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

Form 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2019

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

Commission file number 1-14180

LORAL SPACE & COMMUNICATIONS INC.

(Exact name of registrant specified in its charter)

Jurisdiction of incorporation: Delaware

IRS identification number: 87-0748324

600 Fifth Avenue

New York, New York 10020

(Address of principal executive offices)

Telephone: (212) 697-1105

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

| <u>Title of each class</u> | <u>Trading Symbol</u> | <u>Name of each exchange on which registered</u> |
|-------------------------------|-----------------------|--------------------------------------------------|
| Common stock, \$.01 par value | LORL | NASDAQ |

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| | | | | |
|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| Large accelerated filer | Accelerated filer | Non-accelerated filer | Smaller reporting company | Emerging growth company |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Exchange Act Rule 12b-2 of the Act). Yes No

As of June 28, 2019, the aggregate market value of the common stock, the only common equity of the registrant currently issued and outstanding, held by non-affiliates of the registrant was approximately \$439,112,289

At March 9, 2020, 21,427,078 shares of the registrant's voting common stock and 9,505,673 shares of the registrant's non-voting common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for its 2020 Annual Meeting of Stockholders, which is to be filed subsequent to the date hereof, are incorporated by reference into Part III of this Annual Report on Form 10-K.

[Table of Contents](#)

**LORAL SPACE AND COMMUNICATIONS INC.
INDEX TO ANNUAL REPORT ON FORM 10-K
For the Year Ended December 31, 2019**

| | |
|--------------------------------------------------------------------------------------------------------------------------------------|----|
| <u>PART I</u> | |
| Item 1: Business | 3 |
| Item 1A: Risk Factors | 17 |
| Item 1B: Unresolved Staff Comments | 39 |
| Item 2: Properties | 39 |
| Item 3: Legal Proceedings | 39 |
| Item 4: Mine Safety Disclosures | 39 |
| <u>PART II</u> | |
| Item 5: Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities | 40 |
| Item 7: Management’s Discussion and Analysis of Financial Condition and Results of Operations | 41 |
| Item 8: Financial Statements and Supplementary Data | 57 |
| Item 9: Changes in and Disagreements with Accountants on Accounting and Financial Disclosure | 57 |
| Item 9A: Controls and Procedures | 57 |
| Item 9B: Other Information | 60 |
| <u>PART III</u> | |
| Item 10: Directors, Executive Officers and Corporate Governance | 60 |
| Item 11: Executive Compensation | 60 |
| Item 12: Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters | 60 |
| Item 13: Certain Relationships and Related Transactions, and Director Independence | 60 |
| Item 14: Principal Accountant Fees and Services | 60 |
| <u>PART IV</u> | |
| Item 15: Exhibits and Financial Statement Schedule | 61 |
| Signatures | 68 |

PART I

Item 1. *Business*

THE COMPANY

Overview

Loral Space & Communications Inc., together with its subsidiaries (“Loral,” the “Company,” “we,” “our” and “us”), is a leading satellite communications company engaged, through our ownership interests in affiliates, in satellite-based communications services.

Satellite Services

Loral has one operating segment consisting of satellite-based communications services. Loral participates in satellite services operations primarily through its ownership interest in Telesat Canada (“Telesat”), a leading global satellite operator. Telesat provides its satellite and communication services from a fleet of satellites that occupy Canadian and other orbital locations. Loral held a 62.7% economic interest and a 32.6% voting interest in Telesat as of December 31, 2019.

Telesat owns and leases a satellite fleet that operates in geostationary orbit approximately 22,000 miles above the equator. In this orbit, satellites remain in a fixed position relative to points on the earth’s surface and provide reliable, high-bandwidth services anywhere in their coverage areas, serving as the backbone for many forms of telecommunications. Telesat is also developing a global constellation of low earth orbit (“LEO”) satellites. LEO satellites operate in a circular orbit around the earth with an altitude typically between 500 and 870 miles. Unlike geostationary satellites that operate in a fixed orbital location above the equator, LEO 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 geostationary 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.

At December 31, 2019, Telesat, with approximately \$2.5 billion of backlog, provided satellite services to customers from its fleet of 16 in-orbit geostationary satellites and the Canadian Ka-band payload on the ViaSat-1 satellite. In January 2018, Telesat launched a Ka-band satellite into low earth orbit as part of its plan to deploy a high capacity LEO constellation that is expected to deliver low latency, fiber-like broadband to commercial and government users worldwide.

Telesat provides video distribution and direct-to-home (“DTH”) video, as well as end-to-end communications services using both satellite and hybrid satellite-ground networks.

Telesat Services

Telesat earns the majority of its 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. Telesat also earns 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. Telesat categorizes its revenues into: Broadcast, Enterprise, and Consulting and Other.

Broadcast

Telesat’s broadcast services business provided approximately 48.8% of its revenue for the year ended December 31, 2019. These services include:

DTH: Both Canadian DTH service providers (Bell TV and Shaw Direct) exclusively use Telesat’s satellites as a distribution platform for their services, delivering television programming, audio and information channels directly to customers’ homes. In addition, Telesat’s satellites are used by DISH Network for DTH services in the United States.

[Table of Contents](#)

Video distribution and contribution: Broadcasters, cable networks and DTH service providers use Telesat satellites for the full-time transmission of television programming. Additionally, Telesat provides 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 Telesat 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

Telesat's enterprise services provided approximately 48.8% of its revenue for the year ended December 31, 2019. These services include:

Telecommunication carrier and integrator services: Telesat provides 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.

Maritime and aeronautical services: Telesat provides satellite capacity to customers serving the growing maritime and aeronautical markets bringing broadband communications services to commercial airplanes and vessels.

Government services: Telesat provides services to the United States government through government service integrators, rather than directly to United States government agencies. Telesat is also a significant provider of satellite services to the Canadian government.

Direct-to-Consumer Broadband services: Telesat provides satellite capacity to Xplornet in Canada, to ViaSat in the United States, and to HNS in South Africa, who each in turn, use it to provide two-way broadband internet services directly to consumers.

Retail services: Telesat operates 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 retail petroleum sites.

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

Satellite operator services: Telesat provides 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 a designated orbital location to preserve their spectrum rights.

Consulting and Other

Telesat's consulting and other category provided approximately 2.4% of its revenues for the year ended December 31, 2019. With more than 50 years of engineering and technical experience, Telesat is a leading consultant in establishing, operating and upgrading satellite systems worldwide. Telesat's consulting operations allow it to realize operating efficiencies by leveraging the same employees and facilities used to support Telesat's own satellite communication business.

Competitive Strengths

Telesat's business is characterized by the following key competitive strengths:

Leading Global FSS Operator

Telesat is one of the world's leading fixed satellite services ("FSS") operators and the largest in Canada. It has a leading position as a provider of satellite services in the North American video distribution market. Telesat provides services to both of the major DTH providers in Canada, Bell TV and Shaw Direct, which together have approximately 1.8 million subscribers, as well as to the DISH Network in the United States, which has approximately 9.5 million subscribers. Its 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

Telesat offers its broad suite of satellite services to more than 400 customers worldwide, which include some of the world's leading DTH service providers, ISPs, network services integrators, telecommunications carriers, corporations and government agencies. Over almost 50 years of operation, Telesat has established long-term, collaborative relationships with its customers and has developed a reputation for creating innovative solutions and providing services essential for its customers to reach their end users. Telesat's 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 Telesat's services, which enhances the predictability of its future revenues and cash flows and supports its future growth.

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

Historically, Telesat has been able to generate strong cash flows from its operating activities due to the high operating margins in the satellite industry and its disciplined control of expenses. The stability of Telesat's cash flows is underpinned by its large revenue backlog. Telesat has been able to generate significant backlog by entering into long-term contracts with some of its customers, in some cases for all or substantially all of a satellite's orbital maneuver life. Historically, this has resulted in revenue from the satellite services business being fairly predictable.

Portfolio of Orbital Real Estate

Telesat's satellites occupy highly attractive orbital locations that provide it with an advantageous position in the markets in which it operates due to the scarcity of available satellite spectrum and the strong neighborhoods Telesat has 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. Telesat is 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 its leading position in North America. Telesat's 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. Telesat has rights to additional spectrum, including at certain existing orbital locations.

Telesat also has 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 geostationary 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. Telesat's first LEO satellite was launched in January 2018 and is being used to support live demonstrations of certain features of Telesat's 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 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 Telesat's North American broadcast and enterprise services businesses and Telesat's 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 16 geostationary satellites plus multiple other satellites for third parties, Telesat has attained meaningful scale to allow it to leverage its relatively fixed cost base to achieve substantial operating margins.

Business Strategy

Telesat's commitment to providing strong customer service and its focus on innovation and technical expertise has allowed it to successfully build its business to date. Building on its existing contractual revenue backlog, Telesat will continue to focus on increasing the utilization of its existing satellite capacity, maintaining its operating efficiency and, in a disciplined manner, using its strong cash flow to grow in-orbit satellite capacity and strengthen its business.

Telesat believes its satellite fleet offers a strong combination of existing backlog and available capacity that provides a solid foundation upon which it will seek to grow its revenue and cash flows. To achieve this growth, Telesat 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.

Telesat 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 its fixed cost structure.

Telesat will continue to advance its LEO constellation plans. In January 2018, Telesat successfully launched its first LEO satellite, an important milestone in its development of a state-of-the-art, high capacity LEO constellation is expected to deliver transformative, fiber-like broadband to commercial and government users worldwide. This Phase 1 LEO satellite is now demonstrating certain features of Telesat's LEO system design, in particular the capability of the satellite and customer terminals to deliver a low-latency broadband experience. Telesat has installed ground infrastructure at its 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 the second quarter of 2019, Telesat completed risk management contracts (executed in July 2018) with Airbus Defence and Space and a consortium of Thales Alenia Space and Maxar Technologies Inc. ("Maxar"). Both teams — working with Telesat — completed designs for the LEO constellation and invested significant effort in mitigating technical and programmatic risks associated with construction, deployment and operations. In the next phase of the project, Telesat will contract with industry partners to implement the LEO constellation, including manufacture and launch of the satellites and deployment of the ground systems. In 2019, Telesat also initiated a commercial process with antenna manufacturers to catalyze the development of economical and high efficiency antenna systems compatible with Telesat's LEO constellation.

In 2019, Telesat announced that it had entered into a Memorandum of Understanding ("MOU") with the Government of Canada ("GoC") regarding a partnership intended to ensure access to affordable high-speed internet connectivity across rural and remote areas of Canada through the development of the Telesat LEO satellite constellation. The partnership is expected to generate CAD 1.2 billion in revenue for Telesat over 10 years, which includes a contribution of up to CAD 600 million from the GoC. Additionally, Telesat announced that it had entered into an agreement with the GoC pursuant to which the GoC will contribute CAD 85 million to support the development of the Telesat LEO constellation through the GoC's Strategic Innovation Fund ("SIF").

In a number of countries, regulators plan to adopt new spectrum allocations for terrestrial mobile broadband and 5G, including certain C-band spectrum currently allocated to satellite services. Telesat currently uses C-band spectrum in a number of countries, including the United States and Canada. To the extent that Telesat is able to assist in making the C-band spectrum it uses available for use for terrestrial mobile broadband and 5G, Telesat may be entitled to certain compensation.

In the United States, on October 2, 2017, Intelsat and Intel Corporation submitted a proposal to the FCC that would enable joint use of 3.7 - 4.2 GHz C-band spectrum in the United States by fixed satellite services operators and terrestrial mobile services providers. The FCC issued a Notice of Proposed Rule Making in July 2018 that included aspects of this proposal. In September of 2018, Telesat became a member of the C-Band Alliance (the "CBA"), which is composed of leading global satellite operators Intelsat, SES and Telesat. The stated role of the CBA is to implement the safe and efficient clearing and repurposing of C-band spectrum in the U.S., accelerating the deployment of 5G services, and the CBA has worked with customer groups, associations and other stakeholders to provide detailed technical and operational plans that will enable safely clearing a portion of the band in a way that highly reliable C-band satellite services can continue.

On March 3, 2020, the FCC issued a Report and Order on Expanding Flexible use of the 3.7 to 4.2 GHz Band. Among other things, the Report and Order provides that:

[Table of Contents](#)

1. FSS operators must clear the entire 3.7–4.0 GHz by December 5, 2025.
2. If a satellite operator ceases use of this spectrum by this deadline, it is entitled to reimbursement for the costs of moving its services. If it does not meet this deadline, it is not eligible for cost reimbursement and may be liable for penalties.
3. Satellite operators will be eligible for accelerated relocation payments if they relocate out of 3.7–4.0 GHz band on an accelerated basis. The FCC has set out two accelerated relocation deadlines:
 - a. The bottom 100 MHz (plus a 20 MHz guard band) in 46 of the top 50 partial economic areas (“PEAs”) (PEAs are license areas, the United States is divided into 416 PEAs) by December 5, 2021.
 - b. All 280 MHz (plus a 20 MHz guard band) throughout the contiguous United States by December 5, 2023.
4. If Telesat meets the first deadline, it would be entitled to \$84.79 million and if it meets the second deadline, it would be entitled to \$259.61 million. The FCC adopted a schedule of declining accelerated relocation payments for the six months following each of the two deadlines. If Telesat cannot complete its transition within six months of a relevant deadline, its associated payment will drop to zero.
5. Satellite operators who wish to receive accelerated relocation payments must make an election with the FCC by May 29, 2020. The FCC will only make accelerated relocation payments available if satellite operators who are entitled to at least 80% of accelerated relocation payments make such elections. As a practical matter, accelerated relocation payments will be available if and only if both Intelsat and SES make such elections. Telesat plans to make such an election.

There can be no assurance that Telesat will receive any compensation from the repurposing of C-band.

Competition

Telesat is a leading global FSS operator in a highly competitive industry, and Telesat competes 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. Telesat also competes with a number of nationally or regionally focused FSS operators around the world.

Intelsat, SES and Eutelsat are each substantially larger than Telesat in terms of both the number of satellites they have in-orbit as well as their revenues. Telesat believes that Intelsat and its subsidiaries and SES and its subsidiaries each have global fleets of over 50 satellites, and that Eutelsat and its subsidiaries have a fleet of almost 40 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: Telesat also competes against regional FSS operators, including:

- in North America: Arsat, Hispasat, HNS/EchoStar and ViaSat;
- in Latin America: Arsat, Hispamar and Star One;
- in Europe, Middle East, Africa: Arabsat, Avanti, Es’hailsat, Gazprom, Hellas Sat, Nilesat, RSCC, Spacecom, Turksat and Yahsat;

[Table of Contents](#)

- in Asia: APT, Asia Broadcast Satellite, AsiaSat, Measat, Optus, PT Telkom, SKY Perfect JSAT and Thaicom.

A number of other countries have domestic satellite systems against which Telesat competes 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 geostationary satellites and non-geostationary satellite constellations are listed as having been approved for use in Canada. Four of these geostationary satellites are Telesat satellites licensed by other administrations and one is a satellite on which Telesat owns 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, Telesat faces competition from MSS operators that include Inmarsat, which offers a high throughput Ka-band service using a global constellation of five 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, SES, 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 high throughput satellite systems recently launched and in development purport to be capable of throughput that substantially exceeds the throughput of first generation high throughput satellites. This is expected to 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 non-geostationary orbit (“NGSO”) satellite systems have been announced and are now in various stages of development. These include systems from OneWeb, SpaceX, Amazon and SES/O3b, as well as government sponsored initiatives such as in China and Russia. 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. In addition, as 5G is rolled out, its advanced capabilities could further increase 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. Telesat’s competitors are primarily United States and European-based companies.

Satellite Fleet & Ground Resources

Telesat’s state-of-the art satellite fleet is comprised of 16 geostationary satellites offering global coverage with a concentration over the Americas. Telesat’s 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.

[Table of Contents](#)

In January 2018, Telesat launched a Ka-band satellite into low earth orbit as part of a plan to deploy a high capacity LEO constellation that is expected to deliver low latency, fiber-like broadband to commercial and government users worldwide.

Telesat operates an extensive ground infrastructure, including a satellite control center (“SCC”) in Ottawa, Ontario, its main earth station and backup SCC at Allan Park, Ontario, nine earth stations throughout Canada, one teleport located in the United States and one in Brazil. These ground facilities are used for controlling Telesat’s satellites and for the provision of end-to-end services to Telesat’s customers.

The table below summarizes selected data relating to Telesat’s owned in-orbit satellite capacity as of December 31, 2019:

| | Orbital Location Regions Covered | Launch Date | Manufacturer’s End-of-Service Life | Expected End-of- Orbital Maneuver Life⁽¹⁾ | Model |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------|---------------------------------------------------------------------|----------------------------|
| Anik F1 | 107.3°WL South America | November 2000 | 2016 | 2020 | BSS702 (Boeing) |
| Anik FIR | 107.3° WL North America | September 2005 | 2020 | 2022 | E3000 (EADS Astrium) |
| Anik F2 | 111.1° WL Canada, Continental United States | July 2004 | 2019 | 2026 | 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 | SSL 1300 |
| Nimiq 1 | Not Applicable ⁽²⁾ | May 1999 | 2011 | 2021 ⁽³⁾ | A2100 AX (Lockheed Martin) |
| Nimiq 2 | Not Applicable ⁽²⁾ | December 2002 | 2015 | 2024 ⁽³⁾ | 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 | 2036 | SSL 1300 |
| Nimiq 6 | 91.1° WL Canada | May 2012 | 2027 | 2046 | SSL 1300 |
| Telstar 11N | 37.55° WL North and Central America, Europe, Africa and the maritime Atlantic Ocean region | February 2009 | 2024 | 2026 | SSL 1300 |
| Telstar 12 | 109.2°WL Southern United States, South and Central America | October 1999 | 2012 | 2020 ⁽³⁾ | SSL 1300 |
| Telstar 12 VANTAGE | 15°WL Eastern United 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 | SSL 1300 |
| Telstar 18 VANTAGE⁽⁴⁾ | 138° EL India, South East Asia, Indonesia/Malaysia, China, Australia/New Zealand, North Pacific and Hawaii | September 2018 | 2033 | 2040 | SSL 1300 |
| Telstar 19 VANTAGE | 63°WL Brazil and portions of Latin America, North America, Atlantic Ocean, Caribbean | July 2018 | 2033 | 2037 | SSL 1300 |
| LEO 1 | NGSO polar | January 2018 | 2021 | N/A ⁽⁵⁾ | SSTL |

- (1) Telesat’s 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 Telesat currently anticipates. 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, Telesat currently anticipates that it 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.
- (2) Nimiq 1 and Nimiq 2 are currently located in non-Telesat orbital slots.
- (3) 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 station keeping.
- (4) 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%.
- (5) LEO 1 has sufficient fuel to support collision avoidance maneuvers for several years and subsequent deorbit. End of life will be determined based on ongoing assessment of spacecraft health.

[Table of Contents](#)

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

Telesat is currently evaluating mission extension services that have the potential to prolong the orbital maneuver lives of certain of its satellites. However, there can be no assurance that Telesat will contract for the use of these mission extension services or that, if it does so, the services will be successful.

Satellite Services Performance⁽¹⁾

Loral holds a 62.7% economic interest and a 32.6% voting interest in Telesat. We use the equity method of accounting for our investment in Telesat, and its results are not consolidated in our financial statements. Our share of the operating results from our investment in this company is included in equity in net income (loss) of affiliates in our consolidated statements of operations and our investment is included in investments in affiliates in our consolidated balance sheets (see Note 5 to the Loral consolidated financial statements).

| | Year Ended December 31, | |
|-------------------------------------------------------------|-------------------------|------------|
| | 2019 | 2018 |
| | (In thousands) | |
| Revenue: | | |
| Total segment revenues | \$ 687,868 | \$ 699,596 |
| Affiliate eliminations ⁽²⁾ | (687,868) | (699,596) |
| Revenues from satellite services as reported | \$ — | \$ — |
| Operating income: | | |
| Total segment operating income | \$ 345,167 | \$ 357,321 |
| Affiliate eliminations ⁽²⁾ | (345,167) | (357,321) |
| Operating income from satellite services after eliminations | \$ — | \$ — |

- (1) See Consolidated Operating Results in Management's Discussion and Analysis of Financial Condition and Results of Operations for significant items that affect comparability between the periods presented.
- (2) Affiliate eliminations represent the elimination of amounts attributable to Telesat which is reflected in our consolidated financial statements under the equity method of accounting.

Total Telesat assets were \$4.1 billion and \$3.9 billion as of December 31, 2019 and 2018, respectively. Backlog was approximately \$2.5 billion and \$2.7 billion as of December 31, 2019 and 2018, respectively. It is expected that approximately 21.5% of the backlog at December 31, 2019 will be recognized as revenue by Telesat in 2020.

Other

We also own 56% of XTAR, LLC ("XTAR"), a joint venture between Loral and Hisdesat Servicios Estrategicos S.A. ("Hisdesat") of Spain. We account for our ownership interest in XTAR under the equity method of accounting because we do not control certain of its significant operating decisions. XTAR owns and operates an X-band satellite, XTAR-EUR located at 29° EL, which entered service in March 2005. The satellite is designed to provide X-band communications services exclusively to United States, Spanish and allied government users throughout the satellite's coverage area, including Europe, the Middle East and Asia. The government of Spain granted XTAR rights to an X-band license, normally reserved for government and military use, to develop a commercial business model for supplying X-band capacity in support of military, diplomatic and security communications requirements. XTAR also leases 7.2 72 MHz X-band transponders (subject to certain temporary reductions for 2018) on the Spainsat satellite located at 30° WL owned by Hisdesat, which entered commercial service in April 2006. These transponders, designated as XTAR-LANT, allow XTAR to provide its customers in the U.S. and abroad with additional X-band services and greater flexibility. XTAR currently has contracts to provide satellite telecommunication services to various agencies of the United States, Spanish and other European governments. For more information on XTAR see Note 5 to the Loral consolidated financial statements.

REGULATION

Telesat is subject to regulation by government authorities in Canada, the United States and other countries in which it operates and is subject to the frequency coordination process of the International Telecommunication Union (“ITU”). Telesat’s ability to provide satellite services in a particular country or region is subject also to the technical constraints of its satellites, international coordination, local regulation including as it applies to securing landing rights and licensing requirements.

Canadian Regulatory Environment

Telesat 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, pursuant to the Telesat Canada Reorganization and Divestiture Act (1991), or the Telesat Divestiture Act, Telesat was continued on March 27, 1992 as a business corporation under the Canada Business Corporations Act, the Telesat Canada Act was repealed and the Canadian government sold its shares in Telesat. The Telesat Divestiture Act provides that no legislation relating to the solvency or winding-up of a corporation applies to Telesat and that its affairs cannot be wound up unless authorized by an Act of Parliament. In addition, Telesat and its shareholders and directors cannot apply for Telesat’s continuation in another jurisdiction or dissolution unless authorized by an Act of Parliament.

Telesat is a Canadian carrier under the Telecommunications Act (Canada), or the Telecom Act. The Telecom Act authorizes the Canadian Radio-Television and Telecommunications Commission (“CRTC”) to regulate various aspects of the provision of telecommunications services by Telesat and other telecommunications service providers. Telesat is currently not subject to detailed rate regulation; the CRTC has, however, 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 Telesat’s relationship with existing customers, which could have a material adverse effect on Telesat’s results of operations, business prospects and financial condition.

Telesat’s operations are also subject to regulation and licensing by ISED (formerly Industry Canada) 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 Telesat’s 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 Telesat operates the Anik and Nimiq satellites require Telesat 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 broadcast satellite services (“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.

[Table of Contents](#)

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 2019 was 0.52%, and an interim rate of 0.45% has been established by the CRTC for 2020.

United States Regulatory Environment

The Federal Communications Commission ("FCC") regulates the provision of satellite services to, from, or within the United States.

Telesat has chosen to operate its U.S. licensed satellites, Telstar 11N, Telstar 12 and Telstar 12 VANTAGE, on a non-common carrier basis. Consequently, it is not subject to rate regulation or other common carrier regulations enacted under the Communications Act of 1934. Telesat pays FCC filing fees in connection with its space station and earth station applications and annual fees to defray the FCC's regulatory expenses. The FCC has requested comment on applying regulatory fees to non-US licensed satellites with US market access. Annual and quarterly status reports must be filed with the Universal Service Administrative Company ("USAC") covering interstate/international telecommunications revenues. Based on these reports, USAC assesses Telesat for contribution 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 2020. 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 its USF payments are not material.

Telesat also owns and operates 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 United States.

The FCC currently grants geostationary-like satellite authorizations on a first-come, first-served basis to applicants which 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 generally 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 \$1 million when a geostationary satellite or non-geostationary satellite constellation authorization is granted and escalating to up to \$3 million in the case of a geostationary satellite and \$5 million in the case of a non-geostationary satellite constellation. The entire amount of the bond may be forfeited if there is a failure to meet the FCC's milestones 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 geostationary satellite using the same frequencies. At the end of the 15-year term, a geostationary 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 U.S.-licensed satellites apply equally to authorized foreign-licensed satellites. Telesat's Anik F1, Anik FIR, Anik F2, Anik F3, Telstar 14R/Estrela do Sul 2 and Telstar 19 VANTAGE satellites and Telesat's Ka- and V-band LEO constellations are currently authorized to serve the U.S. market in accordance with these procedures.

[Table of Contents](#)

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 Telesat, 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 acquisition of our ownership interest in Telesat was conditioned upon compliance by Telesat 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. These ITAR provisions may limit Telesat's access to certain technical information and may have a negative impact on Telesat's international consulting revenues.

Regulation Outside Canada and the United States

The Brazilian national telecommunications agency, ANATEL, grants exploitation rights for Brazilian satellites to companies incorporated and existing in Brazil. Until October 2019, these exploitation rights were granted to companies which participated in specific auctions conducted by ANATEL. Such requirement of specific auctions was abolished by Federal Law No. 13,879, dated October 3, 2019, which amended the Brazilian General Telecommunications Law (as amended, the "GTL"). The auction process was replaced by a simpler administrative process to be determined by ANATEL. Under this administrative process, interested companies will continue to be required to 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 will be granted to the owner of the space segment or the company which 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 satellites, the rights are granted conditional on payment of applicable fees (payment may be converted into investment commitments) and are valid for up to 15 years (renewable for additional periods provided that the obligations already assumed are fulfilled). In exploitation and landing rights of foreign satellites, the rights are granted conditional on payment of applicable fees and are valid for up to 15 years renewable once for an additional equal period).

ANATEL has authorized Telesat, through its 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 in March 2016. Telesat's Estrela do Sul 2 and Telstar 19 VANTAGE satellites are located at 63° WL and make use of these frequency rights.

[Table of Contents](#)

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

Telesat owns the Telstar 18 VANTAGE satellite, which currently operates 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 Telesat gained access to this orbital location through APT, there is greater uncertainty with respect to its ability to maintain access to this orbital location and the frequencies.

Telesat owns and operates 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. (“ManSat”) 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

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 administrators (Canada, USA, Brazil and United Kingdom) 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 its 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 Telesat's financial condition, as well as on the value of its 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 Telesat's 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.

Some of the international and domestic regulations governing NGSO satellites are undergoing revision or have yet to be established. Both Canada and the United States have adopted deployment milestones for NGSO systems. The ITU adopted new deployment milestones for the maintenance of international NGSO filings at the World Radio Conference in November 2019 that could limit Telesat's ability to maintain international priority rights for its planned LEO constellation. In addition, while the international rules governing coordination between Ka-band NGSO satellite systems are established and rely on international filing date priority, the United States 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 planned LEO constellation in the United States is uncertain. It is possible that other jurisdictions may adopt the United States approach to coordination between NGSO systems. Some of the spectrum utilized by Telesat's planned LEO constellation is also allocated to terrestrial fixed and mobile services and geostationary satellite services. While jurisdictions such as the United States have established rules for sharing the spectrum, many jurisdictions have yet to address this issue. Telesat's ability to use shared spectrum for its planned LEO constellation may be impacted by new rules or the absence of rules for spectrum sharing.

PATENTS AND PROPRIETARY RIGHTS

As of December 31, 2019, Telesat owned 19 issued patents, three of which are in the United States. These patents expire between 2020 and 2032. Telesat also has several pending domestic and international patent applications.

There can be no assurance that any of the foregoing pending patent applications will be issued. Moreover, 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 Telesat may infringe. In such event, Telesat may be restricted from continuing the infringing activities, which could adversely affect its business, or Telesat may be required to obtain a license from a patent holder and pay royalties, which would increase the cost of doing business.

RESEARCH AND DEVELOPMENT

Telesat's 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 Telesat's planned LEO constellation.

FOREIGN OPERATIONS

Telesat's revenues from customers in Canada, the U.S. and other geographical regions, primarily Europe, Middle East and Africa and Latin America and Caribbean, for the years ended December 31, 2019 and 2018 are tabulated below:

| | Year Ended December 31, | |
|---------------|-------------------------|-------------------|
| | 2019 | 2018 |
| | (In thousands) | |
| Canada | \$ 297,450 | \$ 323,630 |
| United States | 248,080 | 246,992 |
| Others | 142,338 | 128,974 |
| | <u>\$ 687,868</u> | <u>\$ 699,596</u> |

At December 31, 2019 and 2018, Telesat's long-lived assets were located primarily in Canada, with the exception of in-orbit satellites. (see Item 1A – “*Risk Factors* – Telesat is subject to risks associated with doing business internationally.”)

EMPLOYEES

As of December 31, 2019, Loral had 19 full-time employees.

As of December 31, 2019, Telesat and its subsidiaries had approximately 373 full-time and part-time employees, approximately 3.75% of whom are subject to collective bargaining agreements. Telesat's 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.

AVAILABLE INFORMATION

Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports are available without charge on our web site, www.loral.com, as soon as reasonably practicable after they are electronically filed with or furnished to the Securities and Exchange Commission (“SEC”). Copies of these documents also are available in print, without charge, from Loral's Investor Relations Department, 600 Fifth Avenue, New York, NY 10020. Loral's web site is an inactive textual reference only, meaning that the information contained on the web site is not part of this report and is not incorporated in this report by reference.

Item 1A. Risk Factors

I. Financial and Telesat Investment Risk Factors

Telesat's profitability may be adversely affected by swings in the global financial markets, such as those that have occurred and are occurring as a result of uncertainty relating to the Covid-19 coronavirus. Swings in the global financial markets may have a material adverse effect on Telesat's customers and suppliers.

Swings in the global financial markets that include illiquidity, market volatility, changes in interest rates and currency exchange fluctuations can be difficult to predict and negatively affect the ability of certain customers to make payments when due. Such swings may materially and adversely affect us due to the potential insolvency of Telesat's suppliers and customers, inability of customers to obtain financing for their transponder leases, decreased customer demand, delays in supplier performance and contract terminations. Telesat's customers may not have access to capital or a willingness to spend capital on transponder leases, or their levels of cash liquidity with which to pay for transponder leases may be adversely affected. Access of Telesat's suppliers to capital and liquidity with which to maintain their inventories, production levels or product quality may be adversely affected, which could cause them to raise prices or cease operations. As a result, we may experience a material adverse effect on our business, results of operations and financial condition. These potential effects of swings in the global financial markets, such as those resulting from uncertainty relating to the Covid-19 coronavirus, are difficult to forecast and mitigate.

Our equity investment in Telesat may be at risk because of Telesat's leverage.

At December 31, 2019, Telesat had outstanding indebtedness of \$2.86 billion, which matures in 2026 and 2027, and additional borrowing capacity of \$200 million under its revolving facility which matures in 2024. Approximately \$2.31 billion of this total borrowing capacity is secured by substantially all of the assets of Telesat. This indebtedness represents a significant amount of indebtedness for a company the size of Telesat. The agreements governing this indebtedness impose operating and financial restrictions on Telesat's activities. These restrictions on Telesat's ability to operate its business could seriously harm its business by, among other things, limiting its ability to take advantage of financing, merger and acquisition and other corporate opportunities, which could in time adversely affect the value of our investment in Telesat. Borrowings under Telesat's senior secured credit facilities are at variable rates of interest and expose Telesat to interest rate risk. Assuming all revolving loans are fully drawn, each quarter point change in interest rates would result in a \$2.1 million change in annual interest expense on indebtedness under the senior secured credit facilities. Telesat has entered into, and in the future it may enter into, interest rate swaps that involve the exchange of floating for fixed rate interest payments in order to reduce interest rate volatility. Telesat may not, however, maintain interest rate swaps with respect to all or any of its variable rate indebtedness, and any swaps Telesat enters into may not fully mitigate its interest rate risk, may prove disadvantageous or may create additional risks.

As of December 31, 2019, all of Telesat's outstanding debt was denominated in U.S. dollars. Changes in exchange rates impact the amount that Telesat pays in interest and may significantly increase the amount that Telesat is required to pay in Canadian dollar terms to redeem the indebtedness either at maturity, or earlier if redemption rights are exercised or other events occur which require Telesat to offer to purchase the indebtedness prior to maturity, and to repay funds drawn under its U.S. dollar denominated facility. Unfavorable exchange rate changes could affect Telesat's ability to repay or refinance this debt.

A breach of the covenants contained in any of Telesat's loan agreements, including without limitation, a failure to maintain the financial ratios required under such agreements, could result in an event of default. If an event of default were to occur, Telesat's lenders would be able to accelerate repayment of the related indebtedness, and it may also trigger a cross default under other Telesat indebtedness.

If Telesat is unable to repay or refinance its secured indebtedness when due (whether at the maturity date or upon acceleration as a result of a default), the lenders will have the right to proceed against the collateral granted to them to secure such indebtedness, which consists of substantially all of the assets of Telesat and its subsidiaries. Telesat's ability to make payments on, or repay or refinance, its debt, will depend largely upon its future operating performance and market conditions. Disruptions in the financial markets could make it more difficult to renew or extend Telesat's facilities at current commitment levels on similar terms or at all. In the event that Telesat is not able to service or refinance its indebtedness, there would be a material adverse effect on the fair value of our equity investment in Telesat.

Telesat’s financial results and our U.S. dollar reporting of Telesat’s financial results will be affected by volatility in the Canadian/U.S. dollar exchange rate.

Portions of Telesat’s revenue and expenses and all of its debt are denominated in U.S. dollars and changes in the U.S. dollar/Canadian dollar exchange rate may have a negative impact on Telesat’s financial results and affect the ability of Telesat to repay or refinance its borrowings. Telesat’s main currency exposures as of December 31, 2019 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. In addition, approximately 53% of Telesat’s revenues, 39% of its operating expenses, 100% of its interest expense and a majority of its capital expenditures for 2019 were denominated in U.S. dollars. As of December 31, 2019, a five percent increase (decrease) in the value of the Canadian dollar against the U.S. dollar on financial assets and liabilities would have increased (decreased) Telesat’s net income by approximately \$133.1 million. This analysis assumes all other variables, in particular interest rates, remain constant.

Loral reports its investment in Telesat using the equity method of accounting. Loral reports its investment in Telesat in U.S. dollars while Telesat reports its financial results in Canadian dollars. As a result, Telesat’s results of operations are subject to conversion from Canadian dollars to U.S. dollars. Changes in the U.S. dollar relationship to the Canadian dollar affect how Telesat’s financial results are reported in our consolidated financial statements. During 2019, the exchange rate moved from U.S. \$1.00/CAD 1.3637 at December 31, 2018 to U.S. \$1.00/CAD 1.2990 at December 31, 2019.

While we own 62.7% of Telesat on an economic basis, we own only 32.6% of its voting stock and therefore do not have the right to elect or appoint a majority of the members of its Board of Directors and our interests and those of the other Telesat shareholders may diverge or conflict.

While we own 62.7% of the economic interests in Telesat, we hold only 32.6% of its voting interests. Although the restrictions on foreign ownership of Canadian satellites have been removed by the government of Canada, we are still subject to our shareholders agreement with the Public Sector Pension Investment Board (“PSP”) and the articles of incorporation of Telesat, which do not allow us to own more voting stock of Telesat than we currently own. Also, under our shareholders agreement, the governance and management of Telesat is vested in its 10-member Board of Directors, comprised of three Loral-appointed directors, three PSP-appointed directors and four independent directors, two of whom also own Telesat shares with nominal economic value and 31.1% and 6.8% of the voting interests for Telesat directors, respectively. While we own a greater voting interest in Telesat than any other single stockholder with respect to election of directors and we and PSP, which owns 29.4% of the voting interests for directors and 67.4% of the voting interests for all other matters, together own a majority of Telesat’s voting power, circumstances may occur where our interests and those of PSP diverge or are in conflict. For example, it is likely that any strategic transaction involving our ownership interests in Telesat that we wish to pursue will require the cooperation of PSP, and PSP may not share our objectives or wish to pursue transactions in which we are interested or any transaction at all. In the event that our interests differ from those of PSP, PSP, with the agreement of at least three of the four independent directors, may, subject to veto rights that we have under Telesat’s shareholders agreement, cause Telesat to take actions contrary to our wishes. These veto rights are, however, limited to certain extraordinary actions — for example, the incurrence of more than \$100 million of indebtedness or the purchase of assets at a cost in excess of \$100 million. Moreover, our right to block these actions under the shareholders agreement falls away if, subject to certain exceptions, either (i) ownership or control, directly or indirectly by Dr. Mark H. Rachesky (President of MHR Fund Management LLC, or MHR, which, through its affiliated funds is our largest stockholder) of our voting stock falls below certain levels other than in certain specified circumstances or (ii) there is a change in the composition of a majority of the members of Loral’s board of directors over a consecutive two-year period without the approval of the incumbent directors.

We may face indemnification claims for pre-closing taxes from our sale of SSL.

In the fourth quarter of 2012, we completed the sale of our wholly-owned subsidiary, Space Systems/Loral, LLC (formerly known as Space Systems/Loral, Inc.) (“SSL”), to MDA Communications Holdings, Inc., a subsidiary of Maxar (formerly known as MacDonald, Dettwiler and Associates Ltd.) (“MDA”). Under the terms of the purchase agreement related to the SSL sale, we are obligated to indemnify MDA and its affiliates for certain pre-closing taxes. The final amounts of certain indemnification claims relating to pre-closing taxes have not yet been determined. Where appropriate, we intend vigorously to contest the underlying tax assessments, but there can be no assurance that we will be successful. We may not be able to settle indemnification claims at or below the value recorded in our financial statements, and indemnification claims under the purchase agreement, whether pending now or made in the future, could have a material adverse effect on our financial condition, including liquidity, and results of operations.

Loral Space & Communications Inc. is a holding company with no current operations; we are dependent upon, and may not receive, sufficient cash flow from our affiliates or be able to incur sufficient borrowings to meet our financial obligations.

Loral is a holding company with ownership interests in Telesat and XTAR and, as such, Loral has no independent operations or operating assets and has ongoing cash requirements. We are dependent upon, and may not receive, sufficient cash flow from our affiliates or be able to incur sufficient borrowings to meet our financial obligations.

The ability of Telesat and XTAR to make payments or distributions to Loral, whether as dividends or as payments under applicable management and consulting agreements or otherwise, will depend on their operating results, including their ability to satisfy their own cash flow requirements, and obligations including, without limitation, their debt service obligations. Moreover, covenants contained in the debt agreements of Telesat impose limitations on its ability to dividend or distribute funds to Loral. Even if the applicable debt covenants would permit Telesat to pay dividends or make distributions, Loral will not have the ability to cause Telesat to do so. See above “While we own 62.7% of Telesat on an economic basis, we own only 32.6% of its voting stock and therefore do not have the right to elect or appoint a majority of the members of its Board of Directors and our interests and those of the other Telesat shareholders may diverge or conflict.” Likewise, any dividends or distributions by XTAR would require the prior consent of our Spanish partner in the joint venture.

Although our equity in Telesat has substantial value, our shareholders agreement with PSP regarding Telesat limits our ability to pledge our shares in Telesat as collateral for borrowing. For so long as the shareholders agreement is in place in its current form (see below “The initial public offering of Telesat and related governance changes that we have requested may not occur or may proceed in a manner contrary to our requests”), we may not be able to borrow or access the debt markets on a secured basis to fund our financial obligations, and our ability to borrow or access the debt markets on an unsecured basis may be limited or not available at all.

XTAR has not generated sufficient revenues to meet all of its substantial contractual obligations, and XTAR may be unable to pay these obligations when due, which could ultimately result in a restructuring of XTAR.

XTAR has not been successful in leasing a significant portion of its available capacity. As a result, XTAR has deferred certain payments owed to us, Hisdesat and Telesat, including payments due under an agreement with Hisdesat to lease certain transponders on the Spainsat satellite (the “Spainsat Lease Agreement”). As of December 31, 2019 and 2018, XTAR has deferred payment of liabilities of \$42.6 million and \$37.6 million, respectively, under the Spainsat Lease Agreement. XTAR’s lease and other obligations to Hisdesat, which will aggregate in excess of \$62 million over the remaining life of the satellite as of December 31, 2019, are substantial, especially in light of XTAR’s limited revenues to date. XTAR has agreed that most of its excess cash balance would be applied towards making limited payments on these obligations, as well as payments of other amounts owed to us, Hisdesat and Telesat in respect of services provided by them to XTAR. Unless XTAR is able to generate a substantial increase in its revenues, these obligations will continue to accrue and grow, and, absent agreement to further defer all or some these obligations, XTAR may be unable to pay them when due, which ultimately could result in a restructuring of XTAR. As of December 31, 2019, \$6.7 million was due to Loral from XTAR and we had an allowance of \$6.6 million against these receivables.

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

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

We have explored, are exploring and expect in the future to explore various strategic transactions; this process may have an adverse effect on our financial condition and results of operations whether or not a transaction is ultimately consummated.

We have previously explored, and are exploring, potential strategic transactions involving Telesat. In the future, we expect to continue to pursue strategic alternatives involving Telesat with the goal of maximizing shareholder value. The process of pursuing a strategic transaction will result in transaction costs and may result in the diversion of the attention of operating management of Telesat from business operations, the disclosure of confidential information to competitors or potential customers as part of a due diligence process and an adverse perception of Telesat in the marketplace which could, among other things, adversely affect Telesat's ability to win new business. Any of such results could have a material adverse effect on our financial condition and results of operations whether or not a strategic transaction is consummated. There can be no assurance whether or when any transaction involving Loral or Telesat will occur, and, even if a transaction is consummated, there can be no assurance as to whether or to what degree such a transaction will be successful in maximizing value to our shareholders.

We may explore and evaluate possible strategic transactions and alliances other than those involving Telesat which require financing which may not be available at all or on favorable terms.

Loral may, in addition to exploring strategic transactions involving Telesat, from time to time, explore and evaluate possible strategic transactions and alliances which may include joint ventures and strategic relationships as well as business combinations or the acquisition or disposition of assets. In order to pursue certain of these opportunities, additional funds are likely to be required. There can be no assurance that we will enter into additional strategic transactions or alliances, nor do we know if we will be able to obtain the necessary financing for transactions that require additional funds on favorable terms, if at all.

As part of our business strategy, we or Telesat may complete acquisitions or dispositions, undertake restructuring efforts or engage in other strategic transactions. These actions could adversely affect our or Telesat's business, results of operations and financial condition.

As part of our business strategy, we or Telesat may engage in discussions with third parties regarding, or enter into agreements relating to, acquisitions, dispositions, restructuring efforts or other strategic transactions in order to manage our or Telesat's product and technology portfolios or further our strategic objectives. In order to pursue this strategy successfully, we or Telesat must identify suitable acquisition or alliance candidates and complete these transactions, some of which may be large and complex. Any of these activities may result in disruptions to our or Telesat's business and may not produce the full efficiency and cost reduction benefits anticipated.

Instability in financial markets could adversely affect our ability to access additional capital.

In past years, the volatility and disruption in the capital and credit markets reached unprecedented levels. If these conditions reoccur, there can be no assurance that we will not experience a material adverse effect on our ability to borrow money or have access to capital, if needed. Lenders may be unable or unwilling to lend money. In addition, if we determine that it is appropriate or necessary to raise capital in the future, the future cost of raising funds through the debt or equity markets may be expensive or those markets may be unavailable. If we were unable to raise funds through debt or equity markets, it could have a material adverse effect on our business, results of operations and financial condition.

The Telesat information in this report other than the information included in the audited financial statements is based solely on information provided to us by Telesat.

Because we do not control Telesat, we do not have the same control and certification processes with respect to the information contained in this report on Telesat that we would have if we controlled Telesat. We are also not involved in managing Telesat's day-to-day operations. Accordingly, the Telesat information contained in this report other than the information included in the audited financial statements is based solely on information provided to us by Telesat and has not been separately verified by us.

II. Risk Factors Associated With Satellite Services

Telesat's 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 Telesat's satellites have had malfunctions and other anomalies in the past. Acts of war, terrorism, magnetic, electrostatic or solar storms, space debris, satellite conjunctions or micrometeoroids could also damage Telesat's 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. There can be no assurance 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 Telesat's satellites could cause Telesat's revenues, cash flows and backlog to decline materially, could require Telesat to repay prepayments made by customers of the affected satellite and could have a material adverse effect on Telesat's relationships with current customers and its 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 Telesat is 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 Telesat to expedite its planned replacement program, adversely affecting its profitability, increasing its financing needs and limiting the availability of funds for other business purposes. Finally, the occurrence of anomalies may adversely affect Telesat's 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 Telesat's future revenues.

A substantial amount of Telesat's revenue is earned from customers who use Telesat's services to provide DTH television services to the public in North America. For various reasons, the number of DTH subscribers to whom Telesat's customers provide services has been decreasing. In many regions of the world, including North America, the terrestrial networks with which Telesat competes 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 Telesat's largest DTH customers also has a substantial fiber terrestrial broadcast distribution network that it is continuing to expand, which has led to certain of its own DTH customers migrating to its terrestrial network. The migration of DTH customers to terrestrial networks in order to access improved two-way services or for other reasons could decrease the demand for Telesat's services, adversely impacting its revenue and financial performance.

The growth of "over the top" ("OTT") video distribution (e.g., Netflix) may also have an adverse impact on Telesat's 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 its satellite capacity.

Fluctuations in available satellite capacity could adversely affect Telesat's 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 several years and the number presently under construction, many of which contain high throughput payloads, unless Telesat experiences 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. An oversupply of capacity may lead to a decrease in rates charged for satellite services which could adversely affect Telesat's results.

Developments that Telesat expects 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 Telesat anticipates.

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

Telesat provides point-to-point and point-to-multipoint services for voice, data and video communications and for high-speed internet access. Telesat competes against global competitors who are substantially larger than Telesat 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. Telesat also competes against regional satellite operators who may enjoy competitive advantages in their local markets. 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 demand for Telesat services.

Telesat expects a substantial portion of its 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 video programming 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 Telesat's DTH customers.

Telesat's 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. In addition, as 5G is rolled out, its advanced capabilities could further increase competition for Telesat's satellite services. The ability of terrestrial companies to significantly increase the capacity, capability and/or the reach of their networks would likely result in a decrease in the demand for Telesat's services. Increasing availability of capacity from other forms of communications technology can create an excess supply of telecommunications capacity, decreasing the prices Telesat would be able to charge for its services under new service contracts and thereby negatively affecting Telesat's profitability. New technology could render satellite-based services less competitive by satisfying consumer demand in other ways.

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

Changes in technology could have a material adverse effect on Telesat’s 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 Telesat’s services. The introduction of first generation high throughput satellites, such as ViaSat-1, Jupiter 1 and Intelsat’s “Epic” line of high throughput satellites, 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 high throughput satellites or include high throughput payloads. In addition, second generation high throughput satellite systems recently launched and in development purport to be capable of throughput that substantially exceeds the throughput of first generation high throughput satellites. While Telesat owns the high throughput Canadian payload on ViaSat-1 and has incorporated high throughput payloads on its Telstar 12 VANTAGE, Telstar 18 VANTAGE and Telstar 19 VANTAGE satellites, the introduction of more, and more capable, high throughput satellites by other operators into the markets in which Telesat participates could have a material adverse effect on Telesat’s results of operations, business prospects and financial condition.

New entrants to satellite manufacturing are developing “micro” satellites which are significantly smaller and lower cost satellites. Should these micro satellites be successfully developed, it could foster increased competition and could potentially allow current customers to procure their own satellites, both of which could have an adverse effect on Telesat’s business.

A number of 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 Telesat’s customers to transmit the same amount of data using a reduced amount of capacity, which could decrease demand for Telesat’s services.

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

Telesat is currently developing an advanced, global LEO constellation consisting of over one hundred, and potentially several hundred, satellites in non-geostationary orbit. There are numerous risks and uncertainties associated with NGSO constellations generally and with Telesat’s LEO constellation specifically.

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. Telesat’s 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 application at the scale, levels of performance and price points that Telesat requires. In addition, in order to provide a competitive service in certain of the customer segments Telesat plans to serve, Telesat requires advances in ground terminal design and manufacture, particularly electronic flat panel antennas capable of acquiring and tracking LEO satellites. If Telesat’s LEO constellation does not deliver the required quality of service at prices that are competitive relative to other satellite providers and alternative products, Telesat may not be able to acquire customers and establish a successful business. It is possible that despite Telesat’s concerted effort to do so, Telesat may not be able to sufficiently overcome the technological hurdles required to complete its planned LEO constellation or Telesat may implement its LEO constellation and, due to technological issues that Telesat did not foresee or which Telesat did not effectively address, Telesat’s LEO constellation may not operate as planned. Given the scale and complexity of Telesat’s LEO constellation, Telesat may not be able to obtain insurance to protect itself if it experiences the failure of one or more of its LEO satellites or other losses.

[Table of Contents](#)

In order to operate Telesat's LEO constellation efficiently and in a commercially viable manner, Telesat will require access to a sufficient amount of spectrum. Telesat currently holds an authorization from Canada for an NGSO network in Ka-band which has global ITU priority. However, the ITU, Canada and the U.S. have recently adopted new deployment milestones for NGSO systems for the bringing into use and maintenance of international NGSO filings. These new milestones could adversely impact Telesat's ability to maintain priority rights for its 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 Telesat for its LEO constellation in the U.S. is uncertain. It is possible that other jurisdictions may adopt the United States approach or some other approach that undermines Telesat. Some of the spectrum utilized by Telesat's LEO constellation is also allocated to terrestrial fixed and mobile services and geostationary satellite services. Other portions of the spectrum that Telesat plans to use are under consideration for being designed for terrestrial fixed and mobile services. While some jurisdictions 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 adversely impacted by new rules or the absence of rules for spectrum sharing. In addition, in order to successfully sell services on Telesat's LEO constellation, Telesat will require market access to each country in which its customers are located. It is uncertain if Telesat will be successful in obtaining market access to all of the countries needed to make its LEO constellation commercially successful.

There are certain environmental risks that have been raised in opposition to LEO constellations, including the potential for increased orbital debris and "light pollution" associated with light reflecting off satellites in the night sky. To the extent that governments impose restrictions or additional regulations to address any environmental concerns regarding LEO constellations it may adversely impact Telesat's ability to successfully deploy its constellation.

