foreign exchange	(327)	(.	308)		_	<u> </u>	_		425		_		(210)		
Accumulated amortization and impairment as at December 31, 2018	\$ (207,770)	\$ (130,	564)	\$	(12,116)	\$	(11,866)	\$	(6,912)	\$	(37)	\$	(369,265)		
Net carrying values															
As at December 31, 2017	\$ 36,212	\$ 78,	172	\$	13,917	\$	5,776	\$	30,511	\$	26	\$	164,614		
As at December 31, 2018	\$ 28,185	\$ 68,	163	\$	11,026	\$	4,852	\$	25,962	\$	22	\$	138,210		

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 17. INTANGIBLE ASSETS – (continued)

The total combined indefinite and finite life intangible assets are summarized below.

	As at December 31, 2018						As at December 31, 2017							
	Cost	Accumulated amortization and impairment		Ne	et carrying value		Cost		Accumulated nortization and impairment	N	et carrying value			
Indefinite life intangible assets	\$ 674,044	\$	(1,100)	\$	672,944	\$	649,481	\$	(1,100)	\$	648,381			
Finite life intangible assets	507,475		(369,265)		138,210		509,458		(344,844)		164,614			
Total intangible assets	\$ 1,181,519	\$	(370,365)	\$	811,154	\$	1,158,939	\$	(345,944)	\$	812,995			

The orbital slots represent a right to operate satellites in a given longitudinal coordinate in space, where geostationary orbit may be achieved. They are limited in availability and represent a scarce resource. Usage of orbital slots is licensed through the International Telecommunications Union. Satellite operators can generally expect, with a relatively high level of certainty, continued occupancy of an assigned orbital slot either during the operational life of an existing orbiting satellite or upon replacement by a new satellite once the operational life of the existing orbiting satellite is over. As a result of the expectancy right to maintain the once awarded orbital slots, an indefinite life is typically associated with orbital slots.

The Company's trade name has a long and established history, a strong reputation and has been synonymous with quality and growth within the satellite industry. It has been assigned an indefinite life because of expected ongoing future use.

The Company's intellectual property relates to development relating to its planned LEO constellation. It has been assigned an indefinite life because of anticipated ongoing future use.

The following are the remaining useful lives of the intangible assets:

	Years
Revenue backlog	1 to 6
Customer relationships	1 to 10
Customer contracts	2 to 8
Transponder rights	4
Concession rights	1 to 12
Patent	7

All of the Company's intangible assets have been pledged as security as a requirement of the Company's Senior Secured Credit Facilities as at December 31, 2018 and 2017 (Note 24).

### *Impairment*

Finite life intangible assets are assessed for impairment at the Company's CGU level. Indefinite life intangible assets are tested for impairment at the individual asset level. The annual impairment tests for these assets were performed in the fourth quarters of 2018, 2017 and 2016 in accordance with the policy described in Note 4.

No impairment loss was recognized in the years ended December 31, 2018, 2017 and 2016.

The recoverable amount, for indefinite life intangible assets valued using the income approach, which is equal to the fair value less costs of disposal, was calculated using the following assumptions:

	2017	2016
Discount rate	10.00%	10.25% to 10.75%

Some of the more sensitive assumptions used, including the forecasted cash flows and the discount rate, could have yielded different estimates of the recoverable amount. Actual operating results and the related cash flows of the Company could differ from the estimated operating results and related cash flows used in the impairment analysis, and had different estimates been used, it could have resulted in a different fair value.

For the indefinite life intangible assets, in 2018, after performing the qualitative assessment, the Company concluded that it is remote that the fair value is less than the carrying amount. Therefore, the quantitative impairment test was not required.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 18. GOODWILL

The Company carries goodwill at its cost of \$2,446.6 million with no accumulated impairment losses since acquisition.

*Impairment* 

Goodwill is tested for impairment at the entity level because that represents the lowest level at which goodwill supports the Company's operations and is monitored internally. The annual impairment test on goodwill was performed in the fourth quarters of 2018, 2017, and 2016 in accordance with the policy described in Note 4. The Company's recoverable amount exceeded the carrying value therefore, no impairment was recognized. The most significant assumptions used in the quantitative impairment test were as follows:

	2017	2016
Discount rate	10.00%	10.75%
Terminal year growth rate	2.0%	2.0%

Some of the more sensitive assumptions used, including the forecasted cash flows and discount rate, could have yielded different estimates of the recoverable amount. Actual operating results and the related cash flows of the Company could differ from the estimated operating results and related cash flows used in the impairment analysis, and had different estimates been used, it could have resulted in a different fair value.

In 2018, after performing the qualitative assessment of goodwill, the Company concluded that it is remote that the fair value is less than the carrying amount. Therefore, the quantitative goodwill impairment test was not required.

### 19. TRADE AND OTHER PAYABLES

As at December 31,	 2018	 2017	
Trade payables	\$ 3,609	\$ 2,659	
Other payables and accrued liabilities <sup>(a)</sup>	 27,050	 35,260	
Trade and other payables	\$ 30,659	\$ 37,919	

(a) Other payables and accrued liabilities included payables that are not trade in nature as well as various operating and capital accruals.

### 20. OTHER CURRENT FINANCIAL LIABILITIES

As at December 31,	2018		2017
Derivative liabilities (Note 27)	\$ 6	\$	1
Security deposits	1,913		1,944
Satellite performance incentive payments	11,645		10,452
Interest payable <sup>(a)</sup>	8,584		8,929
Other	4,238		5,029
Other current financial liabilities	\$ 26,386	\$	26,355

(a) Interest payable included interest payable on indebtedness, satellite performance incentive payments, and other current financial liabilities.

# 21. OTHER CURRENT LIABILITIES

As at December 31,	 2018	 2017
Deferred revenue (Note 23)	\$ 102,645	\$ 66,449

Decommissioning liabilities (Note 23)	1,068	1,205
Uncertain tax positions	1,315	1,315
Income taxes payable	4,231	4,121
Other	4,030	4,234
Other current liabilities	\$ 113,289	\$ 77,324

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 22. OTHER LONG-TERM FINANCIAL LIABILITIES

As at December 31,	2018	2017
Derivative liabilities (Note 27)	\$ 5,627	\$ 5,527
Security deposits	346	328
Satellite performance incentive payments	47,268	52,509
Other	1,280	467
Other long-term financial liabilities	\$ 54,521	\$ 58,831

#### 23. OTHER LONG-TERM LIABILITIES

As at December 31,	_	2018		2017
Deferred revenue <sup>(b)</sup>	\$	400,725	\$	323,709
Accrued benefit liabilities (Note 29)		32,235		40,065
Uncertain tax positions		175		175
Decommissioning liabilities <sup>(a)</sup>		2,043		1,590
Other		340		340
Other long-term liabilities	\$	435,518	\$	365,879

The current and long-term decommissioning liabilities on property and equipment were \$3.1 million (December 31, 2017 — \$2.8 million). The decommissioning liabilities are for the restoration of leased buildings and teleports. During the year ended to December 31, 2018, \$0.1 million was recorded as interest expense (December 31, 2017 - \$0.1 million) with \$0.1 million.

(a) December 31, 2018, \$0.1 million was recorded as interest expense (December 31, 2017 - \$0.1 million) with \$0.1 million decommissioning liabilities derecognized (December 31, 2017 - \$nil). It is expected that the decommissioning liabilities will mature between 2019 and 2062.

Remaining performance obligations, which the Company also refers to as contract revenue backlog ("backlog") represents the expected future revenue under existing customer contracts, includes both cancellable and non-cancellable contracts, and any deferred revenue that will be recognized in the future in respect to cash already received. The Company does not include revenue beyond the stated expiration of the contract regardless of potential for renewal.

The Company expects the backlog as at December 31, 2018 to be recognized as follows (in millions of Canadian dollars):

2019		2020		2021		2022	2023	Thereafter			Total		
\$ 759.0	\$	605.6	\$	504.3	\$	433.8	\$ 380.2	\$	1,030.7	\$	3,713.6		

### 24. INDEBTEDNESS

As at December 31,		2018	 2017
Senior Secured Credit Facilities <sup>(a)</sup>			
Revolving Credit Facility	\$	_	\$ 
Term Loan B – U.S. Facility (December 31, 2018 – USD\$2,326,049, December 31, 2017 – USD\$2,399,686)	3	3,172,033	3,016,645
8.875% Senior Notes (USD\$500,000) <sup>(b)</sup>		681,850	628,550
	3	3,853,883	3,645,195
Less: deferred financing costs, interest rate floors, prepayment options and net gain on repricing/repayment <sup>(c)</sup>		(129,655)	(101,818)
	3	3,724,228	3,543,377
Less: current indebtedness		(7,888)	(14,486)

**Long-term indebtedness** \$ 3,716,340 \$ 3,528,891

F-34

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 24. INDEBTEDNESS – (continued)

On November 17, 2016, Telesat Canada entered into a new amended and restated Credit Agreement with a syndicate of banks which provides for the extension of credit under the Senior Secured Credit Facilities of USD\$2,430.0 million and revolving credit borrowings of up to USD\$200.0 million (or Canadian dollar equivalent). All obligations under the Credit Agreement are guaranteed by the Company and certain of Telesat Canada's existing subsidiaries ("Guarantors"). The obligations under the Credit Agreement and the guarantees of those obligations are secured, subject to certain exceptions, by first priority liens and security interest in the assets of Telesat Canada and the Guarantors. If the Revolving Credit Facility is drawn, the Credit Agreement requires Telesat Canada to comply with a first lien net leverage ratio of 5.75:1.00, tested quarterly, and failure to comply will result in an event of default. The Credit Agreement contains total leverage ratio covenants that restrict, with certain exceptions, the ability of Telesat Canada and the Guarantors to take specified actions, including, among other things and subject to certain significant exceptions: creating liens, incurring indebtedness, making investments, engaging in mergers, selling property, paying dividends, entering into sale-leaseback transactions, creating subsidiaries, repaying subordinated debt or amending organizational documents. As at December 31, 2018, the leverage ratio was 4.93:1.00 (December 31, 2017 – 4.55:1.00), which was more than the maximum test ratio of 4.50:1.00.

On November 17, 2016, Telesat Canada issued, through a private placement, USD\$500 million of 8.875% Senior Notes which mature on November 17, 2024. The 8.875% Senior Notes are subordinated to Telesat Canada's existing and future secured indebtedness, including obligations under its Senior Secured Credit Facilities, and are governed under the 8.875% Senior Notes Indenture.

With the net proceeds from the 8.875% Senior Notes offering and the Senior Secured Credit Facilities, along with available cash on hand, all outstanding amounts on the 6.0% Senior Notes and the former senior secured credit facilities were repaid on November 17, 2016. In addition, at this time, any unamortized balances of the deferred financing costs, interest rate floors, prepayment option and premiums were written off resulting in a net loss on refinancing of \$31.9 million.

On February 1, 2017, Telesat amended its Senior Secured Credit Facilities. The amendment to the Senior Secured Credit Facilities reduced the applicable margin on the Term Loan B — U.S. Facility from 3.75% to 3.00%. Additional debt issue costs of \$38.4 million were incurred in connection with this amendment.

In connection with the adoption of IFRS 9, a gain on repricing of \$36.1 million was recorded against the opening balance of accumulated earnings and the current and long-term indebtedness. The gain on repricing recorded against the indebtedness is subsequently amortized to interest expense using the effective interest method.

In March 2018, the Company made a \$50 million U.S. dollar voluntary payment on the Term Loan B – U.S. Facility. This resulted in the recognition of a loss of \$2.8 million which was recorded against interest and other income and indebtedness. The loss recorded against the indebtedness is subsequently amortized to interest expense using the effective interest method.

On April 26, 2018, the Company amended the Senior Secured Credit Facilities in which the applicable margin on the Term Loan B – U.S. Facility was reduced to 2.50%. This resulted in a gain on repricing of \$6.9 million which was recorded against interest and other income and indebtedness. Additional debt issue costs of \$10.2 million were also incurred in connection with this amendment. The gain on repricing and debt issue costs recorded against the indebtedness are subsequently amortized to interest expense using the effective interest method.

The Senior Secured Credit Facilities are secured by substantially all of Telesat's assets. The Credit Agreement requires Telesat (a) Canada and the Guarantors to comply with a First Lien Net Leverage Ratio. As at December 31, 2018 and 2017, Telesat was in compliance with this covenant.

Each tranche of the Senior Secured Credit Facilities is subject to mandatory principal repayment requirements. Up to February 1, 2017, this repayment was equal to one quarter of 1% of the initial aggregate principal amount and is payable on a quarterly basis. From February 1, 2017 to April 26, 2018, the repayment was equal to one quarter of 1% of the value of the loan at the time of the amendment, February 1, 2017, and is payable on a quarterly basis. As at April 26, 2018, the repayment is equal to one quarter of 1% of the value of the loan at the time of the amendment, April 26, 2018, and is payable on a quarterly basis.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 24. INDEBTEDNESS – (continued)

The Senior Secured Credit Facilities have several tranches which are described below:

A Revolving Credit Facility ("Revolving Facility") of up to \$200 million U.S. dollars (or Canadian dollar equivalent) is available to Telesat. This Revolving Facility matures on November 17, 2021 and is available to be drawn at any time in U.S. funds or Canadian dollar equivalent funds. Loans under the Revolving Facility bear interest at a floating interest rate. For Canadian Prime Rate and Alternative Base Rate ("ABR") loans, an applicable margin ranging from 1.5% to 2.00% is applied to the Prime Rate

- (i) and ABR as these interest rates are defined in the Senior Credit Facilities. For Bankers Acceptance ("BA") Loans and Eurodollar Loans, an applicable margin ranging from 2.50% to 3.00% is applied to either the BA interest rate or LIBOR. The rates on the Revolving Facility vary depending upon the results of the first lien leverage ratio. The Revolving Facility has an unused commitment fee of 40 basis points. As at December 31, 2018, other than \$0.3 million (December 31, 2017 \$0.2 million) in drawings related to letters of credit, there were no borrowings under this facility.
  - The U.S. TLB Facility is a USD\$2,430 million facility maturing on November 17, 2023. The outstanding borrowings under the U.S. TLB Facility bear interest at a floating rate of either: (i) LIBOR as periodically determined for interest rate periods selected by Telesat in accordance with the terms of the Senior Secured Credit Facilities, but not less than 0.75%, plus an applicable margin of 2.50%; or (ii) Alternative Base Rate as determined in accordance with the terms of the Senior Secured Credit Facilities.
- (ii) margin of 2.50%; or (ii) Alternative Base Rate as determined in accordance with the terms of the Senior Secured Credit Facilities plus an applicable margin of 2.00%. The weighted average effective interest rate was 5.83% for the year ended December 31, 2018 (December 31, 2017 4.86%). On February 1, 2017, the Company amended the Senior Secured Credit Facilities to reduce the applicable margin to 3.00% from 3.75%. On April 26, 2018, the Company amended the Senior Secured Credit Facilities in which the applicable margin on the Term Loan B U.S. Facility was further reduced to 2.50%.

The Senior Notes bear interest at an annual rate of 8.875% and are due November 17, 2024. The total balance of the Senior Notes is USD\$500 million. The Senior Notes include covenants or terms that restrict the Company's ability to, among other things: (i) incur or guarantee additional indebtedness, or issue disqualified stock or preferred shares, (ii) incur liens, (iii) pay dividends, or make certain restricted payments or investments, (iv) enter into certain transactions with affiliates, (v) modify or cancel satellite insurance, (vi) consolidate, merge, sell or otherwise dispose of substantially all assets, (vii) create restrictions on the ability to pay dividends, make loans, and sell assets, and (viii) designate subsidiaries as unrestricted subsidiaries. The weighted average effective interest rate for the years ended December 31, 2018 and 2017 was 8.80%.

- (c) The Senior Secured Credit Facilities and 8.875% Senior Notes included the following deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment:
  - The U.S. TLB Facility and 8.875% Senior Notes were presented on the balance sheet net of related deferred financing costs of (i) \$83.8 million as at December 31, 2018 (December 31, 2017 \$87.7 million). The deferred financing costs are amortized using the effective interest method.
    - The indenture agreement for the 8.875% Senior Notes contained provisions for certain prepayment options (Note 27) which were fair valued at the time of debt issuance. The initial fair value impact, in November 2016, of the prepayment option related
  - (ii) to the 8.875% Senior Notes was an \$8.7 million increase to the indebtedness. This liability is subsequently amortized using the effective interest method and had a carrying amount of \$6.9 million as at December 31, 2018 (December 31, 2017 \$7.8 million).
  - (iii) The initial fair value impact, in November 2016, of the interest rate floor on the U.S. TLB Facility was a decrease to the indebtedness of \$25.6 million. This asset is subsequently amortized using the effective interest method and had a carrying amount of \$18.6 million as at December 31, 2018 (December 31, 2017 \$21.9 million).
  - (iv) The U.S. TLB Facility was presented on the balance sheet net of the net gain on repricing/repayment of \$34.2 million as at December 31, 2018. The net gain on repricing/repayment arose from the following:

_	In connection with the adoption of IFRS 9, a gain on	repricing of \$36.1 million	was recorded as a reduction of the
•	indebtedness, effective January 1, 2018;		

In connection with the \$50 million U.S. dollars voluntary repayment in March 2018, a loss on repayment of \$2.8 million was recorded as an increase to the indebtedness; and

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

# 24. INDEBTEDNESS – (continued)

In connection with the amendment to the Senior Secured Credit Facilities in April 2018, a gain on repricing of \$6.9 million was recorded as a reduction of indebtedness.

The outstanding balance of the net gain on repricing/repayment is amortized using the effective interest method.

The short-term and long-term portions of deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment were as follows:

As at December 31,	2018	2017
Short-term deferred financing costs	\$ 15,263	\$ 13,435
Long-term deferred financing costs	68,536	 74,278
	\$ 83,799	\$ 87,713
Short-term interest rate floor	\$ 3,436	\$ 3,413
Long-term interest rate floor	15,165	18,483
	\$ 18,601	\$ 21,896
Short-term prepayment option	\$ (942)	\$ (863)
Long-term prepayment option	(5,986)	(6,928)
	\$ (6,928)	\$ (7,791)
Short-term net gain on repricing/repayment	\$ 6,315	\$ _
Long-term net gain on repricing/repayment	\$ 27,868	\$ _
	\$ 34,183	\$
Deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment	\$ 129,655	\$ 101,818

The outstanding principal balance of indebtedness, excluding deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment will be repaid as follows (in millions of Canadian dollars):

2019		2020		2021		2022	 2023	1	hereafter	Total		
\$ 32.0	\$	32.0	\$	32.0	\$	32.0	\$ 3,044.0	\$	681.9	\$	3,853.9	

# 25. SHARE CAPITAL

The number of shares and stated value of the outstanding shares were as follows:

	2018		2017					
As at December 31,	Number of shares	r of shares Stated value		Number of shares		Stated value		
Common Shares	74,252,460	\$	26,580	74,252,460	\$	26,580		
Voting Participating Preferred Shares	7,034,444		48,246	7,034,444		48,246		
Non-Voting Participating Preferred Shares	38,431,311		78,870	38,391,823		77,846		
Director Voting Preferred Shares	1,000		10	1,000		10		
Share capital		\$	153,706		\$	152,682		

In November 2017 and 2016 dividends were declared and paid on the Director Voting Preferred Shares.

In 2016, a former employee exercised 178,642 stock options, on a net settlement basis, in exchange for 129,400 Non-Voting Participating Preferred Shares with a stated value of \$1.9 million.

In January 2017, the Board of Directors approved a cash distribution to shareholders, as a reduction of stated capital, in the amount of approximately \$387.2 million U.S. dollars. These distributions were made during the first quarter of 2017.

In January 2017, 7,000 stock options granted under the Company's stock incentive plan were exercised for 7,000 Non-Voting Participating Preferred Shares in exchange for \$0.1 million.

In June 2018, 95,363 stock appreciation rights ("Sars") were exercised for 39,488 Non-Voting Participating Preferred Shares, on a net settlement basis.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 25. SHARE CAPITAL – (continued)

There were no changes to the rights, privileges or conditions associated to each class of shares.

The authorized share capital of the Company is comprised of: (i) an unlimited number of Common Shares, Voting Participating Preferred Shares, Non-Voting Participating Preferred Shares, Redeemable Common Shares, and Redeemable Non-Voting Participating Preferred Shares, (ii) 1,000 Director Voting Preferred Shares, and (iii) 325,000 Senior Preferred Shares. None of the Redeemable Common Shares, Redeemable Non-Voting Participating Preferred Shares or Senior Preferred Shares have been issued as at December 31, 2018 or 2017. The Company's share-based compensation plans have authorized the grant of up to 16,553,779 options to purchase Non-Voting Participating Preferred Shares combined with authorizing 200,000 restricted share units expected to be settled in Non-Voting Participating Preferred Shares (Note 28).

### Common Shares

The holders of the Common Shares are entitled to receive notice of and to attend all annual and special meetings of the shareholders of the Company and to one vote in respect of each common share held on all matters at all such meetings, except in respect of a class vote applicable only to the shares of any other class, in respect of which the common shareholders shall have no right to vote. The holders of the Common Shares are entitled to receive dividends as may be declared by the Board of Directors of the Company, and are entitled to share in the distribution of the assets of the Company upon liquidation, winding-up or dissolution, subject to the rights, privileges and conditions attaching to any other class of shares ranking in order of priority. The Common Shares are convertible at the holders' option, at any time, into Voting Participating Preferred Shares or Non-Voting Participating Preferred Shares, on a one-for-one basis. The Common Shares have no par value.

# Voting Participating Preferred Shares

The rights, privileges and conditions of the Voting Participating Preferred Shares are identical in all respects to those of the Common Shares, except for the following:

- The holders of Voting Participating Preferred Shares are not entitled to vote at meetings of the shareholders of the Company on resolutions electing directors.
- For all other meetings of the shareholders of the Company, the holders of Voting Participating Preferred Shares are entitled to a variable number of votes per Voting Participating Preferred Share based on the number of Voting Participating Preferred Shares, Non-Voting Participating Preferred Shares and Redeemable Non-Voting Participating Preferred Shares outstanding on the record date of the given meeting of the shareholders of the Company.
- The Voting Participating Preferred Shares are convertible, at any time, at the holders' option into Common Shares or Non-Voting Participating Preferred Shares on a one-for-one basis as long as the result of such conversion does not cause the Company to cease to be a "qualified corporation" within the meaning of the Canadian Telecommunication Common Carrier Ownership and Control Regulations pursuant to the Telecommunications Act (Canada).

The Voting Participating Preferred Shares have no par value.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 25. SHARE CAPITAL – (continued)

### Non-Voting Participating Preferred Shares

The rights, privileges and conditions of the Non-Voting Participating Preferred Shares are identical in all respects to those of the Common Shares, except for the following:

- The holders of Non-Voting Participating Preferred Shares are not entitled to vote on any matter at meetings of the shareholders of the Company, except in respect of a class vote applicable only to the Non-Voting Participating Preferred Shares.
- The Non-Voting Participating Preferred Shares are convertible, at any time, at the holders' option into Common Shares or Voting Participating Preferred Shares on a one-for-one basis as long as the result of such conversion does not cause the Company to cease to be a "qualified corporation" within the meaning of the Canadian Telecommunication Common Carrier Ownership and Control Regulations pursuant to the Telecommunications Act (Canada).

The Non-Voting Participating Preferred Shares have no par value.

# **Director Voting Preferred Shares**

The rights, privileges and conditions of the Director Voting Preferred Shares are identical in all respects to those of the Common Shares, except for the following:

- The holders of Director Voting Preferred Shares are entitled to receive notice of and to attend all meetings of the shareholders of the Company at which directors of the Company are to be elected. The holders of the Director Voting Preferred Shares are not entitled to attend meetings of the shareholders of the Company and have no right to vote on any matter other than the election of directors of the Company.
- The holders of Director Voting Preferred Shares are entitled to receive annual non-cumulative dividends of \$10 per share if declared by the Board of Directors of the Company, in priority to the payment of dividends on the Common Shares, Voting Participating Preferred Shares, Non-Voting Participating Preferred Shares, Redeemable Common Shares, and Redeemable Non-Voting Participating Preferred Shares, but after payment of any accrued dividends on the Senior Preferred Shares.
- In the event of liquidation, wind-up or dissolution, the holders of Director Voting Preferred Shares are entitled to receive \$10 per share in priority to the payment of dividends on the Common Shares, Voting Participating Preferred Shares, Non-Voting Participating Preferred Shares, Redeemable Common Shares, and Redeemable Non-Voting Participating Preferred Shares, but after payment of any accrued dividends on the Senior Preferred Shares.
- The Director Voting Preferred Shares are redeemable at the option of the Company, at any time, at a redemption price of \$10 per share.

The Director Voting Preferred Shares have a nominal stated value.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 26. CAPITAL DISCLOSURES

Telesat is a privately held company. The Company's financial strategy is designed to maintain compliance with the financial covenant under its Senior Secured Credit Facilities (Note 24), and to maximize returns to its shareholders and other stakeholders. The Company meets these objectives through regular monitoring of the financial covenant and operating results on a quarterly basis. The Company's overall financial strategy remains unchanged from 2017.

The Company defines its capital as shareholders' equity (comprising issued share capital, accumulated earnings and excluding reserves) and debt financing (comprising indebtedness and excluding deferred financing costs, prepayment option, interest rate floor and net gain on repricing/repayment as detailed in Note 24).

The Company's capital at the end of the year was as follows:

As at December 31,	2018	2017
Shareholders' equity (excluding reserves)	\$ 997,307	\$ 1,121,090
Debt financing (excluding deferred financing costs, prepayment option, interest rate floor and net gain on repricing/repayment)	\$ 3,853,883	\$ 3,645,195

If the Revolving Facility is drawn, the Senior Secured Credit Facilities require Telesat Canada to comply with a first lien net leverage ratio test. As at December 31, 2018, the first lien net leverage ratio was 4.02:1.00 (December 31, 2017 — 3.74:1.00), which was less than the maximum test ratio of 5.75:1.00.

The Company's operating results are tracked against budget on a regular basis, and this analysis is reviewed by senior management. The Company partly manages its interest rate risk due to variable interest rate debt through the use of interest rate swaps (Note 27).

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 27. FINANCIAL INSTRUMENTS

### **Measurement of Risks**

The Company, through its financial assets and liabilities, is exposed to various risks. The following analysis provides a measurement of risks as at December 31, 2018.

Credit risk

Credit risk is the risk that a counterparty to a financial asset will default, resulting in the Company incurring a financial loss. As at December 31, 2018, the maximum exposure to credit risk is equal to the carrying value of the financial assets which totaled \$888.6 million (December 31, 2017 — \$630.0 million).

Cash and cash equivalents are invested with high quality investment grade financial institutions and are governed by the Company's corporate investment policy, which aims to reduce credit risk by restricting investments to high-grade, mainly U.S. dollar and Canadian dollar denominated investments.

The Company has credit evaluation, approval and monitoring processes intended to mitigate potential credit risks related to trade accounts receivable. The Company's standard payment terms are 30 days with interest typically charged on balances remaining unpaid at the end of standard payment terms. The Company's historical experience with customer defaults has been minimal. As at December 31, 2018, North American and International customers made up 59% and 41% of the outstanding trade receivable balance, respectively (December 31, 2017 — 39% and 61%, respectively). Anticipated bad debt losses have been provided for in the allowance for doubtful accounts. The allowance for doubtful accounts as at December 31, 2018 was \$5.1 million (December 31, 2017 — \$2.7 million).

The Company mitigates the credit risk associated with derivative instruments by entering into them with only high quality financial institutions.

Foreign exchange risk

The Company's operating results are subject to fluctuations as a result of exchange rate variations to the extent that transactions are made in currencies other than Canadian dollars. The Company's main currency exposures lie in its U.S. dollar denominated cash and cash equivalents, trade and other receivables, trade and other payables and indebtedness with the most significant impact being on the U.S. dollar denominated indebtedness. As at December 31, 2018 and 2017, the entire indebtedness was denominated in U.S. dollars. The Canadian dollar equivalent of the U.S. dollar denominated indebtedness was \$3,853.9 million and \$3,645.2 million, respectively (before netting of deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment).

In July 2016, Telesat entered into four forward foreign exchange contracts which require the Company to pay \$7.0 million Canadian dollars to receive 4.2 million British Pounds Sterling. All forward foreign exchange contracts matured by October 31, 2017.

As at December 31, 2018, the impact of a 5 percent increase (decrease) in the value of the Canadian dollar against the U.S. dollar on financial assets and liabilities would have (increased) decreased net (loss) income by \$163.9 million (December 31, 2017 — \$162.0 million) and increased (decreased) other comprehensive income (loss) by \$3.1 million (December 31, 2017 — \$0.2 million). This analysis assumes that all other variables, in particular interest rates, remain constant.

Interest rate risk

The Company is exposed to interest rate risk on its cash and cash equivalents and its indebtedness. The interest rate risk on the indebtedness is from a portion of the indebtedness having a variable interest rate. Changes in the interest rates could impact the amount of interest that the Company is required to pay or receive.

In October 2017, the Company entered into four interest rate swaps to hedge the interest rate risk associated with the variable interest rate on \$1,800.0 million of the U.S. denominated Term Loan B at fixed interest rates, excluding applicable margins, ranging from 1.72% to 2.04%. These contracts mature between September 2019 and September 2022.
F-41

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

# 27. FINANCIAL INSTRUMENTS – (continued)

If the interest rates on the unhedged variable rate indebtedness change by 0.25%, excluding the potential impact of interest rate floors, the result would be an increase or decrease to net (loss) income of \$1.8 million for the year ended December 31, 2018 (December 31, 2017 — \$6.5 million).

Liquidity risk

The Company maintains credit facilities to ensure it has sufficient funds available to meet current and foreseeable financial requirements.

The contractual maturities of financial liabilities as at December 31, 2018 were as follows:

	 Carrying amount	tractual cash flows discounted)	2019		2020		 2021	2022		2023		Thereafter	
Trade and other payables	\$ 30,659	\$ 30,659	\$	30,659	\$	_	\$ _	\$	_	\$	_	\$	_
Customer and other deposits	2,259	2,259		1,852		14	239		_		_		154
Satellite performance incentive payments	59,895	76,506		14,401		11,446	9,959		8,959		8,057		23,684
Other financial liabilities	5,556	5,467		3,993		476	116		116		116		650
Indebtedness <sup>(1)</sup>	 3,861,447	5,034,385		263,687		262,432	260,117		257,437		3,248,348		742,364
	\$ 3,959,816	\$ 5,149,276	\$	314,592	\$	274,368	\$ 270,431	\$	266,512	\$	3,256,521	\$	766,852

(1) Indebtedness excludes deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment.

The interest payable and interest payments included in the carrying value and contractual cash flows, respectively, in the above table, were as follows:

	Interest p	oayable	Inter	est payments
Satellite performance incentive payments	\$	982	\$	16,943
Other financial liabilities	\$	37	\$	37
Indebtedness	\$	7,564	\$	1,180,502

Financial assets and liabilities recorded on the balance sheets and the fair value hierarchy levels used to calculate those values were as follows:

As at December 31, 2018	FVT	PL Am	Amortized cost <sup>(4)</sup>		Total		nir value	Fair value hierarchy	
Cash and cash equivalents	\$	<u> </u>	768,433	\$	768,433	\$	768,433	Level 1	
Trade and other receivables		_	45,631		45,631		45,631	(3)	
Other current financial assets <sup>(1)</sup>	1	8,632	147		18,779		18,779	Level 1, Level 2	
Other long-term financial assets <sup>(1)</sup>	3	33,796	21,959		55,755		55,755	Level 1, Level 2	
Trade and other payables		_	(30,659)		(30,659)		(30,659)	(3)	
Other current financial liabilities		(6)	(26,380)		(26,386)		(29,131)	Level 2	

Other long-term financial liabilities	(5,627)	(48,894)	(54,521)	(54,733)	Level 2
Indebtedness <sup>(2)</sup>	 _	 (3,853,883)	(3,853,883)	(3,709,695)	Level 2
	\$ 46,795	\$ (3,123,646)	\$ (3,076,851)	\$ (2,935,620)	

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

# 27. FINANCIAL INSTRUMENTS – (continued)

As at December 31, 2017	oans and ceivables	FVTPL	VTPL Othe			Total		air value	Fair value hierarchy
Cash and cash equivalents	\$ 479,045	\$ <u> </u>	\$	_	\$	479,045	\$	479,045	Level 1
Trade and other receivables	64,986	_		_		64,986		64,986	(3)
Other current financial assets <sup>(1)</sup>	2,275	162		_		2,437		2,437	Level 1, Level 2
Other long-term financial assets <sup>(1)</sup>	18,808	64,723		_		83,531		83,531	Level 1, Level 2
Trade and other payables	_	_		(37,919)		(37,919)		(37,919)	(3)
Other current financial liabilities	_	(1)		(26,354)		(26,355)		(27,791)	Level 2
Other long-term financial liabilities	_	(5,527)		(53,304)		(58,831)		(59,648)	Level 2
Indebtedness <sup>(2)</sup>	 _	_		(3,645,195)	(.	3,645,195)	(	3,723,474)	Level 2
	\$ 565,114	\$ 59,357	\$	(3,762,772)	\$ (:	3,138,301)	\$ (	3,218,833)	

- (1) Other current and long-term financial assets classified as fair value through profit or loss were calculated using level 2 of the fair value hierarchy. All other balances were calculated using level 1 of the fair value hierarchy.
- (2) Indebtedness excludes deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment (December 31, 2017 excludes deferred financing costs, interest rate floor and prepayment option).
- (3) Trade and other receivables and trade and other payables approximate fair value due to the short-term maturity of these instruments. Cash and cash equivalents, trade and other receivables, other current and long-term financial assets, classified as loans and
- (4) receivables under IAS 39 have been classified as amortized cost under IFRS 9. Trade and other payables, other current and long-term financial liabilities and indebtedness classified as other financial liabilities under IAS 39 have been classified as amortized cost under IFRS 9. The change in classification did not have an impact on the measurement of the Company's financial instruments.

### Assets pledged as security

The Senior Secured Credit Facilities are secured by substantially all of Telesat's assets excluding the assets of unrestricted subsidiaries.

# Fair Value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market under current market conditions at the measurement date. Where possible, fair values are based on the quoted market values in an active market. In the absence of an active market, the Company determines fair values based on prevailing market rates (bid and ask prices, as appropriate) for instruments with similar characteristics and risk profiles or internal or external valuation models, such as option pricing models and discounted cash flow analysis, using observable market-based inputs.

The fair value hierarchy is as follows:

Level 1 is based on quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company can access at the measurement date.

Level 2 is based on observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially all of the full term of the assets or liabilities.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 27. FINANCIAL INSTRUMENTS – (continued)

Level 3 is based on unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

Estimates of fair values are affected significantly by the assumptions for the amount and timing of estimated future cash flows and discount rates, which all reflect varying degrees of risk. Potential income taxes and other expenses that would be incurred on disposition of these financial instruments are not reflected in the fair values. As a result, the fair values are not necessarily the net amounts that would be realized if these instruments were actually settled.

The carrying amounts of cash and cash equivalents, trade and other receivables, and trade and other payables approximate fair value due to the short-term maturity of these instruments. As at December 31, 2018, cash and cash equivalents included \$425.6 million (December 31, 2017 — \$90.7 million) of short-term investments.

The fair value of the satellite performance incentive payments, included in other current and long-term financial liabilities, was determined using a discounted cash flow methodology. The calculation is performed on a recurring basis. As at December 31, 2018 and 2017, the discount rate used was 5.7%.

The fair value of the indebtedness was based on transactions and quotations from third parties considering market interest rates and excluding deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment (December 31, 2017 – excluding deferred financing costs, interest rate floor and prepayment option). The calculation of the fair value of the indebtedness is performed on a recurring basis. The rates used were as follows:

As at December 31,	2018	2017
Senior Secured Credit Facilities		
Term Loan B – U.S. Facility	94.50%	100.13%
8.875% Senior Notes	104.44%	111.83%

Fair value of derivative financial instruments

Derivatives were valued using a discounted cash flow methodology. The calculations of the fair value of the derivatives are performed on a recurring basis.

Interest rate swap future cash flows were determined based on current yield curves and exchange rates and then discounted based on discount curves.

Prepayment option cash flows were calculated with a third party option valuation model which is based on the current price of the debt instrument and discounted based on a discount curve.

Interest rate floor cash flows were calculated using the Black Scholes option valuation model in Bloomberg and discounted based on discount curves.

The discount rates used to discount cash flows as at December 31, 2018 ranged from 2.29% to 2.81% (December 31, 2017 — 1.56% to 2.31%).

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

# 27. FINANCIAL INSTRUMENTS – (continued)

The fair value of the derivative assets and liabilities was calculated based on the level 2 of the fair value hierarchy. The current and long-term portions of the fair value of the Company's derivative assets and liabilities, as at each balance sheet date, were as follows:

As at December 31, 2018	Otl current t	inancial	Other long-term financial assets		Other current financial liabilities		Other long-term financial liabilities		Total	
Interest rate floors	\$		\$		\$	(6)	\$ (5,627)	\$	(5,633)	
Interest rate swaps		18,632		16,650			_		35,282	
Prepayment option				17,146		<u> </u>			17,146	
	\$	18,632	\$	33,796	\$	(6)	\$ (5,627)	\$	46,795	

As at December 31, 2017	Oth curre finan- asse	ent cial	Ot	ther long-term financial assets	cui	Other rrent financial liabilities	Other long-term financial liabilities	 Total
Interest rate floors	\$		\$		\$	(1)	\$ (5,527)	\$ (5,528)
Interest rate swaps		162		18,945		_	_	19,107
Prepayment option		_		45,778				45,778
	\$	162	\$	64,723	\$	(1)	\$ (5,527)	\$ 59,357

The reconciliation of the fair value of derivative assets and liabilities was as follows:

Fair value, December 31, 2016 and January 1, 2017       \$ 218         Realized losses on derivatives       (207)         Unrealized gains on derivatives       7,861         Interest rate floors       7,861         Prepayment option       33,018         Interest rate swaps       19,394         Forward foreign exchange contracts       240         Impact of foreign exchange       (1,167)         Fair value, December 31, 2017 and January 1, 2018       59,357         Unrealized gains (losses) on derivatives       255         Prepayment option       (30,691)         Interest rate swaps       12,231         Impact of foreign exchange       5,643         Fair value, December 31, 2018       \$ 46,795		
Forward foreign exchange contract Unrealized gains on derivatives Interest rate floors Prepayment option Interest rate swaps Forward foreign exchange contracts Impact of foreign exchange Fair value, December 31, 2017 and January 1, 2018 Interest rate floors Interest rate floors Frepayment option Interest rate floors Prepayment option Interest rate swaps Interest r	Fair value, December 31, 2016 and January 1, 2017	\$ 218
Unrealized gains on derivatives7,861Interest rate floors33,018Prepayment option33,018Interest rate swaps19,394Forward foreign exchange contracts240Impact of foreign exchange(1,167)Fair value, December 31, 2017 and January 1, 201859,357Unrealized gains (losses) on derivatives255Interest rate floors255Prepayment option(30,691)Interest rate swaps12,231Impact of foreign exchange5,643	Realized losses on derivatives	
Interest rate floors       7,861         Prepayment option       33,018         Interest rate swaps       19,394         Forward foreign exchange contracts       240         Impact of foreign exchange       (1,167)         Fair value, December 31, 2017 and January 1, 2018       59,357         Unrealized gains (losses) on derivatives       255         Interest rate floors       255         Prepayment option       (30,691)         Interest rate swaps       12,231         Impact of foreign exchange       5,643	Forward foreign exchange contract	(207)
Prepayment option       33,018         Interest rate swaps       19,394         Forward foreign exchange contracts       240         Impact of foreign exchange       (1,167)         Fair value, December 31, 2017 and January 1, 2018       59,357         Unrealized gains (losses) on derivatives       255         Interest rate floors       255         Prepayment option       (30,691)         Interest rate swaps       12,231         Impact of foreign exchange       5,643	Unrealized gains on derivatives	
Interest rate swaps       19,394         Forward foreign exchange contracts       240         Impact of foreign exchange       (1,167)         Fair value, December 31, 2017 and January 1, 2018       59,357         Unrealized gains (losses) on derivatives       255         Interest rate floors       255         Prepayment option       (30,691)         Interest rate swaps       12,231         Impact of foreign exchange       5,643	Interest rate floors	7,861
Forward foreign exchange contracts  Impact of foreign exchange  Fair value, December 31, 2017 and January 1, 2018  Unrealized gains (losses) on derivatives  Interest rate floors  Prepayment option  Interest rate swaps  Impact of foreign exchange  240  (1,167)  59,357  255  (30,691)  12,231  12,231	Prepayment option	33,018
Impact of foreign exchange(1,167)Fair value, December 31, 2017 and January 1, 201859,357Unrealized gains (losses) on derivatives255Interest rate floors(30,691)Interest rate swaps12,231Impact of foreign exchange5,643	Interest rate swaps	19,394
Fair value, December 31, 2017 and January 1, 2018  Unrealized gains (losses) on derivatives Interest rate floors Prepayment option Interest rate swaps Impact of foreign exchange  59,357  (30,691)  12,231  12,231	Forward foreign exchange contracts	240
Unrealized gains (losses) on derivatives Interest rate floors Prepayment option Interest rate swaps Impact of foreign exchange  255 255 275 275 275 275 275 275 275 27	Impact of foreign exchange	(1,167)
Interest rate floors255Prepayment option(30,691)Interest rate swaps12,231Impact of foreign exchange5,643	Fair value, December 31, 2017 and January 1, 2018	 59,357
Prepayment option (30,691) Interest rate swaps 12,231 Impact of foreign exchange 5,643	Unrealized gains (losses) on derivatives	
Interest rate swaps 12,231 Impact of foreign exchange 5,643	Interest rate floors	255
Impact of foreign exchange 5,643	Prepayment option	(30,691)
	Interest rate swaps	12,231
Fair value, December 31, 2018 \$ 46,795	Impact of foreign exchange	5,643
	Fair value, December 31, 2018	\$ 46,795

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 28. SHARE-BASED COMPENSATION PLANS

### Telesat Canada Stock Incentive Plans

In September 2008 and April 2013, Telesat adopted share-based compensation plans (the "stock incentive plans") for certain key employees of the Company and its subsidiaries. The stock incentive plans provide for the grant of up to 16,553,779 options, 8,824,646 authorized in 2008, 4,036,729 authorized in 2013, 62,404 authorized in 2015, 350,000 authorized in 2017 and additional 3,280,000 in 2018, to purchase Non-Voting Participating Preferred Shares of Telesat Canada, convertible into Common Shares. Of the stock options authorized and issued in 2018, 780,000 vest over three-year period with the vesting period commencing on January 1, 2018 and 2,500,000 vest over a five-year period with the vesting period commencing on November 1, 2017.

In addition, in 2018, Telesat authorized the issuance of 200,000 restricted share units expected to be settled in Non-Voting Participating Preferred Shares. The restricted share units vest over a three-year period with a vesting period commencing on January 1, 2018.

Under the stock incentive plans, two different types of stock options can be granted: time-vesting options and performance-vesting options. The time-vesting options generally become vested and exercisable over a five-year period by 20% annual increments. The performance-vesting options become vested and exercisable over a five-year period, provided that the Company has achieved or exceeded an annual or cumulative target consolidated EBITDA established by the Board of Directors. The exercise period of the stock options expires 10 years from the grant date. The exercise price of each share underlying the options will be the higher of a fixed price, established by the Board of Directors on the grant date, and the fair market value of a Non-Voting Participating Preferred Share on the grant date. Both plans authorize the Board of Directors to grant tandem SARs, at their discretion.

In August 2017, Telesat authorized the exchange of 805,835 performance-vesting options for 805,835 time-vesting options. The exchanged amounts included 715,383 unvested performance-vesting options which were exchanged for an equal amount of unvested time-vesting options. A portion of the new unvested time-vesting options will vest upon the next anniversary date of the option holder with the remainder vesting evenly over a three-year period commencing on the sixth anniversary date.

The Company expenses the fair value of stock options that are expected to vest over the vesting period using the Black-Scholes option pricing model. The share-based compensation expense is included in operating expenses.

In January 2016, the Board approved the purchase for cancellation of up to 25% of the currently outstanding stock options. In March 2016, a total of 1,253,477 vested stock options were repurchased at fair value from key management personnel and other employees or former employees for a total cash consideration of \$24.7 million.

In connection with the \$387 million U.S. dollars cash distribution to the Company's shareholders (Note 25), effective January 25, 2017, a special payment was authorized to option holders of \$12.8 million U.S. dollars. Of this balance, \$11.3 million U.S. dollars has cumulatively been recorded as an operating expense up to December 31, 2018 (2017 - \$10.0 million U.S.), of which \$11.2 million U.S. dollars has been cumulatively paid (2017 - \$8.0 million U.S.). The remaining payments will be made in subsequent periods subject to certain conditions being met.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

# 28. SHARE-BASED COMPENSATION PLANS – (continued)

The change in number of stock options outstanding and their weighted average exercise price were as follows:

	Time vesti	Time vesting option plans				e vesting lans
	Number of options		eighted average exercise price	Number of options		ighted average xercise price
Outstanding at December 31, 2016 and January 1, 2017	2,677,019	\$	24.54	1,303,733	\$	20.16
Granted						
Forfeited	(15,507)			(17,638)		
Exercised (Note 25)	(3,150)			(3,850)		
Exchanged	805,835			(805,835)		
Expired	_			_		
Outstanding at December 31, 2017 and January 1, 2018	3,464,197	\$	24.85	476,410	\$	11.07
Granted	3,692,372			_		
Forfeited	(2,650)			_		
Exercised (Note 25)	(51,055)			(44,308)		
Expired						
Outstanding at December 31, 2018	7,102,864	\$	25.56	432,102	\$	11.07

The movement in the number of restricted share units outstanding was as follows:

Outstanding, January 1, 2018	_
Granted	200,000
Outstanding, December 31, 2018	200,000

There were no restricted share units in 2017.

The quantity of stock options that are exercisable and the weighted average remaining life were as follows:

As at December 31,	2018	2017
Time vesting option plans	3,689,117	2,612,679
Performance vesting option plans	432,102	476,413
Weighted average remaining life	7 years	4 years

The share-based compensation expense included in the consolidated statements of (loss) income was as follows:

Years ended December 31,	 2018	 2017	 2016
Operating expenses	\$ 29,505	\$ 2,856	\$ 5,770

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 28. SHARE-BASED COMPENSATION PLANS – (continued)

The weighted average assumptions used to determine the share-based compensation expense for stock options using the Black-Scholes option pricing model were as follows:

	2018	2017	2016
Dividend yield	%	%	<u> </u>
Expected volatility	31.7%	24.6%	24.6%
Risk-free interest rate	2.94%	1.83%	1.83%
Expected life (years)	10	10	10

The expected volatility is based on the historical volatility.

The weighted average fair value of the stock options and restricted share units granted during 2018 was \$13.37. There were no stock options or restricted share units granted in 2016 or 2017.

### 29. EMPLOYEE BENEFIT PLANS

The expenses included on the consolidated statements of (loss) income and the consolidated statements of comprehensive (loss) income were as follows:

	Pension plans				Other post-employment benefit plans					it plans	
Years ended December 31,		2018		2017	2016		2018		2017		2016
Consolidated statements of (loss) income											
Operating expenses	\$	6,345	\$	6,239	\$ 6,235	\$	276	\$	243	\$	221
Interest expense	\$	658	\$	650	\$ 875	\$	830	\$	861	\$	858
Consolidated statements of comprehensive (loss) income											
Actuarial (gains) losses on employee benefit plans	\$	(4,555)	\$	3,761	\$ (4,376)	\$	(3,200)	\$	1,410	\$	(724)

In October 2013, the Company ceased allowing new employees to join certain of the defined benefit plans, except under certain circumstances, and commenced a defined contribution pension plan for new employees.

The Company made contributions of \$0.9 million for various defined contribution arrangements during 2018 (December 31, 2017 — \$0.8 million).

The Company's funding policy is to make contributions to its defined benefit pension funds based on actuarial cost methods as permitted by pension regulatory bodies. Contributions reflect actuarial assumptions concerning future investment returns, salary projections and future service benefits. Plan assets are represented primarily by Canadian and foreign equity securities, fixed income instruments and short-term investments.

The Company provides certain health care and life insurance benefits for some of its retired employees and their dependents. Participants are eligible for these benefits generally when they retire from active service and meet the eligibility requirements for the pension plan. These benefits are funded primarily on a pay-as-you-go basis, with the retiree generally paying a portion of the cost through contributions, deductibles and coinsurance provisions.

The balance sheet obligations, distributed between pension and other post-employment benefits, included in other long-term liabilities (Note 23) were as follows:

As at December 31,	2018	2017
Pension benefits	\$ 10,905	\$ 16,169
Other post-employment benefits	21,330	23,896
Accrued benefit liabilities	\$ 32,235	\$ 40,065

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

# 29. EMPLOYEE BENEFIT PLANS – (continued)

The amounts recognized in the balance sheets and the funded statuses of the benefit plans were as follows:

	2018				2017			
As at December 31,	Pension Other		Pension			Other		
Present value of funded obligations	\$	292,914	\$		\$	306,660	\$	_
Fair value of plan assets		(283,064)		<u> </u>		(291,612)		<u> </u>
		9,850				15,048		_
Present value of unfunded obligations		1,055		21,330		1,121		23,896
Accrued benefit liabilities	\$	10,905	\$	21,330	\$	16,169	\$	23,896

The changes in the benefit obligations and in the fair value of plan assets were as follows:

	1	Pension	 Other	Total
Change in benefit obligations				
Benefit obligation, January 1, 2018	\$	307,781	\$ 23,896	\$ 331,677
Current service cost		5,905	276	6,181
Interest expense		10,836	830	11,666
Remeasurements				
Actuarial gains arising from plan experience		(1,018)	(701)	(1,719)
Actuarial gains from change in demographic assumptions		(8,363)	(1,072)	(9,435)
Actuarial gains from changes in financial assumptions		(13,125)	(1,427)	(14,552)
Benefits paid		(9,190)	(743)	(9,933)
Contributions by plan participants		1,146	_	1,146
Foreign exchange		_	297	297
Other		(3)	(26)	(29)
Benefit obligation, December 31, 2018		293,969	21,330	315,299
Change in fair value of plan assets				
Fair value of plan assets, January 1, 2018		(291,612)	_	(291,612)
Contributions by plan participants		(1,146)		(1,146)
Contributions by employer		(7,709)	(743)	(8,452)
Interest income		(10,178)	_	(10,178)
Benefits paid		9,190	743	9,933
Remeasurements				
Return on plan assets, excluding interest income		17,951	_	17,951
Administrative costs		440		440
Fair value of plan assets, December 31, 2018		(283,064)	_	(283,064)
Accrued benefit liabilities, December 31, 2018	\$	10,905	\$ 21,330	\$ 32,235

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

# 29. EMPLOYEE BENEFIT PLANS – (continued)

	Pension		Other		Total
Change in benefit obligations					
Benefit obligation, January 1, 2017	\$ 280,585	\$	22,388	\$	302,973
Current service cost	5,741		243		5,984
Interest expense	10,992		861		11,853
Remeasurements					
Actuarial losses arising from plan experience	2,748		138		2,886
Actuarial losses from change in demographic assumptions	_		13		13
Actuarial losses from changes in financial assumptions	16,244		1,259		17,503
Benefits paid	(9,769)		(750)		(10,519)
Contributions by plan participants	1,168				1,168
Foreign exchange	_		(246)		(246)
Other	72		(10)		62
Benefit obligation, December 31, 2017	307,781		23,896		331,677
Change in fair value of plan assets			-		
Fair value of plan assets, January 1, 2017	(266,255)		_		(266,255)
Contributions by plan participants	(1,168)				(1,168)
Contributions by employer	(8,883)		(750)		(9,633)
Interest income	(10,342)		_		(10,342)
Benefits paid	9,769		750		10,519
Remeasurements					
Return on plan assets, excluding interest income	(15,231)		_		(15,231)
Administrative costs	498		_		498
Fair value of plan assets, December 31, 2017	(291,612)		_		(291,612)
Accrued benefit liabilities, December 31, 2017	\$ 16,169	\$	23,896	\$	40,065

The weighted average duration of the defined benefit obligation as at December 31, 2018 is 15 years for the defined benefit pension plans and 14 years for the other post-employment benefit plans. The weighted average duration of the current service cost as at December 31, 2018 is 22 years for the defined benefit pension plans and 27 years for the other post-employment benefit plans.

The estimated future benefit payments for the defined benefit pension plans and other post-employment benefit plans until 2028 are as follows:

	1	Pension	 Other
2019	\$	10,144	\$ 800
2020	\$	10,608	\$ 831
2021	\$	11,073	\$ 863
2022	\$	11,501	\$ 897
2023	\$	12,024	\$ 932
2024 to 2028	\$	68,087	\$ 6,124

Benefit payments include obligations to 2028 only as obligations beyond this date are not quantifiable.

# Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

# 29. EMPLOYEE BENEFIT PLANS – (continued)

The fair value of the plan assets were allocated as follows between the various types of investments:

As at December 31,	2018	2017
Equity securities		
Canada	20.8%	22.3%
United States	12.7%	14.1%
International (other than United States)	18.1%	18.9%
Fixed income instruments		
Canada	45.7%	42.6%
Cash and cash equivalents		
Canada	2.7%	2.1%

Plan assets are valued at the measurement date of December 31 each year.

The investments are made in accordance with the Statement of Investment Policies and Procedures. The Statement of Investment Policies and Procedures is reviewed on an annual basis by the Management Level Pension Fund Investment Committee with approval of the policy being provided by the Audit Committee.

The following are the significant assumptions adopted in measuring the Company's pension and other benefit obligations:

Pension	Other	Pension	Other
2018	2018	2017	2017
3.80%	3.80% to 4.0%	3.50%	3.25% to 3.50%
3.60%	3.25% to 3.60%	4.00%	3.75% to 4.00%
2.50%	N/A	2.50%	N/A
N/A	4.50%	N/A	4.50%
N/A	4.50%	N/A	4.50%
	3.80% 3.60% 2.50% N/A	3.80% 3.80% to 4.0%  3.60% 3.25% to 3.60% 2.50% N/A N/A 4.50%	2018         2018         2017           3.80%         3.80% to 4.0%         3.50%           3.60%         3.25% to 3.60%         4.00%           2.50%         N/A         2.50%           N/A         4.50%         N/A

For certain Canadian post-retirement benefits, the medical trend rate for drugs was assumed to be 6.50% in 2018, decreasing by 0.25% per annum to an ultimate rate of 4.50% per annum in 2026 and thereafter.

# Sensitivity of assumptions

Discount rate

The calculation of the defined benefit obligation is sensitive to the assumptions set out above. The following table summarizes how the impact on the defined benefit obligation as at December 31, 2018 and 2017 would have increased or decreased as a result of the change in the respective assumptions by one percent.

	Per	Other			
As at December 31, 2018	1% increase	1% decrease	1% increase	1% decrease	
Discount rate	\$ (39,145)	\$ 49,361	\$ (2,471)	\$ 3,224	
Future salary growth	\$ 7,572	\$ (6,919)	N/A	N/A	
Medical and dental trend rates	N/A	N/A	\$ 1,703	\$ (1,280)	
	Per	nsion	Ot	her	
As at December 31, 2017	1% increase	1% decrease	1% increase	1% decrease	

(42.092)

(2,786)

3,588

Future salary growth \$ 7,988 \$ (7,457) N/A N/A Medical and dental trend rates N/A N/A \$ 2,165 \$ (1,663)

F-51

### Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 29. EMPLOYEE BENEFIT PLANS – (continued)

The above sensitivities are hypothetical and should be used with caution. Changes in amounts based on a one percent variation in assumptions generally cannot be extrapolated because the relationship of the change in assumption to the change in amounts may not be linear. The sensitivities have been calculated independently of changes in other key variables. Changes in one factor may result in changes in another, which could amplify or reduce certain sensitivities.

The Company expects to make contributions of \$7.1 million to the defined benefit plans and \$0.4 million to the defined contribution plan of Telesat Canada during the next fiscal year.

### 30. SUPPLEMENTAL CASH FLOW INFORMATION

Cash and cash equivalents were comprised of the following:

As at December 31,	2018		 2017	2016		
Cash	\$	342,874	\$ 388,372	\$	457,686	
Short-term investments <sup>(1)</sup>		425,559	90,673		324,720	
Cash and cash equivalents	\$	768,433	\$ 479,045	\$	782,406	

(1) Consisted of short-term investments with an original maturity of three months or less or which are available on demand with no penalty for early redemption.

Income taxes paid, net of income taxes received was comprised of the following:

Years ended December 31,	2018		2017	2016
Income taxes paid	\$ (109,193)	\$	(85,503)	\$ (122,401)
Income taxes received	2,885		22,512	1,929
	\$ (106,308)	\$	(62,991)	\$ (120,472)

Interest paid, net of capitalized interest and interest received was comprised of the following:

Years ended December 31,	2018		2017	 2016
Interest paid	\$	(207,339)	\$ (219,773)	\$ (165,173)
Interest received		11,802	6,201	6,620
Capitalized interest		19,120	18,324	6,292
	\$	(176,417)	\$ (195,248)	\$ (152,261)

The reconciliation of the liabilities arising from financing activities was as follows:

	In	debtedness	per in	atellite formance acentive ayments	Capital leases
Balance as at January 1, 2018	\$	3,543,377	\$	62,961	\$ 369
Debt repricing costs		(10,190)		_	_
Cash outflows		(94,951)		(9,037)	(29)
Amortization of deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment		22,497		_	_
Loss on voluntary payment (Note 24)		2,828			

Gain on repricing (Note 24)	(6,901)	_	_
Cumulative effect adjustment (Note 3)	(36,072)	_	_
Other		191	
Impact of foreign exchange	303,640	4,798	29
Balance as at December 31, 2018	\$ 3,724,228	\$ 58,913	\$ 369

### Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 30. SUPPLEMENTAL CASH FLOW INFORMATION – (continued)

	Ind				Capital leases
Balance as at January 1, 2017 <sup>(1)</sup>	\$	3,856,097	\$	75,985	\$ 422
Debt issue costs		(42,867)		_	_
Cash outflows		(31,620)		(8,436)	(30)
Amortization of deferred financing costs, interest rate floor and prepayment option		14,988		_	
Other		_		18	2
Impact of foreign exchange		(253,221)		(4,606)	(25)
Balance as at December 31, 2017	\$	3,543,377	\$	62,961	\$ 369

(1) Balance of the indebtedness as at January 1, 2017, included \$4,459 of accrued debt issue costs associated with the November 2016 refinancing which were paid in 2017.

	Indebtedness		Satellite performance incentive payments			Capital leases
Balance as at January 1, 2016	\$	4,063,221	\$	87,026	\$	_
Cash outflows		(4,008,356)		(8,934)		(30)
Cash inflows		3,935,576		_		_
Amortization of deferred financing costs, interest rate floors, prepayment option and premiums		12,971		_		_
Debt issue costs		(58,141)		_		_
Accrued debt issue costs		(4,459)		_		
Write off of debt issue costs, interest rate floors, prepayment option and premiums		41,183		_		_
Non-cash additions <sup>(1)</sup>		(16,910)		_		474
Other		(150)		573		(2)
Impact of foreign exchange		(113,297)		(2,680)		(20)
Balance as at December 31, 2016	\$	3,851,638	\$	75,985	\$	422

(1) Non-cash additions for the indebtedness includes \$(25,581) relating to the interest rate floors on the Senior Secured Credit Facilities and \$8,671 relating to the prepayment option on the Senior Notes.

The net change in operating assets and liabilities was comprised of the following:

As at December 31,	2018		 2017	2016	
Trade and other receivables	\$	22,056	\$ (13,272)	\$ (8,347)	
Financial assets		(210)	3,975	(2,521)	
Other assets		371	12,848	1,260	
Trade and other payables		(4,695)	6,947	6,076	
Financial liabilities		(1,026)	(13,748)	551	
Other liabilities		72,317	51,502	103,618	
	\$	88,813	\$ 48,252	\$ 100,637	

Non-cash investing activities were comprised of:

2018			2017		2016
\$	3,795	\$	9,515	\$	13,776
\$	3,635	\$	(128)	\$	2,350
	\$ \$	\$ 3,795	·	\$ 3,795 \$ 9,515	\$ 3,795 \$ 9,515 \$

F-53

### Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 31. COMMITMENTS AND CONTINGENT LIABILITIES

The following were the Company's off-balance sheet contractual obligations as at December 31, 2018:

	 2019	_	2020	_	2021	_	2022	_	2023	Th	nereafter	_	Total
Operating property leases Capital commitments	\$ 3,190 22,460	\$	3,434	\$	3,630	\$	3,097	\$	3,003	\$	17,483	\$	33,837 22,460
Other operating commitments	18,501		11,425		9,114		3,563		2,937		8,453		53,993
	\$ 44,151	\$	14,859	\$	12,744	\$	6,660	\$	5,940	\$	25,936	\$	110,290

Operating property leases consisted of off-balance sheet contractual obligations for land or building usage, while capital commitments included commitments for capital projects. Other operating commitments consisted of third party satellite capacity arrangements as well as other commitments that are not categorized as operating property leases or capital commitments. The Company's off-balance sheet obligations included the future minimum payments for the non-cancellable period of each respective obligation, which have various terms and expire between 2019 to 2043. The aggregate expense related to operating property lease commitments for the year ended December 31, 2018 was \$7.3 million (December 31, 2017 — \$6.4 million, December 31, 2016 — \$6.5 million).

The Company has entered into contracts for the development of the LEO constellation and other capital expenditures. The total outstanding commitments as at December 31, 2018 were included in capital commitments.

The Company has agreements with various customers for prepaid revenue on several service agreements which take effect when the satellite is placed in service. The Company is responsible for operating and controlling these satellites. As at December 31, 2018, customer prepayments of \$503.4 million (December 31, 2017 — \$390.2 million), a portion of which is refundable under certain circumstances, were reflected in other current and long-term liabilities.

In the normal course of business, the Company has executed agreements that provide for indemnification and guarantees to counterparties in various transactions. These indemnification undertakings and guarantees may require the Company to compensate the counterparties for costs and losses incurred as a result of certain events including, without limitation, loss or damage to property, change in the interpretation of laws and regulations (including tax legislation), claims that may arise while providing services, or as a result of litigation that may be suffered by the counterparties. The nature of substantially all of the indemnification undertakings prevents the Company from making a reasonable estimate of the maximum potential amount the Company could be required to pay counterparties as the agreements do not specify a maximum amount and the amounts are dependent upon the outcome of future contingent events, the nature and likelihood of which cannot be determined at this time. Historically, the Company has not made any significant payments under such indemnifications.

Telesat and Loral have entered into an indemnification agreement whereby Loral will indemnify Telesat for tax liabilities for taxation years prior to 2007 related to Loral Skynet operations. Likewise, Telesat will indemnify Loral for the settlement of tax receivables for taxation years prior to 2007.

### **Legal Proceedings**

The Company frequently participates in proceedings before national telecommunications regulatory authorities. In addition, the Company may also become involved from time to time in other legal proceedings arising in the normal course of its business.

The Company is subject to audits by taxing authorities in the various jurisdictions in which it operates.

The Company is currently involved in a number of disputes with the Brazilian tax authorities who have alleged that additional taxes are owed on revenue earned by the Company for the period 2003 to 2012. The disputes relate to the Brazilian tax authorities' characterization of the Company's revenue. Additional taxes and interest of approximately \$38.9 million have been assessed by Brazilian tax authorities and the Company has challenged those assessments. The Company believes the likelihood of an unfavorable outcome in these disputes is remote and, as such, no reserve has been established.

### Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 31. COMMITMENTS AND CONTINGENT LIABILITIES – (continued)

The Canadian taxing authorities have assessed the Company for \$9 million relating to transfer pricing issues for the years 2009 and 2012. Both disputes relate to the Canadian tax authorities' repricing of certain transactions between The Company and its subsidiaries. The Company has paid 50% of the outstanding amount to formally object, which has been recorded as an other long-term asset. The Company believes the likelihood of an unfavorable outcome in these disputes is remote and, as such, no reserve has been established.

Other than the legal proceedings disclosed above, the Company is not aware of any proceedings outstanding or threatened as of the date hereof by or against it or relating to its business which may have, or have had in the recent past, significant effects on the Company's financial position or profitability.

### 32. SUBSIDIARIES

The list of significant companies included in the scope of consolidation as at December 31, 2018 was as follows:

Company	Country	Method of Consolidation	% voting rights
Infosat Communications LP	Canada	Fully consolidated	100
Telesat Spectrum General Partnership	Canada	Fully consolidated	100
10680451 Canada Inc.	Canada	Fully consolidated	100
Skynet Satellite Corporation	United States	Fully consolidated	100
Telesat Network Services, Inc.	United States	Fully consolidated	100
The SpaceConnection Inc.	United States	Fully consolidated	100
Telesat Satellite LP	United States	Fully consolidated	100
Infosat Able Holdings, Inc.	United States	Fully consolidated	100
Telesat Brasil Capacidade de Satélites Ltda.	Brazil	Fully consolidated	100
Telesat (IOM) Limited	Isle of Man	Fully consolidated	100
Telesat International Limited	United Kingdom	Fully consolidated	100

Apart from 10680451 Canada Inc. which was incorporated in 2018, the percentage of voting rights and method of consolidation were the same as at December 31, 2017.

### 33. RELATED PARTY TRANSACTIONS

The Company's immediate shareholders are Red Isle Private Investment Inc. ("Red Isle"), a company incorporated in Canada, Loral Holdings Corporation ("Loral Holdings"), a company incorporated in the United States and various individuals. Red Isle is wholly-owned by PSP Investments, a Canadian Crown corporation. Loral Holdings is a wholly-owned subsidiary of Loral, a United States publicly listed company.

### Transactions with subsidiaries

The Company and its subsidiaries regularly engage in inter-group transactions. These transactions include the purchase and sale of satellite services and communications equipment, providing and receiving network and call centre services, access to orbital slots and management services. The transactions have been entered into over the normal course of operations. Balances and transactions between the Company and its subsidiaries have been eliminated on consolidation and therefore have not been disclosed.

### Special cash distribution

Effective January 25, 2017, the Board of Directors approved a special cash distribution to shareholders, as a reduction of stated capital, in the amount of approximately \$387.2 million U.S. dollars. Of this balance, \$138.5 million U.S. dollars were paid to Red Isle,

	F-55		

### Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 33. RELATED PARTY TRANSACTIONS – (continued)

### Compensation of executives and Board level directors

Year ended December 31,	 2018	 2017	 2016
Short-term benefits (including salaries)	\$ 16,853	\$ 10,037	\$ 6,751
Special payments (1)	2,904	9,006	_
Post-employment benefits	2,510	2,458	2,344
Share-based payments	 29,016	 2,820	 5,482
	\$ 51,283	\$ 24,321	\$ 14,577

(1) Balance relates to the special cash distribution effective January 25, 2017.

### Key management personnel — stock options

In March 2016, a total of 1,253,477 vested stock options were repurchased at fair value from key management personnel and other employees or former employees for a total cash consideration of \$24.7 million, of which \$18.7 million was paid to key management personnel.

In August 2017, Telesat authorized the exchange of 805,835 performance-vesting options for 805,835 time-vesting options, of which 682,550 options related to key management personnel. The exchanged amounts included 715,383 unvested performance-vesting options which were exchanged for an equal amount of unvested time-vesting options, of which 613,316 unvested options related to key management personnel. A portion of the new unvested time-vesting options will vest upon the next anniversary date of the option holder with the remainder vesting evenly over a three-year period commencing on the sixth anniversary date.

In June 2018, 95,363 stock appreciation rights were exercised by a member of key management personnel for 39,488 Non-Voting Participating Preferred shares, on a net settlement basis.

During 2018, Telesat issued 3,630,000 time-vesting options to certain key management personnel. Of this balance, 2,850,000 options vest over a five-year period, while 780,000 vest over a three-year period. In addition, 200,000 restricted share units were granted during 2018 which vest over a three-year period and are expected to be settled with Non-Voting Participating Preferred shares.

### Transactions with related parties

The Company and certain of its subsidiaries regularly engage in transactions with related parties. The Company's related parties include Loral and Red Isle. The transactions have been entered into over the normal course of operations. There were no transactions or balances with Red Isle during any of the years presented.

During the years presented below, the Company and its subsidiaries entered into the following transactions with Loral.

		_	ods and se est incom	ces,		goods and est expens	vices,
Years ended December 31,	2018		2017	2016	2018	2017	2016
Revenue	\$ 128	\$	128	\$ 133	\$ 	\$	\$ _
Operating expenses	\$ _	\$	_	\$ _	\$ 6,456	\$ 6,518	\$ 6,627

### Notes to the 2018 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

### 33. RELATED PARTY TRANSACTIONS – (continued)

The following balances were outstanding with Loral at the end of the years presented below:

	Amounts owed by related parties		 Amounts owed to related parties					
At December 31,		2018	2017		2018		2017	
Current receivables/payables	\$	28	\$	82	\$ _	- \$		=

The amounts outstanding are unsecured and will be settled in cash.

### Other related party transactions

The Company funds certain defined benefit pension plans. Contributions made to the plans for the year ended December 31, 2018 were \$7.7 million (December 31, 2017 — \$8.9 million).

### SUBSIDIARIES OF TELESAT CANADA $^{\mathrm{1}}$

Subsidiary	State or Other Jurisdiction of Incorporation or Organization
Telesat International Limited	England and Wales
Telesat Spectrum General Partnership	Ontario
Excludes certain subsidiaries which, considered in the aggregate as defined in Rule 1-02(w) of Regulation S-X) as of December 31, 20	

- I, Daniel S. Goldberg, certify that:
- 1. I have reviewed this annual report on Form 20-F of Telesat Canada;
- 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 the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer(s) 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 the company 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 the company, 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;
  - (b) 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 the company'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 the company'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, the company's internal control over financial reporting; and
- 5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
- (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 the company'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 the company's internal control over financial reporting.

Date: March 1, 2019	
/s/ Daniel S. Goldberg	
Daniel S. Goldberg	
President and Chief Executive Officer	

- I, Michel G. Cayouette, certify that:
- 1. I have reviewed this annual report on Form 20-F of Telesat Canada;
- 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 the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer(s) 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 the company 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 the company, 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;
  - (b) 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 the company'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 the company'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, the company's internal control over financial reporting; and
- 5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
- (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 the company'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 the company's internal control over financial reporting.

Date: March 1, 2019	
/s/ Michel G. Cayouette	
Michel G. Cayouette	
Chief Financial Officer and Treasurer	

. . . . . .

# CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Telesat Canada (the "Company") on Form 20-F for the fiscal year ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Daniel S. Goldberg, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report 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 the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 1, 2019

### /s/ Daniel S. Goldberg

Name: Daniel S. Goldberg

Title: President and Chief Executive Officer

# CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Telesat Canada (the "Company") on Form 20-F for the fiscal year ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michel G. Cayouette, Chief Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report 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 the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 1, 2019

### /s/ Michel G. Cayouette

Name: Michel G. Cayouette

Title: Chief Financial Officer and Treasurer

## **Document and Entity Information**

12 Months Ended Dec. 31, 2018 shares

**Disclosure of classes of share capital [line items]** 

Entity Registrant NameTelesat CanadaEntity Central Index Key0001465191

<u>Document Type</u> 20-F

<u>Document Period End Date</u> Dec. 31, 2018

Amendment Flag false
Current Fiscal Year End Date --12-31
Entity a Well-known Seasoned Issuer No
Entity a Voluntary Filer No
Entity Reporting Status Current No

Entity Filer Category Non-accelerated Filer

Entity Emerging Growth CompanyfalseEntity Ex Transition PeriodfalseEntity Shell Companyfalse

Entity Common Stock, Shares Outstanding

Document Fiscal Period FocusFYDocument Fiscal Year Focus2018

Voting Participating Preferred Shares [Member]

**Disclosure of classes of share capital [line items]** 

Entity Common Stock, Shares Outstanding 7,034,444

Non-Voting Participating Preferred Shares [Member]

Disclosure of classes of share capital [line items]

Entity Common Stock, Shares Outstanding 38,431,311

Director Voting Participating Preferred Shares [Member]

Disclosure of classes of share capital [line items]

Entity Common Stock, Shares Outstanding 1,000

Common Stock [Member]

**Disclosure of classes of share capital [line items]** 

Entity Common Stock, Shares Outstanding 74,252,460

#### **Consolidated Statements of** 12 Months Ended (Loss) Income - CAD (\$) Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016 \$ in Thousands **Profit or loss [abstract]** \$ 902,932 \$ 927,407 \$ 930,854 Revenue Operating expenses (185,827)(187,687)(174,923)Net revenue 717,105 739,720 755,931 Depreciation (224,851)(221,058)(224,773)Amortization (24,305)(26,330)(27,690)Other operating gains (losses), net 743 5,902 (2,565)Operating income 468,692 498,234 500,903 (237,786)<u>Interest expense</u> (200,144)(198,815)Loss on refinancing (31,850)Interest and other income 16,498 3,004 6,078 (Loss) gain on changes in fair value of financial instruments (18,205) 60,306 7,877 (Loss) gain on foreign exchange 223,898 (259,079)92,613 (29,880)585,298 (Loss) income before tax 376,806 Tax expense (61,056)(80,245)(83,906)Net (loss) income \$ (90,936) \$ 505,053 \$ 292,900

Consolidated Statements of Comprehensive (Loss)	12 Months Ended					
Income - CAD (\$) \$ in Thousands	Dec. 31, 201	8 Dec. 31, 201	7 Dec. 31, 2016			
Profit or loss [abstract]						
Net (loss) income	\$ (90,936)	\$ 505,053	\$ 292,900			
Items that may be reclassified into profit or loss						
Foreign currency translation adjustments	44,459	(48,563)	(1,765)			
Items that will not be reclassified into profit or los	<u>ss</u>					
Actuarial gains (losses) on employee benefit plans	7,755	(5,171)	5,100			
Tax (expense) recovery	(2,031)	673	(1,424)			
Other comprehensive income (loss)	50,183	(53,061)	1,911			
Total comprehensive (loss) income	\$ (40,753)	\$ 451,992	\$ 294,811			

Changes in equity [Roll Forward]  Net (loss) income	
Net (loss) income   292,900   292,000   292,	918,128
Net (loss) income       292,900       292         Dividends declared on preferred shares       (10)       (10)         Repurchase of stock options       (15,913)       (8,745)       (24         Issuance of share capital on exercise of stock appreciation rights       1,861       1,861       (1,269)       (592)       (592)         Other comprehensive income (loss), net of tax (expense) recovery of \$(1,424), \$673 and \$(2031) for the year ended December 31, 2016, 2017 and 2018, respectively       3,676       (1,765)       (1,765)       1,9	
Dividends declared on preferred shares  Repurchase of stock options  Respurchase of stock options  Issuance of share capital on exercise of stock appreciation rights  Other comprehensive income (loss), net of tax (expense) recovery of \$(1,424), \$673 and \$(2031) for the year ended December 31, 2016, 2017 and 2018, respectively  (10)  (10)  (10)  (10)  (10)  (10)  (10)  (17,65)  (17,65)  (17,65)  (17,65)  (17,65)  (17,65)  (17,65)  (17,65)	
December 31, 2016, 2017 and 2018, respectively   (10)	2,900
Repurchase of stock options Issuance of share capital on exercise of stock appreciation rights Other comprehensive income (loss), net of tax (expense) recovery of \$(1,424), \$673 and \$(2031) for the year ended December 31, 2016, 2017 and 2018, respectively  (15,913) (8,745) (24 (1,269) (592) (592) (592) (1,765) 1,9	))
Issuance of share capital on exercise of stock appreciation rights Other comprehensive income (loss), net of tax (expense) recovery of \$(1,424), \$673 and \$(2031) for the year ended December 31, 2016, 2017 and 2018, respectively  1,861	4,658)
exercise of stock appreciation rights Other comprehensive income (loss), net of tax (expense) recovery of \$(1,424), \$673 and \$(2031) for the year ended December 31, 2016, 2017 and 2018, respectively  1,861	+,030)
rights Other comprehensive income (loss), net of tax (expense) recovery of \$(1,424), \$673 and \$(2031) for the year ended December 31, 2016, 2017 and 2018, respectively  (1,765)  1,9	
(loss), net of tax (expense)         recovery of \$(1,424), \$673 and         \$(2031) for the year ended         December 31, 2016, 2017 and         2018, respectively    3,676  (1,765) 1,9	
recovery of \$(1,424), \$673 and \$(2031) for the year ended December 31, 2016, 2017 and 2018, respectively	
\$(2031) for the year ended  December 31, 2016, 2017 and  2018, respectively	
<u>S(2031) for the year ended</u> <u>December 31, 2016, 2017 and</u> <u>2018, respectively</u>	<del>)</del> 11
2018, respectively	
	770
Ralance as at end at Dec. 31	
2016 340,602 318,133 658,735 467,863 28,698 38,745 67,443 1,1	194,041
Changes in equity [Roll	
Forward]	
<u>Net (loss) income</u> 505,053 505	5,053
<u>Dividends declared on</u> (10)	<u>))</u>
preferred shares	
	06,135)
<u>Issuance of share capital on</u> exercise of stock appreciation 82 82 (5) (5) 77	
exercise of stock appreciation 82 82 (5) (5) 77 rights	
Other comprehensive income	
(loss), net of tax (expense)	
recovery of \$(1,424), \$673 and	3,061)
5(2031) for the year ended	5,001)
December 31, 2016, 2017 and	
2018, respectively	0.5.6
	356
Balance as at end at Dec. 31, 26,580 126,102 152,682 968,408 31,549 (9,818) 21,731 1,1	142,821
Changes in equity [Roll Forward]	
	0,936)
	,,,,,,,,,
	94)
	94)

Cumulative effect adjustment	(38,516)		322	322	(38,194)
Other comprehensive income					
(loss), net of tax (expense)					
recovery of \$(1,424), \$673 and	5,724		44,459	44,459	50,183
\$(2031) for the year ended	3,724		44,433	44,433	30,163
December 31, 2016, 2017 and					
2018, respectively					
Share-based compensation		29,505		29,505	29,505
Balance as at end at Dec. 31, \$ 26,58	\$ 127,126 \$ 153,706 \$ 843,601	\$ 60,715	\$ 34,963	\$ 95,678	\$
2018	) \$ 127,120 \$ 133,700 \$ 6 <del>4</del> 3,001	\$ 00,713	\$ 34,903	\$ 93,076	1,092,985

### Consolidated Statements of Changes in Shareholders' Equity (Parenthetical) -CAD (\$) \$ in Thousands

12 Months Ended

Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

**Statement of changes in equity [abstract]** 

Other comprehensive income (loss) income tax (expense) recovery \$ (2,031) \$ 673 \$ (1,424)

<b>Consolidated Balance Sheets</b>			
- CAD (\$)		Dec. 31, 2018	Dec. 31, 2017
\$ in Thousands			
<u>Assets</u>			
Cash and cash equivalents		\$ 768,433	\$ 479,045
<u>Trade and other receivables</u>	[1]	45,631	64,986
Other current financial assets		18,779	2,437
Prepaid expenses and other current assets		16,381	8,503
<u>Total current assets</u>		849,224	554,971
Satellites, property and other equipment		1,703,039	1,791,847
<u>Deferred tax assets</u>		10,799	4,617
Other long-term financial assets		55,755	83,531
Other long-term assets		7,912	3,056
Intangible assets		811,154	812,995
Goodwill		2,446,603	2,446,603
Total assets		5,884,486	5,697,620
<u>Liabilities</u>			
<u>Trade and other payables</u>	[1]	30,659	37,919
Other current financial liabilities		26,386	26,355
Other current liabilities		113,289	77,324
<u>Current indebtedness</u>		7,888	14,486
Total current liabilities		178,222	156,084
Long-term indebtedness		3,716,340	3,528,891
Deferred tax liabilities		406,900	445,114
Other long-term financial liabilities		54,521	58,831
Other long-term liabilities		435,518	365,879
Total liabilities		4,791,501	4,554,799
<b>Shareholders' Equity</b>			
Share capital		153,706	152,682
Accumulated earnings		843,601	968,408
Reserves		95,678	21,731
Total shareholders' equity		1,092,985	1,142,821
Total liabilities and shareholders' equity		\$ 5,884,486	\$ 5,697,620

<sup>[1]</sup> Trade and other receivables and trade and other payables approximate fair value due to the short-term maturity of these instruments.

Consolidated Statements of	12	Months En	ıded
Cash Flows - CAD (\$)	Dec. 31,	Dec. 31,	Dec. 31,
\$ in Thousands	2018	2017	2016
Cash flows from operating activities	<b>.</b> (22.25)	<b>.</b>	
Net (loss) income	\$ (90,936)	\$ 505,053	\$ 292,900
Adjustments to reconcile net (loss) income to cash flows from			
operating activities	224.051	221 050	224.772
<u>Depreciation</u>	224,851	221,058	224,773
Amortization	24,305	26,330	27,690
<u>Tax expense</u>	61,056	80,245	83,906
Interest expense	237,786	200,144	198,815
Interest income	(12,415)	(6,024)	(6,700)
Loss (gain) on foreign exchange	259,079	(223,898)	(92,613)
Loss (gain) on changes in fair value of financial instruments	18,205	(60,306)	(7,877)
Share-based compensation	29,505	2,856	5,770
Loss on disposal of assets	353	269	2,565
Loss on refinancing			31,850
<u>Other</u>	(91,580)	(49,040)	(36,966)
Income taxes paid, net of income taxes received	(106,308)	(62,991)	(120,472)
Interest paid, net of capitalized interest and interest received	(176,417)	(195,248)	(152,261)
Repurchase of stock options			(24,658)
Operating assets and liabilities	88,813	48,252	100,637
Net cash from operating activities	466,297	486,700	527,359
<u>Cash flows used in investing activities</u>			
Satellite programs, including capitalized interest	(67,387)	(135,986)	(236,834)
Purchase of property and other equipment	(15,997)	(10,616)	(6,977)
Purchase of intangible assets	(19,923)	(18,011)	(42,285)
Net cash used in investing activities	(103,307)	(164,613)	(286,096)
Cash flows used in financing activities			
Repayment of indebtedness	(94,951)	(31,620)	(4,008,356)
Proceeds from indebtedness			3,935,576
Payment of debt issue costs	(10,190)	(42,867)	(58,141)
Return of capital to shareholders		(506,135)	
Capital lease payments	(29)	(30)	(30)
Satellite performance incentive payments	(9,037)	(8,436)	(8,934)
Settlement of derivatives		207	130
Proceeds from exercise of stock options		77	
Dividends paid on preferred shares		(10)	(10)
Net cash used in financing activities	(114,207)	(588,814)	(139,765)
Effect of changes in exchange rates on cash and cash equivalents	40,605	(36,634)	(9,818)
Increase (decrease) in cash and cash equivalents	289,388	(303,361)	91,680
Cash and cash equivalents, beginning of year	479,045	782,406	690,726
Cash and cash equivalents, end of year	\$ 768,433	\$ 479,045	\$ 782,406

### 1. BACKGROUND OF THE COMPANY

12 Months Ended Dec. 31, 2018

Background Of Company BACKGROUND OF THE COMPANY

### 1. BACKGROUND OF THE COMPANY

On January 1, 2017, Telesat Holdings Inc. completed a corporate reorganization, of companies under common control, pursuant to which Telesat Holdings Inc. amalgamated with Telesat Interco Inc. and immediately thereafter the newly amalgamated company amalgamated with Telesat Canada. The continuing entity, existing under the laws of Canada, is named Telesat Canada. The reorganization has been accounted for as a continuation of Telesat Holdings Inc.

Telesat Canada (the "Company" or "Telesat") is a Canadian corporation. Telesat is a leading global satellite operator providing reliable and secure satellite-delivered communication solutions worldwide to broadcast, telecom, corporate and government customers. Headquartered in Ottawa, Canada, the Company's state-of-the-art fleet consists of 17 geostationary satellites and the Canadian payload on ViaSat-1. In 2018, an additional satellite was launched into low earth orbit ("LEO") as part of Telesat's plans to deploy an advanced, global LEO constellation.

As at December 31, 2018, Loral Space and Communications Inc. ("Loral") and Canada's Public Sector Pension Investment Board ("PSP Investments") indirectly held economic interests in Telesat of approximately 63% and 36%, respectively, with the remaining economic interest held by various individuals. Loral indirectly held a voting interest of 33% on all matters including the election of directors. PSP Investments indirectly held a voting interest of 67% on all matters except for the election of directors, and a 29% voting interest for the election of directors. The remaining voting interest of 38% for the election of directors is held by shareholders of the Company's Director Voting Preferred Shares.

Unless the context states or requires otherwise, references herein to the "financial statements" or similar terms refer to the audited consolidated financial statements of Telesat Canada.

On February 28, 2019, these financial statements were approved by the Audit Committee of the Board of Directors and authorized for issue.

## 2. BASIS OF PRESENTATION

12 Months Ended Dec. 31, 2018

Basis Of Presentation
BASIS OF PRESENTATION

### 2. BASIS OF PRESENTATION

### Statement of Compliance

The consolidated financial statements were prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). With the exception of the changes in accounting policies outlined in Note 3, the accounting policies described in Note 4 were consistently applied to all the years presented.

### **Basis of Consolidation**

Subsidiaries

These consolidated financial statements include the results of the Company and subsidiaries controlled by the Company. Control is achieved when the Company has power over an entity, has exposure, or rights to variable returns from its involvement with an entity, and has the ability to use the power over an entity to affect the amount of its return. The most significant subsidiaries are listed in Note 32.

Joint arrangements

A joint operation is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to their share of the assets and revenue, and obligations for the liabilities and expenses, relating to the arrangement.

The Company's consolidated financial statements include the Company's share of the assets, liabilities, revenue and expenses of its interest in joint operations.

## 3. CHANGES IN ACCOUNTING POLICIES

12 Months Ended Dec. 31, 2018

Changes In Accounting
Policies
CHANGES IN
ACCOUNTING POLICIES

#### 3. CHANGES IN ACCOUNTING POLICIES

### IFRS 15, Revenue from Contracts with Customers

The Company has adopted IFRS 15, Revenue from Contracts with Customers ("IFRS 15"), with a date of initial adoption of January 1, 2018. Under the standard, revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration the entity expects to receive in exchange for those goods and services. In addition, the standard requires disclosure of the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. The Company has elected to adopt IFRS 15 using a modified retrospective approach with the cumulative effect of initially applying the standard being recorded as an adjustment to the opening balance of accumulated earnings. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those years.

The main impacts of this standard relate to the following:

- an adjustment to the promised amount of consideration for effects of the time value of money for prepayment contracts with a significant financing component. This
- resulted in an increase in deferred tax assets, satellites, property and other equipment, both other current and long-term liabilities, reserves and a decrease to accumulated earnings and deferred tax liabilities as of January 1, 2018; and
- an adjustment is required for certain contracts in which the Company would be considered as an agent under the new revenue standard as opposed to a principal under the former standard. This change had no impact on the balance sheet as at January 1, 2018.

The impacts on the balance sheet from the changes relating to IFRS 15 have been summarized below in the Impact on Opening Balance Sheet section.

The Company has elected to use the practical expedient where the effect of all modifications to a contract prior to January 1, 2018 need not be separately evaluated.

### IFRS 9, Financial Instruments

The Company has adopted IFRS 9, Financial Instruments ("IFRS 9"), with a date of initial adoption of January 1, 2018. IFRS 9 uses a single approach to determine whether a financial asset is measured at amortized cost or fair value, replacing multiple rules in IAS 39. The approach in IFRS 9 is generally based on how an entity manages its financial assets in the context of its business model and the contractual cash flow characteristics of the financial assets. Impairments of financial assets are determined using a single impairment model that requires entities to recognize expected credit losses without requiring a triggering event to occur. The new impairment model applies to financial assets measured at amortized cost or fair value through other comprehensive income ("FVTOCI"), except for investments in equity instruments, and to contract assets. IFRS 9 largely retains the existing requirements under IAS 39 for the classification and measurement of financial liabilities, with the exception of the following change applicable to the Company:

IFRS 9 changes the accounting for non-substantial modifications of financial liabilities. Under IFRS 9, when a financial liability is modified but not derecognized, the Company recalculates the amortized cost of the modified financial liability by discounting the modified contractual cash flows using the original effective interest

rate. Any adjustment to the amortized cost of the financial liability is recognized on the statement of income.

This standard is applied retrospectively with the cumulative effect of initially applying the standard being recorded as an adjustment to the opening balance of accumulated earnings as at January 1, 2018. The Company has not restated comparative years.

The main impact of the adoption of IFRS 9 was the following:

- The change in accounting for non-substantial modifications of financial liabilities resulted in an amount recognized relating to the repricing of the Term Loan B U.S.
- Facility which reduced the applicable margin from 3.75% to 3.00% on February 1, 2017. This resulted in an increase in deferred tax assets, deferred tax liabilities and accumulated earnings and a decrease in indebtedness on January 1, 2018.

The new expected credit loss model had an insignificant impact on the Company's impairment allowance.

The impact on the balance sheet from the change relating to IFRS 9 has been summarized below in the Impact on Opening Balance Sheet section.

### IFRS 2, Share-Based Payments

The Company has adopted the amendments to IFRS 2, *Share-Based Payments* ("IFRS 2"), with a date of initial adoption of January 1, 2018. These amendments clarify the accounting treatment and disclosure requirements for certain types of share-based payment transactions, including cash settled share-based payment transactions, share-based payment transactions with a net settlement feature for withholding tax obligations, as well as modifications of share-based payment transactions from cash settled to equity settled. These amendments had no impact on the consolidated financial statements.

### Impact on Opening Balance Sheet

The following table summarizes the effect, increases (decreases), of adopting these accounting standards on the balances of the balance sheet as at January 1, 2018.

(in thousands of Canadian dollars)	IFRS 15	IFRS 9	Total
Deferred tax assets	\$ 1,263	\$ 93	\$ 1,356
	Ф 205	Φ	Φ 205
Satellites, property and other equipment	\$ 395	\$ —	\$ 395
Other current liabilities	\$ 21,007	\$ —	\$ 21,007
Current indebtedness	\$ —	\$ (5,549)	\$ (5,549)
Long-term indebtedness	\$ —	\$(30,523)	\$(30,523)
Deferred tax liabilities	\$(21,676)	\$ 9,599	\$(12,077)
Other long-term liabilities	\$ 67,087	\$ —	\$ 67,087
Accumulated earnings	\$(65,082)	\$ 26,566	\$(38,516)
Reserves	\$ 322	\$ —	\$ 322

Impact on December 31, 2018 financial statements

IFRS 15 requires disclosures of the impact on the financial statements of the implementation of the standard. The impact on the balance sheet as at December 31, 2018 and the statement of loss, statement of other comprehensive loss and statement of cash flows for the year ended December 31, 2018 have been summarized below:

Balance sheet as at December 31, 2018

(in thousands of Canadian dollars)	r	As eported	IFRS 15 djustments	alance without the doption of IFRS 15
Satellites, property and other equipment	\$1	,703,039	\$ 2,989	\$ 1,700,050
Deferred tax assets	\$	10,799	\$ 2,637	\$ 8,162
Other current liabilities	\$	113,289	\$ 15,046	\$ 98,243
Deferred tax liabilities	\$	406,900	\$ (16,021)	\$ 422,921
Other long-term liabilities	\$	435,518	\$ 60,978	\$ 374,540
Accumulated earnings	\$	843,601	\$ (54,699)	\$ 898,300
Reserves	\$	95,678	\$ 322	\$ 95,356

Statement of loss for the year ended December 31, 2018

(in thousands of Canadian dollars)	As reported	IFRS 15 adjustmen		nce without the tion of IFRS 15
Revenue	\$ 902,932	\$ 19,51	12 \$	883,420
Operating expenses	\$(185,827)	\$ 20,55	58 \$	(206,385)
Depreciation	\$(224,851)	\$ 10	50 \$	(225,011)
Operating income	\$ 468,692	\$ 40,23	30 \$	428,462
Interest expense	\$(237,786)	\$ (25,32	28) \$	(212,458)
Loss before tax	\$ (29,880)	\$ 14,90	02 \$	(44,782)
Tax expense	\$ (61,056)	\$ (4,30	01) \$	(56,755)
Net loss	\$ (90,936)	\$ 10,60	01 \$	(101,537)

Statement of comprehensive loss for the year ended December 31, 2018

(in thousands of Canadian dollars	As reported	IFRS 15 adjustments	Balance without the adoption of IFRS 15
Net loss	\$ (90,936)	\$ 10,601	\$ (101,537)
Foreign currency translation adjustments	\$ 44,459	\$ (217)	\$ 44,676
Other comprehensive income	\$ 50,183	\$ (217)	\$ 50,400

Statement of cash flows for the year ended December 31, 2018

Total comprehensive loss

(in thousands of Canadian dollars)	As reported	IFRS 15 adjustments	Balance without the adoption of IFRS 15
Cash flows from operating activities			
Net loss	\$ (90,936)	\$ 10,601	\$ (101,537)
Adjustments to reconcile net loss to cash flows from operating activities			
Depreciation	\$ 224,851	\$ (160)	\$ 225,011
Tax expense	\$ 61,056	\$ 4,301	\$ 56,755
Interest expense	\$ 237,786	\$ 25,328	\$ 212,458
Other	\$ (91,580)	\$ (40,070)	\$ (51,510)
Interest paid, net of capitalized interest and interest received	\$(176,417)	\$ 2,046	\$ (178,463)
Net cash from operating activities	\$ 466,297	\$ 2,046	\$ 464,251
Cash flows used in investing activities			
Satellite programs, including capitalized interest	\$ (67,387)	\$ (2,046)	\$ (65,341)
Net cash used in investing activities	\$(103,307)	\$ (2,046)	\$ (101,261)

## 4. SIGNIFICANT ACCOUNTING POLICIES

12 Months Ended Dec. 31, 2018

Significant Accounting
Policies
SIGNIFICANT
ACCOUNTING POLICIES

#### 4. SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared on an historical cost basis except for certain financial instruments which were measured at their fair values, as explained in the accounting policies below. Historical cost is based on the fair value of the consideration given or received in exchange for assets or liabilities.

### Segment Reporting

The Company operates in a single industry segment, in which it provides satellite-based services to its broadcast, enterprise and consulting customers around the world. Operating segments are reported in a manner consistent with the internal reporting provided to the Company's Chief Operating Decision Maker, who is the Company's Chief Executive Officer. To be reported, a segment is usually based on quantitative thresholds but can also encompass qualitative factors management deems significant.

### Foreign Currency Translation

Unless otherwise specified, all figures reported in the consolidated financial statements and associated note disclosures are presented in Canadian dollars, which is the functional and presentation currency of the Company. Each of the subsidiaries of the Company determines their own functional currency and uses that currency to measure items on their separate financial statements.

For the Company's non-foreign operations, foreign currency non-monetary assets and liabilities are translated at their historical exchange rates, foreign currency monetary assets and liabilities are translated at the year end exchange rates, and foreign denominated revenue and expenses are translated at the average exchange rates of the month in which the transactions occurred. Gains or losses on translation of these items are recognized as a component of net (loss) income.

Upon consolidation of the Company's foreign operations that have a functional currency other than the Canadian dollar, assets and liabilities are translated at the year end exchange rate, and revenue and expenses are translated at the average exchange rates of the month in which the transactions occurred. Gains or losses on the translation of foreign subsidiaries are recognized in other comprehensive income (loss).

### Cash and Cash Equivalents

All highly liquid investments with an original maturity of three months or less, or which are available upon demand with no penalty for early redemption, are classified as cash and cash equivalents. Cash and cash equivalents are comprised of cash on hand, demand deposits, short-term investments and restricted cash expected to be used within the next twelve months.

### Revenue Recognition

Telesat recognizes revenue from satellite services on a monthly basis as services are performed in an amount that reflects the consideration the Company expects to receive in exchange for those services. Telesat accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability is considered probable.

Revenue from a contract to sell consulting services is recognized as follows:

- Consulting revenue for cost plus contracts is recognized as the approved time and labour is completed by Telesat.
- The percentage of completion method is used for fixed price consulting revenue contracts. The percentage completion method is measured by comparing actual cost incurred to total cost expected.

Equipment sale revenue is recognized when the customer obtains control of the equipment, being at the time the equipment is delivered to and accepted by the customer. Only equipment sales are subject to warranty or return and there is no general right of return. Historically, the Company has not incurred significant expenses for warranties.

When a transaction involves more than one product or service, revenue is allocated to each performance obligation based on its relative stand-alone selling price. Transactions are evaluated to determine whether the Company is the principal and if the transactions should be recorded on a gross or net basis.

### **Deferred Revenue**

Deferred revenue represents the Company's liability for the provision of future services and is classified on the balance sheet in other current and long-term liabilities. Deferred revenue consists of remuneration received in advance of the provision of service and in the majority of cases is recognized in income on a straight-line basis over the term of the related customer contracts. In the case of certain deferred revenue for short-term services, balances are recognized into income upon the completion or percentage completion of the related contract. Prepayments are evaluated to determine whether or not they constitute a significant financing component. The Company has elected a practical expedient whereby if the timing difference between the customer prepayment and the transfer of control of the promised goods and services is less than a year then it would not be considered as a significant financing component.

A significant financing component will only occur in the following circumstances:

- There is a timing difference between when the control of goods or services is transferred to the customer and when the customer pays for the goods;
- The timing difference between the customer prepayment and transfer of control of the promised goods and services is in excess of one year; and
- The primary reason for the prepayment is for financing purposes.

In the case of the existence of a significant financing component, the amount of the consideration is adjusted to reflect what the cash selling price of the promised service would have been if payments had occurred as control of the service was transferred to the customer. The discount rate used in determining the significant financing component is the rate that would be reflected in a separate financing transaction between the Company and the customer at contract inception.

### **Borrowing Costs**

Borrowing costs are incurred on the Company's debt financing. Borrowing costs attributable to the acquisition, production or construction of a qualifying asset are added to the cost of that asset. The Company has defined a qualifying asset as an asset that takes longer than twelve months to be ready for its intended use or sale. Capitalization of borrowing costs continues until such time that the asset is substantially ready for its intended use or sale. Borrowing costs are determined based on specific financing related to the asset, or in the absence of specific financing,

the borrowing costs are calculated on the basis of a capitalization rate which is equal to the Company's weighted average cost of debt. All other borrowing costs are expensed when incurred.

### Satellites, Property and Other Equipment

Satellites, property and other equipment, which are carried at cost, less accumulated depreciation and any accumulated impairment losses, include the contractual cost of equipment, capitalized engineering costs, capitalized borrowing costs during the construction or production of qualifying assets, and with respect to satellites, the cost of launch services, and launch insurance.

Depreciation is calculated using the straight-line method over the respective estimated useful lives of the assets.

Below are the estimated useful lives in years of satellites, property and other equipment as at December 31, 2018.

	Years
Satellites	12 to 15
Property and other equipment	3 to 30

Construction in progress is not depreciated as depreciation only commences when the asset is ready for its intended use. For satellites, depreciation commences on the day the satellite becomes available for service.

The investment in each satellite will be removed from the accounts when the satellite is retired. When other property is retired from operations at the end of its useful life, the cost of the asset and accumulated depreciation are removed from the accounts. Earnings are credited with the amount of any net salvage value and charged with any net cost of removal. When an asset is sold prior to the end of its useful life, the gain or loss is recognized immediately in other operating gains (losses), net.

In the event of an unsuccessful launch or total in-orbit satellite failure, all unamortized costs that are not recoverable under launch or in-orbit insurance are recorded in other operating gains (losses), net.

Liabilities related to decommissioning and restoration of retiring property and other equipment are measured at fair value with a corresponding increase to the carrying amount of the related asset. The liability is accreted over the period of expected cash flows with a corresponding charge to interest expense. The liabilities recorded to date have not been significant and are reassessed at the end of each reporting period. There are no decommissioning or restoration obligations for satellites.

### Satellite Performance Incentive Payments

Satellite performance incentive payments are obligations payable to satellite manufacturers over the lives of certain satellites. The present value of the payments are capitalized as part of the cost of the satellite and recognized as part of the depreciation of the satellite.

### Impairment of Long-Lived Assets

Tangible fixed assets and finite life intangible assets are assessed for impairment on an annual basis or more frequently when events or changes in circumstances indicate that the carrying value of an asset exceeds the recoverable amount. Tangible fixed assets and finite life intangible assets are also assessed for indicators of impairment at each reporting period.

In cases where there are indicators of impairment, the recoverable amount of the asset, which is the higher of its fair value less costs of disposal and its value in use, is determined. If it is not practicable to measure the recoverable amount for a particular asset, the Company determines the

recoverable amount of the cash generating unit ("CGU") with which it is associated. A CGU is the smallest identifiable group of assets that generates cash inflows which are largely independent of the cash inflows from other assets or groups of assets.

The Company measures value in use on the basis of the estimated future cash flows to be generated by an asset or CGU. These future cash flows are based on the Company's latest business plan information approved by senior management and are discounted using rates that best reflect the time value of money and the specific risks associated with the underlying asset or assets in the CGU.

The fair value less costs of disposal is the price that would be received to sell an asset or CGU in an orderly transaction between market participants at the measurement date. For the impairment assessment, the fair value is calculated on a recurring basis and is calculated using level 3 of the fair value hierarchy.

An impairment loss is the amount by which the carrying amount of an asset or CGU exceeds its recoverable amount. When an impairment loss subsequently reverses, the carrying amount of the asset (or a CGU) is increased to the revised measure of its recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or CGU) in prior years. Impairment losses and reversals of impairment losses are recognized in other operating gains (losses), net.

### Goodwill and Intangible Assets

The Company accounts for business combinations using the acquisition method of accounting, which establishes specific criteria for the recognition of intangible assets separately from goodwill. Goodwill represents the excess between the total of the consideration transferred over the fair value of net assets acquired. After initial recognition at cost, goodwill is measured at cost less any accumulated impairment losses.

The Company distinguishes intangible assets between assets with finite and indefinite useful lives. Intangible assets with indefinite useful lives are comprised of the Company's trade name, intellectual property, and orbital slots. These assets are carried at cost less any accumulated impairment losses. Finite life intangible assets, which are carried at cost less accumulated amortization and any accumulated impairment losses, consist of revenue backlog, customer relationships, customer contracts, concession rights, transponder rights and patents. Intangible assets with finite lives are amortized over their estimated useful lives using the straight-line method of amortization, except for revenue backlog which is based on the expected period of recognition of the related revenue.

Below are the estimated useful lives in years of the finite life intangible assets as at December 31, 2018.

	Years
Revenue backlog	12 to 17
Customer relationships	6 to 21
Customer contracts	5 to 15
Concession rights	1 to 15
Transponder rights	16
Patents	18

### Impairment of Goodwill and Indefinite Life Intangible Assets

An assessment for impairment of goodwill and indefinite life intangible assets is performed annually, or more frequently whenever events or changes in circumstances indicate that the carrying amounts of these assets are likely to exceed their recoverable amount. Goodwill is tested for impairment at the entity level as this represents the lowest level within the Company at which the goodwill is monitored for internal management purposes, and is not larger than an operating

segment. Indefinite life intangible assets have not been allocated to any CGU and are tested for impairment at the asset level.

Goodwill and indefinite life intangible assets are qualitatively assessed for indicators of impairment.

If the qualitative assessment concludes an indication of impairment, a quantitative impairment test is performed. A quantitative impairment test consists of assessing the recoverable amount of an asset, which is the higher of its fair value less costs of disposal and its value in use. For the quantitative impairment assessment, fair value is calculated on a recurring basis and is calculated using level 2 or level 3 of the fair value hierarchy depending on the valuation approach being utilized.

### Orbital Slots

In performing the quantitative orbital slot impairment analysis, the Company determines, for each orbital slot, its fair value less costs of disposal, and its value in use on an annual basis. The higher of these two amounts is determined to be the recoverable amount. To the extent that the recoverable amount is less than the carrying value of the asset, an impairment exists and the asset is written down to its recoverable amount.

The key assumptions used in estimating the recoverable amounts of the orbital slots include:

- i) the market penetration leading to revenue growth;
- ii) the profit margin;
- iii) the duration and profile of the build-up period;
- iv) the estimated start-up costs and losses incurred during the build-up period; and
- v) the discount rate.

Fair value less costs of disposal is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. In order to determine the fair value less costs of disposal, the Company uses either a market or income approach. Under a market approach, the Company measures what an independent third party would pay to purchase the orbital slot by looking to actual market transactions for similar assets. Under an income approach, the fair value is determined to be the sum of the projected discounted cash flows over a discrete period of time in addition to the terminal value.

The value in use amount is the present value of the future cash flows expected to be derived from the asset. The determination of this amount includes projections of cash inflows from the continuing use of the asset and cash outflows that are required to generate the associated cash inflows. These cash inflows are discounted at an appropriate discount rate.

### Goodwill

In performing the quantitative goodwill impairment analysis, the Company assesses the recoverable amount of goodwill using the income approach as well as the market approach in the determination of the fair value of goodwill at the entity level.

Under the income approach, the sum of the projected discounted cash flows for the next five years, or a longer period if justified by the most recent financial plan approved by management, in addition to a terminal value are used to determine the fair value at the entity level. In this model, significant assumptions used include: revenue, expenses, capital expenditures, working capital, costs of disposal, terminal growth rate and discount rate.

Under the market approach, the fair value at the entity level is determined based on market multiples derived from comparable public companies. As part of this analysis, assumptions are made regarding the comparability of selected companies including revenue, earnings before interest, taxes, depreciation and amortization multiples for valuation purposes, growth rates, size and overall profitability.