In addition, the parameters of Telesat's current LEO constellation design differ from the parameters of its authorization from Canada, as well as from the authorization Telesat received from the United States allowing U.S. market access for Telesat's LEO constellation. Prior to deploying the LEO constellation, Telesat will be required to apply to amend its Canadian authorization to match the parameters of Telesat's final LEO constellation design. There can be no assurance that Telesat's requested amendment will be approved. Similarly, prior to providing service in the United States, Telesat will be required to apply to modify its U.S. market access authorization. There can be no assurance that Telesat's requested modification will be approved or, if approved, that it will not have conditions that preclude Telesat from being able to deliver an acceptable level of service in the United States.

The implementation of Telesat's planned LEO constellation will require a substantial outlay of capital. Telesat may not be able to raise sufficient capital for any number of reasons. If Telesat is unable to raise sufficient capital, Telesat will not be able to build and deploy its LEO constellation. In addition, if Telesat is successful in raising sufficient capital to fund the LEO constellation and the constellation does not operate as expected or is otherwise commercially unsuccessful, Telesat may not be able to repay all or a substantial part of its debt.

Although Telesat believes there is a significant market for the services Telesat expects to provide with its LEO constellation, Telesat may not be able to attract enough customers to make the project successful and earn a sufficient return on its investment, which could have a material adverse effect on Telesat's business prospects and financial condition and its ability to pay its debt.

In 2019, Telesat announced that it had entered into an MOU with the GoC regarding a partnership intended to ensure access to affordable high-speed internet connectivity across rural and remote areas of Canada through the development of the Telesat LEO satellite constellation. The partnership is expected to generate CAD 1.2 billion in revenue for Telesat over 10 years, which includes a contribution of up to CAD 600 million from the GoC. The MOU is a non-binding document and Telesat's ability to actually receive any contribution from the GoC is contingent upon, among other things, the execution of a binding agreement with the GoC and Telesat fulfilling its obligations under that agreement, including successfully deploying an operational constellation that can support the delivery of broadband services that meets the GoC's objectives. Additionally, in 2019, Telesat announced that it had entered into a binding agreement with the GoC pursuant to which the GoC will contribute CAD 85 million to support the development of the Telesat LEO constellation through the GoC's SIF. Telesat's ability to obtain any funds from SIF is contingent on Telesat meeting certain obligations under the agreement, including meeting certain hiring goals and thresholds for research and development investment in Canada. There can be no assurances that Telesat can successfully enter into a binding agreement with the GoC regarding the MOU, or fulfill its obligations under that agreement or the agreement regarding SIF funding.

There are a number of competing NGSO satellite projects in development, including projects being developed by SpaceX, Amazon, OneWeb and SES/O3b, as well as country-sponsored projects in China and Russia. Some of these potential competitors to Telesat's system have greater access to capital than Telesat has and/or may be at a more advanced stage of development. For example, China and Russia have access to almost unlimited amounts of capital and have government-owned satellite manufacturing and launch facilities at their disposal. SpaceX and Amazon are much larger than Telesat, have more diverse sources of revenue and have substantially greater financial resources than Telesat does. In addition, OneWeb has already launched dozens of satellites into its constellation and SpaceX has launched several hundred satellites. Both have announced that they will continue to regularly launch satellites well in advance of the timeline when Telesat will begin deploying significant numbers of additional satellites into its constellation. SpaceX has its own in-house launch capability. Blue Origin, a company owned by Amazon's Chairman, CEO and largest shareholder, Jeff Bezos, is significantly advanced in its development of launch vehicles. Amazon and SpaceX's greater access to launch vehicles for their own satellites may give them an advantage over Telesat since Telesat does not have in-house capability to launch its own satellites and, in the event SpaceX or Blue Origin do not make their launch vehicles available to Telesat, may limit Telesat's access to affordable launch vehicles for its constellation. If Telesat's competitors are able to establish operational constellations before Telesat does, it may be more difficult for Telesat to attract customers for its constellation. Further, to the extent that their constellations make use of Ka-band spectrum, as SpaceX and OneWeb have indicated they will, it may limit Telesat's access to sufficient Ka-band spectrum to operate its constellation efficiently and profitably.

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

If successfully implemented, Telesat's LEO constellation may decrease demand for its other satellite services.

There are numerous risks related to monetizing C-band spectrum and it may not happen in a timely manner or at all.

On October 2, 2017, Intelsat and Intel Corporation submitted a proposal to the FCC that would enable joint use of 3.7-4.2 GHz C-band spectrum in the United States by fixed satellite services operators and terrestrial mobile services providers. The FCC issued a Notice of Proposed Rule Making in July 2018 that included aspects of this proposal. In September 2018, Telesat became a member of the CBA, which was composed of leading global satellite operators Intelsat, SES, Eutelsat and Telesat. Eutelsat subsequently withdrew from the CBA. The stated role of the CBA was to implement the safe and efficient clearing and repurposing of C-band spectrum in the U.S., accelerating the deployment of 5G services, and the CBA has worked with customer groups, associations and other stakeholders to provide detailed technical and operational plans that will enable safely clearing a portion of the band in a way that highly reliable C-band satellite services can continue.

On March 3, 2020, the FCC issued a Report and Order on Expanding Flexible use of the 3.7 to 4.2 GHz Band. The Report and Order indicated that Telesat could receive as much as \$344.4 million from the repurposing of C-band Spectrum. However, Telesat's ability to receive any proceeds would be subject to certain conditions. If those conditions are not met, the amount Telesat receives could be reduced significantly or eliminated altogether. Also, Intelsat has suggested that there is no further role for the CBA, and the Report and Order is subject to reconsideration at the FCC and legal challenge in the courts. In addition, there are members of the United States Senate and House of Representatives who oppose the FCC's current plans and are seeking legislation to modify or overturn them. There are also technical challenges to clearing C-band spectrum. There can be no assurance that Telesat will receive any proceeds from the FCC process or, if it were to receive proceeds, the amount or timing of receipt.

The actual orbital maneuver lives of Telesat's satellites may be shorter than Telesat anticipates and Telesat may be required to reduce available capacity on its satellites prior to the end of their orbital maneuver lives.

Telesat anticipates that its satellites will have the end-of-orbital maneuver life dates described above in Item 1-Business. For all but one of Telesat's 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 Telesat's 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 Telesat's satellite fleet obsolete.

Telesat has 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 Telesat's existing satellites may also be shorter than originally anticipated. Further, on some of Telesat's 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.

Telesat periodically reviews the expected orbital maneuver life of each of its satellites using current engineering data. A reduction in the orbital maneuver life of any of Telesat's 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 Telesat is required to reduce the available payload capacity prior to the end of a satellite's orbital maneuver life, its revenues from the satellite would be reduced.

Telesat's insurance will not protect it against all satellite-related losses. Further, Telesat may not be able to renew insurance on its existing satellites or obtain insurance on future satellites on acceptable terms or at all, and, for certain of Telesat's existing satellites, Telesat has elected to forego obtaining insurance.

Telesat's current satellite insurance does not protect it against all satellite-related losses that it may experience, and it does not have in-orbit insurance coverage for all of the satellites in its fleet. As of December 31, 2019, the total net book value of Telesat's six in-orbit satellites for which it does not have insurance (Nimiq 1, Nimiq 2, Anik F1, Anik F2, Telstar 12 and ViaSat-1) was approximately CAD 27.2 million. Telesat's insurance does not protect it against business interruption, loss of revenues or delay of revenues. In addition, Telesat does 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. Telesat's existing launch and in-orbit insurance policies include, and any future policies that Telesat obtains 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 Telesat's 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 Telesat's 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 Telesat experiences a launch or in-orbit failure that is not fully insured, or for which insurance proceeds are delayed or disputed, it may not have sufficient resources to replace the affected satellite. In addition, higher premiums on insurance policies increase Telesat's costs, thereby reducing its 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, Telesat will be able to renew the policy on terms acceptable to it.

[Table of Contents](#)

Subject to the requirements of Telesat's senior secured credit facilities and the indentures governing Telesat's senior secured notes and senior notes, Telesat may elect to reduce or eliminate insurance coverage for certain of its existing satellites, or elect not to obtain insurance policies for its 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.

Telesat derives a substantial amount of its revenues from only a few of its 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 Telesat's future revenues and contracted backlog.

For the year ended December 31, 2019, Telesat's top five customers together accounted for approximately 62% of its revenues. At December 31, 2019, Telesat's top five backlog customers together accounted for approximately 83% of its backlog. If any of Telesat's major customers chooses not to renew its contract or contracts at the expiration of the existing terms or seeks to negotiate concessions, particularly on price, it could have a material adverse effect on Telesat's results of operations, business prospects and financial condition. Telesat's 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 Telesat's services or becoming unable to pay for services they had contracted to buy. In addition, some of Telesat's customers' industries are undergoing significant consolidation, and Telesat's customers may be acquired by each other or other companies, including by Telesat's competitors. Such acquisitions could adversely affect Telesat's ability to sell services to such customers and to any end-users whom they serve. Some customers have in the past defaulted, and Telesat's customers may in the future default, on their obligations to Telesat due to bankruptcy, lack of liquidity, operational failure or other reasons. Such defaults could adversely affect Telesat's revenues, operating margins and cash flows. If Telesat's contracted revenue backlog is reduced due to the financial difficulties of its customers, Telesat's revenues, operating margins and cash flows would be further negatively impacted.

Telesat's business is capital intensive, and Telesat may not be able to raise adequate capital to finance its business strategies, or Telesat may be able to do so only on terms that significantly restrict its ability to operate its business.

Implementation of Telesat's business strategy requires a substantial outlay of capital. As Telesat pursues its business strategies and seeks to respond to developments in its business and opportunities and trends in its industry, its actual capital expenditures may differ from its expected capital expenditures. There can be no assurance that Telesat will be able to satisfy its capital requirements in the future. In addition, if one of Telesat's satellites failed unexpectedly, there can be no assurance of insurance recovery or the timing thereof and Telesat may need to exhaust or significantly draw upon its revolving credit facility or obtain additional financing to replace the satellite. If Telesat determines that it needs to obtain additional funds through external financing and is unable to do so, Telesat may be prevented from fully implementing its business strategy.

The availability and cost to Telesat of external financing depends on a number of factors, including its credit rating and financial performance and general market conditions. Telesat's 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 Telesat's expected future revenues under contracts with customers and challenging business conditions faced by its customers are among the other factors that may adversely affect Telesat's credit and access to the capital markets. Other factors that could impact Telesat's credit rating include the amount of debt in its current or future capital structure, activities associated with strategic initiatives, the health of its satellites, the success or failure of its planned launches, its expected future cash flows and the capital expenditures required to execute its business strategy. The overall impact on Telesat's financial condition of any transaction that it pursues 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 its 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 Telesat's access to capital. A credit rating downgrade or deterioration in Telesat's financial performance or general market conditions could limit its 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 Telesat deferring or reducing capital expenditures including on new or replacement satellites.

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

Telesat operates in a highly regulated industry and government regulations may adversely affect its ability to sell its services or increase the expense of such services or otherwise limit Telesat's ability to operate or grow its business.

As an operator of a global satellite system, Telesat is regulated by government authorities in Canada, the United States, Brazil and other countries in which it operates.

In Canada, Telesat's 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 Telesat's 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. Telesat is required to pay "universal service" charges in Canada and has certain research and development and public benefit obligations that do not apply to other satellite operators with which it competes. These obligations could change at any time.

In the United States, the FCC regulates the provision of satellite services to, from, or within the United States. Certain of Telesat's 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). Telesat's Anik F1, Anik FIR, Anik F2, Anik F3, Nimiq 5, 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 ITAR which currently includes satellites on the list of items requiring export permits. These ITAR provisions have constrained Telesat's access to technical information and have had a negative impact on its international consulting revenues. In addition, Telesat and its satellite manufacturers may not be able to obtain and maintain necessary export authorizations which could adversely affect Telesat's ability to procure new United States-manufactured satellites; control its existing satellites; acquire launch services; obtain insurance and pursue its rights under insurance policies; or conduct its satellite-related operations and consulting activities.

Telesat also operates satellites through licenses granted by, and 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 Telesat, through its subsidiary, TBCS, to operate Telstar 14R/Estrela do Sul 2, a Ku-band 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 Telesat 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 plan to 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 Telesat's business.

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

If Telesat fails to obtain or maintain particular authorizations on acceptable terms, such failure could delay or prevent Telesat from offering some or all of its services and adversely affect its results of operations, business prospects and financial condition. In particular, Telesat may not be able to obtain all of the required regulatory authorizations for the construction, launch and operation of any of its future satellites, for the orbital locations and spectrum for these satellites and for its ground infrastructure, on acceptable terms or at all. Even if Telesat were able to obtain the necessary authorizations and orbital locations, the licenses Telesat obtains may impose significant operational restrictions, or not protect Telesat from interference that could affect the use of its 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 Telesat's existing authorizations to be changed or cancelled, require Telesat to incur additional costs, impose or change existing pricing, or otherwise adversely affect its 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 Telesat 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, Telesat may be subject to regulations in foreign countries of which Telesat is not presently aware that it is not in compliance with, and as a result could be subject to sanctions by a foreign government.

Telesat's operations may be limited or precluded by ITU rules or processes, and Telesat is required to coordinate its 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. Telesat participates in the activities of the ITU. Only national administrations, however, have full standing as ITU members. Consequently, Telesat must rely on the relevant government administrations to represent its 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. The most recent WRC was held in November 2019. 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 new international spectrum allocations for terrestrial mobile and other services. As a result, Telesat cannot guarantee that the ITU will not change its allocation decisions and rules in the future in a way that could limit or preclude Telesat's use of some or all of its existing or future orbital locations or spectrum.

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, Telesat must coordinate the operation of its 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 Telesat's satellites.

In certain countries, a failure to resolve coordination issues is used by regulators as a justification to deny, 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 Telesat, Telesat 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 Telesat, or its customers, transmit. This interference could require Telesat to take steps, or pay or refund amounts to its customers, that could have a material adverse effect on Telesat's 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 Telesat's satellites' frequencies successfully or to obtain or maintain other required regulatory approvals could have an adverse effect on Telesat's business operations, prospects and financial condition, as well as on the value of its business.

Telesat's satellite launches may be delayed, it may suffer launch failures or its 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 Telesat's 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 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 Telesat's current customers to move to another satellite provider if they determine that the delay may cause an interruption in continuous service. In addition, Telesat's 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 Telesat to refund any prepayment it may have received, and would result in a reduction in Telesat's contracted backlog and would delay or prevent Telesat 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 Telesat's results of operations, business prospects and financial condition.

If Telesat does not make use of its spectrum rights by specified deadlines, or does not continue to use the orbital spectrum rights it currently uses, those rights may become available for other satellite operators to use.

Telesat's in-orbit satellites do not currently occupy all of the geostationary locations for which it has obtained regulatory authorizations. In some cases, the Telesat satellite that occupies a geostationary location is not designed to use all of the frequency spectrum for which Telesat has been authorized. Similarly, Telesat has been granted regulatory authorizations for certain spectrum in NGSO that is not yet occupied at all or in which the full complement of satellites has not yet been deployed.

In accordance with the ITU Radio Regulations, governments have rights to use certain geostationary locations and NGSO orbits and the associated radio frequencies. Certain of these governments have in turn authorized Telesat to use geostationary locations, NGSO orbits and associated radio frequencies in addition to those used by its current satellites. Under the ITU Radio Regulations, Telesat must bring into use 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 geostationary 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 Telesat to use these orbital resources have generally conditioned such use on Telesat meeting certain milestones, including making use of the orbital spectrum by a specified time.

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

Replacing a satellite upon the end of its service life would require Telesat to make significant expenditures and may require Telesat to obtain shareholder approval, and Telesat may choose not to replace some of its satellites.

To ensure no disruption in Telesat's business and to prevent loss of its customers, Telesat is typically 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 \$250 million to \$300 million to construct, launch and insure a geostationary satellite. There can be no assurance that Telesat 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 Telesat will obtain shareholder approval to procure replacement satellites. Certain of Telesat's satellites are nearing their expected end-of-orbital maneuver lives. Should Telesat not have sufficient funds available to replace those satellites or should Telesat not receive approval from its shareholders to purchase replacement satellites, it could have a material adverse effect on Telesat's results of operations, business prospects and financial condition. In order to justify the cost of replacing a satellite at the end of its life, there must be sufficient demand for services such that a reasonable business case can be made for its replacement. If there is insufficient demand for a replacement, Telesat may choose not to replace a satellite at the end of its life. For example, Telesat does not currently intend to replace its Anik F1 satellite at the end of its commercial life which is expected to occur later this year.

The uncertainty regarding the potential phase-out of LIBOR may negatively impact Telesat's operating results.

LIBOR, the interest rate benchmark used as a reference rate on Telesat's variable rate debt, including Telesat's revolving credit facility, term loan and interest rate swaps, is expected to be phased out by the end of 2021, when private-sector banks are no longer required to report the information used to set the rate. Without this data, LIBOR may no longer be published, or the lack of quality and quantity of data may cause the rate no longer to be representative of the market. At this time, no consensus exists as to what rate or rates will become accepted alternatives to LIBOR, although the U.S. Federal Reserve, in connection with the Alternative Reference Rates Committee, a steering committee comprised of large U.S. financial institutions, selected the Secured Overnight Financing Rate ("SOFR") as the rate that represents best practice for replacing U.S. dollar LIBOR for use in new U.S. dollar derivatives and other financial contracts, and has recommended a paced transition plan that involves the creation of a reference rate based on SOFR by the end of 2021. SOFR is a more generic measure than LIBOR and considers the cost of borrowing cash overnight, collateralized by U.S. Treasury securities. Given the inherent differences between LIBOR and SOFR or any other alternative benchmark rate that may be established, there are many uncertainties regarding a transition from LIBOR, including but not limited to the need to amend some or all contracts with LIBOR as the reference rate and how this will impact Telesat's cost of variable rate debt and certain derivative financial instruments. Telesat will also need to consider new contracts and if they should reference an alternative benchmark rate or include suggested fallback language, as published by the Alternative Reference Rates Committee. The consequences of these developments with respect to LIBOR cannot be entirely predicted and span multiple future periods but could result in an increase in the cost of Telesat's variable rate debt or derivative financial instruments which may be detrimental to Telesat's financial position or operating results.

Reductions in government spending could reduce demand for Telesat's 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 Telesat's services could decrease which could adversely affect Telesat's revenue, the prices it is able to charge for services and its results.

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

Telesat operates an extensive ground infrastructure including a satellite control center in Ottawa, Ontario, its main earth station and back up satellite control facility at Allan Park, Ontario, nine earth stations throughout Canada, two teleports located in the United States and one in Brazil. These ground facilities are used for controlling Telesat's satellites and for the provision of end-to-end services to Telesat's customers.

[Table of Contents](#)

Telesat 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 Telesat customers. Additionally, Telesat may experience a failure in the necessary equipment at the satellite control center, 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 Telesat's ability to deliver satellite services to its customers. A failure at any of Telesat's facilities or in the communications links between its facilities or interference with its satellite signal could cause its revenues and backlog to decline materially and could adversely affect its ability to market its services and generate future revenues and profit.

Telesat purchases equipment from third party suppliers and depends on those suppliers to deliver, maintain and support these products to the contracted specifications in order for Telesat to meet its service commitments to its customers. Telesat may experience difficulty if these suppliers do not meet their obligations to deliver and support this equipment. Telesat 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 Telesat's revenues and backlog to decline materially and could adversely affect Telesat's ability to market its services and generate future revenues and profit.

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

Any delays in the design, construction or launch of Telesat's satellites could have a material adverse effect on its business, financial condition and results of operations. There are a limited number of manufacturers that are able to design and build satellites according to the technical specifications and standards of quality Telesat requires, including Airbus Defense and Space, Thales Alenia Space, Boeing, Lockheed Martin, MELCO, Northrop Grumman and Maxar. Telesat also relies on the manufacturers of its satellites to provide support throughout the life of the satellite in the event it should suffer an anomaly. If the business of any of Telesat's manufacturers fails, Telesat's ability to overcome a satellite anomaly and maintain its satellites in service, in whole or in part, could be adversely impacted. There are also a limited number of suppliers able to launch such satellites, including International Launch Services, Arianespace, Mitsubishi Heavy Industries, Space Exploration Technologies Corp. ("SpaceX") and Lockheed Martin. Should any of Telesat's manufacturers' or launch suppliers' businesses fail, competition would be reduced and the cost of satellites and launch services could increase. Adverse events with respect to any of Telesat's manufacturers or launch suppliers could also result in the delay of the design, construction or launch of its satellites. For example, many of Telesat's 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 export of certain prescribed U.S. technologies, if the export 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 having 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 Telesat's 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 Telesat's 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, Telesat may have difficulty identifying them in a timely manner, or may incur significant additional expense in changing suppliers, and this could result in difficulties or delays in the design, construction or launch of Telesat's satellites.

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

The assets on Telesat’s consolidated balance sheet as of December 31, 2019 include goodwill with a carrying value of approximately CAD 2.4 billion and other intangible assets with a carrying value of approximately CAD 243 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. Telesat measures for the quantitative impairment test using a projected discounted cash flow method and confirms 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 consolidated statement of income (loss). 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. Telesat cannot predict whether an event that triggers impairment will occur, when it will occur or how it will affect the reported asset values. If Telesat’s goodwill or other intangible assets are deemed to be impaired in whole or in part, it could be required to reduce or write off such assets, which could have a material adverse effect on its financial condition.

Telesat is subject to risks associated with doing business internationally.

Telesat’s operations internationally are subject to risks that are inherent in conducting business globally. Telesat is 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 Telesat’s employees and contractors are required to comply with these laws, Telesat cannot be sure that its internal policies and procedures will always protect it from violations of these laws, despite Telesat’s 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 SEC 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 Telesat’s business, performance, financial condition and results of operations.

Telesat’s 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 its 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 Telesat does not maintain its existing authorizations or obtain necessary future authorizations under the export control laws and regulations of the United States, it may be unable to export technical data or equipment to non-U.S. persons and companies, including to Telesat’s own non-U.S. employees, as required to fulfill existing contracts. If Telesat does not maintain its existing authorizations or obtain necessary future authorizations under the trade sanctions laws and regulations of the United States, it may not be able to provide satellite capacity and related administrative services to certain countries subject to U.S. sanctions. Telesat’s ability to acquire new United States-manufactured satellites, procure launch services and launch new satellites, operate existing satellites, obtain insurance and pursue its rights under insurance policies or conduct its satellite-related operations and consulting activities could also be negatively affected if Telesat and its suppliers are not able to obtain and maintain required U.S. export authorizations.

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

Telesat provides satellite capacity for transmissions by third parties. Telesat does not decide what content is transmitted over its satellites, although its contracts generally provide it with rights to prohibit certain types of content or to cease transmission or permit Telesat to require its customers to cease their transmissions under certain circumstances. A governmental body or other entity may object to some of the content carried over Telesat’s 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 Telesat’s satellites could affect its future revenues, operations or relationship with certain governments or customers.

III. Other Risks

We have been pursuing and will continue to pursue a strategic transaction with respect to our interest in Telesat; there can be no assurance, however, as to when or whether we will be able to conclude any such transaction.

Our principal asset is our majority economic ownership interest in Telesat. In an effort to maximize shareholder value, we have been exploring, and are in discussions with PSP regarding, potential strategic transactions to alter the status quo in our ownership of Telesat. Subject to market conditions and the cooperation of PSP, we continue to explore the combination of Loral and Telesat into one public company. Also, in 2015, we exercised our right under the Telesat Shareholders Agreement (the “Shareholders Agreement”) to require that Telesat initiate a public offering, and we may further pursue this right in the event that the combination transaction that we are pursuing is not likely to be achievable in a timely manner or on satisfactory terms. See “The initial public offering of Telesat and related governance changes that we have requested may not occur or may proceed in a manner contrary to our requests” below. There can be no assurance as to whether or when we will be able to conclude any strategic transaction or that any strategic initiatives or transaction involving Telesat or Loral may occur, or that any particular economic, tax, structural or other objectives or benefits with respect to any initiative or transaction involving Telesat or Loral’s interest therein will be achieved.

We received a cash distribution from Telesat of \$242.7 million in 2017; we intend to make a cash distribution or return capital to our stockholders from the proceeds of that distribution; there can be no assurance, however, as to the amount and timing of any such distribution or return of capital, and such distribution or return of capital may be impacted by the outcome of our discussions regarding, and the structure of, the strategic combination transaction with respect to our interest in Telesat that we are pursuing.

In 2017, we received \$242.7 million in cash from Telesat, representing our share of an aggregate approximately \$400 million distribution from Telesat to its shareholders and stock option holders. We intend to use the proceeds of such distribution, net of reasonable reserves for working capital and other liabilities, to make a distribution or return capital to our stockholders. There can be no assurance as to the amount and timing of any such distribution or return of capital, and such distribution or return of capital may be impacted by the outcome of our discussions regarding, and the structure of, the strategic combination transaction with respect to our interest in Telesat that we are pursuing.

The initial public offering of Telesat and related governance changes that we have requested may not occur or may proceed in a manner contrary to our requests.

Our Shareholders Agreement with PSP regarding Telesat provides for either PSP or Loral to initiate the process of conducting an initial public offering of the equity shares of Telesat (a “Telesat IPO”). In connection with our exploration of strategic initiatives to alter the status quo in our ownership of Telesat, in July 2015, we exercised our right under the Shareholders Agreement to require Telesat to conduct a Telesat IPO. Specifically, we requested that Telesat issue not more than 25 million newly issued shares of Telesat voting common stock. We also requested the termination of the Shareholders Agreement and the elimination of certain provisions in Telesat’s Articles of Incorporation, both of which we believe are necessary to accommodate a successful public offering. If those provisions are eliminated, an impediment to the conversion of our non-voting Telesat shares to voting shares would be eliminated. Termination or modification of the Shareholders Agreement and conversion of our non-voting shares to voting shares would enable us, after a Telesat IPO and subject to the receipt of any necessary regulatory approvals, to obtain majority voting control of Telesat. To date, we and PSP have not reached agreement on governance matters following a Telesat IPO. In the event a transaction to combine Loral and Telesat into one public company that we are pursuing is not likely to be achievable in a timely manner or on satisfactory terms (see “We have been pursuing and will continue to pursue a strategic transaction with respect to our interest in Telesat; there can be no assurance, however, as to when or whether we will be able to conclude any such transaction,” above), we may further pursue our right to a Telesat IPO. There can be no assurance as to whether, when or on what terms a Telesat IPO, termination or modification of the Shareholders Agreement or any requested changes to Telesat’s Articles of Incorporation may occur or that any particular economic, tax, structural or other objectives or benefits with respect to a Telesat IPO will be achieved. If a Telesat IPO is expected to proceed under unfavorable terms or at an unfavorable price, we may withdraw our demand for a Telesat IPO.

We and PSP may assert legal claims against one another relating to Telesat; there can be no assurance, however, that our claims will be successful or that the relief we seek will be granted or that PSP will not prevail on its claims.

Depending upon the outcome of the strategic initiatives that we are pursuing (see “We have been pursuing and will continue to pursue a strategic transaction with respect to our interest in Telesat; there can be no assurance, however, as to when or whether we will be able to conclude any such transaction,” above), we may assert certain claims against PSP for actions we believe violated our rights relating to the affairs of Telesat under the Telesat Shareholders Agreement and otherwise. In response to our claims, PSP has informed us that it believes that it may have claims against us, although we are not aware of the legal or factual basis for any such claims. We and PSP have agreed that, pending the outcome of our discussions relating to Telesat, it would be beneficial to delay the commencement of any action relating to either party’s claims and have entered into an agreement (the “Tolling Agreement”) which preserves the parties’ rights to assert against one another legal claims relating to Telesat. We also included Telesat as a party to the Tolling Agreement because, as a technical matter of Canadian law and for purposes of potentially seeking equitable relief, Telesat may be a necessary party. There can be no assurance that if the Tolling Agreement lapses that we and PSP will not pursue legal claims against one another relating to Telesat. If we pursue claims against PSP, there can be no assurance that our claims will be successful or that the relief we seek will be granted. If PSP pursues claims against us, there can be no assurance that PSP will not prevail on its claims.

A public offering of stock in Telesat could adversely affect the market for, and price of, our common stock and the value of our interest in Telesat.

If the Telesat IPO that we have requested occurs, it is uncertain whether the offering would include a primary offering of shares by Telesat, a secondary offering of shares by either or both of the Telesat shareholders or a combination of both types of offerings. It is also uncertain what effect the Telesat IPO (and any corporate restructuring required in connection with such offering under the terms of the Telesat shareholders agreement) would have on Loral’s governance rights in Telesat. Changes in our Telesat governance rights could adversely affect the value of our interest in Telesat and the price at which our common stock trades. In addition, a public market for Telesat equity would create a situation where there would be two separate public-market proxies for the value of Telesat – our stock and the Telesat stock. Telesat stock would represent a direct interest in Telesat, whereas the value of the common shares of Loral would also include other assets and liabilities, many of which are difficult to value. Having both Telesat stock and our stock trading publicly could create confusion in the market and could adversely affect the liquidity and/or trading values of either our or Telesat’s common stock.

Third parties have significant rights with respect to our affiliates.

Third parties have significant rights with respect to, and we do not have control over management of, our affiliates. For example, while we own 62.7% of the participating shares of Telesat, we own only 32.6% of the voting power. Also, Hisdesat enjoys substantial approval rights in regard to XTAR, our X-band joint venture. The rights of these third parties and fiduciary duties under applicable law could result in others acting or failing to act in ways that are not in our best interest. For example, it is likely that any strategic transaction involving Telesat or XTAR that we wish to pursue will require the cooperation of our joint venture partners, and our partners may not share our objectives or wish to pursue a transaction in which we are interested or any transaction at all.

The loss of executive officers and our inability to retain other key personnel could materially adversely affect our operations or ability to pursue strategic alternatives.

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

Also, we have retained Michael B. Targoff, our former chief executive officer and president, as a consultant, in particular to provide assistance and guidance in the oversight of strategic matters relating to Telesat and XTAR. The consulting agreement may be terminated by either the Company or Mr. Targoff at any time for any reason or for no reason on ten days prior notice. There can be no assurance that Mr. Targoff will not terminate the agreement, and, were he to do so, the ability of the Company to pursue strategic alternatives with regard to Telesat and XTAR could be adversely affected.

Interruption or failure of, or cyber-attacks on, Telesat's or our information technology and communications systems could hurt Telesat's or our ability to operate our respective businesses effectively, which could harm Telesat's or our business and operating results.

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

While we and Telesat continue to bolster systems with additional security measures, and, working with external experts, mitigate the risk of security breaches, 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 or Telesat's systems. In addition, Telesat's and our facilities are also potentially vulnerable to break-ins, sabotage and intentional acts of vandalism. Moreover, some of these systems are not fully redundant, and disaster recovery planning cannot account for all eventualities. Telesat's and our business and operations could be adversely affected if, as a result of a significant cyber event or otherwise, operations are disrupted or shut down, confidential or proprietary information is stolen or disclosed, Telesat loses customers, costs are incurred or fines are required in connection with confidential or export-controlled information that is disclosed, significant resources are dedicated to system repairs or to increase cyber security protection or we or Telesat otherwise incur significant litigation or other costs as a result of any such event. While Telesat's or 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 systems could significantly limit Telesat's or 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.

MHR may be viewed as our controlling stockholder and may have conflicts of interest with us in the future.

As of December 31, 2019, various funds affiliated with MHR and Dr. Rachesky held approximately 39.9% of the outstanding voting common stock of Loral as well as all issued and outstanding shares of Loral non-voting common stock, which, when taken together, represent approximately 58.4% of the outstanding common equity of Loral as of December 31, 2019. As of March 9, 2020, representatives of MHR occupy two of the seven seats on our board of directors. One seat on our board, previously occupied by a former managing principal of MHR, is currently vacant. In addition, one of our other directors was selected by the creditors' committee in our predecessor's chapter 11 cases, in which MHR served as the chairman. Conflicts of interests may arise in the future between us and MHR. For example, MHR and its affiliated funds are in the business of making investments in companies and may acquire and hold interests in businesses that compete directly or indirectly with us. Under our agreement with PSP, subject to certain exceptions, in the event that either (i) ownership or control, directly or indirectly, by Dr. Rachesky, of our voting stock falls below certain levels other than in certain specific circumstances or (ii) there is a change in the composition of a majority of the members of the Loral board of directors over a consecutive two-year period without the approval of the incumbent directors, we will lose our veto rights relating to certain actions by Telesat. In addition, after either of these events, PSP will have certain rights to enable it to exit from its investment in Telesat, including a right to cause Telesat to conduct an initial public offering in which PSP's shares would be the first shares offered or, if no such offering has occurred within one year due to a lack of cooperation from Loral or Telesat, to cause the sale of Telesat and to drag along the other shareholders in such sale, subject to our right to call PSP's shares at fair market value.

There is a thin trading market for our voting common stock.

Trading activity in our voting common stock, which is listed on the NASDAQ National Market, has generally been light, averaging approximately 47,000 shares per day for the year ended December 31, 2019. Moreover, over 50% of our voting common stock is effectively held by MHR and several other stockholders. If any of our significant stockholders should sell some or all of their holdings, it will likely have an adverse effect on our share price. Although the funds affiliated with MHR have restrictions on their ability to sell our shares under U.S. securities laws, we have filed a shelf registration statement in respect of the voting common stock and non-voting common stock they hold in Loral that effectively eliminates such restrictions. Such funds also have other demand and piggyback registration rights in respect of their Loral voting common stock and non-voting common stock that would also, if exercised, effectively eliminate such restrictions.

The market for our voting common stock could be adversely affected by future issuance of significant amounts of our voting common stock.

As of December 31, 2019, 21,427,078 shares of our voting common stock and 9,505,673 shares of our non-voting common stock were outstanding. On that date, there were also outstanding 75,262 vested restricted stock units. These restricted stock units may be settled either in cash or Loral voting common stock at the Company's option.

Sales of significant amounts of our voting common stock to the public, or the perception that those sales could happen, could adversely affect the market for, and the trading price of, our voting common stock.

Changes in tax rates or policies or changes to our tax liabilities could affect operating results.

We are subject to U.S. federal, state and local income taxation on our worldwide income and foreign taxes on certain income from sources outside the United States. Telesat is subject to income taxes in Canada and numerous foreign jurisdictions. Significant judgment is required to determine and estimate tax liabilities, and future annual and quarterly tax rates could be affected by numerous factors, including changes in the applicable tax laws, composition of earnings in countries or states with differing tax rates, valuation and utilization of deferred tax assets and liabilities and the outcome of income tax audits in various jurisdictions around the world. Many countries have or are expected to adopt changes to tax laws as a 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 results of operations. Although we believe our tax estimates are reasonable, we regularly evaluate the adequacy of our provision for income taxes, and there can be no assurance that any final determination by a taxing authority will not result in additional tax liability which could have a material adverse effect on our results of operations.

The future use of tax attributes is limited.

As of December 31, 2019, we had various tax attributes including carryforwards for federal net operating losses ("NOLs") of \$95.3 million and foreign tax credits ("FTCs") of \$109.6 million and state NOLs that are available to offset future tax liability (see Notes 2 and 7 to the Loral consolidated financial statements for a description of the accounting treatment of such tax attributes). As our emergence from bankruptcy on November 21, 2005 constituted an "ownership change" under Section 382 of the Internal Revenue Code, our ability to use these tax attributes existing at such effective date is subject to an annual limitation of approximately \$32.6 million (tax effect of \$6.8 million), subject to increase or decrease based on certain factors. If Loral experiences an additional "ownership change" during any three-year period after November 21, 2005, future use of these tax attributes may become further limited. An ownership change may be triggered by sales or acquisitions of Loral equity interests in excess of 50% by shareholders owning five percent or more of our total equity value, i.e., the total market value of our equity interests, as determined on any applicable testing date. A strategic transaction with respect to our ownership interest in Telesat could result in such an ownership change. We would be adversely affected by an additional "ownership change" if, at the time of such change, the total market value of our equity multiplied by the federal applicable long-term tax exempt rate, which at December 31, 2019 was 1.59%, was less than \$32.6 million. As of December 31, 2019, the total market value of our equity (\$1.0 billion) multiplied by the federal applicable long-term tax exempt rate was approximately \$16.0 million.

We are subject to the Foreign Corrupt Practices Act.

We are subject to the Foreign Corrupt Practices Act, or the FCPA, which generally prohibits U.S. companies and their intermediaries from making corrupt payments to foreign officials for the purpose of obtaining or keeping business or otherwise obtaining favorable treatment, and requires companies to maintain adequate record-keeping and internal accounting practices to accurately reflect the transactions of the company. The FCPA applies to companies, individual directors, officers, employees and agents. Under the FCPA, U.S. companies may be held liable for actions taken by strategic or local partners or representatives. If we, our intermediaries or companies in which we have an interest, such as Telesat and XTAR, fail to comply with the requirements of the FCPA, governmental authorities in the United States could seek to impose civil and/or criminal penalties, which could have a material adverse effect on our business, results of operations, financial conditions and cash flows.

Declines in the stock market and reductions in interest rates will increase our pension plan's unfunded status resulting in increased pension liabilities on our balance sheet and may require us to increase our pension plan contributions or make such contributions earlier than anticipated, thereby having an adverse effect on our financial position.

Our qualified pension plan is invested primarily in equity and fixed income investments. Steep declines in the equity markets, such as those that have occurred and are occurring as a result of uncertainty relating to the Covid-19 coronavirus, will have the effect of reducing our pension plan assets, thereby increasing the plan's unfunded status, resulting in increased pension liabilities on our balance sheet. In addition, reductions in interest rates, whether in connection with the Federal Reserve attempting to stabilize the markets or otherwise, will have the effect of increasing our pension plan obligations. A significant reduction in pension plan assets and/or increase in pension plan obligations will increase pension liabilities on our balance sheet and may have the effect of requiring us to increase our contributions to our pension plan or make such contributions earlier than we anticipated thereby having an adverse effect on our financial position.

Failure to remediate a material weakness in internal accounting controls could result in material misstatements in our financial statements.

During the third quarter of 2019, our management identified a material weakness in internal control over financial reporting and has concluded that, due to such material weakness, our disclosure controls and procedures were not effective as of September 30, 2019 and December 31, 2018. If remediation of this material weakness is unsuccessful or if other material weaknesses occur in the future, our failure to establish and maintain effective disclosure controls and procedures and internal control over financial reporting could result in material misstatements in our financial statements and a failure to meet our reporting and financial obligations, each of which could have a material adverse effect on our financial condition and the trading price of our common stock.

Accounting standards periodically change and the application of our accounting policies and methods may require management to make estimates about matters that are uncertain.

The regulatory bodies that establish accounting standards, including, among others, the Financial Accounting Standards Board, or the FASB, and the SEC, periodically revise or issue new financial accounting and reporting standards that govern the preparation of our consolidated financial statements. The effect of such revised or new standards on our consolidated financial statements can be difficult to predict and can materially affect how we record and report our results of operations and financial condition. In addition, our management must exercise judgment in appropriately applying many of our accounting policies and methods so they comply with generally accepted accounting principles. In some cases, the accounting policy or method chosen might be reasonable under the circumstances and yet might result in our reporting materially different amounts than would have been reported if we had selected a different policy or method. Accounting policies are critical to fairly presenting our results of operations and financial condition and may require management to make difficult, subjective or complex judgments about matters that are uncertain.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Corporate

We lease approximately 8,000 square feet of space for our corporate offices in New York, NY.

Satellite Services

Telesat's primary SCC is located at its headquarters in Ottawa, Ontario. This facility operates LEO 1, 14 of Telesat's 16 geostationary satellites as well as ViaSat-1 and numerous other satellites for third parties. Telesat's Telstar 14R/Estrela do Sul 2 satellite and Telstar 19 VANTAGE satellite are operated from Telesat's SCC in Rio de Janeiro, Brazil. In the fourth quarter of 2018, Telesat moved its headquarters to a location in downtown Ottawa comprised of approximately 54,000 rentable square feet. The rentable square feet will increase to approximately 76,000 when Telesat takes on additional contiguous space in the third quarter of 2020. Telesat's new lease 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 center and a technical control center. This facility is the single point of contact for Telesat's international customers and is also the main earth station complex providing telemetry, tracking and control services for the satellites Telesat operates. The Allan Park earth station also houses Telesat's backup SCC for the Nimiq and Anik satellites. The back-up satellite control center for the Telstar satellites is located at the Mount Jackson earth station. Telesat would have the functional ability to restore satellite control services via the Allan Park and Mount Jackson back-up control centers if Telesat's primary SCCs became disabled.

Telesat also operates 13 other earth stations in Canada, the United States and Brazil.

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

Item 3. Legal Proceedings

We are not currently subject to any legal proceedings that, if decided adversely, could have a material adverse effect on our financial position or results of operations. In the future, however, we may become subject to legal proceedings and claims, either asserted or unasserted, that may arise in the ordinary course of business or otherwise.

Item 4. Mine Safety Disclosures

Not Applicable

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

(a) Market Price and Dividend Information

Loral's amended and restated certificate of incorporation provides that the total authorized capital stock of the Company is eighty million (80,000,000) shares consisting of two classes: (i) seventy million (70,000,000) shares of common stock, \$0.01 par value per share, divided into two series, of which 50,000,000 shares are voting common stock and 20,000,000 shares are non-voting common stock and (ii) ten million (10,000,000) shares of preferred stock, \$0.01 par value per share. Each share of voting common stock and each share of non-voting common stock are identical and are treated equally in all respects, except that the non-voting common stock does not have voting rights except as set forth in Article IV(a)(iv) of the amended and restated certificate of incorporation and as otherwise provided by law. Article IV(a)(iv) of Loral's amended and restated certificate of incorporation provides that Article IV(a) of the amended and restated certificate of incorporation, which provides for, among other things, the equal treatment of the non-voting common stock with the voting common stock, may not be amended, altered or repealed without the affirmative vote of holders of a majority of the outstanding shares of the non-voting common stock, voting as a separate class. Except as otherwise provided in the amended and restated certificate of incorporation or bylaws of Loral, each holder of Loral voting common stock is entitled to one vote in respect of each share of Loral voting common stock held of record on all matters submitted to a vote of stockholders.

Holders of shares of Loral common stock are entitled to share equally, share for share in dividends when and as declared by the Board of Directors out of funds legally available for such dividends. Upon a liquidation, dissolution or winding up of Loral, the assets of Loral available to stockholders will be distributed equally per share to the holders of Loral common stock. The holders of Loral common stock do not have any cumulative voting rights. Loral common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to Loral common stock. All outstanding shares of Loral common stock are fully paid and non-assessable.

Our voting common stock trades on the NASDAQ National Market under the ticker symbol "LORL."

There is no established trading market for the Company's non-voting common stock. All of the shares of non-voting common stock were issued pursuant to the exemption from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act") provided by Section 4(2) of the Securities Act.

(b) Approximate Number of Holders of Common Stock

At March 9, 2020, there were 131 holders of record of our voting common stock and five holders of record of our non-voting common stock.

(c) Dividends

Loral's ability to pay dividends or distributions on its common stock will depend upon its earnings, financial condition and capital needs and other factors deemed pertinent by the Board of Directors. Loral has not paid any dividends on its common stock for the years ended December 31, 2019 and 2018. In 2017, we received a \$242.7 million cash distribution from Telesat. We intend to use the proceeds of such distribution, net of reasonable reserves for working capital and other liabilities, to make a distribution or return capital to our stockholders. There can be no assurance as to the amount and timing of any such distribution or return of capital, and such distribution or return of capital may be impacted by the outcome of our discussions regarding, and the structure of, the strategic combination transaction with respect to our interest in Telesat that we are pursuing.

(d) Securities Authorized for Issuance under Equity Compensation Plans

See Note 9 to the Loral consolidated financial statements for information regarding the Company's stock incentive plan. Compensation information required by Item 11 will be presented in the Company's 2020 definitive proxy statement which is incorporated herein by reference or by an amendment to this Annual Report on Form 10-K.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis should be read in conjunction with our consolidated financial statements (the "financial statements") included in Item 15 of this Annual Report on Form 10-K.

Loral Space & Communications Inc., a Delaware corporation, together with its subsidiaries, is a leading satellite communications company engaged, through our ownership interests in affiliates, in satellite-based communications services.

Disclosure Regarding Forward-Looking Statements

Except for the historical information contained in the following discussion and analysis, the matters discussed below are not historical facts, but 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," "project," "intend," or "outlook" or other variations of these words. These statements, including without limitation those relating to Telesat, 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 the Risk Factors section above, the Commitments and Contingencies section below and to our other periodic reports filed with the Securities and Exchange Commission ("SEC"). We operate in an industry sector in which the value of securities may be volatile and may be influenced by economic and other factors beyond our control. We undertake no obligation to update any forward-looking statements.

Overview

Business

Loral has one operating segment consisting of satellite-based communications services. Loral participates in satellite services operations primarily through its ownership interest in Telesat, a leading global satellite operator. Telesat provides its satellite and communication services from a fleet of satellites that occupy Canadian and other orbital locations. Loral holds a 62.7% economic interest and a 32.6% voting interest in Telesat as of December 31, 2019.

At December 31, 2019, Telesat, with approximately \$2.5 billion of backlog, provided satellite services to customers from its fleet of 16 in-orbit geostationary satellites and the Canadian Ka-band payload on the ViaSat-1 satellite. Telesat is also developing a global constellation of LEO satellites. In January 2018, Telesat launched a Ka-band satellite into low earth orbit as part of its plans to deploy an advanced, global LEO constellation. This satellite is being used to perform testing and live demonstrations of certain features of Telesat's 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 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.

On October 11, 2019, Telesat issued \$550.0 million of 6.5% senior notes maturing in October 2027. The 6.5% senior notes are effectively subordinated to Telesat's secured indebtedness, including the obligations under its senior secured credit facilities and its 4.875% senior secured notes.

On October 11, 2019, Telesat used the net proceeds from the 6.5% senior notes offering together with available cash on hand to redeem its \$500 million 8.875% senior notes due November 15, 2024 by repaying all outstanding amounts, including principal, redemption premium and discounted interest to November 15, 2019.

[Table of Contents](#)

On December 6, 2019, Telesat entered into amended senior secured credit facilities which provide for term loan borrowings of \$1,908.5 million which mature in December 2026 and revolving credit facilities of up to \$200 million (or Canadian dollar equivalent) which mature in December 2024. Telesat also issued, through a private placement, \$400 million of 4.875% senior secured notes which mature in June 2027.

On December 6, 2019, Telesat repaid all outstanding amounts, including related fees and expenses, under its former senior secured credit facilities.

On July 24, 2019, Telesat announced that it had entered into a memorandum of understanding with the GoC regarding a partnership intended to ensure access to affordable high-speed internet connectivity across rural and remote areas of Canada through the development of the Telesat LEO constellation. The partnership is expected to generate CAD 1.2 billion in revenue for Telesat over 10 years, which includes a contribution of up to CAD 600 million from the GoC.

In May 2019, Telesat entered into an agreement with the GoC pursuant to which the GoC will contribute up to CAD 85 million through July 31, 2023 to support the development of the Telesat LEO constellation (the “Government Grant”). As of December 31, 2019, Telesat recorded CAD 5.0 million relating to the agreement.

In 2018, Telesat became a member of the C-Band Alliance, which is composed of leading global satellite operators Intelsat, SES and Telesat, a consortium formed to facilitate the potential repurposing of certain C-band spectrum in the United States for 5G.

On March 3, 2020, the FCC issued a Report and Order on Expanding Flexible use of the 3.7 to 4.2 GHz Band. The Report and Order indicated that Telesat could receive as much as \$344.4 million from the repurposing of C-band Spectrum in the United States. However, Telesat’s ability to receive any proceeds would be subject to certain conditions (See “*Business Strategy*”). There can be no assurance that Telesat will receive any proceeds from the FCC process or, if it were to receive proceeds, the amount or timing of receipt.

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. Telesat has been able to generate a large contractual revenue backlog by entering into long-term contracts with some of its customers, in some cases for all or substantially all of a satellite’s orbital maneuver life. Historically, this has resulted in revenue from the satellite services business being fairly predictable.

Telesat’s desirable spectrum rights, commitment to providing the highest level of customer service, deep technical expertise and culture of innovation have enabled it to successfully develop its business to date. Leveraging these strengths and building on its existing contractual revenue backlog, Telesat’s focus is on profitably growing its business by increasing the utilization of its in-orbit satellites and, in a disciplined manner, deploying expansion satellite capacity where strong market demand is anticipated. In 2018, Telesat launched a Ka-band satellite into low earth orbit in furtherance of its plans 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.

Telesat believes that it is well positioned to serve its customers and the markets in which it participates. Telesat actively pursues 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. However, while Telesat regularly pursues these opportunities, it does not procure additional or replacement satellites until it believes there is a demonstrated need and a sound business plan for such satellite capacity.

In 2020, Telesat remains focused on increasing utilization of its existing satellites, the development of its global LEO constellation, identifying and pursuing opportunities to invest in other expansion of satellite capacity and leveraging the value of its spectrum rights, all while maintaining operating discipline.

[Table of Contents](#)

Telesat's operating results are subject to fluctuations as a result of exchange rate variations. During 2019, approximately 53% of Telesat's revenues, 39% of its operating expenses, 100% of its interest expense and the majority of its capital expenditures were denominated in U.S. dollars. The most significant impact of variations in the exchange rate is on the U.S. dollar denominated indebtedness and cash and short term investments. As of December 31, 2019, Telesat's U.S. dollar denominated debt totaled \$2.86 billion. As of December 31, 2019, a five percent increase (decrease) in the Canadian dollar against the U.S. dollar on financial assets and liabilities would have increased (decreased) Telesat's net income by approximately \$133.1 million. This analysis assumes all other variables, in particular interest rates, remain constant.

General

Our principal asset is our majority economic ownership interest in Telesat. In an effort to maximize shareholder value, we have been exploring, and are in discussions with PSP regarding, potential strategic transactions to alter the status quo in our ownership of Telesat. Subject to market conditions and the cooperation of PSP, we continue to explore the combination of Loral and Telesat into one public company. Also, as described more fully below, we have exercised our right to require that Telesat initiate a public offering, and we may further pursue this right in the event that the combination transaction that we are pursuing is not likely to be achievable in a timely manner or on satisfactory terms. There can be no assurance as to whether or when we will be able to conclude any strategic transaction or that any strategic initiatives or transaction involving Telesat or Loral may occur, or that any particular economic, tax, structural or other objectives or benefits with respect to any initiative or transaction involving Telesat or Loral's interest therein will be achieved.

In 2017, we received \$242.7 million in cash from Telesat, representing our share of an aggregate approximately \$400 million distribution from Telesat to its shareholders and stock option holders. We intend to use the proceeds of such distribution, net of reasonable reserves for working capital and other liabilities, to make a distribution or return capital to our stockholders. There can be no assurance as to the amount and timing of any such distribution or return of capital, and such distribution or return of capital may be impacted by the outcome of our discussions regarding, and the structure of, the strategic combination transaction that we are pursuing.

As mentioned above, we have the right under the Telesat Shareholders Agreement to require Telesat to conduct an initial public offering of its equity shares, and, in July 2015, we exercised this right. Specifically, we requested that Telesat issue not more than 25 million newly issued shares of Telesat voting common stock. We also requested the termination of the Shareholders Agreement and the elimination of certain provisions in Telesat's Articles of Incorporation, both of which we believe are important for a successful public offering. If those provisions are eliminated, an impediment to the conversion of our non-voting Telesat shares to voting shares would be eliminated. Termination or modification of the Shareholders Agreement and conversion of our non-voting shares to voting shares would enable us, after a Telesat IPO and subject to the receipt of any necessary regulatory approvals, to obtain majority voting control of Telesat. To date, we and PSP have not reached agreement on governance matters following a Telesat IPO. In the event a transaction to combine Loral and Telesat into one public company that we are pursuing is not likely to be achievable in a timely manner or on satisfactory terms, we may further pursue our right to a Telesat IPO. There can be no assurance as to whether, when or on what terms a Telesat IPO, termination or modification of the Shareholders Agreement or any requested changes to Telesat's Articles of Incorporation may occur or that any particular economic, tax, structural or other objectives or benefits with respect to a Telesat IPO will be achieved. If a Telesat IPO is expected to proceed under unfavorable terms or at an unfavorable price, we may withdraw our demand for a Telesat IPO.

Depending upon the outcome of the strategic initiatives discussed above, we may assert certain claims against PSP for actions we believe violated our rights relating to the affairs of Telesat under the Telesat Shareholders Agreement and otherwise. In response to our claims, PSP has informed us that it believes that it may have claims against us, although we are not aware of the legal or factual basis for any such claims. We and PSP have agreed that, pending the outcome of our discussions relating to Telesat, it would be beneficial to delay the commencement of any action relating to either party's claims and have entered into an agreement (the "Tolling Agreement") which preserves the parties' rights to assert against one another legal claims relating to Telesat. We also included Telesat as a party to the Tolling Agreement because, as a technical matter of Canadian law and for purposes of potentially seeking equitable relief, Telesat may be a necessary party. There can be no assurance that if the Tolling Agreement lapses that we and PSP will not pursue legal claims against one another relating to Telesat. If we pursue claims against PSP, there can be no assurance that our claims will be successful or that the relief we seek will be granted. If PSP pursues claims against us, there can be no assurance that PSP will not prevail on its claims.

[Table of Contents](#)

Loral may, from time to time, explore and evaluate other possible strategic transactions and alliances which may include joint ventures and strategic relationships as well as business combinations or the acquisition or disposition of assets. In order to pursue certain of these opportunities, additional funds are likely to be required. There can be no assurance that we will enter into additional strategic transactions or alliances, nor do we know if we will be able to obtain the necessary financing for transactions that require additional funds on favorable terms, if at all.

In connection with the acquisition of our ownership interest in Telesat in 2007, Loral has agreed that, subject to certain exceptions described in the Shareholders Agreement, for so long as Loral has an interest in Telesat, it will not compete in the business of leasing, selling or otherwise furnishing fixed satellite service, broadcast satellite service or audio and video broadcast direct to home service using transponder capacity in the C-band, Ku-band and Ka-band (including in each case extended band) frequencies and the business of providing end-to-end data solutions on networks comprised of earth terminals, space segment, and, where appropriate, networking hubs.

Consolidated Operating Results

Please refer to Critical Accounting Matters set forth below in this section.

2019 Compared with 2018

The following compares our consolidated results for 2019 and 2018 as presented in our financial statements:

General and Administrative Expenses

| | Year Ended December 31, | |
|-------------------------------------|-------------------------|----------|
| | 2019 | 2018 |
| | (In thousands) | |
| General and administrative expenses | \$ 6,612 | \$ 6,534 |

General and administrative expenses were comparable for the years ended December 31, 2019 and 2018.

Interest and Investment Income

| | Year Ended December 31, | |
|--------------------------------|-------------------------|----------|
| | 2019 | 2018 |
| | (In thousands) | |
| Interest and investment income | \$ 5,727 | \$ 4,746 |

Interest and investment income increased by \$1.0 million for the year ended December 31, 2019 as compared to the year ended December 31, 2018 primarily due to higher interest rates earned on the cash balance in 2019 as compared to 2018.

Other Expense

| | Year Ended December 31, | |
|---------------|-------------------------|----------|
| | 2019 | 2018 |
| | (In thousands) | |
| Other expense | \$ 4,586 | \$ 3,445 |

Other expense for the years ended December 31, 2019 and 2018 was primarily comprised of expenses related to the evaluation of strategic initiatives. See Overview – General.

Income Tax (Provision) Benefit

| | Year Ended December 31, | |
|--------------------------------|-------------------------|-----------|
| | 2019 | 2018 |
| | (In thousands) | |
| Income tax (provision) benefit | \$ (6,153) | \$ 39,348 |

For 2019, we recorded a current and deferred tax provision of \$3.2 million and \$3.0 million, respectively, resulting in a total tax provision of \$6.2 million. For 2018, we recorded a current tax benefit of \$48.4 million and a deferred tax provision of \$9.1 million, resulting in a net tax benefit of \$39.3 million.

The deferred tax provision for each period included the impact of equity in net income (loss) of affiliates in our consolidated statement of operations. After utilization of our NOL carryforward and allowable tax credits, there was no federal income tax on Global Intangible Low-Taxed Income (“GILTI”) from Telesat.

For 2018, the statute of limitations for the assessment of additional tax expired with regard to certain of our federal uncertain tax positions (“UTPs”). As a result, the reduction to our liability for UTPs provided a current tax benefit including the reversal of previously recognized interest, partially offset by an additional provision for the potential payment of interest on our remaining UTPs.

Public Law 115-97, known as the “Tax Cuts and Jobs Act,” first effective in 2018, made broad and complex changes to the U.S tax code including, but not limited to, (1) eliminating U.S federal income taxes on dividends from certain foreign investments, such as Telesat; (2) requiring a current inclusion in U.S. federal taxable income of certain earnings of controlled foreign corporations, including Telesat, as part of GILTI; (3) limiting the use of FTCs to reduce U.S. federal tax liability; (4) creating the base erosion anti-abuse tax, a new minimum tax; (5) creating a new limit on deductible interest expense; and (6) changing the rules related to the use of NOL carryforwards created in tax years beginning after December 31, 2017. During 2018, in accordance with SAB 118, we recognized the income tax effects of additional regulatory guidance issued by the U.S. Treasury and Internal Revenue Service on various provisions of the Tax Cuts and Jobs Act. Based upon our interpretation of this guidance, we determined that, after the utilization of allowable tax credits, federal income tax imposed on the future recognition of GILTI from Telesat will be zero. Since we anticipate that our deferred tax assets related to the investment in Telesat will be realized from the future recognition of GILTI, the federal portion of these deferred tax assets are valued at zero. Therefore, as of December 31, 2018, we reduced deferred tax assets by \$1.5 million with a corresponding increase to our deferred income tax provision.

To the extent that profitability from operations is not sufficient to realize the benefit from our remaining net deferred tax assets, we would generate sufficient taxable income from the appreciated value of our Telesat investment in order to prevent federal net operating losses from expiring and realize the benefit of all remaining deferred tax assets.

See Critical Accounting Matters — *Taxation* below for discussion of our accounting method for income taxes.

Equity in Net Income (Loss) of Affiliates

| | Year Ended December 31, | |
|---------|-------------------------|-------------|
| | 2019 | 2018 |
| | (In thousands) | |
| Telesat | \$ 101,403 | \$ (24,412) |

[Table of Contents](#)

The following is a reconciliation of the changes in our investment in Telesat for the years ended December 31, 2019 and 2018:

| | Year Ended December 31, | |
|------------------------------------------------------------------|-------------------------|-------------|
| | 2019 | 2018 |
| | (In thousands) | |
| Opening Balance, January 1, | \$ 24,574 | \$ 53,430 |
| Components of equity in net income (loss) of Telesat: | | |
| Equity in net income (loss) of Telesat | \$ 97,856 | \$ (25,603) |
| Eliminations of affiliate transactions and related amortization | 3,547 | 1,191 |
| Equity in Telesat-related other comprehensive (loss) income: | | |
| Prior years ⁽¹⁾ | (22,056) | — |
| Current year | (13,737) | 22,033 |
| Cumulative effect adjustment of accounting change ⁽²⁾ | — | (26,477) |
| Ending balance, December 31, | \$ 90,184 | \$ 24,574 |

(1) In the third quarter of 2019, we recorded an out-of-period correction to decrease our investment in Telesat and increase other comprehensive loss by \$22.1 million. This non-cash adjustment was made to record the cumulative translation adjustment on our investment in Telesat from November 2007, when we first acquired our ownership interest in Telesat, to December 31, 2018. The adjustment resulted from translating our share of Telesat's equity from Canadian dollars to U.S. dollars at historical foreign exchange rates in accordance with ASC 830, *Foreign Currency Matters*, as required by ASC 323, *Investments – Equity Method and Joint Ventures*. Previously, we translated our share of Telesat's equity from Canadian dollars to U.S. dollars at current foreign exchange rates at each balance sheet date. This adjustment had no effect on our equity in net income (loss) of Telesat for any current or prior reporting period. The Company has not revised its financial statements for prior periods for this adjustment based on its belief that the effect of such adjustment is not material to the financial statements taken as a whole.

(2) On January 1, 2018, Telesat adopted Accounting Standards Codification (“ASC”) 606, *Revenue from Contracts with Customers*, for its U.S. GAAP reporting which we use to record our equity in net income or loss of Telesat. Telesat adopted the new guidance using the modified retrospective approach with a cumulative effect adjustment to reduce Telesat's retained earnings by \$42.2 million. As a result, we recorded our share of the cumulative effect adjustment of \$26.5 million by reducing our investment in Telesat.

As of December 31, 2019, we held a 62.7% economic interest and a 32.6% voting interest in Telesat. Loral's equity in net income of Telesat is based on our proportionate share of Telesat's results in accordance with U.S. GAAP and in U.S. dollars. The amortization of Telesat fair value adjustments applicable to the Loral Skynet assets and liabilities acquired by Telesat in 2007 is proportionately eliminated in determining our share of the net income or loss of Telesat. Our equity in net income or loss of Telesat also reflects amortization of profits eliminated, to the extent of our economic interest in Telesat, on satellites we constructed for Telesat while we owned SSL and on Loral's sale to Telesat in April 2011 of its portion of the payload on the ViaSat-1 satellite and related assets.

[Table of Contents](#)

Summary financial information for Telesat in accordance with U.S. GAAP in Canadian dollars and U.S. dollars for the years ended and as of December 31, 2019 and 2018 follows (in thousands):

| | Year Ended December 31, | | Year Ended December 31, | |
|-----------------------------------------------------------|--------------------------------|-------------|--------------------------------|-------------|
| | 2019 | 2018 | 2019 | 2018 |
| | (In Canadian dollars) | | (In U.S. dollars) | |
| Statement of Operations Data: | | | | |
| Revenues | 914,000 | 902,932 | 687,868 | 699,596 |
| Operating expenses | (172,431) | (177,335) | (129,770) | (137,400) |
| Depreciation, amortization and stock-based compensation | (282,069) | (265,165) | (212,282) | (205,451) |
| Other operating (expense) income | (862) | 743 | (649) | 576 |
| Operating income | 458,638 | 461,175 | 345,167 | 357,321 |
| Interest expense | (247,670) | (228,281) | (186,394) | (176,873) |
| Loss on refinancing | (114,493) | — | (86,166) | — |
| Foreign exchange gain (loss) | 162,109 | (262,008) | 122,002 | (203,005) |
| (Loss) gain on financial instruments | (55,859) | 20,386 | (42,039) | 15,795 |
| Other income | 21,738 | 14,629 | 16,360 | 11,335 |
| Income tax provision | (16,929) | (58,625) | (12,741) | (45,423) |
| Net income (loss) | 207,534 | (52,724) | 156,189 | (40,850) |
| Average exchange rate for translating Canadian dollars | | | | |
| to U.S. dollars (1 U.S. dollar equals) | 1.3289 | 1.2912 | | |
| | | | | |
| | December 31, | | December 31, | |
| | 2019 | 2018 | 2019 | 2018 |
| | (In Canadian dollars) | | (In U.S. dollars) | |
| Balance Sheet Data: | | | | |
| Current assets | 1,139,605 | 856,575 | 877,294 | 628,125 |
| Total assets | 5,365,307 | 5,376,860 | 4,130,337 | 3,942,847 |
| Current liabilities | 161,357 | 190,100 | 124,217 | 139,401 |
| Long-term debt, including current portion | 3,684,873 | 3,770,084 | 2,836,700 | 2,764,599 |
| Total liabilities | 4,552,467 | 4,738,181 | 3,504,594 | 3,474,504 |
| Shareholders' equity | 812,840 | 638,679 | 625,743 | 468,343 |
| Period end exchange rate for translating Canadian dollars | | | | |
| to U.S. dollars (1 U.S. dollar equals) | 1.2990 | 1.3637 | | |

Telesat's revenue decreased by \$11.7 million for the year ended December 31, 2019 as compared to the year ended December 31, 2018 due primarily to the impact of the change in the U.S. dollar/Canadian dollar exchange rate on Canadian dollar denominated revenue, the reduction of service for a North American DTH customer, lower equipment sales to enterprise customers, lower revenue from certain enterprise customers in the resource sector and lower revenue due to the completion of an enterprise agreement that provided for a prepayment for services which was accounted for as having a significant financing component. These decreases were partially offset by higher revenue from the Telstar 19 VANTAGE and Telstar 18 VANTAGE satellites, which began service in August 2018 and October 2018, respectively, an increase in revenue from short-term services provided to other satellite operators and higher consulting revenues. The foreign exchange rate change decreased Telesat's revenue by approximately \$9.5 million for the year ended December 31, 2019 as compared to the year ended December 31, 2018.

Telesat's operating expenses decreased by \$7.6 million for the year ended December 31, 2019 as compared to the year ended December 31, 2018 primarily due to lower cost of sales principally due to lower equipment sales, lower rent expense, and the impact of the change in the U.S. dollar/Canadian exchange rate on Canadian dollar denominated expenses, partially offset by higher consulting expenses. The foreign exchange rate change decreased Telesat's operating expenses by approximately \$2.3 million for the year ended December 31, 2019 as compared to the year ended December 31, 2018.

[Table of Contents](#)

Telesat's depreciation, amortization and stock-based compensation increased by \$6.8 million for the year ended December 31, 2019 as compared to the year ended December 31, 2018 primarily due to depreciation on the Telstar 19 VANTAGE and Telstar 18 VANTAGE satellites, which began commercial service in August 2018 and October 2018, respectively, and higher stock-based compensation.

The loss on refinancing of \$86.2 million for the year ended December 31, 2019 related to the redemption of Telesat's 8.875% senior notes and the refinancing of former senior secured credit facilities, which occurred in the fourth quarter of 2019.

Telesat'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. Telesat's main currency exposures as of December 31, 2019, lie in its U.S. dollar denominated cash and cash equivalents, accounts receivable, accounts payable and debt financing. The most significant impact of variations in the exchange rate is on the U.S. dollar denominated debt financing. As of December 31, 2019, Telesat's U.S. dollar denominated debt totaled \$2.86 billion. As of December 31, 2019, a five percent increase (decrease) in the Canadian dollar against the U.S. dollar on financial assets and liabilities would have increased (decreased) Telesat's net income by approximately \$133.1 million. This analysis assumes all other variables, in particular interest rates, remain constant.

Backlog

Telesat's backlog as of December 31, 2019 and 2018 was \$2.5 billion and \$2.7 billion, respectively. It is expected that approximately 21.5% of satellite services backlog will be recognized as revenue by Telesat during 2020. As of December 31, 2019, Telesat had received approximately \$339.0 million of customer prepayments.

Critical Accounting Matters

The preparation of financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the amounts of income (loss) reported for the period. Actual results could differ from estimates. We believe the following critical accounting matters contain the more significant judgments and estimates used in the preparation of our financial statements.

Investments in Affiliates

Our investments in affiliates are accounted for using the equity method of accounting under U.S. GAAP. The carrying value of our investments in affiliates is reviewed for impairment in accordance with Financial Accounting Standards Board ("FASB") Codification Topic 323 *Investments – Equity Method and Joint Ventures*. We monitor our equity method investments for factors indicating other-than-temporary decrease in value. An impairment charge would be recognized when the decrease in value is determined to be other-than-temporary. The fair value of each investment is determined based on the income approach by discounting our investee's projected annual free cash flows to their present value using a rate of return appropriate for the risk of achieving the projected cash flows. Telesat's financial statements are prepared in accordance with international financial reporting standards ("IFRS"). To allow our reporting of our investment in Telesat under U.S. GAAP, Telesat provides us with a reconciliation of its financial statements from IFRS to U.S. GAAP.

Fair Value Measurements

U.S. GAAP defines fair value as the price that would be received for an asset or the exit price that would be paid to transfer a liability in the principal or most advantageous market in an orderly transaction between market participants. U.S. GAAP also establishes a fair value hierarchy that gives the highest priority to observable inputs and the lowest priority to unobservable inputs. The three levels of the fair value hierarchy are described below:

Level 1: Inputs represent a fair value that is derived from unadjusted quoted prices for identical assets or liabilities traded in active markets at the measurement date.

Level 2: Inputs represent a fair value that is derived from quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, model-based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities, and pricing inputs, other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reporting date.

[Table of Contents](#)

Level 3: Inputs are generally unobservable and typically reflect management’s estimates of assumptions that market participants would use in pricing the asset or liability. The fair values are therefore determined using model-based techniques that include option pricing models, discounted cash flow models, and similar techniques.

These provisions are applicable to all of our assets and liabilities that are measured and recorded at fair value.

Assets and Liabilities Measured at Fair Value

The following table presents our assets and liabilities measured at fair value on a recurring or non-recurring basis at December 31, 2019:

| | Level 1 | Level 2 | Level 3 |
|---------------------------------------------|----------------|---------|---------|
| | (In thousands) | | |
| Assets | | | |
| Cash equivalents: Money market funds | \$ 256,915 | \$ — | \$ — |
| Other current assets: | | | |
| Indemnification - Sale of SSL | \$ — | \$ — | \$ 598 |
| Liabilities | | | |
| Long term liabilities: | | | |
| Indemnification - Globalstar do Brasil S.A. | \$ — | \$ — | \$ 145 |

The carrying amount of money market funds approximates fair value as of each reporting date because of the short maturity of those instruments.

The Company did not have any non-financial assets or non-financial liabilities that were recognized or disclosed at fair value as of December 31, 2019.

Assets and Liabilities Measured at Fair Value on a Non-recurring Basis

We review the carrying values of our equity method investments when events and circumstances warrant and consider all available evidence in evaluating when declines in fair value are other-than-temporary. The fair values of our investments are determined based on valuation techniques using the best information available and may include quoted market prices, market comparables and discounted cash flow projections. An impairment charge is recorded when the carrying amount of the investment exceeds its current fair value and is determined to be other-than-temporary.

The asset resulting from the indemnification of SSL is for certain pre-closing taxes and reflects the excess of payments since inception over refunds and the estimated remaining liability, which was originally determined using the fair value objective approach. The estimated liability for indemnifications relating to Globalstar do Brasil S.A. (“GdB”), originally determined using expected value analysis, is net of payments since inception.

Taxation

Loral is subject to U.S. federal, state and local income taxation on its worldwide income and foreign taxes on certain income from sources outside the United States. Our foreign subsidiaries are subject to taxation in local jurisdictions. Telesat is subject to tax in Canada and other jurisdictions and Loral will provide in operating earnings any additional U.S. current and deferred tax required on distributions received or deemed to be received from Telesat, including GILTI.

We use the liability method in accounting for taxes whereby income taxes are recognized during the year in which transactions are recorded in the financial statements. Deferred taxes reflect the future tax effect of temporary differences between the carrying amount of assets and liabilities for financial and income tax reporting and are measured by applying anticipated statutory tax rates in effect for the year during which the differences are expected to reverse. We assess the recoverability of our deferred tax assets and, based upon this analysis, record a valuation allowance against the deferred tax assets to the extent recoverability does not satisfy the “more likely than not” recognition criteria.

[Table of Contents](#)

The tax benefit of a UTP taken or expected to be taken in income tax returns is recognized only if it is “more likely-than-not” to be sustained on examination by the taxing authorities, based on its technical merits as of the reporting date. The tax benefit recognized in the financial statements from such a position is measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. We recognize interest and penalties related to income taxes in income tax expense on a quarterly basis.

The unrecognized tax benefit of a UTP is recognized in the period when the UTP is effectively settled. Previously recognized tax positions are derecognized in the first period in which it is no longer more likely than not that the tax position would be sustained upon examination. Evaluating the technical merits of a tax position and determining the benefit to be recognized involves a significant level of judgment in the assumptions underlying such evaluation.

Pension and Other Employee Benefits

We maintain a qualified pension plan, which is a defined benefit pension plan. In addition to providing pension benefits, we provide certain health care and life insurance benefits for retired employees and dependents. Healthcare benefits end when the retiree reaches age 65. Pension and other employee post-retirement benefit costs are developed from actuarial valuations. Inherent in these valuations are key assumptions, including the discount rate and expected long-term rate of return on plan assets. Material changes in these pension and other employee post-retirement benefit costs may occur in the future due to changes in these assumptions, as well as our actual experience.

The discount rate is subject to change each year, based on a hypothetical yield curve developed from a portfolio of high quality, corporate, non-callable bonds with maturities that match our projected benefit payment stream. The resulting discount rate reflects the matching of the plan liability cash flows to the yield curve. The discount rate determined on this basis for the qualified pension plan and other employee post-retirement benefit costs was 3.25% and 4.25% as of December 31, 2019 and 2018, respectively.

The expected long-term rate of return on pension plan assets is selected by taking into account the expected duration of the plan’s projected benefit obligation, asset mix and the fact that its assets are actively managed to mitigate risk. Allowable investment types include equity investments, fixed income investments and real assets. Both equity and fixed income investment types may include alternative investments which are permitted to be up to 20% of total plan assets. Pension plan assets are primarily managed by Russell Investment Corp. (“Russell”), which allocates the assets into specified Russell-designed funds as we direct. Each specified Russell fund is then managed by investment managers chosen by Russell. We also engage non-Russell related investment managers through Russell, in its role as trustee, to invest pension plan assets. The targeted long-term allocation of our pension plan assets is 56.5% in liquid return-seeking investments, 29% in fixed income investments and 14.5% in alternative investments. The expected long-term annual rate of return on plan assets was 7.25% for 2019 and 2018. For 2020, we have updated our expected long-term rate of return to 7.00%.

Pension and other employee post-retirement benefit costs (“Net Periodic Costs”) included in income from continuing operations in 2020 are expected to be approximately \$1.0 million, compared with \$1.3 million in 2019. Net Periodic Costs include amortization of actuarial gains and losses presented in accumulated other comprehensive loss. We use the corridor approach to amortize actuarial gains and losses. Under this approach, net actuarial gains or losses in excess of 10% of the larger of the benefit obligation or fair value of plan assets are amortized on a straight-line basis. Changes in Net Periodic Costs are partly driven by changes in discount rate and expected long-term rate of return. Lowering the discount rate and the expected long-term rate of return each by 0.5% would have increased Net Periodic Costs by approximately \$0.2 million in 2019.

[Table of Contents](#)

The benefit obligations for pensions and other employee post-retirement benefits exceeded the fair value of plan assets by \$17.5 million at December 31, 2019. We are required to recognize the funded status of a benefit plan on our balance sheet. Market conditions and interest rates significantly affect future assets and liabilities of Loral's pension and other employee benefits plans.

Contingencies

Contingencies by their nature relate to uncertainties that require management to exercise judgment both in assessing the likelihood that a liability has been incurred as well as in estimating the amount of potential loss, if any. We accrue for costs relating to litigation, claims and other contingent matters when, in management's opinion, such liabilities become probable and reasonably estimable. Such estimates may be based on advice from third parties or on management's judgment, as appropriate. Actual amounts paid may differ from amounts estimated, and such differences will be charged to operations in the period in which the final determination of the liability is made. Management considers the assessment of loss contingencies as a critical accounting policy because of the significant uncertainty relating to the outcome of any potential legal actions and other claims and the difficulty of predicting the likelihood and range of the potential liability involved, coupled with the material impact on our results of operations that could result from legal actions or other claims and assessments.

Accounting Standards Issued and Not Yet Implemented

For discussion of accounting standards issued and not yet implemented that could have an impact on us, see Note 2 to the financial statements.

Liquidity and Capital Resources

Loral

As described above, Loral's principal asset is a 62.7% economic interest in Telesat. The operations of Telesat are not consolidated but are presented using the equity method of accounting. Loral has no debt. Telesat has third party debt with financial institutions. Cash is maintained at Loral and Telesat to support the operating needs of each respective entity. The ability of Telesat to pay dividends or certain other restricted payments as well as consulting fees in cash to Loral is governed by applicable covenants relating to its debt and its shareholder agreement.

Cash and Available Credit

At December 31, 2019, Loral had \$259.1 million of cash and cash equivalents and no debt. The Company's cash and cash equivalents as of December 31, 2019 increased by \$2.1 million from December 31, 2018 due primarily to \$5.8 million of interest and investment income, \$5.3 million of income tax refunds, net of income tax payments, and a \$1.8 million recovery of our tax indemnification receivable from SSL, partially offset by corporate expenses of \$6.2 million, adjusted for changes in working capital and net of consulting fees from Telesat, post-retirement benefits funding of \$1.0 million and payments of \$3.6 million related to strategic initiatives. A discussion of cash changes by activity is set forth in the section "Net Cash Provided by Operating Activities."

The Company did not have a credit facility as of December 31, 2019 and 2018.

Cash Management

We have a cash management investment program that seeks a competitive return while maintaining a conservative risk profile. Our cash management investment policy establishes what we believe to be conservative guidelines relating to the investment of surplus cash. The policy allows us to invest in commercial paper, money market funds and other similar short-term investments but does not permit us to engage in speculative or leveraged transactions, nor does it permit us to hold or issue financial instruments for trading purposes. The cash management investment policy was designed to preserve capital and safeguard principal, to meet all of our liquidity requirements and to provide a competitive rate of return for similar risk categories of investment. The policy addresses dealer qualifications, lists approved securities, establishes minimum acceptable credit ratings, sets concentration limits, defines a maturity structure, requires all firms to safe keep securities on our behalf, requires certain mandatory reporting activity and discusses review of the portfolio. We operate the cash management investment program under the guidelines of our investment policy and continuously monitor the investments to avoid risks.

[Table of Contents](#)

We currently invest our cash in several liquid Prime and Government AAA money market funds. The dispersion across funds reduces the exposure of a default at one fund.

Liquidity

We believe that our cash and cash equivalents will be sufficient to fund projected expenditures for the next 12 months. We expect that our major cash outlays during the next 12 months will include general corporate expenses net of consulting fees from Telesat.

In 2017, we received \$242.7 million in cash from Telesat, representing our share of an aggregate approximately \$400 million distribution from Telesat to its shareholders and stock option holders. We intend to use the proceeds of such distribution, net of reasonable reserves for working capital and other liabilities, to make a distribution or return capital to our stockholders. There can be no assurance as to the amount and timing of any such distribution or return of capital, and such distribution or return of capital may be impacted by the outcome of our discussions regarding, and the structure of, the strategic combination transaction with respect to our interest in Telesat that we are pursuing.

Risks to Cash Flow

In 2012, we sold our former subsidiary, SSL, to MDA. Under the terms of the purchase agreement, we are obligated to indemnify MDA from liabilities with respect to certain pre-closing taxes the total amount of which has not yet been determined. Where appropriate, we intend vigorously to contest the underlying tax assessments, but there can be no assurance that we will be successful. Although no assurance can be provided, we do not believe that these tax-related matters will have a material adverse effect on our financial position or results of operations.

Telesat

Cash and Available Credit

As of December 31, 2019, Telesat had CAD 1.03 billion of cash and short-term investments as well as approximately \$200 million of borrowing availability under its revolving credit facility.

Liquidity

A large portion of Telesat's 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. Telesat believes its cash and short-term investments as of December 31, 2019, cash flows from operating activities, and drawings on the revolving credit facility under its senior secured credit facilities will be adequate to meet Telesat's expected cash requirements for at least the next 12 months for activities in the normal course of business, including capital requirements and required interest and principal payments on debt.

The construction of any satellite replacement or expansion program, including Telesat's planned LEO constellation, will require significant capital expenditures. Cash required for any future satellite programs may be funded from a range of sources including: cash and short-term investments; cash flow from operating activities; cash flow from customer prepayments or through borrowings on the revolving credit facility under Telesat's senior secured credit facilities; vendor financing; equity investments; export credit agency financing; additional secured or unsecured financing; proceeds received from repurposing C-band spectrum, and from government sources. In addition, Telesat may sell certain satellite assets and, in accordance with the terms and conditions of Telesat's senior secured credit facilities, reinvest the proceeds in replacement satellites or pay down indebtedness under Telesat's senior secured credit facilities. Telesat's ability to access these sources of funding, however, is not guaranteed, and therefore, Telesat may not be able to fully fund additional replacement or new satellite programs.

[Table of Contents](#)

Debt

Telesat's debt as of December 31, 2019 and 2018 was as follows:

| | Maturity | Currency | December 31, | |
|---------------------------------------------------------------------|---------------|-----------------------|--------------|--------------|
| | | | 2019 | 2018 |
| (in thousands) | | | | |
| Former senior secured credit facilities: | | | | |
| Revolving credit facility | | USD or CAD equivalent | \$ — | \$ — |
| Term Loan B - U.S. facility | | USD | — | 2,326,049 |
| 8.875% Senior notes | | USD | — | 500,000 |
| Senior secured credit facilities: | | | | |
| Revolving credit facility | December 2024 | USD or CAD equivalent | — | — |
| Term Loan B - U.S. facility | December 2026 | USD | 1,908,500 | — |
| 6.5% Senior notes | October 2027 | USD | 550,000 | — |
| 4.875% Senior secured notes | June 2027 | USD | 400,000 | — |
| | | | 2,858,500 | 2,826,049 |
| Less: Deferred financing costs and prepayment options | | | | |
| | | | (302) | (95,076) |
| Total debt under international financial reporting standards | | | 2,858,198 | 2,730,973 |
| U.S. GAAP adjustments | | | (21,498) | 33,626 |
| Total debt under U.S. GAAP | | | 2,836,700 | 2,764,599 |
| Current portion | | | 16,480 | 5,784 |
| Long term portion | | | \$ 2,820,220 | \$ 2,758,815 |

On October 11, 2019, Telesat issued \$550.0 million of 6.5% senior notes maturing in October 2027. The 6.5% senior notes are effectively subordinated to Telesat's secured indebtedness, including the obligations under its senior secured credit facilities and its 4.875% senior secured notes.

On October 11, 2019, Telesat used the net proceeds from the 6.5% senior notes offering together with available cash on hand to redeem its \$500 million 8.875% senior notes due November 15, 2024 by repaying all outstanding amounts, including principal, redemption premium and discounted interest to November 15, 2019.

On December 6, 2019, Telesat entered into amended senior secured credit facilities which provide for term loan borrowings of \$1,908.5 million which mature in December 2026 and revolving credit facilities of up to \$200 million (or Canadian dollar equivalent) which mature in December 2024. Telesat also issued, through a private placement, \$400 million of 4.875% senior secured notes which mature in June 2027.

On December 6, 2019, Telesat repaid all outstanding amounts, including related fees and expenses, under its former senior secured credit facilities.

Senior Secured Credit Facilities

The obligations under Telesat's 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 its subsidiaries (the "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 Telesat to repay a portion of the outstanding principal under its senior secured credit facilities prior to the stated maturity.

[Table of Contents](#)

Telesat's senior secured credit facilities are comprised of the following facilities:

i — Revolving Credit Facility

Telesat's revolving credit facility ("Revolving Facility") is a \$200 million loan facility available in either U.S. dollar or Canadian dollar equivalent, maturing in December 2024. 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 0.75% to 1.25% is applied to the Prime Rate 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 1.75% to 2.25% 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. Telesat's Revolving Facility currently has an unused commitment fee that ranges from 25 to 37.5 basis points per annum, depending upon the result of the total leverage ratio. As of December 31, 2019, other than approximately CAD 0.1 million in drawings related to letters of credit, there were no borrowings under this facility.

ii — Term Loan B — U.S. Facility

Telesat's term loan B — U.S. facility ("U.S. TLB Facility") is a \$1,908.5 million facility maturing in December 2026. As of December 31, 2019, \$1,908.5 million of this facility was outstanding, which represents the full amount available. The borrowings under Telesat's 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 plus an applicable margin of 2.75%; or (ii) Alternative Base Rate as determined in accordance with the terms of the senior secured credit facilities plus an applicable margin of 1.75%.

The mandatory principal repayments on Telesat's U.S. TLB Facility are one quarter of 1.00% of the value of the loan, which must be paid on the last day of each quarter, commencing on March 31, 2020.

Senior Secured Notes

Telesat's senior secured notes, in the amount of \$400.0 million, bear interest at an annual rate of 4.875% and are due in June 2027. They include covenants or terms that restrict Telesat's 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 its satellite insurance, effect mergers with another entity, and redeem its senior secured notes, without penalty, before December 1, 2024, in each case subject to exceptions provided in the senior secured notes indenture.

The senior secured notes indenture 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.

Senior Notes

Telesat's senior notes, in the amount of \$550 million, bear interest at an annual rate of 6.5% and are due in October 2027. They include covenants or terms that restrict Telesat's 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 its satellite insurance, effect mergers with another entity, and redeem its senior notes, without penalty, before October 15, 2024, in each case subject to exceptions provided in the senior notes indenture.

As at December 31, 2019, Telesat was in compliance with the financial covenants of its senior secured credit facilities, the indenture governing its senior secured notes and the indenture governing its senior notes.

Debt Service Cost

The interest expense on Telesat's senior secured credit facilities, senior notes, senior secured 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, 2019 was CAD 204.0 million.

Derivatives

Telesat uses, from time to time, interest rate and currency derivatives to manage its exposure to changes in interest rates and foreign exchange rates.

As of December 31, 2019, Telesat had three outstanding interest rate swaps which hedge the interest rate risk associated with the variable interest rate on \$1.35 billion of U.S. denominated Term Loan B borrowings. These contracts, which mature between September 2020 and September 2022, are at fixed interest rates ranging from 1.84% to 2.04%, excluding applicable margin. As of December 31, 2019, the fair value of the interest rate swaps was a net liability of \$6.1 million.

Telesat also has foreign currency embedded derivatives in its purchase contracts with suppliers and sales contracts with customers as a result of some of these contracts being denominated in a currency other than the functional currency of the substantial parties to the respective contract. The fair value of these foreign currency embedded derivatives as of December 31, 2019 was a net liability of \$0.5 million.

Development Costs and Capital Expenditures

Telesat has entered into contracts for the development of its LEO constellation and other capital expenditures. The outstanding commitments associated with these contracts were approximately CAD 41.9 million as of December 31, 2019. 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 the revolving credit facility.

Statements of Cash Flow

Net Cash Provided by Operating Activities

Net cash provided by operating activities was \$2.1 million for the year ended December 31, 2019.

Net cash provided by operating activities from continuing operations was \$0.3 million for the year ended December 31, 2019, consisting primarily of a \$4.4 million change in income tax accounts mainly attributable to the receipt of income tax refunds and a \$4.0 million increase in other liabilities, primarily due to an increase in the liability for uncertain tax positions, partially offset by a \$7.6 million cash use attributable to net income adjusted for non-cash operating items and a \$0.6 million decrease in pension and other post-retirement liabilities.

Net cash provided by operating activities from discontinued operations was \$1.8 million for the year ended December 31, 2019 attributable to a tax indemnification recovery related to the SSL Sale.

Net cash provided by operating activities from continuing operations was \$1.9 million for the year ended December 31, 2018, consisting primarily of \$44.2 million attributable to income from continuing operations adjusted for non-cash operating items and a decrease in income taxes receivable of \$8 million, partially offset by a reduction in other long term liabilities of \$48 million, primarily due to a decrease in the liability for uncertain tax positions, and a \$2.4 million decrease in pension and post-retirement liabilities primarily due to pension funding.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as defined by the rules and regulations of the SEC, that have or are reasonably likely to have a material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources. As a result, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these arrangements.

Other

Loral's operating cash flows for 2019 and 2018 included contributions of approximately \$1.0 million and \$2.4 million, respectively, to the qualified pension plan and for other post-retirement benefits.

Affiliate Matters

Loral has made certain investments in joint ventures in the satellite services business that are accounted for under the equity method of accounting (see Note 5 to the financial statements for further information on affiliate matters).

Commitments and Contingencies

Our business and operations are subject to a number of significant risks, the most significant of which are summarized in Item 1A — *Risk Factors* and also in Note 13 to the financial statements.

Item 8. Financial Statements and Supplementary Data

See Index to Financial Statements and Financial Statement Schedules on page F-1.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our president and our chief financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (“the Exchange Act”)) as of December 31, 2019, have concluded that our disclosure controls and procedures were effective and designed to ensure that information relating to Loral and its consolidated subsidiaries required to be disclosed in our filings under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms. The term disclosure controls and procedures means controls and other procedures of an issuer that are designed to ensure that information required to be disclosed by the issuer in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that the information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management’s Report on Internal Control Over Financial Reporting

Our 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. Under the supervision and with the participation of our management, including our president and our chief financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework set forth in *Internal Control — Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under such criteria, our management concluded that our internal control over financial reporting was effective as of December 31, 2019.

Our management’s assessment of the effectiveness of our internal control over financial reporting as of December 31, 2019 has been audited by Deloitte and Touche LLP, an independent registered public accounting firm, as stated in its attestation report which is included below.

Changes in Internal Controls Over Financial Reporting

In our quarterly report for the third quarter of 2019, we identified and disclosed a material weakness in our internal control over financial reporting. The material weakness resulted from the lack of controls which allowed historical misapplication of ASC 830, *Foreign Currency Matters*, in accounting for our ownership interest in Telesat using the equity method of accounting as required by ASC 323, *Investments – Equity Method and Joint Ventures*. Specifically, we did not record our share of the cumulative translation adjustment (“CTA”) upon translation of Telesat’s equity from Canadian dollars to U.S. dollars. Previously, we translated our share of Telesat’s equity from Canadian dollars to U.S. dollars at current foreign exchange rates, whereas, it should have been translated at historical foreign exchange rates thereby generating CTA.

Our management also reevaluated the effectiveness of our internal control over financial reporting as of December 31, 2018 and concluded that, because of the material weakness identified above, our internal control over financial reporting was not effective as of December 31, 2018.

To remediate the material weakness described above, we instituted a process, which included relevant controls, to calculate, record and monitor the propriety of CTA in future periods.

[Table of Contents](#)

We have successfully completed the testing necessary to conclude that the previously identified material weakness has been remediated as of December 31, 2019.

Except as noted above, there was no change in the Company's internal control over financial reporting as of December 31, 2019 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our president and our chief financial officer, does not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Controls may also be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
Loral Space & Communications Inc.
New York, New York

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Loral Space & Communications Inc. and subsidiaries (the “Company”) as of December 31, 2019, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2019, of the Company and our report dated March 12, 2020, expressed an unqualified opinion on those financial statements, and includes an explanatory paragraph relating to the adoption of the new lease standard by the Company’s equity method investment, Telesat Canada.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

New York, New York
March 12, 2020

[Table of Contents](#)

Item 9B. *Other Information*

None.

PART III

Item 10. *Directors, Executive Officers and Corporate Governance*

Executive Officers of the Registrant

The following table sets forth information concerning the executive officers of Loral as of March 12, 2020.

| Name | Age | Position |
|--------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Avi Katz | 61 | President, General Counsel and Secretary since December 2012. Senior Vice President, General Counsel and Secretary from January 2008 to December 2012. |
| John Capogrossi | 66 | Vice President, Chief Financial Officer and Treasurer since January 2016. Vice President, Chief Financial Officer, Treasurer and Controller from March 2013 to January 2016. Vice President and Controller from January 2008 to March 2013. |
| Ravinder S. Girgla | 56 | Vice President and Controller since January 2016. Deputy Controller from February 2013 to January 2016. Assistant Controller from July 2008 to February 2013. |

The remaining information required under Item 10 will be presented in the Company's 2020 definitive proxy statement which is incorporated herein by reference or by amendment to this Annual Report on Form 10-K.

Item 11. *Executive Compensation*

Information required under Item 11 will be presented in the Company's 2020 definitive proxy statement which is incorporated herein by reference or by amendment to this Annual Report on Form 10-K.

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

Information required under Item 12 will be presented in the Company's 2020 definitive proxy statement which is incorporated herein by reference or by amendment to this Annual Report on Form 10-K.

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

Information required under Item 13 will be presented in the Company's 2020 definitive proxy statement which is incorporated herein by reference or by amendment to this Annual Report on Form 10-K.

Item 14. *Principal Accountant Fees and Services*

Information required under Item 14 will be presented in the Company's 2020 definitive proxy statement which is incorporated herein by reference or by amendment to this Annual Report on Form 10-K.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) 1. Financial Statements

| | |
|---------------------------------------------------------------------------------------------------------------------------------|------|
| Index to Financial Statements and Financial Statement Schedule | |
| <i>Loral Space & Communications Inc. and Subsidiaries:</i> | |
| Report of Independent Registered Public Accounting Firm | F-2 |
| Consolidated Balance Sheets as of December 31, 2019 and 2018 | F-3 |
| Consolidated Statements of Operations for the years ended December 31, 2019 and 2018 | F-4 |
| Consolidated Statements of Comprehensive Income for the years ended December 31, 2019 and 2018 | F-5 |
| Consolidated Statements of Shareholders' Equity for the years ended December 31, 2019 and 2018 | F-6 |
| Consolidated Statements of Cash Flows for the years ended December 31, 2019 and 2018 | F-7 |
| Notes to Consolidated Financial Statements | F-8 |
| Schedule II | F-33 |
| Separate Financial Statements of Subsidiaries not consolidated Pursuant to Article 8 of Regulation S-X | |
| <i>Telesat Canada and Subsidiaries :</i> | |
| Report of Independent Registered Public Accounting Firm | F-34 |
| Consolidated Statements of Income (Loss) for the years ended December 31, 2019, 2018 and 2017 | F-35 |
| Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2019, 2018 and 2017 | F-36 |
| Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2019, 2018 and 2017 | F-37 |
| Consolidated Balance Sheets as of December 31, 2019 and 2018 | F-38 |
| Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018 and 2017 | F-39 |
| Notes to the 2019 Consolidated Financial Statements | F-40 |

INDEX TO EXHIBITS

| Exhibit Number | Description |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.1 | Restated Certificate of Incorporation of Loral Space & Communications Inc. dated May 19, 2009(6) |
| 3.2 | Amended and Restated Bylaws of Loral Space & Communications Inc. dated December 23, 2008(4) |
| 3.3 | Amendment No. 1 to Bylaws of Loral Space & Communications dated January 12, 2010(8) |
| 4.1 | Description of Loral Securities Registered under Section 12 of the Exchange Act† |
| 10.1 | Purchase Agreement, dated as of June 26, 2012, by and among Loral Space & Communications Inc., Space Systems/Loral, Inc., MacDonald, Dettwiler and Associates Ltd. and MDA Communications Holdings, Inc.(14) |
| 10.2 | Amendment No. 1 to the Purchase Agreement, dated as of October 30, 2012, by and among Loral Space & Communications Inc., Space Systems/Loral, Inc., MacDonald, Dettwiler and Associates Ltd. And MDA Communications Holdings, Inc.(15) |
| 10.3 | Amendment No. 2 to Purchase Agreement, dated March 28, 2013, by and among Loral Space & Communications Inc., Space Systems/Loral, LLC, MacDonald, Dettwiler and Associates Ltd. and MDA Communications Holdings, Inc.(19) |
| 10.4 | Shareholders Agreement, dated as of October 31, 2007, between Public Sector Pension Investment Board, Red Isle Private Investments Inc., Loral Space & Communications Inc., Loral Space & Communications Holdings Corporation, Loral Holdings Corporation, Loral Skynet Corporation, John P. Cashman, Colin D. Watson, Telesat Holdings Inc. (formerly 4363205 Canada Inc.), Telesat Interco Inc. (formerly 4363213 Canada Inc.), Telesat and MHR Fund Management LLC(2) |
| 10.5 | Consulting Services Agreement, dated as of October 31, 2007, by and between Loral Space & Communications Inc. and Telesat(2) |
| 10.6 | Indemnity Agreement, dated as of October 31, 2007, by and among Loral Space & Communications Inc., Telesat, Telesat Holdings Inc., Telesat Interco Inc. and Henry Gerard (Hank) Intven(2) |
| 10.7 | Acknowledgement and Indemnity Agreement, dated as of October 31, 2007, between Loral Space & Communications Inc., Telesat, Telesat Holdings Inc. (formerly 4363205 Canada Inc.), Telesat Interco Inc. (formerly 4363213 Canada Inc.) and McCarthy Tétrault LLP(2) |
| 10.8 | Amended and Restated Registration Rights Agreement dated December 23, 2008 by and among Loral Space & Communications Inc. and the Persons Listed on the Signature Pages Thereof(4) |
| 10.9 | Letter Agreement, dated as of June 30, 2009, by and among Loral Space & Communications Inc., MHR Capital Partners Master Account LP, MHR Capital Partners (100) LP, MHR Institutional Partners LP, MHRA LP, MHRM LP, MHR Institutional Partners II LP, MHR Institutional Partners IIA LP and MHR Institutional Partners III LP.(7) |
| 10.10 | Partnership Interest Purchase Agreement dated December 21, 2007 by and among GSSI, LLC, Globalstar, Inc., Loral/DASA Globalstar, LP, Globalstar do Brasil, SA., Loral/DASA do Brasil Holdings Ltda., Loral Holdings LLC, Global DASA LLC, LGP (Bermuda) Ltd., Mercedes-Benz do Brasil Ltda. (f/k/a DaimlerChrysler do Brasil Ltda.) and Loral Space & Communications Inc.(3) |
| Exhibit Number | Description |

Table of Contents

- 10.11 General Release dated December 14, 2012 between Loral Space & Communications Inc. and Michael B. Targoff(16)
‡
- 10.12 Consulting Agreement dated December 14, 2012 between Loral Space & Communications Inc. and Michael B. Targoff(16) ‡
- 10.13 Consulting Agreement dated December 14, 2012 between Loral Space & Communications Inc. and Richard P. Mastoloni(16) ‡
- 10.14 Consulting Agreement dated March 15, 2013 between Loral Space & Communications Inc. and Harvey B. Rein(18) ‡
- 10.15 Form of Officers' and Directors' Indemnification Agreement between Loral Space & Communications Inc. and Loral Executives(1) ‡
- 10.16 Loral Space Management Incentive Bonus Program (Adopted as of December 17, 2008)(4) ‡
- 10.17 Loral Space & Communications Inc. 2005 Stock Incentive Plan (Amended and Restated as of April 3, 2009)(5) ‡
- 10.18 Form of Director 2009 Restricted Stock Unit Agreement(9) ‡
- 10.19 Form of Director 2010 Restricted Stock Unit Agreement(10) ‡
- 10.20 Form of Director 2011 Restricted Stock Unit Agreement(13) ‡
- 10.21 Form of Director 2012 Restricted Stock Unit Agreement(17) ‡
- 10.22 Loral Space & Communications Inc. Severance Policy for Corporate Officers (Amended and restated as of August 4, 2011)(12) ‡
- 10.23 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 Goldberg(11) ‡
- 10.24 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. and Michael C. Schwartz(11) ‡
- 10.25 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. and Michel G. Cayouette(11) ‡
- 10.26 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(20)
‡

Table of Contents

| Exhibit Number | Description |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>10.27</u> | <u>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 Michel G. Cayouette(20) ‡</u> |
| <u>10.28</u> | <u>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(21) ‡</u> |
| <u>10.29</u> | <u>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(27) ‡</u> |
| <u>10.30</u> | <u>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 Goldberg(28) ‡</u> |
| <u>10.31</u> | <u>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 Inc. and Daniel Goldberg(28) ‡</u> |
| <u>10.32</u> | <u>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 Goldberg(28) ‡</u> |
| <u>10.33</u> | <u>Grant Agreement, dated as of March 18, 2019, by and among Telesat Canada, Loral Space & Communications Inc., the Public Sector Pension Investment Board, 4440480 Canada Inc. and Michael C. Schwartz(30) ‡</u> |
| <u>14.1</u> | <u>Code of Conduct, Revised as of December 8, 2017, Updated as of December 6, 2018 and January 7, 2020†</u> |
| <u>21.1</u> | <u>List of Subsidiaries of the Registrant†</u> |
| <u>23.1</u> | <u>Consent of Deloitte & Touche LLP†</u> |
| <u>23.2</u> | <u>Consent of Deloitte LLP†</u> |
| <u>31.1</u> | <u>Certification of President pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 302 of the Sarbanes-Oxley Act of 2002†</u> |
| <u>31.2</u> | <u>Certification of Chief Financial Officer pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 302 of the Sarbanes-Oxley Act of 2002†</u> |
| <u>32.1</u> | <u>Certification of President pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002†</u> |
| <u>32.2</u> | <u>Certification of Chief Financial Officer pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002†</u> |
| <u>99.1</u> | <u>Certificate and Articles of Amalgamation of Telesat Canada, dated as of January 1, 2017(26)</u> |

Exhibit

[Table of Contents](#)

| Number | Description |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 99.2 | By-Law No. 1 of Telesat Canada, dated as of January 1, 2017(26) |
| 99.3 | 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 lenders party thereto(22) |
| 99.4 | 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 Bank, N.A., as administrative agent, and the other lenders party thereto(23) |
| 99.5 | 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 administrative agent, collateral agent, swingline lender and L/C Issuer(24) |
| 99.6 | 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 JP Morgan Chase Bank, N.A., as administrative agent, collateral agent, swingline lender and L/C Issuer(25) |
| 99.7 | 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 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(25) |
| 99.8 | 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(29) |
| 99.9 | Amendment No. 6, dated December 6, 2019, to the Credit Agreement, dated 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, as further amended by Amendment No. 4 on February 1, 2017 and as further amended by Amendment No. 5 on April 26, 2018, 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 and the other financial institutions and other parties party thereto(31) |
| 99.10 | Indenture, dated October 11, 2019, with respect to Telesat Canada's 6.500% Senior Notes due 2027, among Telesat Canada and Telesat LLC, as co-issuers, the guarantors party thereto and The Bank of New York Mellon, as Trustee(32) |
| 99.11 | Indenture, dated December 6, 2019, with respect to Telesat Canada's 4.875% Senior Secured Notes due 2027, among Telesat Canada and Telesat LLC, as co-issuers, the guarantors party thereto and The Bank of New York Mellon, as Trustee and as a Notes Collateral Agent and the other Notes Collateral Agents party thereto(31) |

[Table of Contents](#)

| Exhibit Number | Description |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 101 | Interactive Data Files† (101.INS) XBRL Instance Document (101.SCH) XBRL Taxonomy Extension Schema Document (101.CAL) XBRL Taxonomy Extension Calculation Linkbase Document (101.DEF) XBRL Taxonomy Extension Definition Linkbase Document (101.LAB) XBRL Taxonomy Extension Label Linkbase Document (101.PRE) XBRL Taxonomy Extension Presentation Linkbase Document |
| (1) | Incorporated by reference from the Company's Current Report on Form 8-K filed on November 23, 2005. |
| (2) | Incorporated by reference from the Company's Current Report on Form 8-K filed on November 2, 2007. |
| (3) | Incorporated by reference from the Company's Current Report on Form 8-K filed December 21, 2007. |
| (4) | Incorporated by reference from the Company's Current Report on Form 8-K filed on December 23, 2008. |
| (5) | Incorporated by reference from the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2009 filed on May 11, 2009. |
| (6) | Incorporated by reference from the Company's Current Report on Form 8-K filed on May 20, 2009. |
| (7) | Incorporated by reference from the Company's Current Report on Form 8-K filed on June 30, 2009. |
| (8) | Incorporated by reference from the Company's Current Report on Form 8-K filed on January 15, 2010. |
| (9) | Incorporated by reference from the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2009 filed on March 15, 2010. |
| (10) | Incorporated by reference from the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2010 filed on March 15, 2011. |
| (11) | Incorporated by reference from the Company's Current Report on Form 8-K filed on June 13, 2011. |
| (12) | Incorporated by reference from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011 filed on August 9, 2011. |
| (13) | Incorporated by reference from the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2011 filed on February 29, 2012. |
| (14) | Incorporated by reference from the Company's Current Report on Form 8-K filed on June 28, 2012. |
| (15) | Incorporated by reference from the Company's Current Report on Form 8-K filed on November 5, 2012. |
| (16) | Incorporated by reference from the Company's Current Report on Form 8-K filed on December 17, 2012. |
| (17) | Incorporated by reference from the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2012 filed on March 1, 2013. |
| (18) | Incorporated by reference from the Company's Current Report on Form 8-K filed on March 18, 2013. |
| (19) | Incorporated by reference from the Company's Current Report on Form 8-K filed on April 3, 2013. |
| (20) | Incorporated by reference from the Company's Current Report on Form 8-K filed on November 20, 2013. |
| (21) | Incorporated by reference from the Company's Current Report on Form 8-K filed on January 29, 2016. |
| (22) | Incorporated by reference from the Report of Foreign Issuer on Form 6-K filed by Telesat Canada on March 29, 2012. |
| (23) | Incorporated by reference from the Report of Foreign Issuer on Form 6-K filed by Telesat Holdings Inc. on April 2, 2013. |

[Table of Contents](#)

- (24) Incorporated by reference from the Report of Foreign Issuer on Form 6-K filed by Telesat Holdings Inc. on November 17, 2016.
 - (25) Incorporated by reference from the Report of Foreign Issuer on Form 6-K filed by Telesat Canada on February 2, 2017.
 - (26) Incorporated by reference from the Annual Report on Form 20-F filed by Telesat Canada on March 2, 2017.
 - (27) Incorporated by reference from the Company's Current Report on Form 8-K filed on September 6, 2018.
 - (28) Incorporated by reference from the Company's Current Report on Form 8-K filed on November 29, 2018.
 - (29) Incorporated by reference from the Report of Foreign Issuer on Form 6-K filed by Telesat Canada on April 26, 2018.
 - (30) Incorporated by reference from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 filed on November 12, 2019.
 - (31) Incorporated by reference from the Report of Foreign Issuer on Form 6-K filed by Telesat Canada on December 11, 2019.
 - (32) Incorporated by reference from the Report of Foreign Issuer on Form 6-K filed by Telesat Canada on October 11, 2019.
- † Filed herewith.
- ‡ Management contract or compensatory plan, contract or arrangement with directors or named executive officers.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

LORAL SPACE & COMMUNICATIONS INC.