Under both approaches, all assumptions used are based on management's best estimates. The discount rates are consistent with external sources of information.

Trade Name

For the purposes of quantitative impairment testing, the fair value of the trade name is determined using an income approach, specifically the relief from royalties method.

The relief from royalties method is comprised of two major steps:

- i) a determination of the hypothetical royalty rate; and
- ii) the subsequent application of the royalty rate to projected revenue.

In determining the hypothetical royalty rate in the relief from royalties method, the Company considered comparable license agreements, operating earnings benchmarks, an excess earnings analysis to determine aggregate intangible asset earnings, and other qualitative factors. The key assumptions used include the tax and discount rates.

### Intellectual Property

In performing the quantitative intellectual property impairment analysis, the Company determines its fair value less costs of disposal, and its value in use on an annual basis. The higher of these two amounts is determined to be the recoverable amount. To the extent that the recoverable amount is less than the carrying value of the asset, an impairment exists and the asset is written down to its recoverable amount.

The Company measures value in use on the basis of the estimated future cash flows to be generated by an asset. These future cash flows are based on the Company's latest business plan information approved by senior management and are discounted using rates that best reflect the time value of money and the specific risks associated with the underlying asset.

Fair value less costs of disposal is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. In order to determine the fair value less costs of disposal, the Company uses a market approach. Under a market approach, the Company measures what an independent third party would pay to purchase the intellectual property.

### Financial Instruments

Financial assets are initially recognized at fair value. Financial assets are measured using one of three measurement approaches (fair value through profit or loss ("FVTPL"), fair value through other comprehensive income ("FVTOCI"), or amortized cost). A financial asset is measured at amortized cost if it is not designated as FVTPL, it is held within a business model whose objective is to hold assets to collect contractual cash flows and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. A debt investment is measured at FVTOCI if it is not designated at FVTPL, it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amounts outstanding. On initial recognition of an equity investment that is not held for trading, the Company may irrevocably elect to present subsequent changes in the investment's fair value in OCI. This election is made on an

investment by investment basis. All financial assets not classified as measured at amortized cost or FVTOCI as described above are measured at FVTPL.

The following accounting policies apply to the subsequent measurement of the Company's financial assets:

- Amortized cost: The financial assets are subsequently measured at amortized cost in accordance with the effective interest method. The amortized cost is reduced by any impairment losses; and
- FVTPL: These financial assets are subsequently measured at fair value with changes in fair value recorded in the consolidated statement of (loss) income as part of (loss) gain on changes in fair value of financial instruments.

Financial liabilities are initially measured at fair value. Financial liabilities are classified as amortized cost or FVTPL. Financial liabilities that are classified as amortized cost are measured and recorded at amortized cost in accordance with the effective interest method. Financial liabilities classified as FVTPL are subsequently measured at fair value with changes in fair value recorded in the consolidated statement of (loss) income as part of the (loss) gain on changes in fair value of financial instruments.

The Company has used derivative financial instruments to manage its exposure to foreign exchange risk associated with debt denominated in foreign currencies, as well as to reduce its exposure to interest rate risk associated with debt. Currently, the Company does not designate any of its derivative financial instruments as hedging instruments for accounting purposes. All realized and unrealized gains and losses on these derivative financial instruments are recorded in the consolidated statement of (loss) income as part of (loss) gain on changes in fair value of financial instruments.

Derivatives, including embedded derivatives that must be separately accounted for, are recorded at fair value on the consolidated balance sheet at inception and marked to market at each reporting period thereafter. Derivatives embedded in financial liabilities and other non-financial instrument contracts are treated as separate derivatives when their risk and characteristics are not closely related to those of the host contract and the host contract is measured separately according to its characteristics. The Company accounts for embedded foreign currency derivatives and the related host contract as a single instrument where the contract requires payments denominated in the currency that is commonly used in contracts to procure non-financial items in the economic environment in which the Company transacts.

Transaction costs for instruments classified as FVTPL are expensed as incurred. Transaction costs that are directly attributable to the acquisition of financial assets and liabilities (other than FVTPL) are added or deducted from the fair value of the financial asset or financial liability on initial recognition.

The Company's financial assets classified as amortized cost and contract assets are subject to impairment requirements. The Company has elected to measure loss allowances for trade receivables and other contract assets at an amount equal to lifetime expected credit loss. The lifetime expected credit losses are the expected credit losses that result from possible default events over the expected life of the instrument.

### Financing Costs

The debt issuance costs related to the Senior Secured Credit Facility and the Senior Notes are included in current and long-term indebtedness and are amortized to interest expense using the effective interest method. All other debt issuance costs are accounted for as short-term and long-term deferred charges and are included in prepaid expenses and other current assets and other long-term assets. The deferred charges are amortized to interest expense on a straight-line basis over the term of the indebtedness to which they relate.

#### Employee Benefit Plans

Telesat maintains one contributory and three non-contributory defined benefit pension plans which provide benefits based on length of service and rate of pay. Two of these defined-benefit plans were closed to new members in 2013. Telesat is responsible for adequately funding the defined benefit pension plans. Contributions are made based on actuarial cost methods that are permitted by pension regulatory bodies and reflect assumptions about future investment returns, salary projections and future service benefits. Telesat also provides other post-employment and retirement benefits, including health care and life insurance benefits on retirement and various disability plans, worker's compensation and medical benefits to former or inactive employees, their beneficiaries and covered dependents, after employment but before retirement, under certain circumstances. In addition, Telesat provides defined contribution pension plans, under certain circumstances, for employees who are not eligible for the defined benefit pension plans. Costs for defined contribution pension plans are recognized as an expense during the year in which the employees have rendered service entitling them to the Company's contribution.

The Company accrues the present value of its obligations under employee benefit plans and the related costs reduced by the fair value of plan assets. Pension costs and other retirement benefits are determined using the projected unit credit method prorated on service and management's best estimate of expected investment performance, salary escalation, retirement ages of employees and expected health care costs.

Pension plan assets are valued at fair value. The discount rate is based on the market interest rate of high quality bonds and is consistent with guidance described by Canadian Institute of Actuaries in June 2018 in the Revised Educational Note. Past service costs arising from plan amendments are recognized immediately to the extent that the benefits are already vested, and otherwise are amortized on a straight-line basis over the average remaining vesting period. A valuation is performed at least every three years to determine the present value of the accrued pension and other retirement benefits.

Remeasurements arising from defined benefit pension plans comprise actuarial gains and losses and the return on plan assets (excluding interest). Telesat recognizes them immediately in other comprehensive income (loss), which is included in accumulated earnings, in the year in which they occur.

The current service costs and administration fees not related to asset management are included in operating expenses. The net interest expense (income) on the net defined benefit liability (asset) for the period is calculated by applying the discount rate used to measure the defined benefit obligation at the beginning of the year to the net defined benefit liability (asset) at the beginning of the year while taking into account any changes in the net defined benefit liability (asset) during the year as a result of contributions and benefit payments. The net interest expense (income) is included in interest expense.

The pension expense for 2018 was determined based on membership data as at December 31, 2016. The accrued benefit obligation as at December 31, 2018 was determined based on the membership data as at December 31, 2017, and extrapolated one year based on December 31, 2018 assumptions. For certain Canadian post-retirement benefits, the expense for 2018 was based on membership and eligibility data as at September 30, 2015 and the accrued benefit obligations as at December 31, 2018 was based on membership data as at September 30, 2018. For certain American post-retirement benefits, the expense for 2018 was based on membership and eligibility data as at January 1, 2018. The accrued benefit obligation for certain American post-retirement benefits as at December 31, 2018 was determined based on membership data as at January 1, 2018, and extrapolated, based on December 31, 2018 assumptions. The most recent valuation of the pension plans for funding purposes was as of December 31, 2017. Valuations will be performed for the pension plans as of December 31, 2018.

Telesat also provides health care and life insurance benefits for certain retired employees. These benefits are funded primarily on a pay-as-you-go basis, with the retiree paying a portion of the cost through contributions, deductibles and co-insurance provisions. Commencing in 2015, as a result of an amendment to one of the plans, Telesat has contributed to a health reimbursement account instead of providing the health care and life insurance benefits directly to certain retired employees.

#### Share-Based Compensation Plans

The Company offers equity-settled share-based compensation plans for certain key employees under which it receives services from employees in exchange for equity instruments of the Company. The expense is based on the fair value of the awards granted using the Black-Scholes option pricing model. The expense is recognized over the vesting period, which is the period over which all of the specified vesting conditions are satisfied, with a corresponding increase in equity. For awards with graded vesting, the fair value of each tranche is recognized over the respective vesting period with a significant higher proportionate amount of the total expense being recognized earlier in the vesting period.

#### Restricted Share Units

For each restricted share unit ("RSU"), an expense is recorded over the vesting period equal to the fair value of the Non-Voting Participating Preferred shares with a corresponding increase in equity. For awards with graded vesting, the fair value of each tranche is recognized over the respective vesting period with a significant higher proportionate amount of the total expense being recognized earlier in the vesting period. RSU's are expected to be settled in Non-Vesting Participating Preferred shares of Telesat.

#### Income Taxes

Income tax expense, comprised of current and deferred income tax, is recognized in income except to the extent it relates to items recognized in other comprehensive income (loss) or equity, in which case the income tax expense is recognized in other comprehensive income (loss) or equity, respectively.

Current income tax is measured at the amount expected to be paid to the taxation authorities, net of recoveries, based on the tax rates and laws enacted or substantively enacted as at the balance sheet date.

Deferred taxes are the result of temporary differences arising between the tax bases of assets and liabilities and their carrying amount. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period when the asset is realized or the liability is settled, based on tax rates and laws that have been enacted or substantively enacted at the balance sheet date. Deferred tax assets are recognized for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that the deferred tax assets will be realized. Unrecognized deferred tax assets are reassessed at each balance sheet date and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax assets to be recovered.

Deferred tax assets are netted against the deferred tax liabilities when they relate to income taxes levied by the same taxation authority on either:

- i) the same taxable entity; or
  - different taxable entities which intend to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period
- basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Deferred tax liabilities are recognized for all taxable temporary differences except when the deferred tax liability arises from the initial recognition of goodwill or the initial recognition of an asset or liability in a transaction which is not a business combination. For taxable temporary differences associated with investments in subsidiaries, a deferred tax liability is recognized unless the parent can control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

### Future Changes in Accounting Policies

The IASB periodically issues new and amended accounting standards. The new and amended standards determined to be applicable to the Company are disclosed below. The remaining new and amended standards have been excluded as they are not applicable.

Leases

IFRS 16, Leases ("IFRS 16") was issued by the IASB in January 2016, and will replace IAS 17, Leases and related interpretations on leases. IFRS 16 will require a lessee to recognize a right-of-use asset and lease liability for all leases with a term of more than 12 months. The standard will also require that the depreciation of the lease assets be recorded separately from the interest on the lease liabilities in the statement of income. For lessors, IFRS 16 substantially carries forward the requirements of IAS 17.

Companies can elect to use either a retrospective approach with a restatement of comparative information or a modified retrospective approach with the cumulative effect of initial application shown in retained earnings instead of the restatement of the comparative information. The Company has elected to use a modified retrospective approach on adoption.

Based on the evaluations to date, the Company has identified the following areas that will be affected:

A material amount will be required to be recognized for contracts that Telesat has entered into as the lessee. Telesat anticipates that this will result in an increase in satellites, property and other equipment and other current and long-term liabilities as at January 1, 2019. On the balances to be capitalized on January 1, 2019, going forward this will result in lower operating expenses and higher interest and depreciation expenses; and

· Additional disclosure will be required for the new standard.

This standard is effective for annual periods beginning on or after January 1, 2019. The Company has not yet finalized the quantification of the above noted impacts of this adoption as it continues to evaluate the impact of IFRS 16 and emerging guidance.

Income taxes

IFRIC 23, *Uncertainty over Income Taxes Treatments* was issued by the IASB in June 2017. The interpretation clarifies how to apply the recognition and measurement requirements in IAS 12, *Income Taxes* when there is uncertainty over income tax treatments. This interpretation is effective for annual reporting periods beginning on or after January 1, 2019. This interpretation is not expected to have an impact on the Company's consolidated financial statements.

### 5. CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES

Dec. 31, 2018

12 Months Ended

Critical Accounting
Judgments And Estimates
CRITICAL ACCOUNTING
JUDGMENTS AND
ESTIMATES

#### 5. CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES

### Critical judgments in applying accounting policies

The following are the critical judgments made in applying the Company's accounting policies which have the most significant effect on the amounts reported in the financial statements:

Deferred Revenue

The Company's accounting policy relating to deferred revenue is described in Note 4. Certain of the Company's revenue agreements were noted to include a significant financing component, Judgment by management is required to determine the discount rate used in the significant financing component calculation.

Uncertain income tax positions

The Company operates in numerous jurisdictions and is subject to country-specific tax laws. Management uses significant judgment when determining the worldwide provision for tax, and estimates provisions for uncertain tax positions as the amounts expected to be paid based on a qualitative assessment of all relevant factors. In the assessment, management considers risk with respect to tax matters under active discussion, audit, dispute or appeal with tax authorities, or which are otherwise considered to involve uncertainty. Management reviews the provisions as at each balance sheet date.

### Critical accounting estimates and assumptions

The Company makes accounting estimates and assumptions that affect the carrying value of assets and liabilities, reported net (loss) income and disclosure of contingent assets and liabilities. Estimates and assumptions are based on historical experience, current events and other relevant factors, therefore, actual results may differ and differences could be material.

The accounting estimates and assumptions critical to the determination of the amounts reported in the financial statements were as follows:

Derivative financial instruments measured at fair value

Derivative financial assets and liabilities measured at fair value were \$52.4 million and \$5.6 million, respectively, as at December 31, 2018 (December 31, 2017 — \$64.9 million and \$5.5 million, respectively).

Quoted market values are unavailable for the Company's financial instruments and, in the absence of an active market, the Company determines fair value for financial instruments based on prevailing market rates (bid and ask prices, as appropriate) for instruments with similar characteristics and risk profiles or internal or external valuation models, such as option pricing models and discounted cash flow analysis, using observable market-based inputs. The determination of fair value is significantly impacted by the assumptions used for the amount and timing of estimated future cash flows and discount rates. As a result, the fair value of financial assets and liabilities and the amount of (loss) gain on changes in fair value of financial instruments recorded to net (loss) income could vary.

#### Impairment of goodwill

Goodwill represented \$2,446.6 million of total assets as at December 31, 2018 and 2017. Determining whether goodwill is impaired using a quantitative approach requires an estimation of the Company's value which requires management to estimate the future cash flows expected to arise from operations and to make assumptions regarding economic factors, tax rates and annual growth rates. Actual operating results and the related cash flows of the Company could differ from the estimates used for the impairment analysis.

#### Impairment of intangible assets

Intangible assets represented \$811.2 million of total assets as at December 31, 2018 (December 31, 2017 — \$813.0 million). Impairment of intangible assets is tested annually or more frequently if indicators of impairment or reversal of a prior impairment loss exist. The quantitative impairment analysis requires the Company to estimate the future cash flows expected to arise from operations and to make assumptions regarding economic factors, discount rates, tax rates and annual growth rates. Significant judgments are made in establishing these assumptions. Actual operating results and the related cash flows of the Company could differ from the estimates used for the impairment analysis.

#### Employee benefits

The cost of defined benefit pension plans and other post-employment benefits, and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions which may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates, future pension increases and return on plan assets. Due to the complexity of the valuation, the underlying assumptions, and its long-term nature, the defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed annually.

#### Share-based compensation

The expense for stock options is based on the fair value of the awards granted using the Black-Scholes option pricing model. The Black-Scholes option pricing model includes estimates of the dividend yield, expected volatility, risk-free interest rate and the expected life in years. Any changes in these estimates may have a significant impact on the amounts reported.

#### Determination of useful life of satellites and finite life intangible assets

The estimated useful life and depreciation method for satellites and finite life intangible assets are reviewed annually, with the effect of any changes in estimate being accounted for on a prospective basis. Any change in these estimates may have a significant impact on the amounts reported.

#### Income taxes

Management assesses the recoverability of deferred tax assets based upon an estimation of the Company's projected taxable income using enacted or substantially enacted tax laws, and its ability to utilize future tax deductions before they expire. Actual results could differ from expectations.

### 6. SEGMENT **INFORMATION**

### 12 Months Ended Dec. 31, 2018

### **Segment Information**

SEGMENT INFORMATION 6. SEGMENT INFORMATION

Telesat operates in a single reportable industry segment, in which it provides satellite-based services to its broadcast, enterprise and consulting customers around the world.

The Company derives revenue from the following services:

**Broadcast** — Direct-to-home television, video distribution and contribution, and occasional use services.

Enterprise — Telecommunication carrier and integrator, government, consumer broadband, resource, maritime and aeronautical, retail and satellite operator services.

**Consulting and other** — Consulting services related to space and earth segments, government studies, satellite control services, and research and development.

Revenue derived from the above services were as follows:

Years ended December 31,	 2018	2017	2016
Broadcast	\$ 455,125	\$ 472,751	\$ 486,434
Enterprise	428,226	430,343	420,138
Consulting and other	 19,581	24,313	24,282
Revenue	\$ 902,932	\$ 927,407	\$ 930,854

Equipment sales included within the various services were as follows:

Years ended December 31,	2018		2017		 2016
Broadcast	\$	315	\$	274	\$ 1,904
Enterprise		23,639		14,460	11,520
Consulting and other		_		389	_
Total equipment sales	\$	23,954	\$	15,123	\$ 13,424

### Geographic Information

Revenue by geographic regions was based on the point of origin of the revenue, which was the destination of the billing invoice, and was allocated as follows:

Years ended December 31,	2018	2017	2016
Canada	\$ 417,692	\$ 415,575	\$ 426,193
United States	318,779	311,159	319,473
Europe, Middle East & Africa	61,317	80,532	64,624
Latin America & Caribbean	75,011	78,921	83,244
Asia & Australia	30,133	41,220	37,320
Revenue	\$ 902,932	\$ 927,407	\$ 930,854

The Company's satellites are in geosynchronous orbit. For disclosure purposes, the satellites and the intangible assets have been classified based on ownership. Satellites, property and other equipment and intangible assets by geographic regions were allocated as follows:

As at December 31,	2018	2017
Canada	\$ 821,449	\$ 976,349
Europe, Middle East & Africa	775,055	693,903

103,567	118,512
2,968	3,083
\$1,703,039	\$1,791,847
2018	2017
\$ 734,751	\$ 734,061
41,935	39,190
25,962	30,510
8,506	9,234
\$ 811,154	\$ 812,995
	2,968 \$1,703,039 2018 \$ 734,751 41,935 25,962 8,506

Other long-term financial assets and other long-term assets by geographic regions were allocated as follows:

As at December 31,		2018		2017
Canada	\$	43,779	\$	72,395
Europe, Middle East & Africa		8,043		8,059
All others		3,933		3,077
Other long-term financial assets	\$	55,755	\$	83,531
	Ψ	33,133	Ψ	05,551
As at December 31	=	2018	Ψ	2017
	\$		\$	
As at December 31	\$	2018	<u> </u>	2017

Goodwill was not allocated to geographic regions.

### **Major Customers**

For the years ended December 31, 2018, 2017 and 2016, there were three significant customers each representing more than 10% of consolidated revenue.

### 7. OPERATING EXPENSES

### 12 Months Ended Dec. 31, 2018

### Operating Expenses OPERATING EXPENSES

### 7. OPERATING EXPENSES

Years ended December 31,	2018		2017		2016
Compensation and employee benefits <sup>(a)</sup>	\$	98,350	\$	85,135	\$ 71,841
Other operating expenses <sup>(b)</sup>		45,596		42,895	39,359
Cost of sales <sup>(c)</sup>		41,881		59,657	63,723
Operating expenses	\$	185,827	\$	187,687	\$ 174,923

Compensation and employee benefits included salaries, bonuses, commissions, postemployment benefits and charges arising from share-based compensation. The balance for the

- (a) year ended December 31, 2018 included \$1.3 million of expenses associated with a special payment to stock option holders, including associated benefit expenses (December 31, 2017 \$14.2 million, December 31, 2016 \$nil).
- (b) Other operating expenses included general and administrative expenses, marketing expenses, in-orbit insurance expenses, professional fees and facility costs.
  - Cost of sales included the cost of third-party satellite capacity, the cost of equipment sales
- (c) and other costs directly attributable to fulfilling the Company's obligations under customer contracts.

## 8. OTHER OPERATING GAINS (LOSSES), NET

12 Months Ended Dec. 31, 2018

**Other Operating Gains Losses Net** 

OTHER OPERATING GAINS (LOSSES), NET 8. OTHER OPERATING GAINS (LOSSES), NET

Years ended December 31,	2	018	2017	2016
Insurance proceeds	\$	_	\$6,171	\$ —
Loss on disposal of assets		(353)	(269)	(2,565)
Other	1	,096	_	_
Other operating gains (losses), net	\$	743	\$5,902	\$(2,565)

### 9. INTEREST EXPENSE

## 12 Months Ended Dec. 31, 2018

## Interest Expense INTEREST EXPENSE

### 9. INTEREST EXPENSE

Years ended December 31,	2018	2017	2016
Interest on indebtedness	\$231,015	\$209,136	\$195,523
Interest on derivative instruments	(7,105)	3,071	2,303
Interest on satellite performance incentive payments	4,134	4,750	5,548
Interest on significant financing component	27,374	_	_
Interest on employee benefit plans (Note 29)	1,488	1,511	1,733
Capitalized interest (Note 16)	(19,120)	(18,324)	(6,292)
Interest expense	\$237,786	\$200,144	\$198,815

### 10. INCOME TAXES

## 12 Months Ended Dec. 31, 2018

### **Income Taxes**INCOME TAXES

### 10. INCOME TAXES

Years ended December 31,	 2018	 2017	2016
Current tax expense	\$ 98,841	\$ 111,510	\$ 75,634
Deferred tax (recovery) expense	 (37,785)	(31,265)	 8,272
Tax expense	\$ 61,056	\$ 80,245	\$ 83,906

A reconciliation of the statutory income tax rate, which is a composite of Canadian federal and provincial rates, to the effective income tax rate was as follows with the comparatives figures being restated to conform with the presentation in the current year:

Year ended December 31,	2018	2017	2016
(Loss) income before tax	\$ (29,880)	\$ 585,298	\$ 376,806
Multiplied by the statutory income tax rates	26.59%	26.60%	26.61%
	(7,945)	155,689	100,268
Income tax recorded at rates different from the Canadian tax rate	(10,823)	(9,833)	(6,410)
Permanent differences	50,458	(36,241)	15,594
Effect on deferred tax balances due to changes in income tax rates	(427)	(2,120)	(140)
Effect of temporary differences not recognized as deferred tax assets	35,416	(25,789)	(27,286)
Previously unrecognized tax losses and credits	(6,110)		_
Other	487	(1,461)	1,880
Tax expense	\$ 61,056	\$ 80,245	\$ 83,906
Effective income tax rate	(204.34)%	13.71%	22.27%

The tax effects of temporary differences between the carrying amounts of assets and liabilities for accounting purposes and the amounts used for tax purposes are presented below with the comparatives figures being restated to conform with the presentation in the current year:

As at December 31,	2018		2017
Deferred tax assets			
Foreign tax credits	\$	4,245	\$ 8,639
Corporate interest restriction		7,176	_
Unrealized foreign exchange losses		4,488	
Deferred revenue		20,729	1,879
Loss carry forwards		22,316	52,911
Employee benefits		8,374	10,430
Other		1,794	13
Total deferred tax assets	\$	69,122	\$ 73,872
As at December 31,		2018	2017
Deferred tax liabilities			
Capital assets	\$	(215,248)	\$ (244,569)
Intangible assets		(240,595)	(241,731)
Finance charges		(9,380)	(876)
Unrealized foreign exchange gains		_	(27,193)
Total deferred tax liabilities	\$	(465,223)	\$ (514,369)
Deferred tax liabilities, net	\$	(396,101)	\$ (440,497)

Deferred tax assets of \$10.8 million (December 31, 2017 — \$4.6 million) on the balance sheet relate to the Brazil and United Kingdom tax jurisdictions.

#### Losses and tax credits

Foreign tax credit

The Company has \$4.2 million of foreign tax credits which may only be used to offset taxes payable. These credits will begin to expire in 2019.

Loss carry forwards

The Company has Canadian capital losses carried forward of \$644.1 million, with no expiration date. No deferred tax asset has been recognized with respect to these losses as there are no capital gains anticipated.

The Company has tax losses in the United Kingdom of \$131.3 million that can be carried forward indefinitely but are subject to restrictions on their utilization. The United Kingdom legislation, introduced on April 1, 2017, restricts to a maximum of 50% the amount of profit that can be relieved with carried-forward losses. Notwithstanding, the Company will be entitled to a GBP 5 million annual allowance of unrestricted taxable income not subject to the 50% limitation. A deferred tax asset of \$22.3 million has been recognized as the Company expects the tax losses to be utilized.

#### Interest restrictions

On April 1, 2017, the United Kingdom introduced new legislation concerning interest deductibility. The legislation introduces measures to restrict a group's net interest deduction to an amount which is proportionate with the activities taxed in the United Kingdom, taking into account the amount the group borrows from third parties. Unused interest deductions may be applied against future taxable income and can be carried forward indefinitely. No deferred tax asset has been recognized for temporary differences of unused interest deductions of \$10 million. A deferred tax asset of \$7.2 million has been recognized as the Company expects to deduct these amounts against future taxable income.

#### Investments in subsidiaries

As at December 31, 2018, the Company had temporary differences of \$15.2 million associated with investments in subsidiaries for which no deferred tax liabilities have been recognized, as the Company is able to control the timing of the reversal of these temporary differences and it is not probable that these differences will reverse in the foreseeable future.

### 11. TRADE AND OTHER RECEIVABLES

12 Months Ended Dec. 31, 2018

Trade and Other Receivables

TRADE AND OTHER RECEIVABLES

### 11. TRADE AND OTHER RECEIVABLES

As at December 31,	 2018	 2017
Trade receivables	\$ 44,358	\$ 61,177
Trade receivables due from related parties (Note 33)	28	82
Less: Allowance for doubtful accounts	 (5,136)	 (2,662)
Net trade receivables	39,250	58,597
Other receivables	6,381	6,389
Trade and other receivables	\$ 45,631	\$ 64,986

### Allowance for doubtful accounts

The movement in the allowance for doubtful accounts was as follows:

Years ended December 31,	2018	 2017
Allowance for doubtful accounts, beginning of year	\$ 2,662	\$ 3,514
Provisions (reversals) for impaired receivables	73	(110)
Cumulative effect adjustment <sup>(1)</sup>	2,754	
Receivables written off	(47)	(586)
Impact of foreign exchange	 (306)	 (156)
Allowance for doubtful accounts, end of year	\$ 5,136	\$ 2,662

(1) On January 1, 2018, a reclassification of \$2.8 million was made from trade receivables to allowance for doubtful accounts as a result of the implementation of IFRS 15. There was no impact on accumulated earnings as a result of this adjustment.

## 12. OTHER CURRENT FINANCIAL ASSETS

## 12 Months Ended Dec. 31, 2018

**Other Current Financial Assets** 

OTHER CURRENT FINANCIAL ASSETS 12. OTHER CURRENT FINANCIAL ASSETS

As at December 31,	20	018	2017
Security deposits	\$	147	\$2,275
Derivative assets (Note 27)	18	3,632	162
Other current financial assets	\$18	3,779	\$2,437

### 13. PREPAID EXPENSES AND OTHER CURRENT ASSETS

12 Months Ended
Dec. 31, 2018

**Prepaid Expenses And Other** 

**Current Assets** 

PREPAID EXPENSES AND OTHER CURRENT ASSETS

### 13. PREPAID EXPENSES AND OTHER CURRENT ASSETS

As at December 31,	2018	 2017
Prepaid expenses <sup>(a)</sup>	\$ 2,909	\$ 3,848
Income tax recoverable	10,329	945
Inventory <sup>(b)</sup>	2,429	2,998
Deferred charges <sup>(c)</sup>	475	543
Other	239	169
Prepaid expenses and other current assets	\$ 16,381	\$ 8,503

- (a) Prepaid expenses were primarily comprised of prepaid satellite in-orbit insurance, prepaid general liability insurance and prepaid license fees.
  - As at December 31, 2018, inventory consisted of \$2.2 million of finished goods (December 31, 2017 \$2.3 million) and \$0.2 million of work in process (December 31, 2017 —
- (b) \$0.7 million). During the year, \$17.7 million was recognized as cost of equipment sales and recorded as an operating expense (December 31, 2017 \$11.7 million, December 31, 2016 \$9.8 million).
- (c) Deferred charges included deferred financing charges relating to the Revolving Credit Facility.

## 14. OTHER LONG-TERM FINANCIAL ASSETS

## 12 Months Ended Dec. 31, 2018

**Other Long-term Financial Assets** 

OTHER LONG-TERM FINANCIAL ASSETS 14. OTHER LONG-TERM FINANCIAL ASSETS

As at December 31,	2018	2017
Long-term receivables	\$12,170	\$12,898
Security deposits	9,789	5,910
Derivative assets (Note 27)	33,796	64,723
Other long-term financial assets	\$55,755	\$83,531

## 15. OTHER LONG-TERM ASSETS

## 12 Months Ended Dec. 31, 2018

**Other Long-term Assets** 

OTHER LONG-TERM ASSETS 15. OTHER LONG-TERM ASSETS

As at December 31,	2	018	2017		
Prepaid expenses	\$	991	\$	245	
Deferred charges (Note 13)		753	1	,153	
Income tax recoverable	5	,866	1	,356	
Other		302		302	
Other long-term assets	\$7	,912	\$3	,056	

### 16. SATELLITES, PROPERTY AND OTHER EQUIPMENT

Satellites Property And
Other Equipment
SATELLITES, PROPERTY
AND OTHER EQUIPMENT

# 12 Months Ended Dec. 31, 2018

### 16. SATELLITES, PROPERTY AND OTHER EQUIPMENT

	Satellites	Property and other equipment	Assets under construction	Total
Cost as at January 1, 2017	\$ 3,203,103	\$ 229,208	\$ 270,768	\$ 3,703,079
Additions	_	3,270	139,212	142,482
Disposals/retirements	_	(2,982)	_	(2,982)
Reclassifications and transfers				
from assets under construction	_	11,816	(11,816)	
Impact of foreign exchange	(22,925)	(2,092)	(21,199)	(46,216)
Cost as at December 31, 2017	3,180,178	239,220	376,965	3,796,363
Additions	_	538	78,373	78,911
Cumulative effect adjustment (Note 3)	(4,172)	_	3,134	(1,038)
Disposals/retirements	_	(3,622)	_	(3,622)
Reclassifications and transfers				
from assets under	448,216	17,229	(465,445)	
construction				
Impact of foreign exchange	45,348	1,690	18,110	65,148
Cost as at December 31, 2018	\$ 3,669,570	\$ 255,055	\$ 11,137	\$ 3,935,762
Accumulated depreciation				
and impairment as at	\$(1,651,321)	\$ (136,347)	\$	\$(1,787,668)
January 1, 2017				
Depreciation	(206,439)			(221,058)
Disposals/retirements	_	2,564	_	2,564
Impact of foreign exchange	568	1,078		1,646
Accumulated depreciation				
and impairment as at	(1,857,192)	(147,324)	<del>-</del>	(2,004,516)
<b>December 31, 2017</b>				
Depreciation	(209,987)	(14,864)		(224,851)
Cumulative effect adjustment	1,433	_	_	1,433
(Note 3)	1,133			·
Disposals/retirements		3,207	_	3,207
Impact of foreign exchange	(7,050)	(946)		(7,996)
Accumulated depreciation and impairment as at December 31, 2018	\$(2,072,796)	\$ (159,927)	-	\$(2,232,723)
Net carrying values				
As at December 31, 2017	\$ 1,322,986	\$ 91,896	\$ 376.965	\$ 1,791,847
As at December 31, 2018	\$ 1,596,774			\$ 1,703,039

Substantially all of the Company's satellites, property and other equipment have been pledged as security as a requirement of the Company's Senior Secured Credit Facilities as at December 31, 2018 and 2017 (Note 24).

### Borrowing costs

Borrowing costs of \$19.1 million were capitalized for the year ended December 31, 2018 (December 31, 2017 — \$18.3 million, December 31, 2016 — \$6.3 million). The average

capitalization rate was 7% (5% in 2017 and 2016). Of the total capitalized borrowing costs, \$0.4 million was capitalized to intangible assets for the year ended December 31, 2018 (December 31, 2017 — \$1.2 million, December 31, 2016 — \$0.3 million) with the remaining balance capitalized to satellites, property and other equipment.

In addition, a cumulative effect adjustment was recorded on January 1, 2018, as a result of the implementation of IFRS 15 due to additional interest required to be capitalized as a result of a significant financing component existing on certain revenue agreements. Net of the accumulated depreciation adjusted on January 1, 2018, the impact on satellites, property and other equipment was an increase of \$0.4 million.

**Impairment** 

No impairment was recognized for the years ended December 31, 2018, 2017 and 2016.

Joint arrangements

Telesat International Limited ("TIL") and APT entered into agreements relating to the Telstar 18 VANTAGE satellite, which are accounted for as a joint operation, whereby TIL's interest is 42.5%. Telesat (IOM) Limited ("TIOM") and ViaSat Inc. entered into agreements relating to the ViaSat-1 satellite, which are accounted for as a joint operation, whereby TIOM owns the Canadian payload on the ViaSat-1 satellite.

### 17. INTANGIBLE ASSETS

### 12 Months Ended Dec. 31, 2018

Intangible Assets
INTANGIBLE ASSETS

### 17. INTANGIBLE ASSETS

The intangible assets are split between assets with finite and indefinite lives.

The indefinite life intangible assets are summarized below.

	Orbital slots		Trade name		Intellectual property		otal indefinite fe intangible assets
Cost as at January 1, 2017	\$	609,397	\$ 17,000	\$	13,161	\$	639,558
Additions			_		12,577		12,577
Disposals/retirements		_	_		_		_
Impact of foreign exchange		(2,654)	_		_		(2,654)
Cost as at December 31, 2017 and January 1, 2018		606,743	17,000		25,738		649,481
Additions		_			21,311		21,311
Disposals/retirements		_	_		_		_
Impact of foreign exchange		3,252	_		_		3,252
Cost as at December 31, 2018	\$	609,995	\$ 17,000	\$	47,049	\$	674,044
Accumulated impairment as at January 1, 2017	\$	(1,100)	\$ 	\$		\$	(1,100)
Impairment		_	_		_		_
Accumulated impairment as at December 31, 2017 and January 1, 2018		(1,100)	_		_		(1,100)
Impairment		_	_		_		_
Accumulated impairment as at December 31, 2018	\$	(1,100)	\$	\$	_	\$	(1,100)
Net carrying values							
As at December 31, 2017	\$	605,643	\$ 17,000	\$	25,738	\$	648,381
As at December 31, 2018	\$	608,895	\$ 17,000	\$	47,049	\$	672,944

The finite life intangible assets are summarized below.

	Revenue backlog	<b>Customer</b> relationships		Transponder rights	Concession rights	Other	Total finite life intangible assets
Cost as at January 1, 2017	\$ 235,896	\$ 198,652	\$ 23,142	\$ 16,718	\$ 38,575	\$ 59	\$ 513,042
Additions	_	_	_	_	155	_	155
Disposals/ retirements	_	(1)	_	_	_	_	(1)
Impact of foreign exchange	(261)	(337)	_	_	(3,140)	) —	(3,738)
Cost as at December 31, 2017 and January 1, 2018	235,635	198,314	23,142	16,718	35,590	59	509,458
Additions	_	_	_	_	36	_	36
Disposals/ retirements	_	_	_	_	(94)	_	(94)
Impact of foreign exchange	320	413		_	(2,658)	<u> </u>	(1,925)

Cost as at December 31, 2018	\$ 235,955 \$	198,727 \$	23,142 \$	16,718 \$	32,874 \$	59 \$	507,475
Accumulated amortization and impairment as at January 1, 2017	\$(190,917)\$	(108,850) \$	(6,335) \$	(10,017) \$	(2,839) \$	(30) \$	(318,988)
Amortization	(8,749)	(11,434)	(2,890)	(925)	(2,329)	(3)	(26,330)
Disposals/ retirements	_	1	_	_	_	_	1
Impact of foreign exchange	243	141	_	_	89	_	473
Accumulated amortization and impairment as at December 31, 2017 and January 1, 2018	(199,423)	(120,142)	(9,225)	(10,942)	(5,079)	(33)	(344,844)
Amortization	(8,020)	(10,114)	(2,891)	(924)	(2,352)	(4)	(24,305)
Disposals/	( ) )	, ,	( ) )	,	( ) )		
retirements				_	94	_	94
Impact of foreign exchange	(327)	(308)			425	_	(210)
as at December 31, 2018	\$(207,770) \$	(130,564) \$	(12,116) \$	(11,866) \$	(6,912) \$	(37) \$	(369,265)
Net carrying values							_
As at December 31, 2017	\$ 36,212 \$	78,172 \$	13,917 \$	5,776 \$	30,511 \$	26 \$	164,614
As at December 31, 2018	\$ 28,185 \$	68,163 \$	11,026 \$	4,852 \$	25,962 \$	22 \$	138,210

The total combined indefinite and finite life intangible assets are summarized below.

		As	As at December 31, 2018					As at December 31, 2017					
		Cost	Accumulated amortization and impairment	N	Net carrying value		Cost	a	Accumulated mortization and impairment	No	et carrying value		
Indefinite life intangible assets	\$	674,044	\$ (1,100)	\$	672,944	\$	649,481	\$	(1,100)	\$	648,381		
Finite life intangible assets		507,475	(369,265)		138,210		509,458		(344,844)		164,614		
Total intangible assets	\$1	,181,519	\$ (370,365)	\$	811,154	\$	1,158,939	\$	(345,944)	\$	812,995		

The orbital slots represent a right to operate satellites in a given longitudinal coordinate in space, where geostationary orbit may be achieved. They are limited in availability and represent a scarce resource. Usage of orbital slots is licensed through the International Telecommunications Union. Satellite operators can generally expect, with a relatively high level of certainty, continued occupancy of an assigned orbital slot either during the operational life of an existing orbiting satellite or upon replacement by a new satellite once the operational life of the existing orbiting satellite is over. As a result of the expectancy right to maintain the once awarded orbital slots, an indefinite life is typically associated with orbital slots.

The Company's trade name has a long and established history, a strong reputation and has been synonymous with quality and growth within the satellite industry. It has been assigned an indefinite life because of expected ongoing future use.

The Company's intellectual property relates to development relating to its planned LEO constellation. It has been assigned an indefinite life because of anticipated ongoing future use.

The following are the remaining useful lives of the intangible assets:

	Years
Revenue backlog	1 to 6
Customer relationships	1 to 10
Customer contracts	2 to 8
Transponder rights	4
Concession rights	1 to 12
Patent	7

All of the Company's intangible assets have been pledged as security as a requirement of the Company's Senior Secured Credit Facilities as at December 31, 2018 and 2017 (Note 24).

### *Impairment*

Finite life intangible assets are assessed for impairment at the Company's CGU level. Indefinite life intangible assets are tested for impairment at the individual asset level. The annual impairment tests for these assets were performed in the fourth quarters of 2018, 2017 and 2016 in accordance with the policy described in Note 4.

No impairment loss was recognized in the years ended December 31, 2018, 2017 and 2016.

The recoverable amount, for indefinite life intangible assets valued using the income approach, which is equal to the fair value less costs of disposal, was calculated using the following assumptions:

	2017	2016
Discount rate	10.00%	10.25% to 10.75

Some of the more sensitive assumptions used, including the forecasted cash flows and the discount rate, could have yielded different estimates of the recoverable amount. Actual operating results and the related cash flows of the Company could differ from the estimated operating results and related cash flows used in the impairment analysis, and had different estimates been used, it could have resulted in a different fair value.

For the indefinite life intangible assets, in 2018, after performing the qualitative assessment, the Company concluded that it is remote that the fair value is less than the carrying amount. Therefore, the quantitative impairment test was not required.

### 18. GOODWILL

### 12 Months Ended Dec. 31, 2018

### **Goodwill**GOODWILL

#### 18. GOODWILL

The Company carries goodwill at its cost of \$2,446.6 million with no accumulated impairment losses since acquisition.

*Impairment* 

Goodwill is tested for impairment at the entity level because that represents the lowest level at which goodwill supports the Company's operations and is monitored internally. The annual impairment test on goodwill was performed in the fourth quarters of 2018, 2017, and 2016 in accordance with the policy described in Note 4. The Company's recoverable amount exceeded the carrying value therefore, no impairment was recognized. The most significant assumptions used in the quantitative impairment test were as follows:

	2017	2016
Discount rate	10.00%	10.75%
Terminal year growth rate	2.0%	2.0%

Some of the more sensitive assumptions used, including the forecasted cash flows and discount rate, could have yielded different estimates of the recoverable amount. Actual operating results and the related cash flows of the Company could differ from the estimated operating results and related cash flows used in the impairment analysis, and had different estimates been used, it could have resulted in a different fair value.

In 2018, after performing the qualitative assessment of goodwill, the Company concluded that it is remote that the fair value is less than the carrying amount. Therefore, the quantitative goodwill impairment test was not required.

### 19. TRADE AND OTHER PAYABLES

Trade And Other Payables
TRADE AND OTHER
PAYABLES

## 12 Months Ended Dec. 31, 2018

### 19. TRADE AND OTHER PAYABLES

As at December 31,	2018	2017		
Trade payables	\$ 3,609	\$	2,659	
Other payables and accrued liabilities <sup>(a)</sup>	27,050		35,260	
Trade and other payables	\$ 30,659	\$	37,919	

<sup>(</sup>a) Other payables and accrued liabilities included payables that are not trade in nature as well as various operating and capital accruals.

### 20. OTHER CURRENT FINANCIAL LIABILITIES

12 Months Ended Dec. 31, 2018

Other Current Financial
Liabilities
OTHER CURRENT
FINANCIAL LIABILITIES

### 20. OTHER CURRENT FINANCIAL LIABILITIES

As at December 31,	 2018	2017
Derivative liabilities (Note 27)	\$ 6	\$ 1
Security deposits	1,913	1,944
Satellite performance incentive payments	11,645	10,452
Interest payable <sup>(a)</sup>	8,584	8,929
Other	4,238	5,029
Other current financial liabilities	\$ 26,386	\$ 26,355

<sup>(</sup>a) Interest payable included interest payable on indebtedness, satellite performance incentive payments, and other current financial liabilities.

## 21. OTHER CURRENT LIABILITIES

12 Months Ended Dec. 31, 2018

**Other Current Liabilities** 

### OTHER CURRENT LIABILITIES 21. OTHER CURRENT LIABILITIES

2018	2017
\$102,645	\$66,449
1,068	1,205
1,315	1,315
4,231	4,121
4,030	4,234
\$113,289	\$77,324
	\$102,645 1,068 1,315 4,231

## 22. OTHER LONG-TERM FINANCIAL LIABILITIES

## 12 Months Ended Dec. 31, 2018

**Other Long-term Financial Liabilities** 

OTHER LONG-TERM FINANCIAL LIABILITIES 22. OTHER LONG-TERM FINANCIAL LIABILITIES

As at December 31,	2018	2017
Derivative liabilities (Note 27)	\$ 5,627	\$ 5,527
Security deposits	346	328
Satellite performance incentive payments	47,268	52,509
Other	1,280	467
Other long-term financial liabilities	\$54,521	\$58,831

### 23. OTHER LONG-TERM LIABILITIES

12 Months Ended Dec. 31, 2018

Other Long-term Liabilities
OTHER LONG-TERM
LIABILITIES

#### 23. OTHER LONG-TERM LIABILITIES

As at December 31,	2018	2017
Deferred revenue <sup>(b)</sup>	\$ 400,725	\$ 323,709
Accrued benefit liabilities (Note 29)	32,235	40,065
Uncertain tax positions	175	175
Decommissioning liabilities <sup>(a)</sup>	2,043	1,590
Other	340	340
Other long-term liabilities	\$ 435,518	\$ 365,879

The current and long-term decommissioning liabilities on property and equipment were \$3.1 million (December 31, 2017 — \$2.8 million). The decommissioning liabilities are for the restoration of leased buildings and teleports. During the year ended December 31, 2018, \$0.1 million was recorded as interest expense (December 31, 2017 - \$0.1 million) with \$0.1 million decommissioning liabilities derecognized (December 31, 2017 - \$nil). It is expected that the decommissioning liabilities will mature between 2019 and 2062.

Remaining performance obligations, which the Company also refers to as contract revenue backlog ("backlog") represents the expected future revenue under existing customer contracts, includes both cancellable and non-cancellable contracts, and any deferred revenue that will be recognized in the future in respect to cash already received. The Company does not include revenue beyond the stated expiration of the contract regardless of potential for renewal.

The company expects the backlog as at December 31, 2018 to be recognized as follows (in millions of Canadian dollars):

2019		2019 2020		2021		2022		2023		hereafter	Total		
\$	759.0	\$	605.6	\$ 504.3	\$	433.8	\$	380.2	\$	1,030.7	\$	3,713.6	

### 24. INDEBTEDNESS

### 12 Months Ended Dec. 31, 2018

### Indebtedness INDEBTEDNESS

#### 24. INDEBTEDNESS

As at December 31,	2018	2017		
Senior Secured Credit Facilities <sup>(a)</sup>				
Revolving Credit Facility	\$ —	\$ —		
Term Loan B – U.S. Facility (December 31, 2018 – USD\$2,326,049, December 31, 2017 – USD\$2,399,686)	3,172,033	3,016,645		
8.875% Senior Notes (USD\$500,000) <sup>(b)</sup>	681,850	628,550		
	3,853,883	3,645,195		
Less: deferred financing costs, interest rate floors, prepayment options and net gain on repricing/repayment <sup>(c)</sup>	(129,655)	(101,818)		
	3,724,228	3,543,377		
Less: current indebtedness	(7,888)	(14,486)		
Long-term indebtedness	\$3,716,340	\$3,528,891		

On November 17, 2016, Telesat Canada entered into a new amended and restated Credit Agreement with a syndicate of banks which provides for the extension of credit under the Senior Secured Credit Facilities of USD\$2,430.0 million and revolving credit borrowings of up to USD\$200.0 million (or Canadian dollar equivalent). All obligations under the Credit Agreement are guaranteed by the Company and certain of Telesat Canada's existing subsidiaries ("Guarantors"). The obligations under the Credit Agreement and the guarantees of those obligations are secured, subject to certain exceptions, by first priority liens and security interest in the assets of Telesat Canada and the Guarantors. If the Revolving Credit Facility is drawn, the Credit Agreement requires Telesat Canada to comply with a first lien net leverage ratio of 5.75:1.00, tested quarterly, and failure to comply will result in an event of default. The Credit Agreement contains total leverage ratio covenants that restrict, with certain exceptions, the ability of Telesat Canada and the Guarantors to take specified actions, including, among other things and subject to certain significant exceptions: creating liens, incurring indebtedness, making investments, engaging in mergers, selling property, paying dividends, entering into sale-leaseback transactions, creating subsidiaries, repaying subordinated debt or amending organizational documents. As at December 31, 2018, the leverage ratio was 4.93:1.00 (December 31, 2017 -4.55:1.00), which was more than the maximum test ratio of 4.50:1.00.

On November 17, 2016, Telesat Canada issued, through a private placement, USD\$500 million of 8.875% Senior Notes which mature on November 17, 2024. The 8.875% Senior Notes are subordinated to Telesat Canada's existing and future secured indebtedness, including obligations under its Senior Secured Credit Facilities, and are governed under the 8.875% Senior Notes Indenture.

With the net proceeds from the 8.875% Senior Notes offering and the Senior Secured Credit Facilities, along with available cash on hand, all outstanding amounts on the 6.0% Senior Notes and the former senior secured credit facilities were repaid on November 17, 2016. In addition, at this time, any unamortized balances of the deferred financing costs, interest rate floors, prepayment option and premiums were written off resulting in a net loss on refinancing of \$31.9 million.

On February 1, 2017, Telesat amended its Senior Secured Credit Facilities. The amendment to the Senior Secured Credit Facilities reduced the applicable margin on the Term Loan B — U.S. Facility from 3.75% to 3.00%. Additional debt issue costs of \$38.4 million were incurred in connection with this amendment.

In connection with the adoption of IFRS 9, a gain on repricing of \$36.1 million was recorded against the opening balance of accumulated earnings and the current and long-term indebtedness.

The gain on repricing recorded against the indebtedness is subsequently amortized to interest expense using the effective interest method.

In March 2018, the Company made a \$50 million U.S. dollar voluntary payment on the Term Loan B-U.S. Facility. This resulted in the recognition of a loss of \$2.8 million which was recorded against interest and other income and indebtedness. The loss recorded against the indebtedness is subsequently amortized to interest expense using the effective interest method.

On April 26, 2018, the Company amended the Senior Secured Credit Facilities in which the applicable margin on the Term Loan B-U.S. Facility was reduced to 2.50%. This resulted in a gain on repricing of \$6.9 million which was recorded against interest and other income and indebtedness. Additional debt issue costs of \$10.2 million were also incurred in connection with this amendment. The gain on repricing and debt issue costs recorded against the indebtedness are subsequently amortized to interest expense using the effective interest method.

The Senior Secured Credit Facilities are secured by substantially all of Telesat's assets. The Credit Agreement requires Telesat Canada and the Guarantors to comply with a First Lien Net Leverage Ratio. As at December 31, 2018 and 2017, Telesat was in compliance with this covenant.

Each tranche of the Senior Secured Credit Facilities is subject to mandatory principal repayment requirements. Up to February 1, 2017, this repayment was equal to one quarter of 1% of the initial aggregate principal amount and is payable on a quarterly basis. From February 1, 2017 to April 26, 2018, the repayment was equal to one quarter of 1% of the value of the loan at the time of the amendment, February 1, 2017, and is payable on a quarterly basis. As at April 26, 2018, the repayment is equal to one quarter of 1% of the value of the loan at the time of the amendment, April 26, 2018, and is payable on a quarterly basis.

The Senior Secured Credit Facilities have several tranches which are described below:

A Revolving Credit Facility ("Revolving Facility") of up to \$200 million U.S. dollars (or Canadian dollar equivalent) is available to Telesat. This Revolving Facility matures on November 17, 2021 and is available to be drawn at any time in U.S. funds or Canadian dollar equivalent funds. Loans under the Revolving Facility bear interest at a floating interest rate. For Canadian Prime Rate and Alternative Base Rate ("ABR") loans, an applicable margin ranging from 1.5% to 2.00% is applied to the Prime Rate and ABR as

- (i) these interest rates are defined in the Senior Credit Facilities. For Bankers Acceptance ("BA") Loans and Eurodollar Loans, an applicable margin ranging from 2.50% to 3.00% is applied to either the BA interest rate or LIBOR. The rates on the Revolving Facility vary depending upon the results of the first lien leverage ratio. The Revolving Facility has an unused commitment fee of 40 basis points. As at December 31, 2018, other than \$0.3 million (December 31, 2017 \$0.2 million) in drawings related to letters of credit, there were no borrowings under this facility.
  - The U.S. TLB Facility is a USD\$2,430 million facility maturing on November 17, 2023. The outstanding borrowings under the U.S. TLB Facility bear interest at a floating rate of either: (i) LIBOR as periodically determined for interest rate periods selected by Telesat in accordance with the terms of the Senior Secured Credit Facilities, but not less than 0.75%, plus an applicable margin of 2.50%; or (ii) Alternative Base Rate as determined in accordance with the terms of the Senior Secured Credit Facilities plus an applicable
- (ii) margin of 2.00%. The weighted average effective interest rate was 5.83% for the year ended December 31, 2018 (December 31, 2017 4.86%). On February 1, 2017, the Company amended the Senior Secured Credit Facilities to reduce the applicable margin to 3.00% from 3.75%. On April 26, 2018, the Company amended the Senior Secured Credit Facilities in which the applicable margin on the Term Loan B U.S. Facility was further reduced to 2.50%.
- (b) The Senior Notes bear interest at an annual rate of 8.875% and are due November 17, 2024. The total balance of the Senior Notes is USD\$500 million. The Senior Notes include

covenants or terms that restrict the Company's ability to, among other things: (i) incur or guarantee additional indebtedness, or issue disqualified stock or preferred shares, (ii) incur liens, (iii) pay dividends, or make certain restricted payments or investments, (iv) enter into certain transactions with affiliates, (v) modify or cancel satellite insurance, (vi) consolidate, merge, sell or otherwise dispose of substantially all assets, (vii) create restrictions on the ability to pay dividends, make loans, and sell assets, and (viii) designate subsidiaries as unrestricted subsidiaries. The weighted average effective interest rate for the years ended December 31, 2018 and 2017 was 8.80%.

The Senior Secured Credit Facilities and 8.875% Senior Notes included the following (c) deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment:

The U.S. TLB Facility and 8.875% Senior Notes were presented on the balance sheet net of related deferred financing costs of \$83.8 million as at December 31, 2018 (December 31, 2017- \$87.7 million). The deferred financing costs are amortized using the effective interest method.

The indenture agreement for the 8.875% Senior Notes contained provisions for certain prepayment options (Note 27) which were fair valued at the time of debt issuance. The initial fair value impact, in November 2016, of the prepayment option related to the 8.875% Senior Notes was an \$8.7 million increase to the indebtedness. This liability is subsequently amortized using the effective interest method and had a carrying amount of \$6.9 million as at December 31, 2018 (December 31, 2017- \$7.8 million).

- (iii) The initial fair value impact, in November 2016, of the interest rate floor on the U.S. TLB Facility was a decrease to the indebtedness of \$25.6 million. This asset is subsequently amortized using the effective interest method and had a carrying amount of \$18.6 million as at December 31, 2018 (December 31, 2017- \$21.9 million).
- (iv) The U.S. TLB Facility was presented on the balance sheet net of the net gain on repricing/repayment of \$34.2 million as at December 31, 2018. The net gain on repricing/repayment arose from the following:
  - In connection with the adoption of IFRS 9, a gain on repricing of \$36.1 million was recorded as a reduction of the indebtedness, effective January 1, 2018;
  - In connection with the \$50 million U.S. dollars voluntary repayment in March 2018, a loss on repayment of \$2.8 million was recorded as an increase to the indebtedness; and
  - In connection with the amendment to the Senior Secured Credit Facilities in April 2018, a gain on repricing of \$6.9 million was recorded as a reduction of indebtedness.

The outstanding balance of the net gain on repricing/repayment is amortized using the effective interest method.

The short-term and long-term portions of deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment were as follows:

As at December 31,	 2018	 2017
Short-term deferred financing costs	\$ 15,263	\$ 13,435
Long-term deferred financing costs	 68,536	74,278
	\$ 83,799	\$ 87,713
Short-term interest rate floor	\$ 3,436	\$ 3,413
Long-term interest rate floor	 15,165	 18,483
	\$ 18,601	\$ 21,896
Short-term prepayment option	\$ (942)	\$ (863)

Long-term prepayment option	(5,986)	 (6,928)
	\$ (6,928)	\$ (7,791)
Short-term net gain on repricing/repayment	\$ 6,315	\$
Long-term net gain on repricing/repayment	\$ 27,868	\$ 
	\$ 34,183	\$
Deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment	\$ 129,655	\$ 101,818

The outstanding principal balance of indebtedness, excluding deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment will be repaid as follows (in millions of Canadian dollars):

2019		2020		2021		2022		2023		Thereafter		Total	
\$	32.0	\$	32.0	\$ 32.0	\$	32.0	\$	3.044.0	\$	681.9	\$	3.853.9	

### 25. SHARE CAPITAL

### 12 Months Ended Dec. 31, 2018

**Share Capital**SHARE CAPITAL

#### 25. SHARE CAPITAL

The number of shares and stated value of the outstanding shares were as follows:

	2018		2017	
As at December 31,	Number of shares	Stated value	Number of shares	Stated value
Common Shares	74,252,460	\$ 26,580	74,252,460	\$ 26,580
Voting Participating Preferred Shares	7,034,444	48,246	7,034,444	48,246
Non-Voting Participating Preferred Shares	38,431,311	78,870	38,391,823	77,846
Director Voting Preferred Shares	1,000	10	1,000	10
Share capital		\$153,706		\$152,682

In November 2017 and 2016 dividends were declared and paid on the Director Voting Preferred Shares.

In 2016, a former employee exercised 178,642 stock options, on a net settlement basis, in exchange for 129,400 Non-Voting Participating Preferred Shares with a stated value of \$1.9 million.

In January 2017, the Board of Directors approved a cash distribution to shareholders, as a reduction of stated capital, in the amount of approximately \$387.2 million U.S. dollars. These distributions were made during the first quarter of 2017.

In January 2017, 7,000 stock options granted under the Company's stock incentive plan were exercised for 7,000 Non-Voting Participating Preferred Shares in exchange for \$0.1 million.

In June 2018, 95,363 stock appreciation rights ("Sars") were exercised for 39,488 Non-Voting Participating Preferred Shares, on a net settlement basis.

There were no changes to the rights, privileges or conditions associated to each class of shares.

The authorized share capital of the Company is comprised of: (i) an unlimited number of Common Shares, Voting Participating Preferred Shares, Non-Voting Participating Preferred Shares, Redeemable Common Shares, and Redeemable Non-Voting Participating Preferred Shares, (ii) 1,000 Director Voting Preferred Shares, and (iii) 325,000 Senior Preferred Shares. None of the Redeemable Common Shares, Redeemable Non-Voting Participating Preferred Shares or Senior Preferred Shares have been issued as at December 31, 2018 or 2017. The Company's share-based compensation plans have authorized the grant of up to 16,553,779 options to purchase Non-Voting Participating Preferred Shares combined with authorizing 200,000 restricted share units expected to be settled in Non-Voting Participating Preferred Shares (Note 28).

#### **Common Shares**

The holders of the Common Shares are entitled to receive notice of and to attend all annual and special meetings of the shareholders of the Company and to one vote in respect of each common share held on all matters at all such meetings, except in respect of a class vote applicable only to the shares of any other class, in respect of which the common shareholders shall have no right to vote. The holders of the Common Shares are entitled to receive dividends as may be declared by the Board of Directors of the Company, and are entitled to share in the distribution of the assets of the Company upon liquidation, winding-up or dissolution, subject to the rights, privileges and

conditions attaching to any other class of shares ranking in order of priority. The Common Shares are convertible at the holders' option, at any time, into Voting Participating Preferred Shares or Non-Voting Participating Preferred Shares, on a one-for-one basis. The Common Shares have no par value.

#### **Voting Participating Preferred Shares**

The rights, privileges and conditions of the Voting Participating Preferred Shares are identical in all respects to those of the Common Shares, except for the following:

The holders of Voting Participating Preferred Shares are not entitled to vote at meetings of the shareholders of the Company on resolutions electing directors.

For all other meetings of the shareholders of the Company, the holders of Voting Participating Preferred Shares are entitled to a variable number of votes per Voting Participating Preferred Share based on the number of Voting Participating Preferred Shares, Non-Voting Participating Preferred Shares and Redeemable Non-Voting Participating Preferred Shares outstanding on the record date of the given meeting of the shareholders of the Company.

The Voting Participating Preferred Shares are convertible, at any time, at the holders' option into Common Shares or Non-Voting Participating Preferred Shares on a one-for-one basis as long as the result of such conversion does not cause the Company to cease to be a "qualified corporation" within the meaning of the Canadian Telecommunication Common Carrier Ownership and Control Regulations pursuant to the Telecommunications Act (Canada).

The Voting Participating Preferred Shares have no par value.

#### Non-Voting Participating Preferred Shares

The rights, privileges and conditions of the Non-Voting Participating Preferred Shares are identical in all respects to those of the Common Shares, except for the following:

The holders of Non-Voting Participating Preferred Shares are not entitled to vote on any matter at meetings of the shareholders of the Company, except in respect of a class vote applicable only to the Non-Voting Participating Preferred Shares.

The Non-Voting Participating Preferred Shares are convertible, at any time, at the holders' option into Common Shares or Voting Participating Preferred Shares on a one-for-one basis as long as the result of such conversion does not cause the Company to cease to be a "qualified corporation" within the meaning of the Canadian Telecommunication Common Carrier Ownership and Control Regulations pursuant to the Telecommunications Act (Canada).

The Non-Voting Participating Preferred Shares have no par value.

### **Director Voting Preferred Shares**

The rights, privileges and conditions of the Director Voting Preferred Shares are identical in all respects to those of the Common Shares, except for the following:

The holders of Director Voting Preferred Shares are entitled to receive notice of and to attend all meetings of the shareholders of the Company at which directors of the Company are to be elected. The holders of the Director Voting Preferred Shares are not entitled to attend meetings of the shareholders of the Company and have no right to vote on any matter other than the election of directors of the Company.

The holders of Director Voting Preferred Shares are entitled to receive annual non-cumulative dividends of \$10 per share if declared by the Board of Directors of the Company, in priority to the payment of dividends on the Common Shares, Voting Participating Preferred Shares, Non-Voting Participating Preferred Shares, Redeemable Common Shares, and Redeemable Non-Voting Participating Preferred Shares, but after payment of any accrued dividends on the Senior Preferred Shares.

In the event of liquidation, wind-up or dissolution, the holders of Director Voting Preferred Shares are entitled to receive \$10 per share in priority to the payment of dividends on the Common Shares, Voting Participating Preferred Shares, Non-Voting Participating Preferred Shares, Redeemable Common Shares, and Redeemable Non-Voting Participating Preferred Shares, but after payment of any accrued dividends on the Senior Preferred Shares.

The Director Voting Preferred Shares are redeemable at the option of the Company, at any time, at a redemption price of \$10 per share.

The Director Voting Preferred Shares have a nominal stated value.

### 26. CAPITAL DISCLOSURES

<u>Capital Disclosures</u> CAPITAL DISCLOSURES

### 12 Months Ended Dec. 31, 2018

#### 26. CAPITAL DISCLOSURES

Telesat is a privately held company. The Company's financial strategy is designed to maintain compliance with the financial covenant under its Senior Secured Credit Facilities (Note 24), and to maximize returns to its shareholders and other stakeholders. The Company meets these objectives through regular monitoring of the financial covenant and operating results on a quarterly basis. The Company's overall financial strategy remains unchanged from 2017.

The Company defines its capital as shareholders' equity (comprising issued share capital, accumulated earnings and excluding reserves) and debt financing (comprising indebtedness and excluding deferred financing costs, prepayment option, interest rate floor and net gain on repricing/repayment as detailed in Note 24).

The Company's capital at the end of the year was as follows:

As at December 31,		2018	2017
Shareholders' equity (excluding reserves)	\$	997,307	\$1,121,090
Debt financing (excluding deferred financing costs, prepayment option, interest rate floor and net gain on repricing/repayment)	\$3	,853,883	\$3,645,195

If the Revolving Facility is drawn, the Senior Secured Credit Facilities require Telesat Canada to comply with a first lien net leverage ratio test. As at December 31, 2018, the first lien net leverage ratio was 4.02:1.00 (December 31, 2017 — 3.74:1.00), which was less than the maximum test ratio of 5.75:1.00.

The Company's operating results are tracked against budget on a regular basis, and this analysis is reviewed by senior management. The Company partly manages its interest rate risk due to variable interest rate debt through the use of interest rate swaps (Note 27).

### 27. FINANCIAL INSTRUMENTS

Financial Instruments
FINANCIAL
INSTRUMENTS

### 12 Months Ended Dec. 31, 2018

#### 27. FINANCIAL INSTRUMENTS

#### Measurement of Risks

The Company, through its financial assets and liabilities, is exposed to various risks. The following analysis provides a measurement of risks as at December 31, 2018.

Credit risk

Credit risk is the risk that a counterparty to a financial asset will default, resulting in the Company incurring a financial loss. As at December 31, 2018, the maximum exposure to credit risk is equal to the carrying value of the financial assets which totaled \$888.6 million (December 31, 2017 — \$630.0 million).

Cash and cash equivalents are invested with high quality investment grade financial institutions and are governed by the Company's corporate investment policy, which aims to reduce credit risk by restricting investments to high-grade, mainly U.S. dollar and Canadian dollar denominated investments.

The Company has credit evaluation, approval and monitoring processes intended to mitigate potential credit risks related to trade accounts receivable. The Company's standard payment terms are 30 days with interest typically charged on balances remaining unpaid at the end of standard payment terms. The Company's historical experience with customer defaults has been minimal. As at December 31, 2018, North American and International customers made up 59% and 41% of the outstanding trade receivable balance, respectively (December 31, 2017 — 39% and 61%, respectively). Anticipated bad debt losses have been provided for in the allowance for doubtful accounts. The allowance for doubtful accounts as at December 31, 2018 was \$5.1 million (December 31, 2017 — \$2.7 million).

The Company mitigates the credit risk associated with derivative instruments by entering into them with only high quality financial institutions.

Foreign exchange risk

The Company's operating results are subject to fluctuations as a result of exchange rate variations to the extent that transactions are made in currencies other than Canadian dollars. The Company's main currency exposures lie in its U.S. dollar denominated cash and cash equivalents, trade and other receivables, trade and other payables and indebtedness with the most significant impact being on the U.S. dollar denominated indebtedness. As at December 31, 2018 and 2017, the entire indebtedness was denominated in U.S. dollars. The Canadian dollar equivalent of the U.S. dollar denominated indebtedness was \$3,853.9 million and \$3,645.2 million, respectively (before netting of deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment).

In July 2016, Telesat entered into four forward foreign exchange contracts which require the Company to pay \$7.0 million Canadian dollars to receive 4.2 million British Pounds Sterling. All forward foreign exchange contracts matured by October 31, 2017.

As at December 31, 2018, the impact of a 5 percent increase (decrease) in the value of the Canadian dollar against the U.S. dollar on financial assets and liabilities would have (increased) decreased net (loss) income by \$163.9 million (December 31, 2017 — \$162.0 million) and increased (decreased) other comprehensive income (loss) by \$3.1 million (December 31, 2017 — \$0.2 million). This analysis assumes that all other variables, in particular interest rates, remain constant.

Interest rate risk

The Company is exposed to interest rate risk on its cash and cash equivalents and its indebtedness. The interest rate risk on the indebtedness is from a portion of the indebtedness having a variable interest rate. Changes in the interest rates could impact the amount of interest that the Company is required to pay or receive.

In October 2017, the Company entered into four interest rate swaps to hedge the interest rate risk associated with the variable interest rate on \$1,800.0 million of the U.S. denominated Term Loan B at fixed interest rates, excluding applicable margins, ranging from 1.72% to 2.04%. These contracts mature between September 2019 and September 2022.

If the interest rates on the unhedged variable rate indebtedness change by 0.25%, excluding the potential impact of interest rate floors, the result would be an increase or decrease to net (loss) income of \$1.8 million for the year ended December 31, 2018 (December 31, 2017 — \$6.5 million).

#### Liquidity risk

The Company maintains credit facilities to ensure it has sufficient funds available to meet current and foreseeable financial requirements.

The contractual maturities of financial liabilities as at December 31, 2018 were as follows:

	Carrying amount	Contractual cash flows (undiscounted)	2019	2020 2021		2021 2022		Thereafter	
Trade and other payables	\$ 30,659	\$ 30,659	\$ 30,659	\$ —	\$	\$ —	\$ —	\$ —	
Customer and other deposits	2,259	2,259	1,852	14	239	_	_	154	
Satellite performance incentive payments	59,895	76,506	14,401	11,446	9,959	8,959	8,057	23,684	
Other financial liabilities	5,556	5,467	3,993	476	116	116	116	650	
Indebtedness <sup>(1)</sup>	3,861,447	5,034,385	263,687	262,432	260,117	257,437	3,248,348	742,364	
	\$3,959,816	\$ 5,149,276	\$314,592	\$274,368	\$270,431	\$266,512	\$3,256,521	\$ 766,852	

(1) Indebtedness excludes deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment.

The interest payable and interest payments included in the carrying value and contractual cash flows, respectively, in the above table, were as follows:

	Interes	t payable	Intere	nterest payments		
Satellite performance incentive payments	\$	982	\$	16,943		
Other financial liabilities	\$	37	\$	37		
Indebtedness	\$	7,564	\$	1,180,502		

Financial assets and liabilities recorded on the balance sheets and the fair value hierarchy levels used to calculate those values were as follows:

As at December 31, 2018	FVTPL	Amortized cost <sup>(4)</sup>	Total	Fair value	Fair value hierarchy	
Cash and cash equivalents	<u></u> \$ —	\$ 768,433	\$ 768,433	\$ 768,433	Level 1	
Trade and other receivables	_	45,631	45,631	45,631	(3)	
Other current financial assets <sup>(1)</sup>	18,632	147	18,779	18,779	Level 1, Level 2	
Other long-term financial assets <sup>(1)</sup>	33,796	21,959	55,755	55,755	Level 1, Level 2	
Trade and other payables	_	(30,659)	(30,659)	(30,659)	(3)	
Other current financial liabilities	(6)	(26,380)	(26,386)	(29,131)	Level 2	
Other long-term financial liabilities	(5,627)	(48,894)	(54,521)	(54,733)	Level 2	

As at December 31, 2017	Loans and receivables	FVTPL		Total	Fair value	Fair value hierarchy	
Cash and cash equivalents	\$ 479,045	<u>\$</u>	\$ —	\$ 479,045	\$ 479,045	Level 1	
Trade and other receivables	64,986	_	_	64,986	64,986	(3)	
Other current financial assets <sup>(1)</sup>	2,275	162	_	2,437	2,437	Level 1, Level 2	
Other long-term financial assets <sup>(1)</sup>	18,808	64,723	_	83,531	83,531	Level 1, Level 2	
Trade and other payables	_	_	(37,919)	(37,919)	(37,919)	(3)	
Other current financial liabilities	_	(1)	(26,354)	(26,355)	(27,791)	Level 2	
Other long-term financial liabilities	_	(5,527)	(53,304)	(58,831)	(59,648)	Level 2	
Indebtedness <sup>(2)</sup>	_	_	(3,645,195)	(3,645,195)	(3,723,474)	Level 2	
	\$ 565,114	\$59,357	\$ (3,762,772)	\$(3,138,301)	\$(3,218,833)		

Other current and long-term financial assets classified as fair value through profit or loss were (1) calculated using level 2 of the fair value hierarchy. All other balances were calculated using level 1 of the fair value hierarchy.

Indebtedness excludes deferred financing costs, interest rate floor, prepayment option and net gain on

- (2) repricing/repayment (December 31, 2017 excludes deferred financing costs, interest rate floor and prepayment option).
- (3) Trade and other receivables and trade and other payables approximate fair value due to the short-term maturity of these instruments.
  - Cash and cash equivalents, trade and other receivables, other current and long-term financial assets, classified as loans and receivables under IAS 39 have been classified as amortized cost under IFRS 9.
- (4) Trade and other payables, other current and long-term financial liabilities and indebtedness classified as other financial liabilities under IAS 39 have been classified as amortized cost under IFRS 9. The change in classification did not have an impact on the measurement of the Company's financial instruments.

#### Assets pledged as security

The Senior Secured Credit Facilities are secured by substantially all of Telesat's assets excluding the assets of unrestricted subsidiaries.

#### Fair Value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market under current market conditions at the measurement date. Where possible, fair values are based on the quoted market values in an active market. In the absence of an active market, the Company determines fair values based on prevailing market rates (bid and ask prices, as appropriate) for instruments with similar characteristics and risk profiles or internal or external valuation models, such as option pricing models and discounted cash flow analysis, using observable market-based inputs.

The fair value hierarchy is as follows:

Level 1 is based on quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company can access at the measurement date.

Level 2 is based on observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially all of the full term of the assets or liabilities.

Level 3 is based on unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or

similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

Estimates of fair values are affected significantly by the assumptions for the amount and timing of estimated future cash flows and discount rates, which all reflect varying degrees of risk. Potential income taxes and other expenses that would be incurred on disposition of these financial instruments are not reflected in the fair values. As a result, the fair values are not necessarily the net amounts that would be realized if these instruments were actually settled.

The carrying amounts of cash and cash equivalents, trade and other receivables, and trade and other payables approximate fair value due to the short-term maturity of these instruments. As at December 31, 2018, cash and cash equivalents included \$425.6 million (December 31, 2017 — \$90.7 million) of short-term investments.

The fair value of the satellite performance incentive payments, included in other current and long-term financial liabilities, was determined using a discounted cash flow methodology. The calculation is performed on a recurring basis. As at December 31, 2018 and 2017, the discount rate used was 5.7%.

The fair value of the indebtedness was based on transactions and quotations from third parties considering market interest rates and excluding deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment (December 31, 2017 – excluding deferred financing costs, interest rate floor and prepayment option). The calculation of the fair value of the indebtedness is performed on a recurring basis. The rates used were as follows:

As at December 31,	2018	2017
Senior Secured Credit Facilities		
Term Loan B – U.S. Facility	94.50%	100.13%
8.875% Senior Notes	104.44%	111.83%

Fair value of derivative financial instruments

Derivatives were valued using a discounted cash flow methodology. The calculations of the fair value of the derivatives are performed on a recurring basis.

Interest rate swap future cash flows were determined based on current yield curves and exchange rates and then discounted based on discount curves.

Prepayment option cash flows were calculated with a third party option valuation model which is based on the current price of the debt instrument and discounted based on a discount curve.

Interest rate floor cash flows were calculated using the Black Scholes option valuation model in Bloomberg and discounted based on discount curves.

The discount rates used to discount cash flows as at December 31, 2018 ranged from 2.29% to 2.81% (December 31, 2017 - 1.56% to 2.31%).

The fair value of the derivative assets and liabilities was calculated based on the level 2 of the fair value hierarchy. The current and long-term portions of the fair value of the Company's derivative assets and liabilities, as at each balance sheet date, were as follows:

As at December 31, 20	Oth 18 current f ass	financial	lo fi	Other ng-term nancial assets	cu	Other urrent financial liabilities	Other long-term financial liabilities	Total
Interest rate floors	\$	_	\$	_	\$	(6)	\$ (5,627	\$ (5,633)
Interest rate swaps		18,632		16,650	)	_	_	35,282
Prepayment option		_		17,146	)	_	_	17,146
	\$	18,632	\$	33,796	\$	(6)	\$ (5,627	\$46,795
As at December 31, 20	17 Other	Other l		_	cur	Other	Other long-term	Total

assets

liabilities

financial liabilities

current

### financial assets

	as	3613			
Interest rate floors	\$	<u> </u>	<u> </u>	(1) \$	(5,527) \$ (5,528)
Interest rate swaps		162	18,945	_	— 19,107
Prepayment option			45,778	<u> </u>	45,778
	\$	162 \$	64,723 \$	(1) \$	(5,527) \$59,357

The reconciliation of the fair value of derivative assets and liabilities was as follows:

Fair value, December 31, 2016 and January 1, 2017	\$ 218
Realized losses on derivatives	
Forward foreign exchange contract	(207)
Unrealized gains on derivatives	
Interest rate floors	7,861
Prepayment option	33,018
Interest rate swaps	19,394
Forward foreign exchange contracts	240
Impact of foreign exchange	(1,167)
Fair value, December 31, 2017 and January 1, 2018	59,357
Unrealized gains (losses) on derivatives	
Interest rate floors	255
Prepayment option	(30,691)
Interest rate swaps	12,231
Impact of foreign exchange	5,643
Fair value, December 31, 2018	\$ 46,795

### 28. SHARE-BASED COMPENSATION PLANS

12 Months Ended Dec. 31, 2018

Share-based Compensation Plans
SHARE-BASED
COMPENSATION PLANS

#### 28. SHARE-BASED COMPENSATION PLANS

#### Telesat Canada Stock Incentive Plans

In September 2008 and April 2013, Telesat adopted share-based compensation plans (the "stock incentive plans") for certain key employees of the Company and its subsidiaries. The stock incentive plans provide for the grant of up to 16,553,779 options, 8,824,646 authorized in 2008, 4,036,729 authorized in 2013, 62,404 authorized in 2015, 350,000 authorized in 2017 and additional 3,280,000 in 2018, to purchase Non-Voting Participating Preferred Shares of Telesat Canada, convertible into Common Shares. Of the stock options authorized and issued in 2018, 780,000 vest over three-year period with the vesting period commencing on January 1, 2018 and 2,500,000 vest over a five-year period with the vesting period commencing on November 1, 2017.

In addition, in 2018, Telesat authorized the issuance of 200,000 restricted share units expected to be settled in Non-Voting Participating Preferred Shares. The restricted share units vest over a three-year period with a vesting period commencing on January 1, 2018.

Under the stock incentive plans, two different types of stock options can be granted: time-vesting options and performance-vesting options. The time-vesting options generally become vested and exercisable over a five-year period by 20% annual increments. The performance-vesting options become vested and exercisable over a five-year period, provided that the Company has achieved or exceeded an annual or cumulative target consolidated EBITDA established by the Board of Directors. The exercise period of the stock options expires 10 years from the grant date. The exercise price of each share underlying the options will be the higher of a fixed price, established by the Board of Directors on the grant date, and the fair market value of a Non-Voting Participating Preferred Share on the grant date. Both plans authorize the Board of Directors to grant tandem SARs, at their discretion.

In August 2017, Telesat authorized the exchange of 805,835 performance-vesting options for 805,835 time-vesting options. The exchanged amounts included 715,383 unvested performance-vesting options which were exchanged for an equal amount of unvested time-vesting options. A portion of the new unvested time-vesting options will vest upon the next anniversary date of the option holder with the remainder vesting evenly over a three-year period commencing on the sixth anniversary date.

The Company expenses the fair value of stock options that are expected to vest over the vesting period using the Black-Scholes option pricing model. The share-based compensation expense is included in operating expenses.

In January 2016, the Board approved the purchase for cancellation of up to 25% of the currently outstanding stock options. In March 2016, a total of 1,253,477 vested stock options were repurchased at fair value from key management personnel and other employees or former employees for a total cash consideration of \$24.7 million.

In connection with the \$387 million U.S. dollars cash distribution to the Company's shareholders (Note 25), effective January 25, 2017, a special payment was authorized to option holders of \$12.8 million U.S. dollars. Of this balance, \$11.3 million U.S. dollars has cumulatively been recorded as an operating expense up to December 31, 2018 (2017 - \$10.0 million U.S.), of which \$11.2 million U.S. dollars has been cumulatively paid (2017 - \$8.0 million U.S.). The remaining payments will be made in subsequent periods subject to certain conditions being met.

The change in number of stock options outstanding and their weighted average exercise price were as follows:

	Time vesting option plans		Performance vesting option plans				
	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price			
Outstanding at December							
31, 2016 and January 1, 2017	2,677,019	\$ 24.54	1,303,733	\$ 20.16			
Granted			_				
Forfeited	(15,507)		(17,638)				
Exercised (Note 25)	(3,150)		(3,850)				
Exchanged	805,835		(805,835)				
Expired	_		_				
Outstanding at December							
31, 2017 and January 1, 2018	3,464,197	\$ 24.85	476,410	\$ 11.07			
Granted	3,692,372		_				
Forfeited	(2,650)		_				
Exercised (Note 25)	(51,055)		(44,308)				
Expired	_		_				
Outstanding at December 31, 2018	7,102,864	\$ 25.56	432,102	\$ 11.07			
2018 Granted Forfeited Exercised (Note 25) Expired Outstanding at December	3,692,372 (2,650) (51,055)		(44,308)				

The movement in the number of restricted share units outstanding was as follows:

Outstanding, January 1, 2018	_
Granted	200,000
Outstanding, December 31, 2018	200,000

There were no restricted share units in 2017.

The quantity of stock options that are exercisable and the weighted average remaining life were as follows:

As at December 31,	2018	2017
Time vesting option plans	3,689,117	2,612,679
Performance vesting option plans	432,102	476,413
Weighted average remaining life	7 years	4 years

The share-based compensation expense included in the consolidated statements of (loss) income was as follows:

Years ended December 31,	 2018	 2017	2016
Operating expenses	\$ 29,505	\$ 2,856	\$ 5,770

The weighted average assumptions used to determine the share-based compensation expense for stock options using the Black-Scholes option pricing model were as follows:

	2018	2017	2016
Dividend yield	%	%	%
Expected volatility	31.7%	24.6%	24.6%
Risk-free interest rate	2.94%	1.83%	1.83%
Expected life (years)	10	10	10

The expected volatility is based on the historical volatility.

The weighted average fair va 2018 was \$13.37. There were no	alue of the stock options and stock options or restricted sha	restricted share units granted during re units granted in 2016 or 2017.	19

### 29. EMPLOYEE BENEFIT PLANS

Employee Benefit Plans
EMPLOYEE BENEFIT
PLANS

### 12 Months Ended Dec. 31, 2018

#### 29. EMPLOYEE BENEFIT PLANS

The expenses included on the consolidated statements of (loss) income and the consolidated statements of comprehensive (loss) income were as follows:

	Pension plans			Other post-employment benefit plans					fit plans
Years ended December 31,	2018	2017	2016		2018		2017		2016
Consolidated statements of (loss) income									
Operating expenses	\$ 6,345	\$ 6,239	\$ 6,235	\$	276	\$	243	\$	221
Interest expense	\$ 658	\$ 650	\$ 875	\$	830	\$	861	\$	858
Consolidated statements of comprehensive (loss) income									
Actuarial (gains) losses on employee benefit plans	\$ (4,555)	\$ 3,761	\$ (4,376)	\$	(3,200)	\$	1,410	\$	(724)

In October 2013, the Company ceased allowing new employees to join certain of the defined benefit plans, except under certain circumstances, and commenced a defined contribution pension plan for new employees.

The Company made contributions of \$0.9 million for various defined contribution arrangements during 2018 (December 31, 2017 — \$0.8 million).

The Company's funding policy is to make contributions to its defined benefit pension funds based on actuarial cost methods as permitted by pension regulatory bodies. Contributions reflect actuarial assumptions concerning future investment returns, salary projections and future service benefits. Plan assets are represented primarily by Canadian and foreign equity securities, fixed income instruments and short-term investments.

The Company provides certain health care and life insurance benefits for some of its retired employees and their dependents. Participants are eligible for these benefits generally when they retire from active service and meet the eligibility requirements for the pension plan. These benefits are funded primarily on a pay-as-you-go basis, with the retiree generally paying a portion of the cost through contributions, deductibles and coinsurance provisions.

The balance sheet obligations, distributed between pension and other post-employment benefits, included in other long-term liabilities (Note 23) were as follows:

As at December 31,	2018	2017
Pension benefits	\$ 10,905	\$ 16,169
Other post-employment benefits	 21,330	23,896
Accrued benefit liabilities	\$ 32,235	\$ 40,065

The amounts recognized in the balance sheets and the funded statuses of the benefit plans were as follows:

	20	18	20	17
As at December 31,	Pension	Other	Pension	Other
Present value of funded obligations	\$ 292,914	<u></u> \$ —	\$ 306,660	\$ —
Fair value of plan assets	(283,064)	_	(291,612)	_
	9,850		15,048	

Present value of unfunded obligations	 1,055	 21,330	 1,121	 23,896
Accrued benefit liabilities	\$ 10,905	\$ 21,330	\$ 16,169	\$ 23,896

The changes in the benefit obligations and in the fair value of plan assets were as follows:

	Pension	Other	Total
Change in benefit obligations	¢ 207 791	¢ 22.006	¢ 221 677
Benefit obligation, January 1, 2018 Current service cost	\$ 307,781 5,905	\$ 23,896	\$ 331,677 6,181
Interest expense	10,836	830	11,666
Remeasurements	10,830	630	11,000
Actuarial gains arising from plan experience	(1,018)	(701)	(1,719)
Actuarial gains from change in demographic			
assumptions	(8,363)	(1,072)	(9,435)
Actuarial gains from changes in financial			
assumptions	(13,125)	(1,427)	(14,552)
Benefits paid	(9,190)	(743)	(9,933)
Contributions by plan participants	1,146	_	1,146
Foreign exchange		297	297
Other	(3)	(26)	(29)
Benefit obligation, December 31, 2018	293,969	21,330	315,299
Change in fair value of plan assets			
Fair value of plan assets, January 1, 2018	(291,612)	_	(291,612)
Contributions by plan participants	(1,146)	_	(1,146)
Contributions by employer	(7,709)	(743)	/
Interest income	(10,178)		(10,178)
Benefits paid	9,190	743	9,933
Remeasurements	,		,
Return on plan assets, excluding interest income	17,951	_	17,951
Administrative costs	440	_	440
Fair value of plan assets, December 31, 2018	(283,064)		(283,064)
Accrued benefit liabilities, December 31, 2018	\$ 10,905	\$ 21,330	\$ 32,235
, - , - ,	<del>ψ 10,505</del>	Ψ 21,330	Ψ 32,233
	Pension	Other	Total
Change in benefit obligations	1 Chiston		10111
Benefit obligation, January 1, 2017	\$ 280,585	\$ 22.388	\$ 302,973
Current service cost	5,741	243	5,984
Interest expense	10,992	861	11,853
Remeasurements	10,552	001	11,000
Actuarial losses arising from plan experience	2,748	138	2,886
Actuarial losses from change in demographic	_,,		
assumptions	_	13	13
Actuarial losses from changes in financial	16044	1.250	17.502
assumptions	16,244	1,259	17,503
Benefits paid	(9,769)	(750)	(10,519)
Contributions by plan participants	1,168	`_	1,168
Foreign exchange	_	(246)	(246)
Other	72	(10)	62
Benefit obligation, December 31, 2017	307,781	23,896	331,677
Change in fair value of plan assets			
Fair value of plan assets, January 1, 2017	(266,255)	_	(266,255)
Contributions by plan participants	(1,168)	_	(1,168)
Contributions by employer	(8,883)	(750)	(9,633)
Interest income	(10,342)		(10,342)
Benefits paid	9,769	750	10,519
Remeasurements			
Return on plan assets, excluding interest income	(15,231)	_	(15,231)

Administrative costs	498	<u> </u>
Fair value of plan assets, December 31, 2017	(291,612)	<u>(291,612)</u>
Accrued benefit liabilities, December 31, 2017	\$ 16,169 \$	23,896 \$ 40,065

The weighted average duration of the defined benefit obligation as at December 31, 2018 is 15 years for the defined benefit pension plans and 14 years for the other post-employment benefit plans. The weighted average duration of the current service cost as at December 31, 2018 is 22 years for the defined benefit pension plans and 27 years for the other post-employment benefit plans.

The estimated future benefit payments for the defined benefit pension plans and other postemployment benefit plans until 2028 are as follows:

	P	Pension		Other
2019	\$	10,144	\$	800
2020	\$	10,608	\$	831
2021	\$	11,073	\$	863
2022	\$	11,501	\$	897
2023	\$	12,024	\$	932
2024 to 2028	\$	68,087	\$	6,124

Benefit payments include obligations to 2028 only as obligations beyond this date are not quantifiable.

The fair value of the plan assets were allocated as follows between the various types of investments:

As at December 31,	2018	2017
Equity securities		
Canada	20.8%	22.3%
United States	12.7%	14.1%
International (other than United States)	18.1%	18.9%
Fixed income instruments		
Canada	45.7%	42.6%
Cash and cash equivalents		
Canada	2.7%	2.1%

Plan assets are valued at the measurement date of December 31 each year.

The investments are made in accordance with the Statement of Investment Policies and Procedures. The Statement of Investment Policies and Procedures is reviewed on an annual basis by the Management Level Pension Fund Investment Committee with approval of the policy being provided by the Audit Committee.

The following are the significant assumptions adopted in measuring the Company's pension and other benefit obligations:

	Pension Other		Pension	Other
As at December 31,	2018	2018	2017	2017
Actuarial benefit obligation				
Discount rate	3.80%	3.80% to <sub>%</sub> 4.0	3.50%	3.25% to % 3.50
Benefit costs for the year ended				
Discount rate	3.60%	3.25% to <sub>%</sub> 3.60	4.00%	3.75% to 4.00%
Future salary growth	2.50%	N/A	2.50%	N/A
Health care cost trend rate	N/A	4.50%	N/A	4.50%
Other medical trend rates	N/A	4.50%	N/A	4.50%

For certain Canadian post-retirement benefits, the medical trend rate for drugs was assumed to be 6.50% in 2018, decreasing by 0.25% per annum to an ultimate rate of 4.50% per annum in 2026 and thereafter.

#### Sensitivity of assumptions

The calculation of the defined benefit obligation is sensitive to the assumptions set out above. The following table summarizes how the impact on the defined benefit obligation as at December 31, 2018 and 2017 would have increased or decreased as a result of the change in the respective assumptions by one percent.

		Pension				Other				
As at December 31, 2018	19	6 increase	1%	6 decrease	19	% increase	1%	decrease		
Discount rate	\$	(39,145)	\$	49,361	\$	(2,471)	\$	3,224		
Future salary growth	\$	7,572	\$	(6,919)		N/A		N/A		
Medical and dental trend rates		N/A		N/A	\$	1,703	\$	(1,280)		

		Pen	sion			Oth	ner		
As at December 31, 2017	1%	6 increase	1%	decrease	1%	ó increase	1%	decrease	
Discount rate	\$	(42,092)	\$	53,148	\$	(2,786)	\$	3,588	
Future salary growth	\$	7,988	\$	(7,457)		N/A		N/A	
Medical and dental trend rates		N/A		N/A	\$	2,165	\$	(1,663)	

The above sensitivities are hypothetical and should be used with caution. Changes in amounts based on a one percent variation in assumptions generally cannot be extrapolated because the relationship of the change in assumption to the change in amounts may not be linear. The sensitivities have been calculated independently of changes in other key variables. Changes in one factor may result in changes in another, which could amplify or reduce certain sensitivities.

The Company expects to make contributions of \$7.1 million to the defined benefit plans and \$0.4 million to the defined contribution plan of Telesat Canada during the next fiscal year.

# 30. SUPPLEMENTAL CASH FLOW INFORMATION

Supplemental Cash Flow Information
SUPPLEMENTAL CASH FLOW INFORMATION

## 12 Months Ended Dec. 31, 2018

#### 30. SUPPLEMENTAL CASH FLOW INFORMATION

Cash and cash equivalents were comprised of the following:

As at December 31,	2018	2017	2016
Cash	\$ 342,874	\$ 388,372	\$ 457,686
Short-term investments <sup>(1)</sup>	425,559	90,673	324,720
Cash and cash equivalents	\$ 768,433	\$ 479,045	\$ 782,406

(1) Consisted of short-term investments with an original maturity of three months or less or which are available on demand with no penalty for early redemption.

Income taxes paid, net of income taxes received was comprised of the following:

Years ended December 31,	2018	2017	2016
Income taxes paid	\$(109,193) \$	(85,503)	\$(122,401)
Income taxes received	2,885	22,512	1,929
	\$(106,308) \$	(62,991)	\$(120,472)

Interest paid, net of capitalized interest and interest received was comprised of the following:

Years ended December 31,	2018	2017	2016
Interest paid	\$(207,339)	\$(219,773)	\$(165,173)
Interest received	11,802	6,201	6,620
Capitalized interest	19,120	18,324	6,292
	\$(176,417)	\$(195,248)	\$(152,261)

The reconciliation of the liabilities arising from financing activities was as follows:

	Indebtedness			atellite formance icentive ayments	pital ases
Balance as at January 1, 2018	\$	3,543,377	\$	62,961	\$ 369
Debt repricing costs		(10,190)		_	_
Cash outflows		(94,951)		(9,037)	(29)
Amortization of deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment		22,497		_	_
Loss on voluntary payment (Note 24)		2,828		_	_
Gain on repricing (Note 24)		(6,901)		_	
Cumulative effect adjustment (Note 3)		(36,072)		_	
Other		_		191	
Impact of foreign exchange		303,640		4,798	29
Balance as at December 31, 2018	\$	3,724,228	\$	58,913	\$ 369
	In	debtedness		atellite formance	pital ases

		payments		
Balance as at January 1, 2017 <sup>(1)</sup>	\$ 3,856,097	\$ 75,985	\$	422
Debt issue costs	(42,867)	_		
Cash outflows	(31,620)	(8,436)	)	(30)
Amortization of deferred financing costs, interest rate floor and prepayment option	14,988			_
Other	_	18		2
Impact of foreign exchange	(253,221)	(4,606)	)	(25)
Balance as at December 31, 2017	\$ 3,543,377	\$ 62,961	\$	369

(1) Balance of the indebtedness as at January 1, 2017, included \$4,459 of accrued debt issue costs associated with the November 2016 refinancing which were paid in 2017.

	In	debtedness	Satellite performance incentive payments	Capital leases
Balance as at January 1, 2016	\$	4,063,221	\$ 87,026	\$ —
Cash outflows		(4,008,356)	(8,934)	(30)
Cash inflows		3,935,576	_	_
Amortization of deferred financing costs, interest rate floors, prepayment option and premiums		12,971	_	_
Debt issue costs	(58,141)		_	_
Accrued debt issue costs		(4,459)	_	_
Write off of debt issue costs, interest rate floors, prepayment option and premiums		41,183	_	_
Non-cash additions <sup>(1)</sup>		(16,910)	_	474
Other		(150)	573	(2)
Impact of foreign exchange		(113,297)	(2,680)	(20)
Balance as at December 31, 2016	\$	3,851,638	\$ 75,985	\$ 422

Non-cash additions for the indebtedness includes \$(25,581) relating to the interest rate floors (1) on the Senior Secured Credit Facilities and \$8,671 relating to the prepayment option on the Senior Notes.

The net change in operating assets and liabilities was comprised of the following:

As at December 31,	2018	 2017	2016
Trade and other receivables	\$ 22,056	\$ (13,272)	\$ (8,347)
Financial assets	(210)	3,975	(2,521)
Other assets	371	12,848	1,260
Trade and other payables	(4,695)	6,947	6,076
Financial liabilities	(1,026)	(13,748)	551
Other liabilities	72,317	51,502	103,618
	\$ 88,813	\$ 48,252	\$ 100,637

Non-cash investing activities were comprised of:

Years ended December 31,	ember 31, 2018		2017	2016		
Satellites, property and other equipment	\$	3,795	\$ 9,515	\$	13,776	
Intangible assets	\$	3,635	\$ (128)	\$	2,350	

# 31. COMMITMENTS AND CONTINGENT LIABILITIES

12 Months Ended
Dec. 31, 2018

Commitments And
Contingent Liabilities
COMMITMENTS AND
CONTINGENT LIABILITIES

#### 31. COMMITMENTS AND CONTINGENT LIABILITIES

The following were the Company's off-balance sheet contractual obligations as at December 31, 2018:

	2019	2020	2021	2022	2023	Th	ereafter	Total
Operating property leases	\$ 3,190	\$ 3,434	\$ 3,630	\$ 3,097	\$ 3,003	\$	17,483	\$ 33,837
Capital commitments	22,460	_	_	_	_		_	22,460
Other operating commitments	18,501	11,425	9,114	3,563	2,937		8,453	53,993
	\$44,151	\$14,859	\$12,744	\$ 6,660	\$ 5,940	\$	25,936	\$110,290

Operating property leases consisted of off-balance sheet contractual obligations for land or building usage, while capital commitments included commitments for capital projects. Other operating commitments consisted of third party satellite capacity arrangements as well as other commitments that are not categorized as operating property leases or capital commitments. The Company's off-balance sheet obligations included the future minimum payments for the non-cancellable period of each respective obligation, which have various terms and expire between 2019 to 2043. The aggregate expense related to operating property lease commitments for the year ended December 31, 2018 was \$7.3 million (December 31, 2017 — \$6.4 million, December 31, 2016 — \$6.5 million).

The Company has entered into contracts for the development of the LEO constellation and other capital expenditures. The total outstanding commitments as at December 31, 2018 were included in capital commitments.

The Company has agreements with various customers for prepaid revenue on several service agreements which take effect when the satellite is placed in service. The Company is responsible for operating and controlling these satellites. As at December 31, 2018, customer prepayments of \$503.4 million (December 31, 2017 — \$390.2 million), a portion of which is refundable under certain circumstances, were reflected in other current and long-term liabilities.

In the normal course of business, the Company has executed agreements that provide for indemnification and guarantees to counterparties in various transactions. These indemnification undertakings and guarantees may require the Company to compensate the counterparties for costs and losses incurred as a result of certain events including, without limitation, loss or damage to property, change in the interpretation of laws and regulations (including tax legislation), claims that may arise while providing services, or as a result of litigation that may be suffered by the counterparties. The nature of substantially all of the indemnification undertakings prevents the Company from making a reasonable estimate of the maximum potential amount the Company could be required to pay counterparties as the agreements do not specify a maximum amount and the amounts are dependent upon the outcome of future contingent events, the nature and likelihood of which cannot be determined at this time. Historically, the Company has not made any significant payments under such indemnifications.

Telesat and Loral have entered into an indemnification agreement whereby Loral will indemnify Telesat for tax liabilities for taxation years prior to 2007 related to Loral Skynet

operations. Likewise, Telesat will indemnify Loral for the settlement of tax receivables for taxation years prior to 2007.

#### **Legal Proceedings**

The Company frequently participates in proceedings before national telecommunications regulatory authorities. In addition, the Company may also become involved from time to time in other legal proceedings arising in the normal course of its business.

The Company is subject to audits by taxing authorities in the various jurisdictions in which it operates.

The Company is currently involved in a number of disputes with the Brazilian tax authorities who have alleged that additional taxes are owed on revenue earned by the Company for the period 2003 to 2012. The disputes relate to the Brazilian tax authorities' characterization of the Company's revenue. Additional taxes and interest of approximately \$38.9 million have been assessed by Brazilian tax authorities and the Company has challenged those assessments. The Company believes the likelihood of an unfavorable outcome in these disputes is remote and, as such, no reserve has been established.

The Canadian taxing authorities have assessed the Company for \$9 million relating to transfer pricing issues for the years 2009 and 2012. Both disputes relate to the Canadian tax authorities' repricing of certain transactions between The Company and its subsidiaries. The Company has paid 50% of the outstanding amount to formally object, which has been recorded as an other long-term asset. The Company believes the likelihood of an unfavorable outcome in these disputes is remote and, as such, no reserve has been established.

Other than the legal proceedings disclosed above, the Company is not aware of any proceedings outstanding or threatened as of the date hereof by or against it or relating to its business which may have, or have had in the recent past, significant effects on the Company's financial position or profitability.

#### 32. SUBSIDIARIES

### 12 Months Ended Dec. 31, 2018

SUBSIDIARIES

#### 32. SUBSIDIARIES

The list of significant companies included in the scope of consolidation as at December 31, 2018 was as follows:

Company	Country	Method of Consolidation	% voting rights
Infosat Communications LP	Canada	Fully consolidated	100
Telesat Spectrum General Partnership	Canada	Fully consolidated	100
10680451 Canada Inc.	Canada	Fully consolidated	100
Skynet Satellite Corporation	United States	Fully consolidated	100
Telesat Network Services, Inc.	United States	Fully consolidated	100
The SpaceConnection Inc.	United States	Fully consolidated	100
Telesat Satellite LP	United States	Fully consolidated	100
Infosat Able Holdings, Inc.	United States	Fully consolidated	100
Telesat Brasil Capacidade de Satélites Ltda.	Brazil	Fully consolidated	100
Telesat (IOM) Limited	Isle of Man	Fully consolidated	100
Telesat International Limited	United Kingdom	Fully consolidated	100

Apart from 10680451 Canada Inc. which was incorporated in 2018, the percentage of voting rights and method of consolidation were the same as at December 31, 2017.

### 33. RELATED PARTY TRANSACTIONS

Related Party Transactions
RELATED PARTY
TRANSACTIONS

### 12 Months Ended Dec. 31, 2018

#### 33. RELATED PARTY TRANSACTIONS

The Company's immediate shareholders are Red Isle Private Investment Inc. ("Red Isle"), a company incorporated in Canada, Loral Holdings Corporation ("Loral Holdings"), a company incorporated in the United States and various individuals. Red Isle is wholly-owned by PSP Investments, a Canadian Crown corporation. Loral Holdings is a wholly-owned subsidiary of Loral, a United States publicly listed company.

#### Transactions with subsidiaries

The Company and its subsidiaries regularly engage in inter-group transactions. These transactions include the purchase and sale of satellite services and communications equipment, providing and receiving network and call centre services, access to orbital slots and management services. The transactions have been entered into over the normal course of operations. Balances and transactions between the Company and its subsidiaries have been eliminated on consolidation and therefore have not been disclosed.

#### Special cash distribution

Effective January 25, 2017, the Board of Directors approved a special cash distribution to shareholders, as a reduction of stated capital, in the amount of approximately \$387.2 million U.S. dollars. Of this balance, \$138.5 million U.S. dollars were paid to Red Isle, \$242.7 million U.S. dollars were paid to Loral Holdings, with the remainder paid to various individuals. These distributions were made during the first quarter of 2017.

#### Compensation of executives and Board level directors

2018		2017			2016
\$	16,853	\$	10,037	\$	6,751
	2,904		9,006		_
	2,510		2,458		2,344
	29,016		2,820		5,482
\$	51,283	\$	24,321	\$	14,577
	\$	\$ 16,853 2,904 2,510 29,016	\$ 16,853 \$ 2,904 2,510 29,016	\$ 16,853 \$ 10,037 2,904 9,006 2,510 2,458 29,016 2,820	\$ 16,853 \$ 10,037 \$ 2,904 9,006 2,510 2,458 29,016 2,820

(1) Balance relates to the special cash distribution effective January 25, 2017.

#### **Key management personnel** — stock options

In March 2016, a total of 1,253,477 vested stock options were repurchased at fair value from key management personnel and other employees or former employees for a total cash consideration of \$24.7 million, of which \$18.7 million was paid to key management personnel.

In August 2017, Telesat authorized the exchange of 805,835 performance-vesting options for 805,835 time-vesting options, of which 682,550 options related to key management personnel. The exchanged amounts included 715,383 unvested performance-vesting options which were exchanged for an equal amount of unvested time-vesting options, of which 613,316 unvested options related to key management personnel. A portion of the new unvested time-vesting options will vest upon the next anniversary date of the option holder with the remainder vesting evenly over a three-year period commencing on the sixth anniversary date.

In June 2018, 95,363 stock appreciation rights were exercised by a member of key management personnel for 39,488 Non-Voting Participating Preferred shares, on a net settlement basis.

During 2018, Telesat issued 3,630,000 time-vesting options to certain key management personnel. Of this balance, 2,850,000 options vest over a five-year period, while 780,000 vest over a three-year period. In addition, 200,000 restricted share units were granted during 2018 which vest over a three-year period and are expected to be settled with Non-Voting Participating Preferred shares.

#### Transactions with related parties

The Company and certain of its subsidiaries regularly engage in transactions with related parties. The Company's related parties include Loral and Red Isle. The transactions have been entered into over the normal course of operations. There were no transactions or balances with Red Isle during any of the years presented.

During the years presented below, the Company and its subsidiaries entered into the following transactions with Loral.

	Sale of goods and services, interest income				P		_	oods and st expen	rvices,	
Years ended December 31	, $\overline{}$			017	 2016	_	2018		2017	2016
Revenue	\$	128	\$	128	\$ 133	\$		\$		\$ 
Operating expenses	\$	_	\$	_	\$ _	\$	6,456	\$	6,518	\$ 6,627

The following balances were outstanding with Loral at the end of the years presented below:

		Amounts owed by related parties		ts owed to I parties
At December 31,	2018	2017	2018	2017
Current receivables/payables	\$ 28	\$ 82	\$ —	<u>\$</u>

The amounts outstanding are unsecured and will be settled in cash.

#### Other related party transactions

The Company funds certain defined benefit pension plans. Contributions made to the plans for the year ended December 31, 2018 were \$7.7 million (December 31, 2017 — \$8.9 million).

### 4. SIGNIFICANT **ACCOUNTING POLICIES**

(Policies)

12 Months Ended Dec. 31, 2018

**Significant Accounting Policies** 

Segment Reporting

#### Segment Reporting

The Company operates in a single industry segment, in which it provides satellite-based services to its broadcast, enterprise and consulting customers around the world. Operating segments are reported in a manner consistent with the internal reporting provided to the Company's Chief Operating Decision Maker, who is the Company's Chief Executive Officer. To be reported, a segment is usually based on quantitative thresholds but can also encompass qualitative factors management deems significant.

#### Foreign Currency Translation

#### Foreign Currency Translation

Unless otherwise specified, all figures reported in the consolidated financial statements and associated note disclosures are presented in Canadian dollars, which is the functional and presentation currency of the Company. Each of the subsidiaries of the Company determines its own functional currency and uses that currency to measure items on their separate financial statements.

For the Company's non-foreign operations, foreign currency non-monetary assets and liabilities are translated at their historical exchange rates, foreign currency monetary assets and liabilities are translated at the year end exchange rates, and foreign denominated revenue and expenses are translated at the average exchange rates of the month in which the transactions occurred. Gains or losses on translation of these items are recognized as a component of net (loss) income.

Upon consolidation of the Company's foreign operations that have a functional currency other than the Canadian dollar, assets and liabilities are translated at the year end exchange rate, and revenue and expenses are translated at the average exchange rates of the month in which the transactions occurred. Gains or losses on the translation of foreign subsidiaries are recognized in other comprehensive income (loss).

#### Cash and Cash Equivalents

#### Cash and Cash Equivalents

All highly liquid investments with an original maturity of three months or less, or which are available upon demand with no penalty for early redemption, are classified as cash and cash equivalents. Cash and cash equivalents are comprised of cash on hand, demand deposits, shortterm investments and restricted cash expected to be used within the next twelve months.