By: /s/ AVI KATZ

Avi Katz

President, General Counsel & Secretary

Dated: March 12, 2020

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

| Signatures | Title | Date |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------|
| <u>/s/ MARK H. RACHESKY, M.D.</u> Mark H. Rachesky, M.D. | Director, Non-Executive Chairman of the Board | March 12, 2020 |
| <u>/s/ MICHAEL B. TARGOFF</u> Michael B. Targoff | Director, Vice Chairman of the Board | March 12, 2020 |
| <u>/s/ JOHN D. HARKEY, JR.</u> John D. Harkey, Jr. | Director | March 12, 2020 |
| <u>/s/ ARTHUR L. SIMON</u> Arthur L. Simon | Director | March 12, 2020 |
| <u>/s/ JOHN P. STENBIT</u> John P. Stenbit | Director | March 12, 2020 |
| <u>/s/ JANET T. YEUNG</u> Janet T. Yeung | Director | March 12, 2020 |
| <u>/s/ AVI KATZ</u> Avi Katz | President, General Counsel & Secretary (Principal Executive Officer) | March 12, 2020 |
| <u>/s/ JOHN CAPOGROSSI</u> John Capogrossi | Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer) | March 12, 2020 |
| <u>/s/ RAVINDER S. GIRGLA</u> Ravinder S. Girgla | Vice President and Controller (Principal Accounting Officer) | March 12, 2020 |

INDEX TO FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULES

Loral Space & Communications Inc. and Subsidiaries:

| | |
|----------------------------------------------------------------------------------------------------------------|------|
| Report of Independent Registered Public Accounting Firm | F-2 |
| Consolidated Balance Sheets as of December 31, 2019 and 2018 | F-3 |
| Consolidated Statements of Operations for the years ended December 31, 2019 and 2018 | F-4 |
| Consolidated Statements of Comprehensive Income for the years ended December 31, 2019 and 2018 | F-5 |
| Consolidated Statements of Shareholders' Equity for the years ended December 31, 2019 and 2018 | F-6 |
| Consolidated Statements of Cash Flows for the years ended December 31, 2019 and 2018 | F-7 |
| Notes to Consolidated Financial Statements | F-8 |
| Schedule II | F-33 |

Separate Financial Statements of Subsidiaries not consolidated Pursuant to Article 8 of Regulation S-X

Telesat Canada and Subsidiaries :

| | |
|---------------------------------------------------------------------------------------------------------------------------------|------|
| Report of Independent Registered Public Accounting Firm | F-34 |
| Consolidated Statements of Income (Loss) for the years ended December 31, 2019, 2018 and 2017 | F-35 |
| Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2019, 2018 and 2017 | F-36 |
| Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2019, 2018 and 2017 | F-37 |
| Consolidated Balance Sheets as of December 31, 2019 and 2018 | F-38 |
| Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018 and 2017 | F-39 |
| Notes to the 2019 Consolidated Financial Statements | F-40 |

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
Loral Space & Communications Inc.
New York, New York

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Loral Space & Communications Inc. and subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income, shareholders' equity, and cash flows for each of the two years in the period ended December 31, 2019, and the related notes and the schedule listed in the Index at Item 15 (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, 2019 and 2018, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 12, 2020, expressed an unqualified opinion on the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 5 to the financial statements, the Company's equity method investment, Telesat Canada, has changed its method of accounting for leases in fiscal year 2019 due to the adoption of the new lease standard.

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 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. 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 & TOUCHE LLP

New York, New York
March 12, 2020

We have served as the Company's auditor since 1996.

LORAL SPACE & COMMUNICATIONS INC.

CONSOLIDATED BALANCE SHEETS

(In thousands, except share data)

| | December 31, | |
|--------------------------------------------------------------------------------------------------------------|--------------|------------|
| | 2019 | 2018 |
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 259,067 | \$ 256,947 |
| Income tax refund receivable | 576 | 3,903 |
| Other current assets | 1,322 | 3,232 |
| Total current assets | 260,965 | 264,082 |
| Right-of-use asset | 988 | — |
| Income tax refund receivable, non-current | 387 | 774 |
| Investments in affiliates | 90,184 | 24,574 |
| Deferred tax assets | 37,945 | 40,520 |
| Other assets | 341 | 350 |
| Total assets | \$ 390,810 | \$ 330,300 |
| LIABILITIES AND SHAREHOLDERS' EQUITY | | |
| Current liabilities: | | |
| Accrued employment costs | \$ 2,611 | \$ 2,573 |
| Other current liabilities | 2,883 | 1,495 |
| Total current liabilities | 5,494 | 4,068 |
| Pension and other post-retirement liabilities | 17,447 | 15,167 |
| Other liabilities | 17,842 | 13,499 |
| Total liabilities | 40,783 | 32,734 |
| Commitments and contingencies | | |
| Shareholders' Equity: | | |
| Preferred stock, \$0.01 par value; 10,000,000 shares authorized, no shares issued and outstanding | — | — |
| Common Stock: | | |
| Voting common stock, \$0.01 par value; 50,000,000 shares authorized, 21,581,572 issued | 216 | 216 |
| Non-voting common stock, \$0.01 par value; 20,000,000 shares authorized, 9,505,673 issued and outstanding | 95 | 95 |
| Paid-in capital | 1,019,988 | 1,019,988 |
| Treasury stock (at cost), 154,494 shares of voting common stock | (9,592) | (9,592) |
| Accumulated deficit | (605,766) | (695,521) |
| Accumulated other comprehensive loss | (54,914) | (17,620) |
| Total shareholders' equity | 350,027 | 297,566 |
| Total liabilities and shareholders' equity | \$ 390,810 | \$ 330,300 |

See notes to consolidated financial statements

LORAL SPACE & COMMUNICATIONS INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)

| | Year Ended December 31, | |
|-------------------------------------------------------------------|--------------------------------|-------------|
| | 2019 | 2018 |
| General and administrative expenses | \$ (6,612) | \$ (6,534) |
| Operating loss | (6,612) | (6,534) |
| Interest and investment income | 5,727 | 4,746 |
| Interest expense | (24) | (26) |
| Other expense | (4,586) | (3,445) |
| Loss from continuing operations before income taxes and equity in | | |
| net income (loss) of affiliates | (5,495) | (5,259) |
| Income tax (provision) benefit | (6,153) | 39,348 |
| (Loss) income from continuing operations before equity in | | |
| net income (loss) of affiliates | (11,648) | 34,089 |
| Equity in net income (loss) of affiliates | 101,403 | (24,412) |
| Income from continuing operations | 89,755 | 9,677 |
| Loss from discontinued operations, net of tax | — | (63) |
| Net income | \$ 89,755 | \$ 9,614 |
| Net income per share: | | |
| Basic | | |
| Income from continuing operations | \$ 2.9 | \$ 0.31 |
| Loss from discontinued operations, net of tax | — | — |
| Net income | \$ 2.9 | \$ 0.31 |
| Diluted | | |
| Income from continuing operations | \$ 2.88 | \$ 0.31 |
| Loss from discontinued operations, net of tax | — | — |
| Net income | \$ 2.88 | \$ 0.31 |
| Weighted average common shares outstanding: | | |
| Basic | 30,933 | 30,933 |
| Diluted | 31,008 | 31,008 |

See notes to consolidated financial statements

LORAL SPACE & COMMUNICATIONS INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In thousands)

| | Year Ended December 31, | |
|------------------------------------------------------------------|--------------------------------|-------------|
| | 2019 | 2018 |
| Net income | \$ 89,755 | \$ 9,614 |
| Other comprehensive (loss) income, net of tax: | | |
| Pension and other post-retirement benefits | (1,511) | 1,798 |
| Proportionate share of Telesat other comprehensive (loss) income | (35,783) | 22,033 |
| Other comprehensive (loss) income, net of tax | (37,294) | 23,831 |
| Comprehensive income | \$ 52,461 | \$ 33,445 |

See notes to consolidated financial statements

LORAL SPACE & COMMUNICATIONS INC.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(In thousands, except per share amounts)

| | Common Stock | | | | Paid-In Capital | Treasury Stock | | Accumulated Deficit | Accumulated Other Comprehensive Loss | Shareholders' Equity |
|--------------------------------------------------------------------------|------------------|--------|------------------|--------|--------------------|----------------|------------|------------------------|-----------------------------------------------|-------------------------|
| | Voting | | Non-Voting | | | Voting | | | | |
| | Shares Issued | Amount | Shares Issued | Amount | | Shares | Amount | | | |
| Balance, January 1, 2018 | 21,582 | \$ 216 | 9,506 | \$ 95 | \$ 1,019,988 | 154 | \$ (9,592) | \$ (682,831) | \$ (37,278) | \$ 290,598 |
| Net income | | | | | | | | 9,614 | | |
| Other comprehensive income | | | | | | | | | 23,831 | |
| Comprehensive income | | | | | | | | | | 33,445 |
| Tax Cuts and Jobs Act, reclassification tax effect | | | | | | | | 4,173 | (4,173) | — |
| Cumulative effect adjustment attributable to investment in Telesat | | | | | | | | (26,477) | | (26,477) |
| Balance, December 31, 2018 | 21,582 | 216 | 9,506 | 95 | 1,019,988 | 154 | (9,592) | (695,521) | (17,620) | 297,566 |
| Net income | | | | | | | | 89,755 | | |
| Other comprehensive loss | | | | | | | | | (37,294) | |
| Comprehensive income | | | | | | | | | | 52,461 |
| Balance, December 31, 2019 | 21,582 | \$ 216 | 9,506 | \$ 95 | \$ 1,019,988 | 154 | \$ (9,592) | \$ (605,766) | \$ (54,914) | \$ 350,027 |

See notes to consolidated financial statements

LORAL SPACE & COMMUNICATIONS INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

| | Year Ended December 31, | |
|-----------------------------------------------------------------------------------|--------------------------------|-------------|
| | 2019 | 2018 |
| Operating activities: | | |
| Net income | \$ 89,755 | \$ 9,614 |
| Loss from discontinued operations, net of tax | — | 63 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | |
| Non-cash operating items (Note 2) | (97,384) | 34,539 |
| Changes in operating assets and liabilities: | | |
| Other current assets | 98 | (133) |
| Accrued employment costs and other current liabilities | 93 | 184 |
| Income taxes payable and receivable | 4,387 | 7,978 |
| Pension and other post-retirement liabilities | (633) | (2,411) |
| Other liabilities | 3,998 | (47,976) |
| Net cash provided by operating activities - continuing operations | 314 | 1,858 |
| Net cash provided by (used in) operating activities – discontinued operations | 1,812 | (46) |
| Net cash provided by operating activities | 2,126 | 1,812 |
| Investing activities: | | |
| Capital expenditures | (6) | (4) |
| Net cash used in investing activities – continuing operations | (6) | (4) |
| Net cash used in investing activities - discontinued operations | — | — |
| Net cash used in investing activities | (6) | (4) |
| Cash, cash equivalents and restricted cash — period increase | 2,120 | 1,808 |
| Cash, cash equivalents and restricted cash — beginning of year | 257,251 | 255,443 |
| Cash, cash equivalents and restricted cash — end of year | \$ 259,371 | \$ 257,251 |

See notes to consolidated financial statements

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Principal Business

Loral Space & Communications Inc., together with its subsidiaries (“Loral,” the “Company,” “we,” “our” and “us”) is a leading satellite communications company engaged, through our ownership interests in affiliates, in satellite-based communications services.

Description of Business

Loral has one operating segment consisting of satellite-based communications services. Loral participates in satellite services operations primarily through its ownership interest in Telesat Canada (“Telesat”), a leading global satellite operator. Loral holds a 62.7% economic interest and a 32.6% voting interest in Telesat. We use the equity method of accounting for our ownership interest in Telesat (see Note 5).

Telesat owns and leases a satellite fleet that operates in geostationary earth orbit approximately 22,000 miles above the equator. In this orbit, satellites remain in a fixed position relative to points on the earth’s surface and provide reliable, high-bandwidth services anywhere in their coverage areas, serving as the backbone for many forms of telecommunications. Telesat is also developing a global constellation of low earth orbit (“LEO”) satellites. LEO satellites operate in a circular orbit around the earth with an altitude typically between 500 and 870 miles. Unlike geostationary orbit satellites that operate in a fixed orbital location above the equator, LEO 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 geostationary orbit 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.

2. Basis of Presentation

The consolidated financial statements include the results of Loral and its subsidiaries and have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”). All intercompany transactions have been eliminated.

Investments in Affiliates

Our ownership interest in Telesat is accounted for using the equity method of accounting under U.S. GAAP. Telesat’s financial statements are prepared in accordance with international financial reporting standards (“IFRS”). To allow our reporting of our investment in Telesat under U.S. GAAP, Telesat provides us with a reconciliation of its financial statements from IFRS to U.S. GAAP. Income and losses of Telesat are recorded based on our economic interest. The contribution of Loral Skynet, a wholly owned subsidiary of Loral prior to its contribution to Telesat in 2007, was recorded by Loral at the historical book value of our retained interest combined with the gain recognized on the contribution. However, the contribution was recorded by Telesat at fair value. Accordingly, the amortization of Telesat fair value adjustments applicable to the Loral Skynet assets and liabilities acquired by Telesat in 2007 is proportionately eliminated in determining our share of the net income of Telesat. Our equity in net income or loss of Telesat also reflects amortization of profits eliminated, to the extent of our economic interest in Telesat, on satellites we constructed for Telesat while we owned Space Systems/Loral, LLC (formerly known as Space Systems/Loral, Inc.) (“SSL”) and on Loral’s sale to Telesat in April 2011 of its portion of the payload on the ViaSat-1 satellite and related assets. Non-refundable cash distributions received from Telesat in excess of our initial investment and our share of cumulative equity in comprehensive income of Telesat, net of cash distributions received in prior periods, are recorded as equity in net income of Telesat (“Excess Cash Distribution”) since we have no obligation to provide future financial support to Telesat. After receiving an Excess Cash Distribution, we do not record additional equity in net income of Telesat until our share of Telesat’s future net income exceeds the Excess Cash Distribution. Equity in losses of affiliates is not recognized after the carrying value of an investment, including advances and loans, has been reduced to zero, unless guarantees or other funding obligations exist. We had no guarantees or other funding obligations for our equity method investments as of December 31, 2019 and 2018. We use the nature of distribution approach to classify distributions from equity method investments on the statements of cash flows. The Company monitors its equity method investments for factors indicating other-than-temporary impairment. An impairment loss is recognized when there has been a loss in value of the affiliate that is other-than-temporary.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Use of Estimates in Preparation of Financial Statements

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the amount of income (loss) reported for the period. Actual results could materially differ from estimates.

Significant estimates also included the allowances for doubtful accounts, income taxes, including the valuation of deferred tax assets, the fair value of liabilities indemnified, the dilutive effect of Telesat stock options (see Note 10) and our pension liabilities.

Cash, Cash Equivalents and Restricted Cash

As of December 31, 2019, the Company had \$259.1 million of cash and cash equivalents. Cash and cash equivalents include liquid investments, primarily money market funds, with maturities of less than 90 days at the time of purchase. Management determines the appropriate classification of its investments at the time of purchase and at each balance sheet date.

As of December 31, 2019 and December 31, 2018, the Company had restricted cash of \$0.3 million, representing the amount pledged as collateral to the issuer of a standby letter of credit (the “LC”). The LC, which expires in August 2021, has been provided as a guaranty to the lessor of our corporate offices.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the consolidated balance sheet to the consolidated statement of cash flows (in thousands):

| | December 31, | |
|---------------------------------------------------------------------------------|---------------------|-------------------|
| | 2019 | 2018 |
| Cash and cash equivalents | \$ 259,067 | \$ 256,947 |
| Restricted cash included in other assets | 304 | 304 |
| Cash, cash equivalents and restricted cash shown in the statement of cash flows | <u>\$ 259,371</u> | <u>\$ 257,251</u> |

Concentration of Credit Risk

Financial instruments which potentially subject us to concentrations of credit risk consist principally of cash and cash equivalents and receivables. Our cash and cash equivalents are maintained with high-credit-quality financial institutions. As of December 31, 2019 and December 31, 2018, our cash and cash equivalents were invested primarily in several liquid Prime and Government AAA money market funds. Such funds are not insured by the Federal Deposit Insurance Corporation. The dispersion across funds reduces the exposure of a default at any one fund. As a result, management believes that its potential credit risks are minimal.

Fair Value Measurements

U.S. GAAP defines fair value as the price that would be received for an asset or the exit price that would be paid to transfer a liability in the principal or most advantageous market in an orderly transaction between market participants. U.S. GAAP also establishes a fair value hierarchy that gives the highest priority to observable inputs and the lowest priority to unobservable inputs. The three levels of the fair value hierarchy are described below:

Level 1: Inputs represent a fair value that is derived from unadjusted quoted prices for identical assets or liabilities traded in active markets at the measurement date.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Level 2: Inputs represent a fair value that is derived from quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, model-based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities, and pricing inputs, other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reporting date.

Level 3: Inputs are generally unobservable and typically reflect management’s estimates of assumptions that market participants would use in pricing the asset or liability. The fair values are therefore determined using model-based techniques that include option pricing models, discounted cash flow models, and similar techniques.

Assets and Liabilities Measured at Fair Value

The following table presents our assets and liabilities measured at fair value on a recurring or non-recurring basis (in thousands):

| | <u>December 31, 2019</u> | | | <u>December 31, 2018,</u> | | |
|---------------------------------------------|--------------------------|----------------|----------------|---------------------------|----------------|----------------|
| | <u>Level 1</u> | <u>Level 2</u> | <u>Level 3</u> | <u>Level 1</u> | <u>Level 2</u> | <u>Level 3</u> |
| Assets | | | | | | |
| Cash and cash equivalents: | | | | | | |
| Money market funds | \$ 256,915 | \$ — | \$ — | \$ 254,552 | \$ — | \$ — |
| Other current assets: | | | | | | |
| Indemnification - Sale of SSL | \$ — | \$ — | \$ 598 | \$ — | \$ — | \$ 2,410 |
| Liabilities | | | | | | |
| Long term liabilities | | | | | | |
| Indemnification - Globalstar do Brasil S.A. | \$ — | \$ — | \$ 145 | \$ — | \$ — | \$ 184 |

The carrying amount of cash equivalents approximates fair value as of each reporting date because of the short maturity of those instruments.

The Company did not have any non-financial assets or non-financial liabilities that were recognized or disclosed at fair value as of December 31, 2019 and December 31, 2018.

Assets and Liabilities Measured at Fair Value on a Non-recurring Basis

We review the carrying values of our equity method investments when events and circumstances warrant and consider all available evidence in evaluating when declines in fair value are other-than-temporary. The fair values of our investments are determined based on valuation techniques using the best information available and may include quoted market prices, market comparables and discounted cash flow projections. An impairment charge is recorded when the carrying amount of the investment exceeds its current fair value and is determined to be other-than-temporary.

The asset resulting from the indemnification of SSL is for certain pre-closing taxes and reflects the excess of payments since inception over refunds and the estimated remaining liability, which was originally determined using the fair value objective approach. The estimated liability for indemnifications relating to Globalstar do Brasil S.A. (“GdB”), originally determined using expected value analysis, is net of payments since inception.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Contingencies

Contingencies by their nature relate to uncertainties that require management to exercise judgment both in assessing the likelihood that a liability has been incurred as well as in estimating the amount of potential loss, if any. We accrue for costs relating to litigation, claims and other contingent matters when such liabilities become probable and reasonably estimable. Such estimates may be based on advice from third parties or on management's judgment, as appropriate. Actual amounts paid may differ from amounts estimated, and such differences will be charged to operations in the period in which the final determination of the liability is made.

Income Taxes

Loral and its subsidiaries are subject to U.S. federal, state and local income taxation on their worldwide income and foreign taxation on certain income from sources outside the United States. Telesat is subject to tax in Canada and other jurisdictions, and Loral will provide in each period any additional U.S. current and deferred tax required on actual or deemed distributions from Telesat, including Global Intangible Low Taxed Income ("GILTI"). Deferred income taxes reflect the future tax effect of temporary differences between the carrying amount of assets and liabilities for financial and income tax reporting and are measured by applying anticipated statutory tax rates in effect for the year during which the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance to the extent it is more likely than not that the deferred tax assets will not be realized.

The tax benefit of an uncertain tax position ("UTP") taken or expected to be taken in income tax returns is recognized only if it is "more likely than not" to be sustained on examination by the taxing authorities, based on its technical merits as of the reporting date. The tax benefit recognized in the financial statements from such a position is measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. The Company recognizes interest and penalties related to income taxes in income tax expense on a quarterly basis.

The unrecognized tax benefit of a UTP is recognized in the period when the UTP is effectively settled. Previously recognized tax positions are derecognized in the first period in which it is no longer more likely than not that the tax position would be sustained upon examination.

Earnings per Share

Basic earnings per share are computed based upon the weighted average number of shares of voting and non-voting common stock outstanding during each period. Shares of non-voting common stock are in all respects identical to and treated equally with shares of voting common stock except for the absence of voting rights (other than as provided in Loral's Amended and Restated Certificate of Incorporation which was ratified by Loral's stockholders on May 19, 2009). Diluted earnings per share are based on the weighted average number of shares of voting and non-voting common stock outstanding during each period, adjusted for the effect of unvested or unconverted restricted stock units. For diluted earnings per share, earnings are adjusted for the dilutive effect of Telesat stock options and restricted share units.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Additional Cash Flow Information

The following represents non-cash activities and supplemental information to the consolidated statements of cash flows (in thousands):

| | Year Ended December 31, | |
|-------------------------------------------------------------|--------------------------------|------------------|
| | 2019 | 2018 |
| Non-cash operating items | | |
| Equity in net (income) loss of affiliates | \$ (101,403) | \$ 24,412 |
| Deferred taxes | 2,987 | 9,030 |
| Depreciation | 15 | 26 |
| Right-of-use asset, net of lease liability | 9 | — |
| Amortization of prior service credit and actuarial loss | 1,008 | 1,071 |
| Net non-cash operating items – continuing operations | \$ (97,384) | \$ 34,539 |
| Supplemental information: | | |
| Interest paid – continuing operations | \$ 24 | \$ 26 |
| Income tax refunds | \$ 5,547 | \$ 8,619 |
| Income tax payments | \$ 288 | \$ 264 |

Recent Accounting Pronouncements

In August 2018, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2018-14, *Compensation-Retirement Benefits-Defined Benefit Plans-General (Subtopic 715-20): Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans*. The amendments in ASU No. 2018-14 remove certain disclosures that are no longer considered cost beneficial, clarify the specific requirements of certain disclosures, and add disclosure requirements identified as relevant to improve effectiveness of disclosures related to employer sponsored defined benefit or other postretirement plans. The new guidance is effective for the Company on January 1, 2021, with earlier application permitted in any interim or annual period. The amendments in this ASU are applied on a retrospective basis to all periods presented. The Company early adopted the new guidance in the fourth quarter of 2018 by providing the required additional disclosures for all periods presented (see Note 11).

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*. ASU No. 2018-13 eliminates, amends, and adds disclosure requirements to improve the effectiveness of fair value measurement disclosures. While certain amendments are to be applied prospectively, all other amendments are to be applied retrospectively to all periods presented. The new guidance is effective for the Company on January 1, 2020, with earlier application permitted. We will adopt the new guidance in the first quarter of 2020. While we continue to assess the potential impact of the new guidance, we do not expect it to have a material effect on our consolidated financial statements.

In February 2016, the FASB amended the Accounting Standards Codification (“ASC”) by creating ASC Topic 842, *Leases* (“ASC 842”). ASC Topic 842 requires a lessee to record a right-of-use asset and a lease liability for all leases with a lease term greater than 12 months. The main difference between previous U.S. GAAP and ASC Topic 842 is the recognition under ASC 842 of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous U.S. GAAP. The new guidance was effective for the Company on January 1, 2019. We adopted ASC 842 in the first quarter of 2019 utilizing the modified retrospective method with a practical expedient through a cumulative-effect adjustment at the beginning of the first quarter of 2019. As a result, on January 1, 2019, we recognized a right-of-use asset and lease liability for an operating lease of approximately \$0.3 million on our consolidated balance sheet.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

3. Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive loss, net of tax, are as follows (in thousands):

| | Pension and Other Post-retirement Benefits | Equity in Telesat-related Other Comprehensive Loss | Accumulated Other Comprehensive Loss |
|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------|
| Balance, January 1, 2018 | \$ (16,454) | \$ (20,824) | \$ (37,278) |
| Other comprehensive income before reclassification | 953 | 22,033 | 22,986 |
| Amounts reclassified from accumulated other comprehensive loss | 845 | — | 845 |
| Net current-period other comprehensive income | 1,798 | 22,033 | 23,831 |
| Tax Cuts and Jobs Act, reclassification of tax effect from accumulated other comprehensive loss to accumulated deficit | — | (4,173) | (4,173) |
| Balance, December 31, 2018 | (14,656) | (2,964) | (17,620) |
| Other comprehensive loss before reclassification: | | | |
| Prior periods (see Note 5) | — | (22,050) | (22,050) |
| Current period | (2,307) | (13,733) | (16,040) |
| Other comprehensive loss before reclassification | (2,307) | (35,783) | (38,090) |
| Amounts reclassified from accumulated other comprehensive loss | 796 | — | 796 |
| Net current-period other comprehensive loss | (1,511) | (35,783) | (37,294) |
| Balance, December 31, 2019 | \$ (16,167) | \$ (38,747) | \$ (54,914) |

The components of other comprehensive (loss) income and related tax effects are as follows (in thousands):

| | Before-Tax Amount | Tax Benefit (Provision) | Net-of-Tax Amount |
|--------------------------------------------------------------|----------------------|-------------------------------|----------------------|
| Year ended December 31, 2019 | | | |
| Pension and other post-retirement benefits: | | | |
| Net actuarial loss and prior service credits | \$ (2,921) | \$ 614 | \$ (2,307) |
| Amortization of prior service credits and net actuarial loss | 1,008 ^(a) | (212) | 796 |
| Pension and other post-retirement benefits: | (1,913) | 402 | (1,511) |
| Equity in Telesat-related other comprehensive loss: | | | |
| Prior periods (See Note 5) | (22,056) | 6 | (22,050) |
| Current period | (13,737) | 4 | (13,733) |
| Equity in Telesat-related other comprehensive loss | (35,793) | 10 ^(b) | (35,783) |
| Other comprehensive loss | \$ (37,706) | \$ 412 | \$ (37,294) |
| Year ended December 31, 2018 | | | |
| Pension and other post-retirement benefits: | | | |
| Net actuarial gain and prior service credits | \$ 1,208 | \$ (255) | \$ 953 |
| Amortization of prior service credits and net actuarial loss | 1,071 ^(a) | (226) | 845 |
| Pension and other post-retirement benefits: | 2,279 | (481) | 1,798 |
| Equity in Telesat-related other comprehensive income | 22,033 | — ^(b) | 22,033 |
| Other comprehensive income | \$ 24,312 | \$ (481) | \$ 23,831 |

(a) Reclassifications are included in other expenses.

(b) See Note 7, Income Taxes

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

4. Other Current Assets

Other current assets consist of (in thousands):

| | December 31, | |
|-------------------------------------------------------------------------|-----------------|-----------------|
| | 2019 | 2018 |
| Indemnification receivable from SSL for pre-closing taxes (see Note 13) | \$ 598 | \$ 2,410 |
| Due from affiliates | 186 | 161 |
| Prepaid expenses | 164 | 151 |
| Other | 374 | 510 |
| | <u>\$ 1,322</u> | <u>\$ 3,232</u> |

5. Investments in Affiliates

Investments in affiliates consist of (in thousands):

| | December 31, | |
|---------|--------------|-----------|
| | 2019 | 2018 |
| Telesat | \$ 90,184 | \$ 24,574 |

Equity in net income (loss) of affiliates consists of (in thousands):

| | Year Ended December 31, | |
|---------|-------------------------|-------------|
| | 2019 | 2018 |
| Telesat | \$ 101,403 | \$ (24,412) |

Telesat

As of December 31, 2019, we held a 62.7% economic interest and a 32.6% voting interest in Telesat. We use the equity method of accounting for our majority economic interest in Telesat because we own 32.6% of the voting stock and do not exercise control by other means to satisfy the U.S. GAAP requirement for treatment as a consolidated subsidiary. We have also concluded that Telesat is not a variable interest entity for which we are the primary beneficiary. Loral's equity in net income or loss of Telesat is based on our proportionate share of Telesat's results in accordance with U.S. GAAP and in U.S. dollars. Our proportionate share of Telesat's net income or loss is based on our economic interest as our holdings consist of common stock and non-voting participating preferred shares that have all the rights of common stock with respect to dividends, return of capital and surplus distributions, but have no voting rights.

In addition to recording our share of equity in net income (loss) of Telesat, we also recorded our share of equity in other comprehensive (loss) income of Telesat of \$(35.8) million and \$22.0 million for the years ended December 31, 2019 and 2018, respectively.

In the third quarter of 2019, we recorded an out-of-period correction to decrease our investment in Telesat and increase other comprehensive loss by \$22.1 million. This non-cash adjustment was made to record the cumulative translation adjustment on our investment in Telesat from November 2007, when we first acquired our ownership interest in Telesat, to December 31, 2018. The adjustment resulted from translating our share of Telesat's equity from Canadian dollars to U.S. dollars at historical foreign exchange rates in accordance with ASC 830, *Foreign Currency Matters*, as required by ASC 323, *Investments – Equity Method and Joint Ventures*. Previously, we translated our share of Telesat's equity from Canadian dollars to U.S. dollars at current foreign exchange rates at each balance sheet date. This adjustment had no effect on our equity in net income (loss) of Telesat for any current or prior reporting period. The Company has not revised its financial statements for prior periods for this adjustment based on its belief that the effect of such adjustment is not material to the financial statements taken as a whole.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

On January 1, 2019, Telesat adopted ASC 842, *Leases*, for its U.S. GAAP reporting which we use to record our equity income in Telesat. Telesat adopted the new guidance using the modified retrospective approach with the cumulative effect of initially applying the standard being recorded on the balance sheet. As a result, on January 1, 2019, Telesat recognized a right-of-use asset of \$19.6 million and lease liability of \$20.0 million on its consolidated balance sheet. Comparative summary financial information of Telesat presented below has not been restated and continues to be reported under the accounting standards in effect for those periods presented.

On January 1, 2018, Telesat adopted ASC 606, *Revenue from Contracts with Customers*, for its U.S. GAAP reporting which we use to record our equity income in Telesat. Telesat adopted the new standard using the modified retrospective approach with a cumulative effect adjustment to reduce Telesat's retained earnings by \$42.2 million. As a result, we recorded our share of the cumulative effect adjustment by reducing our investment in Telesat by \$26.5 million and increasing our accumulated deficit by \$26.5 million.

On January 1, 2018, Telesat adopted ASU No. 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Costs*, for its U.S. GAAP reporting. Adoption of the new guidance did not affect Telesat's previously reported financial position or net income.

On October 11, 2019, Telesat issued \$550.0 million of 6.5% senior notes maturing in October 2027. The 6.5% senior notes are effectively subordinated to Telesat's secured indebtedness, including the obligations under its senior secured credit facilities and its 4.875% senior secured notes.

On October 11, 2019, Telesat used the net proceeds from the 6.5% senior notes offering together with available cash on hand to redeem its \$500 million 8.875% senior notes due November 15, 2024 by repaying all outstanding amounts, including principal, redemption premium and discounted interest to November 15, 2019.

On December 6, 2019, Telesat entered into amended senior secured credit facilities which provide for term loan borrowings of \$1,908.5 million which mature in December 2026 and revolving credit facilities of up to \$200 million (or Canadian dollar equivalent) which mature in December 2024. Telesat also issued, through a private placement, \$400 million of 4.875% senior secured notes which mature in June 2027.

On December 6, 2019, Telesat repaid all outstanding amounts, including related fees and expenses, under its former senior secured credit facilities.

In March 2018, Telesat made a \$50 million voluntary payment on the U.S. TLB Facility.

In April 2018, Telesat amended the former senior secured credit facilities, resulting in a reduction of the margin on the U.S. TLB Facility to 2.5% from 3.0%.

The ability of Telesat to pay dividends or certain other restricted payments in cash to Loral is governed by applicable covenants in Telesat's debt and shareholder agreements. Telesat's credit agreement governing its senior secured credit facilities limits, among other items, Telesat's ability to incur debt and make dividend payments if the total leverage ratio ("Total Leverage Ratio") is above 4.50:1.00, with certain exceptions. As of December 31, 2019, Telesat's Total Leverage Ratio was 4.63:1.00. Telesat is, however, permitted to pay annual consulting fees of \$5 million to Loral in cash (see Note 14).

The contribution of Loral Skynet, a wholly owned subsidiary of Loral prior to its contribution to Telesat in 2007, was recorded by Loral at the historical book value of our retained interest combined with the gain recognized on the contribution. However, the contribution was recorded by Telesat at fair value. Accordingly, the amortization of Telesat fair value adjustments applicable to the Loral Skynet assets and liabilities is proportionately eliminated in determining our share of the net income or losses of Telesat. Our equity in net income or loss of Telesat also reflects amortization of profits eliminated, to the extent of our economic interest in Telesat, on satellites we constructed for Telesat while we owned SSL and on Loral's sale to Telesat in April 2011 of its portion of the payload on the ViaSat-1 satellite and related assets.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The following table presents summary financial data for Telesat in accordance with U.S. GAAP, for the years ended December 31, 2019 and 2018 and as of December 31, 2019 and 2018 (in thousands):

| | Year Ended December 31, | |
|---------------------------------------------------------|--------------------------------|--------------------|
| | 2019 | 2018 |
| Statement of Operations Data: | | |
| Revenues | \$ 687,868 | \$ 699,596 |
| Operating expenses | (129,770) | (137,400) |
| Depreciation, amortization and stock-based compensation | (212,282) | (205,451) |
| Other operating (expense) income | (649) | 576 |
| Operating income | 345,167 | 357,321 |
| Interest expense | (186,394) | (176,873) |
| Loss on refinancing | (86,166) | — |
| Foreign exchange gain (loss) | 122,002 | (203,005) |
| (Loss) gain on financial instruments | (42,039) | 15,795 |
| Other income | 16,360 | 11,335 |
| Income tax provision | (12,741) | (45,423) |
| Net income (loss) | <u>\$ 156,189</u> | <u>\$ (40,850)</u> |
| | | |
| | December 31, | |
| | 2019 | 2018 |
| Balance Sheet Data: | | |
| Current assets | \$ 877,294 | \$ 628,125 |
| Total assets | 4,130,337 | 3,942,847 |
| Current liabilities | 124,217 | 139,401 |
| Long-term debt, including current portion | 2,836,700 | 2,764,599 |
| Total liabilities | 3,504,594 | 3,474,504 |
| Shareholders' equity | 625,743 | 468,343 |

Other

We own 56% of XTAR, a joint venture between us and Hisdesat Servicios Estrategicos, S.A. ("Hisdesat") of Spain. We account for our ownership interest in XTAR under the equity method of accounting because we do not control certain of its significant operating decisions. We have also concluded that XTAR is not a variable interest entity for which we are the primary beneficiary. As of December 31, 2019 and 2018, the carrying value of our investment in XTAR was zero. Beginning January 1, 2016, we discontinued providing for our allocated share of XTAR's net losses as our investment was reduced to zero and we have no commitment to provide further financial support to XTAR.

XTAR owns and operates an X-band satellite, XTAR-EUR, located at 29° E.L., which is designed to provide X-band communications services exclusively to United States, Spanish and allied government users throughout the satellite's coverage area, including Europe, the Middle East and Asia. XTAR also leases 7.2 72MHz X-band transponders on the Spainsat satellite located at 30° W.L., owned by Hisdesat. These transponders, designated as XTAR-LANT, provide capacity to XTAR for additional X-band services and greater coverage and flexibility.

As of December 31, 2019 and 2018, the Company also held an indirect ownership interest in a foreign company that currently serves as the exclusive service provider for Globalstar service in Mexico. The Company accounts for this ownership interest using the equity method of accounting. As of December 31, 2019 and 2018, the carrying value of this investment was zero. Loral has written-off its investment in this company and has no future funding requirements relating to this investment. Accordingly, there is no requirement for us to provide for our allocated share of this company's net losses. This company is currently in the process of dissolution and liquidation in Mexico, and Loral believes that it will not have any liability associated with this company upon completion of this process.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

6. Other Current Liabilities

Other current liabilities consists of (in thousands):

| | December 31, | |
|-----------------------------------------------|-----------------|-----------------|
| | 2019 | 2018 |
| Operating lease liability | 652 | — |
| Due to affiliate | \$ 5 | \$ 164 |
| Accrued professional fees | 1,419 | 1,206 |
| Pension and other post-retirement liabilities | 77 | 69 |
| Income taxes payable | 673 | — |
| Accrued liabilities | 57 | 56 |
| | <u>\$ 2,883</u> | <u>\$ 1,495</u> |

7. Income Taxes

The following summarizes our income tax (provision) benefit (in thousands):

| | Year Ended December 31, | |
|--------------------------------------|-------------------------|------------------|
| | 2019 | 2018 |
| Current: | | |
| U.S. federal | \$ (2,918) | \$ 47,761 |
| State and local | 2 | 867 |
| Foreign | (250) | (250) |
| Total current | <u>(3,166)</u> | <u>48,378</u> |
| Deferred: | | |
| U.S. federal | (2,990) | (9,036) |
| State and local | 3 | 6 |
| Total deferred | <u>(2,987)</u> | <u>(9,030)</u> |
| Total income tax (provision) benefit | <u>\$ (6,153)</u> | <u>\$ 39,348</u> |

Our current income tax (provision) benefit includes an (increase) decrease to our liability for UTPs for (in thousands):

| | Year Ended December 31, | |
|---------------------------|-------------------------|------------------|
| | 2019 | 2018 |
| Unrecognized tax benefits | \$ (2,467) | \$ 41,115 |
| Interest expense | (1,570) | 6,752 |
| Total | <u>\$ (4,037)</u> | <u>\$ 47,867</u> |

The deferred income tax provision for each period includes the impact of equity in net income (loss) of affiliates in our consolidated statement of operations and the periodic effect of our accounting for GILTI. After utilization of our net operating loss (“NOL”) carryforward and allowable tax credits, there was no federal income tax on GILTI from Telesat.

For 2018, the statute of limitations for the assessment of additional tax expired with regard to certain of our federal UTPs. As a result, the reduction to our liability for UTPs provided a current tax benefit including the reversal of previously recognized interest, partially offset by an additional provision for the potential payment of interest on our remaining UTPs.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Public Law 117-97, known as the “Tax Cuts and Jobs,” Act made broad and complex changes to the U.S tax code first effective in 2018 including, but not limited to, (1) eliminating U.S federal income taxes on dividends from certain foreign investments, such as Telesat; (2) requiring a current inclusion in U.S. federal taxable income of certain earnings of controlled foreign corporations, including Telesat, as part of GILTI; (3) limiting the use of foreign tax credits (“FTCs”) to reduce U.S. federal tax liability; (4) creating the base erosion anti-abuse tax, a new minimum tax; (5) creating a new limit on deductible interest expense; and (6) changing the rules related to the use of NOL carryforwards created in tax years beginning after December 31, 2017. During 2018, in accordance with SAB 118, we recognized the income tax effects of additional regulatory guidance issued by the U.S. Treasury and Internal Revenue Service on various provisions of the Tax Cuts and Jobs Act. Based upon our interpretation of this guidance, we determined that, after the utilization of allowable tax credits, federal income tax imposed on the future recognition of GILTI from Telesat will be zero. Since we anticipate that our deferred tax assets related to the investment in Telesat will be realized from the future recognition of GILTI, the federal portion of these deferred tax assets are valued at zero. Therefore, as of December 31, 2018, we reduced deferred tax assets by \$1.5 million with a corresponding increase to our deferred income tax provision.

In addition to the income tax (provision) benefit presented above, we also recorded the following items (in thousands):

| | Year Ended December 31, | |
|-------------------------------------------------------------------------------------------|--------------------------------|-------------|
| | 2019 | 2018 |
| Tax benefit on loss from discontinued operations | \$ — | \$ 16 |
| Deferred tax benefit (provision) for adjustments in other comprehensive loss (see Note 3) | 412 | (481) |

The (provision) benefit for income taxes differs from the amount computed by applying the statutory U.S. federal income tax rate on the loss from continuing operations before income taxes and equity in net income (loss) of affiliates because of the effect of the following items (dollars in thousands):

| | Year Ended December 31, | |
|-----------------------------------------------------------|--------------------------------|-------------|
| | 2019 | 2018 |
| U.S. Statutory Federal Corporate Income Tax Rate | 21% | 21% |
| Tax benefit | \$ 1,154 | \$ 1,104 |
| Permanent adjustments which change statutory amounts: | | |
| State and local income taxes, net of federal income tax | 107 | 666 |
| Equity in net income (loss) of affiliates | (5,055) | (6,241) |
| Federal (provision) benefit for unrecognized tax benefits | (1,226) | 46,534 |
| Nondeductible expenses | (695) | (957) |
| Change in valuation allowance | (118) | (4,329) |
| Income tax credits | — | 4,554 |
| Foreign income taxes | (250) | (250) |
| Effect of U.S. tax law changes | — | (1,542) |
| Other, net | (70) | (191) |
| Total income tax (provision) benefit | \$ (6,153) | \$ 39,348 |

The following table summarizes the activity related to our unrecognized tax benefits (in thousands):

| | Year Ended December 31, | |
|----------------------------------------------|--------------------------------|-------------|
| | 2019 | 2018 |
| Balance at January 1 | \$ 43,055 | \$ 70,410 |
| Decreases as a result of statute expirations | (18) | (27,355) |
| Balance at December 31 | \$ 43,037 | \$ 43,055 |

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

With few exceptions, the Company is no longer subject to U.S. federal, state or local income tax examinations by tax authorities for years prior to 2014. Earlier years related to certain foreign jurisdictions remain subject to examination. To the extent allowed by law, the tax authorities may have the right to examine prior periods where NOLs were generated and carried forward, and make adjustments up to the amount of the NOL carryforward. While we intend to contest any future tax assessments for uncertain tax positions, no assurance can be provided that we would ultimately prevail.

Our liability for UTPs increased from \$13.3 million at December 31, 2018 to \$17.4 million at December 31, 2019 and is included in long-term liabilities in the consolidated balance sheets. At December 31, 2019, we have accrued \$2.0 million for the potential payment of tax-related interest. If our positions are sustained by the taxing authorities, approximately \$7.3 million of the tax benefits will reduce the Company's income tax provision from continuing operations. Other than as described above, there were no significant changes to our unrecognized tax benefits during the year ended December 31, 2019, and we do not anticipate any other significant increases or decreases to our unrecognized tax benefits during the next twelve months.

At December 31, 2019, we had federal FTC carryforwards of \$109.6 million, federal NOL carryforwards of \$95.3 million and New York NOL carryforwards of \$1.5 million which expire from 2022 to 2034.

The reorganization of the Company pursuant to emergence from Chapter 11 of the federal bankruptcy laws during 2005 constituted an ownership change under section 382 of the Internal Revenue Code. Accordingly, use of our tax attributes, such as NOLs and tax credits generated prior to the ownership change, are subject to an annual limitation of approximately \$32.6 million, subject to increase or decrease based on certain factors.

We assess the recoverability of our FTCs, NOLs and other deferred tax assets and based upon this analysis, record a valuation allowance to the extent recoverability does not satisfy the "more likely than not" recognition criteria. We continue to maintain our valuation allowance until sufficient positive evidence exists to support full or partial reversal. As of December 31, 2019, we had a valuation allowance totaling \$128.5 million against our deferred tax assets for certain tax credits, primarily FTC carryovers from 2017, and loss carryovers due to the limited carryforward periods. During 2019, the valuation allowance increased by \$0.1 million, which was recorded as a provision to continuing operations in our statement of operations. To the extent that profitability from operations is not sufficient to realize the benefit from our remaining net deferred tax assets, we would generate sufficient taxable income from the appreciated value of our Telesat investment in order to prevent federal net operating losses from expiring and realize the benefit of all remaining deferred tax assets.

During 2018, the valuation allowance increased by \$4.3 million, which was recorded as a provision to continuing operations in our statement of operations.

The significant components of the net deferred income tax assets are (in thousands):

| | December 31, | |
|------------------------------------------------------|--------------|-----------|
| | 2019 | 2018 |
| Deferred tax assets: | | |
| Net operating loss carryforwards | \$ 34,294 | \$ 36,875 |
| Foreign tax credit carryforwards | 126,007 | 126,007 |
| Compensation and benefits | 961 | 953 |
| Indemnification liabilities | 66 | 216 |
| Other, net | 305 | 219 |
| Federal benefit of uncertain tax positions | 428 | 98 |
| Pension costs | 3,375 | 3,157 |
| Investments in and advances to affiliates | 992 | 1,360 |
| Total deferred tax assets before valuation allowance | 166,428 | 168,885 |
| Less valuation allowance | (128,483) | (128,365) |
| Deferred tax assets | \$ 37,945 | \$ 40,520 |

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

8. Other Liabilities

Other liabilities consists of (in thousands):

| | December 31, | |
|---------------------------------------------------|------------------|------------------|
| | 2019 | 2018 |
| Operating lease liability | \$ 345 | \$ — |
| Indemnification liabilities - other (see Note 13) | 145 | 184 |
| Liabilities for uncertain tax positions | 17,352 | 13,315 |
| | <u>\$ 17,842</u> | <u>\$ 13,499</u> |

9. Stock-Based Compensation*Stock Plans*

The Loral amended and restated 2005 stock incentive plan (the “Stock Incentive Plan”) which allowed for the grant of several forms of stock-based compensation awards including stock options, stock appreciation rights, restricted stock, restricted stock units, stock bonuses and other stock-based awards, had a ten-year term and has expired. The Company granted 75,262 restricted stock units under the Stock Incentive Plan that do not expire and remained unconverted as of December 31, 2019 and December 31, 2018. As of December 31, 2019, there is no unrecognized compensation cost related to non-vested awards.

10. Earnings Per Share

Telesat has awarded employee stock options, which, if exercised, would result in dilution of Loral’s ownership interest in Telesat to approximately 62.3%. The following table presents the dilutive impact of Telesat stock options on Loral’s reported income from continuing operations for the purpose of computing diluted earnings per share (in thousands):

| | Year Ended December 31, | |
|---------------------------------------------------------------|-------------------------|-----------------|
| | 2019 | 2018 |
| Income from continuing operations — basic | \$ 89,755 | \$ 9,677 |
| Less: Adjustment for dilutive effect of Telesat stock options | (528) | — |
| Income from continuing operations — diluted | <u>\$ 89,227</u> | <u>\$ 9,677</u> |

Telesat stock options are excluded from the calculation of diluted loss per share for the year ended December 31, 2018 as the effect would be antidilutive.

Basic earnings per share is computed based upon the weighted average number of shares of voting and non-voting common stock outstanding. The following is the computation of common shares outstanding for diluted earnings per share (in thousands):

| | Year Ended December 31, | |
|----------------------------------------------------------|-------------------------|---------------|
| | 2019 | 2018 |
| Weighted average common shares outstanding | 30,933 | 30,933 |
| Unconverted restricted stock units | 75 | 75 |
| Common shares outstanding for diluted earnings per share | <u>31,008</u> | <u>31,008</u> |

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

11. Pensions and Other Employee Benefit Plans

Pensions

We maintain a qualified defined benefit pension plan to which members may contribute in order to receive enhanced pension benefits. Employees hired after June 30, 2006 do not participate in the defined benefit pension plan, but participate in our defined contribution savings plan with an additional Company contribution. Benefits are based primarily on members' compensation and/or years of service. Our funding policy is to fund the qualified pension plan in accordance with the Internal Revenue Code and regulations thereon. Plan assets are generally invested in equity, fixed income and real asset investments. Pension plan assets are managed primarily by Russell Investment Corp. ("Russell"), which allocates the assets into funds as we direct.