#### Revenue Recognition

#### Revenue Recognition

Telesat recognizes revenue from satellite services on a monthly basis as services are performed in an amount that reflects the consideration the Company expects to receive in exchange for those services. Telesat accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability is considered probable.

Revenue from a contract to sell consulting services is recognized as follows:

- Consulting revenue for cost plus contracts is recognized as the approved time and labour is completed by Telesat.
- The percentage of completion method is used for fixed price consulting revenue contracts. The percentage completion method is measured by comparing actual cost incurred to total cost expected.

Equipment sale revenue is recognized when the customer obtains control of the equipment, being at the time the equipment is delivered to and accepted by the customer. Only equipment sales are subject to warranty or return and there is no general right of return. Historically, the Company has not incurred significant expenses for warranties.

When a transaction involves more than one product or service, revenue is allocated to each performance obligation based on its relative stand-alone selling price. Transactions are evaluated to determine whether the Company is the principal and if the transactions should be recorded on a gross or net basis.

#### **Deferred Revenue**

#### Deferred Revenue

Deferred revenue represents the Company's liability for the provision of future services and is classified on the balance sheet in other current and long-term liabilities. Deferred revenue consists of remuneration received in advance of the provision of service and in the majority of cases is recognized in income on a straight-line basis over the term of the related customer contracts. In the case of certain deferred revenue for short-term services, balances are recognized into income upon the completion or percentage completion of the related contract. Prepayments are evaluated to determine whether or not they constitute a significant financing component. The Company has elected a practical expedient whereby if the timing difference between the customer prepayment and the transfer of control of the promised goods and services is less than a year then it would not be considered as a significant financing component.

A significant financing component will only occur in the following circumstances:

- There is a timing difference between when the control of goods or services is transferred to the customer and when the customer pays for the goods;
- The timing difference between the customer prepayment and transfer of control of the promised goods and services is in excess of one year; and
- The primary reason for the prepayment is for financing purposes.

In the case of the existence of a significant financing component, the amount of the consideration is adjusted to reflect what the cash selling price of the promised service would have been if payments had occurred as control of the service was transferred to the customer. The discount rate used in determining the significant financing component is the rate that would be reflected in a separate financing transaction between the Company and the customer at contract inception.

#### **Borrowing Costs**

#### **Borrowing Costs**

Borrowing costs are incurred on the Company's debt financing. Borrowing costs attributable to the acquisition, production or construction of a qualifying asset are added to the cost of that asset. The Company has defined a qualifying asset as an asset that takes longer than twelve months to be ready for its intended use or sale. Capitalization of borrowing costs continues until such time that the asset is substantially ready for its intended use or sale. Borrowing costs are determined based on specific financing related to the asset, or in the absence of specific financing, the borrowing costs are calculated on the basis of a capitalization rate which is equal to the Company's weighted average cost of debt. All other borrowing costs are expensed when incurred.

### Satellites, Property and Other Equipment

#### Satellites, Property and Other Equipment

Satellites, property and other equipment, which are carried at cost, less accumulated depreciation and any accumulated impairment losses, include the contractual cost of equipment, capitalized engineering costs, capitalized borrowing costs during the construction or production of qualifying assets, and with respect to satellites, the cost of launch services, and launch insurance.

Depreciation is calculated using the straight-line method over the respective estimated useful lives of the assets.

Below are the estimated useful lives in years of satellites, property and other equipment as at December 31, 2018.

	Years
Satellites	12 to 15
Property and other equipment	3 to 30

Construction in progress is not depreciated as depreciation only commences when the asset is ready for its intended use. For satellites, depreciation commences on the day the satellite becomes available for service.

The investment in each satellite will be removed from the accounts when the satellite is retired. When other property is retired from operations at the end of its useful life, the cost of the asset and accumulated depreciation are removed from the accounts. Earnings are credited with the amount of any net salvage value and charged with any net cost of removal. When an asset is sold prior to the end of its useful life, the gain or loss is recognized immediately in other operating gains (losses), net.

In the event of an unsuccessful launch or total in-orbit satellite failure, all unamortized costs that are not recoverable under launch or in-orbit insurance are recorded in other operating gains (losses), net.

Liabilities related to decommissioning and restoration of retiring property and other equipment are measured at fair value with a corresponding increase to the carrying amount of the related asset. The liability is accreted over the period of expected cash flows with a corresponding charge to interest expense. The liabilities recorded to date have not been significant and are reassessed at the end of each reporting period. There are no decommissioning or restoration obligations for satellites.

#### Satellite Performance Incentive Payments

Satellite performance incentive payments are obligations payable to satellite manufacturers over the lives of certain satellites. The present value of the payments are capitalized as part of the cost of the satellite and recognized as part of the depreciation of the satellite.

#### Impairment of Long-Lived Assets

Tangible fixed assets and finite life intangible assets are assessed for impairment on an annual basis or more frequently when events or changes in circumstances indicate that the carrying value of an asset exceeds the recoverable amount. Tangible fixed assets and finite life intangible assets are also assessed for indicators of impairment at each reporting period.

In cases where there are indicators of impairment, the recoverable amount of the asset, which is the higher of its fair value less costs of disposal and its value in use, is determined. If it is not practicable to measure the recoverable amount for a particular asset, the Company determines the recoverable amount of the cash generating unit ("CGU") with which it is associated. A CGU is the smallest identifiable group of assets that generates cash inflows which are largely independent of the cash inflows from other assets or groups of assets.

The Company measures value in use on the basis of the estimated future cash flows to be generated by an asset or CGU. These future cash flows are based on the Company's latest business plan information approved by senior management and are discounted using rates that best reflect the time value of money and the specific risks associated with the underlying asset or assets in the CGU.

The fair value less costs of disposal is the price that would be received to sell an asset or CGU in an orderly transaction between market participants at the measurement date. For the impairment assessment, the fair value is calculated on a recurring basis and is calculated using level 3 of the fair value hierarchy.

Satellite Performance Incentive Payments

Impairment of Long-Lived Assets

### Goodwill and Intangible Assets

An impairment loss is the amount by which the carrying amount of an asset or CGU exceeds its recoverable amount. When an impairment loss subsequently reverses, the carrying amount of the asset (or a CGU) is increased to the revised measure of its recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or CGU) in prior years. Impairment losses and reversals of impairment losses are recognized in other operating gains (losses), net.

#### Goodwill and Intangible Assets

The Company accounts for business combinations using the acquisition method of accounting, which establishes specific criteria for the recognition of intangible assets separately from goodwill. Goodwill represents the excess between the total of the consideration transferred over the fair value of net assets acquired. After initial recognition at cost, goodwill is measured at cost less any accumulated impairment losses.

The Company distinguishes intangible assets between assets with finite and indefinite useful lives. Intangible assets with indefinite useful lives are comprised of the Company's trade name, intellectual property, and orbital slots. These assets are carried at cost less any accumulated impairment losses. Finite life intangible assets, which are carried at cost less accumulated amortization and any accumulated impairment losses, consist of revenue backlog, customer relationships, customer contracts, concession rights, transponder rights and patents. Intangible assets with finite lives are amortized over their estimated useful lives using the straight-line method of amortization, except for revenue backlog which is based on the expected period of recognition of the related revenue.

Below are the estimated useful lives in years of the finite life intangible assets as at December 31, 2018.

	Years
Revenue backlog	12 to 17
Customer relationships	6 to 21
Customer contracts	5 to 15
Concession rights	1 to 15
Transponder rights	16
Patents	18

#### of Goodwill and Impairment of Goodwill and Indefinite Life Intangible Assets

An assessment for impairment of goodwill and indefinite life intangible assets is performed annually, or more frequently whenever events or changes in circumstances indicate that the carrying amounts of these assets are likely to exceed their recoverable amount. Goodwill is tested for impairment at the entity level as this represents the lowest level within the Company at which the goodwill is monitored for internal management purposes, and is not larger than an operating segment. Indefinite life intangible assets have not been allocated to any CGU and are tested for impairment at the asset level.

Goodwill and indefinite life intangible assets are qualitatively assessed for indicators of impairment.

If the qualitative assessment concludes an indication of impairment, a quantitative impairment test is performed. A quantitative impairment test consists of assessing the recoverable amount of an asset, which is the higher of its fair value less costs of disposal and its value in use. For the quantitative impairment assessment, fair value is calculated on a recurring basis and is calculated using level 2 or level 3 of the fair value hierarchy depending on the valuation approach being utilized.

#### Orbital Slots

In performing the quantitative orbital slot impairment analysis, the Company determines, for each orbital slot, its fair value less costs of disposal, and its value in use on an annual basis. The

Impairment of Goodwill and Indefinite Life Intangible Assets

higher of these two amounts is determined to be the recoverable amount. To the extent that the recoverable amount is less than the carrying value of the asset, an impairment exists and the asset is written down to its recoverable amount.

The key assumptions used in estimating the recoverable amounts of the orbital slots include:

- i) the market penetration leading to revenue growth;
- ii) the profit margin;
- iii) the duration and profile of the build-up period;
- iv) the estimated start-up costs and losses incurred during the build-up period; and
- v) the discount rate.

Fair value less costs of disposal is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. In order to determine the fair value less costs of disposal, the Company uses either a market or income approach. Under a market approach, the Company measures what an independent third party would pay to purchase the orbital slot by looking to actual market transactions for similar assets. Under an income approach, the fair value is determined to be the sum of the projected discounted cash flows over a discrete period of time in addition to the terminal value.

The value in use amount is the present value of the future cash flows expected to be derived from the asset. The determination of this amount includes projections of cash inflows from the continuing use of the asset and cash outflows that are required to generate the associated cash inflows. These cash inflows are discounted at an appropriate discount rate.

#### Goodwill

In performing the quantitative goodwill impairment analysis, the Company assesses the recoverable amount of goodwill using the income approach as well as the market approach in the determination of the fair value of goodwill at the entity level.

Under the income approach, the sum of the projected discounted cash flows for the next five years, or a longer period if justified by the most recent financial plan approved by management, in addition to a terminal value are used to determine the fair value at the entity level. In this model, significant assumptions used include: revenue, expenses, capital expenditures, working capital, costs of disposal, terminal growth rate and discount rate.

Under the market approach, the fair value at the entity level is determined based on market multiples derived from comparable public companies. As part of this analysis, assumptions are made regarding the comparability of selected companies including revenue, earnings before interest, taxes, depreciation and amortization multiples for valuation purposes, growth rates, size and overall profitability.

Under both approaches, all assumptions used are based on management's best estimates. The discount rates are consistent with external sources of information.

#### Trade Name

For the purposes of quantitative impairment testing, the fair value of the trade name is determined using an income approach, specifically the relief from royalties method.

The relief from royalties method is comprised of two major steps:

i) a determination of the hypothetical royalty rate; and

ii) the subsequent application of the royalty rate to projected revenue.

In determining the hypothetical royalty rate in the relief from royalties method, the Company considered comparable license agreements, operating earnings benchmarks, an excess earnings analysis to determine aggregate intangible asset earnings, and other qualitative factors. The key assumptions used include the tax and discount rates.

#### Intellectual Property

In performing the quantitative intellectual property impairment analysis, the Company determines its fair value less costs of disposal, and its value in use on an annual basis. The higher of these two amounts is determined to be the recoverable amount. To the extent that the recoverable amount is less than the carrying value of the asset, an impairment exists and the asset is written down to its recoverable amount.

The Company measures value in use on the basis of the estimated future cash flows to be generated by an asset. These future cash flows are based on the Company's latest business plan information approved by senior management and are discounted using rates that best reflect the time value of money and the specific risks associated with the underlying asset.

Fair value less costs of disposal is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. In order to determine the fair value less costs of disposal, the Company uses a market approach. Under a market approach, the Company measures what an independent third party would pay to purchase the intellectual property.

#### Financial Instruments

Financial assets are initially recognized at fair value. Financial assets are measured using one of three measurement approaches (fair value through profit or loss ("FVTPL"), fair value through other comprehensive income ("FVTOCI"), or amortized cost). A financial asset is measured at amortized cost if it is not designated as FVTPL, it is held within a business model whose objective is to hold assets to collect contractual cash flows and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. A debt investment is measured at FVTOCI if it is not designated at FVTPL, it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amounts outstanding. On initial recognition of an equity investment that is not held for trading, the Company may irrevocably elect to present subsequent changes in the investment's fair value in OCI. This election is made on an investment by investment basis. All financial assets not classified as measured at amortized cost or FVTOCI as described above are measured at FVTPL.

The following accounting policies apply to the subsequent measurement of the Company's financial assets:

- Amortized cost: The financial assets are subsequently measured at amortized cost in
  accordance with the effective interest method. The amortized cost is reduced by any impairment losses; and
- FVTPL: These financial assets are subsequently measured at fair value with changes
   in fair value recorded in the consolidated statement of (loss) income as part of (loss) gain on changes in fair value of financial instruments.

Financial liabilities are initially measured at fair value. Financial liabilities are classified as amortized cost or FVTPL. Financial liabilities that are classified as amortized cost are measured and recorded at amortized cost in accordance with the effective interest method. Financial liabilities classified as FVTPL are subsequently measured at fair value with changes in fair value

#### Financial Instruments

recorded in the consolidated statement of (loss) income as part of the (loss) gain on changes in fair value of financial instruments.

The Company has used derivative financial instruments to manage its exposure to foreign exchange risk associated with debt denominated in foreign currencies, as well as to reduce its exposure to interest rate risk associated with debt. Currently, the Company does not designate any of its derivative financial instruments as hedging instruments for accounting purposes. All realized and unrealized gains and losses on these derivative financial instruments are recorded in the consolidated statement of (loss) income as part of (loss) gain on changes in fair value of financial instruments.

Derivatives, including embedded derivatives that must be separately accounted for, are recorded at fair value on the consolidated balance sheet at inception and marked to market at each reporting period thereafter. Derivatives embedded in financial liabilities and other non-financial instrument contracts are treated as separate derivatives when their risk and characteristics are not closely related to those of the host contract and the host contract is measured separately according to its characteristics. The Company accounts for embedded foreign currency derivatives and the related host contract as a single instrument where the contract requires payments denominated in the currency that is commonly used in contracts to procure non-financial items in the economic environment in which the Company transacts.

Transaction costs for instruments classified as FVTPL are expensed as incurred. Transaction costs that are directly attributable to the acquisition of financial assets and liabilities (other than FVTPL) are added or deducted from the fair value of the financial asset or financial liability on initial recognition.

The Company's financial assets classified as amortized cost and contract assets are subject to impairment requirements. The Company has elected to measure loss allowances for trade receivables and other contract assets at an amount equal to lifetime expected credit loss. The lifetime expected credit losses are the expected credit losses that result from possible default events over the expected life of the instrument.

#### Financing Costs

The debt issuance costs related to the Senior Secured Credit Facility and the Senior Notes are included in current and long-term indebtedness and are amortized to interest expense using the effective interest method. All other debt issuance costs are accounted for as short-term and long-term deferred charges and are included in prepaid expenses and other current assets and other long-term assets. The deferred charges are amortized to interest expense on a straight-line basis over the term of the indebtedness to which they relate.

#### Employee Benefit Plans

Telesat maintains one contributory and three non-contributory defined benefit pension plans which provide benefits based on length of service and rate of pay. Two of these defined-benefit plans were closed to new members in 2013. Telesat is responsible for adequately funding the defined benefit pension plans. Contributions are made based on actuarial cost methods that are permitted by pension regulatory bodies and reflect assumptions about future investment returns, salary projections and future service benefits. Telesat also provides other post-employment and retirement benefits, including health care and life insurance benefits on retirement and various disability plans, worker's compensation and medical benefits to former or inactive employees, their beneficiaries and covered dependents, after employment but before retirement, under certain circumstances. In addition, Telesat provides defined contribution pension plans, under certain circumstances, for employees who are not eligible for the defined benefit pension plans. Costs for defined contribution pension plans are recognized as an expense during the year in which the employees have rendered service entitling them to the Company's contribution.

The Company accrues the present value of its obligations under employee benefit plans and the related costs reduced by the fair value of plan assets. Pension costs and other retirement benefits are determined using the projected unit credit method prorated on service and

#### **Financing Costs**

#### **Employee Benefit Plans**

management's best estimate of expected investment performance, salary escalation, retirement ages of employees and expected health care costs.

Pension plan assets are valued at fair value. The discount rate is based on the market interest rate of high quality bonds and is consistent with guidance described by Canadian Institute of Actuaries in June 2018 in the Revised Educational Note. Past service costs arising from plan amendments are recognized immediately to the extent that the benefits are already vested, and otherwise are amortized on a straight-line basis over the average remaining vesting period. A valuation is performed at least every three years to determine the present value of the accrued pension and other retirement benefits.

Remeasurements arising from defined benefit pension plans comprise actuarial gains and losses and the return on plan assets (excluding interest). Telesat recognizes them immediately in other comprehensive income (loss), which is included in accumulated earnings, in the year in which they occur.

The current service costs and administration fees not related to asset management are included in operating expenses. The net interest expense (income) on the net defined benefit liability (asset) for the period is calculated by applying the discount rate used to measure the defined benefit obligation at the beginning of the year to the net defined benefit liability (asset) at the beginning of the year while taking into account any changes in the net defined benefit liability (asset) during the year as a result of contributions and benefit payments. The net interest expense (income) is included in interest expense.

The pension expense for 2018 was determined based on membership data as at December 31, 2016. The accrued benefit obligation as at December 31, 2018 was determined based on the membership data as at December 31, 2017, and extrapolated one year based on December 31, 2018 assumptions. For certain Canadian post-retirement benefits, the expense for 2018 was based on membership and eligibility data as at September 30, 2015 and the accrued benefit obligations as at December 31, 2018 was based on membership data as at September 30, 2018. For certain American post-retirement benefits, the expense for 2018 was based on membership and eligibility data as at January 1, 2018. The accrued benefit obligation for certain American post-retirement benefits as at December 31, 2018 was determined based on membership data as at January 1, 2018, and extrapolated, based on December 31, 2018 assumptions. The most recent valuation of the pension plans for funding purposes was as of December 31, 2017. Valuations will be performed for the pension plans as of December 31, 2018.

Telesat also provides health care and life insurance benefits for certain retired employees. These benefits are funded primarily on a pay-as-you-go basis, with the retiree paying a portion of the cost through contributions, deductibles and co-insurance provisions. Commencing in 2015, as a result of an amendment to one of the plans, Telesat has contributed to a health reimbursement account instead of providing the health care and life insurance benefits directly to certain retired employees.

#### Share-Based Compensation Plans

The Company offers equity-settled share-based compensation plans for certain key employees under which it receives services from employees in exchange for equity instruments of the Company. The expense is based on the fair value of the awards granted using the Black-Scholes option pricing model. The expense is recognized over the vesting period, which is the period over which all of the specified vesting conditions are satisfied, with a corresponding increase in equity. For awards with graded vesting, the fair value of each tranche is recognized over the respective vesting period with a significant higher proportionate amount of the total expense being recognized earlier in the vesting period.

#### Restricted Share Units

For each restricted share unit ("RSU"), an expense is recorded over the vesting period equal to the fair value of the Non-Voting Participating Preferred shares with a corresponding increase in equity. For awards with graded vesting, the fair value of each tranche is recognized over the

#### <u>Share-Based Compensation</u> <u>Plans</u>

#### **Restricted Share Units**

#### **Income Taxes**

respective vesting period with a significant higher proportionate amount of the total expense being recognized earlier in the vesting period. RSU's are expected to be settled in Non-Vesting Participating Preferred shares of Telesat.

#### Income Taxes

Income tax expense, comprised of current and deferred income tax, is recognized in income except to the extent it relates to items recognized in other comprehensive income (loss) or equity, in which case the income tax expense is recognized in other comprehensive income (loss) or equity, respectively.

Current income tax is measured at the amount expected to be paid to the taxation authorities, net of recoveries, based on the tax rates and laws enacted or substantively enacted as at the balance sheet date.

Deferred taxes are the result of temporary differences arising between the tax bases of assets and liabilities and their carrying amount. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period when the asset is realized or the liability is settled, based on tax rates and laws that have been enacted or substantively enacted at the balance sheet date. Deferred tax assets are recognized for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that the deferred tax assets will be realized. Unrecognized deferred tax assets are reassessed at each balance sheet date and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax assets to be recovered.

Deferred tax assets are netted against the deferred tax liabilities when they relate to income taxes levied by the same taxation authority on either:

- i) the same taxable entity; or
- different taxable entities which intend to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period
- in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Deferred tax liabilities are recognized for all taxable temporary differences except when the deferred tax liability arises from the initial recognition of goodwill or the initial recognition of an asset or liability in a transaction which is not a business combination. For taxable temporary differences associated with investments in subsidiaries, a deferred tax liability is recognized unless the parent can control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

#### Future Changes in Accounting Future Changes in Accounting Policies **Policies**

The IASB periodically issues new and amended accounting standards. The new and amended standards determined to be applicable to the Company are disclosed below. The remaining new and amended standards have been excluded as they are not applicable.

Leases

IFRS 16, Leases ("IFRS 16") was issued by the IASB in January 2016, and will replace IAS 17, Leases and related interpretations on leases. IFRS 16 will require a lessee to recognize a rightof-use asset and lease liability for all leases with a term of more than 12 months. The standard will also require that the depreciation of the lease assets be recorded separately from the interest on the lease liabilities in the statement of income. For lessors, IFRS 16 substantially carries forward the requirements of IAS 17.

Companies can elect to use either a retrospective approach with a restatement of comparative information or a modified retrospective approach with the cumulative effect of initial application shown in retained earnings instead of the restatement of the comparative information. The Company has elected to use a modified retrospective approach on adoption.

Based on the evaluations to date, the Company has identified the following areas that will be affected:

A material amount will be required to be recognized for contracts that Telesat has entered into as the lessee. Telesat anticipates that this will result in an increase in satellites, property and other equipment and other current and long-term liabilities as at January 1, 2019. On the balances to be capitalized on January 1, 2019, going forward this will result in lower operating expenses and higher interest and depreciation expenses; and

· Additional disclosure will be required for the new standard.

This standard is effective for annual periods beginning on or after January 1, 2019. The Company has not yet finalized the quantification of the above noted impacts of this adoption as it continues to evaluate the impact of IFRS 16 and emerging guidance.

Income taxes

IFRIC 23, *Uncertainty over Income Taxes Treatments* was issued by the IASB in June 2017. The interpretation clarifies how to apply the recognition and measurement requirements in IAS 12, *Income Taxes* when there is uncertainty over income tax treatments. This interpretation is effective for annual reporting periods beginning on or after January 1, 2019. This interpretation is not expected to have an impact on the Company's consolidated financial statements.

#### 3. CHANGES IN ACCOUNTING POLICIES (Tables)

#### **Changes In Accounting Policies**

Schedule of effect, increases (decreases), of adopting these accounting standards on the balances of the balance sheet

# 12 Months Ended Dec. 31, 2018

The following table summarizes the effect, increases (decreases), of adopting these accounting standards on the balances of the balance sheet as at January 1, 2018.

(in thousands of Canadian dollars)	IF	RS	15	I	FRS 9		To	tal
Deferred tax assets	\$	1,2	263	\$	93	\$	1	,356
Satellites, property and other equipment	\$	(	395	\$	_	\$		395
Other current liabilities	<b>o</b> ′	21/	007	Φ	_	Ф	21	007
Other current habilities	Φ.	۷1,۱	JU /	Ф	_	Ф	<i>Z</i> I	,007
Current indebtedness	\$		_	\$	(5,549)	\$	(5	,549)
Long-term indebtedness	\$		—	\$(	(30,523)	\$(	30	,523)
Deferred tax liabilities	\$(2	21,0	676)	\$	9,599	\$(	12	,077)
Other long-term liabilities	\$ (	67,0	087	\$	_	\$	67	,087
	Φ.	C	202)	Φ	26.566	Φ.	20	<b>51</b> ()
Accumulated earnings	\$(	03,0	J82)	<b>3</b>	26,566	2(	38	,316)
Reserves	\$	3	322	\$	_	\$		322

Schedule of impact on financial statements

The impact on the balance sheet as at December 31, 2018 and the statement of loss, statement of other comprehensive loss and statement of cash flows for the year ended December 31, 2018 have been summarized below:

Balance sheet as at December 31, 2018

(in thousands of Canadian dollars)	r	As eported	ac	IFRS 15 ljustments	alance without the loption of IFRS 15
Satellites, property and other equipment	\$1	,703,039	\$	2,989	\$ 1,700,050
Deferred tax assets	\$	10,799	\$	2,637	\$ 8,162
Other current liabilities	\$	113,289	\$	15,046	\$ 98,243
Deferred tax liabilities	\$	406,900	\$	(16,021)	\$ 422,921
Other long-term liabilities	\$	435,518	\$	60,978	\$ 374,540
Accumulated earnings	\$	843,601	\$	(54,699)	\$ 898,300
Reserves	\$	95,678	\$	322	\$ 95,356

Statement of loss for the year ended December 31, 2018

(in thousands of Canadian dollars)	As reported	IFRS 15 adjustments	Balance without the adoption of IFRS 15		
Revenue	\$ 902,932	\$ 19,512	\$ 883,420		

Operating expenses	\$(185,827) \$	20,558 \$	(206,385)
Depreciation	\$(224,851) \$	160 \$	(225,011)
Depreciation	Ψ(224,031) ψ	100 ψ	(223,011)
Operating income	\$ 468,692 \$	40,230 \$	428,462
Interest expense	\$(237,786) \$	(25,328) \$	(212,458)
microst expense	Ψ(237,700) Ψ	(23,320) \$	(212, 130)
Loss before tax	\$ (29,880) \$	14,902 \$	(44,782)
Tax expense	\$ (61,056)\$	(4,301) \$	(56,755)
_			
Net loss	\$ (90,936) \$	10,601 \$	(101,537)

Statement of comprehensive loss for the year ended December 31, 2018

(in thousands of Canadian dollars)	As reported	IFRS 15 adjustments	Balance without the adoption of IFRS 15		
Net loss	\$ (90,936)	\$ 10,601	\$ (101,537)		
Foreign currency translation adjustments	\$ 44,459	\$ (217)	\$ 44,676		
Other comprehensive income	\$ 50,183	\$ (217)	\$ 50,400		
Total comprehensive loss	\$ (40,753)	\$ 10,384	\$ (51,137)		

Statement of cash flows for the year ended December 31, 2018

(in thousands of Canadian dollars)	As reported	IFRS 15 adjustments	Balance without the adoption of IFRS 15
Cash flows from operating activities			
Net loss	\$ (90,936)	\$ 10,601	\$ (101,537)
Adjustments to reconcile net loss to cash flows from operating activities			
Depreciation	\$ 224,851	\$ (160)	\$ 225,011
Tax expense	\$ 61,056	\$ 4,301	\$ 56,755
Interest expense	\$ 237,786	\$ 25,328	\$ 212,458
Other	\$ (91,580)	\$ (40,070)	\$ (51,510)
Interest paid, net of capitalized interest and interest received	\$(176,417)	\$ 2,046	\$ (178,463)
Net cash from operating activities	\$ 466,297	\$ 2,046	\$ 464,251

Cash flows used in investing activities			
Satellite programs, including capitalized interest	\$ (67,387) \$	(2,046) \$	(65,341)
Net cash used in investing activities	\$(103,307) \$	(2,046) \$	(101,261)

#### 4. SIGNIFICANT ACCOUNTING POLICIES (Tables)

#### **Significant Accounting Policies**

Schedule of estimated useful lives in years of satellites, property and other equipment

Schedule of estimated useful lives in years of finite life intangible assets

## 12 Months Ended Dec. 31, 2018

Below are the estimated useful lives in years of satellites, property and other equipment as at December 31, 2018.

	Years
Satellites	12 to
	15
Duamants and other agricument	3 to
Property and other equipment	30

Below are the estimated useful lives in years of the finite life intangible assets as at December 31, 2018.

	Years
Revenue backlog	12 to
Revenue backlog	17
Customer relationships	6 to 21
Customer contracts	5 to 15
Concession rights	1 to 15
Transponder rights	16
Patents	18

### 6. SEGMENT INFORMATION (Tables)

#### **Segment Information**

Schedule of revenue derived from services

### 12 Months Ended Dec. 31, 2018

Revenue derived from the above services were as follows:

Years ended December 31,	2018	2017	2016
Broadcast	\$ 455,125	\$ 472,751	\$ 486,434
Enterprise	428,226	430,343	420,138
Consulting and other	19,581	24,313	24,282
Revenue	\$ 902,932	\$ 927,407	\$ 930,854

Schedule of equipment sales within services

Equipment sales included within the various services were as follows:

Years ended December 31,	2018		18 2017		 2016
Broadcast	\$	315	\$	274	\$ 1,904
Enterprise		23,639		14,460	11,520
Consulting and other		_		389	_
Total equipment sales	\$	23,954	\$	15,123	\$ 13,424

Schedule by geographic regions

Revenue by geographic regions was based on the point of origin of the revenue, which was the destination of the billing invoice, and was allocated as follows:

Years ended December 31,	2018	2017	2016
Canada	\$ 417,692	\$ 415,575	\$ 426,193
United States	318,779	311,159	319,473
Europe, Middle East & Africa	61,317	80,532	64,624
Latin America & Caribbean	75,011	78,921	83,244
Asia & Australia	30,133	41,220	37,320
Revenue	\$ 902,932	\$ 927,407	\$ 930,854

The Company's satellites are in geosynchronous orbit. For disclosure purposes, the satellites and the intangible assets have been classified based on ownership. Satellites, property and other equipment and intangible assets by geographic regions were allocated as follows:

As at December 31,		2018		2017
Canada	\$	821,449	\$	976,349
Europe, Middle East & Africa		775,055		693,903
United States		103,567		118,512
All others		2,968		3,083
	\$1	,703,039	\$1	,791,847
Satellites, property and other equipment	Ψ.	,,	_	, ,
	<b>—</b>	<del></del>		
As at December 31,		2018		2017
	_	<del></del>		
As at December 31,	_	2018		2017
As at December 31, Canada	_	<b>2018</b> 6 734,751		<b>2017</b> 734,061
As at December 31, Canada United States	_	<b>2018</b> 5 734,751 41,935		<b>2017</b> 734,061 39,190

Other long-term financial assets and other long-term assets by geographic regions were allocated as follows:

As at December 31,	2018		2017
Canada	\$ 43,779	\$	72,395
Europe, Middle East & Africa	8,043		8,059
All others	3,933		3,077

Other long-term financial assets	\$ 55,755	\$ 83,531
As at December 31	2018	2017
Canada	\$ 6,925	\$ 2,885
Europe, Middle East & Africa	987	171
Other long-term assets	\$ 7,912	\$ 3,056

Goodwill was not allocated to geographic regions.

### 7. OPERATING EXPENSES (Tables)

12 Months Ended Dec. 31, 2018

Operating Expenses
Schedule of operating
expenses

Years ended December 31,	2018		2017		2016
Compensation and employee benefits <sup>(a)</sup>	\$ 98,350	\$	85,135	\$	71,841
Other operating expenses <sup>(b)</sup>	45,596		42,895		39,359
Cost of sales <sup>(c)</sup>	41,881		59,657		63,723
Operating expenses	\$ 185,827	\$	187,687	\$	174,923

Compensation and employee benefits included salaries, bonuses, commissions, postemployment benefits and charges arising from share-based compensation. The balance for the

- (a) year ended December 31, 2018 included \$1.3 million of expenses associated with a special payment to stock option holders, including associated benefit expenses (December 31, 2017 \$14.2 million, December 31, 2016 \$nil).
- (b) Other operating expenses included general and administrative expenses, marketing expenses, in-orbit insurance expenses, professional fees and facility costs.
- Cost of sales included the cost of third-party satellite capacity, the cost of equipment sales
- (c) and other costs directly attributable to fulfilling the Company's obligations under customer contracts.

#### 8. OTHER OPERATING GAINS (LOSSES), NET (Tables)

12 Months Ended

Dec. 31, 2018

#### **Other Operating Gains Losses Net**

Schedule of Other operating gains (losses), net	Years ended December 31,	2018	2017	2016
	Insurance proceeds	\$ —	\$6,171	\$ —
	Loss on disposal of assets	(353	(269)	(2,565)
	Other	1,096	_	
	Other operating gains (losses), net	\$ 743	\$5,902	\$(2,565)

### 9. INTEREST EXPENSE (Tables)

### 12 Months Ended Dec. 31, 2018

#### **Interest Expense**

Schedule of interest expense

Years ended December 31,	2018	2017	2016
Interest on indebtedness	\$231,015	\$209,136	\$195,523
Interest on derivative instruments	(7,105)	3,071	2,303
Interest on satellite performance incentive payments	4,134	4,750	5,548
Interest on significant financing component	27,374	_	_
Interest on employee benefit plans (Note 29)	1,488	1,511	1,733
Capitalized interest (Note 16)	(19,120)	(18,324)	(6,292)
Interest expense	\$237,786	\$200,144	\$198,815

#### 10. INCOME TAXES (Tables)

#### 12 Months Ended Dec. 31, 2018

#### **Income Taxes**

Schedule of components of income tax expense

Years ended December 31,	2018	2017	2016
Current tax expense	\$ 98,841	\$111,510	\$ 75,634
Deferred tax (recovery) expense	(37,785)	(31,265)	8,272
Tax expense	\$ 61,056	\$ 80,245	\$ 83,906

income tax rate

Schedule of reconciliation of statutory A reconciliation of the statutory income tax rate, which is a composite of Canadian federal and provincial rates, to the effective income tax rate was as follows with the comparatives figures being restated to conform with the presentation in the current year:

Year ended December 31,	2018	2017	2016
(Loss) income before tax	\$(29,880)	\$585,298	\$376,806
Multiplied by the statutory income tax rates	26.59%	26.60%	26.61%
	(7,945)	155,689	100,268
Income tax recorded at rates different from the Canadian tax rate	(10,823)	(9,833)	(6,410)
Permanent differences	50,458	(36,241)	15,594
Effect on deferred tax balances due to changes in income tax rates	(427)	(2,120)	(140)
Effect of temporary differences not recognized as deferred tax assets	35,416	(25,789)	(27,286)
Previously unrecognized tax losses and credits	(6,110)	_	_
Other	487	(1,461)	1,880
Tax expense	\$ 61,056	\$ 80,245	\$ 83,906
Effective income tax rate	(204.34)%	13.71%	22.27%

Schedule of tax effects of temporary differences between carrying amounts of assets and liabilities for accounting purposes

The tax effects of temporary differences between the carrying amounts of assets and liabilities for accounting purposes and the amounts used for tax purposes are presented below with the comparatives figures being restated to conform with the presentation in the current year:

As at December 31,	2018	2017
Deferred tax assets		
Foreign tax credits	\$ 4,245	\$ 8,639
Corporate interest restriction	7,176	_
Unrealized foreign exchange losses	4,488	_
Deferred revenue	20,729	1,879
Loss carry forwards	22,316	52,911
Employee benefits	8,374	10,430
Other	1,794	13
Total deferred tax assets	\$ 69,122	\$ 73,872
As at December 31,	2018	2017
Deferred tax liabilities		
Capital assets	\$(215,248)	\$(244,569)
Intangible assets	(240,595)	(241,731)
Finance charges	(9,380)	(876)
Unrealized foreign exchange gains	_	(27,193)
Total deferred tax liabilities	\$(465,223)	\$(514,369)
Deferred tax liabilities, net	\$(396,101)	\$(440,497)

### 11. TRADE AND OTHER RECEIVABLES (Tables)

### 12 Months Ended Dec. 31, 2018

#### **Trade and Other Receivables**

Schedule of components of trade and other receivables

As at December 31,	 2018	 2017
Trade receivables	\$ 44,358	\$ 61,177
Trade receivables due from related parties (Note 33)	28	82
Less: Allowance for doubtful accounts	 (5,136)	 (2,662)
Net trade receivables	 39,250	58,597
Other receivables	6,381	6,389
Trade and other receivables	\$ 45,631	\$ 64,986

Schedule of movement in allowance for doubtful accounts

The movement in the allowance for doubtful accounts was as follows:

Years ended December 31,	_	2018	2017
Allowance for doubtful accounts, beginning of year	\$	2,662	\$ 3,514
Provisions (reversals) for impaired receivables		73	(110)
Cumulative effect adjustment <sup>(1)</sup>		2,754	_
Receivables written off		(47)	(586)
Impact of foreign exchange		(306)	(156)
Allowance for doubtful accounts, end of year	\$	5,136	\$ 2,662

(1) On January 1, 2018, a reclassification of \$2.8 million was made from trade receivables to allowance for doubtful accounts as a result of the implementation of IFRS 15. There was no impact on accumulated earnings as a result of this adjustment.

#### 12. OTHER CURRENT FINANCIAL ASSETS (Tables)

12 Months Ended **Dec. 31, 2018** 

#### **Other Current Financial Assets**

C
Security deposits \$ 147 \\$2,275
Derivative assets (Note 27) 18,632 162
Other current financial assets \$18,779 \$2,437

#### 13. PREPAID EXPENSES AND OTHER CURRENT ASSETS (Tables)

12 Months Ended
Dec. 31, 2018

#### **Prepaid Expenses And Other**

**Current Assets** 

Schedule of prepaid expenses and other current assets

As at December 31,	2018	2017
Prepaid expenses <sup>(a)</sup>	\$ 2,909	\$ 3,848
Income tax recoverable	10,329	945
Inventory <sup>(b)</sup>	2,429	2,998
Deferred charges <sup>(c)</sup>	475	543
Other	239	169
Prepaid expenses and other current assets	\$ 16,381	\$ 8,503

- (a) Prepaid expenses were primarily comprised of prepaid satellite in-orbit insurance, prepaid general liability insurance and prepaid license fees.
  - As at December 31, 2018, inventory consisted of \$2.2 million of finished goods (December 31, 2017 \$2.3 million) and \$0.2 million of work in process (December 31, 2017 —
- (b) \$0.7 million). During the year, \$17.7 million was recognized as cost of equipment sales and recorded as an operating expense (December 31, 2017 \$11.7 million, December 31, 2016 \$9.8 million).
- (c) Deferred charges included deferred financing charges relating to the Revolving Credit Facility.

#### 14. OTHER LONG-TERM FINANCIAL ASSETS (Tables)

12 Months Ended **Dec. 31, 2018** 

#### **Other Long-term Financial Assets**

Schedule of other long-term financial assets	As at December 31,	2018	2017
	Long-term receivables	\$12,170	\$12,898
	Security deposits	9,789	5,910
	Derivative assets (Note 27)	33,796	64,723
	Other long-term financial assets	\$55,755	\$83,531

### 15. OTHER LONG-TERM ASSETS (Tables)

### 12 Months Ended Dec. 31, 2018

#### **Other Long-term Assets**

Schedule of other long-term assets As at December 31,	2018	2017
Prepaid expenses	\$ 991	\$ 245
Deferred charges (Note 13)	753	1,153
Income tax recoverable	5,866	1,356
Other	302	302
Other long-term assets	\$7,912	\$3,056

#### 16. SATELLITES, PROPERTY AND OTHER EQUIPMENT (Tables)

Satellites Property And Other Equipment

<u>Schedule of satellites, property and other equipment</u>

## 12 Months Ended Dec. 31, 2018

	Satellites	Property and other equipment	Assets under construction	Total
Cost as at January 1, 2017	\$ 3,203,103	\$ 229,208	\$ 270,768	\$ 3,703,079
Additions	_	3,270	139,212	142,482
Disposals/retirements	_	(2,982)	_	(2,982)
Reclassifications and				
transfers from assets under construction	_	11,816	(11,816)	
Impact of foreign exchange	(22,925)	(2,092)	(21,199)	(46,216)
Cost as at December 31,				
2017	3,180,178	239,220	376,965	3,796,363
Additions	_	538	78,373	78,911
Cumulative effect adjustment (Note 3)	(4,172)	_	3,134	(1,038)
Disposals/retirements	_	(3,622)	_	(3,622)
Reclassifications and transfers from assets under construction	448,216	17,229	(465,445)	
Impact of foreign exchange	45,348	1,690	18,110	65,148
Cost as at December 31, 2018	\$ 3,669,570	\$ 255,055	\$ 11,137	\$ 3,935,762
Accumulated depreciation and impairment as at January 1, 2017	\$(1,651,321)	\$ (136,347)	\$ —	\$(1,787,668)
Depreciation	(206,439)	(14,619)		(221,058)
Disposals/retirements	(200, 100)	2,564	_	2,564
Impact of foreign exchange	568	1,078	_	1,646
Accumulated				
depreciation and impairment as at December 31, 2017	(1,857,192)	(147,324)	_	(2,004,516)
Depreciation	(209,987)	(14,864)		(224,851)
Cumulative effect adjustment (Note 3)	1,433	_	_	1,433
Disposals/retirements	_	3,207	_	3,207
Impact of foreign exchange	(7,050)	(946)	_	(7,996)
Accumulated depreciation and impairment as at December 31, 2018	\$(2,072,796)	\$ (159,927)	\$ —	\$(2,232,723)
Net carrying values As at December 31, 2017 As at December 31, 2018				\$ 1,791,847 \$ 1,703,039

### 17. INTANGIBLE ASSETS (Tables)

#### **Intangible Assets**

<u>Schedule of indefinite life</u> <u>intangible assets</u>

12 Months Ended Dec. 31, 2018

The indefinite life intangible assets are summarized below.

			Trade Intellectual name property		Total indefinite life intangible asse			
Cost as at January 1, 2017	\$ 6	09,397	\$	17,000	\$	13,161	\$	639,558
Additions		_		_		12,577		12,577
Disposals/retirements		_		_		_		_
Impact of foreign exchange		(2,654)		_		_		(2,654)
Cost as at December 31, 2017 and January 1, 2018	6	606,743		17,000		25,738		649,481
Additions		_		_		21,311		21,311
Disposals/retirements		_		_		_		
Impact of foreign exchange		3,252		_		_		3,252
Cost as at December 31, 2018	\$ 6	09,995	\$	17,000	\$	47,049	\$	674,044
Accumulated impairment as at January 1, 2017	\$	(1,100)	\$		\$		\$	(1,100)
Impairment		_		_		_		_
Accumulated impairment as at December 31, 2017 and January 1, 2018		(1,100)						(1,100)
Impairment		_		_		_		_
Accumulated impairment as at December 31, 2018	\$	(1,100)	\$		\$	_	\$	(1,100)
Net carrying values								
As at December 31, 2017	\$ 6	05,643	\$	17,000	\$	25,738	\$	648,381
As at December 31, 2018	\$ 6	08,895	\$	17,000	\$	47,049	\$	672,944
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The finite life intangible assets are summarized below.

Schedule of finite life
intangible assets

	Revenue backlog	<b>Customer</b> relationships	<b>Customer</b> contracts	Transponder rights	Concession rights	Other	Total finite life intangible assets
Cost as at January 1, 2017	\$ 235,896	\$ 198,652	\$ 23,142	\$ 16,718	\$ 38,575	\$ 59	\$ 513,042
Additions	_	_	_		155	_	155
Disposals/ retirements	_	(1)	_	_	_	_	(1)
Impact of foreign exchange	(261)	(337)		_	(3,140)	_	(3,738)
Cost as at December 31, 2017 and January 1, 2018	235,635	198,314	23,142	16,718	35,590	59	509,458
Additions	_	_	_	_	36	_	36
Disposals/ retirements	_	_	_	_	(94)	_	(94)
Impact of foreign exchange	320	413	_	_	(2,658)	_	(1,925)
Cost as at December 31, 2018	\$ 235,955	\$ 198,727	\$ 23,142	\$ 16,718	\$ 32,874	\$ 59	\$ 507,475
Accumulated amortization and impairment as at January 1, 2017	\$(190,917)	\$ (108,850)	\$ (6,335)	\$ (10,017)	\$ (2,839)	\$ (30)	\$ (318,988)

Amortization	(8,749)	(11,434)	(2,890)	(925)	(2,329)	(3)	(26,330)
Disposals/		1					1
retirements		1					1
Impact of							
foreign	243	141	_	_	89	_	473
exchange							
Accumulated							
amortization							
and							
impairment	(100, 402)	(120, 142)	(0.225)	(10.042)	(5.070)	(22)	(244.044)
as at	(199,423)	(120,142)	(9,225)	(10,942)	(5,079)	(33)	(344,844)
December 31, 2017 and	,						
January 1,							
2018							
Amortization	(8,020)	(10,114)	(2,891)	(924)	(2,352)	(4)	(24,305)
Disposals/				,			
retirements					94		94
Impact of							
foreign	(327)	(308)	_	_	425	_	(210)
exchange	<u></u>						
Accumulated							
amortization							
and							
impairment	\$(207,770) \$	(130,564) \$	(12,116) \$	(11,866) \$	(6,912) \$	(37) \$	(369,265)
as at							
December 31,	,						
2018							
Net carrying							
values							
As at December							
31,	\$ 36,212 \$	78,172 \$	13,917 \$	5,776 \$	30,511 \$	26 \$	164,614
2017							
As at December							
31,	\$ 28,185 \$	68,163 \$	11,026 \$	4,852 \$	25,962 \$	22 \$	138,210
2018		1 6" 11					

Schedule of indefinite and finite life intangible assets

The total combined indefinite and finite life intangible assets are summarized below.

		As	at Decemb	er 31, 2	2018		As	s at December 31, 2017			
		Cost	Accumul amortiza and impai	tion	Net carrying value	;	Cost	Accumulated amortization and impairment	Net carrying value		
Indefinite life intangible assets	\$	674,044	\$	(1,100)	\$ 672,944	\$	649,481	\$ (1,100)	\$ 648,381		
Finite life intangible assets		507,475	(36	69,265)	138,210	)	509,458	(344,844)	164,614		
Total intangible assets	\$1,	,181,519	\$ (37	70,365)	\$ 811,154	\$	1,158,939	\$ (345,944)	\$ 812,995		

Schedule of remaining useful lives of intangible assets

The following are the remaining useful lives of the intangible assets:

	Years
Revenue backlog	1 to 6
Customer relationships	1 to 10
Customer contracts	2 to 8
Transponder rights	4
Concession rights	1 to 12
Patent	7

<u>Schedule of recoverable</u> amount, for indefinite life

The recoverable amount, for indefinite life intangible assets valued using the income approach, which is equal to the fair value less costs of disposal, was calculated using the following assumptions:

intangible assets valued using income approach

#### 18. GOODWILL (Tables)

### 12 Months Ended Dec. 31, 2018

#### **Goodwill**

Schedule of significant assumptions used in impairment test

The Company's recoverable amount exceeded the carrying value therefore, no impairment was recognized. The most significant assumptions used in the quantitative impairment test were as follows:

	2017	2016
Discount rate	10.00%	10.75%
Terminal year growth rate	2.0%	2.0%

### 19. TRADE AND OTHER PAYABLES (Tables)

Trade And Other Payables
Schedule of trade and other
payables

### 12 Months Ended Dec. 31, 2018

As at December 31,	2018		2017	
Trade payables	\$	3,609	\$ 2,659	
Other payables and accrued liabilities <sup>(a)</sup>		27,050	35,260	
Trade and other payables	\$	30,659	\$ 37,919	

<sup>(</sup>a) Other payables and accrued liabilities included payables that are not trade in nature as well as various operating and capital accruals.

#### **20. OTHER CURRENT** FINANCIAL LIABILITIES

(Tables)

**Other Current Financial Liabilities** 

Schedule of other current financial liabilities

#### 12 Months Ended Dec. 31, 2018

As at December 31,	2	018	2017
Derivative liabilities (Note 27)	\$	6	\$ 1
Security deposits		1,913	1,944
Satellite performance incentive payments		11,645	10,452
Interest payable <sup>(a)</sup>		8,584	8,929
Other		4,238	5,029
Other current financial liabilities	\$	26,386	\$ 26,355

Interest payable included interest payable on indebtedness, satellite performance incentive payments, and other current financial liabilities.

### 21. OTHER CURRENT LIABILITIES (Tables)

### 12 Months Ended Dec. 31, 2018

#### **Other Current Liabilities**

Schedule of other current liabilities As at December 31,	2018	2017
Deferred revenue (Note 23)	\$102,645	\$66,449
Decommissioning liabilities (Note 23)	1,068	1,205
Uncertain tax positions	1,315	1,315
Income taxes payable	4,231	4,121
Other	4,030	4,234
Other current liabilities	\$113,289	\$77,324

## 22. OTHER LONG-TERM FINANCIAL LIABILITIES (Tables)

#### 12 Months Ended

Dec. 31, 2018

#### **Other Long-term Financial Liabilities**

Schedule of other long-term financial liabilities As at December 31,	2018	2017
Derivative liabilities (Note 27)	\$ 5,627	\$ 5,527
Security deposits	346	328
Satellite performance incentive payments	47,268	52,509
Other	1,280	467
Other long-term financial liabilities	\$54,521	\$58,831

#### 23. OTHER LONG-TERM LIABILITIES (Tables)

#### **Other Long-term Liabilities**

Schedule of other long-term liabilities

#### 12 Months Ended Dec. 31, 2018

As at December 31,	2018	2017
Deferred revenue <sup>(b)</sup>	\$ 400,725	\$ 323,709
Accrued benefit liabilities (Note 29)	32,235	40,065
Uncertain tax positions	175	175
Decommissioning liabilities <sup>(a)</sup>	2,043	1,590
Other	340	340
Other long-term liabilities	\$ 435,518	\$ 365,879

The current and long-term decommissioning liabilities on property and equipment were \$3.1 million (December 31, 2017 — \$2.8 million). The decommissioning liabilities are for the restoration of leased buildings and teleports. During the year ended December 31, 2018, \$0.1 million was recorded as interest expense (December 31, 2017 - \$0.1 million) with \$0.1 million decommissioning liabilities derecognized (December 31, 2017 - \$nil). It is expected that the decommissioning liabilities will mature between 2019 and 2062.

Remaining performance obligations, which the Company also refers to as contract revenue backlog ("backlog") represents the expected future revenue under existing customer contracts, includes both cancellable and non-cancellable contracts, and any deferred revenue that will be recognized in the future in respect to cash already received. The Company does not include revenue beyond the stated expiration of the contract regardless of potential for renewal.

The Company expects the backlog as at December 31, 2018 to be recognized as follows (in millions of Canadian dollars):

#### Schedule of backlog to be recognised

2019		2020		2021		2022	2023	Thereafter			Total		
\$	759.0	\$	605.6	\$	504.3	\$ 433.8	\$ 380.2	\$	1,030.7	\$	3,713.6		

### 24. INDEBTEDNESS (Tables)

#### **Indebtedness**

Schedule of indebtedness

### 12 Months Ended Dec. 31, 2018

As at December 31,	2018	2017
Senior Secured Credit Facilities <sup>(a)</sup>		
Revolving Credit Facility	\$ —	\$ —
Term Loan B – U.S. Facility (December 31, 2018 – USD\$2,326,049, December 31, 2017 – USD\$2,399,686)	3,172,033	3,016,645
8.875% Senior Notes (USD\$500,000) <sup>(b)</sup>	681,850	628,550
	3,853,883	3,645,195
Less: deferred financing costs, interest rate floors, prepayment options and net gain on repricing/repayment <sup>(c)</sup>	(129,655)	(101,818)
	3,724,228	3,543,377
Less: current indebtedness	(7,888)	(14,486)
Long-term indebtedness	\$3,716,340	\$3,528,891

The Senior Secured Credit Facilities are secured by substantially all of Telesat's assets. The Credit Agreement requires Telesat Canada and the Guarantors to comply with a First Lien Net Leverage Ratio. As at December 31, 2018 and 2017, Telesat was in compliance with this covenant.

Each tranche of the Senior Secured Credit Facilities is subject to mandatory principal repayment requirements. Up to February 1, 2017, this repayment was equal to one quarter of 1% of the initial aggregate principal amount and is payable on a quarterly basis. From February 1, 2017 to April 26, 2018, the repayment was equal to one quarter of 1% of the value of the loan at the time of the amendment, February 1, 2017, and is payable on a quarterly basis. As at April 26, 2018, the repayment is equal to one quarter of 1% of the value of the loan at the time of the amendment, April 26, 2018, and is payable on a quarterly basis.

The Senior Secured Credit Facilities have several tranches which are described below:

Canadian dollar equivalent) is available to Telesat. This Revolving Facility matures on November 17, 2021 and is available to be drawn at any time in U.S. funds or Canadian dollar equivalent funds. Loans under the Revolving Facility bear interest at a floating interest rate. For Canadian Prime Rate and Alternative Base Rate ("ABR") loans, an applicable margin ranging from 1.5% to 2.00% is applied to the Prime Rate and ABR as (i) these interest rates are defined in the Senior Credit Facilities. For Bankers Acceptance ("BA") Loans and Eurodollar Loans, an applicable margin ranging from 2.50% to 3.00% is applied to either the BA interest rate or LIBOR. The rates on the Revolving Facility vary depending upon the results of the first lien leverage ratio. The Revolving Facility has an unused commitment fee of 40 basis points. As at December 31, 2018, other than \$0.3 million (December 31, 2017 – \$0.2 million) in drawings related to letters of credit, there were no borrowings under this facility.

A Revolving Credit Facility ("Revolving Facility") of up to \$200 million U.S. dollars (or

The U.S. TLB Facility is a USD\$2,430 million facility maturing on November 17, 2023. The outstanding borrowings under the U.S. TLB Facility bear interest at a floating rate of either: (i) LIBOR as periodically determined for interest rate periods selected by Telesat in accordance with the terms of the Senior Secured Credit Facilities, but not less than 0.75%, plus an applicable margin of 2.50%; or (ii) Alternative Base Rate as determined in accordance with the terms of the Senior Secured Credit Facilities plus an applicable margin of 2.00%. The weighted average effective interest rate was 5.83% for the year ended December 31, 2018 (December 31, 2017 – 4.86%). On February 1, 2017, we amended the Senior Secured Credit Facilities to reduce the applicable margin to 3.00% from 3.75%. On April 26, 2018, we amended the Senior Secured Credit Facilities in

which the applicable margin on the Term Loan B-U.S. Facility was further reduced to 2.50%.

The Senior Notes bear interest at an annual rate of 8.875% and are due November 17, 2024. The total balance of the Senior Notes is USD\$500 million. The Senior Notes include covenants or terms that restrict the Company's ability to, among other things: (i) incur or guarantee additional indebtedness, or issue disqualified stock or preferred shares, (ii) incur liens, (iii) pay dividends, or make certain restricted payments or investments, (iv) enter into certain transactions with affiliates, (v) modify or cancel satellite insurance, (vi) consolidate, merge, sell or otherwise dispose of substantially all assets, (vii) create restrictions on the ability to pay dividends, make loans, and sell assets, and (viii) designate subsidiaries as unrestricted subsidiaries. The weighted average effective interest rate for the year ended December 31, 2018 was 8.80% (December 31, 2017 — 8.80%).

The Senior Secured Credit Facilities and 8.875% Senior Notes included the following (c) deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment:

The U.S. TLB Facility and 8.875% Senior Notes were presented on the balance sheet net of related deferred financing costs of \$83.8 million as at December 31, 2018 (December 31, 2017 – \$87.7 million). The deferred financing costs are amortized using the effective interest method.

The indenture agreement for the 8.875% Senior Notes contained provisions for certain prepayment options (Note 27) which were fair valued at the time of debt issuance. The initial fair value impact of the prepayment option related to the 8.875% Senior Notes was an \$8.7 million increase to the indebtedness at their inception date. This liability is subsequently amortized using the effective interest method and had a carrying amount of \$6.9 million as at December 31, 2018 (December 31, 2017 – \$7.8 million).

- (iii) The initial fair value impact, in November 2016, of the interest rate floor on the U.S. TLB Facility was a decrease to the indebtedness of \$25.6 million. This asset is subsequently amortized using the effective interest method and had a carrying amount of \$18.6 million as at December 31, 2018 (December 31, 2017 \$21.9 million).
- (iv) The U.S. TLB Facility was presented on the balance sheet net of the net gain on repricing/repayment of \$34.2 million as at December 31, 2018. The net gain on repricing/repayment arose from the following:
  - In connection with the adoption of IFRS 9, a gain on repricing of \$36.1 million was recorded as a reduction of the indebtedness, effective January 1, 2018;
  - In connection with the \$50 million U.S. dollars voluntary repayment in March 2018, a loss on repayment of \$2.8 million was recorded as an increase to the indebtedness; and
  - In connection with the amendment to the Senior Secured Credit Facilities in April 2018, a gain on repricing of \$6.9 million was recorded as a reduction of indebtedness.

Schedule of short-term and long-term portions of deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment were as follows:

Schedule of short-term and long-term portions of deferred financing costs, interest rate floors, prepayment option and premiums

As at December 31,	2018	2017
Short-term deferred financing costs	\$ 15,263	\$ 13,435
Long-term deferred financing costs	68,536	74,278
	\$ 83,799	\$ 87,713
Short-term interest rate floor	\$ 3,436	\$ 3,413
Long-term interest rate floor	15,165	18,483
	\$ 18,601	\$ 21,896

Short-term prepayment option	\$ (942)	\$ (863)
Long-term prepayment option	(5,986)	(6,928)
	\$ (6,928)	\$ (7,791)
Short-term net gain on repricing/repayment	\$ 6,315	\$
Long-term net gain on repricing/repayment	\$ 27,868	\$ 
	\$ 34,183	\$
Deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment	\$ 129,655	\$ 101,818

Schedule of outstanding principal balance of indebtedness

The outstanding principal balance of indebtedness, excluding deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment will be repaid as follows (in millions of Canadian dollars):

2019		2020		2021		2022	 2023	<b>Thereafter</b>			Total		
\$	32.0	\$	32.0	\$ 32.0	\$	32.0	\$ 3,044.0	\$	681.9	\$	3,853.9		

### 25. SHARE CAPITAL (Tables)

#### **Share Capital**

<u>Schedule of number of shares and stated</u> <u>value of outstanding shares</u>

### 12 Months Ended Dec. 31, 2018

The number of shares and stated value of the outstanding shares were as follows:

	2018		2017			
As at December 31,	Number of shares	Stated value	Number of shares	Stated value		
Common Shares	74,252,460	\$ 26,580	74,252,460	\$ 26,580		
Voting Participating Preferred Shares	7,034,444	48,246	7,034,444	48,246		
Non-Voting Participating Preferred Shares	38,431,311	78,870	38,391,823	77,846		
Director Voting Preferred Shares	1,000	10	1,000	10		
Share capital		\$153,706		\$152,682		

### 26. CAPITAL DISCLOSURES (Tables)

### 12 Months Ended Dec. 31, 2018

**Capital Disclosures** 

Schedule of company's capital

The Company's capital at the end of the year was as follows:

As at December 31,	2018	2017
Shareholders' equity (excluding reserves)	\$ 997,307	\$1,121,090
Debt financing (excluding deferred financing costs, prepayment option, interest rate floor and not gain on reprising/repayment)	\$3.853.883	\$3,645,195
interest rate floor and net gain on repricing/repayment)	φυ,ουυ,οου	φυ,ο.υ,1>υ

### 27. FINANCIAL INSTRUMENTS (Tables)

#### **Financial Instruments**

Schedule of contractual maturities of financial liabilities

### 12 Months Ended Dec. 31, 2018

The contractual maturities of financial liabilities as at December 31, 2018 were as follows:

	Carrying amount	Contractual cash flows (undiscounted)	2019	2020	2021	2022	2023	Thereafter	
Trade and other payables	\$ 30,659	\$ 30,659	\$ 30,659	\$	\$	\$ —	\$	\$	
Customer and other deposits	2,259	2,259	1,852	14	239		_	154	
Satellite performance incentive payments	59,895	76,506	14,401	11,446	9,959	8,959	8,057	23,684	
Other financial liabilities	5,556	5,467	3,993	476	116	116	116	650	
Indebtedness <sup>(1)</sup>	3,861,447	5,034,385	263,687	262,432	260,117	257,437	3,248,348	742,364	
	\$3,959,816	\$ 5,149,276	\$314,592	\$274,368	\$270,431	\$266,512	\$3,256,521	\$ 766,852	

<sup>(1)</sup> Indebtedness excludes deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment.

<u>Schedule of interest payable</u> <u>and interest payments</u>

The interest payable and interest payments included in the carrying value and contractual cash flows, respectively, in the above table, were as follows:

	Interest	payable	Inter	est payments
Satellite performance incentive payments	\$	982	\$	16,943
Other financial liabilities	\$	37	\$	37
Indebtedness	\$	7.564	\$	1.180.502

Schedule of financial assets Financial assets and liabi and financial liabilities and fair those values were as follows: values hierarchy

Financial assets and liabilities recorded on the balance sheets and the fair value hierarchy levels used to calculate ose values were as follows:

As at December 31, 2018		FVTPL		Amortized cost <sup>(4)</sup>		Total		air value	Fair value hierarchy
Cash and cash equivalents	\$		\$	768,433	\$	768,433	\$	768,433	Level 1
Trade and other receivables		_		45,631		45,631		45,631	(3)
Other current financial assets <sup>(1)</sup>		18,632		147		18,779		18,779	Level 1, Level 2
Other long-term financial assets <sup>(1)</sup>		33,796		21,959		55,755		55,755	Level 1, Level 2
Trade and other payables		_		(30,659)		(30,659)		(30,659)	(3)
Other current financial liabilities		(6)		(26,380)		(26,386)		(29,131)	Level 2
Other long-term financial liabilities		(5,627)		(48,894)		(54,521)		(54,733)	Level 2
Indebtedness <sup>(2)</sup>				(3,853,883)	(	(3,853,883)	(.	3,709,695)	Level 2
	\$	46,795	\$	(3,123,646)	\$(	(3,076,851)	\$(2	2,935,620)	

As at December 31, 2017	oans and ceivables	FVT	PL	Other financial liabilities		l	Total	Fair value		Fair value hierarchy	
Cash and cash equivalents	\$ 479,045	\$		\$	_	- \$	479,045	\$	479,045	Level 1	
Trade and other receivables	64,986		_		_	-	64,986		64,986	(3)	
Other current financial assets <sup>(1)</sup>	2,275		162		_	-	2,437		2,437	Level 1, Level 2	
Other long-term financial assets <sup>(1)</sup>	18,808	64,	723			-	83,531		83,531	Level 1, Level 2	
Trade and other payables	_		_		(37,919	9)	(37,919)		(37,919)	(3)	
Other current financial liabilities	_		(1)		(26,354	ł)	(26,355)		(27,791)	Level 2	
Other long-term financial liabilities	_	(5,	527)		(53,304	ł)	(58,831)		(59,648)	Level 2	
Indebtedness <sup>(2)</sup>					(3,645,195	5)	(3,645,195)	(:	3,723,474)	Level 2	

_			_			-	
\$	565,114	\$59,357	\$	(3,762,772)	\$(3,138,301)	) :	\$(3,218,833)

- Other current and long-term financial assets classified as fair value through profit or loss were calculated using level 2 of the fair value hierarchy. All other balances were calculated using level 1 of the fair value hierarchy.
- (2) Indebtedness excludes deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment (December 31, 2017 excludes deferred financing costs, interest rate floor and prepayment option).
- Trade and other receivables and trade and other payables approximate fair value due to the short-term maturity of these instruments.
  - Cash and cash equivalents, trade and other receivables, other current and long-term financial assets, classified as loans and receivables under IAS 39 have been classified as amortized cost under IFRS 9. Trade and other
- (4) payables, other current and long-term financial liabilities and indebtedness classified as other financial liabilities under IAS 39 have been classified as amortized cost under IFRS 9. The change in classification did not have an impact on the measurement of the Company's financial instruments.

The calculation of the fair value of the indebtedness is performed on a recurring basis. The rates used were as follows:

Schedule of rates used	<u>to</u>
calculate fair value of	
indebtedness	

As at December 31,	2018	2017
Senior Secured Credit Facilities		
Term Loan B – U.S. Facility	94.50%	100.13%
8.875% Senior Notes	104.44%	111.83%

Schedule of current and longterm portions of fair value of derivative assets and liabilities The current and long-term portions of the fair value of the Company's derivative assets and liabilities, as at each balance sheet date, were as follows:

As at December 31, 2018	cur	Other rent financial assets	Other long-term financial assets		long-term financial		Other current financial liabilities		Other long-term financial liabilities		Total	
Interest rate floors	\$		\$		\$	(6)	\$ (5,627	\$ (	(5,633)			
Interest rate swaps		18,632		16,650			_	-	35,282			
Prepayment option				17,146		<u> </u>			17,146			
	\$	18,632	\$	33,796	\$	(6)	\$ (5,627	() \$	46,795			

As at December 31, 2017	cui fina	ther rent incial sets	Ot	Other long-term financial assets		Other current financial liabilities		Other long-term financial liabilities		Total
Interest rate floors	\$		\$		\$	(1)	\$	(5,527)	\$	(5,528)
Interest rate swaps		162		18,945		_		_		19,107
Prepayment option		_		45,778		_		_		45,778
	\$	162	\$	64,723	\$	(1)	\$	(5,527)	\$	59,357

Schedule of reconciliation of fair value of derivative assets and liabilities

The reconciliation of the fair value of derivative assets and liabilities was as follows:

Fair value, December 31, 2016 and January 1, 2017	\$ 218
Realized losses on derivatives	
Forward foreign exchange contract	(207)
Unrealized gains on derivatives	
Interest rate floors	7,861
Prepayment option	33,018
Interest rate swaps	19,394
Forward foreign exchange contracts	240
Impact of foreign exchange	(1,167)
Fair value, December 31, 2017 and January 1, 2018	59,357
Unrealized gains (losses) on derivatives	
Interest rate floors	255
Prepayment option	(30,691)
Interest rate swaps	12,231
Impact of foreign exchange	5,643
Fair value, December 31, 2018	\$ 46,795

#### 28. SHARE-BASED COMPENSATION PLANS (Tables)

### **Sharebased Compensation Plans Information Abstract**

Schedule of movement in number of stock options outstanding and weighted average exercise price were as follows:

exercise price

12 Months Ended Dec. 31, 2018

The change in number of stock options outstanding and their weighted average exercise price were as follows:

	Time vesti	ing option pl	ans	Performance vesting option plans						
	Number of options	Weighted average exercise price		Number of options	Weighted a	0				
Outstanding at December 31, 2016 and January 1, 2017	2,677,019	\$	24.54	1,303,733	\$	20.16				
Granted	<u> </u>									
Forfeited	(15,507)			(17,638)						
Exercised (Note 25)	(3,150)			(3,850)						
Exchanged	805,835			(805,835)						
Expired										
Outstanding at December 31, 2017 and January 1, 2018	3,464,197	\$	24.85	476,410	\$	11.07				
Granted	3,692,372			_						
Forfeited	(2,650)			_						
Exercised (Note 25)	(51,055)			(44,308)						
Expired	_			_						
Outstanding at December 31, 2018	7,102,864	\$	25.56	432,102	\$	11.07				
The move	ment in the 1	number of re	estricted	share units	outstanding	was as				

Schedule of movement in the number of restricted share units outstanding

The movement in the number of restricted share units outstanding was as follows:

Outstanding, January 1, 2018	_
Granted	200,000
Outstanding, December 31, 2018	200,000

Schedule of quantity of stock options exercisable and weighted average remaining life

There were no restricted share units in 2017.

The quantity of stock options that are exercisable and the weighted average remaining life were as follows:

As at December 31,	2018	2017
Time vesting option plans	3,689,117	2,612,679
Performance vesting option plans	432,102	476,413
Weighted average remaining life	7 years	4 years

The share-based compensation expense included in the consolidated statements of (loss) income was as follows:

Years ended December 31, 2018 2017 2016

Schedule of share-based compensation expense

Schedule of weighted-average assumptions used to determine sharebased compensation expense using Black-Scholes option pricing model

Operating expenses	\$ 29,505	\$ 2,856	\$ 5,770

The weighted average assumptions used to determine the share-based compensation expense for stock options using the Black-Scholes option pricing model were as follows:

	2018	2017	2016
Dividend yield	%	%	%
Expected volatility	31.7%	24.6%	24.6%
Risk-free interest rate	2.94%	1.83%	1.83%
Expected life (years)	10	10	10

### 29. EMPLOYEE BENEFIT PLANS (Tables)

#### **Employee Benefit Plans**

Schedule of expenses included on consolidated statements of income (loss) and consolidated statements of comprehensive income (loss)

Schedule of pension and other post-employment benefits obligations, included in other long-term liabilities

Schedule of funded statuses of the benefit plans and accrued benefit liabilities balance

Schedule of changes in benefit obligations and fair value of plan assets

### 12 Months Ended Dec. 31, 2018

The expenses included on the consolidated statements of (loss) income and the consolidated statements of comprehensive (loss) income were as follows:

	Pension plans			Other post-employment l					benefit plans	
Years ended December 31,	2018	2017	2016		2018 2017			2016		
Consolidated statements of					_					
(loss) income										
Operating expenses	\$ 6,345	\$6,239	\$ 6,235	\$	276	\$	243	\$	221	
Interest expense	\$ 658	\$ 650	\$ 875	\$	830	\$	861	\$	858	
Consolidated statements of comprehensive (loss) income										
Actuarial (gains) losses on employee benefit plans	\$(4,555)	\$3,761	\$(4,376)	\$	(3,200)	\$	1,410	\$	(724)	

The balance sheet obligations, distributed between pension and other post-employment benefits, included in other long-term liabilities (Note 23) were as follows:

As at December 31,	2018		 2017
Pension benefits	\$	10,905	\$ 16,169
Other post-employment benefits		21,330	23,896
Accrued benefit liabilities	\$	32,235	\$ 40,065

The amounts recognized in the balance sheets and the funded statuses of the benefit plans were as follows:

	20	18	2017		
As at December 31,	Pension	Other	Pension	Other	
Present value of funded obligations	\$ 292,914	<u></u> —	\$ 306,660	\$ —	
Fair value of plan assets	(283,064)		(291,612)		
	9,850		15,048		
Present value of unfunded obligations	1,055	21,330	1,121	23,896	
Accrued benefit liabilities	\$ 10,905	\$ 21,330	\$ 16,169	\$ 23,896	

The changes in the benefit obligations and in the fair value of plan assets were as follows:

Pension	Other	Total
\$ 307,781	\$ 23,896	\$ 331,677
5,905	276	6,181
10,836	830	11,666
(1,018)	(701)	(1,719)
(8,363)	(1,072)	(9,435)
(13,125)	(1,427)	(14,552)
(9,190)	(743)	(9,933)
1,146	_	1,146
_	297	297
(3)	(26)	(29)
293,969	21,330	315,299
	\$ 307,781 5,905 10,836 (1,018) (8,363) (13,125) (9,190) 1,146 — (3)	\$ 307,781 \$ 23,896 5,905 276 10,836 830 (1,018) (701) (8,363) (1,072) (13,125) (1,427) (9,190) (743) 1,146 — 297 (3) (26)

Change in fair value of plan assets

Fair value of plan assets, January 1, 2018	(291,612)	_	(291,612)
Contributions by plan participants	(1,146)	_	(1,146)
Contributions by employer	(7,709)	(743)	(8,452)
Interest income	(10,178)	_	(10,178)
Benefits paid	9,190	743	9,933
Remeasurements			
Return on plan assets, excluding interest income	17,951	_	17,951
Administrative costs	440	_	440
Fair value of plan assets, December 31, 2018	(283,064)	_	(283,064)
Accrued benefit liabilities, December 31, 2018	\$ 10,905 \$	21,330	\$ 32,235
	Pension	Other	Total
Change in benefit obligations			
Benefit obligation, January 1, 2017	\$ 280,585 \$	22,388	\$ 302,973
Current service cost	5,741	243	5,984
Interest expense	10,992	861	11,853
Remeasurements			
Actuarial losses arising from plan experience	2,748	138	2,886
Actuarial losses from change in demographic assumptions	_	13	13
Actuarial losses from changes in financial assumptions	16,244	1,259	17,503
Benefits paid	(9,769)	(750)	(10,519)
Contributions by plan participants	1,168		1,168
Foreign exchange		(246)	(246)
Other	72	(10)	62
Benefit obligation, December 31, 2017	307,781	23,896	331,677
Change in fair value of plan assets		- ,	,,,,,,
Fair value of plan assets, January 1, 2017	(266,255)	_	(266,255)
Contributions by plan participants	(1,168)	_	(1,168)
Contributions by employer	(8,883)	(750)	(9,633)
Interest income	(10,342)		(10,342)
Benefits paid	9,769	750	10,519
Remeasurements			
Return on plan assets, excluding interest income	(15,231)	_	(15,231)
Administrative costs	498	_	498
Fair value of plan assets, December 31, 2017	(291,612)	_	(291,612)
Accrued benefit liabilities, December 31, 2017	\$ 16,169 \$	23,896	\$ 40,065

Schedule of estimated future benefit payments for defined benefit pension plans and other post-employment benefit plans The estimated future benefit payments for the defined benefit pension plans and other post-employment benefit plans until 2028 are as follows:

	P	ension	(	Itner
2019	\$	10,144	\$	800
2020	\$	10,608	\$	831
2021	\$	11,073	\$	863
2022	\$	11,501	\$	897
2023	\$	12,024	\$	932
2024 to 2028	\$	68,087	\$	6,124

Schedule of fair value of plan assets allocation by type of investment The fair value of the plan assets were allocated as follows between the various types of investments:

As at December 31,	2018	2017
Equity securities		
Canada	20.8%	22.3%
United States	12.7%	14.1%
International (other than United States)	18.1%	18.9%
Fixed income instruments		

Schedule of significant assumptions adopted in measuring pension and other benefit obligations

Schedule of impact on defined benefit obligation from one percent increase or decrease change in assumptions used

Canada	45.7%	42.6%
Cash and cash equivalents		
Canada	2.7%	2.1%

The following are the significant assumptions adopted in measuring the Company's pension and other benefit obligations:

	Pension	Other	Pension	Other
As at December 31,	2018	2018	2017	2017
Actuarial benefit obligation		_		
Discount rate	3.80%	3.80% to <sub>%</sub> 4.0	3.50%	3.25% to <sub>%</sub> 3.50
Benefit costs for the year ended				
Discount rate	3.60%	3.25% to <sub>%</sub> 3.60	4.00%	3.75% to <sub>%</sub> 4.00
Future salary growth	2.50%	N/A	2.50%	N/A
Health care cost trend rate	N/A	4.50%	N/A	4.50%
Other medical trend rates	N/A	4.50%	N/A	4.50%

The following table summarizes how the impact on the defined benefit obligation as at December 31, 2018 and 2017 would have increased or decreased as a result of the change in the respective assumptions by one percent.

	Pension			Other				
As at December 31, 2018	1%	increase	1%	decrease	1%	increase	1%	decrease
Discount rate	\$	(39,145)	\$	49,361	\$	(2,471)	\$	3,224
Future salary growth	\$	7,572	\$	(6,919)		N/A		N/A
Medical and dental trend rates		N/A		N/A	\$	1,703	\$	(1,280)

	Pension			Other				
As at December 31, 2017	1%	increase	1%	decrease	1%	increase	1%	decrease
Discount rate	\$	(42,092)	\$	53,148	\$	(2,786)	\$	3,588
Future salary growth	\$	7,988	\$	(7,457)		N/A		N/A
Medical and dental trend rates		N/A		N/A	\$	2,165	\$	(1,663)

## 30. SUPPLEMENTAL CASH FLOW INFORMATION (Tables)

### **Supplemental Cash Flow Information**

Schedule of cash and cash equivalents

Schedule of income taxes paid, net of income taxes received

Schedule of interest paid, net of capitalized interest and interest received

Schedule of reconciliation of the liabilities arising from financing activities

## 12 Months Ended Dec. 31, 2018

Cash and cash equivalents were comprised of the following:

As at December 31,	2018	2017	2016
Cash	\$ 342,874	\$ 388,372	\$ 457,686
Short-term investments <sup>(1)</sup>	425,559	90,673	324,720
Cash and cash equivalents	\$ 768,433	\$ 479,045	\$ 782,406

(1) Consisted of short-term investments with an original maturity of three months or less or which are available on demand with no penalty for early redemption.

Income taxes paid, net of income taxes received was comprised of the following:

Years ended December 31,	2018	2017	2016
Income taxes paid	\$(109,193)	\$ (85,503)	\$(122,401)
Income taxes received	2,885	22,512	1,929
	\$(106,308)	\$ (62,991)	\$(120,472)

Interest paid, net of capitalized interest and interest received was comprised of the following:

Years ended December 31,	2018	2017	2016
Interest paid	\$(207,339)	\$(219,773)	\$(165,173)
Interest received	11,802	6,201	6,620
Capitalized interest	19,120	18,324	6,292
	\$(176,417)	\$(195,248)	\$(152,261)

The reconciliation of the liabilities arising from financing activities was as follows:

	In	debtedness	apital eases		
Balance as at January 1, 2018	\$	3,543,377	\$	62,961	\$ 369
Debt repricing costs		(10,190)		_	
Cash outflows		(94,951)		(9,037)	(29)
Amortization of deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment		22,497		_	_
Loss on voluntary payment (Note 24)	2,828				
Gain on repricing (Note 24)	(6,901) —				
Cumulative effect adjustment (Note 3)		(36,072)		_	_
Other		_		191	_
Impact of foreign exchange		303,640		4,798	29
Balance as at December 31, 2018	\$	3,724,228	\$	58,913	\$ 369
	Indebtedness		pe i	Satellite rformance ncentive payments	apital eases
Balance as at January 1, 2017 <sup>(1)</sup>	\$	3,856,097	\$	75,985	\$ 422
Debt issue costs		(42,867)		_	_

Cash outflows	(31,620)	(8,436)	(30)
Amortization of deferred financing costs, interest rate floor and prepayment option	14,988	_	_
Other	_	18	2
Impact of foreign exchange	(253,221)	(4,606)	(25)
Balance as at December 31, 2017	\$ 3,543,377 \$	62,961 \$	369

(1) Balance of the indebtedness as at January 1, 2017, included \$4,459 of accrued debt issue costs associated with the November 2016 refinancing which were paid in 2017.

	In	debtedness	Satellite performance incentive payments	Capital leases
Balance as at January 1, 2016	\$	4,063,221	\$ 87,026	\$ —
Cash outflows		(4,008,356)	(8,934)	(30)
Cash inflows		3,935,576	_	_
Amortization of deferred financing costs, interest rate floors, prepayment option and premiums		12,971	_	_
Debt issue costs		(58,141)	_	_
Accrued debt issue costs		(4,459)	_	_
Write off of debt issue costs, interest rate floors, prepayment option and premiums		41,183	_	_
Non-cash additions <sup>(1)</sup>		(16,910)	_	474
Other		(150)	573	(2)
Impact of foreign exchange		(113,297)	(2,680)	(20)
Balance as at December 31, 2016	\$	3,851,638	\$ 75,985	\$ 422

Non-cash additions for the indebtedness includes \$(25,581) relating to the interest rate (1) floors on the Senior Secured Credit Facilities and \$8,671 relating to the prepayment option on the Senior Notes.

The net change in operating assets and liabilities was comprised of the following:

As at December 31,	_	2018	 2017	2016
Trade and other receivables	\$	22,056	\$ (13,272)	\$ (8,347)
Financial assets		(210)	3,975	(2,521)
Other assets		371	12,848	1,260
Trade and other payables		(4,695)	6,947	6,076
Financial liabilities		(1,026)	(13,748)	551
Other liabilities		72,317	 51,502	103,618
	\$	88 813	\$ 48 252	\$ 100 637

Non-cash investing activities were comprised of:

Years ended December 31,		2018	2017	2016
Satellites, property and other equipment	\$	3,795	\$ 9,515	\$ 13,776
Intangible assets	\$	3,635	\$ (128)	\$ 2,350

Schedule of net change in operating assets and liabilities

Schedule of non-cash investing activities

## 31. COMMITMENTS AND CONTINGENT LIABILITIES (Tables)

12 Months Ended **Dec. 31, 2018** 

### **Commitments And Contingent Liabilities**

<u>Schedule of off-balance sheet contractual obligations</u>

The following were the Company's off-balance sheet contractual obligations as at December 31, 2018:

	2019	2020	2021	2022	2023	<b>Thereafter</b>	<u>Total</u>
Operating property leases	\$ 3,190	\$ 3,434	\$ 3,630	\$3,097	\$3,003	\$ 17,483	\$ 33,837
Capital commitments	22,460	_	_	_	_	_	22,460
Other operating commitments	18,501	11,425	9,114	3,563	2,937	8,453	53,993
	\$44,151	\$14,859	\$12,744	\$6,660	\$5,940	\$ 25,936	\$110,290

#### 32. SUBSIDIARIES (Tables)

### 12 Months Ended Dec. 31, 2018

#### **Subsidiaries**

Schedule of companies included in scope of consolidation

The list of significant companies included in the scope of consolidation as at December 31, 2018 was as follows:

Country	Method of Consolidation	% voting rights
Canada	Fully consolidated	100
Canada	Fully consolidated	100
Canada	Fully consolidated	100
United States	Fully consolidated	100
United States	Fully consolidated	100
Brazil	Fully consolidated	100
Isle of Man	Fully consolidated	100
United Kingdom	Fully consolidated	100
	Canada Canada Canada United States United	CountryConsolidationCanadaFully consolidatedCanadaFully consolidatedCanadaFully consolidatedUnitedFully consolidatedUnitedFully consolidatedUnitedFully consolidatedUnitedFully consolidatedUnitedFully consolidatedUnitedFully consolidatedUnitedFully consolidatedBrazilFully consolidatedIsle of ManFully consolidatedUnitedFully consolidatedFully consolidatedFully consolidatedFully consolidatedFully consolidatedFully consolidatedFully 

### **33. RELATED PARTY TRANSACTIONS (Tables)**

# Related Party Transactions Schedule of compensation of executives and board level directors

### Schedule of related parties transaction

### Schedule of related parties transaction outstanding

### 12 Months Ended Dec. 31, 2018

#### Compensation of executives and Board level directors

Year ended December 31,	2018			2017	 2016
Short-term benefits (including salaries)	\$	16,853	\$	10,037	\$ 6,751
Special payments (1)		2,904		9,006	_
Post-employment benefits		2,510		2,458	2,344
Share-based payments		29,016		2,820	5,482
	\$	51,283	\$	24,321	\$ 14,577

(1) Balance relates to the special cash distribution effective January 25, 2017.

During the years presented below, the Company and its subsidiaries entered into the following transactions with Loral.

	interest income						r		0	st expen		rvices,	
Years ended December 31,		2018		2017		2016		2018		2017		2016	
Revenue	\$	128	\$	128	\$	133	\$		\$		\$		
Operating expenses	\$		\$	_	\$	_	\$	6,456	\$	6,518	\$	6,627	

The following balances were outstanding with Loral at the end of the years presented below:

		Amounts related	•	Amounts owed to related parties			
At December 31,		2018	2017	-	2018	2	2017
Current receivables/payables	\$	28	\$ 82	\$		\$	

The amounts outstanding are unsecured and will be settled in cash.

1. BACKGROUND OF THE COMPANY (Details Narrative)	12 Months Ended Dec. 31, 2018
Disclosure of classes of share capital [line items]	
Percentage of voting interests held by shareholders for election of directors (Director Voting Preferred Shares)	38.00%
Director Voting Participating Preferred Shares [Member]	
Disclosure of classes of share capital [line items]	
Percentage of voting interests for electing directors	29.00%
Loral Space and Communications Inc. [Member]	
Disclosure of classes of share capital [line items]	
Percentage of economic interests held indirectly	63.00%
Percentage of voting interests held indirectly	33.00%
Public Sector Pension Investment Board [Member]	
Disclosure of classes of share capital [line items]	
Percentage of economic interests held indirectly	36.00%
Percentage of voting interests held indirectly	67.00%

## 3. CHANGES IN ACCOUNTING POLICIES (Details) - CAD (\$)

(Details) - CAD (\$) \$ in Thousands Dec. 31, 2018 Dec. 31, 2017

ψ III Tilousanus		
<u>Deferred tax assets</u>	\$ 10,799	\$ 4,617
Satellites, property and other equipmen	<u>t</u> 1,703,039	1,791,847
Other current liabilities	113,289	77,324
Current indebtedness	7,888	14,486
Long-term indebtedness	3,716,340	3,528,891
Deferred tax liabilities	406,900	
Other long-term liabilities	435,518	365,879
Accumulated earnings	843,601	968,408
Reserves	95,678	21,731
IFRS 15 [Member]		
Deferred tax assets	2,637	1,263
Satellites, property and other equipmen	<u>t</u> 2,989	395
Other current liabilities	15,046	21,007
Current indebtedness		
Long-term indebtedness		
Deferred tax liabilities	(16,021)	(21,676)
Other long-term liabilities	60,978	67,087
Accumulated earnings	(54,699)	(65,082)
Reserves	\$ 322	322
IFRS 9 [Member]		
Deferred tax assets		93
Satellites, property and other equipmen	<u>t</u>	
Other current liabilities		
Current indebtedness		(5,549)
Long-term indebtedness		(30,523)
Deferred tax liabilities		9,599
Other long-term liabilities		
Accumulated earnings		26,566
Reserves		
Total [Member]		
Deferred tax assets		1,356
Satellites, property and other equipmen	<u>t</u>	395
Other current liabilities		21,007
Current indebtedness		(5,549)
Long-term indebtedness		(30,523)
Deferred tax liabilities		(12,077)
Other long-term liabilities		67,087
Accumulated earnings		(38,516)
Reserves		\$ 322

# 3. CHANGES IN ACCOUNTING POLICIES (Details 1) - CAD (\$)

\$ in Thousands

\$ in Thousands			
Satellites, property and other equipment	\$ 1,703,039	\$ 1,791,847	
<u>Deferred tax assets</u>	10,799	4,617	
Other current liabilities	113,289	77,324	
Deferred tax liabilities	406,900		
Other long-term liabilities	435,518	365,879	
Accumulated earnings	843,601	968,408	
Reserves	95,678	21,731	
IFRS 15 [Member]			
Satellites, property and other equipment	2,989	395	
<u>Deferred tax assets</u>	2,637	1,263	
Other current liabilities	15,046	21,007	
Deferred tax liabilities	(16,021)	(21,676)	
Other long-term liabilities	60,978	67,087	
Accumulated earnings	(54,699)	(65,082)	
Reserves	322	\$ 322	
Balance Without the Adoption of IFRS 15 [Member	]		
Satellites, property and other equipment	1,700,050		
<u>Deferred tax assets</u>	8,162		
Other current liabilities	98,243		
Deferred tax liabilities	422,921		
Other long-term liabilities	374,540		
Accumulated earnings	898,300		
Reserves	\$ 95,356		

Dec. 31, 2018 Dec. 31, 2017

## 3. CHANGES IN ACCOUNTING POLICIES

#### 12 Months Ended

TO CO CITIZITY OF CETO	1
(Details 2) - CAD (\$)	
\$ in Thousands	

Dec. 31, 2018 Dec.	31, 2017	7 Dec. 31,	2016
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\$ in Thousands	,	,	,
Revenue	\$ 902,932	\$ 927,407	\$ 930,854
Operating expenses	(185,827)	(187,687)	(174,923)
<u>Depreciation</u>	(224,851)	(221,058)	(224,773)
Operating income	468,692	498,234	500,903
<u>Interest expense</u>	(237,786)	(200,144)	(198,815)
Loss before tax	(29,880)	585,298	376,806
<u>Tax expense</u>	(61,056)	(80,245)	(83,906)
Net loss	(90,936)	\$ 505,053	\$ 292,900
IFRS 15 [Member]			
Revenue	19,512		
Operating expenses	20,558		
<u>Depreciation</u>	160		
Operating income	40,230		
<u>Interest expense</u>	(25,328)		
Loss before tax	14,902		
<u>Tax expense</u>	(4,301)		
Net loss	10,601		
Balance Without the Adoption of IFRS 15 [Member	1		
Revenue	883,420		
Operating expenses	(206,385)		
<u>Depreciation</u>	(225,011)		
Operating income	428,462		
<u>Interest expense</u>	(212,458)		
<u>Loss before tax</u>	(44,782)		
<u>Tax expense</u>	(56,755)		
Net loss	\$ (101,537)		

## 3. CHANGES IN ACCOUNTING POLICIES

#### 12 Months Ended

Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

( <b>Details 3</b> ) - <b>CAD</b> (\$)
\$ in Thousands

Net loss	\$ (90,936)	\$ 505,053	\$ 292,900
Foreign currency translation adjustments	44,459	(48,563)	(1,765)
Other comprehensive income	50,183	(53,061)	1,911
<u>Total comprehensive loss</u>	(40,753)	\$ 451,992	\$ 294,811

IFRS 15 [Member]

Net loss	10,601
Foreign currency translation adjustments	(217)
Other comprehensive income	(217)
<u>Total comprehensive loss</u>	10,384

Balance Without the Adoption of IFRS 15 [Member]

Net loss	(101,537)
Foreign currency translation adjustments	44,676
Other comprehensive income	50,400
Total comprehensive loss	\$ (51,137)

3. CHANGES IN	12 Months Ended		
ACCOUNTING POLICIES (Details 4) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016
Cash flows from operating activities			
Net (loss) income	\$ (90,936)	\$ 505,053	\$ 292,900
Adjustments to reconcile net loss to cash flows from operating			
<u>activities</u>			
<u>Depreciation</u>	224,851	221,058	224,773
<u>Tax expense</u>	61,056	80,245	83,906
<u>Interest expense</u>	237,786	200,144	198,815
<u>Other</u>	(91,580)	(49,040)	(36,966)
Interest paid, net of capitalized interest and interest received	(176,417)	(195,248)	(152,261)
Net cash from operating activities	466,297	486,700	527,359
Cash flows used in investing activities			
Satellite programs, including capitalized interest	(67,387)	(135,986)	(236,834)
Net cash used in investing activities	(103,307)	\$ (164,613)	\$ (286,096)
IFRS 15 [Member]			
Cash flows from operating activities			
Net (loss) income	10,601		
Adjustments to reconcile net loss to cash flows from operating			
activities			
<u>Depreciation</u>	(160)		
<u>Tax expense</u>	4,301		
<u>Interest expense</u>	25,328		
<u>Other</u>	(40,070)		
Interest paid, net of capitalized interest and interest received	2,046		
Net cash from operating activities	2,046		
<u>Cash flows used in investing activities</u>			
Satellite programs, including capitalized interest	(2,046)		
Net cash used in investing activities	(2,046)		
Balance Without the Adoption of IFRS 15 [Member]			
Cash flows from operating activities			
Net (loss) income	(101,537)		
Adjustments to reconcile net loss to cash flows from operating			
activities			
<u>Depreciation</u>	225,011		
<u>Tax expense</u>	56,755		
<u>Interest expense</u>	212,458		
<u>Other</u>	(51,510)		
Interest paid, net of capitalized interest and interest received	(178,463)		
Net cash from operating activities	464,251		
Cash flows used in investing activities			
Satellite programs, including capitalized interest	(65,341)		

Net cash used in investing activities	\$ (101,261)

# 3. CHANGES IN ACCOUNTING POLICIES (Details Narrative) - Senior secured credit facilities [Member] - Term Loan B U.S. Facility [Member] IFRS 9, Financial Instruments [Member] act of initial application of new standards or

Disclosure of expected impact of initial application of new standards or interpretations [line items]

Interest rate on borrowing	3.00%	3.00%
Previous interest rate on borrowing	3.75%	3.75%

#### 4. SIGNIFICANT ACCOUNTING POLICIES (Details)

12 Months Ended
Dec. 31, 2018

Satellites [Member]

Disclosure of detailed information about property, plant and equipment [line items]

Estimated useful lives (in years) 12 to 15

Property and Other Equipment [Member]

Disclosure of detailed information about property, plant and equipment [line items]

Estimated useful lives (in years) 3 to 30

#### 4. SIGNIFICANT ACCOUNTING POLICIES (Details 1)

12 Months Ended **Dec. 31, 2018** 

Revenue	Back1	ဂ္ဂဇ	Mem	her]
100 101100	Duciti	_	TITULE	

Tto + ends Basinos [Trismost]	
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	
Estimated useful lives of the finite intangible assets (in years)	12 to 17
Customer Relationships [Member]	
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	
Estimated useful lives of the finite intangible assets (in years)	6 to 21
Customer Contracts [Member]	
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	
Estimated useful lives of the finite intangible assets (in years)	5 to 15
Concession Rights [Member]	
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	-
Estimated useful lives of the finite intangible assets (in years)	1 to 15
Transponder Rights [Member]	
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	-
Estimated useful lives of the finite intangible assets (in years)	16
Patents [Member]	
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	-
Estimated useful lives of the finite intangible assets (in years)	18

#### 5. CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES (Details Narrative) - CAD (\$)

Dec. 31, 2018 Dec. 31, 2017

\$ in Thousands

#### **Critical Accounting Judgments And Estimates**

Derivative financial assets, at fair value	\$ 52,400	\$ 64,900
Derivative financial liabilities, at fair value	5,600	5,500
Goodwill	2,446,603	2,446,603
Intangible assets	\$ 811,154	\$ 812,995

6. SEGMENT		12 Months Ended		
INFORMATION (Details) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	
Disclosure of disaggregation of revenue from contracts with customers				
[line items]				
Revenue	\$ 902,932	\$ 927,407	\$ 930,854	
Broadcast [Member]				
Disclosure of disaggregation of revenue from contracts with customers				
[line items]				
Revenue	455,125	472,751	486,434	
Enterprise [Member]				
Disclosure of disaggregation of revenue from contracts with customers				
[line items]				
Revenue	428,226	430,343	420,138	
Consulting and Other [Member]				
Disclosure of disaggregation of revenue from contracts with customers				
[line items]				
Revenue	\$ 19,581	\$ 24,313	\$ 24,282	

6. SEGMENT		12 Months Ended			
INFORMATION (Details 1) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016		
Disclosure of disaggregation of revenue from contracts with customers					
[line items]					
Equipment sales services	\$ 23,954	\$ 15,123	\$ 13,424		
Broadcast [Member]					
Disclosure of disaggregation of revenue from contracts with customers					
[line items]					
Equipment sales services	315	274	1,904		
Enterprise [Member]					
Disclosure of disaggregation of revenue from contracts with customers					
[line items]					
Equipment sales services	23,639	14,460	11,520		
Consulting and Other [Member]					
Disclosure of disaggregation of revenue from contracts with customers					
[line items]					
Equipment sales services		\$ 389			

6. SEGMENT	12 Months Ended			
INFORMATION (Details 2) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	
Disclosure of disaggregation of revenue from contracts with customers				
[line items]				
Revenue	•	\$ 927,407	\$ 930,854	
Satellites, property and other equipment	1,703,039	1,791,847		
Intangible assets	811,154	812,995		
Other long-term financial assets	55,755	83,531		
Other long-term assets	7,912	3,056		
<u>CANADA</u>				
Disclosure of disaggregation of revenue from contracts with customers				
[line items]				
Revenue	417,692	415,575	426,193	
Satellites, property and other equipment	821,449	976,349		
<u>Intangible assets</u>	734,751	734,061		
Other long-term financial assets	43,779	72,395		
Other long-term assets	6,925	2,885		
<u>UNITED STATES</u>				
Disclosure of disaggregation of revenue from contracts with customers				
[line items]				
Revenue	318,779	311,159	319,473	
Satellites, property and other equipment	103,567	118,512		
<u>Intangible assets</u>	41,935	39,190		
EUROPE, MIDDLE EAST & AFRICA				
Disclosure of disaggregation of revenue from contracts with customers				
[line items]				
Revenue	61,317	80,532	64,624	
Satellites, property and other equipment	775,055	693,903		
Other long-term financial assets	8,043	8,059		
Other long-term assets	987	171		
LATIN AMERICA & CARIBBEAN				
Disclosure of disaggregation of revenue from contracts with customers				
[line items]				
Revenue	75,011	78,921	83,244	
<u>Intangible assets</u>	25,962	30,510		
ASIA & AUSTRALIA				
Disclosure of disaggregation of revenue from contracts with customers				
[line items]				
Revenue	30,133	41,220	\$ 37,320	
ALL OTHERS				
Disclosure of disaggregation of revenue from contracts with customers [line items]				

Satellites, property and other equipment	2,968	3,083
<u>Intangible assets</u>	8,506	9,234
Other long-term financial assets	\$ 3,933	\$ 3.077

# 6. SEGMENT INFORMATION (Details Narrative) - Customer

12 Months Ended

Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

3

**Segment Information** 

Number of customers with greater than 10% of consolidated revenue 3 3

7. OPERATING EXPENSES		12 Months Ende	d	
(Details) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	
<b>Operating Expenses</b>				
Compensation and employee benefits	[1] \$ 98,350	\$ 85,135	\$ 71,841	
Other operating expenses	[2] 45,596	42,895	39,359	
Cost of sales	[3] 41,881	59,657	63,723	
Operating expenses	\$ 185,827	\$ 187,687	\$ 174,923	

- [1] Compensation and employee benefits included salaries, bonuses, commissions, post-employment benefits and charges arising from share-based compensation. The balance for the year ended December 31, 2018 included \$1.3 million of expenses associated with a special payment to stock option holders, including associated benefit expenses (December 31, 2017 \$14.2 million, December 31, 2016 \$nil).
- [2] Other operating expenses included general and administrative expenses, marketing expenses, in-orbit insurance expenses, professional fees and facility costs.
- [3] Cost of sales included the cost of third-party satellite capacity, the cost of equipment sales and other costs directly attributable to fulfilling the Company's obligations under customer contracts.

#### 8. OTHER OPERATING **GAINS (LOSSES), NET**

#### 12 Months Ended

(Details) - CAD (\$)

Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

\$ in Thousands

#### **Other Operating Gains Losses Net**

Insurance proceeds		\$ 6,171	
Loss on disposal of assets	(353)	(269)	(2,565)
<u>Other</u>	1,096		
Other operating gains (losses), net	\$ 743	\$ 5,902	\$ (2,565)

9. INTEREST EXPENSE	12 Months Ended			
(Details) - CAD (\$) \$ in Thousands	Dec. 31, 201	18 Dec. 31, 201	17 Dec. 31, 2016	
Interest Expense				
Interest on indebtedness	\$ 231,015	\$ 209,136	\$ 195,523	
Interest on derivative instruments	(7,105)	3,071	2,303	
Interest on satellite performance incentive payment	<u>s</u> 4,134	4,750	5,548	
Interest on significant financing component	27,374			
Interest on employee benefit plans (Note 29)	1,488	1,511	1,733	
Capitalized interest (Note 16)	(19,120)	(18,324)	(6,292)	
<u>Interest expense</u>	\$ 237,786	\$ 200,144	\$ 198,815	

#### 10. INCOME TAXES 12 Months Ended (Details) - CAD (\$) Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016 \$ in Thousands

•						
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<u>Current tax expense</u>	\$ 98,841	\$ 111,510	\$ 75,634
Deferred tax (recovery)	<u>expense</u> (37,785)	(31,265)	8,272
<u>Tax expense</u>	\$ 61,056	\$ 80,245	\$ 83,906

#### 10. INCOME TAXES 12 Months Ended (**Details 1**) - **CAD** (**\$**) Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016 \$ in Thousands **Income Taxes** (Loss) income before tax \$ (29,880) \$ 585,298 \$ 376,806 Multiplied by the statutory income tax rates 26.59% 26.60% 26.61% Tax expenses income at applicable tax rate \$ (7,945) \$ 155,689 \$ 100,268 Income tax recorded at rates different from the Canadian tax rate (6,410)(10,823)(9,833)Permanent differences 50,458 (36,241)15,594 Effect on deferred tax balances due to changes in income tax rates (427)(2,120)(140)Effect of temporary differences not recognized as deferred tax assets 35,416 (25,789)(27,286)Previously unrecognized tax losses and credits (6,110)Other 487 (1,461)1,880 Tax expense \$ 61,056 \$ 80,245 \$83,906 (204.34%)22.27% Effective income tax rate 13.71%

#### 10. INCOME TAXES Dec. 31, 2018 Dec. 31, 2017 (Details 2) - CAD (\$) \$ in Thousands **Deferred tax assets** Foreign tax credits \$ 4,245 \$ 8,639 Corporate interest restriction 7,176 Unrealized foreign exchange losses 4,488 Deferred revenue 20,729 1,879 Loss carry forwards 22,316 52,911 **Employee benefits** 8,374 10,430 1,794 Other 13 Total deferred tax assets 69,122 73,872 **Deferred tax liabilities** Capital assets (215,248)(244,569)**Intangible assets** (240,595)(241,731)Finance charges (9,380)(876)Unrealized foreign exchange gains (27,193)Total deferred tax liabilities (465,223)(514,369)Deferred tax liabilities, net \$ (396,101) \$ (440,497)

10. INCOME TAXES (Details Normative)	12 Months Ended			
(Details Narrative) £ in Thousands, \$ in Thousands	Dec. 31, 2018 CAD (\$)	2018	Dec. 31, 2017 CAD (\$)	2017
<b>Disclosure of disaggregation of revenue from contracts with</b>				
customers [line items]				
<u>Deferred tax assets</u>	\$ 10,799		\$ 4,617	
Foreign tax credits to offset taxes payable	4,200			
Carried back to prior year capital gains	644,100			
Temporary differences not recognized	15,200			\$ 10,000
<u>UNITED KINGDOM</u>				
Disclosure of disaggregation of revenue from contracts with				
customers [line items]				
Deferred tax assets	2,230			
Tax losses carried forward	131,300			
Deferred tax asset deduct against future taxable income	\$ 7,200			
UNITED KINGDOM   British Pound Sterling				
Disclosure of disaggregation of revenue from contracts with				
customers [line items]				
Percentage of maximum amount of profit carried-forward	50.00%			
Allowance of unrestricted taxable income   £		£ 5,000		

11. TRADE AND OTHER RECEIVABLES (Details) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016
<b>Trade and Other Receivables</b>			
Trade receivables	\$ 44,358	\$ 61,177	
Trade receivables due from related parties (Note 33)	28	82	
Less: Allowance for doubtful accounts	(5,136)	(2,662)	\$ (3,514)
Net trade receivables	39,250	58,597	
Other receivables	6,381	6,389	
Trade and other receivables	[1] \$ 45,631	\$ 64,986	

<sup>[1]</sup> Trade and other receivables and trade and other payables approximate fair value due to the short-term maturity of these instruments.

11. TRADE AND OTHER	12 Months Ended		
RECEIVABLES (Details 1) - CAD (\$) \$ in Thousands		Dec. 31, 2018	Dec. 31, 2017
Trade and Other Receivables			
Allowance for doubtful accounts, beginning of year		\$ 2,662	\$ 3,514
Provisions (reversals) for impaired receivables		73	(110)
Cumulative effect adjustment	[1]	2,754	
Receivables written off		(47)	(586)
Impact of foreign exchange		(306)	(156)
Allowance for doubtful accounts, end of year		\$ 5,136	\$ 2,662

<sup>[1]</sup> On January 1, 2018, a reclassification of \$2.8 million was made from trade receivables to allowance for doubtful accounts as a result of the implementation of IFRS 15. There was no impact on accumulated earnings as a result of this adjustment.

## 12. OTHER CURRENT FINANCIAL ASSETS

(Details) - CAD (\$) \$ in Thousands Dec. 31, 2018 Dec. 31, 2017

#### **Other Current Financial Assets**

Security deposits	\$ 147	\$ 2,275
Derivative assets (Note 27)	18,632	162
Other current financial assets	\$ 18,779	\$ 2,437

13. PREPAID EXPENSES AND OTHER CURRENT ASSETS (Details) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017
<b>Prepaid Expenses And Other Current Assets</b>		
Prepaid expenses	[1] \$ 2,909	\$ 3,848
Income tax recoverable	10,329	945
Inventory	[2] 2,429	2,998
<u>Deferred charges</u>	[3] 475	543
Other	239	169

\$ 16,381

\$ 8,503

- [1] Prepaid expenses were primarily comprised of prepaid satellite in-orbit insurance, prepaid general liability insurance and prepaid license fees.
- [2] As at December 31, 2018, inventory consisted of \$2.2 million of finished goods (December 31, 2017 \$2.3 million) and \$0.2 million of work in process (December 31, 2017 - \$0.7 million). During the year, \$17.7 million was recognized as cost of equipment sales and recorded as an operating expense (December 31, 2017 - \$11.7 million, December 31, 2016 - \$9.8 million).
- [3] Deferred charges included deferred financing charges relating to the Revolving Credit Facility.