Other Benefits

In addition to providing pension benefits, we provide certain health care and life insurance benefits for retired employees and dependents. For the years ended December 31, 2019 and 2018 certain of these benefits were provided through plans sponsored or managed by Telesat. Participants are eligible for these benefits generally when they retire from active service and meet the eligibility requirements for our 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. Medical coverage for retired employees and dependents ends when the retiree reaches age 65.

Funded Status

The following tables provide a reconciliation of the changes in the plans' benefit obligations and fair value of assets for 2019 and 2018, and a statement of the funded status as of December 31, 2019 and 2018. We use a December 31 measurement date for the pension plan and other post-retirement benefits (in thousands).

| | Pension Benefits | | Other Benefits | |
|-----------------------------------------------------|--------------------------------|--------------------|--------------------------------|-----------------|
| | Year Ended December 31, | | Year Ended December 31, | |
| | 2019 | 2018 | 2019 | 2018 |
| Reconciliation of benefit obligation: | | | | |
| Obligation at beginning of period | \$ 49,020 | \$ 53,976 | \$ 479 | \$ 519 |
| Service cost | 722 | 715 | — | 1 |
| Interest cost | 2,018 | 1,855 | 21 | 18 |
| Participant contributions | 25 | 27 | — | 15 |
| Actuarial loss (gain) | 5,256 | (5,725) | 30 | (36) |
| Benefit payments | (1,882) | (1,828) | (19) | (38) |
| Obligation at December 31, | <u>55,159</u> | <u>49,020</u> | <u>511</u> | <u>479</u> |
| Reconciliation of fair value of plan assets: | | | | |
| Fair value of plan assets at beginning of period | 34,263 | 35,640 | — | — |
| Actual return on plan assets | 4,798 | (1,925) | — | — |
| Employer contributions | 942 | 2,349 | 19 | 23 |
| Participant contributions | 25 | 27 | — | 15 |
| Benefit payments | (1,882) | (1,828) | (19) | (38) |
| Fair value of plan assets at December 31, | <u>38,146</u> | <u>34,263</u> | <u>—</u> | <u>—</u> |
| Funded status at end of period | <u>\$ (17,013)</u> | <u>\$ (14,757)</u> | <u>\$ (511)</u> | <u>\$ (479)</u> |

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The benefit obligations for pensions and other employee benefits exceeded the fair value of plan assets by \$17.5 million at December 31, 2019 (the “unfunded benefit obligations”). The unfunded benefit obligations were measured using a discount rate of 3.25% and 4.25% at December 31, 2019 and 2018, respectively. For the year ended December 31, 2019, the actuarial loss component of the change in benefit obligation of \$5.3 million for the pension plan comprises \$6.7 million attributable to the change in the discount rate partially offset by \$1.4 million attributable to other factors. For the year ended December 31, 2018, the actuarial gain component of the change in benefit obligation of \$5.7 million for the pension plan comprises \$5.1 million attributable to the change in the discount rate and \$0.6 million attributable to other factors. Lowering the discount rate by 0.5% would have increased the unfunded benefit obligations for pension and other post-retirement benefits by approximately \$3.7 million and \$3.4 million as of December 31, 2019 and 2018, respectively. Market conditions and interest rates will significantly affect future assets and liabilities of Loral’s pension plan and other post-retirement benefits.

The pre-tax amounts recognized in accumulated other comprehensive loss as of December 31, 2019 and 2018 consist of (in thousands):

| | Pension Benefits | | Other Benefits | |
|----------------|-------------------------|-------------|-----------------------|-------------|
| | December 31, | | December 31, | |
| | 2019 | 2018 | 2019 | 2018 |
| Actuarial loss | \$ (18,613) | \$ (16,728) | \$ (32) | \$ (4) |

The amounts recognized in other comprehensive (loss) income during the years ended December 31, 2019 and 2018 consist of (in thousands):

| | Year Ended December 31, | | | |
|-------------------------------------------------------|--------------------------------|-----------------------|-------------------------|-----------------------|
| | 2019 | | 2018 | |
| | Pension Benefits | Other Benefits | Pension Benefits | Other Benefits |
| Actuarial (loss) gain during the period | \$ (2,891) | \$ (30) | \$ 1,172 | \$ 36 |
| Amortization of actuarial loss | 1,006 | 2 | 1,041 | 8 |
| Amortization of prior service cost | — | — | — | 22 |
| Total recognized in other comprehensive (loss) income | \$ (1,885) | \$ (28) | \$ 2,213 | \$ 66 |

Amounts recognized in the balance sheet consist of (in thousands):

| | Pension Benefits | | Other Benefits | |
|-----------------------|-------------------------|-------------|-----------------------|-------------|
| | December 31, | | December 31, | |
| | 2019 | 2018 | 2019 | 2018 |
| Current Liabilities | \$ — | \$ — | \$ 77 | \$ 69 |
| Long-Term Liabilities | 17,013 | 14,757 | 434 | 410 |
| | \$ 17,013 | \$ 14,757 | \$ 511 | \$ 479 |

The accumulated pension benefit obligation was \$54.2 million and \$48.2 million at December 31, 2019 and 2018, respectively.

During 2019, we contributed \$0.9 million to the qualified pension plan and our contributions for the other employee post-retirement benefits were not significant. During 2020, based on current estimates, we expect our contributions to the qualified pension plan will be approximately \$2.7 million. We expect that our funding of other employee post-retirement benefits during 2020 will not be significant.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The following table provides the components of net periodic cost included in income from continuing operations for the plans for the years ended December 31, 2019 and 2018 (in thousands):

| | Pension Benefits | | Other Benefits | |
|---------------------------------------------------|-------------------------|---------------|-------------------------|--------------|
| | Year Ended December 31, | | Year Ended December 31, | |
| | 2019 | 2018 | 2019 | 2018 |
| Service cost ⁽¹⁾ | \$ 722 | \$ 715 | \$ — | \$ 1 |
| Interest cost ⁽²⁾ | 2,018 | 1,855 | 21 | 18 |
| Expected return on plan assets ⁽²⁾ | (2,432) | (2,628) | — | — |
| Amortization of prior service cost ⁽²⁾ | — | — | — | 22 |
| Amortization of net actuarial loss ⁽²⁾ | 1,006 | 1,041 | 2 | 8 |
| Net periodic cost | <u>\$ 1,314</u> | <u>\$ 983</u> | <u>\$ 23</u> | <u>\$ 49</u> |

(1) Included in general and administrative expenses.

(2) Included in other expense.

Assumptions

Assumptions used to determine net periodic cost:

| | Year Ended December 31, | |
|--------------------------------|-------------------------|-------|
| | 2019 | 2018 |
| Discount rate | 4.25% | 3.50% |
| Expected return on plan assets | 7.25% | 7.25% |
| Rate of compensation increase | 4.25% | 4.25% |

Assumptions used to determine the benefit obligation:

| | December 31, | |
|-------------------------------|--------------|-------|
| | 2019 | 2018 |
| Discount rate | 3.25% | 4.25% |
| Rate of compensation increase | 4.25% | 4.25% |

The expected long-term rate of return on pension plan assets is selected by taking into account the expected duration of the projected benefit obligation for the plans, the asset mix of the plans and the fact that the plan assets are actively managed to mitigate risk. Our expected long-term rate of return on plan assets for 2020 is 7.00%.

As of December 31, 2019 and 2018, the Company contributions remaining for other benefits were primarily for fixed amounts. Therefore, future health care cost trend rates will not affect Company costs and accumulated post-retirement benefit obligation.

Plan Assets

The Company has established the pension plan as a retirement vehicle for participants and as a funding vehicle to secure promised benefits. The investment goal is to provide a total return that over time will earn a rate of return to satisfy the benefit obligations given investment risk levels, contribution amounts and expenses. The pension plan invests in compliance with the Employee Retirement Income Security Act 1974, as amended (“ERISA”), and any subsequent applicable regulations and laws.

The Company has adopted an investment policy for the management and oversight of the pension plan. It sets forth the objectives for the pension plan, the strategies to achieve these objectives, procedures for monitoring and control and the delegation of responsibilities for the oversight and management of pension plan assets.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The Company's Board of Directors has delegated primary fiduciary responsibility for pension assets to an investment committee. In carrying out its responsibilities, the investment committee establishes investment policy, makes asset allocation decisions, determines asset class strategies and retains investment managers to implement asset allocation and asset class strategy decisions. It is responsible for the investment policy and may amend such policy from time to time.

Pension plan assets are invested in various asset classes in what we believe is a prudent manner for the exclusive purpose of providing benefits to participants. U.S. equities are held for their long-term expected return premium over fixed income investments and inflation. Non-U.S. equities are held for their expected return premium (along with U.S. equities), as well as diversification relative to U.S. equities and other asset classes. Fixed income investments are held for diversification relative to equities. Real assets are held for diversification relative to equities and fixed income. Alternative investments are held for both diversification and higher returns than those typically available in traditional asset classes.

Asset allocation policy is the principal method for achieving the pension plan's investment objectives stated above. Asset allocation policy is reviewed regularly by the investment committee. The pension plan's actual and targeted asset allocations, are as follows:

| | December 31, 2019 | Target Allocation | |
|-----------------------------------|-------------------|-------------------|--------------|
| | Actual Allocation | Target | Target Range |
| Liquid return-seeking investments | 61% | 56.5% | 45-65% |
| Alternative investments | 9% | 14.5% | 0-20% |
| Fixed income investments | 30% | 29.0% | 20-40% |
| | <u>100%</u> | <u>100%</u> | <u>100%</u> |

The target allocation within the liquid return-seeking portfolio is 75% global equities, 15% marketable real assets and 10% fixed income. Allocations may vary by up to 5% from these targets.

The pension plan's assets are actively managed using a multi-asset, multi-style, multi-manager investment approach. Portfolio risk is controlled through this diversification process and monitoring of money managers. Consideration of such factors as differing rates of return, volatility and correlation are utilized in the asset and manager selection process. Diversification reduces the impact of losses in single investments. Performance results and fund accounting are provided to the Company by Russell on a monthly basis. Periodic reviews of the portfolio are performed by the investment committee with Russell. These reviews typically consist of a market and economic review, a performance review, an allocation review and a strategy review. Performance is judged by investment type against market indexes. Allocation adjustments or fund changes may occur after these reviews. Performance is reported to the Company's Board of Directors at quarterly board meetings.

Fair Value Measurements

The values of the fund trusts are calculated using systems and procedures widely used across the investment industry. Generally, investments are valued based on information in financial publications of general circulation, statistical and valuation services, discounted cash flow methodology, records of security exchanges, appraisal by qualified persons, transactions and bona fide offers.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The table below provides the fair values of the Company’s pension plan assets, by asset category, at December 31, 2019 and 2018. The Company’s pension plan assets are mainly held in commingled employee benefit fund trusts.

| Asset Category | Fair Value Measurements | | | | | Assets Measured at NAV ⁽¹⁾ |
|-----------------------------------------------------------|-------------------------|------------|---------|---------|----------|---------------------------------------|
| | Total | Percentage | Level 1 | Level 2 | Level 3 | |
| (Dollars in thousands) | | | | | | |
| At December 31, 2019 | | | | | | |
| Liquid return-seeking: | | | | | | |
| Multi-asset fund ⁽²⁾ | \$ 23,127 | 61% | | | | \$ 23,127 |
| Fixed income securities: | | | | | | |
| Commingled funds ⁽³⁾ | 11,463 | 30% | | | | 11,463 |
| Alternative investments: | | | | | | |
| Equity long/short fund ⁽⁴⁾ | 1,349 | 4% | | | \$ 1,349 | |
| Private equity fund ⁽⁵⁾ | 48 | 0% | | | | 48 |
| Distressed opportunity limited partnership ⁽⁶⁾ | 463 | 1% | | | | 463 |
| Multi-strategy limited partnership ⁽⁷⁾ | 1,696 | 4% | | | | 1,696 |
| | 3,556 | 9% | — | — | 3,556 | — |
| | \$ 38,146 | 100% | — | — | \$ 3,556 | \$ 34,590 |
| At December 31, 2018 | | | | | | |
| Liquid return-seeking: | | | | | | |
| Multi-asset fund ⁽²⁾ | \$ 20,251 | 59% | | | | \$ 20,251 |
| Fixed income securities: | | | | | | |
| Commingled funds ⁽³⁾ | 10,869 | 32% | | | | 10,869 |
| Alternative investments: | | | | | | |
| Equity long/short fund ⁽⁴⁾ | 1,002 | 3% | | | \$ 1,002 | |
| Private equity fund ⁽⁵⁾ | 76 | 0% | | | | 76 |
| Distressed opportunity limited partnership ⁽⁶⁾ | 463 | 1% | | | | 463 |
| Multi-strategy limited partnership ⁽⁷⁾ | 1,602 | 5% | | | | 1,602 |
| | 3,143 | 9% | — | — | 3,143 | — |
| | \$ 34,263 | 100% | — | — | \$ 3,143 | \$ 31,120 |

- (1) Assets measured using the net asset value (“NAV”) practical expedient have not been classified in the fair value hierarchy. The NAV practical expedient is based on the fair value of the underlying assets of the common/collective trust (“CCT”) minus its liabilities, and then divided by the number of units outstanding. The NAV practical expedient of a CCT is calculated based on a compilation of primarily observable market information.
- (2) A single fund that invests in global equities, marketable real assets and fixed income securities. The fund has no limitation on redemptions.
- (3) Investments in bonds representing many sectors of the broad bond market with both short-term and intermediate-term maturities. The fund has no limitation on redemptions.
- (4) Investments primarily in long and short positions in equity securities of U.S. and non-U.S. companies. The fund generally has semi-annual tender offer redemption periods on June 30 and December 31 and is reported on a one month lag.
- (5) Fund invests in portfolios of secondary interest in established venture capital, buyout, mezzanine and special situation funds on a global basis. Fund is valued on a quarterly lag with adjustment for subsequent cash activity. The fund terminates on July 12, 2020, subject to extension for up to two one-year periods. Earlier redemptions are not permitted.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

- (6) Investments mainly in discounted debt securities, bank loans, trade claims and other debt and equity securities of financially troubled companies. This partnership has semi-annual withdrawal rights on June 30 and December 31 with notice of 90 days and is reported on a one month lag.
- (7) Investments in a partnership that has a multi-strategy investment program and does not rely on a single investment model. This partnership has quarterly redemption rights with notice of 65 days and is reported on a one month lag.

Additional information pertaining to the changes in the fair value of the pension plan assets classified as Level 3 for the years ended December 31, 2019 and 2018 is presented below:

| | Fair Value Measurements Using Significant Unobservable Inputs (Level 3) | | | | Total |
|----------------------------|----------------------------------------------------------------------------|------------------------------|-----------------------------------------------|---------------------------|----------|
| | Private Equity Fund | Equity Long/Short Fund | Distressed Opportunity Ltd. Partnership | Multi Strategy Fund | |
| | (In thousands) | | | | |
| Balance, January 1, 2018 | \$ 83 | \$ 1,067 | \$ 504 | \$ 1,572 | \$ 3,226 |
| Unrealized gain | 10 | (65) | (41) | 30 | (66) |
| Sales | (17) | — | — | — | (17) |
| Balance, December 31, 2018 | 76 | 1,002 | 463 | 1,602 | 3,143 |
| Unrealized gain (loss) | (23) | 347 | — | 94 | 418 |
| Sales | (5) | — | — | — | (5) |
| Balance, December 31, 2019 | \$ 48 | \$ 1,349 | \$ 463 | \$ 1,696 | \$ 3,556 |

Both the Equity Long/Short Fund and the Distressed Opportunity Limited Partnership are valued at each month-end based upon quoted market prices by the investment managers.

The Multi-Strategy Fund invests in various underlying securities. The fund's net asset value is calculated by the fund manager and is not publicly available. The fund manager accumulates all the underlying security values and uses them in determining the fund's net asset value.

The private equity fund and limited partnership valuations are primarily based on cost/price of recent investments, earnings/performance multiples, net assets, discounted cash flows, comparable transactions and industry benchmarks.

The annual audited financial statements of all funds are reviewed by the Company.

Benefit Payments

The following benefit payments, which reflect future services, as appropriate, are expected to be paid (in thousands):

| | Pension Benefits | Other Benefits |
|--------------|---------------------|-------------------|
| 2020 | \$ 2,103 | \$ 78 |
| 2021 | 2,267 | 68 |
| 2022 | 2,368 | 58 |
| 2023 | 2,527 | 50 |
| 2024 | 2,770 | 41 |
| 2025 to 2029 | 14,831 | 128 |

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Employee Savings (401k) Plan

We have an employee savings (401k) plan, to which the Company provides contributions which match up to 6% of a participant's base salary at a rate of 66%. The Company also makes retirement contributions to the savings (401k) plan, which provide added retirement benefits to employees hired on or after July 1, 2006, as they are not eligible to participate in our defined benefit pension plan. Retirement contributions are provided regardless of an employee's contribution to the savings (401k) plan. Matching contributions and retirement contributions are collectively known as Company contributions. Company contributions are made in cash and placed in each participant's age appropriate "life cycle" fund. For each of the years ended December 31, 2019 and 2018, Company contributions were \$0.1 million. Participants of the savings (401k) plan are able to redirect Company contributions to any available fund within the plan. Participants are also able to direct their contributions to any available fund.

12. Financial Instruments, Derivative Instruments and Hedging

Financial Instruments

The carrying amount of cash equivalents approximates fair value because of the short maturity of those instruments.

Foreign Currency

We are subject to the risks associated with fluctuations in foreign currency exchange rates. To limit this foreign exchange rate exposure, we attempt to denominate all contracts in U.S. dollars. Where appropriate, derivatives are used to minimize the risk of foreign exchange rate fluctuations to operating results and cash flows. We do not use derivative instruments for trading or speculative purposes.

Derivatives and Hedging Transactions

There were no derivative instruments as of December 31, 2019 and 2018.

13. Commitments and Contingencies

Financial Matters

In 2012, we sold our former subsidiary, SSL, to MDA Communications Holdings, Inc., a subsidiary of Maxar Technologies Inc. (formerly known as MacDonald, Dettwiler and Associates Ltd.) ("MDA") pursuant to the Purchase Agreement. Under the terms of the Purchase Agreement, we are obligated to indemnify MDA and its affiliates from liabilities with respect to certain pre-closing taxes. Our consolidated balance sheets include an indemnification refund receivable of \$0.6 million and \$2.4 million as of December 31, 2019 and 2018, respectively. Certain tax assessments against SSL for 2007 to 2010 have been settled, resulting in our having received during the second and third quarters of 2019 refunds of prior indemnification payments totaling \$1.8 million. The remaining receivable as of December 31, 2019 represents payments to date over the estimated fair value of the remaining liability for our indemnification of SSL pre-closing taxes where the final amounts have not yet been determined. Where appropriate, we intend vigorously to contest the underlying tax assessments, but there can be no assurance that we will be successful. Although no assurance can be provided, we do not believe that these tax-related matters will have a material adverse effect on our financial position or results of operations.

In connection with the sale in 2008 by Loral and certain of its subsidiaries and DASA Globalstar LLC to Globalstar Inc. of their respective interests in GdB, the Globalstar Brazilian service provider, Loral agreed to indemnify Globalstar Inc. and GdB for certain GdB pre-closing liabilities, primarily related to Brazilian taxes. Our consolidated balance sheets include liabilities of \$0.1 million and \$0.2 million as of December 31, 2019 and 2018, respectively, for indemnification liabilities relating to the sale of GdB.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

See Note 14 — Related Party Transactions — *Transactions with Affiliates* — *Telesat* for commitments and contingencies relating to our agreement to indemnify Telesat for certain liabilities.

Lease Arrangements

We lease a facility and certain equipment under agreements expiring at various dates. We may renew, extend or modify a lease covering facilities as needed. We have no sublease income in any of the periods presented.

We changed our method of accounting for leases in the first quarter of 2019 due to the adoption of ASC 842. We adopted ASC 842 as of January 1, 2019 using the modified retrospective transition method and elected to apply the transition as of the beginning of the period of adoption. Accordingly, financial information as of and for the year ended December 31, 2019 is presented under ASC 842, whereas the financial information as of and for the year ended December 31, 2018 is presented under ASC 840, *Leases*.

Upon adoption of ASC 842, we recognized a right-of-use asset and lease liability of \$0.3 million for an operating lease on our consolidated balance sheet as of January 1, 2019. In March 2019, the operating lease was modified by extending the lease termination date from June 30, 2019 to June 30, 2020 and increasing the rent for the extension period. In December 2019, the operating lease was further modified by extending the lease termination date to June 30, 2021. As a result, the right-of-use asset increased to \$1.0 million as of December 31, 2019. The right-of-use asset is being amortized over the life of the lease. Lease costs expensed for the years ended December 31, 2019 and 2018 were as follows (in thousands):

| | Lease Expense |
|------------------------------|----------------------|
| Year ended December 31, 2019 | \$ 677 |
| Year ended December 31, 2018 | 680 |

Lease payments for the year ended December 31, 2019 were \$0.7 million. The remaining lease term as of December 31, 2019 is 18 months, and we used a discount rate of 7.5% to compute the lease liability at inception and at each modification date.

The following is a reconciliation of the future operating lease payments to operating lease liability as of December 31, 2019 (in thousands):

| | |
|---------------------------------------------------|---------------|
| 2020 | \$ 701 |
| 2021 | 350 |
| Total operating lease payments | <u>1,051</u> |
| Less: Interest | <u>(54)</u> |
| Operating lease liability | <u>\$ 997</u> |
| <i>Amounts recognized in Balance Sheet</i> | |
| Other current liabilities | \$ 652 |
| Other liabilities | 345 |
| | <u>\$ 997</u> |

Legal Proceedings

We are not currently subject to any legal proceedings that, if decided adversely, could have a material adverse effect on our financial position or results of operations. In the future, however, we may become subject to legal proceedings and claims, either asserted or unasserted, that may arise in the ordinary course of business or otherwise.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

14. Related Party Transactions

MHR Fund Management LLC

Mark H. Rachesky, President of MHR Fund Management LLC (“MHR”), and Janet T. Yeung, a principal and the General Counsel of MHR, are members of Loral’s board of directors.

Various funds affiliated with MHR and Dr. Rachesky held, as of December 31, 2019 and December 31, 2018, approximately 39.9% of the outstanding voting common stock and 58.4% of the combined outstanding voting and non-voting common stock of Loral.

Transactions with Affiliates

Telesat

As described in Note 5, we own 62.7% of Telesat and account for our ownership interest under the equity method of accounting.

In connection with the acquisition of our ownership interest in Telesat (which we refer to as the Telesat transaction), Loral and certain of its subsidiaries, our Canadian co-owner, Public Sector Pension Investment Board (“PSP”) and one of its subsidiaries, Telesat 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 thereto and future shareholders of Telesat. The Shareholders Agreement also contains an agreement by Loral not to engage in a competing satellite communications business and agreements by the parties to the Shareholders Agreement not to solicit employees of Telesat or any of its subsidiaries. Additionally, the Shareholders Agreement details the matters requiring the approval of the shareholders of Telesat (including veto rights for Loral over certain extraordinary actions) and provides for preemptive rights for certain shareholders upon the issuance of certain capital shares of Telesat. The Shareholders Agreement also (i) restricts the ability of holders of certain shares of Telesat to transfer such shares unless certain conditions are met or approval of the transfer is granted by the directors of Telesat, (ii) provides for a right of first offer to certain Telesat shareholders if a holder of equity shares of Telesat wishes to sell any such shares to a third party and (iii) provides for, in certain circumstances, tag-along rights in favor of shareholders that are not affiliated with Loral if Loral sells equity shares and drag-along rights in favor of Loral in case Loral or its affiliate enters into an agreement to sell all of its Telesat equity securities.

In addition, the Shareholders Agreement provides for either PSP or Loral to initiate the process of conducting an initial public offering of the equity shares of Telesat (a “Telesat IPO”). In connection with our exploration of strategic initiatives to alter the status quo in our ownership of Telesat, in July 2015, we exercised our right under the Shareholders Agreement to require Telesat to conduct a Telesat IPO. Specifically, we requested that Telesat issue not more than 25 million newly issued shares of Telesat voting common stock. We also requested the termination of the Shareholders Agreement and the elimination of certain provisions in Telesat’s Articles of Incorporation, both of which we believe are important for a successful public offering. If those provisions are eliminated, an impediment to the conversion of our non-voting Telesat shares to voting shares would be eliminated. Termination or modification of the Shareholders Agreement and conversion of our non-voting shares to voting shares would enable us, after a Telesat IPO and subject to the receipt of any necessary regulatory approvals, to obtain majority voting control of Telesat. To date, we and PSP have not reached agreement on governance matters following a Telesat IPO. In the event a strategic transaction to combine Loral and Telesat into one public company that we are pursuing is not likely to be achievable in a timely manner or on satisfactory terms, we may further pursue our right to a Telesat IPO. There can be no assurance as to whether, when or on what terms a Telesat IPO, termination or modification of the Shareholders Agreement or any requested changes to Telesat’s Articles of Incorporation may occur or that any particular economic, tax, structural or other objectives or benefits with respect to a Telesat IPO will be achieved. If a Telesat IPO is expected to proceed under unfavorable terms or at an unfavorable price, we may withdraw our demand for a Telesat IPO.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Depending upon the outcome of discussions with PSP relating to Telesat strategic matters, we may assert certain claims against PSP for actions we believe violated our rights relating to the affairs of Telesat under the Telesat Shareholders Agreement and otherwise. In response to our claims, PSP has informed us that it believes that it may have claims against us, although we are not aware of the legal or factual basis for any such claims. We and PSP have agreed that, pending the outcome of our discussions, it would be beneficial to delay the commencement of any action relating to either party's claims and have entered into an agreement (the "Tolling Agreement") which preserves the parties' rights to assert against one another legal claims relating to Telesat. We also included Telesat as a party to the Tolling Agreement because, as a technical matter of Canadian law and for purposes of potentially seeking equitable relief, Telesat may be a necessary party. There can be no assurance that if the Tolling Agreement lapses that we and PSP will not pursue legal claims against one another relating to Telesat. If we pursue claims against PSP, there can be no assurance that our claims will be successful or that the relief we seek will be granted. If PSP pursues claims against us, there can be no assurance that PSP will not prevail on its claims.

Under the Shareholders Agreement, in the event that, except in certain limited circumstances, either (i) ownership or control, directly or indirectly, by Dr. Rachesky of Loral's voting stock falls below certain levels other than in connection with certain specified circumstances, including an acquisition by a Strategic Competitor (as defined in the Shareholders Agreement) or (ii) there is a change in the composition of a majority of the members of the Loral Board of Directors over a consecutive two-year period without the approval of the incumbent directors, Loral will lose its veto rights relating to certain extraordinary actions by Telesat and its subsidiaries. In addition, after either of these events, PSP will have certain rights to enable it to exit from its investment in Telesat, including a right to cause Telesat to conduct an initial public offering in which PSP's shares would be the first shares offered or, if no such offering has occurred within one year due to a lack of cooperation from Loral or Telesat, to cause the sale of Telesat and to drag along the other shareholders in such sale, subject to Loral's right to call PSP's shares at fair market value.

The Shareholders Agreement provides for a board of directors of Telesat consisting of 10 directors, three nominated by Loral, three nominated by PSP and four independent directors to be selected by a nominating committee comprised of one PSP nominee, one nominee of Loral and one of the independent directors then in office. Each party to the Shareholders Agreement is obligated to vote all of its Telesat shares for the election of the directors nominated by the nominating committee. Pursuant to action by the board of directors taken on October 31, 2007, Dr. Rachesky, who is non-executive Chairman of the Board of Directors of Loral, was appointed non-executive Chairman of the Board of Directors of Telesat. In addition, Michael B. Targoff, Loral's Vice Chairman, serves on the board of directors of Telesat.

On October 31, 2007, Loral and Telesat entered into a consulting services agreement (the "Consulting Agreement"). Pursuant to the terms of the Consulting Agreement, Loral provides to Telesat certain non-exclusive consulting services in relation to the business of Loral Skynet which was transferred to Telesat as part of the Telesat transaction as well as with respect to certain aspects of the satellite communications business of Telesat. The Consulting Agreement has a term of seven-years with an automatic renewal for an additional seven-year term if Loral is not then in material default under the Shareholders Agreement. Upon expiration of the initial term on October 31, 2014, the Consulting Agreement was automatically renewed for the additional seven-year term. In exchange for Loral's services under the Consulting Agreement, Telesat pays Loral an annual fee of \$5.0 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. Our general and administrative expenses for each of the years ended December 31, 2019 and 2018, are net of income of \$5.0 million related to the Consulting Agreement. Loral received payments in cash from Telesat, net of withholding taxes, of \$4.8 million for each of the years ended December 31, 2019 and 2018.

In connection with the acquisition of our ownership interest in Telesat in 2007, Loral retained the benefit of tax recoveries related to the transferred assets and indemnified Telesat ("Telesat Indemnification") for certain liabilities, including Loral Skynet's tax liabilities arising prior to January 1, 2007. The Telesat Indemnification includes certain tax disputes currently under review in various jurisdictions including Brazil. The Brazilian tax authorities challenged Loral Skynet's historical characterization of its revenue generated in Brazil for the years 2003 to 2006. Telesat received and challenged, on Loral Skynet's behalf, tax assessments from Brazil totaling approximately \$0.9 million. The Company believes that Loral Skynet's filing position will ultimately be sustained requiring no payment under the Telesat Indemnification. There can be no assurance that there will be no future claims under the Telesat Indemnification related to tax disputes.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Loral's employees and retirees participate in certain welfare plans sponsored or managed by Telesat. Loral pays Telesat an annual administrative fee of \$0.1 million and reimburses Telesat for the plan costs attributable to Loral participants.

Loral, along with Telesat, PSP and 4440480 Canada Inc., an indirect wholly-owned subsidiary of Loral (the "Special Purchaser"), entered into stock option grant agreements (the "Stock Option Grant Agreements") and a restricted stock unit grant agreement (the "RSU Grant Agreement," and, together with the Stock Option Grant Agreements, the "Grant Agreements") with respect to shares in Telesat with certain executives of Telesat (each, a "Participant" and collectively, the "Participants"). Each of the Participants is or was, at the time, an executive of Telesat.

The Stock Option Grant Agreements document grants to the Participants of Telesat stock options (including tandem SAR rights) and provide for certain rights, obligations and restrictions related to such stock options, which include, among other things: (w) the possible obligation of the Special Purchaser to purchase the shares in the place of Telesat should Telesat be prohibited by applicable law or under the terms of any credit agreement applicable to Telesat from purchasing such shares, or otherwise default on such purchase obligation, pursuant to the terms of the Stock Option Grant Agreements; and (x) the obligation of the Special Purchaser to purchase shares upon exercise by Telesat of its call right under Telesat's Management Stock Incentive Plan in the event of a Participant's termination of employment; and, in the case of certain executives, (y) the right of each such Participant to require the Special Purchaser or Loral to purchase a portion of the shares in Telesat owned by him in the event of exercise after termination of employment to cover taxes that are greater than the minimum withholding amount; and (z) the right of each such Participant to require Telesat to cause the Special Purchaser or Loral to purchase a portion of the shares in Telesat owned by him, or that are issuable to him under Telesat's Management Stock Incentive Plan at the relevant time, in the event that more than 90% of Loral's common stock is acquired by an unaffiliated third party that does not also purchase all of PSP's and its affiliates' interest in Telesat.

The RSU Grant Agreement documents a grant to the Participant of restricted stock units with respect to shares in Telesat and provides for certain rights, obligations and restrictions related to such restricted stock units, which include, among other things: (x) the possible obligation of the Special Purchaser to purchase the shares in the place of Telesat should Telesat be prohibited by applicable law or under the terms of any credit agreement applicable to Telesat from purchasing such shares, or otherwise default on such purchase obligation, pursuant to the terms of the RSU Grant Agreement; and (y) the obligation of the Special Purchaser to purchase shares upon exercise by Telesat of its call right under Telesat's Management Stock Incentive Plan in the event of the termination of the Participant's employment.

The Grant Agreements further provide that, in the event the Special Purchaser is required to purchase shares, such shares, together with the obligation to pay for such shares, shall be transferred to a subsidiary of the Special Purchaser, which subsidiary shall be wound up into Telesat, with Telesat agreeing to the acquisition of such subsidiary by Telesat from the Special Purchaser for nominal consideration and with the purchase price for the shares being paid by Telesat within ten (10) business days after completion of the winding-up of such subsidiary into Telesat.

In 2017, Loral received a \$242.7 million cash distribution from Telesat (see Note 5).

Other

As described in Note 5, we own 56% of XTAR, a joint venture between Loral and Hisdesat and account for our investment in XTAR under the equity method of accounting. SSL constructed XTAR's satellite, which was successfully launched in February 2005. XTAR and Loral have entered into a management agreement whereby Loral provides general and specific services of a technical, financial and administrative nature to XTAR. For the services provided by Loral, XTAR, until December 31, 2013, was charged a quarterly management fee equal to 3.7% of XTAR's quarterly gross revenues. Amounts due to Loral primarily due to the management agreement were \$6.7 million as of December 31, 2019 and 2018. Beginning in 2008, Loral and XTAR agreed to defer amounts owed to Loral under this agreement, and XTAR has agreed that its excess cash balance (as defined), will be applied at least quarterly towards repayment of receivables owed to Loral, as well as to Hisdesat and Telesat. No cash was received under this agreement for the years ended December 31, 2019 and 2018, and we had an allowance of \$6.6 million against these receivables as of December 31, 2019 and 2018. Loral and Hisdesat have agreed to waive future management fees for an indefinite period starting January 1, 2014.

LORAL SPACE & COMMUNICATIONS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Consulting Agreement

On December 14, 2012, Loral entered into a consulting agreement with Michael B. Targoff, Vice Chairman of the Company and former Chief Executive Officer and President. Pursuant to this agreement, Mr. Targoff is engaged as a part-time consultant to the Board to assist the Board with respect to the oversight of strategic matters relating to Telesat and XTAR. Under the agreement, Mr. Targoff receives consulting fees of \$120,000 per month and reimburses the Company for certain expenses. For each of the years ended December 31, 2019 and 2018, Mr. Targoff earned \$1,440,000 in consulting fees and reimbursed Loral net expenses of \$45,000.

SCHEDULE II

LORAL SPACE & COMMUNICATIONS INC.
VALUATION AND QUALIFYING ACCOUNTS
For the Year Ended December 31, 2019 and 2018
(In thousands)

| Description | Balance at Beginning of Period | Additions | | Balance at End of Period |
|-------------------------------------|-----------------------------------------------|----------------------------------------------|------------------------------------------|-----------------------------------------|
| | | Charged to Costs and Expenses | Charged to Other Accounts | |
| Year ended December 31, 2018 | | | | |
| Allowance for affiliate receivables | \$ 6,692 | \$ — | \$ — | \$ 6,692 |
| Deferred tax valuation allowance | \$ 124,036 | \$ 4,329 | \$ — | \$ 128,365 |
| Year ended December 31, 2019 | | | | |
| Allowance for affiliate receivables | \$ 6,692 | \$ — | \$ — | \$ 6,692 |
| Deferred tax valuation allowance | \$ 128,365 | \$ 118 | \$ — | \$ 128,483 |



Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors 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, 2019 and 2018, the related consolidated statements of income (loss), statements of comprehensive income (loss), statements of changes in shareholders’ equity, and statements of cash flows, for each of the three years in the period ended December 31, 2019, 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, 2019 and 2018, and its financial performance and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Change in Accounting Principle

As discussed in Note 3 to the financial statements, effective January 1, 2019, the Company has changed its method of accounting for leases due to the adoption of IFRS 16, Leases.

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 26, 2020

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

Telesat Canada

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

| <i>(in thousands of Canadian dollars)</i> | Notes | 2019 | 2018 | 2017 |
|---------------------------------------------------------------|-------|-------------------|--------------------|-------------------|
| Revenue | 6 | \$ 910,893 | \$ 902,932 | \$ 927,407 |
| Operating expenses | 7 | (165,499) | (185,827) | (187,687) |
| | | 745,394 | 717,105 | 739,720 |
| Depreciation | | (242,966) | (224,851) | (221,058) |
| Amortization | | (23,277) | (24,305) | (26,330) |
| Other operating (losses) gains, net | 8 | (862) | 743 | 5,902 |
| Operating income | | 478,289 | 468,692 | 498,234 |
| Interest expense | 9 | (258,261) | (237,786) | (200,144) |
| Loss on refinancing | 24 | (151,919) | — | — |
| Interest and other income | | 20,043 | 16,498 | 3,004 |
| (Loss) gain on changes in fair value of financial instruments | | (49,672) | (18,205) | 60,306 |
| Gain (loss) on foreign exchange | | 163,840 | (259,079) | 223,898 |
| Income (loss) before tax | | 202,320 | (29,880) | 585,298 |
| Tax expense | 10 | (15,122) | (61,056) | (80,245) |
| Net income (loss) | | \$ 187,198 | \$ (90,936) | \$ 505,053 |

See accompanying notes to the consolidated financial statements

Telesat Canada

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

| <i>(in thousands of Canadian dollars)</i> | Notes | 2019 | 2018 | 2017 |
|---------------------------------------------------------|-------|-------------------|--------------------|-------------------|
| Net income (loss) | | \$ 187,198 | \$ (90,936) | \$ 505,053 |
| Other comprehensive (loss) income | | | | |
| Items that may be reclassified into profit or loss | | | | |
| Foreign currency translation adjustments | | (50,465) | 44,459 | (48,563) |
| Items that will not be reclassified into profit or loss | | | | |
| Actuarial gains (losses) on employee benefit plans | 30 | 1,134 | 7,755 | (5,171) |
| Tax (expense) recovery | | (403) | (2,031) | 673 |
| Other comprehensive (loss) income | | (49,734) | 50,183 | (53,061) |
| Total comprehensive income (loss) | | \$ 137,464 | \$ (40,753) | \$ 451,992 |

See accompanying notes to the consolidated financial statements

Telesat Canada

Consolidated Statements of Changes in Shareholders' Equity

| <i>(in thousands of Canadian dollars)</i> | Notes | Common shares | Preferred shares | Total share capital | Accumulated earnings | Equity-settled employee benefits reserve | Foreign currency translation reserve | Total reserves | Total shareholders' equity |
|--------------------------------------------------------------------|-------|------------------|-------------------|---------------------|----------------------|------------------------------------------|--------------------------------------|------------------|----------------------------|
| 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 Director Voting 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 | 29 | — | — | — | — | 2,856 | — | 2,856 | 2,856 |
| Balance as at December 31, 2017 | | <u>\$ 26,580</u> | <u>\$ 126,102</u> | <u>\$ 152,682</u> | <u>\$ 968,408</u> | <u>\$ 31,549</u> | <u>\$ (9,818)</u> | <u>\$ 21,731</u> | <u>\$ 1,142,821</u> |
| 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 | | — | — | — | (38,516) | — | 322 | 322 | (38,194) |
| Other comprehensive income, net of tax expense of \$2,031 | | — | — | — | 5,724 | — | 44,459 | 44,459 | 50,183 |
| Share-based compensation | 29 | — | — | — | — | 29,505 | — | 29,505 | 29,505 |
| Balance as at December 31, 2018 | | <u>\$ 26,580</u> | <u>\$ 127,126</u> | <u>\$ 153,706</u> | <u>\$ 843,601</u> | <u>\$ 60,715</u> | <u>\$ 34,963</u> | <u>\$ 95,678</u> | <u>\$ 1,092,985</u> |
| Balance as at January 1, 2019 | | \$ 26,580 | \$ 127,126 | \$ 153,706 | \$ 843,601 | \$ 60,715 | \$ 34,963 | \$ 95,678 | \$ 1,092,985 |
| Net income | | — | — | — | 187,198 | — | — | — | 187,198 |
| Dividends declared on Director Voting Preferred shares | 25 | — | — | — | (20) | — | — | — | (20) |
| Issuance of share capital on exercise of stock appreciation rights | 25 | — | 385 | 385 | (455) | (144) | — | (144) | (214) |
| Issuance of share capital on settlement of restricted share units | 25 | — | 804 | 804 | — | (1,729) | — | (1,729) | (925) |
| Other comprehensive income (loss), net of tax expense of \$403 | | — | — | — | 731 | — | (50,465) | (50,465) | (49,734) |
| Share-based compensation | 29 | — | — | — | — | 16,035 | — | 16,035 | 16,035 |
| Balance as at December 31, 2019 | | <u>\$ 26,580</u> | <u>\$ 128,315</u> | <u>\$ 154,895</u> | <u>\$ 1,031,055</u> | <u>\$ 74,877</u> | <u>\$ (15,502)</u> | <u>\$ 59,375</u> | <u>\$ 1,245,325</u> |

See accompanying notes to the consolidated financial statements

Telesat Canada

Consolidated Balance Sheets

| <i>(in thousands of Canadian dollars)</i> | Notes | December 31, 2019 | December 31, 2018 |
|---------------------------------------------------|-------|---------------------|---------------------|
| Assets | | | |
| Cash and cash equivalents | 31 | \$ 1,027,222 | \$ 768,433 |
| Trade and other receivables | 11 | 64,062 | 45,631 |
| Other current financial assets | 12 | 210 | 18,779 |
| Prepaid expenses and other current assets | 13 | 43,724 | 16,381 |
| Total current assets | | 1,135,218 | 849,224 |
| Satellites, property and other equipment | 6, 16 | 1,458,933 | 1,703,039 |
| Deferred tax assets | 10 | 12,412 | 10,799 |
| Other long-term financial assets | 14 | 57,730 | 55,755 |
| Other long-term assets | 6, 15 | 8,264 | 7,912 |
| Intangible assets | 6, 17 | 802,791 | 811,154 |
| Goodwill | 18 | 2,446,603 | 2,446,603 |
| Total assets | | \$ 5,921,951 | \$ 5,884,486 |
| Liabilities | | | |
| Trade and other payables | 19 | \$ 26,247 | \$ 30,659 |
| Other current financial liabilities | 20 | 38,281 | 26,386 |
| Other current liabilities | 21 | 72,315 | 113,289 |
| Current indebtedness | 24 | 24,408 | 7,888 |
| Total current liabilities | | 161,251 | 178,222 |
| Long-term indebtedness | 24 | 3,688,391 | 3,716,340 |
| Deferred tax liabilities | 10 | 348,762 | 406,900 |
| Other long-term financial liabilities | 22 | 42,511 | 54,521 |
| Other long-term liabilities | 23 | 435,711 | 435,518 |
| Total liabilities | | 4,676,626 | 4,791,501 |
| Shareholders' Equity | | | |
| Share capital | 25 | 154,895 | 153,706 |
| Accumulated earnings | | 1,031,055 | 843,601 |
| Reserves | | 59,375 | 95,678 |
| Total shareholders' equity | | 1,245,325 | 1,092,985 |
| Total liabilities and shareholders' equity | | \$ 5,921,951 | \$ 5,884,486 |

See accompanying notes to the consolidated financial statements

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

| <i>(in thousands of Canadian dollars)</i> | Notes | 2019 | 2018 | 2017 |
|------------------------------------------------------------------------------------|-------|---------------------|-------------------|-------------------|
| Cash flows from operating activities | | | | |
| Net income (loss) | | \$ 187,198 | \$ (90,936) | \$ 505,053 |
| Adjustments to reconcile net income (loss) to cash flows from operating activities | | | | |
| Depreciation | | 242,966 | 224,851 | 221,058 |
| Amortization | | 23,277 | 24,305 | 26,330 |
| Tax expense | | 15,122 | 61,056 | 80,245 |
| Interest expense | | 258,261 | 237,786 | 200,144 |
| Interest income | | (20,268) | (12,415) | (6,024) |
| (Gain) loss on foreign exchange | | (163,840) | 259,079 | (223,898) |
| Loss (gain) on changes in fair value of financial instruments | | 49,672 | 18,205 | (60,306) |
| Share-based compensation | 29 | 16,035 | 29,505 | 2,856 |
| Loss on disposal of assets | 8 | 862 | 353 | 269 |
| Loss on refinancing | 24 | 151,919 | — | — |
| Other | | (100,078) | (91,580) | (49,040) |
| Income taxes paid, net of income taxes received | 31 | (95,455) | (106,308) | (62,991) |
| Interest paid, net of capitalized interest and interest received | 31 | (176,112) | (176,417) | (195,248) |
| Operating assets and liabilities | 31 | (13,942) | 88,813 | 48,252 |
| Net cash from operating activities | | 375,617 | 466,297 | 486,700 |
| Cash flows used in investing activities | | | | |
| Satellite programs, including capitalized interest | | (3,668) | (67,387) | (135,986) |
| Purchase of property and other equipment | | (8,345) | (15,997) | (10,616) |
| Purchase of intangible assets | | (27,597) | (19,923) | (18,011) |
| Net cash used in investing activities | | (39,610) | (103,307) | (164,613) |
| Cash flows used in financing activities | | | | |
| Repayment of indebtedness | 31 | (3,743,465) | (94,951) | (31,620) |
| Proceeds from indebtedness | 31 | 3,786,082 | — | — |
| Payment of early redemption premium | 24 | (43,940) | — | — |
| Payment of debt issue costs | 31 | (28,082) | (10,190) | (42,867) |
| Return of capital to shareholders | 25 | — | — | (506,135) |
| Payments of principal on lease liabilities | 31 | (1,252) | (29) | (30) |
| Satellite performance incentive payments | 31 | (9,644) | (9,037) | (8,436) |
| Settlement of derivatives | | — | — | 207 |
| Proceeds from exercise of stock options | | — | — | 77 |
| Dividends paid on Director Voting preferred shares | 25 | (20) | — | (10) |
| Net cash used in financing activities | | (40,321) | (114,207) | (588,814) |
| Effect of changes in exchange rates on cash and cash equivalents | | (36,897) | 40,605 | (36,634) |
| Increase (decrease) in cash and cash equivalents | | 258,789 | 289,388 | (303,361) |
| Cash and cash equivalents, beginning of year | | 768,433 | 479,045 | 782,406 |
| Cash and cash equivalents, end of year | 31 | \$ 1,027,222 | \$ 768,433 | \$ 479,045 |

See accompanying notes to the consolidated financial statements

Telesat Canada

Notes to the 2019 Consolidated Financial Statements (all amounts in thousands of Canadian dollars, except where otherwise noted)

1. BACKGROUND OF THE COMPANY

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 16 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, 2019, 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 26, 2020, 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, and those identified in Note 3 of the December 31, 2018 consolidated financial statements of Telesat Canada, 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 33.

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.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

3. CHANGES IN ACCOUNTING POLICIES

Leases

The Company has adopted IFRS 16, *Leases* (“IFRS 16”) with a date of initial adoption of January 1, 2019. The standard provides a single lease accounting model, requiring the recognition of a right-of-use asset and lease liability, except in limited circumstances.

The Company has chosen to measure the initial right-of-use asset at an amount equal to the lease liability as at January 1, 2019, adjusted for any prepayments made or any accrued lease payments. Each individual lease liability is initially measured at the present value of the lease payments over the remaining lease term, discounted using the Company’s incremental borrowing rate as at January 1, 2019 for that lease.

The weighted average incremental borrowing rate applied to lease liabilities recognized on the balance sheet as at January 1, 2019 was 4.65%.

The Company has elected to adopt IFRS 16 using a modified retrospective approach with the cumulative effect of initially applying the standard being recorded on the balance sheet. The comparative information has not been restated and continues to be reported under the accounting standards in effect in those periods.

The Company has elected to not recognize a right-of-use asset or lease liability for any lease that has a lease term of 12 months or less. The payments associated with these agreements are recognized as an operating expense on a straight-line basis over the lease term.

The following practical expedients have been elected:

- The Company has elected to grandfather the determination as to whether a transaction constituted a lease for all agreements entered into prior to January 1, 2019;
- The Company has elected to not recognize a right-of-use asset or lease liability for leases for which the lease term ends within 12 months of the date of initial adoption;
- The Company has elected to exclude initial direct costs from the measurement of the right-of-use asset at the date of initial application; and
- The Company has elected, for property leases, not to separate the non-lease components from the lease components, and instead account for each lease and any associated non-lease components within the contract as a single lease component.

After the commencement date, the right-of-use assets are measured applying the cost model and depreciated to the earlier of the end of the useful life of the asset or the end of the lease term on a straight-line basis. The lease liability is subsequently measured by increasing the carrying amount to reflect the interest on the lease, using the effective interest method, and by reducing the carrying amount to reflect the lease payments made.

The main impacts of this standard relate to the recognition of right-of-use assets and lease liabilities resulting in an increase in satellites, property and other equipment, other current liabilities and other long-term liabilities. In addition, there were some decreases in other current financial assets, prepaid expenses and other current assets, other long-term financial assets and other long-term financial liabilities as a result of the implementation of IFRS 16. The impact as at January 1, 2019 has been summarized below in the Impact on Opening Balance Sheet.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

3. CHANGES IN ACCOUNTING POLICIES (cont.)***Impact on Opening Balance Sheet***

The following table summarizes the increases (decreases) noted on the adoption of IFRS 16 on the balance sheet as at January 1, 2019.

| | |
|-------------------------------------------|-----------|
| Other current financial assets | \$ (27) |
| Prepaid expenses and other current assets | \$ (72) |
| Satellites, property and other equipment | \$ 26,350 |
| Other long-term financial assets | \$ (123) |
| Other current liabilities | \$ 1,069 |
| Other long-term financial liabilities | \$ (723) |
| Other long-term liabilities | \$ 25,782 |

Reconciliation of commitments to lease liabilities

The reconciliation between the commitments disclosed in Note 31 of the December 31, 2018 financial statements and the lease liabilities recognized as at January 1, 2019 in the consolidated financial statements at that date is as follows:

| | |
|--------------------------------------------------------------------------------------|------------------|
| Operating property leases | \$ 33,837 |
| Leases included in other operating commitments | 376 |
| Total leases included in Note 31 of the December 31, 2018 financial statements | <u>\$ 34,213</u> |
| Discounted using the Company's incremental borrowing rate | \$ 23,844 |
| Adjustments as a result of different treatments of extension and termination options | 12,441 |
| Leases not capitalized due to exemptions | (551) |
| Variable costs included in commitments and contingencies | (8,850) |
| Lease liabilities as at January 1, 2019 | <u>\$ 26,884</u> |

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 was adopted on January 1, 2019. The interpretation had no impact on the consolidated financial statements.

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 operating 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.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

4. SIGNIFICANT ACCOUNTING POLICIES (cont.)

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 income (loss).

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

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

4. SIGNIFICANT ACCOUNTING POLICIES (cont.)

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.

Leases

At the inception of a contract, the Company assesses whether a contract is, or contains, a lease based on whether or not the contract conveys the right to control the use of the asset for a period of time in exchange for consideration.