Prepaid expenses and other current assets

Other

#### 13. PREPAID EXPENSES 12 Months Ended

AND OTHER CURRENT ASSETS (Details Narrative)

- CAD (\$) \$ in Thousands Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

#### **Prepaid Expenses And Other Current Assets**

Finished goods	\$ 2,200	\$ 2,300
Work in progress	200	700

Recognized cost of equipment sales \$ 17,700 \$ 11,700 \$ 9,800

### 14. OTHER LONG-TERM FINANCIAL ASSETS

(Details) - CAD (\$) \$ in Thousands Dec. 31, 2018 Dec. 31, 2017

#### **Other Long-term Financial Assets**

Long-term receivables	\$ 12,170	\$ 12,898
Security deposits	9,789	5,910
Derivative assets (Note 27)	33,796	64,723
Other long-term financial assets	\$ 55,755	\$ 83,531

#### 15. OTHER LONG-TERM ASSETS (Details) - CAD (\$) Dec. 31, 2018 Dec. 31, 2017 \$ in Thousands

#### **Other Long-term Assets**

<u>Prepaid expenses</u>	\$ 991	\$ 245
Deferred charges (Note 13)	753	1,153
Income tax recoverable	5,866	1,356
<u>Other</u>	302	302
Other long-term assets	\$ 7,912	\$ 3,056

FQUIPMENT (Details)	16. SATELLITES, PROPERTY AND OTHER	12 Mont	ths Ended	
CAD (\$)         2018         2017           S in Thousands         1           Disclosure of detailed information about property, plant and equipment [line items]         1           Cost at beginning of year         1,791,847           Additions         1,791,847           Cost at end of year         1,791,847           Satellites [Member]         1,292,986           Disclosure of detailed information about property, plant and equipment [line items]         1,292,986           Oct at beginning of year         1,392,986         1,322,986           Additions         1,296,774         1,322,986           Property and Other Equipment [Member]         1,296,774         1,322,986           Property and Other Equipment [Member]         1,396,774         1,322,986           Additions         91,896         1,322,986         1,322,986           Additions         91,896         1,322,986 </th <th></th> <th>Dec. 31,</th> <th>Dec. 31,</th>		Dec. 31,	Dec. 31,	
Disclosure of detailed information about property, plant and equipment [line items]         \$ 1,71,847         1 (1,71,847)         1 (1,71,847)         1 (1,71,847)         1 (1,71,847)         1 (1,71,847)         2 (1,71,847)         2 (1,71,847)         3 (1,71,847)	- ,	,		
Cost at beginning of year         1,791,847           Additions         1,703,039         1,791,847           Cost at end of year         1,703,039         1,791,847           Satellities [Member]         1,222,986         1,322,986           Ost at beginning of year         1,596,774         1,322,986           Additions         1,596,774         1,322,986           Property and Other Equipment [Member]         1,596,774         1,322,986           Property and Other Equipment [Member]         91,896         4           Disclosure of detailed information about property, plant and equipment [line items]         91,896         4           Additions         95,128         91,896         4           Additions         376,965         4         4           Cost at end of year         11,137         376,965         4           Additions         11,137         376,965         3           Cost at beginning of year         11,137         376,965         3           Additions         11,137         376,965         3           Gross carrying amount [Member]         11,137         376,965         3           Ost at beginning of year         3,796,363         3,703,079         4           Additions	\$ in Thousands			
Additions	Disclosure of detailed information about property, plant and equipment [line items]	-		
Additions         1,00,00%         8,000,00%         1,000,00% <th< td=""><td>Cost at beginning of year</td><td></td><td></td></th<>	Cost at beginning of year			
Cost at end of year         1,703,039         \$ 1,791,847           Satellites [Member]         " 1,791,847           Disclosure of detailed information about property, plant and equipment [line items]         1,322,986         1           Cost at beginning of year         1,596,74         1,322,986         1,322,986           Property and Other Equipment [Member]         " 1,596,74         1,322,986           Property and Other Equipment [Member]         " 1,896         " 1,896           Additions         " 5,128         91,896           Additions         " 5,128         91,896           Assess under construction [Member]         " 5,128         91,896           Assess under construction [Member]         " 5,128         91,896           Additions         " 5,128         91,896           Cost at end of year         1,137         376,965           Additions         " 5,128         91,896           Gross carrying amount [Member]         " 5,128         91,896           Usual tabeginning of year         1,1137         376,965           Gost at end of year         1,298,100         1,298,200         1,298,200 <th cols<="" td=""><td>Additions</td><td>1,771,047</td><td></td></th>	<td>Additions</td> <td>1,771,047</td> <td></td>	Additions	1,771,047	
Satellites [Member]         1,322,986           Disclosure of detailed information about property, plant and equipment [line items]           Cost at beginning of year         1,322,986           Additions         1,596,774         1,322,986           Property and Other Equipment [Member]         1,596,774         1,322,986           Disclosure of detailed information about property, plant and equipment [line items]         8,1896         4,896           Additions         95,128         91,896         4,896           Adssets under construction [Member]         5,128         91,896         4,896           Additions         376,965         5         1,137         376,965         5           Cost at end of year         11,137         376,965         5         3         4		1,703,039	\$	
Disclosure of detailed information about property, plant and equipment [line items]         1,322,986         ***           Cost at beginning of year         1,596,774         1,322,986         ***           Cost at end of year         1,596,774         1,322,986         ***           Property and Other Equipment [Member]           Disclosure of detailed information about property, plant and equipment [line items]         ***         ***           Cost at beginning of year         91,896         ***         ***           Additions         *** </td <td></td> <td>-,,,,</td> <td>1,791,847</td>		-,,,,	1,791,847	
Cost at beginning of year         1,322,986         1,322,986           Additions         1,596,774         1,322,986           Property and Other Equipment [Member]         1,596,774         1,322,986           Disclosure of detailed information about property, plant and equipment [line items]         5         1,896         4           Cost at beginning of year         91,896         91,896         4				
Additions         1,596,774         1,322,986           Property and Other Equipment [Member]         1,596,774         1,322,986           Disclosure of detailed information about property, plant and equipment [line items]         91,896         1           Cost at beginning of year         91,896         91,896           Additions         5,128         91,896           Cost at end of year         95,128         91,896           Assets under construction [Member]         5,696         5           Disclosure of detailed information about property, plant and equipment [line items]         6,696         5           Cost at end of year         11,137         376,965         5           Additions         11,137         376,965         5           Gross carrying amount [Member]         5         5           Disclosure of detailed information about property, plant and equipment [line items]         5         5           Cost at end of year         3,796,363         3,703,079           Additions         78,911         142,482           Cumulative effect adjustment (Note 3)         (1,038)           Disposals/retirements         65,148         (46,216)           Cost at end of year         3,935,762         3,796,363           Gross carrying amount [Memb				
Cost at end of year         1,596,774         1,322,986           Property and Other Equipment [Member]         91,896         1,896           Disclosure of detailed information about property, plant and equipment [line items]         91,896         1,896           Additions         95,128         91,896           Cost at end of year         95,128         91,896           Assets under construction [Member]         376,965         1,396,965           Disclosure of detailed information about property, plant and equipment [line items]         7,896         1,396,965           Additions         11,137         376,965         3,76,965           Gross at end of year         11,137         376,965         3,703,079           Additions         3,796,363         3,703,079           Cost at beginning of year         3,796,363         3,703,079           Additions         1,038         142,482           Cumulative effect adjustment (Note 3)         (1,038)         142,482           Cumulative effect adjustment [Note 3)         (1,038)         3,935,762         3,796,363           Gross at end of year         3,935,762         3,796,363         3,796,363         3,796,363         3,796,363         3,796,363         3,796,363         3,796,363         3,796,363         3,796,363 <td></td> <td>1,322,986</td> <td></td>		1,322,986		
Property and Other Equipment [Member]   Disclosure of detailed information about property, plant and equipment [line items]   Section 19,896   Additions   Section 19,1896   Section 19,896   Additions   Section 19,1896   Sectio		1 506 554	1 222 006	
Disclosure of detailed information about property, plant and equipment [line items]           Cost at beginning of year         91,896           Additions         95,128         91,896           Assets under construction [Member]         95,128         91,896           Assets under construction [Member]         376,965         10,3695           Disclosure of detailed information about property, plant and equipment [line items]         376,965         11,137         376,965           Gross carrying amount [Member]         11,137         376,965         3703,079           Additions         78,911         142,482           Cost at beginning of year         3,796,363         3,703,079           Additions         78,911         142,482           Cumulative effect adjustment (Note 3)         (1,038)         (2,982)           Reclassifications and transfers from assets under construction         (3,622)         (2,982)           Reclassifications and transfers from assets under construction         (46,216)         (46,216)           Cost at end of year         3,935,762         3,796,363         3,796,363           Gross carrying amount [Member]   Satellites [Member]         46,216         46,216           Disclosure of detailed information about property, plant and equipment [line items]         46,216         46,216	· · · · · · · · · · · · · · · · · · ·	1,396,774	1,322,986	
Cost at beginning of year       91,896         Additions       95,128       91,896         Cost at end of year       95,128       91,896         Assets under construction [Member]       ****         *****         *****         *****         *****         *****         *****         *****         *****         *****         *****         *****         *****         *****         *****         *****         ****         *****         ****         ****         ****         ****         ****         ****         ****         ****         ****         ****         ****         ****         ****         ***         ****         ****         ****         ****         ****         ****         ****         ****         ****         ****         ****         ****         ****         ****         ****         ***				
Additions         95,128         91,896           Assets under construction [Member]         19,896           Disclosure of detailed information about property, plant and equipment [line items]         376,965           Cost at beginning of year         376,965           Additions         11,137         376,965           Gross carrying amount [Member]         11,137         376,965           Disclosure of detailed information about property, plant and equipment [line items]         4         4           Cost at beginning of year         3,796,363         3,703,079         4           Additions         78,911         142,482           Cumulative effect adjustment (Note 3)         (1,038)         142,482           Disposals/retirements         (3,622)         (2,982)           Reclassifications and transfers from assets under construction         Impact of foreign exchange         65,148         (46,216)           Cost at end of year         3,935,762         3,796,363         3,796,363           Gross carrying amount [Member]   Satellites [Member]         5         4           Disclosure of detailed information about property, plant and equipment [line items]         5         3,203,103           Oss at beginning of year         3,180,178         3,203,103           Additions         4				
Cost at end of year         95,128         91,896           Assets under construction [Member]           Disclosure of detailed information about property, plant and equipment [line items]           Cost at beginning of year         376,965           Additions         11,137         376,965           Gross carrying amount [Member]         11,137         376,965           Disclosure of detailed information about property, plant and equipment [line items]         5         3796,363         3,703,079           Additions         78,911         142,482           Cumulative effect adjustment (Note 3)         (1,038)         (1,038)           Disposals/retirements         (3,622)         (2,982)           Reclassifications and transfers from assets under construction         46,216         3,935,762         3,796,363           Gross carrying amount [Member]   Satellites [Member]         3,935,762         3,796,363         3,796,363           Gross carrying amount [Member]   Satellites [Member]         3,180,178         3,203,103           Disclosure of detailed information about property, plant and equipment [line items]         5           Cost at beginning of year         3,180,178         3,203,103           Additions         4,172)         5		91,890		
Assets under construction [Member]           Disclosure of detailed information about property, plant and equipment [line items]           Cost at beginning of year         376,965           Additions         11,137         376,965           Gross carrying amount [Member]         11,137         376,965           Disclosure of detailed information about property, plant and equipment [line items]         Very Cost at beginning of year         3,796,363         3,703,079           Additions         78,911         142,482           Cumulative effect adjustment (Note 3)         (1,038)         142,482           Cumulative effect adjustment sects under construction         (3,622)         (2,982)           Reclassifications and transfers from assets under construction         46,216         3,796,363           Gross carrying amount [Member]   Satellites [Member]         3,935,762         3,796,363           Gross carrying amount [Member]   Satellites [Member]         46,216         3,796,363           Disclosure of detailed information about property, plant and equipment [line items]         5,203,103           Additions         4,172)         5,203,103           Cost at beginning of year         3,180,178         3,203,103           Additions         4,172)         5,203,103		05 120	01 206	
Disclosure of detailed information about property, plant and equipment [line items]Cost at beginning of year376,965Additions11,137376,965Cost at end of year11,137376,965Gross carrying amount [Member]****  Disclosure of detailed information about property, plant and equipment [line items]****  Cost at beginning of year3,796,3633,703,079Additions78,911142,482Cumulative effect adjustment (Note 3)(1,038)(1,038)Disposals/retirements(3,622)(2,982)Reclassifications and transfers from assets under construction65,148(46,216)Cost at end of year5,148(46,216)Cost at end of year3,935,7623,796,363Gross carrying amount [Member]   Satellites [Member]Disclosure of detailed information about property, plant and equipment [line items]Cost at beginning of year3,180,1783,203,103AdditionsCumulative effect adjustment (Note 3)(4,172)Disposals/retirements		93,126	91,090	
Cost at beginning of year       376,965         Additions       Cost at end of year       11,137       376,965         Gross carrying amount [Member]         Disclosure of detailed information about property, plant and equipment [line items]       Very Cost at beginning of year       3,796,363       3,790,079         Additions       78,911       142,482         Cumulative effect adjustment (Note 3)       (1,038)       (1,038)         Disposals/retirements       (3,622)       (2,982)         Reclassifications and transfers from assets under construction       65,148       (46,216)         Cost at end of year       5,395,762       3,796,363         Gross carrying amount [Member]   Satellites [Member]       5,148       (46,216)         Disclosure of detailed information about property, plant and equipment [line items]       5,148       3,203,103         Additions       (5,148)       3,203,103       3,203,103         Additions       (4,172)       5,148       4,172         Disposals/retirements       (4,172)       5,148       4,172				
Additions         Cost at end of year         11,137         376,965           Gross carrying amount [Member]           Disclosure of detailed information about property, plant and equipment [line items]         Cost at beginning of year         3,796,363         3,703,079           Additions         78,911         142,482           Cumulative effect adjustment (Note 3)         (1,038)         (1,038)           Disposals/retirements         (3,622)         (2,982)           Reclassifications and transfers from assets under construction         5,148         (46,216)           Cost at end of year         3,935,762         3,796,363           Gross carrying amount [Member]   Satellites [Member]         5         3,180,178         3,203,103           Disclosure of detailed information about property, plant and equipment [line items]         5         3,203,103           Additions         (4,172)         5           Cumulative effect adjustment (Note 3)         (4,172)         5           Disposals/retirements         (4,172)         6				
Cost at end of year         11,137         376,965           Gross carrying amount [Member]         Disclosure of detailed information about property, plant and equipment [line items]         Very Cost at beginning of year         3,796,363         3,703,079           Additions         78,911         142,482           Cumulative effect adjustment (Note 3)         (1,038)         (2,982)           Disposals/retirements         (3,622)         (2,982)           Reclassifications and transfers from assets under construction         46,216           Cost at end of year         5,148         (46,216)           Cost at end of year         3,935,762         3,796,363           Gross carrying amount [Member]   Satellites [Member]         Very Cost at beginning of year         3,180,178         3,203,103           Additions         Cumulative effect adjustment (Note 3)         (4,172)         Very Cost at beginning of year         (4,172)           Disposals/retirements         Disposals/retirements         (4,172)         Very Cost at beginning of year         (4,172)		370,903		
Gross carrying amount [Member]  Disclosure of detailed information about property, plant and equipment [line items]  Cost at beginning of year 3,796,363 3,703,079  Additions 78,911 142,482  Cumulative effect adjustment (Note 3) (1,038)  Disposals/retirements (3,622) (2,982)  Reclassifications and transfers from assets under construction  Impact of foreign exchange 65,148 (46,216)  Cost at end of year 3,935,762 3,796,363  Gross carrying amount [Member]   Satellites [Member]  Disclosure of detailed information about property, plant and equipment [line items]  Cost at beginning of year 3,180,178 3,203,103  Additions  Cumulative effect adjustment (Note 3) (4,172)  Disposals/retirements		11 137	376 965	
Disclosure of detailed information about property, plant and equipment [line items]Cost at beginning of year3,796,3633,703,079Additions78,911142,482Cumulative effect adjustment (Note 3)(1,038)Disposals/retirements(3,622)(2,982)Reclassifications and transfers from assets under construction(46,216)Impact of foreign exchange65,148(46,216)Cost at end of year3,935,7623,796,363Gross carrying amount [Member]   Satellites [Member]Disclosure of detailed information about property, plant and equipment [line items]3,180,1783,203,103AdditionsCumulative effect adjustment (Note 3)(4,172)Disposals/retirements	•	11,137	370,703	
Cost at beginning of year       3,796,363       3,703,079         Additions       78,911       142,482         Cumulative effect adjustment (Note 3)       (1,038)         Disposals/retirements       (3,622)       (2,982)         Reclassifications and transfers from assets under construction         Impact of foreign exchange       65,148       (46,216)         Cost at end of year       3,935,762       3,796,363         Gross carrying amount [Member]   Satellites [Member]       5       3,180,178       3,203,103         Additions       Additions       (4,172)       Cumulative effect adjustment (Note 3)       (4,172)         Disposals/retirements       (4,172)       (4,172)       (4,172)				
Additions78,911142,482Cumulative effect adjustment (Note 3)(1,038)Disposals/retirements(3,622)(2,982)Reclassifications and transfers from assets under construction(46,216)Impact of foreign exchange(5,148)(46,216)Cost at end of year(3,935,762)(3,796,363)Gross carrying amount [Member]   Satellites [Member](4,216)Disclosure of detailed information about property, plant and equipment [line items](4,172)Cost at beginning of year(4,172)Additions(4,172)Cumulative effect adjustment (Note 3)(4,172)Disposals/retirements			3 703 079	
Cumulative effect adjustment (Note 3)(1,038)Disposals/retirements(3,622)(2,982)Reclassifications and transfers from assets under construction(46,216)Impact of foreign exchange(5,148)(46,216)Cost at end of year(40,216)(40,216)Gross carrying amount [Member]   Satellites [Member]Disclosure of detailed information about property, plant and equipment [line items](40,216)Cost at beginning of year(40,216)(40,216)Additions(40,216)(40,216)Cumulative effect adjustment (Note 3)(40,216)Disposals/retirements(41,72)				
Disposals/retirements (3,622) (2,982)  Reclassifications and transfers from assets under construction  Impact of foreign exchange (55,148 (46,216))  Cost at end of year (3,935,762 3,796,363)  Gross carrying amount [Member]   Satellites [Member]  Disclosure of detailed information about property, plant and equipment [line items]  Cost at beginning of year (3,180,178 3,203,103)  Additions  Cumulative effect adjustment (Note 3) (4,172)  Disposals/retirements			1 12, 102	
Reclassifications and transfers from assets under construction  Impact of foreign exchange 65,148 (46,216)  Cost at end of year 3,935,762 3,796,363  Gross carrying amount [Member]   Satellites [Member]  Disclosure of detailed information about property, plant and equipment [line items]  Cost at beginning of year 3,180,178 3,203,103  Additions  Cumulative effect adjustment (Note 3) (4,172)  Disposals/retirements			(2.982)	
Impact of foreign exchange65,148(46,216)Cost at end of year3,935,7623,796,363Gross carrying amount [Member]   Satellites [Member]Disclosure of detailed information about property, plant and equipment [line items]3,180,1783,203,103Cost at beginning of year3,180,1783,203,103Additions(4,172)Cumulative effect adjustment (Note 3)(4,172)Disposals/retirements		(-,)	(-))	
Cost at end of year 3,935,762 3,796,363  Gross carrying amount [Member]   Satellites [Member]  Disclosure of detailed information about property, plant and equipment [line items]  Cost at beginning of year 3,180,178 3,203,103  Additions  Cumulative effect adjustment (Note 3) (4,172)  Disposals/retirements		65,148	(46,216)	
Gross carrying amount [Member]   Satellites [Member]  Disclosure of detailed information about property, plant and equipment [line items]  Cost at beginning of year  Additions  Cumulative effect adjustment (Note 3)  Disposals/retirements  (4,172)			,	
Disclosure of detailed information about property, plant and equipment [line items]Cost at beginning of year3,180,1783,203,103AdditionsCumulative effect adjustment (Note 3)(4,172)Disposals/retirements		, ,	, ,	
Cost at beginning of year  Additions Cumulative effect adjustment (Note 3) Disposals/retirements  3,180,178 3,203,103  (4,172)				
Cumulative effect adjustment (Note 3)  Disposals/retirements  (4,172)			3,203,103	
<u>Disposals/retirements</u>	Additions			
•	Cumulative effect adjustment (Note 3)	(4,172)		
Reclassifications and transfers from assets under construction 448,216	<u>Disposals/retirements</u>			
	Reclassifications and transfers from assets under construction	448,216		
<u>Impact of foreign exchange</u> 45,348 (22,925)	Impact of foreign exchange	45,348	(22,925)	
<u>Cost at end of year</u> 3,669,570 3,180,178	Cost at end of year	3,669,570	3,180,178	

Gross carrying amount [Member]   Property and Other Equipment [Member]		
Disclosure of detailed information about property, plant and equipment [line items	]	
Cost at beginning of year	239,220	229,208
Additions	538	3,270
Cumulative effect adjustment (Note 3)		
<u>Disposals/retirements</u>	(3,622)	(2,982)
Reclassifications and transfers from assets under construction	17,229	11,816
Impact of foreign exchange	1,690	(2,092)
Cost at end of year	255,055	239,220
Gross carrying amount [Member]   Assets under construction [Member]		
Disclosure of detailed information about property, plant and equipment [line items	]	
Cost at beginning of year	376,965	270,768
Additions	78,373	139,212
Cumulative effect adjustment (Note 3)	3,134	
<u>Disposals/retirements</u>		
Reclassifications and transfers from assets under construction	(465,445)	(11,816)
Impact of foreign exchange	18,110	(21,199)
Cost at end of year	11,137	376,965
Accumulated depreciation, amortisation and impairment [Member]		
Disclosure of detailed information about property, plant and equipment [line items	]	
Cost at beginning of year	(2,004,516	(1,787,668)
Additions	(224,851)	(221,058)
Cumulative effect adjustment (Note 3)	1,433	
<u>Disposals/retirements</u>	3,207	2,564
Impact of foreign exchange	(7,996)	
Cost at end of year	(2,232,723	)(2,004,516)
Accumulated depreciation, amortisation and impairment [Member]   Satellites [Member	]	
Disclosure of detailed information about property, plant and equipment [line items	]	
Cost at beginning of year	(1,857,192	(1,651,321)
Additions	(209,804)	(206,439)
Cumulative effect adjustment (Note 3)	1,433	
<u>Disposals/retirements</u>		
Impact of foreign exchange	(7,050)	568
Cost at end of year	(2,072,796	(1,857,192)
Accumulated depreciation, amortisation and impairment [Member]   Property and Other		
Equipment [Member]		
Disclosure of detailed information about property, plant and equipment [line items	]	
Cost at beginning of year	(147,324)	(136,347)
Additions	(14,864)	(14,619)
Cumulative effect adjustment (Note 3)		
<u>Disposals/retirements</u>	3,207	2,564
Impact of foreign exchange	(946)	1,078
Cost at end of year	(159,927)	(147,324)

Accumulated depreciation, amortisation and impairment [Member] | Assets under construction [Member]

Disclosure of detailed information about property, plant and equipment [line items]

Cost at beginning of year

Additions

Disposals/retirements

Impact of foreign exchange

Cost at end of year

# 16. SATELLITES, 12 Months Ended PROPERTY AND OTHER EQUIPMENT (Details

Narrative) - CAD (\$)
S in Thousands

Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

**Disclosure of subsidiaries [line items]** 

 Capitalized interest
 \$ 19,120
 \$ 18,324
 \$ 6,292

 Average capitalization rate
 7.00%
 5.00%
 5.00%

Satellites [Member]

**Disclosure of subsidiaries [line items]** 

Increase of accumulated depreciation \$400

Property and Other Equipment [Member]

**Disclosure of subsidiaries [line items]** 

Increase of accumulated depreciation 400

Intangible assets other than goodwill [Member]

**Disclosure of subsidiaries [line items]** 

<u>Capitalized interest</u> \$ 400 \$ 1,200 \$ 300

Telesat International Limited [Member]

**Disclosure of subsidiaries [line items]** 

Percentage of interest in joint operation 42.50%

17. INTANGIBLE ASSETS (Details) - CAD (\$) \$ in Thousands		ths Ended Dec. 31, 2017
Disclosure of intangible assets with indefinite useful life [line items]	Φ 012 00/	_
Balance at beginning	\$ 812,995	
Balance at ending	811,154	\$ 812,995
Gross carrying amount [Member]		
Disclosure of intangible assets with indefinite useful life [line items]	1 150 020	
Balance at beginning	1,158,939	
Balance at ending	1,181,519	91,158,939
Accumulated depreciation, amortisation and impairment [Member]		
Disclosure of intangible assets with indefinite useful life [line items]	(2.45.0.44)	
Balance at beginning	(345,944)	
Balance at ending	(370,365)	(345,944)
Intangible assets with indefinite useful life [Member]		
Disclosure of intangible assets with indefinite useful life [line items]	640.004	
Balance at beginning	648,381	
Additions		
Balance at ending	672,944	648,381
Intangible assets with indefinite useful life [Member]   Orbital slots [Member]		
Disclosure of intangible assets with indefinite useful life [line items]		
Balance at beginning	605,643	
Additions		
Balance at ending	608,895	605,643
Intangible assets with indefinite useful life [Member]   Trade name [Member]		
Disclosure of intangible assets with indefinite useful life [line items]		
Balance at beginning	17,000	
<u>Additions</u>		
Balance at ending	17,000	17,000
Intangible assets with indefinite useful life [Member]   Intellectual property [Member]		
Disclosure of intangible assets with indefinite useful life [line items]		
Balance at beginning	25,738	
<u>Additions</u>		
Balance at ending	47,049	25,738
Intangible assets with indefinite useful life [Member]   Gross carrying amount [Member]		
Disclosure of intangible assets with indefinite useful life [line items]		
Balance at beginning	649,481	639,558
Additions	21,311	12,577
<u>Disposals/retirements</u>		
Impact of foreign exchange	3,252	(2,654)
Balance at ending	674,044	649,481
Intangible assets with indefinite useful life [Member]   Gross carrying amount [Member]		
Orbital slots [Member]		

Disclosure of intangible assets with indefinite useful life [line items]		
Balance at beginning	606,743	609,397
Additions		
<u>Disposals/retirements</u>		
Impact of foreign exchange	3,252	(2,654)
Balance at ending	606,743	606,743
Intangible assets with indefinite useful life [Member]   Gross carrying amount [Member]		
Trade name [Member]		
Disclosure of intangible assets with indefinite useful life [line items]		
Balance at beginning	17,000	17,000
Additions		
<u>Disposals/retirements</u>		
Balance at ending	17,000	17,000
Intangible assets with indefinite useful life [Member]   Gross carrying amount [Member]		
Intellectual property [Member]		
Disclosure of intangible assets with indefinite useful life [line items]		
Balance at beginning	25,738	13,161
Additions	21,311	12,577
<u>Disposals/retirements</u>		
Balance at ending	25,738	25,738
Intangible assets with indefinite useful life [Member]   Accumulated depreciation,		
amortisation and impairment [Member]		
Disclosure of intangible assets with indefinite useful life [line items]		
Balance at beginning	(1,100)	(1,100)
<u>Impairment</u>		
Balance at ending	(1,100)	(1,100)
Intangible assets with indefinite useful life [Member]   Accumulated depreciation,		
amortisation and impairment [Member]   Orbital slots [Member]		
Disclosure of intangible assets with indefinite useful life [line items]		
Balance at beginning	(1,100)	(1,100)
<u>Impairment</u>		
Balance at ending	(1,100)	(1,100)
Intangible assets with indefinite useful life [Member]   Accumulated depreciation,		
amortisation and impairment [Member]   Trade name [Member]		
Disclosure of intangible assets with indefinite useful life [line items]		
Balance at beginning		
<u>Impairment</u>		
Balance at ending		
Intangible assets with indefinite useful life [Member]   Accumulated depreciation,		
amortisation and impairment [Member]   Intellectual property [Member]		
Disclosure of intangible assets with indefinite useful life [line items]		
Balance at beginning		
<u>Impairment</u>		

Balance at ending

17. INTANGIBLE ASSETS (Details 1) - CAD (\$) \$ in Thousands		ths Ended Dec. 31, 2017
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	¢ 012 00/	-
Balance at beginning	\$ 812,995	
Balance at ending  Grass comming on event [March en]	811,134	\$ 812,995
Gross carrying amount [Member]  Disclosure of reconciliation of changes in intensible assets and goodwill lline items!		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]  Balance at beginning	1 150 020	<b>1</b>
	1,158,939	
Balance at ending  A compulated demonistical amountination and immainment [Mambar]	1,181,313	91,158,939
Accumulated depreciation, amortisation and impairment [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	(245 044)	<b>\</b>
Balance at beginning	(345,944)	
Balance at ending	(3/0,303)	(345,944)
Intangible assets with finite useful life [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	164614	
Balance at beginning	164,614	164614
Balance at ending	138,210	164,614
Intangible assets with finite useful life [Member]   Customer Relationships [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	70.170	
Balance at beginning	78,172	70 172
Balance at ending	68,163	78,172
Intangible assets with finite useful life [Member]   Customer Contracts [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	12.017	
Balance at beginning	13,917	12.017
Balance at ending	11,026	13,917
Intangible assets with finite useful life [Member]   Transponder Rights [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	5.556	
Balance at beginning	5,776	
Balance at ending	4,852	5,776
Intangible assets with finite useful life [Member]   Concession Rights [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	30,511	
Balance at ending	25,962	30,511
Intangible assets with finite useful life [Member]   Other [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	26	
Balance at ending	22	26
Intangible assets with finite useful life [Member]   Gross carrying amount [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	509,458	513,042
<u>Additions</u>	36	155
<u>Disposals/retirements</u>	(94)	(1)

Impact of foreign exchange	(1,925)	(3,738)
Balance at ending	` ′	509,458
Intangible assets with finite useful life [Member]   Gross carrying amount [Member]	,	,
Revenue Backlog [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	235,635	235,635
<u>Additions</u>		
<u>Disposals/retirements</u>		
Impact of foreign exchange	320	(261)
Balance at ending	235,955	235,635
Intangible assets with finite useful life [Member]   Gross carrying amount [Member]		
Customer Relationships [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	198,314	198,652
Additions		
<u>Disposals/retirements</u>		(1)
Impact of foreign exchange	413	(337)
Balance at ending	198,727	198,314
Intangible assets with finite useful life [Member]   Gross carrying amount [Member]		
Customer Contracts [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	23,142	23,142
Additions		
<u>Disposals/retirements</u>		
Impact of foreign exchange		
Balance at ending	23,142	23,142
Intangible assets with finite useful life [Member]   Gross carrying amount [Member]		
Transponder Rights [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	16,718	16,718
Additions		
<u>Disposals/retirements</u>		
Impact of foreign exchange		
Balance at ending	16,718	16,718
Intangible assets with finite useful life [Member]   Gross carrying amount [Member]		
Concession Rights [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	35,590	38,575
Additions	36	155
<u>Disposals/retirements</u>	(94)	
Impact of foreign exchange	(2,658)	(3,140)
Balance at ending	32,874	35,590
Intangible assets with finite useful life [Member]   Gross carrying amount [Member]   Other	•	
[Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		

Balance at beginning	59	59
Additions		
Disposals/retirements		
Impact of foreign exchange		
Balance at ending	59	59
Intangible assets with finite useful life [Member]   Accumulated depreciation, amortisation		
and impairment [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	(344,844)	(318,988)
<u>Disposals/retirements</u>	94	1
Impact of foreign exchange	(210)	473
Amortization	(24,305)	(26,330)
Balance at ending	(369,265)	(344,844)
Intangible assets with finite useful life [Member]   Accumulated depreciation, amortisation		
and impairment [Member]   Revenue Backlog [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	(199,423)	(190,917)
Impact of foreign exchange	(327)	243
<u>Amortization</u>	(8,020)	(8,749)
Balance at ending	(207,770)	(199,423)
Intangible assets with finite useful life [Member]   Accumulated depreciation, amortisation		
and impairment [Member]   Customer Relationships [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	(120,142)	(108,850)
<u>Disposals/retirements</u>		1
Impact of foreign exchange	(308)	141
<u>Amortization</u>	(10,114)	(11,434)
Balance at ending	(130,564)	(120,142)
Intangible assets with finite useful life [Member]   Accumulated depreciation, amortisation		
and impairment [Member]   Customer Contracts [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	(9,225)	
<u>Amortization</u>	(2,891)	
Balance at ending	(12,116)	(9,225)
Intangible assets with finite useful life [Member]   Accumulated depreciation, amortisation		
and impairment [Member]   Transponder Rights [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]	(4.0.0.45)	/10 01=\
Balance at beginning	` '	(10,017)
<u>Amortization</u>	(924)	` /
Balance at ending	(11,866)	(10,942)
Intangible assets with finite useful life [Member]   Accumulated depreciation, amortisation		
and impairment [Member]   Concession Rights [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
	(5.070)	(2.020)
Balance at beginning Disposals/retirements	(5,079) 94	(2,839)

Impact of foreign exchange	425	89
<u>Amortization</u>	(2,352)	(2,329)
Balance at ending	(6,912)	(5,079)
Intangible assets with finite useful life [Member]   Accumulated depreciation, amortisation		
and impairment [Member]   Other [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	(33)	(30)
<u>Amortization</u>	(4)	(3)
Balance at ending	(37)	(33)
Intangible assets with finite useful life [Member]   Revenue Backlog [Member]		
Disclosure of reconciliation of changes in intangible assets and goodwill [line items]		
Balance at beginning	36,212	
Balance at ending	\$ 28,185	\$ 36,212

17. INTANGIBLE ASSETS (Details 2) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, I 2017	Dec. 31, 2016
Disclosure of detailed information about intangible assets [line items]			
Total intangible assets	\$ 811,154	\$ 812,995	
Intangible assets with finite useful life [Member]			
Disclosure of detailed information about intangible assets [line items]			
Total intangible assets	138,210	164,614	
Gross carrying amount [Member]			
Disclosure of detailed information about intangible assets [line items]			
Total intangible assets	1,181,519	1,158,939	
Gross carrying amount [Member]   Intangible assets with finite useful life			
[Member]			
Disclosure of detailed information about intangible assets [line items]			
Total intangible assets	507,475	509,458 \$ 5	13,042
Accumulated depreciation, amortisation and impairment [Member]			•
Disclosure of detailed information about intangible assets [line items]			
Total intangible assets	(370,365)	(345,944)	
Accumulated depreciation, amortisation and impairment [Member]   Intangible			
assets with finite useful life [Member]			
Disclosure of detailed information about intangible assets [line items]			
Total intangible assets	(369,265)	(344,844) (3	318,988)
Intangible assets with indefinite useful life [Member]			
Disclosure of detailed information about intangible assets [line items]			
Total intangible assets	672,944	648,381	
Intangible assets with indefinite useful life [Member]   Gross carrying amount			
[Member]			
Disclosure of detailed information about intangible assets [line items]			
Total intangible assets	674,044	649,481 63	39,558
Intangible assets with indefinite useful life [Member]   Accumulated depreciation,	L		
amortisation and impairment [Member]			
Disclosure of detailed information about intangible assets [line items]			
Total intangible assets	\$ (1,100)	\$ (1,100) \$	(1,100)

### 17. INTANGIBLE ASSETS (Details 3)

12 Months Ended Dec. 31, 2018

7

Revenue Backlog [Member] Disclosure of detailed information about intangible assets [line items] Remaining useful lives of intangible assets (in years) 1 to 6 Customer Relationships [Member] Disclosure of detailed information about intangible assets [line items] Remaining useful lives of intangible assets (in years) 1 to 10 Customer Contracts [Member] Disclosure of detailed information about intangible assets [line items] Remaining useful lives of intangible assets (in years) 2 to 8 Transponder Rights [Member] Disclosure of detailed information about intangible assets [line items] Remaining useful lives of intangible assets (in years) 4 Concession Rights [Member] Disclosure of detailed information about intangible assets [line items] Remaining useful lives of intangible assets (in years) 1 to 12 Patents [Member] Disclosure of detailed information about intangible assets [line items]

Remaining useful lives of intangible assets (in years)

## 17. INTANGIBLE ASSETS (Details 4)

Dec. 31, 2017 Dec. 31, 2016

<b>Disclosure of detailed</b>	information abo	out intangible	assets [line items]

Discount rate 10.00%

Bottom of range [Member]

Disclosure of detailed information about intangible assets [line items]

Discount rate 10.25%

Top of range [Member]

Disclosure of detailed information about intangible assets [line items]

Discount rate 10.75%

#### 18. GOODWILL (Details) -Dec. 31, Dec. 31, Dec. 31, **CAD (\$)** 2018 2017 2016 \$ in Thousands Disclosure of reconciliation of changes in intangible assets and goodwill [line items] Goodwill \$ 2,446,603 \$ 2,446,603 Goodwill [Member] Disclosure of reconciliation of changes in intangible assets and goodwill [line items] Discount rate 10.00% 10.75%

Terminal year growth rate

2.00%

2.00%

# 19. TRADE AND OTHER PAYABLES (Details) - CAD (\$)

Dec. 31, 2018

Dec. 31, 2017

#### \$ in Thousands

Trade A	And (	Other	Paya	bles

<u>Trade payables</u>	\$ 3,609	\$ 2,659
Other payables and accrued liabilities	[1] 27,050	35,260
<u>Trade and other payables</u>	[2] \$ 30,659	\$ 37,919

- [1] Other payables and accrued liabilities included payables that are not trade in nature as well as various operating and capital accruals.
- [2] Trade and other receivables and trade and other payables approximate fair value due to the short-term maturity of these instruments.

20. OTHER CURRENT FINANCIAL LIABILITIES (Details) - CAD (\$) \$ in Thousands		Dec. 31, 2018	Dec. 31, 2017
Other Current Financial Liabilities			
<u>Derivative liabilities</u>		\$ 6	\$ 1
Security deposits		1,913	1,944
Satellite performance incentive payments		11,645	10,452
Interest payable	[1]	8,584	8,929
<u>Other</u>		4,238	5,029
Other current financial liabilities		\$ 26,386	\$ 26,355

<sup>[1]</sup> Interest payable included interest payable on indebtedness, satellite performance incentive payments, and other current financial liabilities.

21. OTHER CURRENT LIABILITIES (Details) - CAD (\$) \$ in Thousands	LIABILITIES (Details) - CAD (\$)  Dec. 31, 2018		ES (Details) - Dec. 31, 2018 31  D (\$)	
Other Current Liabilities				
Deferred revenue [1]	\$ 102,645	\$ 66,449		
Decommissioning liabilities (Note 23)	1,068	1,205		
<u>Uncertain tax positions</u>	1,315	1,315		
Income taxes payable	4,231	4,121		
<u>Other</u>	4,030	4,234		
Other current liabilities	\$ 113,289	\$ 77,324		

<sup>[1]</sup> Remaining performance obligations, which the Company also refers to as contract revenue backlog ("backlog") represents the expected future revenue under existing customer contracts, includes both cancellable and non-cancellable contracts, and any deferred revenue that will be recognized in the future in respect to cash already received. The Company does not include revenue beyond the stated expiration of the contract regardless of potential for renewal.

## **22. OTHER LONG-TERM FINANCIAL LIABILITIES**

(Details) - CAD (\$) \$ in Thousands Dec. 31, 2018 Dec. 31, 2017

#### **Other Longterm Financial Liabilities Details Abstract**

<u>Derivative liabilities (Note 27)</u>	\$ 5,627	\$ 5,527
Security deposits	346	328
Satellite performance incentive payments	47,268	52,509
<u>Other</u>	1,280	467
Other long-term financial liabilities	\$ 54,521	\$ 58,831

#### 23. OTHER LONG-TERM LIABILITIES (Details) -CAD (\$) \$ in Thousands

Dec. 31, 2018 Dec. 31, 2017

#### **Other Long-term Liabilities**

Other Long term Enablities			
<u>Deferred revenue</u>	[1]	\$ 400,725	\$ 323,709
Accrued benefit liabilities (Note 29)		32,235	40,065
<u>Uncertain tax positions</u>		175	175
Decommissioning liabilities	[2]	2,043	1,590
Other		340	340
Other long-term liabilities		\$ 435,518	\$ 365,879

- [1] Remaining performance obligations, which the Company also refers to as contract revenue backlog ("backlog") represents the expected future revenue under existing customer contracts, includes both cancellable and non-cancellable contracts, and any deferred revenue that will be recognized in the future in respect to cash already received. The Company does not include revenue beyond the stated expiration of the contract regardless of potential for renewal.
- [2] The current and long-term decommissioning liabilities on property and equipment were \$3.1 million (December 31, 2017 \$2.8 million). The decommissioning liabilities are for the restoration of leased buildings and teleports. During the year ended December 31, 2018, \$0.1 million was recorded as interest expense (December 31, 2017 \$0.1 million) with \$0.1 million decommissioning liabilities derecognized (December 31, 2017 \$nil). It is expected that the decommissioning liabilities will mature between 2019 and 2062.

23. OTHER LONG-TERM	Dec. 31,
LIABILITIES (Details 1) \$ in Thousands	2018 CAD (\$)
Disclosure of amounts to be recovered or settled after twelve months for classes of assets and	CAD (3)
liabilities that contain amounts to be recovered or settled both no more and more than twelve	
months after reporting date [line items]	
Total other long-term liabilities	\$
	3,713,600
2019 [Member]	
Disclosure of amounts to be recovered or settled after twelve months for classes of assets and	
<u>liabilities that contain amounts to be recovered or settled both no more and more than twelve</u>	
months after reporting date [line items]	
<u>Total other long-term liabilities</u>	759,000
<u>2020 [Member]</u>	
Disclosure of amounts to be recovered or settled after twelve months for classes of assets and	
<u>liabilities that contain amounts to be recovered or settled both no more and more than twelve</u>	
months after reporting date [line items]	60 <b>=</b> 600
Total other long-term liabilities	605,600
2021 [Member]	
Disclosure of amounts to be recovered or settled after twelve months for classes of assets and	
<u>liabilities that contain amounts to be recovered or settled both no more and more than twelve</u> months after reporting date [line items]	
Total other long-term liabilities	504 200
	504,300
2022 [Member]  Disclosure of amounts to be recovered as settled after twelve months for classes of assets and	
Disclosure of amounts to be recovered or settled after twelve months for classes of assets and liabilities that contain amounts to be recovered or settled both no more and more than twelve	
months after reporting date [line items]	
Total other long-term liabilities	433,800
2023 [Member]	,
Disclosure of amounts to be recovered or settled after twelve months for classes of assets and	
liabilities that contain amounts to be recovered or settled both no more and more than twelve	
months after reporting date [line items]	
Total other long-term liabilities	380,200
Thereafter [Member]	
Disclosure of amounts to be recovered or settled after twelve months for classes of assets and	
<u>liabilities that contain amounts to be recovered or settled both no more and more than twelve</u>	
months after reporting date [line items]	
<u>Total other long-term liabilities</u>	\$
	1,030,700

#### 23. OTHER LONG-TERM LIABILITIES (Details Narrative) - CAD (\$) \$ in Thousands

12 Months Ended

Dec. 31, 2018 Dec. 31, 2017

#### **Other Long-term Liabilities**

<u>Decommissioning liabilities on property and equipment</u> \$ 3,100 \$ 2,800 Interest expense related to decommissioning liabilities \$ 100 \$ 100

24. INDEBTEDNESS (Details) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017
Disclosure of detailed information about borrowings [line items]		
Borrowings before deferred financing costs	\$	\$
	3,853,883	3,645,195
Less: deferred financing costs, interest rate floors, prepayment options and net gain on	(129,655)	(101.818)
repricing/repayment	(127,033)	(101,010)
Borrowings	3,724,228	3,543,377
<u>Less: current indebtedness</u>	(7,888)	(14,486)
<u>Long-term indebtedness</u>	3,716,340	3,528,891
Senior secured credit facilities [Member]   Revolving Credit Facility [Member]		
Disclosure of detailed information about borrowings [line items]		
Borrowings before deferred financing costs		
Senior secured credit facilities [Member]   Term Loan B - U.S. Facility [Member]		
Disclosure of detailed information about borrowings [line items]		
Borrowings before deferred financing costs	3,172,033	3,016,645
8.875% Senior Notes [Member]		
Disclosure of detailed information about borrowings [line items]		
Borrowings before deferred financing costs	\$ 681,850	\$ 628,550

24. INDEBTEDNESS (Details 1) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017
Disclosure of detailed information about borrowings [line items]		
Short-term deferred financing costs	\$ 15,263	\$ 13,435
Long-term deferred financing costs	68,536	74,278
Deferred financing costs	83,799	87,713
Deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment	129,655	101,818
Senior secured credit facilities [Member]   Term Loan B - U.S. Facility [Member]		
Disclosure of detailed information about borrowings [line items]		
Short-term interest rate floor	3,436	3,413
Long-term interest rate floor	15,165	18,483
Interest rate floor	18,601	21,896
Senior secured credit facilities [Member]   8.875% Senior Notes [Member]		
Disclosure of detailed information about borrowings [line items]		
Short-term net gain on repricing/repayment	6,315	
Long-term net gain on repricing/repayment	27,868	
Net gain on repricing/repayment	34,183	
8.875% Senior Notes [Member]		
<b>Disclosure of detailed information about borrowings [line items]</b>		
Short-term prepayment option	(942)	(863)
Long-term prepayment option	(5,986)	(6,928)
Prepayment option	(6,928)	(7,791)
8.875% Senior Notes [Member]   Term Loan B - U.S. Facility [Member]		
<b>Disclosure of detailed information about borrowings [line items]</b>		
<u>Deferred financing costs</u>	\$ 83,800	\$ 87,700

# 24. INDEBTEDNESS (Details 2) - CAD (\$) \$ in Thousands

Dec. 31, Dec. 31, 2018 2017

Disclosure of amounts to be recovered or settled after twelve months for classes of assets and liabilities that contain amounts to be recovered or settled both no more and more than twelve months after reporting date [line items]

Borrowings before deferred financing costs

3.853.8833.645.195

2019 [Member]

<u>Disclosure of amounts to be recovered or settled after twelve months for classes of assets and liabilities that contain amounts to be recovered or settled both no more and more than twelve months after reporting date [line items]</u>

Borrowings before deferred financing costs

32,000

2020 [Member]

Disclosure of amounts to be recovered or settled after twelve months for classes of assets and liabilities that contain amounts to be recovered or settled both no more and more than twelve months after reporting date [line items]

Borrowings before deferred financing costs

32,000

2021 [Member]

<u>Disclosure of amounts to be recovered or settled after twelve months for classes of assets and liabilities that contain amounts to be recovered or settled both no more and more than twelve months after reporting date [line items]</u>

Borrowings before deferred financing costs

32,000

2022 [Member]

<u>Disclosure of amounts to be recovered or settled after twelve months for classes of assets and liabilities that contain amounts to be recovered or settled both no more and more than twelve months after reporting date [line items]</u>

Borrowings before deferred financing costs

32,000

2023 [Member]

Disclosure of amounts to be recovered or settled after twelve months for classes of assets and liabilities that contain amounts to be recovered or settled both no more and more than twelve months after reporting date [line items]

Borrowings before deferred financing costs

3,044,000

Thereafter [Member]

Disclosure of amounts to be recovered or settled after twelve months for classes of assets and liabilities that contain amounts to be recovered or settled both no more and more than twelve months after reporting date [line items]

Borrowings before deferred financing costs

\$ 681,900

24. INDEBTEDNESS (Details Narrative) \$ in Thousands, \$ in Thousands	Feb. 01, 2017 CAD (\$)	Jan. 31, 2017	Nov. 17, 2016 CAD (\$)	En	onths ded Mar. 31, 2018 USD (\$)	Dec. 31, 2018	Dec. 31, 2017 CAD (\$)	Dec. 31, 2016	01,	2017	Dec. 31, 2016 USD (\$)	Nov. 17, 2016 USD (\$)	Dec. 31, 2015 CAD (\$)	Dec. 31, 2015 USD	2
Disclosure of detailed information about borrowings [line items] Borrowings before deferred financing costs Deferred financing costs Payments of debt				(*)	(3)	\$ 3,853,883 83,799 10,190	\$ 33,645,195 87,713 42,867						(9)	(\$)	
mandatory principal repayment requirements	From February 1, 2017 to April 26, 2018, the repayment was equal to one quarter of 1% of the value of the loan at the time of the amendment February 1, 2017, and is payable on a quarterly basis. As at April 26, 2018, the repayment is equal to one quarter of 1% of the value of the loan at the time of the amendment April 26, 2018, and is payable on a quarterly basis.	this repayment was equal to one quarter of 1% of the initial aggregate principal amount and is payable on a quarterly basis.						30,111							
8.875% Senior Notes [Member]  Disclosure of detailed information about borrowings [line items] Borrowings before deferred financing costs Borrowings maturity date			November			\$ 681,850	0628,550								
Net loss resulting from write off of refinancing Weighted average effective interest rate			17, 2024 \$ 31,900			8.80%									
Initial fair value impact of prepayment option at inception date  Liability amortized  Prepayment options						\$ 8,700 6,900 6,928	7,800 7,791								
8.875% Senior Notes [Member]   USD						0,740	1,171								

Dec. Dec. Oct. May

31, 31, 2012 2012 USD USD (\$)

(\$)

**Disclosure of detailed** information about borrowings [line items] Borrowings before deferred

financing costs

6.0% Senior Notes [Member]

**Disclosure of detailed** information about borrowings [line items]

Initial fair value impact of

premiums

6.0% Senior Notes [Member]

USD

Disclosure of detailed information about borrowings [line items]

Borrowings amount

Term Loan B - U.S. Facility

[Member]

**Disclosure of detailed** information about borrowings [line items]

Net gain on repricing/

repayment

Term Loan B - U.S. Facility

[Member] | USD

**Disclosure of detailed** information about

borrowings [line items]

Payments of debt

Recognition of a loss

Term Loan B - U.S. Facility [Member] | Senior secured credit facilities [Member]

**Disclosure of detailed** information about borrowings [line items]

Borrowings before deferred

financing costs

Borrowings maturity date

Description of interest rate basis

7,000

\$ 500,000

900,000 200,000 700,000

34,200

50,000 2,800

3,172,0333,016,645

November 17, 2023 (i) LIBOR as periodically determined for interest rate periods selected by Telesat in accordance with the terms of the Senior Secured Credit Facilities, but not less than 0.75%, plus applicable margin of 2.50%; or (ii) Alternative Base Rate as determined in accordance with the terms of

the Senior

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Secured Credit Facilities plus an applicable margin of 2.00%.