The Company recognizes a right-of-use asset and lease liability at the lease commencement date. The right-of-use asset is initially measured based on the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, less any lease incentives received. The right-of-use assets are depreciated to the earlier of the end of the useful life of the asset or the end of the lease term. Each individual lease liability is initially measured at the present value of the lease payments over the respective lease term, discounted using the Company's incremental borrowing rate for that lease.

The lease term is the non-cancellable period determined for each of the leases considering the option to extend when it is reasonably certain that the Company will exercise the option or the option to terminate if it is reasonably certain that the Company will exercise the option.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

4. SIGNIFICANT ACCOUNTING POLICIES (cont.)

After the commencement date, the right-of-use assets are measured applying the cost model and depreciated to the earlier of the end of the useful life of the asset or the end of the lease term on a straight-line basis. The lease liability is subsequently measured by increasing the carrying amount to reflect the interest on the lease, using the effective interest method, and by reducing the carrying amount to reflect the lease payments made.

The lease liability is remeasured when there is a change in future lease payments, arising from a change in index or rate, or if there is a change in the assessment of whether the Company will exercise a purchase, extension or termination option. The amount of the remeasurement of the lease liability is also recognized as an adjustment to the right-of-use asset, or is recorded in the statement of income if the carrying amount of the right-of-use asset has been reduced to zero.

The Company has elected to not recognize a right-of-use asset or lease liability for any lease that has a lease term of 12 months or less. The payments associated with these agreements would be recognized as an operating expense on a straight-line basis over the lease term.

The Company has also elected the practical expedient, for property leases, not to separate the non-lease components from the lease components, and instead account for each lease and any associated non-lease components within the contract as a single lease component.

Government Grants

Government grants are recognized where there is a reasonable assurance that the grant will be received and the attached conditions will be complied with.

When the grant relates to an expense, the grant is recorded as a deduction to the related expense incurred over the same period.

When the grant relates to an asset, the grant is deducted from the carrying amount of the related asset as the grant is receivable.

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, 2019.

| | Years |
|------------------------------|----------|
| Satellites | 12 to 15 |
| Right-of-use assets | 1 to 27 |
| 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.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

4. SIGNIFICANT ACCOUNTING POLICIES (cont.)

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 (losses) gains, 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 (losses) gains, 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 or impairment reversals 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 possible 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 (losses) gains, net.

Telesat Canada**Notes to the 2019 Consolidated Financial Statements - (Continued)**
(all amounts in thousands of Canadian dollars, except where otherwise noted)**4. SIGNIFICANT ACCOUNTING POLICIES (cont.)*****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, 2019.

| | Years |
|------------------------|--------------|
| Revenue backlog | 17 |
| Customer relationships | 6 to 21 |
| Customer contracts | 15 |
| Concession rights | 5 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.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

4. SIGNIFICANT ACCOUNTING POLICIES (cont.)

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.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

4. SIGNIFICANT ACCOUNTING POLICIES (cont.)

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 royalty, 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 income (loss) as part of (loss) gain on changes in fair value of financial instruments.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

4. SIGNIFICANT ACCOUNTING POLICIES (cont.)

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 income (loss) 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 income (loss) 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, the 6.5% Senior Notes and the 4.875% Senior Secured Notes (and former senior secured credit facility and 8.875% 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

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

4. SIGNIFICANT ACCOUNTING POLICIES (cont.)

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 2019 was determined based on membership data as at December 31, 2017. The accrued benefit obligation as at December 31, 2019 was determined based on the membership data as at December 31, 2018, and extrapolated one year based on December 31, 2019 assumptions. For certain Canadian post-retirement benefits, the expense for 2019 was based on membership and eligibility data as at September 30, 2018 and the accrued benefit obligations as at December 31, 2019 was based on membership data as at September 30, 2018. The accrued benefit obligation for certain American post-retirement benefits as at December 31, 2019 was determined based on membership data as at January 1, 2019, and extrapolated, based on December 31, 2019 assumptions. The most recent valuation of the pension plans for funding purposes was as of December 31, 2018. Valuations will be performed for the pension plans as of December 31, 2019.

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.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

4. SIGNIFICANT ACCOUNTING POLICIES (cont.)

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
- ii) 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 Policies

The IASB periodically issues new and amended accounting standards. There are no new and amended standards determined to be applicable to Telesat.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

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.

Lease Liability

The Company's accounting policy relating to leases is described in Note 4. Judgment by management is required in the determination of the likelihood that the lease renewal periods will be exercised as well as the determination of the incremental borrowing rate.

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 income (loss) 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 \$32.8 million and \$7.9 million, respectively, as at December 31, 2019 (December 31, 2018 — \$52.4 million and \$5.6 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 income (loss) could vary.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

5. CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES (cont.)

Impairment of goodwill

Goodwill represented \$2,446.6 million of total assets as at December 31, 2019 and 2018. 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 \$802.8 million of total assets as at December 31, 2019 (December 31, 2018 — \$811.2 million). Impairment of intangible assets is tested annually or more frequently if indicators of impairment or reversal of a prior impairment loss exist. If a quantitative impairment analysis is required, it would require 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 substantively enacted tax laws, and its ability to utilize future tax deductions before they expire. Actual results could differ from expectations.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

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, | 2019 | 2018 | 2017 |
|--------------------------|-------------------|-------------------|-------------------|
| Broadcast | \$ 444,478 | \$ 455,125 | \$ 472,751 |
| Enterprise | 444,732 | 428,226 | 430,343 |
| Consulting and other | 21,683 | 19,581 | 24,313 |
| Revenue | \$ 910,893 | \$ 902,932 | \$ 927,407 |

Equipment sales included within the various services were as follows:

| Years ended December 31, | 2019 | 2018 | 2017 |
|------------------------------|-----------------|------------------|------------------|
| Broadcast | \$ 233 | \$ 315 | \$ 274 |
| Enterprise | 8,323 | 23,639 | 14,460 |
| Consulting and other | — | — | 389 |
| Total equipment sales | \$ 8,556 | \$ 23,954 | \$ 15,123 |

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, | 2019 | 2018 | 2017 |
|------------------------------|-------------------|-------------------|-------------------|
| Canada | \$ 395,235 | \$ 417,692 | \$ 415,575 |
| United States | 329,634 | 318,779 | 311,159 |
| Europe, Middle East & Africa | 50,911 | 61,317 | 80,532 |
| Latin America & Caribbean | 73,120 | 75,011 | 78,921 |
| Asia & Australia | 61,993 | 30,133 | 41,220 |
| Revenue | \$ 910,893 | \$ 902,932 | \$ 927,407 |

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, | 2019 | 2018 |
|-------------------------------------------------|---------------------|---------------------|
| Canada | \$ 682,518 | \$ 821,449 |
| Europe, Middle East & Africa | 685,562 | 775,055 |
| United States | 88,360 | 103,567 |
| All others | 2,493 | 2,968 |
| Satellites, property and other equipment | \$ 1,458,933 | \$ 1,703,039 |

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

6. SEGMENT INFORMATION (cont.)

| As at December 31, | 2019 | 2018 |
|---------------------------|-------------------|-------------------|
| Canada | \$ 733,880 | \$ 734,751 |
| United States | 39,395 | 41,935 |
| Latin America & Caribbean | 21,908 | 25,962 |
| All others | 7,608 | 8,506 |
| Intangible assets | \$ 802,791 | \$ 811,154 |

Other long-term assets by geographic regions were allocated as follows:

| As at December 31, | 2019 | 2018 |
|-------------------------------|-----------------|-----------------|
| Canada | \$ 7,624 | \$ 6,925 |
| Europe, Middle East & Africa | 640 | 987 |
| Other long-term assets | \$ 8,264 | \$ 7,912 |

Goodwill was not allocated to geographic regions.

Major Customers

For the years ended December 31, 2019, 2018 and 2017, there were three significant customers each representing more than 10% of consolidated revenue.

7. OPERATING EXPENSES

| Years ended December 31, | 2019 | 2018 | 2017 |
|---------------------------------------------------|-------------------|-------------------|-------------------|
| Compensation and employee benefits ^(a) | \$ 87,943 | \$ 98,350 | \$ 85,135 |
| Other operating expenses ^(b) | 40,332 | 45,596 | 42,895 |
| Cost of sales ^(c) | 37,224 | 41,881 | 59,657 |
| Operating expenses | \$ 165,499 | \$ 185,827 | \$ 187,687 |

- (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, 2019 included \$1.0 million of expenses associated with a special payment to stock option holders, including associated benefit expenses (December 31, 2018 — \$1.3 million, December 31, 2017 — \$14.2 million).
- (b) Other operating expenses included general and administrative expenses, marketing expenses, in-orbit insurance expenses, professional fees and facility costs. The balance for year ended December 31, 2019 included \$1.7 million of leases not capitalized due to exemptions and variable lease payments not included in the measurement of the leases liabilities.
- (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 (LOSSES) GAINS, NET

| Years ended December 31, | 2019 | 2018 | 2017 |
|--------------------------------------------|-----------------|---------------|-----------------|
| Insurance proceeds | \$ — | \$ — | \$ 6,171 |
| Loss on disposal of assets | (862) | (353) | (269) |
| Other | — | 1,096 | — |
| Other operating (losses) gains, net | \$ (862) | \$ 743 | \$ 5,902 |

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

9. INTEREST EXPENSE

| Years ended December 31, | 2019 | 2018 | 2017 |
|------------------------------------------------------|-------------------|-------------------|-------------------|
| Interest on indebtedness | \$ 239,805 | \$ 231,015 | \$ 209,136 |
| Interest on derivative instruments | (13,191) | (7,105) | 3,071 |
| Interest on satellite performance incentive payments | 3,536 | 4,134 | 4,750 |
| Interest on significant financing component | 25,484 | 27,374 | — |
| Interest on employee benefit plans (Note 30) | 1,339 | 1,488 | 1,511 |
| Interest on leases | 1,288 | — | — |
| Capitalized interest (Note 16) | — | (19,120) | (18,324) |
| Interest expense | \$ 258,261 | \$ 237,786 | \$ 200,144 |

10. INCOME TAXES

| Years ended December 31, | 2019 | 2018 | 2017 |
|--------------------------|------------------|------------------|------------------|
| Current tax expense | \$ 71,202 | \$ 98,841 | \$ 111,510 |
| Deferred tax recovery | (56,080) | (37,785) | (31,265) |
| Tax expense | \$ 15,122 | \$ 61,056 | \$ 80,245 |

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:

| Year ended December 31, | 2019 | 2018 | 2017 |
|-----------------------------------------------------------------------|------------------|------------------|------------------|
| Income (loss) before tax | \$ 202,320 | \$ (29,880) | \$ 585,298 |
| Multiplied by the statutory income tax rates | 26.56% | 26.59% | 26.60% |
| | 53,736 | (7,945) | 155,689 |
| Income tax recorded at rates different from the Canadian tax rate | (13,017) | (10,823) | (9,833) |
| Permanent differences | (6,760) | 50,458 | (36,241) |
| Effect on deferred tax balances due to changes in income tax rates | (2,829) | (427) | (2,120) |
| Effect of temporary differences not recognized as deferred tax assets | (16,681) | 35,416 | (25,789) |
| Previously unrecognized tax losses and credits | — | (6,110) | — |
| Other | 673 | 487 | (1,461) |
| Tax expense | \$ 15,122 | \$ 61,056 | \$ 80,245 |
| Effective income tax rate | 7.47% | (204.34)% | 13.71% |

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:

| As at December 31, | 2019 | 2018 |
|------------------------------------|------------------|------------------|
| Deferred tax assets | | |
| Foreign tax credits | \$ 5,710 | \$ 4,245 |
| Corporate interest restriction | 11,393 | 7,176 |
| Financing charges | 17,152 | — |
| Unrealized foreign exchange losses | — | 4,488 |
| Deferred revenue | 13,071 | 20,729 |
| Loss carry forwards | 29,351 | 22,316 |
| Employee benefits | 8,282 | 8,374 |
| Other | 2,209 | 1,794 |
| Total deferred tax assets | \$ 87,168 | \$ 69,122 |

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

10. INCOME TAXES (cont.)

| As at December 31, | 2019 | 2018 |
|---------------------------------------|---------------------|---------------------|
| Deferred tax liabilities | | |
| Capital assets | \$ (178,317) | \$ (215,248) |
| Intangible assets | (237,269) | (240,595) |
| Finance charges | — | (9,380) |
| Unrealized foreign exchange gains | (7,932) | — |
| Total deferred tax liabilities | \$ (423,518) | \$ (465,223) |
| Deferred tax liabilities, net | \$ (336,350) | \$ (396,101) |

Deferred income tax assets of \$12.4 million (December 31, 2018 — \$10.8 million) on the balance sheet relate to the United Kingdom and Canada tax jurisdictions (December 31, 2018 — Brazil and United Kingdom tax jurisdictions).

Losses and tax credits*Foreign tax credit*

The Company has recognized Canadian foreign tax credits of \$3.5 million which may only be used to offset taxes payable. These credits are due to expire between 2020 to 2026.

The Company has United Kingdom foreign tax credits of \$4.8 million which have no expiry. Of this amount, the Company expects to use \$2.2 million to offset United Kingdom taxes payable and has therefore recognized a deferred tax asset of this amount.

Loss carry forwards

The Company has generated Canadian capital gains of \$43.9 million during the year from the repayment of the U.S. dollar denominated indebtedness which were offset with the capital losses from prior years. As at December 31, 2019, the Company had Canadian capital losses carried forward of \$600.2 million, with no expiration date, that can only be applied against capital gains. A deferred tax asset of \$7.9 million has been recognized with respect to these losses to reflect the extent to which the Company expects to utilize the losses to offset unrealized capital gains as of December 31, 2019.

The Company has tax losses in the United Kingdom of \$125.0 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 5.0 million annual allowance of unrestricted taxable income not subject to the 50% limitation. A deferred tax asset of \$21.2 million has been recognized as the Company expects the tax losses to be utilized.

The Company also has tax losses carried forward of \$2.2 million in Brazil which may be carried forward without any time limitation. However, the use of tax loss carry forwards is limited to 30% of taxable income generated in a carry forward year. No deferred tax asset has been recognized in respect of these losses. The Company also has Brazilian deductible temporary difference of \$6.5 million for which no deferred tax asset has been recognized.

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.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

10. INCOME TAXES (cont.)

Unused interest deductions may be applied against future taxable income and can be carried forward indefinitely. A deferred tax asset of \$11.4 million has been recognized as the Company expects to deduct these amounts against future taxable income.

Investments in subsidiaries

As at December 31, 2019, the Company had temporary differences of \$25.8 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, | 2019 | 2018 |
|------------------------------------------------------|------------------|------------------|
| Trade receivables | \$ 53,893 | \$ 44,358 |
| Trade receivables due from related parties (Note 34) | — | 28 |
| Less: Allowance for doubtful accounts | (1,779) | (5,136) |
| Net trade receivables | 52,114 | 39,250 |
| Other receivables | 11,948 | 6,381 |
| Trade and other receivables | \$ 64,062 | \$ 45,631 |

Allowance for doubtful accounts

The movement in the allowance for doubtful accounts was as follows:

| Years ended December 31, | 2019 | 2018 |
|----------------------------------------------------|----------|----------|
| Allowance for doubtful accounts, beginning of year | \$ 5,136 | \$ 2,662 |
| Provisions for impaired receivables | 604 | 73 |
| Cumulative effect adjustment ⁽¹⁾ | — | 2,754 |
| Receivables written off | (4,899) | (47) |
| Impact of foreign exchange | 938 | (306) |
| Allowance for doubtful accounts, end of year | \$ 1,779 | \$ 5,136 |

- (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

| As at December 31, | 2019 | 2018 |
|---------------------------------------|---------------|------------------|
| Security deposits | \$ 210 | \$ 147 |
| Derivative assets (Note 28) | — | 18,632 |
| Other current financial assets | \$ 210 | \$ 18,779 |

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

13. PREPAID EXPENSES AND OTHER CURRENT ASSETS

| As at December 31, | 2019 | 2018 |
|--------------------------------------------------|------------------|------------------|
| Prepaid expenses | \$ 12,896 | \$ 2,909 |
| Income tax recoverable | 26,730 | 10,329 |
| Inventory ^(a) | 3,556 | 2,429 |
| Deferred charges ^(b) | 307 | 475 |
| Other | 235 | 239 |
| Prepaid expenses and other current assets | \$ 43,724 | \$ 16,381 |

- (a) As at December 31, 2019, inventory consisted of \$1.4 million of finished goods (December 31, 2018 — \$2.2 million) and \$2.2 million of work in process (December 31, 2018 — \$0.2 million). During the year, \$7.0 million was recognized as cost of equipment sales and recorded as an operating expense (December 31, 2018 — \$17.7 million, December 31, 2017 — \$11.7 million).
- (b) Deferred charges included deferred financing charges relating to the Revolving Credit Facility (December 31, 2018 — former revolving credit facility).

14. OTHER LONG-TERM FINANCIAL ASSETS

| As at December 31, | 2019 | 2018 |
|-----------------------------------------|------------------|------------------|
| Long-term receivables | \$ 18,932 | \$ 12,170 |
| Security deposits | 5,977 | 9,789 |
| Derivative assets (Note 28) | 32,821 | 33,796 |
| Other long-term financial assets | \$ 57,730 | \$ 55,755 |

15. OTHER LONG-TERM ASSETS

| As at December 31, | 2019 | 2018 |
|-------------------------------|-----------------|-----------------|
| Prepaid expenses | \$ 640 | \$ 991 |
| Deferred charges (Note 13) | 1,039 | 753 |
| Income tax recoverable | 6,283 | 5,866 |
| Other | 302 | 302 |
| Other long-term assets | \$ 8,264 | \$ 7,912 |

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

16. SATELLITES, PROPERTY AND OTHER EQUIPMENT

| | Satellites | Property and other equipment | Right-of-use assets ⁽¹⁾ | Assets under construction | Total |
|------------------------------------------------------------------------|-----------------------|------------------------------|------------------------------------|---------------------------|-----------------------|
| Cost as at January 1, 2018 | \$ 3,180,178 | \$ 239,220 | \$ — | \$ 376,965 | \$ 3,796,363 |
| Additions | — | 538 | — | 78,373 | 78,911 |
| Cumulative effect adjustment ⁽¹⁾ | (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 | <u>3,669,570</u> | <u>255,055</u> | <u>—</u> | <u>11,137</u> | <u>3,935,762</u> |
| Cumulative effect adjustment (Note 3) | — | (474) | 26,732 | — | 26,258 |
| Additions | — | 797 | 2,798 | 7,843 | 11,438 |
| Disposals/retirements | (77,322) | (7,306) | (104) | — | (84,732) |
| Reclassifications and transfers from assets under construction | — | 7,652 | — | (7,652) | — |
| Impact of foreign exchange | (39,133) | (1,486) | (285) | (153) | (41,057) |
| Cost as at December 31, 2019 | <u>\$ 3,553,115</u> | <u>\$ 254,238</u> | <u>\$ 29,141</u> | <u>\$ 11,175</u> | <u>\$ 3,847,669</u> |
| Accumulated depreciation and impairment as at January 1, 2018 | \$ (1,857,192) | \$ (147,324) | \$ — | \$ — | \$ (2,004,516) |
| Depreciation | (209,987) | (14,864) | — | — | (224,851) |
| Cumulative effect adjustment ⁽¹⁾ | 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 | <u>(2,072,796)</u> | <u>(159,927)</u> | <u>—</u> | <u>—</u> | <u>(2,232,723)</u> |
| Cumulative effect adjustment (Note 3) | — | 92 | — | — | 92 |
| Depreciation | (225,675) | (14,890) | (2,401) | — | (242,966) |
| Disposals/retirements | 77,322 | 6,379 | — | — | 83,701 |
| Impact of foreign exchange | 2,328 | 798 | 34 | — | 3,160 |
| Accumulated depreciation and impairment as at December 31, 2019 | <u>\$ (2,218,821)</u> | <u>\$ (167,548)</u> | <u>\$ (2,367)</u> | <u>\$ —</u> | <u>\$ (2,388,736)</u> |
| Net carrying values | | | | | |
| As at December 31, 2018 | \$ 1,596,774 | \$ 95,128 | \$ — | \$ 11,137 | \$ 1,703,039 |
| As at December 31, 2019 | \$ 1,334,294 | \$ 86,690 | \$ 26,774 | \$ 11,175 | \$ 1,458,933 |

(1) A cumulative effect adjustment was recorded on January 1, 2018, as a result of the implementation of IFRS 15, *Revenue from Contracts with Customers* 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.

(2) Right-of-use assets consisted primarily of property leases.

Certain leases which were signed were not capitalized as at December 31, 2019. Based upon the assessed lease term, the expected undiscounted cash flows totaled \$10.8 million.

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 and Senior Secured Notes as at December 31, 2019 (December 31, 2018 — former senior secured credit facilities) (Note 24).

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

16. SATELLITES, PROPERTY AND OTHER EQUIPMENT (cont.)

Borrowing costs

For the year ended December 31, 2019 there were no borrowing costs capitalized (December 31, 2018 — \$19.1 million, December 31, 2017 — \$18.3 million). The average capitalization rate was 7% in 2018 and 5% in 2017. Of this balance, borrowing costs of \$0.4 million and \$1.2 million were capitalized to intangible assets for the years ended December 31, 2018 and 2017, respectively, with the remaining balance capitalized to satellites, property and other equipment.

Impairment

No impairment was recognized for the years ended December 31, 2019, 2018 and 2017.

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 | Intellectual property | Total indefinite life intangible assets |
|---------------------------------------------------------------------------|---------------|------------|-----------------------|-----------------------------------------|
| Cost as at 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 and January 1, 2019 | 609,995 | 17,000 | 47,049 | 674,044 |
| Additions ⁽¹⁾ | — | — | 20,137 | 20,137 |
| Disposals/retirements | — | — | — | — |
| Impact of foreign exchange | (1,974) | — | (1,364) | (3,338) |
| Cost as at December 31, 2019 | \$ 608,021 | \$ 17,000 | \$ 65,822 | \$ 690,843 |
| Accumulated impairment as at January 1, 2018 | \$ (1,100) | \$ — | \$ — | \$ (1,100) |
| Impairment | — | — | — | — |
| Accumulated impairment as at December 31, 2018 and January 1, 2019 | (1,100) | — | — | (1,100) |
| Impairment | — | — | — | — |
| Accumulated impairment as at December 31, 2019 | \$ (1,100) | \$ — | \$ — | \$ (1,100) |
| Net carrying values | | | | |
| As at December 31, 2018 | \$ 608,895 | \$ 17,000 | \$ 47,049 | \$ 672,944 |
| As at December 31, 2019 | \$ 606,921 | \$ 17,000 | \$ 65,822 | \$ 689,743 |

(1) Additions for intellectual property are net of a reduction related to the government grant of \$3.3 million.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

17. INTANGIBLE ASSETS (cont.)

The finite life intangible assets are summarized below.

| | Revenue backlog | Customer relationships | Customer contracts | Transponder rights | Concession rights | Other | Total finite life intangible assets |
|--------------------------------------------------------------------------------------------|---------------------|------------------------|--------------------|--------------------|-------------------|----------------|-------------------------------------|
| Cost as at 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 and January 1, 2019 | 235,955 | 198,727 | 23,142 | 16,718 | 32,874 | 59 | 507,475 |
| Additions | — | — | — | — | 162 | — | 162 |
| Disposals/retirements | (11,051) | — | (10,284) | — | (290) | — | (21,625) |
| Impact of foreign exchange | (1,240) | (251) | — | — | (2,598) | — | (4,089) |
| Cost as at December 31, 2019 | <u>\$ 223,664</u> | <u>\$ 198,476</u> | <u>\$ 12,858</u> | <u>\$ 16,718</u> | <u>\$ 30,148</u> | <u>\$ 59</u> | <u>\$ 481,923</u> |
| Accumulated amortization and impairment as at 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) |
| Accumulated amortization and impairment as at December 31, 2018 and January 1, 2019 | (207,770) | (130,564) | (12,116) | (11,866) | (6,912) | (37) | (369,265) |
| Amortization | (7,291) | (7,495) | (5,119) | (1,078) | (2,291) | (3) | (23,277) |
| Disposals/retirements | 11,051 | — | 10,284 | — | 234 | — | 21,569 |
| Impact of foreign exchange | 1,227 | 142 | — | — | 729 | — | 2,098 |
| Accumulated amortization and impairment as at December 31, 2019 | <u>\$ (202,783)</u> | <u>\$ (137,917)</u> | <u>\$ (6,951)</u> | <u>\$ (12,944)</u> | <u>\$ (8,240)</u> | <u>\$ (40)</u> | <u>\$ (368,875)</u> |
| Net carrying values | | | | | | | |
| As at December 31, 2018 | \$ 28,185 | \$ 68,163 | \$ 11,026 | \$ 4,852 | \$ 25,962 | \$ 22 | \$ 138,210 |
| As at December 31, 2019 | \$ 20,881 | \$ 60,559 | \$ 5,907 | \$ 3,774 | \$ 21,908 | \$ 19 | \$ 113,048 |

The total combined indefinite and finite life intangible assets are summarized below.

| | As at December 31, 2019 | | | As at December 31, 2018 | | |
|-----------------------------|-------------------------|-----------------------------------------|--------------------|-------------------------|-----------------------------------------|--------------------|
| | Cost | Accumulated amortization and impairment | Net carrying value | Cost | Accumulated amortization and impairment | Net carrying value |
| Indefinite life intangibles | \$ 690,843 | \$ (1,100) | \$ 689,743 | \$ 674,044 | \$ (1,100) | \$ 672,944 |
| Finite life intangibles | 481,923 | (368,875) | 113,048 | 507,475 | (369,265) | 138,210 |
| Total intangibles | <u>\$ 1,172,766</u> | <u>\$ (369,975)</u> | <u>\$ 802,791</u> | <u>\$ 1,181,519</u> | <u>\$ (370,365)</u> | <u>\$ 811,154</u> |

Telesat Canada**Notes to the 2019 Consolidated Financial Statements - (Continued)**
(all amounts in thousands of Canadian dollars, except where otherwise noted)**17. INTANGIBLE ASSETS (cont.)**

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 | 5 |
| Customer relationships | 1 to 9 |
| Customer contracts | 7 |
| Transponder rights | 3 |
| Concession rights | 1 to 11 |
| Patent | 6 |

All of the Company's intangible assets, excluding the intangible assets held in an unrestricted subsidiary, have been pledged as security as a requirement of the Company's Senior Secured Credit Facilities and Senior Secured Notes as at December 31, 2019 (December 31, 2018 — former senior secured credit facilities) (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 2019, 2018 and 2017 in accordance with the policy described in Note 4.

No impairment loss was recognized in the years ended December 31, 2019, 2018 and 2017.

In 2019, the recoverable amount, for indefinite life intangible assets using the income approach, which is equal to the value in use, was calculated using the discount rate of 8.5%.

For 2017, 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 discount rate of 10%.

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.

Some of the more sensitive assumptions used in the quantitative analysis, 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.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(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 2019, 2018, and 2017 in accordance with the policy described in Note 4.

In 2019 and 2017, a quantitative assessment of goodwill was performed. The Company's recoverable amount exceeded the carrying value therefore, no impairment was recognized.

The most significant assumptions used in the quantitative impairment test for 2019 and 2017 were as follows:

- Market multiples;
- Discount rate; and
- Terminal year growth rate.

Some of the more sensitive assumptions used in the quantitative analysis, including the forecasted cash flows, discount rate and market multiples, 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, | 2019 | 2018 |
|-------------------------------------------------------|------------------|------------------|
| Trade payables | \$ 4,561 | \$ 3,609 |
| Other payables and accrued liabilities ^(a) | 21,686 | 27,050 |
| Trade and other payables | \$ 26,247 | \$ 30,659 |

(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, | 2019 | 2018 |
|--------------------------------------------|------------------|------------------|
| Derivative liabilities (Note 28) | \$ 3,206 | \$ 6 |
| Security deposits | 1,277 | 1,913 |
| Satellite performance incentive payments | 9,608 | 11,645 |
| Interest payable ^(a) | 20,563 | 8,584 |
| Other | 3,627 | 4,238 |
| Other current financial liabilities | \$ 38,281 | \$ 26,386 |

(a) Interest payable included interest payable on indebtedness, satellite performance incentive payments, and other current financial liabilities.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

21. OTHER CURRENT LIABILITIES

| As at December 31, | 2019 | 2018 |
|---------------------------------------|------------------|-------------------|
| Deferred revenue (Note 23) | \$ 65,704 | \$ 102,645 |
| Decommissioning liabilities (Note 23) | 826 | 1,068 |
| Uncertain tax positions | 1,315 | 1,315 |
| Income taxes payable | 118 | 4,231 |
| Lease liabilities (Note 23) | 1,866 | — |
| Other | 2,486 | 4,030 |
| Other current liabilities | \$ 72,315 | \$ 113,289 |

22. OTHER LONG-TERM FINANCIAL LIABILITIES

| As at December 31, | 2019 | 2018 |
|----------------------------------------------|------------------|------------------|
| Derivative liabilities (Note 28) | \$ 4,710 | \$ 5,627 |
| Security deposits | 458 | 346 |
| Satellite performance incentive payments | 37,343 | 47,268 |
| Other | — | 1,280 |
| Other long-term financial liabilities | \$ 42,511 | \$ 54,521 |

23. OTHER LONG-TERM LIABILITIES

| As at December 31, | 2019 | 2018 |
|--------------------------------------------|-------------------|-------------------|
| Deferred revenue ^(a) | \$ 374,642 | \$ 400,725 |
| Accrued benefit liabilities (Note 30) | 32,074 | 32,235 |
| Uncertain tax positions | 175 | 175 |
| Decommissioning liabilities ^(a) | 2,104 | 2,043 |
| Lease liabilities ^(a) | 26,716 | 340 |
| Other long-term liabilities | \$ 435,711 | \$ 435,518 |

- (a) The current and long-term decommissioning liabilities on property and equipment were \$2.9 million (December 31, 2018 — \$3.1 million). The decommissioning liabilities are for the restoration of leased buildings and teleports. During the year ended December 31, 2019, \$0.1 million was recorded as interest expense (December 31, 2018 — \$0.1 million) with \$0.2 million decommissioning liabilities derecognized (December 31, 2018 — \$0.1 million). It is expected that the decommissioning liabilities will mature between 2020 and 2062.
- (b) 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, 2019 to be recognized as follows (in millions of Canadian dollars):

| 2020 | 2021 | 2022 | 2023 | 2024 | Thereafter | Total |
|----------|----------|----------|----------|----------|------------|------------|
| \$ 706.3 | \$ 599.4 | \$ 470.7 | \$ 408.0 | \$ 303.7 | \$ 790.7 | \$ 3,278.8 |

- (c) The expected undiscounted contractual cash flows of the lease liabilities as at December 31, 2019 were as follows:

| 2020 | 2021 | 2022 | 2023 | 2024 | Thereafter |
|----------|----------|----------|----------|----------|------------|
| \$ 3,124 | \$ 2,838 | \$ 2,580 | \$ 2,519 | \$ 2,485 | \$ 28,963 |

The undiscounted contractual cash flows included \$13.8 million of interest payments.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

24. INDEBTEDNESS

| As at December 31, | 2019 | 2018 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|
| Former senior secured credit facilities ^(a) | | |
| Revolving Credit Facility | \$ — | \$ — |
| Term Loan B – U.S. Facility (December 31, 2018 – USD \$2,326,049) | — | 3,172,033 |
| 8.875% Senior Notes (December 31, 2018 – USD \$500,000) ^(a) | — | 681,850 |
| Senior Secured Credit Facilities ^(a) | | |
| Revolving Credit Facility | — | — |
| Term Loan B – U.S. Facility (December 31, 2019 – USD \$1,908,500) | 2,479,142 | — |
| Senior Notes (December 31, 2019 – USD \$550,000) ^(a) | 714,450 | — |
| Senior Secured Notes (December 31, 2019 – USD \$400,000) ^(a) | 519,600 | — |
| | 3,713,192 | 3,853,883 |
| Less: deferred financing costs and prepayment options (December 31, 2018 – deferred financing costs, interest rate floors, prepayment option and net gain on repricing/repayment) ^(a) | (393) | (129,655) |
| | 3,712,799 | 3,724,228 |
| Less: current indebtedness | (24,408) | (7,888) |
| Long-term indebtedness | \$ 3,688,391 | \$ 3,716,340 |

On October 11, 2019, Telesat Canada issued, through a private placement, USD\$550 million of Senior Notes, at an interest rate of 6.5%, which mature in October 2027. Debt issue costs of \$7.4 million were incurred in connection with the issuance of the Senior Notes. The Senior Notes are structurally subordinated to Telesat Canada's existing and future secured indebtedness, including obligations under its Senior Secured Credit Facilities and Senior Secured Notes. The Senior Notes are governed by the 6.5% Senior Notes Indenture.

On December 6, 2019, 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\$1,908.5 million and revolving credit borrowings up to USD\$200.0 million (or Canadian dollar equivalent). The term loan facility matures in December 2026 while the revolving credit facility matures in December 2024. Debt issue costs of \$16.0 million were incurred in connection with this amendment, inclusive of \$1.3 million relating to the revolving credit facility. 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 by more than 35% of the Credit Facility amount, 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, 2019, the leverage ratio was 4.63:1.00, which was more than the maximum test ratio of 4.50:1.00.

On December 6, 2019, Telesat Canada issued, through private placement, USD\$400 million of Senior Secured Notes, at an interest rate of 4.875%, which mature in June 2027. Debt issue costs of \$6.6 million were incurred in connection with the issuance of the Senior Secured Notes. The Senior Secured Notes are guaranteed by the Company and certain Guarantors. The Senior Secured Notes are governed by the 4.875% Senior Secured Notes Indenture. The obligations under the Senior Secured Notes Indenture are secured, subject to certain exceptions, by first priority liens and security interest in the assets of Telesat Canada and the Guarantors. The Senior Secured Notes include covenants or terms that restricts 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

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

24. INDEBTEDNESS (cont.)

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.

On November 17, 2016, Telesat Canada, issued through private placement, USD\$500 million of 8.875% Senior Notes which were to mature on November 17, 2024. The 8.875% Senior Notes were subordinated to Telesat Canada's secured indebtedness and were governed under the 8.875% Senior Notes indenture. With the net proceeds from the 6.5% Senior Notes offering, along with available cash on hand, all outstanding amounts, including redemption premium and discounted interest to November 15, 2019, were repaid on October 11, 2019, on the USD\$500 million 8.875% Senior Notes.

On November 17, 2016, Telesat Canada entered into a new amended and restated Credit Agreement with a syndicate of banks which provided 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 were 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 were 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 was drawn, the Credit Agreement required 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 contained 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, which was more than the maximum test ratio of 4.50:1.00. This Credit Agreement was fully repaid on December 6, 2019 from the new amended and restated Credit Agreement in the amount of USD\$1,908.5 million and the USD\$400 million 4.875% Senior Secured Notes.

In connection with the adoption of IFRS 9 on January 1, 2018, a gain on repricing of \$36.1 million was recorded against the opening balance of accumulated earnings in 2018 and the current and long-term indebtedness. Any unamortized gain on repricing, as at December 6, 2019, were written off against the loss on refinancing upon the repayment of the indebtedness.

In March 2018, the Company made a \$50 million U.S. dollar voluntary payment on the former 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. Any unamortized loss on repayment, as at December 6, 2019, were written off against the loss on refinancing upon the repayment of the indebtedness.

In April 2018, the Company amended the former senior secured credit facilities in which the applicable margin was reduced to 2.50% from 3.00%. 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. Any unamortized gain on repricing or unamortized debt issue costs, as at December 6, 2019, were written off against the loss on refinancing upon the repayment of the indebtedness.

- (a) 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 if the Revolving Credit Facility is drawn by more than 35% of the Credit Facility amount. As at December 31, 2019, Telesat was in compliance with this covenant. The former senior secured credit facilities required compliance with the First Lien Net Leverage ratio if the former revolving credit facility was drawn. As at December 31, 2018, Telesat was in compliance with this covenant.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

24. INDEBTEDNESS (cont.)

Each tranche of the Senior Secured Credit Facilities and the former senior secured credit facilities is subject to mandatory principal repayment requirements. For the Senior Secured Credit Facilities, the repayment is equal to one quarter of 1% of the value of the initial principal amount and is payable on a quarterly basis commencing on March 31, 2020. For the former senior secured credit facilities, from February 2017 to April 26, 2018, the repayment was equal to one quarter of 1% of the value of the loan as at the February 2017 loan amendment, and was payable on a quarterly basis. From April 26, 2018, the repayment was equal to one quarter of 1% of the value of the loan as at that date, and was payable on a quarterly basis.

The Senior Secured Credit Facilities, which were entered into on December 6, 2019, have two tranches which are described below:

- (i) A Revolving Credit Facility (“Revolving Facility”) of up to \$200.0 million U.S. dollars (or Canadian dollar equivalent) is available to Telesat maturing in December 2024. This Revolving Facility 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 0.75% to 1.25% is applied to the Prime Rate 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 1.75% to 2.25% 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 that ranges from 25.0 to 37.5 basis points per annum, depending upon the result of the total leverage ratio. As at December 31, 2019, other than \$0.1 million in drawings related to letters of credit, there were no borrowings under this facility.
- (ii) The U.S. TLB Facility is a USD\$1,908.5 million facility maturing in December 2026. The 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, plus an applicable margin of 2.75%; or (ii) Alternative Base Rate as determined in accordance with the terms of the Senior Secured Credit Facilities plus an applicable margin of 1.75%. The mandatory principal repayment is equal to 0.25% of the original aggregate principal amount, payable on the last day of each quarter, commencing on March 31, 2020. The weighted average effective interest rate was 4.73% for the 25-day period ended December 31, 2019.

The former senior secured credit facilities, which were fully repaid on December 6, 2019, had several tranches which are described below:

- (i) A Revolving Credit Facility (“Revolving Facility”) of up to \$200.0 million U.S. dollars (or Canadian dollar equivalent) is available to Telesat. This Revolving Facility was available to be drawn at any time in U.S. funds or Canadian dollar equivalent funds. Loans under the Revolving Facility bore interest at a floating interest rate. For Canadian Prime Rate and Alternative Base Rate (“ABR”) loans, an applicable margin ranging from 1.50% to 2.00% was applied to the Prime Rate 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% was applied to either the BA interest rate or LIBOR. The rates on the Revolving Facility varied depending upon the results of the first lien leverage ratio. The Revolving Facility had an unused commitment fee of 40 basis points. As at December 31, 2018, other than \$0.3 million in drawings related to letters of credit, there were no borrowings under this facility.
- (ii) The former U.S. TLB Facility was initially a USD\$2,430 million. The outstanding borrowings under the former U.S. TLB Facility bore 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 former senior secured credit facilities, but not less than 0.75%,

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

24. INDEBTEDNESS (cont.)

plus an applicable margin of 2.50%; or (ii) Alternative Base Rate as determined in accordance with the terms of the former senior secured credit facilities plus an applicable margin of 2.00%. The weighted average effective interest rate for the 340-day period ended December 6, 2019 was 6.00% (Year ended December 31, 2018 — 5.83%).

- (b) The former Senior Notes bore interest at an annual rate of 8.875% with interest payments having been made in May and November annually. The total balance of the 8.875% Senior Notes was USD\$500 million. The weighted average effective interest rate for the 284-day period ended October 11, 2019 was 8.80% (Year ended December 31, 2018 — 8.80%). The 8.875% Senior Notes were paid in full to the indenture trustee on October 11, 2019.
- (c) The Senior Notes bear interest at an annual rate of 6.5% with interest payments payable in April and October, annually, commencing in April 2020. The 6.5% Senior Notes are due in October 2027 and were entered into on October 11, 2019. The total balance of the Senior Notes is USD\$550.0 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 81-day period ended December 31, 2019 was 6.27%.
- (d) The Senior Secured Notes bear interest at an annual rate of 4.875% with interest payable on June 1 and December 1, annually, commencing in June 2020. The Senior Secured Notes are due in June 2027 and were entered into on December 6, 2019. The total balance of the Senior Secured Notes is USD\$400.0 million. The Senior Secured Notes are secured, subject to certain exceptions, by the assets of Telesat Canada and the Guarantors. The Senior Secured 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 25-day period ended December 31, 2019 was 4.76%.
- (e) The Senior Secured Credit Facilities, Senior Notes and Senior Secured Notes included the following deferred financing costs and prepayment options:
 - (i) The U.S. TLB Facility, Senior Notes and Senior Secured Notes were presented on the balance sheet net of related deferred financing costs of \$28.3 million as at December 31, 2019. The deferred financing costs are amortized using the effective interest method.
 - (ii) The indenture agreement for the Senior Notes contained provisions for certain prepayment options (Note 28) which were fair valued at the time of debt issuance. The initial fair value impact, as at October 11, 2019, of the prepayment option related to the Senior Notes was a \$17.8 million increase to the indebtedness. This liability is subsequently amortized using the effective interest method and had a carrying amount of \$17.4 million as at December 31, 2019.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

24. INDEBTEDNESS (cont.)

- (iii) The indenture agreement for the Senior Secured Notes contained provisions for certain prepayment options (Note 28) which were fair valued at the time of debt issuance. The initial fair value impact, as at December 6, 2019, of the prepayment option related to the Senior Secured Notes was a \$10.6 million increase to the indebtedness. This liability is subsequently amortized using the effective interest method and had a carrying amount of \$10.5 million as at December 31, 2019.

The former senior secured credit facilities and 8.875% Senior Notes included the following deferred financing costs, interest rate floors, prepayment option and net gain on repricing/repayment:

- (i) The former U.S. TLB Facility and 8.875% Senior Notes were presented on the balance sheet net of related deferred financing costs as at December 31, 2018 of \$83.8 million. The unamortized deferred financing costs for the 8.875% Senior Notes as at October 11, 2019 and the unamortized deferred financing costs for the former U.S. TLB Facility as at December 6, 2019, were written off against the loss on refinancing upon the repayment of the indebtedness.
- (ii) The indenture agreement for the 8.875% Senior Notes contained provisions for certain prepayment options (Note 28) 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. Any unamortized prepayment option as at October 11, 2019, was written off against the loss on refinancing upon the repayment of the indebtedness.
- (iii) The initial fair value impact, in November 2016, of the interest rate floor on the former 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. Any unamortized interest rate floors as at December 6, 2019, were written off against the loss on refinancing upon the repayment of the indebtedness.
- (iv) The former U.S. TLB Facility was presented on the balance sheet net of the net loss/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.

Any unamortized net gain on repricing/repayment as at December 6, 2019, was written off against the loss on refinancing upon the repayment of the indebtedness.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

24. INDEBTEDNESS (cont.)

The short-term and long-term portions of deferred financing costs, interest rate floor, prepayment options and net gain on repricing/repayment were as follows:

| As at December 31, | 2019 | 2018 |
|--------------------------------------------------------------------------------------------------------------|--------------------|-------------------|
| Short-term deferred financing costs | \$ 3,385 | \$ 15,263 |
| Long-term deferred financing costs | 24,934 | 68,536 |
| | <u>\$ 28,319</u> | <u>\$ 83,799</u> |
| Short-term interest rate floor | \$ — | \$ 3,436 |
| Long-term interest rate floor | — | 15,165 |
| | <u>\$ —</u> | <u>\$ 18,601</u> |
| Short-term prepayment options | \$ (3,001) | \$ (942) |
| Long-term prepayment options | (24,925) | (5,986) |
| | <u>\$ (27,926)</u> | <u>\$ (6,928)</u> |
| Short-term net gain on repricing/repayment | \$ — | \$ 6,315 |
| Long-term net gain on repricing/repayment | \$ — | \$ 27,868 |
| | <u>\$ —</u> | <u>\$ 34,183</u> |
| Deferred financing costs, interest rate floor, prepayment options and net gain on repricing/repayment | <u>\$ 393</u> | <u>\$ 129,655</u> |

The outstanding principal balance as at December 31, 2019 of indebtedness, excluding deferred financing costs and prepayment options, will be repaid as follows (in millions of Canadian dollars):

| 2020 | 2021 | 2022 | 2023 | 2024 | Thereafter | Total |
|---------|---------|---------|---------|---------|------------|------------|
| \$ 24.8 | \$ 24.8 | \$ 24.8 | \$ 24.8 | \$ 24.8 | \$ 3,589.2 | \$ 3,713.2 |

25. SHARE CAPITAL

The number of shares and stated value of the outstanding shares were as follows:

| As at December 31, | 2019 | | 2018 | |
|-------------------------------------------|------------------|-------------------|------------------|-------------------|
| | 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 | 38,477,137 | 80,059 | 38,431,311 | 78,870 |
| Director Voting Preferred Shares | 1,000 | 10 | 1,000 | 10 |
| Share capital | | <u>\$ 154,895</u> | | <u>\$ 153,706</u> |

In December 2019, February 2019 and November 2017 dividends were declared and paid on the Director Voting Preferred Shares.

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.

In January 2019, 40,269 Sars were exercised for 14,846 Non-Voting Participating Preferred Shares, on a net settlement basis.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

25. SHARE CAPITAL (cont.)

In December 2019, 66,667 restricted share units were settled in exchange for 30,980 Non-Voting Participating Preferred Shares, on a net settlement basis.

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.

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, 2019 or 2018. The Company's share-based compensation plans have authorized the grant of up to 17,053,779 stock 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 29).

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.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

25. SHARE CAPITAL (cont.)

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.
- 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. GOVERNMENT GRANT

In May 2019, Telesat entered into an agreement for a non-refundable government contribution of a value up to \$85 million to July 31, 2023 relating to the LEO constellation.

For the year ended December 31, 2019, the Company recorded \$5.0 million relating to the agreement.

Telesat Canada**Notes to the 2019 Consolidated Financial Statements - (Continued)**
(all amounts in thousands of Canadian dollars, except where otherwise noted)**27. 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 (December 31, 2018 — former 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 2018.

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 and prepayment options (December 31, 2018 – deferred financing costs, prepayment option, interest rate floor and net gain on repricing/repayment) as defined in Note 24).

The Company's capital at the end of the year was as follows:

| As at December 31, | 2019 | 2018 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|
| Shareholders' equity (excluding reserves) | \$ 1,185,950 | \$ 997,307 |
| Debt financing (excluding deferred financing costs and prepayment options (December 31, 2018 – deferred financing costs, prepayment option, interest rate floor and net gain on repricing/repayment)) | \$ 3,713,192 | \$ 3,853,883 |

If the Revolving Facility is drawn by more than 35% of the credit facility amount, the Senior Secured Credit Facilities require Telesat Canada to comply with a first lien net leverage ratio test. As at December 31, 2019, the first lien net leverage ratio was 3.72:1.00, which was less than the maximum test ratio of 5.75:1.00. If the former revolving facility is drawn, the former senior secured credit facilities required 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, 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 28).

28. 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, 2019.

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, 2019, the maximum exposure to credit risk is equal to the carrying value of the financial assets which totaled \$1,149.2 million (December 31, 2018 — \$888.6 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

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

28. FINANCIAL INSTRUMENTS (cont.)

minimal. As at December 31, 2019, North American and International customers made up 50% and 50% of the outstanding trade receivable balance, respectively (December 31, 2018 — 59% and 41%, respectively). Anticipated bad debt losses have been provided for in the allowance for doubtful accounts. The allowance for doubtful accounts as at December 31, 2019 was \$1.8 million (December 31, 2018 — \$5.1 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, 2019 and 2018, the entire indebtedness was denominated in U.S. dollars, with the Canadian dollar equivalent of the U.S. dollar denominated indebtedness equaling \$3,713.2 million and \$3,853.9 million, respectively, before netting of deferred financing costs and prepayment options (December 31, 2018 - before netting of deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment).

As at December 31, 2019, 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 decreased (increased) net income by \$172.9 million (December 31, 2018 — \$163.9 million) and increased (decreased) other comprehensive income by \$30.9 million (December 31, 2018 — \$3.1 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%. As at December 31, 2019, three interest rate swaps were outstanding to hedge the interest rate risk associated with the variable interest rate on \$1,350 million of the U.S. denominated Term Loan B at fixed interest rates, excluding applicable margins, ranging from 1.84% to 2.04% with expiration terms ranging from September 2020 to 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 income (loss) of \$2.0 million for the year ended December 31, 2019 (December 31, 2018 — \$1.8 million).

Liquidity risk

The Company maintains credit facilities to ensure it has sufficient funds available to meet current and foreseeable financial requirements.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

28. FINANCIAL INSTRUMENTS (cont.)

The contractual maturities of financial liabilities as at December 31, 2019 were as follows:

| | Carrying amount | Contractual cash flows (undiscounted) | 2020 | 2021 | 2022 | 2023 | 2024 | Thereafter |
|------------------------------------------|---------------------|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|
| Trade and other payables | \$ 26,247 | \$ 26,247 | \$ 26,247 | \$ — | \$ — | \$ — | \$ — | \$ — |
| Customer and other deposits | 1,735 | 1,735 | 1,277 | 135 | 18 | 104 | — | 201 |
| Satellite performance incentive payments | 47,433 | 59,752 | 11,495 | 9,487 | 8,534 | 7,674 | 5,448 | 17,114 |
| Other financial liabilities | 3,659 | 3,263 | 3,263 | — | — | — | — | — |
| Interest rate swaps | 7,916 | 1,181 | 141 | 598 | 442 | — | — | — |
| Indebtedness ⁽¹⁾ | 3,733,241 | 5,067,951 | 221,928 | 212,311 | 211,147 | 209,983 | 209,059 | 4,003,523 |
| | <u>\$ 3,820,231</u> | <u>\$ 5,160,129</u> | <u>\$ 264,351</u> | <u>\$ 222,531</u> | <u>\$ 220,141</u> | <u>\$ 217,761</u> | <u>\$ 214,507</u> | <u>\$ 4,020,838</u> |

(1) Indebtedness excludes deferred financing costs and prepayment options.