Weighted average effective

interest rate Interest rate floors Payments of debt

\$ 38,400

\$ 36,100

Gain on repricing

Reduction of interest rate

Term Loan B - U.S. Facility [Member] | Senior secured

credit facilities [Member] | IFRS 9, Financial Instruments

[Member]

**Disclosure of detailed** information about

borrowings [line items]

Interest rate on borrowing 3.00% Previous interest rate on 3.75% borrowing

Net gain on repricing/

repayment

Term Loan B - U.S. Facility [Member] | Senior secured credit facilities [Member]

USD

**Disclosure of detailed** information about

borrowings [line items]

Borrowings before deferred

financing costs Borrowings amount

Term Loan B - U.S. Facility

[Member] | 8.875% Senior

Notes [Member]

Disclosure of detailed

information about

borrowings [line items]

Deferred financing costs

Revolving Credit Facility

[Member] | Senior secured

credit facilities [Member]

**Disclosure of detailed** 

information about

borrowings [line items]

Borrowings before deferred

financing costs

Borrowings maturity date

Description of interest rate

**basis** 

5.83% 4.86% \$18,601 \$21,896

10,200

6,900 2.50%

3.00%

3.75%

2,399,6862,423,925

2,430,000

83,800 87,700

interest at a floating rate plus an applicable margin ranging from 1.50% to 2.00% for prime rate and Alternative Base Rate ("ABR") loans and ranging

from 2.50% to 3.00% for Bankers

November 17, 2021 Bear

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Acceptance ("BA") and Eurodollar loans. 0.40%

\$ 140,000

0.50%

Percentage of unused

commitment fee

Drawings related to letters of

credit

Revolving Credit Facility

[Member] | Senior secured credit facilities [Member] |

**Disclosure of detailed** 

information about

borrowings [line items] Borrowings amount

Revolving Credit Facility
[Member] | Former Senior

Secured Credit Facilities

[Member]

**Disclosure of detailed** 

information about

borrowings [line items]

Borrowings amount

Percentage of unused commitment fee

Term Loan A [Member]

Former Senior Secured Credit

Facilities [Member]

**Disclosure of detailed** 

information about

borrowings [line items]

Borrowings amount 500,000

\$ 300

\$ 200

\$ 200,000

Term Loan B - Canadian

Facility [Member] | Former

Senior Secured Credit

Facilities [Member]

**Disclosure of detailed** 

information about

borrowings [line items]

Borrowings amount 140,000

25. SHARE CAPITAL			
(Details) - CAD (\$)	Dec. 31, 2018 Dec. 31, 201		
<b>\$</b> in Thousands			
<b>Disclosure of classes of share capital [line items]</b>			
Stated value	\$ 153,706	\$ 152,682	
Common shares [Member]			
<b>Disclosure of classes of share capital [line items]</b>			
Number of shares	74,252,460	74,252,460	
Stated value	\$ 26,580	\$ 26,580	
Voting Participating Preferred Shares [Member]			
<b>Disclosure of classes of share capital [line items]</b>			
Number of shares	7,034,444	7,034,444	
Stated value	\$ 48,246	\$ 48,246	
Non-Voting Participating Preferred Shares [Member	1		
<b>Disclosure of classes of share capital [line items]</b>			
Number of shares	38,431,311	38,391,823	
Stated value	\$ 78,870	\$ 77,846	
<u>Director Voting Preferred Shares [Member]</u>			
<b>Disclosure of classes of share capital [line items]</b>			
Number of shares	1,000	1,000	
Stated value	\$ 10	\$ 10	

25. SHARE CAPITAL (Details Narrative) \$ / shares in Units, \$ in Thousands, \$ in Thousands	3 Mor End Mar. 31, 2018 CAD (\$)	ed Mar.	6 Months Ended Jun. 30, 2018 shares	12 Months  Dec. 31, 2018  CAD (\$) shares \$ / shares	Dec. 31, 2017 CAD (\$)	Dec. 31, 2015 shares	Dec. 31, 2013 shares	Dec. 31, 2008 shares
Disclosure of classes of share capital [line items] Number of options granted Number of shares authorized	(0)	(Ψ)		3,692,372 3,280,000	shares 350,000	62,404	4,036,729	8,824,646
USD Disclosure of classes of share capital [line items] Special cash distribution to	\$ \$							
<ul> <li>shareholders</li> <li>Non-Voting Participating Preferred</li> <li>Shares [Member]</li> <li>Disclosure of classes of share capital [line items]</li> </ul>	387,2003	587,200						
Number of options granted  Number of options exercised  Value for stock options exercised   \$  Number of shares authorized			95,363 39,488	· ·				
Non-Voting Participating Preferred Shares [Member]   Former Employee [Member] Disclosure of classes of share capital [line items]								
Number of options granted  Number of options exercised  Value for stock options exercised   \$  Director Voting Preferred Shares					178,642 129,400 \$ 1,900			
[Member] Disclosure of classes of share capital [line items] Number of options granted Number of shares authorized				16,553,779 1,000	)			
Dividends entitled per share if declared    \$ / shares  Redemption price per share   \$ / shares				\$ 10 \$ 10				
Senior Preferred Shares [Member]				, - v				

# Disclosure of classes of share capital [line items]

Number of shares authorized

325,000

26. CAPITAL DISCLOSURES (Details) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017
<u>Capital Disclosures</u>		
Shareholders' equity (excluding reserves)	\$ 997,307	\$ 1,121,090
Debt financing (excluding deferred financing costs, prepayment option, interest rate floor	\$	\$
and net gain on repricing/repayment)	3,853,883	3,645,195

27. FINANCIAL	Dec. 31, 2018
INSTRUMENTS (Details) \$ in Thousands	<b>CAD</b> (\$)
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	\$ 5,149,276
2019 [Member]	Ψ 3,1 19,270
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	314,592
2020 [Member]	,
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	274,368
2021 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	270,431
2022 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	266,512
2023 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	3,256,521
Thereafter [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	766,852
Carrying amount [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	3,959,816
Trade and other payables [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	30,659
Trade and other payables [Member]   2019 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	
Trade and other payables [Member]   2020 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	
Trade and other payables [Member]   2021 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	
Trade and other payables [Member]   2022 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	
Trade and other payables [Member]   2023 [Member]	
Disclosure of detailed information about financial instruments [line items]	

Total contractual maturities of financial liabilities	
Trade and other payables [Member]   Thereafter [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	
Trade and other payables [Member]   Carrying amount [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities 30,65	9
Customer and other deposits [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities 2,259	
Customer and other deposits [Member]   2019 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities 1,852	
Customer and other deposits [Member]   2020 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities 14	
Customer and other deposits [Member]   2021 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities 239	
Customer and other deposits [Member]   2022 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	
Customer and other deposits [Member]   2023 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities	
Customer and other deposits [Member]   Thereafter [Member]	
Disclosure of detailed information about financial instruments [line items]	
<u>Total contractual maturities of financial liabilities</u> 154	
Customer and other deposits [Member]   Carrying amount [Member]	
Disclosure of detailed information about financial instruments [line items]	
<u>Total contractual maturities of financial liabilities</u> 2,259	
Satellite performance incentive payments [Member]	
Disclosure of detailed information about financial instruments [line items]	
<u>Total contractual maturities of financial liabilities</u> 76,50	6
Satellite performance incentive payments [Member]   2019 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities 14,40	1
Satellite performance incentive payments [Member]   2020 [Member]	
Disclosure of detailed information about financial instruments [line items]	
<u>Total contractual maturities of financial liabilities</u> 11,44	6
Satellite performance incentive payments [Member]   2021 [Member]	
Disclosure of detailed information about financial instruments [line items]	
Total contractual maturities of financial liabilities 9,959	
Satellite performance incentive payments [Member]   2022 [Member]	

Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	8,959	
Satellite performance incentive payments [Member]   2023 [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	8,057	
Satellite performance incentive payments [Member]   Thereafter [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	23,684	
Satellite performance incentive payments [Member]   Carrying amount [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	59,895	
Other financial liabilities [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	5,467	
Other financial liabilities [Member]   2019 [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	3,993	
Other financial liabilities [Member]   2020 [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	476	
Other financial liabilities [Member]   2021 [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	116	
Other financial liabilities [Member]   2022 [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	116	
Other financial liabilities [Member]   2023 [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	116	
Other financial liabilities [Member]   Thereafter [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	650	
Other financial liabilities [Member]   Carrying amount [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	5,556	
Indebtedness [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	5,034,385	[1]
Indebtedness [Member]   2019 [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	263,687	[1]
Indebtedness [Member]   2020 [Member]	•	
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	262,432	[1]
	•	

Indebtedness [Member]   2021 [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	260,117	[1]
Indebtedness [Member]   2022 [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	257,437	[1]
Indebtedness [Member]   2023 [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	3,248,348	[1]
Indebtedness [Member]   Thereafter [Member]		
<b>Disclosure of detailed information about financial instruments [line items]</b>		
Total contractual maturities of financial liabilities	742,364	[1]
Indebtedness [Member]   Carrying amount [Member]		
Disclosure of detailed information about financial instruments [line items]		
Total contractual maturities of financial liabilities	\$ 3,861,447	[1]

<sup>[1]</sup> Indebtedness excludes deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment.

#### **27. FINANCIAL INSTRUMENTS (Details 1)** \$ in Thousands

Dec. 31, 2018 **CAD (\$)** 

Satellite performance incentive payments [Member]	
Disclosure of detailed information about financial instruments [line items	<u>l</u>
Interest payable	\$ 982
<u>Interest payments</u>	16,943
Other financial liabilities [Member]	
Disclosure of detailed information about financial instruments [line items]	[
Interest payable	37
<u>Interest payments</u>	37
Indebtedness [Member]	
Disclosure of detailed information about financial instruments [line items]	<u>l</u>
Interest payable	7,564
<u>Interest payments</u>	\$ 1,180,502

27. FINANCIAL INSTRUMENTS (Details 2) - CAD (\$) \$ in Thousands		Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2015
Disclosure of detailed information about financial					
instruments [line items] Cash and cash equivalents		\$ 768 433	\$ 479,045	\$ 782 406	\$ 690 726
Trade and other receivables	[1]	45,631	64,986	ψ 702,400	Ψ 070,720
Other current financial assets		18,779	ŕ		
Other long-term financial assets		55,755	-		
Trade and other payables	[1]	(30,659)	-		
Other current financial liabilities		(26,386)	,		
Other long-term financial liabilities		(54,521)	` '		
Indebtedness		,	3,645,195		
FVTPL		46,795	59,357	\$ 218	
<u>Total</u>		(3,076,851	)(3,138,301)	)	
FVTPL [Member]					
Disclosure of detailed information about financial					
instruments [line items]					
Trade and other payables					
Other financial liabilities [Member]  Disclosure of detailed information about financial					
<u>Disclosure of detailed information about financial</u> <u>instruments [line items]</u>					
Trade and other receivables					
Other current financial assets	[2]				
Trade and other payables			(37,919)		
Total			(3,762,772)	)	
Fair value [Member]			(3,702,772)	,	
Disclosure of detailed information about financial					
instruments [line items]					
<u>Trade and other receivables</u>		45,631	64,986		
<u>Trade and other payables</u>		(30,659)	` ′		
<u>Total</u>		(2,935,620	)(3,218,833)	)	
Loans and receivables [Member]					
Disclosure of detailed information about financial					
instruments [line items]			(4.00)		
<u>Trade and other receivables</u> <u>Trade and other payables</u>			64,986		
Total			565,114		
FVTPL [Member]			303,117		
Disclosure of detailed information about financial					
instruments [line items]					
Trade and other receivables					

<u>Trade and other payables</u>			
<u>Total</u>		46,795	59,357
Amortized Cost [Member]			
Disclosure of detailed information about financial			
instruments [line items]	503		
<u>Trade and other receivables</u>	[3]	45,631	
<u>Trade and other payables</u>	[3]	(30,659)	
<u>Total</u>	[3]	(3,123,646	5)
Level 1 [Member]			
<b>Disclosure of detailed information about financial</b>			
instruments [line items]			
<u>Cash and cash equivalents</u>		768,433	479,045
Level 1 [Member]   Other financial liabilities [Member]			
<b>Disclosure of detailed information about financial</b>			
instruments [line items]			
<u>Cash and cash equivalents</u>			
Level 1 [Member]   Fair value [Member]			
Disclosure of detailed information about financial			
instruments [line items]		7.60 422	450.045
Cash and cash equivalents		768,433	479,045
Level 1 [Member]   Loans and receivables [Member]			
Disclosure of detailed information about financial			
instruments [line items]			470.045
Cash and cash equivalents			479,045
Level 1 [Member]   FVTPL [Member]			
<u>Disclosure of detailed information about financial</u> <u>instruments [line items]</u>			
Cash and cash equivalents			
Level 1 [Member]   Amortized Cost [Member]			
Disclosure of detailed information about financial			
instruments [line items]			
Cash and cash equivalents	[3]	768,433	
Level 1 & Level 2 [Member]			
Disclosure of detailed information about financial			
instruments [line items]			
Other current financial assets	[2]	18,779	2,437
Other long-term financial assets	[2]	55,755	83,531
Level 1 & Level 2 [Member]   Other financial liabilities			
[Member]			
Disclosure of detailed information about financial			
instruments [line items]			
Other current financial assets	[2]		
Level 1 & Level 2 [Member]   Fair value [Member]			

Disclosure of detailed information about financial				
instruments [line items]	[2]	40 ==0		
Other current financial assets	[2]	18,779		
Other long-term financial assets	[2]	55,755	83,531	
Level 1 & Level 2 [Member]   Loans and receivables				
[Member]  Disabassys of detailed information about financial				
<u>Disclosure of detailed information about financial</u> <u>instruments [line items]</u>				
Other current financial assets	[2]		2,275	
Other long-term financial assets	[2]		18,808	
Level 1 & Level 2 [Member]   FVTPL [Member]			,	
Disclosure of detailed information about financial				
instruments [line items]				
Other current financial assets	[2]	18,632	162	
Other long-term financial assets	[2]	33,796	64,723	
Level 1 & Level 2 [Member]   Amortized Cost [Member]				
<b>Disclosure of detailed information about financial</b>				
instruments [line items]				
Other current financial assets	[2],[3	2],[3] 147		
Other long-term financial assets	[2],[3	<sup>3]</sup> 21,959		
Level 2 [Member]				
<b>Disclosure of detailed information about financial</b>				
instruments [line items]		(=	(=	
Other current financial liabilities		(26,386)		
Other long-term financial liabilities	F 4 3	(54,521)		
<u>Indebtedness</u>	[4]	(3,853,883	3)(3,645,195)	
Level 2 [Member]   FVTPL [Member]				
Disclosure of detailed information about financial				
instruments [line items]		(6)	(1)	
Other current financial liabilities Other land town financial liabilities		(6) (5.627)	(1)	
Other long-term financial liabilities Indebtedness	[4]	(5,627)	(3,327)	
	ניין			
Level 2 [Member]   Other financial liabilities [Member]				
Disclosure of detailed information about financial instruments [line items]				
Other current financial liabilities			(26,354)	
Other long-term financial liabilities			(53,304)	
Indebtedness	[4]		(3,645,195)	
Level 2 [Member]   Amortized Cost [Member]			(3,013,173)	
Disclosure of detailed information about financial				
instruments [line items]				
Other current financial liabilities	[3]	(26,380)		

Other long-term financial liabilities

Indebtedness

Level 2 [Member] | Fair value [Member]

**Disclosure of detailed information about financial instruments [line items]** 

Other current financial liabilities

Other long-term financial liabilities

<u>Indebtedness</u>

(29,131) (27,791) (54,733) (59,648) \$ (3,709,695) (3,723,474)

[3] (48,894) [3],[4] (3,853,883)

[4]

Level 2 [Member] | Loans and receivables [Member]

**Disclosure of detailed information about financial instruments [line items]** 

Other current financial liabilities

Other long-term financial liabilities

<u>Indebtedness</u> [4]

- [1] Trade and other receivables and trade and other payables approximate fair value due to the short-term maturity of these instruments.
- [2] Other current and long-term financial assets classified as fair value through profit or loss were calculated using level 2 of the fair value hierarchy. All other balances were calculated using level 1 of the fair value hierarchy.
- [3] Cash and cash equivalents, trade and other receivables, other current and long-term financial assets, classified as loans and receivables under IAS 39 have been classified as amortized cost under IFRS 9. Trade and other payables, other current and long-term financial liabilities and indebtedness classified as other financial liabilities under IAS 39 have been classified as amortized cost under IFRS 9. The change in classification did not have an impact on the measurement of the Company's financial instruments.
- [4] Indebtedness excludes deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment (December 31, 2017 excludes deferred financing costs, interest rate floor and prepayment option).

## 27. FINANCIAL INSTRUMENTS (Details 3)

### - Recurring fair value measurement [Member]

Senior secured credit facilities [Member] | Term Loan B - U.S. Facility [Member]

Disclosure of detailed information about financial instruments [line items]

Term Loan 94.50% 100.13%

Dec. 31, 2018 Dec. 31, 2017

8.875% Senior Notes [Member]

Disclosure of detailed information about financial instruments [line items]

<u>Term Loan</u> 104.44% 111.83%

27. FINANCIAL INSTRUMENTS (Details 4) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	
Disclosure of detailed information about financial instruments [line				
<u>items</u> ]				
Other current financial assets	\$ 18,779	\$ 2,437		
Other long-term financial assets	55,755	83,531		
Other current financial liabilities	26,386	26,355		
Other long-term financial liabilities	54,521	58,831		
<u>Total</u>	46,795	59,357	\$ 218	
Level 2 [Member]				
Disclosure of detailed information about financial instruments [line				
<u>items</u> ]				
Other current financial liabilities	26,386	26,355		
Other long-term financial liabilities	54,521	58,831		
Level 2 [Member]   Interest rate floor [Member]				
Disclosure of detailed information about financial instruments [line				
<u>items</u> ]				
Other current financial assets				
Other long-term financial assets				
Other current financial liabilities	(6)	(1)		
Other long-term financial liabilities	(5,627)			
<u>Total</u>	(5,633)			
Level 2 [Member]   Interest rate swaps [Member]				
Disclosure of detailed information about financial instruments [line				
<u>items</u> ]				
Other current financial assets	18,632	162		
Other long-term financial assets	16,650	18,945		
Other current financial liabilities	ŕ	•		
Other long-term financial liabilities				
Total	35,282	19,107		
Level 2 [Member]   Prepayment option [Member]	,	,		
Disclosure of detailed information about financial instruments [line				
items]				
Other current financial assets				
Other long-term financial assets	17,146	45,778		
Other current financial liabilities	.,	- ) •		
Other long-term financial liabilities				
Total	\$ 17,146	\$ 45,778		
10WI	Ψ 17,170	Ψ 12,770		

27. FINANCIAL INSTRUMENTS (Details 5)	12 Months Ended					
- CAD (\$) \$ in Thousands	Dec. 31, 2018	8 Dec. 31, 2017				
Financial Instruments						
Fair value, Beginning	\$ 59,357	\$ 218				
<b>Realized losses on derivatives</b>						
Forward foreign exchange contract		(207)				
<b>Unrealized gains (losses) on derivative</b>	<u>s</u>					
Interest rate floors	255	7,861				
Prepayment option	(30,691)	33,018				
<u>Interest rate swaps</u>	12,231	19,394				
Forward foreign exchange contracts		240				
Impact of foreign exchange	5,643	(1,167)				
Fair value, Ending	\$ 46,795	\$ 59,357				

27. FINANCIAL INSTRUMENTS (Details	1 Months Ended	12 Mont	ths Ended		
Narrative) - CAD (\$)	Jul. 31,	Dec. 31,	Dec. 31,	Oct. 31,	Dec. 31,
\$ in Thousands	2016	2018	2017	2017	2016
<b>Disclosure of detailed information about financial</b>					
instruments [line items]					
Maximum exposure to credit risk		\$ 888,600	\$ 630,000		
Allowance for doubtful accounts		5,136	2,662		\$ 3,514
Borrowings before deferred financing costs		3,853,883	3,645,195		
Short-term investments	[1]	\$ 425,559	\$ 90,673		\$ 324,720
Satellite performance incentive payments [Member]					
Disclosure of detailed information about financial					
instruments [line items]					
Discount rate cash flow projections		5.70%	5.70%		
Forward foreign exchange contracts [Member]					
<b>Disclosure of detailed information about financial</b>					
instruments [line items]					
Net increase (loss) impact of 5 percent increase		\$ 163 900	\$ 162,000		
(decrease)		Ψ 105,500	, φ 10 <b>2,</b> 000		
Other comprehensive income (loss) impact of 5 percent		3,100	200		
increase (decrease)		-,			
Interest rate floor [Member]					
Disclosure of detailed information about financial					
instruments [line items]					
Net income (loss) impact of 0.25 percent change in		\$ 1,800	\$ 6,500		
interest rates  Four Fourier Frederica Contracts [March en]					
Four Forward Foreign Exchange Contracts [Member]					
Disclosure of detailed information about financial					
instruments [line items] Payments for exchange rate contracts	\$ 7,000				
Four Forward Foreign Exchange Contracts [Member]	\$ 7,000				
British Pound Sterling					
Disclosure of detailed information about financial					
instruments [line items]					
Proceeds from exchange rate contracts	\$ 4,200				
North American [Member]	Ψ 1,200				
Disclosure of detailed information about financial					
instruments [line items]					
Percentage of outstanding trade receivables		59.00%	39.00%		
International customers [Member]					
Disclosure of detailed information about financial					
instruments [line items]					
Percentage of outstanding trade receivables		41.00%	61.00%		
Bottom of range [Member]   USD					

Disclosure of detailed information about financial instruments [line items]			
Discount rate used to discount Canadian dollar cash			
flows	2.29%	1.56%	
Top of range [Member]   USD			
Disclosure of detailed information about financial			
instruments [line items]			
Discount rate used to discount Canadian dollar cash	2.010/	2 210/	
flows	2.81%	2.31%	
Term Loan B - Canadian Facility [Member]			
Disclosure of detailed information about financial			
instruments [line items]			
<u>Variable interest rate</u>			\$
			1,800,000
Term Loan B - Canadian Facility [Member]   Bottom of			
range [Member]			
Disclosure of detailed information about financial			
instruments [line items]			
<u>Fixed interest rates</u>			1.72%
Term Loan B - Canadian Facility [Member]   Top of			
range [Member]			
Disclosure of detailed information about financial			
instruments [line items]			

[1] Consisted of short-term investments with an original maturity of three months or less or which are available on demand with no penalty for early redemption.

2.04%

Fixed interest rates

28. SHARE-BASED COMPENSATION PLANS (Details)	1 Months Ended Aug. 31, 2017 shares	_	ths Ended 8 Dec. 31, 2017 shares \$ / shares
Number of options			
<u>Granted</u>		3,692,372	
<u>Time Vesting Option Plans [Member]</u>			
Number of options			
Outstanding at beginning		3,464,197	2,677,019
<u>Granted</u>		3,692,372	
<u>Forfeited</u>		(2,650)	(15,507)
Exercised		(51,055)	(3,150)
Exchanged	805,835		805,835
Expired			
Outstanding at ending		7,102,864	3,464,197
Weighted average exercise price			
Outstanding at beginning   \$ / shares		\$ 24.85	\$ 24.54
Outstanding at ending   \$ / shares		\$ 25.56	\$ 24.85
Performance Vesting Option Plans [Member	1		
Number of options			
Outstanding at beginning		476,410	1,303,733
Granted			
<u>Forfeited</u>			(17,638)
Exercised		(44,308)	(3,850)
Exchanged	805,835		(805,835)
Expired			
Outstanding at ending		432,102	476,410
Weighted average exercise price			
Outstanding at beginning   \$ / shares		\$ 11.07	\$ 20.16
Outstanding at ending   \$ / shares		\$ 11.07	\$ 11.07

#### 28. SHARE-BASED COMPENSATION PLANS (Details 1)

12 Months Ended Dec. 31, 2018 shares

**Disclosure of terms and conditions of share-based payment arrangement [line items]** 

<u>Granted</u> 3,692,372

Restricted Stock [Member]

Disclosure of terms and conditions of share-based payment arrangement [line items]

Outstanding at beginning

<u>Granted</u> 200,000

Outstanding at ending 200,000

28. SHARE-BASED	12 Mon	ths Ended
COMPENSATION PLANS (Details 2) - shares	Dec. 31, 2018	Dec. 31, 2017
Disclosure of terms and conditions of share-based payment arrangement [line		
<u>items</u> ]		
Weighted average remaining life	7 years	4 years
<u>Time Vesting Option Plans [Member]</u>		
Disclosure of terms and conditions of share-based payment arrangement [line		
<u>items</u> ]		
Quantity of stock options exercisable	3,689,117	2,612,679
Performance Vesting Option Plans [Member]		
Disclosure of terms and conditions of share-based payment arrangement [line		
<u>items</u> ]		
Quantity of stock options exercisable	432,102	476,413

## 28. SHARE-BASED COMPENSATION PLANS

12 Months Ended

(Details 3) - CAD (\$) \$ in Thousands Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

**Share-based Compensation Plans** 

<u>Operating expenses</u> \$ 29,505 \$ 2,856 \$ 5,770

### 28. SHARE-BASED COMPENSATION PLANS (Details 4)

#### 12 Months Ended

Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

### **Share-based Compensation Plans**

Dividend yield

Expected volatility	31.70%	24.60%	24.60%
Risk-free interest rate	2.94%	1.83%	1.83%
Expected life (years)	10 years	10 years	10 years

			1 Moi	nths E	nded		3 Mon	ths Ended	l		12 M	Ionths En	ded				
28. SHARE-BASED COMPENSATION PLANS (Details Narrative) \$ / shares in Units, \$ in Thousands, \$ in Thousands	Jan. 02, 2018 shares	Nov. 01, 2017 shares	Aug.	Mar. 31, 2016 CAD	Jan. 30, 2016	Mar. 31, 2018 CAD	Mar. 31, 2017 USD	Mar. 31, 2016 CAD (\$) shares	Mar. 31, 2016	2018 CAD (\$) \$ / shares	Dec. 31, 2018	Dec. 31, 2017 CAD (\$) shares	Dec. 31, 2017	Dec. 31, 2016 CAD	Dec. 31, 2015 shares	Dec. 31, 2013 shares	Dec. 31, 2008 shares
Disclosure of terms and conditions of share-based payment arrangement [line items]				(\$)		(\$)	(\$)			shares				(\$)			
Number of options authorized Stock options vesting and	_	_								3,280,000	3,280,000	350,000	350,000		62,404	4,036,729	8,824,646
exercisable period (in years)  Expiration period for stock options (in years)	3 years	5 years								10 years	10 years						
Percentage of purchase for cancellation of outstanding stock options					25.00%												
Number of vested stock options repurchased for cash consideration Operating expenses   \$	780,000	2,500,000										\$		\$			
Shares granted per share (in										\$ 185,827	1	187,687		174,923			
dollars per share)   \$ / shares										\$ 13.37							
Non-Voting Participating Preferred Shares [Member] Disclosure of terms and																	
conditions of share-based payment arrangement [line items]										200 000	200 000						
Number of options authorized Non-Voting Participating Preferred Shares [Member]										200,000	200,000						
Restricted Stock Units [Member] Disclosure of terms and																	
conditions of share-based payment arrangement [line																	
items] Number of options authorized										200,000	200,000						
Stock options vesting and exercisable period (in years)										3 years	3 years						
Time Vesting Option Plans [Member] Disclosure of terms and																	
conditions of share-based																	
payment arrangement [line items]																	
Stock options vesting and exercisable period (in years)										5 years	5 years						
Number of option exchange Performance Vesting Option Plans [Member]			805,835									805,835	805,835				
Disclosure of terms and conditions of share-based payment arrangement [line																	
items Stock options vesting and										£	£						
exercisable period (in years)  Number of option exchange  Unvested Performance-Vesting			805,835							5 years	3 years	(805,835)	(805,835)	ı			
Option [Member] Disclosure of terms and conditions of share-based																	
payment arrangement [line items] Number of option exchange			715,383														
Unvested Time-Vesting Options [Member] Disclosure of terms and			. 10,000														
conditions of share-based payment arrangement [line items]																	
Number of option exchange USD			715,383														

Disclosure of terms and conditions of share-based payment arrangement [line items]

Special cash distribution to

shareholders

Special payment to be paid to option holders | \$

Operating expenses recorded

Operating expenses | \$

Key Management Personnel Of Entity Or Parent [Member]

Disclosure of terms and conditions of share-based payment arrangement [line

<u>items</u>] Number of vested stock options repurchased for cash

consideration

Total cash consideration paid to repurchase of vested stock

options | \$

\$ \$ 387,200 387,200

\$ 12,800

\$ 11,200 \$ 8,000

\$ 10,000 \$ 11,300

1,253,477 1,253,477

\$ 24,700 24,700

#### 29. EMPLOYEE BENEFIT 12 Months Ended PLANS (Details) - CAD (\$) Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016 \$ in Thousands Consolidated statements of (loss) income <u>Interest expense</u> \$ 237,786 \$ 200,144 \$ 198,815 Consolidated statements of comprehensive (loss) income Actuarial (gains) losses on employee benefit plans 7,755 (5.171)5,100 Pension plans [Member] Consolidated statements of (loss) income Operating expenses 6,345 6,239 6,235 658 650 875 <u>Interest expense</u> Consolidated statements of comprehensive (loss) income Actuarial (gains) losses on employee benefit plans (4,555)3,761 (4,376)Other post-employment benefit plans [Member] Consolidated statements of (loss) income 276 221 Operating expenses 243 830 861 858 Interest expense Consolidated statements of comprehensive (loss) income Actuarial (gains) losses on employee benefit plans \$ (3,200) \$ 1,410 \$ (724)

#### 29. EMPLOYEE BENEFIT

PLANS (Details 1) - CAD (\$) Dec. 31, 2018 Dec. 31, 2017 \$ in Thousands

Disclosure of	of defined	benefit pl	ans	lline itemsl
Disciosure	or actifica	Delicit pi	THE REAL PROPERTY.	IIIIC ICCIIIS

Accrued benefit liabilities	\$ 32,235	\$ 40,065
-----------------------------	-----------	-----------

Pension plans [Member]

**Disclosure of defined benefit plans [line items]** 

Accrued benefit liabilities 10,905 16,169

Other post-employment benefit plans [Member]

**Disclosure of defined benefit plans [line items]** 

Accrued benefit liabilities \$21,330 \$23,896

29. EMPLOYEE BENEFIT PLANS (Details 2) - CAD (\$) \$ in Thousands	12 Mon Dec. 31, 2018	ths Ended Dec. 31, 2017
Remeasurements		
Accrued benefit liabilities, at end of year	\$ 32,235	\$ 40,065
Present value of defined benefit obligation [Member]		
Change in benefit obligations		
Benefit obligation, at beginning of year	331,677	302,973
<u>Current service cost</u>	6,181	5,984
Remeasurements		
Actuarial gains arising from plan experience	(1,719)	2,886
Actuarial gains from change in demographic assumptions	(9,435)	13
Actuarial gains from changes in financial assumptions	(14,552)	17,503
Contributions by plan participants	1,146	
Foreign exchange	297	(246)
<u>Other</u>	(29)	62
Benefit obligation, at end of year	315,299	331,677
Change in fair value of plan assets		
Contributions by plan participants		1,168
Interest income	11,666	11,853
Benefits paid	(9,933)	(10,519)
Plan assets [Member]		
Change in fair value of plan assets		
Fair value of plan assets, at beginning of year	(291,612)	(266,255)
Contributions by plan participants	(1,146)	(1,168)
Contributions by employer	(8,452)	(9,633)
Interest income	(10,178)	(10,342)
Benefits paid	9,933	10,519
Remeasurements		
Return on plan assets, excluding interest income	17,951	(15,231)
Administrative costs	440	498
Fair value of plan assets, at end of year	(283,064)	(291,612)
Pension plans [Member]		
Remeasurements		
Accrued benefit liabilities, at end of year	10,905	16,169
Pension plans [Member]   Present value of defined benefit obligation [Member]		
Change in benefit obligations		
Benefit obligation, at beginning of year	307,781	280,585
<u>Current service cost</u>	5,905	5,741
<u>Interest expense</u>	10,836	10,992
Remeasurements		
Actuarial gains arising from plan experience	(1,018)	2,748
Actuarial gains from change in demographic assumptions	(8,363)	

Actuarial gains from changes in financial assumptions	(13,125)	16,244
Benefits paid	(9,190)	(9,769)
Contributions by plan participants	1,146	1,168
Foreign exchange		
<u>Other</u>	(3)	72
Benefit obligation, at end of year	293,969	307,781
Change in fair value of plan assets		
Fair value of plan assets, at beginning of year	(291,612)	(266,255)
Contributions by plan participants	(1,146)	1,168
Contributions by employer	(7,709)	(8,883)
<u>Interest income</u>	(10,178)	(10,342)
Benefits paid	9,190	9,769
Remeasurements		
Return on plan assets, excluding interest income	17,951	(15,231)
Administrative costs	440	498
Fair value of plan assets, at end of year	(283,064)	(291,612)
Pension plans [Member]   Plan assets [Member]		
Change in fair value of plan assets		
Fair value of plan assets, at beginning of year	(291,612)	(266,255)
Contributions by plan participants	(1,146)	(1,168)
Contributions by employer	(7,709)	(8,883)
<u>Interest income</u>	(10,178)	(10,342)
Benefits paid	9,190	9,769
Remeasurements		
Return on plan assets, excluding interest income	17,951	(15,231)
Administrative costs	440	498
Fair value of plan assets, at end of year	(283,064)	(291,612)
Other post-employment benefit plans [Member]		
Remeasurements		
Accrued benefit liabilities, at end of year	21,330	23,896
Other post-employment benefit plans [Member]   Present value of defined benefit		
obligation [Member]		
Change in benefit obligations		
Benefit obligation, at beginning of year	23,896	22,388
<u>Current service cost</u>	276	243
<u>Interest expense</u>		861
Remeasurements		
Actuarial gains arising from plan experience	(701)	138
Actuarial gains from change in demographic assumptions	(1,072)	13
Actuarial gains from changes in financial assumptions	(1,427)	1,259
Benefits paid		(750)
Contributions by plan participants		
Foreign exchange	297	(246)
<u>Other</u>	(26)	(10)

Benefit obligation, at end of year	21,330	23,896
Change in fair value of plan assets		
Contributions by plan participants		
Interest income	830	861
Benefits paid	(743)	(750)
Other post-employment benefit plans [Member]   Plan assets [Member]		
Change in fair value of plan assets		
Fair value of plan assets, at beginning of year		
Contributions by plan participants		
Contributions by employer	(743)	(750)
Interest income		
Benefits paid	743	750
Remeasurements		
Return on plan assets, excluding interest income		
Administrative costs		

Fair value of plan assets, at end of year

29. EMPLOYEE BENEFIT PLANS (Details 3) \$ in Thousands	12 Months Ended Dec. 31, 2018 CAD (\$)
Pension plans [Member]   2019 [Member]	
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	\$ 10,144
Pension plans [Member]   2020 [Member]	
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	10,608
Pension plans [Member]   2021 [Member]	
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	11,073
Pension plans [Member]   2022 [Member]	
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	11,501
Pension plans [Member]   2023 [Member]	
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	12,024
Pension plans [Member]   2024 to 2028 [Member]	
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	68,087
Other post-employment benefit plans [Member]   2019 [Member]	
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	800
Other post-employment benefit plans [Member]   2020 [Member]	
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	831
Other post-employment benefit plans [Member]   2021 [Member]	
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	863
Other post-employment benefit plans [Member]   2022 [Member]	
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	897
Other post-employment benefit plans [Member]   2023 [Member]	
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	932
Other post-employment benefit plans [Member]   2024 to 2028 [Member]	]
Disclosure of defined benefit plans [line items]	
Estimated future benefit payments	\$ 6,124

## 29. EMPLOYEE BENEFIT PLANS (Details 4)

Dec. 31, 2018 Dec. 31, 2017

1 LAND (Details 4)		
Equity securities [Member]   CANADA		
Disclosure of defined benefit plans [line items	<u>l</u>	
Fair value plan assets	20.80%	22.30%
Equity securities [Member]   UNITED STATES		
Disclosure of defined benefit plans [line items	<u>l</u>	
Fair value plan assets	12.70%	14.10%
Equity securities [Member]   INTERNATIONAL	<u>_</u>	
Disclosure of defined benefit plans [line items	<u>l</u>	
Fair value plan assets	18.10%	18.90%
Fixed income instruments [Member]   CANADA	<u>\</u>	
Disclosure of defined benefit plans [line items	<u>l</u>	
Fair value plan assets	45.70%	42.60%
Cash and cash equivalents [Member]   CANADA	<u>1</u>	
Disclosure of defined benefit plans [line items	<u>l</u>	
Fair value plan assets	2.70%	2.10%

29. EMPLOYEE BENEFIT PLANS (Details 5)	Dec. 31, 201	8 Dec. 31, 2017
Pension plans [Member]		
Disclosure of defined benefit plans [line items]		
Discount rate	3.80%	3.50%
Discount rate	3.60%	4.00%
Future salary growth	2.50%	2.50%
Other post-employment benefit plans [Member]		
Disclosure of defined benefit plans [line items]		
Health care cost trend rate	4.50%	4.50%
Other medical trend rates	4.50%	4.50%
Other post-employment benefit plans [Member]   Bottom of range [Member	]	
Disclosure of defined benefit plans [line items]		
Discount rate	3.80%	3.25%
Discount rate	3.25%	3.75%
Other post-employment benefit plans [Member]   Top of range [Member]		
Disclosure of defined benefit plans [line items]		
Discount rate	4.00%	3.50%
<u>Discount rate</u>	3.60%	4.00%

29. EMPLOYEE BENEFIT PLANS (Details 6) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017
Pension plans [Member]   Discount rate [Member]		
Disclosure of defined benefit plans [line items]		
1% increase	\$ (39,145)	\$ (42,092)
1% decrease	49,361	53,148
Pension plans [Member]   Future salary growth [Member]		
Disclosure of defined benefit plans [line items]		
1% increase	7,572	7,988
1% decrease	(6,919)	(7,457)
Other post-employment benefit plans [Member]   Discount rate [Member]		
Disclosure of defined benefit plans [line items]		
1% increase	(2,471)	(2,786)
1% decrease	3,224	3,588
Other post-employment benefit plans [Member]   Medical and dental trend rates		
[Member]		
Disclosure of defined benefit plans [line items]		
1% increase	1,703	2,165
1% decrease	\$ (1,280)	\$ (1,663)

12 Months Ended 29. EMPLOYEE BENEFIT PLANS (Details Narrative) -Dec. **CAD (\$)** Dec. 31, 2018 31, \$ in Thousands 2017 Disclosure of defined benefit plans [line items] \$ Contributions to defined \$ 900 800 benefit plans Description of medical trend For certain Canadian post-retirement benefits, the medical trend rate for drugs was assumed to be 6.50% in 2018, decreasing by 0.25% per annum to rate an ultimate rate of 4.50% per annum in 2026 and thereafter. Expected contributions for \$7,100 next fiscal year Expected defined contributions \$ 400 for next fiscal year Pension plans [Member] Disclosure of defined benefit plans [line items] Weighted average duration of 15 years defined benefit obligation Weighted average duration of 22 years current service cost Other post-employment benefit plans [Member] Disclosure of defined benefit plans [line items] Weighted average duration of 14 years defined benefit obligation Weighted average duration of

27 years

current service cost

30. SUPPLEMENTAL CASH FLOW INFORMATION (Details) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2015
<b>Supplemental Cash Flow Information</b>				
Cash	\$ 342,874	\$ 388,372	\$ 457,686	
Short-term investments	[1] 425,559	90,673	324,720	
Cash and cash equivalents	\$ 768,433	\$ 479,045	\$ 782,406	\$ 690.726

<sup>[1]</sup> Consisted of short-term investments with an original maturity of three months or less or which are available on demand with no penalty for early redemption.

## 30. SUPPLEMENTAL CASH FLOW

#### 12 Months Ended

**INFORMATION (Details 1)** 

- CAD (\$)

Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

\$ in Thousands

**Supplemental Cash Flow Information** 

<u>Income taxes paid</u> \$ (109,193) \$ (85,503) \$ (122,401)

<u>Income taxes received</u> 2,885 22,512 1,929

Income taxes paid, net of income taxes received \$ (106,308) \$ (62,991) \$ (120,472)

#### 12 Months Ended

Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

#### 30. SUPPLEMENTAL CASH FLOW INFORMATION (Details 2) - CAD (\$)

\$ in Thousands

Sach Flow Information

<b>Supplemental</b>	Cash	Flow	Information

Interest paid	\$ (207,339)	\$ (219,773)	\$ (165,173)
Interest received	11,802	6,201	6,620
<u>Capitalized interest</u>	19,120	18,324	6,292
Interest paid, net of capitalized interest and interest received	<u>d</u> \$ (176,417)	\$ (195,248)	\$ (152,261)

30. SUPPLEMENTAL CASH FLOW	12 Months Ended			
INFORMATION (Details 3) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2	016
Reconciliation Liabilities [Roll Forward]				
Debt repricing costs	\$ 10,190	\$ 42,867	\$ 58,141	
Indebtedness [Member]				
Reconciliation Liabilities [Roll Forward]				
Beginning balance	3,543,37	73,851,638 <sup>[1</sup>	4,063,221	
Debt repricing costs	(10,190)	(42,867)	(58,141)	
<u>Cash outflows</u>	(94,951)	(31,620)	(4,008,356	)
Amortization of deferred financing costs, interest rate floor, prepayment	22,497	14,988	12,971	
option and net gain on repricing/repayment	•	17,700	12,7/1	
Loss on voluntary payment (Note 24)	2,828			
Gain on repricing (Note 24)	(6,901)			
Cumulative effect adjustment (Note 3)	(36,072)		(1.50)	
Other  Live and a Constitution and the second and t	202 (40	(252 221)	(150)	
Impact of foreign exchange Cash inflows	303,640	(253,221)	(113,297)	
Accrued debt issue costs			3,935,576 (4,459)	
Write off of debt issue costs, interest rate floors, prepayment option and			(4,439)	
premiums			41,183	
•	2]		(16,910)	
Ending balance	3,724,223	83,543,377	3,851,638	[1]
Satellite Performance Incentive Payments [Member]				
Reconciliation Liabilities [Roll Forward]				
Beginning balance	62,961	75,985	87,026	
Debt repricing costs				
<u>Cash outflows</u>	(9,037)	(8,436)	(8,934)	
Amortization of deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment				
Loss on voluntary payment (Note 24)				
Gain on repricing (Note 24)				
Cumulative effect adjustment (Note 3)				
<u>Other</u>	191	18	573	
Impact of foreign exchange	4,798	(4,606)	(2,680)	
<u>Cash inflows</u>				
Accrued debt issue costs				
Write off of debt issue costs, interest rate floors, prepayment option and				
premiums  N. T.	21			
	2]			
Ending balance	58,913	62,961	75,985	[1]

Capital Lease [Member]				
Reconciliation Liabilities [Roll Forward]				
Beginning balance	369	422	[1]	
Debt repricing costs				
<u>Cash outflows</u>	(29)	(30)	(30)	
Amortization of deferred financing costs, interest rate floor, prepayment	<u>t</u>			
option and net gain on repricing/repayment				
Loss on voluntary payment (Note 24)				
Gain on repricing (Note 24)				
Cumulative effect adjustment (Note 3)				
<u>Other</u>		2	(2)	
Impact of foreign exchange	29	(25)	(20)	
<u>Cash inflows</u>				
Accrued debt issue costs				
Write off of debt issue costs, interest rate floors, prepayment option and	:			
<u>premiums</u>				
Non-cash additions	[2]		474	
Ending balance	\$ 369	\$ 369	\$ 422	[1]

<sup>[1]</sup> Balance of the indebtedness as at January 1, 2017, included \$4,459 of accrued debt issue costs associated with the November 2016 refinancing which were paid in 2017.

<sup>[2]</sup> Non-cash additions for the indebtedness includes \$(25,581) relating to the interest rate floors on the Senior Secured Credit Facilities and \$8,671 relating to the prepayment option on the Senior Notes.

## 30. SUPPLEMENTAL CASH FLOW

#### 12 Months Ended

INFORMATION (Details 4)
- CAD (\$)

Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

\$ in Thousands

#### **Supplemental Cash Flow Information**

Trade and other receivables	\$ 22,056	\$ (13,272)	\$ (8,347)
Financial assets	(210)	3,975	(2,521)
Other assets	371	12,848	1,260
Trade and other payables	(4,695)	6,947	6,076
Financial liabilities	(1,026)	(13,748)	551
Other liabilities	72,317	51,502	103,618
Operating assets and liabilities	\$ 88,813	\$ 48,252	\$ 100,637

## 30. SUPPLEMENTAL CASH FLOW

#### 12 Months Ended

**INFORMATION (Details 5)** 

- CAD (\$)

Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

\$ in Thousands

### **Supplemental Cash Flow Information**

Satellites, property and other equi	<u>pment</u> \$ 3,795	\$ 9,515	\$ 13,776
Intangible assets	\$ 3,635	\$ (128)	\$ 2,350

30. SUPPLEMENTAL CASH FLOW	12 Months Ended		
INFORMATION (Details Narrative) - CAD (\$) \$ in Thousands	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2016
Indebtedness [Member]			
Disclosure of detailed information about borrowings [line items]			
Accrued debt issue costs	\$ 4,459		
Senior secured credit facilities [Member]   Term Loan B - U.S. Facility			
[Member]			
<b>Disclosure of detailed information about borrowings [line items]</b>			
<u>Interest rate floors</u>	21,896	\$ 18,601	
Senior secured credit facilities [Member]   Term Loan B - U.S. Facility			
[Member]   Indebtedness [Member]			
Disclosure of detailed information about borrowings [line items]			
<u>Interest rate floors</u>			\$
			(25,581)
8.875% Senior Notes [Member]			
Disclosure of detailed information about borrowings [line items]			
<u>Prepayment options</u>	\$ (7,791)	\$ (6,928)	
8.875% Senior Notes [Member]   Indebtedness [Member]			
<b>Disclosure of detailed information about borrowings [line items]</b>			
<u>Prepayment options</u>			\$ 8,671

# 31. COMMITMENTS AND CONTINGENT LIABILITIES (Details)

\$ in Thousands

Dec. 31, 2018 CAD (\$)

Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations \$ 110,29	90
Operating Property Leases [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations 33,837	
Capital Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations 22,460	
Other Operating Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations 53,993	
2019 [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations 44,151	
2019 [Member]   Operating Property Leases [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations 3,190	
2019 [Member]   Capital Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations 22,460	
2019 [Member]   Other Operating Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations 18,501	
2020 [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations 14,859	
2020 [Member]   Operating Property Leases [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations 3,434	
2020 [Member]   Capital Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations	
2020 [Member]   Other Operating Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations 11,425	
2021 [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations 12,744	
2021 [Member]   Operating Property Leases [Member]	

Disclosure of detailed information about property, plant and equipment [line items]

<u>Contractual obligations</u>	3,630
2021 [Member]   Capital Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations	
2021 [Member]   Other Operating Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations	9,114
2022 [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations	6,660
2022 [Member]   Operating Property Leases [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations	3,097
2022 [Member]   Capital Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations	
2022 [Member]   Other Operating Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations	3,563
2023 [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations	5,940
2023 [Member]   Operating Property Leases [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations	3,003
2023 [Member]   Capital Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
Contractual obligations	
2023 [Member]   Other Operating Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
<u>Contractual obligations</u>	2,937
Thereafter [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
<u>Contractual obligations</u>	25,936
Thereafter [Member]   Operating Property Leases [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
<u>Contractual obligations</u>	17,483
Thereafter [Member]   Capital Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
<u>Contractual obligations</u>	
Thereafter [Member]   Other Operating Commitments [Member]	
Disclosure of detailed information about property, plant and equipment [line items]	
<u>Contractual obligations</u>	\$ 8,453

31. COMMITMENTS AND	12 Months Ended				
CONTINGENT LIABILITIES (Details Narrative) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017	, Dec. 31, 2016		
Disclosure of contingent liabilities in business combination [line					
<u>items</u> ]					
Operating property lease commitments expenses	\$ 7,300	\$ 6,400	\$ 6,500		
<u>Customer prepayments</u>	503,400	\$ 390,200			
Brazilian Tax Authorities [Member]					
Disclosure of contingent liabilities in business combination [line					
<u>items</u> ]					
Additional taxes and interest	38,900				
Canada Revenue Agency [Member]					
Disclosure of contingent liabilities in business combination [line					
<u>items</u> ]					
Additional taxes and interest	\$ 9,000				

#### 32. SUBSIDIARIES (Details)

12 Months Ended
Dec. 31, 2018 Dec. 31, 2017

Infosat Communications LP [Member]

**Disclosure of subsidiaries [line items]** 

<u>Country</u> Canada Canada

Method of consolidation Fully consolidated Fully consolidated

Percentage of voting rights 100.00% 100.00%

Telesat Spectrum General Partnership [Member]

**Disclosure of subsidiaries [line items]** 

<u>Country</u> Canada Canada

Method of consolidation Fully consolidated Fully consolidated

Percentage of voting rights 100.00% 100.00%

10680451 Canada Inc. [Member]

Disclosure of subsidiaries [line items]

<u>Country</u> Canada Canada

Method of consolidation Fully consolidated Fully consolidated

Percentage of voting rights 100.00% 100.00%

**Skynet Satellite Corporation [Member]** 

**Disclosure of subsidiaries [line items]** 

Country United States United States

Method of consolidation Fully consolidated Fully consolidated

Percentage of voting rights 100.00% 100.00%

Telesat Network Services, Inc. [Member]

**Disclosure of subsidiaries [line items]** 

Country United States United States

Method of consolidation Fully consolidated Fully consolidated

Percentage of voting rights 100.00% 100.00%

The SpaceConnection Inc. [Member]

Disclosure of subsidiaries [line items]

Country United States United States

Method of consolidation Fully consolidated Fully consolidated

Percentage of voting rights 100.00% 100.00%

Telesat Satellite LP [Member]

**Disclosure of subsidiaries [line items]** 

Country United States United States

Method of consolidation Fully consolidated Fully consolidated

Percentage of voting rights 100.00% 100.00%

Infosat Able Holdings, Inc. [Member]

Disclosure of subsidiaries [line items]

Country United States United States

Method of consolidation Fully consolidated Fully consolidated

Percentage of voting rights 100.00% 100.00%

Telesat Brasil Capacidade de Satelites Ltda. [Member]

**Disclosure of subsidiaries [line items]** 

<u>Country</u> Brazil Brazil

Method of consolidation Fully consolidated Fully consolidated

Percentage of voting rights 100.00% 100.00%

<u>Telesat (IOM) Limited [Member]</u>

**Disclosure of subsidiaries [line items]** 

Country Isle of Man Isle of Man

Method of consolidation Fully consolidated Fully consolidated

Percentage of voting rights 100.00% 100.00%

<u>Telesat International Limited [Member]</u>

**Disclosure of subsidiaries [line items]** 

Country United Kingdom United Kingdom

Method of consolidation Fully consolidated Fully consolidated

Percentage of voting rights 100.00% 100.00%

## 33. RELATED PARTY TRANSACTIONS (Details) -

#### 12 Months Ended

CAD (\$) \$ in Thousands Dec. 31, 2018 Dec. 31, 2017 Dec. 31, 2016

#### **Related Party Transactions**

Short-term benefits (including salaries)	\$ 16,853	\$ 10,037	\$ 6,751
Special payments	[1] 2,904	9,006	
Post-employment benefits	2,510	2,458	2,344
Share-based payments	29,016	2,820	5,482
Compensation of executives and Board level directors	\$ 51,283	\$ 24,321	\$ 14,577

<sup>[1]</sup> Balance relates to the special cash distribution effective January 25, 2017.

33. RELATED PARTY	12 Months Ended				
TRANSACTIONS (Details 1) - CAD (\$) \$ in Thousands	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016		
<b>Disclosure of transactions between related parties [line items]</b>					
Revenue (Sale of goods and services, interest income)	\$ 23,954	\$ 15,123	\$ 13,424		
Operating expenses (Purchase of goods and services, interest expense)	185,827	187,687	174,923		
Loral Holdings Corporation [Member]					
<b>Disclosure of transactions between related parties [line items]</b>					
Revenue (Sale of goods and services, interest income)	128	128	133		
Operating expenses (Purchase of goods and services, interest expense)	\$ 6,456	\$ 6,518	\$ 6,627		

## **33. RELATED PARTY TRANSACTIONS (Details**

2) - CAD (\$) \$ in Thousands Dec. 31, 2018 Dec. 31, 2017

<b>Disclosure of transactions</b>	between related	parties	[line items]

<u>Current receivables</u> \$ 28 \$ 82

Loral Holdings Corporation [Member]

Disclosure of transactions between related parties [line items]

Current receivables 28 82

Current payables

33. RELATED PARTY	1	1 Months Ended 3 Months 1		onths En	6 Ended Months Ended		12 Months Ended			
TRANSACTIONS (Details Narrative) \$ in Thousands, \$ in Thousands	Jun. 30, 2018 shares	Aug. 31, 2017 shares	Mar. 31, 2016 CAD (\$) shares	Mar. 31, 2018 CAD (\$)	Mar. 31, 2017 USD (\$)	Mar. 31, 2016 CAD (\$)	Jun. 30, 2018 shares	Dec. 31, 2018 CAD (\$) shares	Dec. 31, 2017 CAD (\$) shares	Dec. 31, 2015 shares
<b>Disclosure of transactions</b>				(4)	(4)	(4)				
between related parties [line items]										
Number of options granted								3,692,372		
Contributions made to defined								\$ 7,700	\$ 8,900	
benefit pension plans   \$								4 / //	4 0,5 00	
Performance Vesting Option Plans [Member]										
Disclosure of transactions										
between related parties [line										
items]										
Number of options granted		005.025							(005.025)	
Number of option exchange	8	805,835							(805,835)	
Time Vesting Option Plans										
[Member] Disclosure of transactions										
between related parties [line										
items]										
Number of options granted								3,692,372		
Number of option exchange	8	805,835						0,002,072	805,835	
Performance Unvesting Option		330,300							000,000	
Plans [Member]	-									
Disclosure of transactions										
between related parties [line										
<u>items]</u>										
Number of option exchange	7	715,383								
Time Unvesting Option Plans										
[Member]										
Disclosure of transactions										
between related parties [line										
items]	,	715 202								
Number of options granted USD		715,383								
Disclosure of transactions										
between related parties [line										
items]										
Special cash distribution to				\$	\$					
shareholders					387,200					
USD   Red Isle Private										
Investment Inc. [Member]										
<b>Disclosure of transactions</b>										
between related parties [line										
<u>items]</u>										

Special cash distribution to 138,500 shareholders | \$ USD | Loral Holdings Corporation [Member] **Disclosure of transactions** between related parties [line items] Special cash distribution to 242,700 shareholders | \$ **Non-Voting Participating** Preferred Shares [Member] **Disclosure of transactions** between related parties [line items] 95,363 7,000 Number of options granted Key Management Personnel Of Entity Or Parent [Member] **Disclosure of transactions** between related parties [line items] Number of options granted 348,606 Repurchased vested stock 1,253,477 options Total cash consideration paid to repurchase of vested stock \$ 24,700 24,700 options | \$ Total cash consideration paid to key management personnel \$ 18,700 to repurchase of vested stock options | \$ Stock appreciation rights 95,363 Number of shares issued 3,630,000 Description of vesting peiod Of this balance, 2,850,000 options vest over a five-

year period, while 780,000 vest over a three-year period. In addition, 200,000 restricted share units were granted during 2018 which vest over a threeyear period

and will be settled with Non-Voting Participating Preferred shares.

Key Management Personnel
Of Entity Or Parent [Member]
| Time Vesting Option Plans
[Member]

<u>Disclosure of transactions</u> <u>between related parties [line items]</u>

Number of options granted Key Management Personnel

Of Entity Or Parent [Member]
| Time Unvesting Option Plans

[Member]

<u>Disclosure of transactions</u> <u>between related parties [line items]</u>

Number of options granted Description of vesting peiod 682,550

613,316

A portion of the new unvested time-vesting options will vest upon the next anniversary date of the option holder with the remainder vesting evenly over a three-year period commencing

on the sixth anniversary date.

Key Management Personnel
Of Entity Or Parent [Member]
| Non-Voting Participating
Preferred Shares [Member]
Disclosure of transactions
between related parties [line
items]

Stock appreciation rights 39,488