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 | Interest payments |
|------------------------------------------|------------------|-------------------|
| Satellite performance incentive payments | \$ 482 | \$ 12,513 |
| Other financial liabilities | \$ 31 | \$ 31 |
| Indebtedness | \$ 20,050 | \$ 1,354,759 |

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, 2019 | FVTPL | Amortized cost | Total | Fair value | Fair value hierarchy |
|-------------------------------------------------|------------------|-----------------------|-----------------------|-----------------------|----------------------|
| Cash and cash equivalents | \$ — | \$ 1,027,222 | \$ 1,027,222 | \$ 1,027,222 | Level 1 |
| Trade and other receivables | — | 64,062 | 64,062 | 64,062 | ⁽¹⁾ |
| Other current financial assets | — | 210 | 210 | 210 | Level 1 |
| Other long-term financial assets ⁽¹⁾ | 32,821 | 24,909 | 57,730 | 57,730 | Level 1, Level 2 |
| Trade and other payables | — | (26,247) | (26,247) | (26,247) | ⁽¹⁾ |
| Other current financial liabilities | (3,206) | (35,075) | (38,281) | (40,748) | Level 2 |
| Other long-term financial liabilities | (4,710) | (37,801) | (42,511) | (42,493) | Level 2 |
| Indebtedness ⁽²⁾ | — | (3,713,192) | (3,713,192) | (3,760,656) | Level 2 |
| | <u>\$ 24,905</u> | <u>\$ (2,695,912)</u> | <u>\$ (2,671,007)</u> | <u>\$ (2,720,920)</u> | |

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

28. FINANCIAL INSTRUMENTS (cont.)

| As at December 31, 2018 | FVTPL | Amortized cost | Total | Fair 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 | ⁽¹⁾ |
| Other current financial assets ⁽¹⁾ | 18,632 | 147 | 18,779 | 18,779 | Level 1, Level 2 |
| Other long-term financial assets ⁽¹⁾ | 33,796 | 21,959 | 55,755 | 55,755 | Level 1, Level 2 |
| Trade and other payables | — | (30,659) | (30,659) | (30,659) | ⁽¹⁾ |
| 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 ⁽²⁾ | — | (3,853,883) | (3,853,883) | (3,709,695) | Level 2 |
| | <u>\$ 46,795</u> | <u>\$ (3,123,646)</u> | <u>\$ (3,076,851)</u> | <u>\$ (2,935,620)</u> | |

- 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.
- Indebtedness excludes deferred financing costs and prepayment options (December 31, 2018 – deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment).
- Trade and other receivables and trade and other payables approximate fair value due to the short-term maturity of these instruments.

Assets pledged as security

The Senior Secured Credit Facilities and Senior Secured Notes 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.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)**28. FINANCIAL INSTRUMENTS (cont.)**

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, 2019, cash and cash equivalents included \$484.7 million (December 31, 2018 — \$425.6 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, 2019 and 2018, the discount rate used was 5.2% and 5.7%, respectively.

The fair value of the indebtedness was based on transactions and quotations from third parties considering market interest rates and excluding deferred financing costs and prepayments options (December 31, 2018 — deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment). 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, | 2019 | 2018 |
|-----------------------------------------------------------------------|-------------|-------------|
| Term Loan B – U.S. Facility – former senior secured credit facilities | —% | 94.50% |
| Term Loan B – U.S. Facility – Senior Secured Credit Facilities | 100.25% | —% |
| 8.875% Senior Notes | —% | 104.44% |
| Senior Notes | 104.25% | —% |
| Senior Secured Notes | 102.10% | —% |

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, 2019 ranged from 1.45% to 1.91% (December 31, 2018 — 2.29% to 2.81%).

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

28. FINANCIAL INSTRUMENTS (cont.)

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, 2019 | Other current financial assets | Other long-term financial assets | Other current financial liabilities | Other long-term financial liabilities | Total |
|-------------------------|--------------------------------|----------------------------------|-------------------------------------|---------------------------------------|------------------|
| Interest rate swaps | \$ — | \$ — | \$ (3,206) | \$ (4,710) | \$ (7,916) |
| Prepayment options | — | 32,821 | — | — | 32,821 |
| | <u>\$ —</u> | <u>\$ 32,821</u> | <u>\$ (3,206)</u> | <u>\$ (4,710)</u> | <u>\$ 24,905</u> |

| As at December 31, 2018 | Other current financial assets | Other long-term financial assets | Other current financial liabilities | Other long-term financial liabilities | Total |
|-------------------------|--------------------------------|----------------------------------|-------------------------------------|---------------------------------------|------------------|
| Interest rate floor | \$ — | \$ — | \$ (6) | \$ (5,627) | \$ (5,633) |
| Interest rate swaps | 18,632 | 16,650 | — | — | 35,282 |
| Prepayment option | — | 17,146 | — | — | 17,146 |
| | <u>\$ 18,632</u> | <u>\$ 33,796</u> | <u>\$ (6)</u> | <u>\$ (5,627)</u> | <u>\$ 46,795</u> |

The reconciliation of the fair value of derivative assets and liabilities was as follows:

| | |
|----------------------------------------------------|------------------|
| Fair value, December 31, 2017 and January 1, 2018 | \$ 59,357 |
| Unrealized gains (losses) on derivatives | |
| Interest rate floor | 255 |
| Prepayment option | (30,691) |
| Interest rate swaps | 12,231 |
| Impact of foreign exchange | 5,643 |
| Fair value, December 31, 2018 and January 1, 2019 | 46,795 |
| Derivatives recognized at inception | |
| Prepayment option – Senior Notes (Note 24) | 17,829 |
| Prepayment option – Senior Secured Notes (Note 24) | 10,562 |
| Unrealized gains (losses) on derivatives | |
| Interest rate floor | 5,368 |
| Prepayment options | (12,391) |
| Interest rate swaps | (42,649) |
| Impact of foreign exchange | (609) |
| Fair value, December 31, 2019 | <u>\$ 24,905</u> |

Telesat Canada**Notes to the 2019 Consolidated Financial Statements - (Continued)**
(all amounts in thousands of Canadian dollars, except where otherwise noted)**29. 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 17,053,779 options, to purchase Non-Voting Participating Preferred Shares of Telesat Canada, convertible into Common Shares as detailed in the table below.

| Year authorized | Quantity |
|------------------------|-----------------|
| 2008 | 8,824,646 |
| 2013 | 4,036,729 |
| 2015 | 62,404 |
| 2017 | 350,000 |
| 2018 | 3,280,000 |
| 2019 | 500,000 |

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, subsequent to August 2017, 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 connection with the \$387.2 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. The payments are made in subject to certain conditions being met.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

29. SHARE-BASED COMPENSATION PLANS (cont.)

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, 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 and January 1, 2019 | 7,102,864 | \$ 25.56 | 432,102 | \$ 11.07 |
| Granted | 522,372 | | — | |
| Forfeited | (62,499) | | — | |
| Exercised (Note 25) | (18,120) | | (22,149) | |
| Expired | — | | — | |
| Outstanding at December 31, 2019 | 7,544,617 | \$ 25.63 | 409,953 | \$ 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 and January 1, 2019 | 200,000 |
| Settled | (66,667) |
| Outstanding, December 31, 2019 | 133,333 |

The quantity of stock options that are exercisable and the weighted average remaining life were as follows:

| As at December 31, | 2019 | 2018 |
|----------------------------------|-----------|-----------|
| Time vesting option plans | 4,762,335 | 3,689,117 |
| Performance vesting option plans | 409,953 | 432,102 |
| Weighted average remaining life | 7 years | 7 years |

The share-based compensation expense included in the consolidated statements of income (loss) was as follows:

| Years ended December 31, | 2019 | 2018 | 2017 |
|--------------------------|-----------|-----------|----------|
| Operating expenses | \$ 16,035 | \$ 29,505 | \$ 2,856 |

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:

| | 2019 | 2018 | 2017 |
|-------------------------|-------|-------|-------|
| Dividend yield | —% | —% | —% |
| Expected volatility | 32.4% | 31.7% | 24.6% |
| Risk-free interest rate | 2.93% | 2.94% | 1.83% |
| Expected life (years) | 10 | 10 | 10 |

The expected volatility is based on the historical volatility.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

29. SHARE-BASED COMPENSATION PLANS (cont.)

The weighted average fair value of the stock options granted during 2019 was \$12.84 (2018 – weighted average fair value of the stock options and restricted share units was \$13.37). There were no restricted share units granted in 2019.

30. EMPLOYEE BENEFIT PLANS

The expenses included on the consolidated statements of income (loss) and the consolidated statements of comprehensive income (loss) were as follows:

| Years ended December 31, | Pension plans | | | Other post-employment benefit plans | | |
|--------------------------------------------------------|---------------|------------|----------|-------------------------------------|------------|----------|
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Consolidated statements of income (loss) | | | | | | |
| Operating expenses | \$ 6,198 | \$ 6,345 | \$ 6,239 | \$ 116 | \$ 276 | \$ 243 |
| Interest expense | \$ 524 | \$ 658 | \$ 650 | \$ 815 | \$ 830 | \$ 861 |
| Consolidated statements of comprehensive income (loss) | | | | | | |
| Actuarial (gains) losses on employee benefit plans | \$ (3,325) | \$ (4,555) | \$ 3,761 | \$ 2,191 | \$ (3,200) | \$ 1,410 |

In October 2013, the Company ceased to allow new employees to join certain defined benefit plans, except under certain circumstances, and commenced a defined contribution pension plan for new employees.

The Company made contributions of \$1.2 million for various defined contribution arrangements during 2019 (December 31, 2018 — \$0.9 million).

The Company's funding policy is to make contributions to its defined benefit pension funds based on actuarial cost methods as permitted and required 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, | 2019 | 2018 |
|------------------------------------|------------------|------------------|
| Pension benefits | \$ 8,566 | \$ 10,905 |
| Other post-employment benefits | 23,508 | 21,330 |
| Accrued benefit liabilities | \$ 32,074 | \$ 32,235 |

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

30. EMPLOYEE BENEFIT PLANS (cont.)

The amounts recognized in the balance sheets and the funded statuses of the benefit plans were as follows:

| As at December 31, | 2019 | | 2018 | |
|---------------------------------------|-----------------|------------------|------------------|------------------|
| | Pension | Other | Pension | Other |
| Present value of funded obligations | \$ 331,737 | \$ — | \$ 292,914 | \$ — |
| Fair value of plan assets | (324,257) | — | (283,064) | — |
| | 7,480 | — | 9,850 | — |
| Present value of unfunded obligations | 1,086 | 23,508 | 1,055 | 21,330 |
| Accrued benefit liabilities | \$ 8,566 | \$ 23,508 | \$ 10,905 | \$ 21,330 |

The changes in the benefit obligations and in the fair value of plan assets were as follows:

| | Pension | Other | Total |
|---------------------------------------------------------|-----------------|------------------|------------------|
| Change in benefit obligations | | | |
| Benefit obligation, January 1, 2019 | \$ 293,969 | \$ 21,330 | \$ 315,299 |
| Current service cost | 5,701 | 116 | 5,817 |
| Interest expense | 11,241 | 815 | 12,056 |
| Remeasurements | | | |
| Actuarial losses arising from plan experience | 1,773 | 235 | 2,008 |
| Actuarial losses from change in demographic assumptions | — | 16 | 16 |
| Actuarial losses from changes in financial assumptions | 28,531 | 1,940 | 30,471 |
| Benefits paid | (9,483) | (758) | (10,241) |
| Contributions by plan participants | 1,091 | — | 1,091 |
| Foreign exchange | — | (186) | (186) |
| Benefit obligation, December 31, 2019 | 332,823 | 23,508 | 356,331 |
| Change in fair value of plan assets | | | |
| Fair value of plan assets, January 1, 2019 | (283,064) | — | (283,064) |
| Contributions by plan participants | (1,091) | — | (1,091) |
| Contributions by employer | (5,736) | (758) | (6,494) |
| Interest income | (10,717) | — | (10,717) |
| Benefits paid | 9,483 | 758 | 10,241 |
| Remeasurements | | | |
| Return on plan assets, excluding interest income | (33,629) | — | (33,629) |
| Administrative costs | 497 | — | 497 |
| Fair value of plan assets, December 31, 2019 | (324,257) | — | (324,257) |
| Accrued benefit liabilities, December 31, 2019 | \$ 8,566 | \$ 23,508 | \$ 32,074 |

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

30. EMPLOYEE BENEFIT PLANS (cont.)

| | 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 |

The weighted average duration of the defined benefit obligation as at December 31, 2019 is 16 years for the defined benefit pension plans and 15 years for the other post-employment benefit plans. The weighted average duration of the current service cost as at December 31, 2019 is 23 years for the defined benefit pension plans and 28 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 2029 are as follows:

| | Pension | Other |
|--------------|-----------|----------|
| 2020 | \$ 10,848 | \$ 861 |
| 2021 | \$ 11,451 | \$ 894 |
| 2022 | \$ 12,007 | \$ 929 |
| 2023 | \$ 12,649 | \$ 964 |
| 2024 | \$ 13,368 | \$ 1,000 |
| 2025 to 2029 | \$ 76,594 | \$ 6,409 |

Benefit payments include obligations to 2029 only as obligations beyond this date are not quantifiable.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

30. EMPLOYEE BENEFIT PLANS (cont.)

The fair value of the plan assets were allocated as follows between the various types of investments:

| As at December 31, | 2019 | 2018 |
|------------------------------------------|-------|-------|
| Equity securities | | |
| Canada | 22.3% | 20.8% |
| United States | 19.8% | 12.7% |
| International (other than United States) | 14.1% | 18.1% |
| Fixed income instruments | | |
| Canada | 41.2% | 45.7% |
| Cash and cash equivalents | | |
| Canada | 2.6% | 2.7% |

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:

| As at December 31, | Pension 2019 | Other 2019 | Pension 2018 | Other 2018 |
|----------------------------------|-----------------|----------------|-----------------|----------------|
| Actuarial benefit obligation | | | | |
| Discount rate | 3.20% | 2.95% to 3.20% | 3.80% | 3.80% to 4.00% |
| Benefit costs for the year ended | | | | |
| Discount rate | 3.90% | 3.90% to 4.00% | 3.60% | 3.25% to 3.60% |
| Future salary growth | 2.50% | N/A | 2.50% | N/A |
| Health care cost trend rate | N/A | 3.49% to 5.49% | N/A | 4.50% |
| Other medical trend rates | N/A | 4.00% to 4.56% | N/A | 4.50% |

For certain Canadian post-retirement plans the above trend rates are applicable for 2019 to 2024 which will increase linearly to 4.75% in 2029 and grading down to an ultimate rate of 3.57% per annum in 2040 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, 2019 and 2018 would have increased or decreased as a result of the change in the respective assumptions by one percent.

| As at December 31, 2019 | Pension | | Other | |
|--------------------------------|-------------|-------------|-------------|-------------|
| | 1% increase | 1% decrease | 1% increase | 1% decrease |
| Discount rate | \$ (45,385) | \$ 57,745 | \$ (2,751) | \$ 3,576 |
| Future salary growth | \$ 9,856 | \$ (8,874) | N/A | N/A |
| Medical and dental trend rates | N/A | N/A | \$ 2,018 | \$ (1,531) |

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

30. EMPLOYEE BENEFIT PLANS (cont.)

| As at December 31, 2018 | Pension | | Other | |
|--------------------------------|-------------|-------------|-------------|-------------|
| | 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) |

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 \$5.1 million to the defined benefit plans and \$0.6 million to the defined contribution plan of Telesat Canada during the next fiscal year.

31. SUPPLEMENTAL CASH FLOW INFORMATION

Cash and cash equivalents were comprised of the following:

| As at December 31, | 2019 | 2018 | 2017 |
|---------------------------------------|---------------------|-------------------|-------------------|
| Cash | \$ 542,537 | \$ 342,874 | \$ 388,372 |
| Short-term investments ⁽¹⁾ | 484,685 | 425,559 | 90,673 |
| Cash and cash equivalents | \$ 1,027,222 | \$ 768,433 | \$ 479,045 |

- (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, | 2019 | 2018 | 2017 |
|--------------------------|--------------------|---------------------|--------------------|
| Income taxes paid | \$ (101,952) | \$ (109,193) | \$ (85,503) |
| Income taxes received | 6,497 | 2,885 | 22,512 |
| | \$ (95,455) | \$ (106,308) | \$ (62,991) |

Interest paid, net of capitalized interest and interest received was comprised of the following:

| Years ended December 31, | 2019 | 2018 | 2017 |
|--------------------------|---------------------|---------------------|---------------------|
| Interest paid | \$ (195,671) | \$ (207,339) | \$ (219,773) |
| Interest received | 19,559 | 11,802 | 6,201 |
| Capitalized interest | — | 19,120 | 18,324 |
| | \$ (176,112) | \$ (176,417) | \$ (195,248) |

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

31. SUPPLEMENTAL CASH FLOW INFORMATION (cont.)

The reconciliation of the liabilities arising from financing activities was as follows:

| | Indebtedness | Satellite performance incentive payments | Lease liabilities |
|-----------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------|----------------------|
| Balance as at January 1, 2019 | \$ 3,724,228 | \$ 58,913 | \$ 369 |
| Cash outflows | (3,743,465) | (9,644) | (1,252) |
| Cash inflows | 3,786,082 | — | — |
| Write-off of deferred financing costs, interest rate floor, prepayment option and net gain on repricing/repayment (Note 24) | 107,065 | — | — |
| Amortization of deferred financing costs, interest rate floor, prepayment options and net gain on repricing/repayment | 22,461 | — | — |
| Debt issue costs | (28,082) | — | — |
| Debt issue costs accrued | (573) | — | — |
| Prepayment option at inception – Senior Notes | 17,829 | — | — |
| Prepayment option at inception – Senior Secured Notes | 10,562 | — | — |
| Cumulative effect adjustment (Note 3) | — | — | 26,851 |
| Non-cash additions | — | — | 2,775 |
| Interest paid | — | — | (984) |
| Interest accrued | — | — | 1,288 |
| Other | — | 296 | (236) |
| Impact of foreign exchange | (183,308) | (2,614) | (229) |
| Balance as at December 31, 2019 | <u>\$ 3,712,799</u> | <u>\$ 46,951</u> | <u>\$ 28,582</u> |

| | Indebtedness | Satellite performance incentive payments | 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 24) | (36,072) | — | — |
| Other | — | 191 | — |
| Impact of foreign exchange | 303,640 | 4,798 | 29 |
| Balance as at December 31, 2018 | <u>\$ 3,724,228</u> | <u>\$ 58,913</u> | <u>\$ 369</u> |

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

31. SUPPLEMENTAL CASH FLOW INFORMATION (cont.)

| | Indebtedness | Satellite performance incentive payments | Capital leases |
|-------------------------------------------------------------------------------------|---------------------|------------------------------------------|----------------|
| Balance as at January 1, 2017 ⁽¹⁾ | \$ 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 | <u>\$ 3,543,377</u> | <u>\$ 62,961</u> | <u>\$ 369</u> |

(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.

The net change in operating assets and liabilities was comprised of the following:

| As at December 31, | 2019 | 2018 | 2017 |
|-----------------------------|--------------------|------------------|------------------|
| Trade and other receivables | \$ (16,113) | \$ 22,056 | \$ (13,272) |
| Financial assets | (3,897) | (210) | 3,975 |
| Other assets | (13,183) | 371 | 12,848 |
| Trade and other payables | 1,685 | (4,695) | 6,947 |
| Financial liabilities | (2,125) | (1,026) | (13,748) |
| Other liabilities | 19,691 | 72,317 | 51,502 |
| | <u>\$ (13,942)</u> | <u>\$ 88,813</u> | <u>\$ 48,252</u> |

Non-cash investing activities were comprised of:

| Years ended December 31, | 2019 | 2018 | 2017 |
|------------------------------------------|------------|----------|----------|
| Satellites, property and other equipment | \$ 29,234 | \$ 3,795 | \$ 9,515 |
| Intangible assets | \$ (3,263) | \$ 3,635 | \$ (128) |

32. COMMITMENTS AND CONTINGENT LIABILITIES

The following were the Company's off-balance sheet contractual obligations as at December 31, 2019:

| | 2020 | 2021 | 2022 | 2023 | 2024 | Thereafter | Total |
|-----------------------------|------------------|------------------|------------------|-----------------|-----------------|------------------|-------------------|
| Property leases | \$ 1,087 | \$ 1,242 | \$ 1,032 | \$ 1,000 | \$ 1,001 | \$ 13,149 | \$ 18,511 |
| Capital commitments | 15,510 | 21,628 | 4,807 | — | — | — | 41,945 |
| Other operating commitments | 20,532 | 12,052 | 4,557 | 3,435 | 2,703 | 5,467 | 48,746 |
| | <u>\$ 37,129</u> | <u>\$ 34,922</u> | <u>\$ 10,396</u> | <u>\$ 4,435</u> | <u>\$ 3,704</u> | <u>\$ 18,616</u> | <u>\$ 109,202</u> |

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 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 2020 to 2039.

Certain variable costs associated with the capitalized leases have been included in property leases commitments with a termination date co-terminus with the lease liability.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

32. COMMITMENTS AND CONTINGENT LIABILITIES (cont.)

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, 2019 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, 2019, customer prepayments of \$440.3 million (December 31, 2018 — \$503.4 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 participates from time to time in legal proceedings arising in the normal course of its business.

Telesat has previously received assessments from the Brazil tax authorities alleging that additional taxes are owed on revenue earned for the period 2003 to 2012 in the amount of \$36.8 million, including interest and penalties. In July 2019, the Brazil tax authorities extended their audit to the period 2014 to 2018, and alleged that additional taxes are owing for that period. The total dispute for the period 2003 to 2018, including interest and penalties, now totals \$71.2 million. The dispute relates to the Brazil tax authorities' characterization of revenue. The Company has challenged the previous assessments and will challenge the current assessment. 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.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

33. SUBSIDIARIES

The list of significant companies included in the scope of consolidation as at December 31, 2019 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 |

The percentage of voting rights and method of consolidation were the same as at December 31, 2018.

34. 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 was paid to Red Isle, \$242.7 million U.S. dollars was 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

| Year ended December 31, | 2019 | 2018 | 2017 |
|------------------------------------------|------------------|------------------|------------------|
| Short-term benefits (including salaries) | \$ 11,051 | \$ 16,853 | \$ 10,037 |
| Special payments ⁽¹⁾ | 948 | 2,904 | 9,006 |
| Post-employment benefits | 2,773 | 2,510 | 2,458 |
| Share-based payments | 15,649 | 29,016 | 2,820 |
| | <u>\$ 30,421</u> | <u>\$ 51,283</u> | <u>\$ 24,321</u> |

(1) Balance relates to the special cash distribution effective January 25, 2017.

Telesat Canada

Notes to the 2019 Consolidated Financial Statements - (Continued)
(all amounts in thousands of Canadian dollars, except where otherwise noted)

34. RELATED PARTY TRANSACTIONS (cont.)**Key management personnel — stock options**

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.

During 2019, Telesat issued 500,000 time-vesting options to certain key management personnel, which vest over a five-year period.

In January 2019, 40,269 share appreciation rights were exercised by a member of key management personnel for 14,846 Non-Voting Participating Preferred Shares, on a net settlement basis.

In December 2019, 66,667 restricted share units were settled in exchange for 30,980 Non-Voting Participating Preferred Shares, on a net settlement basis.

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.

| Years ended December 31, | Sale of goods and services, interest income | | | Purchase of goods and services, interest expense | | |
|--------------------------|------------------------------------------------|--------|--------|-----------------------------------------------------|----------|----------|
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Revenue | \$ 133 | \$ 128 | \$ 128 | \$ — | \$ — | \$ — |
| Operating expenses | \$ — | \$ — | \$ — | \$ 6,645 | \$ 6,456 | \$ 6,518 |

The following balances were outstanding with Loral at the end of the years presented below:

| At December 31, | Amounts owed by related parties | | Amounts owed to related parties | |
|------------------------------|---------------------------------|-------|---------------------------------|------|
| | 2019 | 2018 | 2019 | 2018 |
| Current receivables/payables | \$ — | \$ 28 | \$ 204 | \$ — |

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, 2019 were \$5.7 million (December 31, 2018 — \$7.7 million).

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934**

As of March 12, 2020, Loral Space & Communications Inc. has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: our common stock.

DESCRIPTION OF COMMON STOCK

General

The following description of our common stock is only a summary. We encourage you to read our restated certificate of incorporation, which is also filed as an exhibit to our Annual Report on Form 10-K of which this exhibit is a part. We are authorized to issue up to 70,000,000 shares of our common stock, par value \$0.01 per share divided into two series, of which 50,000,000 shares are voting common stock and 20,000,000 shares are non-voting common stock and up to 10,000,000 shares of preferred stock, par value \$0.01 per share. As of March 11, 2020, we had outstanding 21,427,078 shares of our voting common stock, 9,505,673 shares of our non-voting common stock and no shares of our preferred stock.

Common Stock

Each share of voting common stock and each share of non-voting common stock are identical and are treated equally in all respects, except with respect to voting rights as set forth below. The rights of holders of our voting and non-voting common stock discussed below are subject to the rights that our board of directors may from time to time confer on holders of our preferred stock issued in the future. These rights may adversely affect the rights of holders of our voting common stock, non-voting common stock, or both.

Liquidation Rights

Upon voluntary or involuntary liquidation, dissolution or winding up, the holders of our voting common stock and non-voting common stock, treated as a single class, share ratably in the assets remaining after payments to creditors and provision for the preference of any preferred stock.

Dividends

Except as otherwise provided by the Delaware General Corporation Law ("DGCL") or our restated certificate of incorporation, the holders of our voting common stock and non-voting common stock, subject to preferences and other rights of holders of any series of preferred stock, are entitled to receive dividends when and as declared by our board of directors out of legally available funds. Holders of our voting common stock and non-voting common stock, treated as a single class, are entitled to share ratably in such dividends.

Voting Rights

Except as otherwise provided by the DGCL or our restated certificate of incorporation, each holder of voting common stock is entitled to one vote in respect of each share of voting common stock held of record on all matters submitted to a vote of stockholders. Our restated certificate of incorporation does not permit our stockholders to act by written consent in lieu of a meeting. Except as otherwise provided by the DGCL or our restated certificate of incorporation, holders of non-voting common stock are not entitled to voting rights. Under our restated certificate of incorporation, holders of non-voting common stock may vote as a separate class on amendments to provisions of the restated certificate of incorporation that provide for the equal treatment of the non-voting common stock and the voting common stock.

Classified Board

Our restated certificate of incorporation provides that our board of directors is divided into three classes, which are designated Class I, Class II and Class III. The number of directors in each class is required to be apportioned so as to maintain the classes as nearly equal in number as possible. The members of each class serve for a three-year term, and the terms are staggered so that each year the term of only one class of directors expires.

Miscellaneous

Our voting common stock and non-voting common stock is not convertible into, or exchangeable for, any other class or series of our capital stock and has no sinking fund or redemption provisions. Holders of our voting common stock and non-voting common stock have no preemptive or other rights to subscribe for or purchase additional securities of ours. Shares of our voting common stock and non-voting common stock are not subject to calls or assessments. All of the outstanding shares of our voting common stock and non-voting common stock are fully paid and nonassessable. Holders of our voting common stock do not have cumulative voting rights.

Transfer Agent

The transfer agent and registrar for our voting common stock is Computershare Inc.

Nasdaq National Market

Our voting common stock is listed and traded on the Nasdaq National Market under the symbol "LORL."

Anti-takeover Effects of Our Certificate of Incorporation and Bylaws and Delaware Law

The following paragraphs summarize certain provisions of the DGCL, and our restated certificate of incorporation and amended and restated bylaws. The summary does not purport to be complete and is subject to and qualified in its entirety by reference to the DGCL and to our restated certificate of incorporation and amended and restated bylaws, copies of which are filed as exhibits to our Annual Report on Form 10-K of which this exhibit is a part.

General

Certain provisions of our restated certificate of incorporation and amended and restated bylaws, as summarized below, and applicable provisions of the DGCL could make our acquisition by a third party, a change in our incumbent management or a similar change of control more difficult, including:

- an acquisition of us by means of a tender or exchange offer;
- an acquisition of us by means of a proxy contest or otherwise; or
- the removal of a majority or all of our incumbent officers and directors.

These provisions, which are summarized below, are likely to discourage certain types of coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us first to negotiate with our board of directors. We believe that these provisions help to protect our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us and that this benefit outweighs the potential disadvantages of discouraging such a proposal because our ability to negotiate with the proponent could result in an improvement of the terms of the proposal.

Election and removal of directors

A director, other than a preferred stock director, may be removed from office only for cause and only by the vote of at least two-thirds in voting power of the outstanding stock entitled to vote in an election of directors. In

addition, our restated certificate of incorporation provides that, subject to the rights of the holders of shares of any series of preferred stock then outstanding, newly created directorships resulting from an increase in the authorized number of directors or vacancies on the board may be filled only by a majority of the directors then in office (even though less than a quorum is then in office) or by the sole remaining director and any director elected to fill a vacancy may hold office for a term that coincides with the term of the class to which such director was elected.

Stockholder action by written consent

Subject to the rights of holders of any series of preferred stock, any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and may not be effected by any consent in writing in lieu of a meeting.

Stockholder meetings

Under our restated certificate of incorporation and amended and restated bylaws, the chairman of the board of directors, the chief executive officer and president, three or more members of the board of directors or the chief executive officer and president, at the request of a majority of the voting power of the then outstanding shares of capital stock then entitled to vote, may call at any time special meetings of stockholders.

Requirements for advance notification of stockholder nominations and proposals

Our amended and restated bylaws establish advance notice procedures with respect to stockholder proposals and nomination of candidates for election as directors other than nominations made by or at the direction of our board of directors.

Bylaw amendments

Our amended and restated bylaws may be amended only by our board of directors or upon the vote of holders of at least 80% of the votes entitled to be cast by the outstanding capital stock in the election of our board of directors.

Delaware anti-takeover law

We are subject to Section 203 of the DGCL, an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years following the date the person became an interested stockholder, unless the “business combination” or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is defined generally as a person who, together with affiliates and associates, owns or within three years prior to the determination of interested stockholder status, did own, 15% or more of a corporation’s voting stock. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Undesignated preferred stock; prohibition on non-voting capital stock

The authorization of undesignated preferred stock makes it possible for our board of directors to issue stock with voting or other rights or preferences that could impede the success of any attempt to change control of us.

Limitation of Liability and Indemnification

As permitted by the DGCL, our restated certificate of incorporation provides that our directors will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- under Section 174 of the DGCL, relating to unlawful payment of dividends or unlawful stock purchase or redemption of stock; or
- for any transaction from which the director derives an improper personal benefit.

As a result of this provision, we and our stockholders may be unable to obtain monetary damages from a director for breach of his or her duty of care.

Our restated certificate of incorporation and bylaws also provide for the indemnification of our directors and officers to the fullest extent authorized by the DGCL. The indemnification provided under our amended and restated certificate of incorporation and bylaws includes the right to be paid certain expenses. These expenses include fees, including attorneys' fees, reasonably incurred in investigating, defending or responding to any civil or criminal action, suit, proceeding or investigation in which one or more of our current or former directors or officers has been named as a defendant, respondent or target, and any related appeal. We will cover these expenses in advance of any proceeding for which indemnification may be payable, provided that the payment of these expenses incurred by a director or officer in advance of the final disposition of a proceeding may be made only upon delivery to us of an undertaking by or on behalf of the director or officer to repay all amounts so paid in advance if it is ultimately determined that the director or officer is not entitled to be indemnified. Such determination will be made without reference to the financial ability of the current or former director or officer to make repayment.

Insofar as indemnification for liabilities under the Securities Act of 1933, as amended, may be permitted to our directors, officers or controlling persons pursuant to our restated certificate of incorporation, our amended and restated bylaws and the DGCL, we have been informed that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Under our restated certificate of incorporation, we have the power to purchase and maintain insurance, at our own expense, on behalf of any person who is or was one of our directors, officers, employees or agents, or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, limited liability company or other business, including any employee benefit plan, against any liability or loss asserted against the person or incurred by the person in any of these capacities, or arising out of the person's status as such, whether or not we would have the power to or are obligated to indemnify such person against such liability or loss. Any indemnification and reimbursement of expenses provided by us will not be available to the extent that indemnification or reimbursement has been received by such person under any applicable policy of insurance or otherwise. We maintain director and officer liability insurance on behalf of our directors and officers.

Loral Space & Communications Inc.

CODE OF CONDUCT

Revised
as of December 8, 2017

Updated
as of December 6, 2018
and
as of January 7, 2020

Table of Contents

| | | |
|----|------------------------------------------------------------------------------------|----|
| 1. | INTRODUCTION | 1 |
| | A. General Policy | 1 |
| | B. Scope | 1 |
| | C. Violations of the Code | 2 |
| 2. | EMPLOYMENT PRACTICES | 2 |
| | A. Equal Employment Opportunity; Non-Discrimination; Harassment | 2 |
| | B. Environmental Safety | 4 |
| 3. | BUSINESS CONDUCT OF ASSOCIATES | 4 |
| | A. Compliance with Laws, Rules and Regulation | 4 |
| | B. Avoidance of Personal Conflicts of Interest | 5 |
| | C. Corporate Opportunities | 6 |
| | D. Insider Trading | 7 |
| | E. Proprietary Information/Trade Secrets | 7 |
| | F. Fair Dealing | 9 |
| | G. Entertainment, Gifts and Gratuities | 9 |
| | H. Marketing Activities | 10 |
| | I. Special Requirements When Marketing and Contracting with the Federal Government | 11 |
| | J. Proper and Timely Reporting of Public Documents | 17 |
| | K. Internal Controls | 17 |
| | L. Accuracy of Documentation | 18 |
| | M. Producing Quality Products | 18 |
| | N. Company Funds and Property | 19 |
| | O. Following Security Guidelines | 20 |
| | P. Record Retention | 20 |
| | Q. Social Media | 20 |
| 4. | WAIVERS OF THE CODE | 21 |
| 5. | ADDITIONAL PROCEDURES FOR THE CEO, PRESIDENT AND SENIOR FINANCIAL OFFICERS | 21 |
| 6. | CERTAIN RULES AND REGULATIONS | 22 |
| | A. Foreign Corrupt Practices Act | 22 |
| | B. Export Control Laws | 24 |
| | C. Economic Sanctions Measures | 26 |
| 7. | REPORTING, INVESTIGATING AND ENFORCEMENT | 29 |
| | A. Code of Conduct Violations | 29 |
| | B. Employment Practices Violations | 31 |
| | C. Anonymous Ethics Hotline. | 32 |

1. INTRODUCTION

This Code of Conduct (this “Code”) sets forth the legal and ethical standards to which all directors, officers, employees, temporary employees, independent contractors and consultants in their capacity as such (the “associates”) of Loral Space & Communications Inc. and its subsidiaries (“Loral” or the “Company”) are required to adhere. All associates are expected to comply with this Code. This Code serves as a guide to associates for the proper recognition and resolution of ethical and legal issues encountered in conducting the Company’s business and in making decisions that conform to ethical and legal standards. This Code may be modified from time to time, without prior notice, as the Company’s Board of Directors deems appropriate.

A. General Policy

It is the standard of conduct and express policy of Loral that all dealings with our customers, suppliers, competitors, partners and co-workers are conducted with the highest level of ethical behavior and in complete compliance with the spirit and the letter of applicable laws and regulations. This is important in our dealings with commercial companies as well as with the United States government and foreign governments.

Improper activities, or even the appearance of impropriety, could result in serious consequences to the Company and the associates involved in such activities. An associate’s adherence to this policy is a significant indicator of the individual’s judgment and competence and will be taken into consideration when evaluating future assignments and promotions. Insensitivity to, or disregard for, the principles set forth in this Code will be grounds for appropriate disciplinary action, including dismissal.

Loral’s objective is to excel as a responsible and reputable business. In attaining this objective, no associate shall, on behalf of Loral or while a Loral associate, engage in any conduct that violates any law or is otherwise inconsistent with the highest levels of honesty and integrity. Complex laws and regulations govern the environment in which Loral does business. This Code outlines key aspects of those laws and regulations as well as relevant Loral policy.

Individual associates may require additional training in certain areas to ensure compliance. If, for example, you have contact with representatives of foreign organizations, you must ensure that you are familiar with import and export regulations, embargo and trade sanction laws and the provisions of the Anti-Boycott Act and the Foreign Corrupt Practices Act. If you have any questions about the applicability of any laws to your actions, you should consult with Loral legal counsel.

B. Scope

Associates with supervisory responsibilities must ensure that employees under their direction or control are acquainted with this Code. Directors and officers should also be aware that there are special legal requirements not covered by this Code that apply

to corporate fiduciaries. Conduct contrary to these guidelines is outside the scope of any employee's employment.

In addition to compliance with all legal requirements, each Loral associate must adhere to the overriding ethical and professional standards that generally govern the conduct of business. The Company's interests are not served by any unethical practice or activity even though such practice or activity may not be in technical violation of the law. The scope of this Code may not include all Loral policies and practices to which associates are required to adhere. In instances in which other such policies and practices appear to conflict with those set forth in this Code, associates must follow the more restrictive policy or practice.

Associates should consider this Code as a baseline, or a minimum requirement, which must always be followed. If at any time you are in doubt about whether a particular provision applies to your conduct or about any aspect of your compliance responsibilities, you should contact your manager or supervisor, or use other resources described in this Code to address your concern.

C. Violations of the Code

Any violation of the applicable laws and regulations or principles of ethics set forth in this Code will be grounds for disciplinary action or discharge from employment and may subject the associate or former associate to civil liability and/or criminal prosecution under applicable law. Disciplinary action may be taken not only against those who authorize or participate directly in such violation, but also against: (i) any associate who deliberately fails to report a violation as required by the policy; (ii) any associate who deliberately withholds material and relevant information concerning a violation; or (iii) the violator's supervisor and manager, to the extent that there is inadequate leadership, supervision or diligence.

Please see Section 7 of the Code below for procedures for reporting of violations.

2. EMPLOYMENT PRACTICES

A. Equal Employment Opportunity; Non-Discrimination; Harassment

Loral is committed to ensuring equal employment opportunity for all associates, including qualified employment applicants. The company maintains its employment practices and its environment free of discrimination based on race, color, religion, gender, national origin, ancestry, age, disability, veteran or marital status, sexual orientation, partnership status, gender identity, alienage or citizenship status, actual or perceived status of a victim of domestic violence, or as a victim of sex offenses or stalking or any other protected category or characteristics under law.

Any associate who has a question or concern regarding the company's employment practices policy should direct his or her inquiry to Avi Katz at the corporate office, his or her direct manager, or any member of the management or executive management team who will answer or address the question or concern. Any applicant or associate

filing a complaint or assisting in the investigation of a complaint is protected from retaliation, coercion, intimidation, interference and discrimination.

Policy against workplace harassment

Loral is committed to maintaining a productive work environment in which all individuals are treated with mutual respect and dignity. Each associate is required to contribute to a professional atmosphere that promotes equal opportunity and nondiscriminatory practices. In keeping with this commitment, harassment and inappropriate conduct of any form will not be tolerated.

Associates are required to exhibit, in their conduct and communications, sound judgment and respect for every other associate and all other persons (i.e., vendors, customers, building staff) with whom the company does business. Insulting, degrading, exploitative or discriminatory treatment, whether verbal or physical or written, electronic or otherwise, will not be tolerated.

Similarly, inappropriate conduct directed to our associates by outside vendors, consultants or customers will not be tolerated.

Sexual harassment

Loral does not tolerate workplace sexual harassment and considers it to be a serious offense.

Sexual harassment is unwanted sexual attention of a persistent or offensive nature made by a person who knows, or reasonably should know, that such attention is unwanted. Sexual harassment includes sexually oriented conduct that is sufficiently pervasive or severe to unreasonably interfere with an employee's job performance or create an intimidating, hostile, or offensive work environment. While sexual harassment encompasses a wide range of conduct, some examples of specifically prohibited conduct include:

- Promising, directly or indirectly, an employee a reward if the employee complies with a sexually oriented request
- Threatening, directly or indirectly, to retaliate against an employee if the employee refuses to comply with a sexually oriented request
- Denying, directly or indirectly, an employee an employment-related opportunity if the employee refuses to comply with a sexually oriented request
- Engaging in sexually suggestive physical contact or touching another employee in a way that is unwelcome
- Displaying, storing, or transmitting pornographic or sexually oriented materials using company equipment or facilities, including email
- Indecent exposure
- Making sexual or romantic advances toward an employee and persisting despite the employee's rejection of the advances

Sexual harassment may involve individuals of the same or different genders and is prohibited whether directed toward men or women. Sexual harassment can be physical and/or psychological in nature.

In addition to the sexual harassment policy set forth in this Code, employees who work in the Company's New York office are bound by and are required to comply with the Company's Sexual Harassment Prevention Policy dated October 5, 2018.

Other forms of harassment also prohibited

To the same degree as sexual harassment, this policy also prohibits harassment or other inappropriate conduct on the basis of race, color, religion, gender, national origin, ancestry, age, disability, veteran status, marital status, sexual orientation, citizenship or any other protected category or characteristics.

B. Environmental Safety

Loral is committed to achieving the highest standards of safety, health and environmental performance at all of its facilities. It is the responsibility of each associate to follow the rules and procedures established at each facility to achieve these safety, health and environmental goals. Associates must immediately report any incident of non-compliance or any unsafe condition to the facility's environmental, health and safety coordinator.

3. BUSINESS CONDUCT OF ASSOCIATES

It is every associate's responsibility to read, understand and comply with this Code. Further, each associate is responsible for knowing his or her job and what it takes to comply with the rules and regulations relating to the performance of that job. Managers, supervisors and employees jointly share the responsibility of identifying training needs required to assist employees in job performance and in complying with this Code. If an associate wishes to obtain guidance on the interpretation or application of this Code or applicable laws and regulations, he or she may contact any one of the sources listed under the heading "Reporting Violations."

A. Compliance with Laws, Rules and Regulation

Obedience to the law, both in letter and in spirit, is the foundation on which Loral's ethical standards are built. All associates must respect and obey the laws of the cities, states and countries in which Loral operates. Although not all associates are expected to know the details of these laws, it is important to know enough to determine when to seek advice from supervisors, managers or other appropriate personnel.

Loral will not knowingly assist other persons or entities with which we have business dealings in violating any law or regulation. For example, we will not misrepresent or confirm facts known to be false to the auditors of a customer or supplier for the purpose of allowing the customer or supplier to prepare false financial statements or financial information.

We specifically direct the associates' attention to Section 7, which describes some of the requirements of the Foreign Corrupt Practices Act, U.S. export control laws and economic sanctions measures that may be applicable to the associates.

If necessary, Loral will hold information and training sessions to promote compliance with laws, rules and regulations, including insider-trading laws.

B. Avoidance of Personal Conflicts of Interest

A personal conflict of interest exists when a person's private interest interferes in any way with the interests of the Company. A conflict situation may arise when an associate takes actions or has interests that may make it difficult to perform his or her Company work objectively and effectively. Conflicts of interests may also arise when an associate, or members of his or her family, receives improper personal benefits as a result of his or her position in the Company. Loans to, or guarantees of obligations of, associates and their family members may create conflicts of interest.

Loral associates must observe high standards of conduct and integrity in their relationships with outside organizations. They must refrain from having any financial or other interest in or relationship with an organization that competes with or does business with Loral. Not only must associates avoid unethical business practices and favoritism, they should also avoid outside activities and financial interests that might create that perception.

It is Loral's policy to respect the rights of associates to engage in outside activities that do not conflict with their positions as associates. However, when an outside activity or financial interest involves an organization with which the Company does business, good judgment is required to avoid any basis for conflict of interest. No associate may, without being granted an exception, acquire or retain, either directly or indirectly, the following financial interests in an organization that competes with, does business with, or seeks to do business with Loral:

- Any interest as a proprietor or partner in such an organization;
- The ownership of, or right to acquire, stock or bonds of such an organization that is a privately held corporation; or
- With respect to a publicly-owned corporation five percent (5%) or more of the revenues of which are derived from Loral, the ownership of, or right to acquire, stock or bonds in an amount in excess of the lesser of (i) \$25,000 or (ii) 1% of the total securities of such publicly owned corporation.*

* This restriction does not apply to employees who come to Loral from other companies and who hold shares of those companies' stock in a savings plan or stock ownership plan. This exception only applies to stock that was owned by the employee prior to his or her employment with Loral, and that is held in those investment instruments. Subject to the terms of the plan document, such employees may keep stock that is in those investment instruments and any stock dividends paid from those remaining in those investment instruments.

- Associates may not compete with Loral directly or indirectly. Associates owe a duty to Loral to advance its legitimate interests when the opportunity to do so arises.

Each associate shall report to the chairperson of the Audit Committee of the Board of Directors or the Loral Legal Department the details on any of the financial interests described above that are held or acquired, directly or indirectly, by himself or herself or any family member, to the extent known by the associate.

The following restrictions also apply to associates:

- No associate may serve as an officer or director of any firm without prior approval by the chairperson of the Audit Committee of the Board of Directors or president of Loral.
- No associate may undertake employment with, or furnish services as a consultant or other representative to another firm, unless approved in writing by the chairperson of the Audit Committee of the Board of Directors or president of Loral.
- Employment of an associate's spouse or other immediate family member by an organization with which Loral competes or does business could provide the basis for criticism, and any such employment situations should be reported to the chairperson of the Audit Committee of the Board of Directors or president of Loral.

Notwithstanding the foregoing, the provisions of this Section 3.B. shall not apply to Loral's non-employee directors. A non-employee director shall, however, promptly notify the Board of Directors if he or she or a member of his or her immediate family commences (x) service as an officer or director of any Competitor or (y) employment with, or the furnishing of services as a consultant or other representative to, any Competitor or otherwise enters into an agreement with a Competitor to do any of the foregoing. For purposes of this paragraph, "Competitor" shall mean any of the following: (i) SES S.A., Intelsat Global S.A. and Eutelsat S.A.; (ii) a business that is principally engaged in the business of fixed satellite services; or (iii) a business other than fixed satellite services in which the Company is principally engaged. Loral reserves the right to change this list at any time. For the avoidance of doubt, any such non-employee director (x) shall not be required to obtain any approval from Loral prior to or in connection with, nor shall he or she be prohibited from engaging in, any of the activities described in this paragraph and (y) may continue to serve as such non-employee director of Loral notwithstanding his or her engagement in the activities described in this paragraph subject to his or her compliance with applicable legal requirements.

C. Corporate Opportunities

Associates are prohibited from taking personal advantage of opportunities that first become known through employment or association with Loral or are otherwise

discovered through the use of Loral property, information or position without the consent of the Board of Directors. Specifically:

- Associates should not place themselves in a situation in which they may profit from a business opportunity if the circumstances indicate that the opportunity should have been made available to Loral. In general, a business opportunity which might reasonably be expected to be of interest to Loral should be brought to the attention of management for a determination of whether Loral wishes to pursue it.
- Associates may not use facilities or equipment of Loral in the pursuit of personal interest or profit. Associates who are on paid Loral time should be involved only in the business of Loral.
- Associates may not compete with Loral directly or indirectly. Associates owe a duty to Loral to advance its legitimate interests when the opportunity to do so arises.

D. Insider Trading

Loral has adopted an Insider Trading and Confidentiality Policy with respect to the trading by associates of securities issued by the Company and the receipt and use of material non-public information by associates. Associates should refer to and must abide by this policy.

E. Proprietary Information/Trade Secrets

Loral proprietary information consists of any information and data possessed by and in the control of the Company that may be valuable to it in its business. Such information must not be disclosed to others, except as required by law or permitted by the Company, because doing so could disadvantage Loral competitively or financially; because the information could hurt or embarrass, customers, suppliers, joint venture partners or the Company; or because the information belongs to others, and we have agreed to keep it private. When there is a legitimate business need to disclose proprietary information outside Loral, a non-disclosure agreement may be appropriate. For more information and prior to disclosure, contact Loral legal counsel.

Proprietary information includes, but is not limited to:

- Loral research and development, such as inventions, manufacturing processes, patent applications, and engineering and laboratory notebooks (see below);
- Customer and employee lists and records;
- Business strategies, business results, unannounced products or services, marketing plans, pricing and financial data;
- Cost information, such as overhead or other indirect rate information, salaries, estimates, etc.;

- Non-public information about products or services, including hardware and software specifications and designs;
- Confidential organizational information; and
- Information disclosed by other parties pursuant to a non-disclosure agreement.

Proprietary information may exist as reports, manuals, charts, computer disks, drawings, specifications, photographs, films and correspondence. Hardware, equipment or materials embodying proprietary information and data may also be treated as proprietary information.

Each associate is responsible for ensuring that proprietary information is protected from theft, damage, unauthorized disclosure or inappropriate use. Always store such information in a safe place and follow security procedures for the computer systems used. Remember that you can be overheard in public places and when using portable communications devices. Do not discuss Loral proprietary information with family or friends; they may not understand its significance and may inadvertently pass it on to someone who should not have it.

i. “Patentable” Inventions

A “patentable” invention is one that constitutes a new, useful and unobvious machine process, article of manufacture, composition of matter, or improvement thereof (including software). All inventions made or conceived by employees in the course of, or as a result of their employment, are the exclusive property of Loral and are to be promptly disclosed in writing and assigned to the Company.

Employees are responsible for maintaining a laboratory notebook to record concepts, ideas and related work, together with the recording of progress on technical efforts, in order to establish priority of invention, provide a basis for patent coverage and protect future proprietary rights of the Company.

Licenses and copyrights obtained by employees in the course of, or as a result of their employment, are the exclusive property of Loral and are to be promptly disclosed in writing and assigned to the Company.

ii. Copyrighted Works

Copyright laws protect the original expression in, among other things, written materials, works of art and music, and prohibit their unauthorized duplication, distribution, display and performance. This means that we may not reproduce, distribute or alter copyrighted materials from books, trade journals, computer software or magazines, or play records, tapes, discs or videotapes, without permission of the copyright owner or its authorized agents. Software used in connection with Loral’s business must be properly licensed and used only in accordance with that license. Using unlicensed software could constitute copyright infringement.

F. Fair Dealing

We believe our reputation for integrity is our most important asset. We must deal fairly with customers, vendors and competitors and fulfill our obligations even when they are detrimental to our profitability. All estimates and commitments to both customers and co-workers should be made with the expectation that they will be achieved.

We seek to outperform our competition fairly and honestly. Stealing proprietary information, possessing trade secret information that was obtained without the owner's consent or inducing such disclosures by past or present associates of other companies is prohibited. Each associate should endeavor to respect the rights of and deal fairly with Loral's customers, suppliers, competitors and associates. No associate should take unfair advantage of anyone with respect or relating to Loral business through manipulation, concealment, abuse of privileged information, misrepresentation of material facts or any other intentional unfair-dealing practice.

All associates must comply with antitrust and related competition laws in jurisdictions in which we do business. These laws in the United States and other countries typically restrict and/or regulate competitive business practices in order to preserve fair, honest and vigorous competition. Violations of these laws may result in damage to our reputation, severe monetary penalties and criminal penalties for those involved. Associates should not seek price information from a competitor; discuss the Company's current or future plans or pricing with a competitor; share confidential Company information with a competitor; agree with one or more competitors on any decision or course of action; seek to raise a competitor's cost of doing business or to restrain a competitor from doing business; or otherwise engage in any course of action that is or could be perceived to be anti-competitive. If an associate is unsure whether a communication is anti-competitive, the associate should consult a supervisor or member of the Company's legal department.

G. Entertainment, Gifts and Gratuities

It is Loral's policy that all dealings with other organizations be conducted with the highest ethical behavior and in complete compliance with applicable laws and regulations. Our business transactions should always be free from even a perception that favorable treatment was sought or received, offered or solicited by gifts, favors, hospitality, entertainment or similar gratuities. While there are certain circumstances under which it is permissible to furnish or accept such items, every employee is expected to follow a course of action that complies with the following guidelines.

No associate may solicit, directly or indirectly, for his or her benefit or for the benefit of another person, any gift, favor or other gratuity from a person or organization with which the Company does business or that seeks to do business with the Company. Soliciting a gift, favor or other gratuity is strictly prohibited regardless of the nature or value of the item or service.

No Loral associate may accept any gratuities (monetary or non-monetary), gifts or favors, except for ordinary items of nominal value, from a person or organization that conducts business with the Company or seeks to do business with the Company. Items of nominal value are considered to be normal sales promotion, advertising or publicity items, with the provider's logo, *e.g.*, calendars, ball point pens, coffee cups, etc., with a retail value not exceeding \$75. Exceptions to this policy require prior approval of the Legal Department and must be based on a legitimate business interest of the Company and may not be in violation of the law, regulation or other authority. Loral associates may accept a meal, drink or entertainment from such persons or organizations only if these courtesies are unsolicited, infrequently provided and reasonable in amount. Associates should reciprocate if and when appropriate, except with respect to offering things of value to government personnel, discussed in section 3.I.i below.

Loral associates should never offer any type of business courtesy to a customer for the purpose of, or in exchange for, obtaining favorable treatment or advantage. Except for restrictions that apply when dealing with government representatives, associates may pay for reasonable business-related meals, refreshments and/or entertainment expenses for customers and suppliers that are incurred only occasionally, are not requested or solicited by the customer and are not intended to or could not reasonably be perceived as affecting business decisions.

H. Marketing Activities

Loral supports vigorous competition. We believe that enduring customer relationships are built on integrity and trust. We seek to gain advantage over our competitors only through superior research, engineering, manufacturing and marketing. It is our intention to win business through excellent products and services, never through unethical or questionable business practices. The marketplace requires the gathering of a wide range of information in a systematic and legal manner. This information provides an understanding of the industry structure and customer requirements for existing or potential products and services of Loral. It is the policy of Loral that its associates, agents and other representatives will gather only information to which the Company is legally entitled. Loral will neither seek nor accept any information that is prohibited from disclosure by law, regulation or policy of the customer. Associates must not:

- seek special treatment or data that are otherwise restricted;
- attempt to improperly influence specifications to gain unfair advantage or limit competition; or
- seek access to classified or officially restricted information.

There must be no exchanges of unauthorized or so-called inside information or attempts to induce competitor or government employees to violate the laws or their standards of conduct by seeking information they cannot properly release or provide. There are severe sanctions available to the government when the laws on procurement integrity are violated.

I. Special Requirements When Marketing and Contracting with the Federal Government

Law forms a foundation for Loral's business activities. We must conduct business in accordance with the laws of the cities, states and countries where we operate. In dealings with the United States government, Loral associates and other representatives who perform legislative liaison, marketing, proposal and/or contract activities should be especially sensitive to the following requirements:

i. Gifts and Gratuities to Government Personnel

The Company must comply with special standards of conduct in contracting with the federal government. Government representatives shall not be offered or given, either directly or indirectly, anything of value that they are prohibited from receiving by applicable law or agency regulations. Political appointees in the executive branch of the U.S. government may be subject to special ethics rules established by executive order of the President. Loral associates dealing with representatives of a particular federal agency are responsible for complying with that agency's standards of conduct. Where there is a question as to a particular agency's requirements under its standards of conduct, associates must contact Loral legal counsel for guidance.

Except as otherwise permitted by law or regulation, Loral associates are prohibited from paying for meals, refreshments, entertainment, travel or lodging expenses for any U.S. government employee or representative. One exception is that, unless otherwise prohibited by law, regulation or Executive Order, unsolicited items of less than \$20 in value may be provided to government employees, such as a meal provided on-site to accommodate continuing business meetings with government employees, so long as items of value totaling no more than \$50 are given by Loral to any single government employee in a calendar year. Loral associates doing business with state or local government officials are responsible for knowing and adhering to the rules that may apply to such state or local government employees.

In certain instances where customs in foreign countries require the exchange of gifts, the Company may provide or accept the gift with approval of the Legal Department. Any gifts, other than those of nominal value received from representatives of these countries, will become Company property.

ii. Lobbying the Federal Government

When engaging in lobbying activities with the federal government, Loral associates must comply with the Lobbying Disclosure Act of 1995 ("Lobbying Act"), the Byrd Amendment and related regulations. Lobbying activities are defined as any oral or written communication to certain executive and legislative officials made on behalf of a client with regard to certain federal matters and efforts in support of such communications, including preparation and planning activities, research and other background work, with some exceptions.

The Lobbying Act is primarily a registration and reporting statute, which requires lobbyists (individuals or entities) to register with Congress and to submit quarterly

disclosure reports of lobbying activities and semi-annual reports of certain campaign contributions. When a company registers on behalf of its employees who are lobbyists, the company completes the quarterly disclosure report filing requirement. The company and each individual lobbyist must also file a semi-annual contribution report, even if no contributions were made during the reporting period. The Lobbying Act also imposes additional restrictions on lobbyists and their employers, including Loral, with respect to gifts and travel offered to members of Congress and their staffs.

The Byrd Amendment both prohibits certain lobbying activity and requires reporting of other lobbying activity. The Byrd Amendment prohibits the use of funds received through government appropriations from being expended on certain lobbying activities. The Byrd Amendment also requires government contractors to file disclosure reports of lobbying activity to government agencies when requesting or receiving certain federal contracts, grants, loans or cooperative agreements.

Finally, certain lobbying costs are unallowable under the Federal Acquisition Regulation.

Loral associates must learn and adhere to these laws and regulations if they intend to engage in any lobbying activity with the federal government and must maintain complete and accurate records of all lobbying activity. Loral associates who intend to lobby state or local governments are responsible for knowing and adhering to the laws that may apply to such activities including, where applicable, any associated state or local “pay-to-play” rules affecting businesses seeking or having contracts with a state or local government.

iii. Restrictions on Obtaining Contractor Bid and Proposal or Government Source Selection Information

Federal law prohibits contractors, their employees, representatives, agents and consultants from obtaining contractor bid and proposal or government source selection information related to any federal agency procurement before award of the contract.

A contractor’s bid or proposal information includes, but is not limited to, any of the following information submitted to a federal agency in connection with a bid or proposal that has not been made available to the public:

- Cost or pricing data;
- Indirect costs and direct labor rates;
- Manufacturing or other processes;
- Proprietary information;

- Information marked “contractor bid or proposal information” in accordance with applicable law or regulation or marked with any other appropriate restrictive or proprietary language under applicable laws or regulations.

Government source selection information includes, but is not limited to, the following information prepared for use by a federal agency for the purpose of evaluating bids or proposals, if the information has not been publicly disclosed:

- Independent government cost estimates;
- Bid prices submitted to an agency or lists of those bid prices;
- Proposed costs or prices submitted to an agency or lists of those costs or prices;
- Source selection plans or technical evaluation plans;
- Technical evaluations, cost or price evaluations, competitive range determinations, rankings of bids, proposals or competitors or reports and evaluations of source selection panels, boards or advisory councils;
- Other information marked as “Source Selection Information” according to applicable laws and regulations.

If any doubt exists as to whether a particular piece of information may be rightfully obtained, the Loral associates or representatives who wish to obtain such information that has not been publicly released should first contact Loral’s legal department. Further, unauthorized offers to provide proprietary or source-selection information must be refused and immediately reported to Loral legal counsel. Consequences for violations may include, but are not limited to, civil or criminal penalties, suspension or debarment and/or exclusion from the particular procurement. Individual liability may also attach to such violations, resulting in potential civil or criminal penalties and/or suspension or debarment.

In addition to the restrictions discussed above, Loral associates should also be aware of “organizational conflicts of interest.” An example of this is the doctrine of “unfair competitive advantage.” This body of law provides that an offeror, in the context of a federal government procurement, may not obtain a competitive edge by allowing a former government employee to participate in the proposal preparation process, if that individual had access while employed by the government to non-public confidential or proprietary information that bears on the procurement. Such information may include the government’s procurement planning materials or pricing or other data about a competitor. Moreover, to the extent the former government employee had access to this type of relevant information, that knowledge may be imputed to the rest of the Company unless certain formal precautions are taken, such as a firewall. Additional information on organizational conflicts of interest is provided in section vii. below. Restrictions on employment discussions and hiring of government personnel are discussed in

detail in the next section. Contact the Loral Legal Department to discuss appropriate measures concerning the hiring and work assignments of former government personnel.

iv. Employment Discussions and Hiring Government Personnel

Loral associates must comply with two types of restrictions in this complex area of law: (1) restrictions on holding employment discussions with certain government personnel; and (2) restrictions on the types of tasks or assignments that current or former government personnel may perform for a private employer. Even if the revolving door laws permit discussions, no Loral associate should ever make employment discussions or employment contingent upon the government employee providing information to Loral that the Company is not authorized to receive.

Loral associates are prohibited from holding employment discussions with certain government personnel who are participating personally and substantially in matters that may affect the Company's financial interests, including federal procurements in which Loral is a bidder or offeror. Employment discussions include a broad range of conduct, such as e-mail correspondence, the exchange of a resume or a conversation over lunch in which the possibility of employment is discussed. References to salary or other terms of employment are not necessary for a communication to constitute employment discussions. Loral associates must know and adhere to the relevant laws if they intend to engage in employment discussions with government personnel.

In addition, even if Loral is permitted to discuss employment with a particular government employee, certain current or former government personnel are restricted from working on certain matters or contracts on behalf of private employers. These restrictions may depend on the type of position, grade level or responsibility the government employee had while working in the government and can last for one year, two years or a lifetime.

The employment discussion and hiring restrictions for federal government personnel are complex; therefore, any questions should be presented to your supervisor or manager to obtain appropriate advice and guidance.

Sanctions available to the government for violations in this area include criminal and civil penalties, exclusion from the procurement competition, cancellation of the contract, and suspension and debarment from doing business with the government. These sanctions may be applied by the government to the Company, the government employee or the Company associate involved, as appropriate.

v. Truth in Negotiations Act

All proposals submitted to the U.S. government must comply with provisions from the Federal Acquisition Regulation (FAR) that are contained in the solicitation and resulting contract. Some contracts and contract modifications are subject to the data disclosure requirements under the Truth in Negotiations Act.

Where cost or pricing data are required to be submitted by the Company, such data must be accurate, complete and current as of the date of final agreement on price. Whether you are the contract negotiator, the cost estimator or the person responsible for furnishing the data to the cost estimator, you must ensure that the Loral data meet these FAR requirements:

- Accurate means free from error;
- Complete data means all facts that a prudent buyer or seller would reasonably expect to have an effect on price negotiations, *e.g.*, historic cost data, vendor quotations, “make or buy” decisions and other management decisions that could have a bearing on cost; and
- Current data means data that are up to date. Because many months may pass after the original proposal and price were submitted, data should be updated, *i.e.*, through disclosure but not necessarily through use of the newer data, through the close of negotiations to ensure they are current.

If you have any questions as to whether information is cost or pricing data that must be disclosed to the government, you should seek advice from Loral legal counsel. It is Loral’s intention that all required cost or pricing information will be disclosed to the government. Falsely certifying facts or data used in government proposals and contracts, whether unintentionally or deliberately, is a violation of law, regulation and contract requirements and may subject the Company and involved associates to criminal and civil penalties or administrative action.

vi. Anti-Kickback Laws

Associates and representatives must comply with anti-kickback laws which prohibit any individual or company from providing, attempting to provide or soliciting, accepting or attempting to accept, any kickback. A “kickback” is generally considered as any money, fee, commission, credit, gift, gratuity, thing of value (including money, trips, tickets, transportation, beverages and personal services) or compensation of any kind that is provided directly or indirectly to any individual or company for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or subcontract/supplier relating to a prime contract.

In addition, certain government contracts contain clauses implementing anti-kickback laws and/or regulations which may require contractors to establish and follow reasonable procedures to prevent and detect possible kickbacks, and to report possible violations when there are “reasonable grounds” to believe that a violation has occurred. If you believe one of the various offenses detailed in this section have occurred, or if you have questions regarding these obligations, please follow the reporting procedures as set forth below in Section 7.A.

vii. Organizational Conflicts of Interest

It is Loral's policy to comply with the letter and spirit of the statutory, regulatory and contractual requirements regarding organizational conflicts of interest. Such a conflict may occur when, because of other activities or relationships, Loral may be unable or potentially unable to render impartial assistance or advice to the government, Loral's objectivity in performing the work is or might be otherwise impaired or the contractor/recipient has an unfair competitive advantage.

Loral will not pursue a grant or contract that has the appearance of, or presents a conflict of interest and has not been approved in advance by the Loral Legal Department. All Loral personnel, agents, representatives, and consultants are responsible for ensuring that this policy is understood and, if any conflicts of interest are suspected, reporting it to their supervisor or the legal department for resolution.

viii. Purchasing and Subcontracting

Because the value of subcontracts and purchase orders awarded by a U.S. government contractor can be substantial, the U.S. government has a strong interest and exercises great control over a contractor's purchasing and subcontracting processes. Among other things, U.S. government requirements can affect the type of subcontract, the amount and type of competition required and the terms and conditions required to be included in vendor agreements and subcontract. It is Company policy to comply with all such restrictions and obligations.

ix. U.S. Government Property

Loral is required to establish and maintain a system in accordance with federal requirements to control, protect, preserve and maintain all U.S. government property. Loral employees must be able to identify such property and track it through the Company's property records. Damage to or misappropriation of U.S. government property may result in a breach of contract charge or even imposition of civil penalties and criminal charges. More information on protecting company property is contained in Section N.

x. Contract Certifications and Representations

The U.S. government requires contractors to make certain written representations and certifications in order to ensure that prospective contractors meet the qualifications of contract solicitations. In addition, during contract performance, there are a host of written attestations that a contractor such as Loral is required to make, including conformance reports, time and material records and other documents supporting our invoices for payment. It is imperative that all representations or certifications be complete and accurate. It is the duty of anyone making a certification or representation on behalf of Loral to determine its accuracy in advance. See also Section L, Accuracy of Documentation.

xi. Mandatory Disclosures to the U.S. Government

Federal regulation mandates that Loral timely disclose, in writing, to the agency Office of the Inspector General (OIG), with a copy to the Contracting Officer, whenever, in connection with the award, performance or closeout of a federal

government contract, grant or cooperative agreement, or any subcontract thereunder, Loral has credible evidence that a principal, employee, agent or subcontractor has committed either:

- A violation of federal criminal law involving fraud, conflict of interest, bribery or gratuity violations found in Title 18 of the United States Code; or
- A violation of the civil False Claims Act.

Loral's failure to meet the above obligation could subject the Company to suspension and debarment action(s). Loral may also be suspended and/or debarred for a knowing failure by a principal to timely disclose to the Contracting Officer credible evidence of a significant overpayment by the federal government.

Note, while you have the right to disclose any concerns regarding the above matters directly to the federal government, your duty as a Loral associate is not to disclose such matters. Rather, if you believe one of the various offenses detailed in this section have occurred, or if you have questions regarding these obligations, please follow the reporting procedures as set forth below in Section 7.A.

J. Proper and Timely Reporting of Public Documents

As a public company, it is of critical importance that Loral's filings with, and submissions to, the Securities and Exchange Commission, and other public communications, be fair, accurate and timely. Depending on his or her position with Loral, an associate may be called upon to provide information required to assure that Loral's public reports are complete, fair and understandable. Loral associates are expected to take this responsibility seriously and to provide prompt and accurate answers to inquiries related to Loral's public disclosure requirements.

K. Internal Controls

Loral has a detailed financial control structure and related procedures designed in accordance with Section 404 of the Sarbanes-Oxley Act of 2002, which requires companies to implement and evaluate internal controls for purposes of financial statement reporting integrity. Assessing the quality of these internal controls involves a continuous process of evaluating their design and operation and taking necessary corrective action to improve them as required. Through discussions with supervisors and review of Loral's documented practices and procedures, each associate must understand his or her role with regard to Loral's overall control structure and related procedures. An associate should report as soon as possible to his or her supervisor or other appropriate person in accordance with Section 5 of this Code any potential concerns he or she may have with respect to either his or her own role or performance or otherwise relating to Loral's control structure and related procedures. Early identification of problems is critical to the strength of the Company's controls, as well as maintaining compliance with the law.

L. Accuracy of Documentation

Loral associates create various forms of records including reports and correspondence, which may be in hard copy or electronic media. Business records should include objective and verifiable factual information and should be free from speculation and rumor, and from ambiguous or misleading statements. Particular care must be taken to ensure that statements made to the government and claims submitted to the government are accurate. The government may impose severe penalties for false statements or false claims.

i. Reporting Expense Reimbursements

Those who submit expense reports and other forms requesting reimbursement must follow Loral's applicable procedures. Expense reports should contain only charges actually incurred by the employee in furtherance of Loral business. Expenses should be accurately described so that unallowable expenses may be excluded from billings to the government. The finance department will provide guidance if you have any questions.

ii. Reporting Labor Charges

The accurate reporting of labor at Loral is both essential and mandatory because it is the source for the charging of direct labor and the distribution of overhead cost to a contract. You will accomplish this by either completing a labor timecard or voucher or by entering your time through an electronic labor reporting system.

When you report time being charged to a specific contract, the following are some general "musts" to help you follow proper labor charging practices. You **MUST**:

- Prepare your own voucher/timecard;
- Record time as work is performed;
- Obtain the charge number for the job(s) you are working on from your immediate supervisor or his or her representative;
- Record time *only* for the job(s) on which you are working;
- If you need to make a correction on a non-electronic labor reporting system, draw a line through the error and write the proper entry on the next line. You and your supervisor must initial each correction. For electronic labor reporting, notify your supervisor promptly of any corrections to incorrect entries; and
- Check and follow Loral's specific guidelines for labor reporting.

M. Producing Quality Products

Loral is committed to delivering products with the highest levels of quality and reliability consistent with each customer's requirements. To achieve this goal, each associate must follow these guidelines:

- Make achievement of quality and excellence your personal goal;
- Strive to do each job right the first time;
- Comply with all contract requirements, including:
 - Design requirements;
 - Performing all inspections and tests specified in each contract;
 - Preparing all required reports accurately and completely;
 - Using only materials conforming to quality levels specified in each contract; and
 - Using only substitute materials that have been approved in writing by the customer's representative.

By providing quality products and services, not only do we meet our customers' requirements, but also we make the Company more competitive and stronger in the marketplace.

N. Company Funds and Property

All employees are responsible for safeguarding and making proper and efficient use of Company funds and property by following procedures to prevent their loss, theft or unauthorized use. Company funds and property include Company time; cash, checks, drafts and charge cards; land and buildings; records; vehicles; equipment, including fax machines, copiers and telephones; computer hardware and software; scrap and obsolete equipment; and all funds and property.

The following are ways to protect company funds and property:

- Make sure expenditures are for legitimate business purposes;
- Keep accurate and complete records of funds spent;
- Use corporate charge cards only for business purposes or as specified in Company instructions;
- Make sure computer and communications equipment and systems, including passwords or other methods used to access or transmit data, and the information they contain are protected against unauthorized access, use, modification, destruction or disclosure;
- Use Loral's trademarks and service marks in accordance with Company instructions; and
- Report actual or suspected loss, damage, misuse, theft, embezzlement or destruction of Company funds or property immediately to Amanda Vazquez, Office Manager, by calling (212) 212-5385.

O. Following Security Guidelines

While Loral's customer base is now primarily commercial companies, Loral continues to contract with the United States government or its prime contractors. These contracts require the Company to implement and maintain a system of security controls. As associates of Loral, we all are individually responsible for safeguarding classified information. The following are some of the key rules that associates must follow:

- Notify your supervisor of any circumstances that might embarrass or damage the Company.
- Establish a system to ensure that unattended classified files are always locked.
- Safeguard and transmit all classified material in accordance with government and Loral requirements.

You are also prohibited from sending classified information via regular mail. Additionally, you should never discuss classified information, company plans or related information with family, friends or other unauthorized persons.

You should be particularly careful when using phones of any type, especially cellular phones, for sensitive or classified conversations. This also applies to use of computer terminals, facsimile machines, cell phone cameras and other equipment used to transmit information or data.

If you have any questions about security matters, contact your immediate supervisor or Amanda Vazquez, Office Manager, at (212) 338-5385.

P. Record Retention

It is Loral policy to comply with all statutory and regulatory requirements for retention of records, including those relating to U.S. government contracts and subcontracts. All Loral personnel, agents, vendors, representatives and consultants are responsible for ensuring that this policy is understood and is implemented consistently with these requirements. The Company has many records retention requirements imposed on it, such as those relating to federal and state tax returns and environmental compliance. It is Company policy to comply with all records retention requirements, whether or not related specifically to government contracts.

Q. Social Media

It is Loral policy to be extremely careful about disclosing Company information and never to disclose any confidential information without authorization. Associates may not post their opinions or information about or related to Loral or its business on the Internet or on or through any social media interfaces (including, without limitation, Facebook, Twitter, LinkedIn, Yahoo, message boards, chat board or blogs), even if not confidential, unless authorized to do so. Associates who are employees, temporary employees or independent contractors may never discuss the Company or matters

related to the Company with the press unless explicitly authorized to do so. Finally, associates who are employees, temporary employees or independent contractors may not accept any public speaking engagement or publish any articles or other written communications in any form, in each case relating to the Company or its business, without prior approval of a Loral officer.

4. WAIVERS OF THE CODE

Except as otherwise provided herein or in any other document adopted or acknowledged by the Company, any waiver of this Code for officers or directors may be made only by the Board of Directors or a Board committee and will be promptly disclosed to stockholders if and to the extent required by law or stock exchange regulation. Any waiver of this Code for associates other than officers or directors may be made only with the consent of the Company's General Counsel.

5. ADDITIONAL PROCEDURES FOR THE CEO, PRESIDENT AND SENIOR FINANCIAL OFFICERS

All provisions of the Code bind the CEO, the President, the CFO, the principal accounting officer or controller and all persons performing similar functions (the "senior financial officers"). In addition to the Code, the senior financial officers are subject to the following additional specific policies:

A. All senior financial officers are responsible for full, fair, accurate, timely and understandable disclosure in the periodic reports that are required to be filed by the Company with the SEC and in the Company's other public communications. Accordingly, it is the responsibility of each senior financial officer to promptly bring to the attention of the management any material information of which he or she may become aware that affects the disclosures made by the Company in its public filings or public communications or otherwise assist the management in fulfilling its responsibilities.

B. Each senior financial officer shall promptly bring to the attention of the management and the Audit Committee any information he or she may have concerning (a) significant deficiencies in the design or operation of internal controls which could adversely affect the Company's ability to record, process, summarize and report financial data or (b) any fraud, suspected fraud or allegation of fraud (regardless of the source of the allegation or its level of credibility), in each case, whether or not material, that involves management or other associates who have a significant role in the Company's financial reporting, disclosures or internal controls.

C. Each senior financial officer shall promptly bring to the attention of the management and to the Audit Committee any information he or she may have concerning any violation of the Company's Code, including any actual or apparent conflicts of interest between personal and professional relationships, involving any members of management or other associates who have a significant role in the Company's financial reporting, disclosures or internal controls.

D. Each senior financial officer shall promptly bring to the attention of the management and to the Audit Committee any information he or she may have concerning evidence of a material violation of the securities or other laws, rules or regulations applicable to the Company and the operation of its business, by the Company or any agent thereof, or of violation of the Code or of these additional procedures.

E. The Board of Directors shall determine, or designate appropriate persons to determine, appropriate actions to be taken in the event of violations of the Code or of these additional procedures by the senior financial officers. Such actions shall be reasonably designed to deter wrongdoing and to promote accountability for adherence to the Code and to these additional procedures and shall include written notices to the individual involved that the Board has determined that there has been a violation, censure by the Board, demotion or re-assignment of the individual involved, suspension with or without pay or benefits (as determined by the Board) and termination of the individual's employment. In determining what action is appropriate in a particular case, the Board of Directors or such designee shall take into account all relevant information, including the nature and severity of the violation, whether the violation was a single occurrence or repeated occurrences, whether the violation appears to have been intentional or inadvertent, whether the individual in question had been advised prior to the violation as to the proper course of action and whether or not the individual in question had committed other violations in the past.

6. CERTAIN RULES AND REGULATIONS

A. Foreign Corrupt Practices Act

Loral complies, and requires that all its associates worldwide and its joint ventures, agents, distributors and other representatives comply with the letter and the spirit of the Foreign Corrupt Practices Act ("FCPA").

The primary purpose of the FCPA is to prohibit the payment of bribes, in any form, to foreign officials in order to secure or retain business. Specifically, the FCPA prohibits the giving or offering of anything of value (hereinafter referred to as "bribes") to foreign officials, foreign political parties or candidates for foreign political office in order to obtain, keep or direct business or otherwise obtain a business advantage. It is important to note that the FCPA's prohibitions are not limited to monetary payments but can include a wide range of non-monetary benefits as well. Also prohibited are indirect bribes made through an intermediary (such as an agent, representative or consultant) knowing that there is a high probability that the intermediary will use all or a portion of the bribe for a prohibited purpose.

In addition, the FCPA includes certain requirements with respect to accounting records that are designed, among other things, to prevent concealment of bribes. The FCPA requires that Loral's books, records and accounts be kept accurately to reflect all transactions and disposition of Company assets. The following are specifically prohibited: maintaining secret or unrecorded funds or assets; falsifying records; and providing misleading or incomplete financial information for audit.

Violation of the FCPA's anti-bribery and accounting provisions may result in civil and criminal prosecution. Loral may be fined up to \$2 million or twice the gross gain or loss from the offense, whichever is greater, for a violation of the anti-bribery provisions of the FCPA; an individual may be fined \$250,000 or twice the gain or loss from the offense, whichever is greater, and may be subject to imprisonment for up to five years. Violations of the accounting provisions may be punished by fines of up to \$25 million for corporations or fines of up to \$5 million and imprisonment of up to 20 years for individuals. Loral will not pay fines imposed on individuals. Loral will take all necessary disciplinary action, including possible dismissal, against associates violating these policies.

There are three types of payments that may be permissible under the FCPA. The first is a payment to facilitate or expedite performance of routine governmental action. "Facilitating or expediting payments" are those that relate to the performance of non-discretionary action. Examples include obtaining permits, licenses or other official documents; processing governmental papers, such as visas and work orders; providing police protection and mail pick-up and delivery; providing phone service; power and water supply; loading and unloading cargo or protecting perishable products; and scheduling inspections associated with contract performance or transit of goods across country. The second is a payment that is reasonable in amount and is directly related to the promotion, demonstration or explanation of a product or the execution of a government contract. These payments may include travel and lodging expenses. The third is a payment that is lawful under the written laws or regulations of a foreign country. ***The application of these exceptions to a particular situation involves a legal determination, and associates must consult with their legal department prior to authorizing any payments under one of these exceptions.***

Loral has established procedures to reduce the likelihood of prohibited bribes by intermediaries, i.e., joint venture partners or agents, distributors or consultants. First, it is Loral's policy to obtain background information on the intermediary to assess the potential for violation. Second, it is Loral's policy to enter into a written agreement with respect to intended disposition of fees and compliance with the FCPA. ***All such agreements must be approved by the legal department prior to execution.***

Additional and more detailed information, guidelines and policies are available from Loral's legal office, and associates are expected to comply with such requirements and guidelines. ***Because the status of certain types of payments may be unclear, associates must review with Loral's legal department the nature of any payments that raise potential FCPA concerns.***

Any violations of the FCPA must be reported immediately to Loral's legal office. Because the immediate reporting of violations or potential violations is a critical component of Loral's efforts to ensure compliance with the FCPA, failure to report such violations could raise potential questions about an associate's knowledge of, or complicity in, a prohibited transaction. Violations or potential violations may be reported without fear of retaliation for making such a report.

B. Export Control Laws

The Company complies, and all of its associates are required to comply, scrupulously with United States export control laws and regulations, including the Arms Export Control Act and International Traffic in Arms Regulations; the International Emergency Economics Powers Act; the Export Administration Act and the Export Administration Regulations; embargo and trade sanctions laws and regulations (see 7.C. below); Anti-Boycott laws and regulations; and Executive Orders pertaining to U.S. export control laws and regulations.

The Company and all of its associates are required to comply scrupulously with the conditions, limitations, provisos, requirements and terms of all licenses and other United States government authorizations (including, without limitation, export licenses, technical assistance agreements and manufacturing licensing agreements) in connection with any export, import, re-export, transfer, sale, marketing activity or proposal by the Company.

Failure to comply with United States export control laws and regulations, or any licenses or other United States government authorizations, may result in severe penalties for the Company and the individuals involved. Any associate who violates export control requirements would be subject to disciplinary action, including termination of employment, and may be subject to civil and/or criminal penalties imposed by the United States government.

The Company's products (hardware, software and technical data) and activities (including certain marketing activities and proposals) may be defined as "defense articles" and "defense services" under the Arms Export Control Act and the International Traffic in Arms Regulations (ITAR).

Associates should be aware that an export occurs under the ITAR by sending or taking a defense article out of the United States in any manner (except by mere travel outside of the United States by a person whose personal knowledge includes technical data); disclosing (including oral or visual disclosure) or transferring technical data to a foreign person, whether in the United States or abroad; performing a defense service on behalf of, or for the benefit of, a foreign person, whether in the United States or abroad; disclosing (including oral or visual disclosure) or transferring in the United States any defense article to an embassy, or any agency or subdivision of a foreign government (e.g., diplomatic missions); or transferring registration, control or ownership to a foreign person of any aircraft, vessel or satellite covered by the U.S. Munitions List, whether in the United States or abroad. Lawful permanent residents of the United States ("green card" holders) and certain protected individuals (certain refugees, asylees, etc.) are not considered "foreign persons" under the ITAR.

The export of defense articles and defense services requires the prior written authorization of the United States Department of State, unless a specific statutory or regulatory exemption applies. In certain instances, the prior written authorization of the United States Department of State is required before making a sale or transfer, or even a proposal to sell or transfer, defense articles, defense services and technical data

to certain countries, or to any persons acting on behalf of these countries, or that is intended for use by the armed forces of certain foreign countries.

In addition, the ITAR place significant restrictions on “brokers” and “brokering activities” concerning ITAR-controlled defense articles and defense services. The term “broker” is defined as any person engaging in the business of “brokering activities” that is (1) a U.S. person, wherever located, (2) a foreign person if physically located or organized in the United States or (3) a foreign person located outside the United States, if the foreign person is owned or controlled by a U.S. person. The term “brokering activities” is defined to mean any action on behalf of another to facilitate the manufacture, export, permanent import, transfer, reexport or retransfer of a U.S. or foreign defense article or a defense service, regardless of its origin. Note that international marketing representatives and other individuals or entities retained by Loral or any of its associates may be deemed a “broker” and engaged in “brokering activities.” With rare exceptions, the use of a broker or engaging in brokering activities requires registration and prior notice to or prior approval by the United States Department of State. In addition, brokers and brokering activities are flatly prohibited for matters involving a country embargoed or otherwise proscribed by the United States Department of State, including the People’s Republic of China.

The export of other Company commodities, software and technology (including technical data) is governed by the Export Administration Regulations (EAR), and the export of such products and technology may require the prior written authorization of the United States Department of Commerce. When economic sanctions are imposed against a foreign country, the Company’s exports and imports of commodities, software and technology to or from that country may also require a license from the U.S. Department of the Treasury’s Office of Foreign Assets Control (OFAC). Associates should be aware that an export occurs under the EAR and OFAC regulations by an actual shipment or transmission of items (commodities, software or technology) out of the United States, or the release of technology or software subject to the EAR to a foreign national in the United States. Permanent resident aliens of the United States and certain protected persons are not considered “foreign persons” under the EAR.

To ensure full compliance with United States export control laws and regulations, all associates should be aware of the following:

- Associates are responsible for complying scrupulously with United States export control laws and regulations, including all applicable export licenses and other export authorizations issued by the United States government.
- Associates are responsible for seeking guidance and/or direction from the Company’s Export Control personnel regarding export control issues before engaging in any exports.
- Associates should be especially aware of the potential for exports in any dealings with foreign persons, such as going on foreign travel, hosting foreign visitors,

having technical interactions with foreign persons or engaging in marketing activities that address technical issues.

C. Economic Sanctions Measures

OFAC administers United States economic sanctions against foreign countries, entities and individuals to counter external threats to United States national security, foreign policy or economy. Loral complies, and all of its associates are required to comply, scrupulously with the OFAC-administered sanctions programs. By law, “U.S. Persons” are required to comply with these sanctions. U.S. Persons include: United States citizens and permanent residents of the United States, wherever they are located; all entities organized in the United States (including their foreign branches); and all individuals, entities and organizations (collectively, “Persons”) actually located in the United States. For the sanctions against Cuba and Iran, all entities owned or controlled by U.S. Persons, wherever organized or doing business (including foreign subsidiaries of United States firms), are also required by United States law to comply. Loral is a U.S. Person. Any associates of Loral, wherever located, who are United States citizens or permanent residents are U.S. Persons. All Loral associates when in the United States (for business or pleasure) are U.S. Persons. As a matter of Loral policy, associates of the Company who are not U.S. Persons are also required to comply with OFAC-administered sanctions at all times, as though they were U.S. Persons.

The Company and all of its associates are required to comply scrupulously with the conditions, limitations, provisos, requirements and terms of all “specific licenses” issued to Loral by OFAC and of all “general licenses” contained in OFAC’s regulations implementing the individual sanctions programs in connection with any export, import, re-export, transfer, sale, marketing activity or proposal by the Company.

Violations of United States economic sanctions may result in the imposition of civil or criminal penalties on individuals and, in certain cases, the entity for which they act. Any associate who violates United States economic sanctions (or causes the Company to violate such sanctions) would be subject to disciplinary action, including potential termination of employment, in addition to any civil and/or criminal penalties imposed by the United States government. Any associate, however, who notifies the Loral legal department when he or she suspects a sanctions violation may have occurred will not be subject to disciplinary action by the Company.

OFAC maintains comprehensive territorial sanctions relating to certain countries and regions (e.g., as of November 30, 2017, against Cuba, Iran, North Korea, Syria and the Crimea Region of Ukraine) (the “Target Countries/Regions”). If comprehensive sanctions apply, the sanctions may apply not only to the territories of those countries and regions but also to entities owned or controlled by their governments, agents of such governments and, in most cases, residents of and Persons in those countries/regions. ***Associates must review with the legal department, and obtain the prior clearance of the legal department for, any proposed activities involving or benefiting the governments, government agencies or government-controlled entities of these countries (wherever located), or Persons or service areas in these countries.***

For a complete list of U.S. sanctions programs, please see the OFAC website at <https://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx>. ***Associates must review with the legal department,, and obtain the prior clearance of the legal department for, any proposed activities involving any of the countries included on the OFAC list of sanctions programs.***

OFAC also maintains, and frequently updates, several lists of sanctioned persons and entities. Chief among these is its list of “Specially Designated Nationals and Blocked Persons” (the “SDN List”), which contains the names of Persons whose property and property interests are blocked pursuant to one of the sanctions programs. In addition, and of particular relevance to Loral is the Foreign Sanctions Evaders (FSE) List. All entities on these two lists are “Target Persons”.¹ Target Countries/Regions and Target Persons (including Persons located in a Target Country with whom transactions are generally prohibited by sanctions) are referred to collectively as “Sanctions Targets.” U.S. Persons, including Loral and all of its associates are prohibited from engaging in transactions or dealings with these Sanctions Targets – directly or indirectly – without a license from OFAC or an applicable exemption. The SDN List may be found on OFAC’s website at <http://www.treasury.gov/resource-center/sanctions/SDN-List/Pages/default.aspx>. The OFAC website also keeps current the description of Target Countries/Regions and other programs comprising the United States sanctions regime. OFAC-administered sanctions programs are dynamic and are subject to change at any time.

The United States also imposes sanctions against persons and entities in Ukraine and Russia. Many of these persons and entities are now included on the OFAC SDN List. In addition, the United States has imposed sanctions that target specific sectors of the Russian economy. These are known as U.S. Sectoral Sanctions and are applied through four directives issued by OFAC. These directives generally prohibit transactions in, provision of financing for, and other dealings in, new debt of longer than 30 (or in some cases 90) days maturity or new equity of the specified persons/entities. Those entities that are subject to U.S. Sectoral Sanctions are included on the Sectoral Sanctions Identifications (SSI) List. ***Associates must review with the legal department, and obtain the prior clearance of, the legal department, for, any proposed activities involving any entity included on the OFAC Sectoral Sanctions List.***

Each sanctions program is different and responds to a different foreign policy context. Associates must check on each program’s scope separately with Loral’s legal department. Elements found in many of OFAC’s sanctions programs include prohibitions on (1) dealing in a Sanctions Target’s “property and property interests,”

¹ The SDN List covers “specially designated nationals” of the Target Countries/Regions, designated Persons in or related to, various regimes, as well as designated terrorists and terrorist groups, designated narcotics traffickers, designated proliferators of weapons of mass destruction and other Persons related to UN Security Council sanctions, their respective designated financiers and certain designated property (including entities) of these Persons. The FSE List includes foreign individuals and entities determined to have violated, attempted to violate, conspired to violate or caused a violation of U.S. sanctions on Syria or Iran or who have facilitated deceptive transactions for or on behalf of persons subject to U.S. sanctions.

defined very broadly to include assets, debts, contracts, contingent rights, patents, etc., including interests involving only partial ownership (referred to as “blocking” or “freezing” the property); (2) trade (exports, re-exports or imports) in goods, services and technology with a Target Country/Region or its government; (3) investment in a Target Country/Region; (4) performance of contracts with or in a Target Country/Region; (5) transportation to or from a Target Country/Region; and (6) facilitation (financing, guaranteeing, approving, etc.) by a U.S. person of a transaction with or benefiting a Sanctions Target where OFAC sanctions would prohibit the transaction if done directly by a U.S. Person or from the United States.

The blocking, exportation of services and facilitation prohibitions are interpreted by OFAC very broadly. OFAC-administered sanctions affect Loral’s ability to enter into contracts with or benefiting Target Countries/Regions, or with Persons on the SDN List. If new sanctions are imposed that block the property of Persons with whom Loral has uncompleted contractual commitments, the Company may be unable to perform under its contract, or may be required to obtain a license from OFAC before resuming any activities under the contract. When sanctions prohibit exportation of technology to a Target Country/Region, an OFAC license may be required in addition to a license under the EAR or ITAR. The sale of a satellite to a foreign Person with the knowledge that this Person intends to lease substantial transponder capacity to, for example, the government of Iran or any other Target Country/Region is likely to require an OFAC license, under the facilitation prohibition in the Iran sanctions.

Most OFAC sanctions programs include a statutory exemption for trade in “information and informational materials” in existence when the trade transaction is done, and not controlled for national security, nonproliferation or terrorism purposes under the EAR. OFAC distinguishes between the information itself and the equipment needed to transmit the information. For example, OFAC’s Iranian Transactions Regulations state that the exemption “does not exempt ... or authorize ... the sale or leasing of telecommunications transmission facilities (such as satellite links or dedicated lines) where such ... sale or leasing is for use in the transmission of any data.” (31 C.F.R. § 560.210(c)(4).) ***Associates should not attempt to interpret the exemption except in consultation with their legal department.***

To ensure full compliance with United States economic sanctions, all associates should be aware of the following:

- Associates are responsible for complying scrupulously with United States economic sanctions, including the terms and conditions of any licenses, whether obtained by the Company for specific transactions or included in OFAC regulations.
- Prior to entering into a contract with foreign entities, Loral associates are required to know their proposed customers – who they are, what they do, where they are based and how they will use the goods, technology or software.

Associates must seek advice from their legal department regarding economic sanctions issues if a proposed transaction involves, directly or indirectly, a Sanctions Target or an entity on the Sectoral Sanctions List.

7. REPORTING, INVESTIGATING AND ENFORCEMENT

Loral is committed to maintaining an environment in which associates may raise questions or report violations or suspected violations of this Code and applicable governmental laws and regulations without fear of retribution. Associates are encouraged to report all violations or suspected violations of this Code or applicable government laws and regulations and to talk to supervisors, managers or other appropriate personnel when in doubt about the best course of action in a particular situation, using the methods outlined below.

Associates are expected to cooperate in internal investigations of misconduct. Loral will not allow retaliation for good faith reports of misconduct made by associates. Any person who believes that he or she has been subject to retaliation for reporting a violation or possible violation may contact anyone designated below, and a prompt investigation will be conducted.

All Code Provisions (including FCPA, Export Control or OFAC, but excluding Employment Practices). Violations or suspected violations relating to all provisions of the Code of Conduct (including violations or suspected violations relating to Loral's dealings under government contracts or with government officials or relating to FCPA, Export Control or OFAC policy (Section 6 of the Code), but excluding Employment Practices) shall be reported, investigated and enforced as set forth below in Section 7.A.

Employment Practices. Violations or suspected violations relating to Loral's Employment Practices policy (Section 2 of the Code) shall be reported, investigated and enforced as set forth below in Section 7.B.

A. Code of Conduct Violations²

With respect to violations or suspected violations relating to all provisions of the Code of Conduct (other than Employment Practices), an associate may contact:

- The associate's immediate supervisor; or
- The supervisor's immediate supervisor; or
- Avi Katz, President, General Counsel and Secretary of Loral Space & Communications Inc. The report may be made by calling (212) 338-5340, by fax to (212) 338-5616, by email to avi.katz@hq.loral.com or by mail to the following address:

² The procedures set forth in this section 7.A. apply to all violations of the Code *except* for violations of the Company's Employment Practices policy (Section 2), such as harassment, discrimination or retaliation. The procedures for violations of the Company's Employment Practices policy are set forth in Section 7.B.

Avi Katz
Loral Space & Communications Inc.
600 Fifth Avenue, 16th Floor
New York, New York 10020

In the alternative, an associate may call the Ethics Hotline to report any violations or suspected violations of this Code (See Section 7.C).

Investigation of prohibited actions involving directors or executive officers

Reports of alleged prohibited actions of this Code involving directors or executive officers of the Company will be reviewed by the Audit Committee. After receiving a report of an alleged prohibited action, the Audit Committee will promptly take all appropriate actions necessary to investigate the matter.

If, after investigating a report of an alleged prohibited action by a director or executive officer of the Company, the Audit Committee determines that a violation of this Code has occurred, the Audit Committee will report such determination to the Company's Board of Directors.

Responsive action for Code violations involving directors or executive officers

Upon receipt of a determination that there has been a violation of this Code, the Board of Directors will take such preventative or disciplinary action as it deems appropriate, including, but not limited to, reassignment, demotion, dismissal and, in the event of criminal conduct or other serious violations of the law, notification of appropriate governmental authorities. Such actions shall be reasonably designed to deter wrongdoing and to promote accountability for adherence to this Code and shall include a written notice or notices to the individual involved that the Board of Directors has determined, as the case may be, that there has been a violation, censure by the Board of Directors, demotion or re-assignment of the individual involved, suspension with or without pay or benefits (as determined by the Board of Directors) and termination of the individual's employment. In determining what action is appropriate in a particular case, the Board of Directors shall take into account all relevant information, including the nature and severity of the violation, whether the violation was a single occurrence or repeated occurrences, whether the violation appears to have been intentional or inadvertent, whether the individual in question had been advised prior to the violation as to the proper course of action and whether or not the individual in question had committed other violations in the past.

Investigation of prohibited actions not involving directors or executive officers

Actions prohibited by this Code involving anyone other than a director or executive officer will be reviewed by a specially assigned investigator, who will review them and, if appropriate, commence an immediate investigation. Depending on the nature of and personnel involved in the report, the investigator may be a member of the Company's Audit Committee or the Company's legal department or another appropriate individual. Communications between the associate and the investigator will be kept confidential to the fullest extent possible.

If, after investigating a report of an alleged prohibited action by an individual other than a director or executive officer of the Company, the investigator determines that a violation of this Code has occurred, the investigator will report such determination to the General Counsel.

Responsive action for Code violations not involving directors or executive officers

Upon receipt of a determination that there has been a violation of this Code, the General Counsel will take such preventative or disciplinary action as he deems appropriate, including, but not limited to, reassignment, demotion, dismissal and, in the event of criminal conduct or other serious violations of the law, notification of appropriate governmental authorities.

B. Employment Practices Violations

Associates who believe that they have been the subject of unlawful discrimination or harassment of any kind are required to promptly report the matter to their direct manager or supervisor. If an associate is not comfortable bringing a complaint to his or her immediate manager or supervisor, please immediately report the complaint as follows:

Contact: Avi Katz
 President, General Counsel and Secretary
 Telephone #: (212) 338-5340
 avi.katz@hq.loral.com

Any manager or supervisor who becomes aware of unlawful discrimination or harassment of any kind, including sexual harassment, has an obligation to report it promptly to Avi Katz at the corporate office, his or her direct manager, or any member of the management or executive management team.

Investigation of complaint

Loral is committed to promptly investigating every complaint and effectively resolving any instance of harassment or discrimination. Each person making a complaint, the alleged harasser/discriminator and all knowledgeable employees have an obligation to cooperate fully with an investigation. The investigation may include individual interviews with those involved and, when necessary, with individuals who may have observed the alleged conduct or may have relevant knowledge. The complaint and

investigation will be handled with sensitivity, under the direction of the Human Resources department and in some cases, one or more members of the Executive management team, or an outside investigator. Confidentiality will be maintained throughout the investigation to the extent practical and appropriate under the circumstances, considering the sensitivities of all concerned.

Protection against retaliation for making a complaint

No one who objects to prohibited harassment or conduct, makes a good faith complaint, or assists in an investigation will be subjected to punishment, coercion, intimidation or retaliation. Retaliation is a serious violation of this policy and will be treated with the same corrective action as would the harassment or discriminatory conduct itself. Acts of retaliation must be reported immediately and will be investigated promptly.

Responsive action

Any person found to have committed prohibited discrimination, harassment or retaliation will be subjected to disciplinary action up to and including termination.

C. Anonymous Ethics Hotline.

Any illegal or unethical action can put a company in an awkward situation. Sometimes, the unethical actions of a few people can destroy an entire company and can result in loss of business, fines, penalties and ultimately debarment from government contracting. If you are ever faced with an unethical situation, we need you to speak up. Silence never helps, and, in fact, it can make an already bad situation much worse. Your voice, however, can make a difference. Speak up if you have concerns about workplace issues such as the following:

- *Theft*
- *Conflicts of interest*
- *Fraudulent or inaccurate financial reporting*
- *Improper contact with government officials*
- *Abuse of company resources*
- *Harassment or discrimination*
- *Antitrust laws*
- *Copyright laws*
- *Disclosure of confidential information*
- *Environmental, health and safety laws*
- *Import/export laws*
- *Improper gifts or gratuities*
- *Alcohol or drug abuse*
- *Bribery or kickbacks*
- *Potential overbillings to government customers*
- *Receipt of ill-gotten bid, proposal or government source selection information*
- *Violations of U.S. sanctions laws*

To report any of the above, speak with your immediate supervisor or other manager. If you have already spoken with a member of management or if you simply prefer to remain anonymous, call the Ethics Hotline.

How to Use the Ethics Hotline

Loral's Ethics Hotline is a simple, effective way to register your concerns about any potentially unethical situation in your workplace. The toll-free Ethics Hotline is available 24-hours a day, every day of the week, so you can even call from the privacy of your own home. By calling the Ethics Hotline, you can remain completely anonymous throughout the reporting process. No call-tracing or recording devices are ever used at the Ethics Hotline. Even if you do choose to give your name, your call will be handled with the utmost confidentiality.

When you call the Ethics Hotline, a Communication Specialist employed by an outside compliance firm will ask you a series of questions to better understand the nature of your concern. The Specialist then prepares a report that is forwarded for review and, if appropriate, investigation, to an independent, non-employee compliance officer who handles these matters for Loral. At the end of your call, you are given a report number, a personal identification number (PIN), and a call-back date, after which you may follow-up on your report. Simply reference the identification number when you call. If additional information is needed from you before your concern can be resolved, you will be asked for it when you call back.

Call the Ethics Hotline even if you don't have all of the facts. The independent compliance officer will look into the information you can provide, attempt to verify it and then take appropriate action.

The Ethics Hotline is not intended to be a substitute for meaningful communication between you and your immediate supervisor. If you have questions or concerns regarding normal operating procedures or suggestions for making your workplace more comfortable or efficient, please bring them directly to him or her.

Ethics Hotline:
888-301-8628

Toll-free, anonymous, all day, every day of the week

LORAL SPACE & COMMUNICATIONS INC.**SIGNIFICANT SUBSIDIARIES**

The active subsidiaries owned directly or indirectly by Loral Space & Communications Inc. as of March 12, 2020, all 100% owned (except as noted below), consist of the following:

| | |
|--------------------------------------|----------------------|
| Loral Skynet Corporation | Delaware |
| Loral Satmex LLC | Delaware |
| Loral Holdings LLC | Delaware |
| Mexico Satellite, LLC ⁽¹⁾ | Delaware |
| Loral Global Services N.V. | Netherlands Antilles |
| Loral Holdings Corporation | Delaware |
| 4440480 Canada Inc. | Canada |
| 4440498 Canada Inc. | Canada |
| Loral Canadian Gateway Corporation | Canada |

NOTE

⁽¹⁾ Only 77.78% owned directly or indirectly

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-132795 and 333-143274 on Form S-8 and Registration Statement Nos. 333-159656 and 333-138652 on Form S-3 of our reports dated March 12, 2020, relating to the financial statements of Loral Space & Communications Inc. and subsidiaries and the effectiveness of the Company's internal control over financial reporting, appearing in this Annual Report on Form 10-K of Loral Space & Communications Inc., for the year ended December 31, 2019.

/s/ DELOITTE & TOUCHE LLP
New York, New York
March 12, 2020



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-132795 and 333-143274 on Form S-8 and Registration Statement Nos. 333-159656 and 333-138652 on Form S-3 of our report dated February 26, 2020, relating to the financial statements of Telesat Canada and subsidiaries appearing in this Annual Report on Form 10-K of Loral Space & Communications Inc. for the year ended December 31, 2019.

/s/ Deloitte LLP

Chartered Professional Accountants
Licensed Public Accountants

Toronto, Canada
March 11, 2020

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Avi Katz, certify that:

1. I have reviewed this Annual Report on Form 10-K of Loral Space & Communications Inc.;
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 registrant as of, and for, the periods presented in this report;
4. The registrant'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 registrant 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 registrant, 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 registrant'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 registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant'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 registrant'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 registrant's internal control over financial reporting.

/s/ AVIKATZ

Avi Katz

President, General Counsel & Secretary

March 12, 2020

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, John Capogrossi, certify that:

1. I have reviewed this Annual Report on Form 10-K of Loral Space & Communications Inc.;
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 registrant as of, and for, the periods presented in this report;
4. The registrant'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 registrant 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 registrant, 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 registrant'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 registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant'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 registrant'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 registrant's internal control over financial reporting.

/s/ JOHN CAPOGROSSI

John Capogrossi

Vice President, Chief Financial Officer and Treasurer

March 12, 2020

**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 Loral Space & Communications Inc. (the “Company”) on Form 10-K for the period ending December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Avi Katz, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (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.

/s/ AVI KATZ

Avi Katz

President, General Counsel & Secretary

March 12, 2020

**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 Loral Space & Communications Inc. (the “Company”) on Form 10-K for the period ending December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, John Capogrossi, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (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.

/s/ JOHN CAPOGROSSI

John Capogrossi

Vice President, Chief Financial Officer and Treasurer

March 12, 2020
