EXACTEARTH LTD. (the "Company")
MANAGEMENT'S DISCUSSION AND ANALYSIS

*The following management discussion and analysis ("**MD&A**") is prepared as of January 23, 2019 and provides information that management believes is relevant to an assessment and understanding of the Company's operations and financial condition for the year ended October 31, 2018. This MD&A should be read in conjunction with the Company's consolidated financial statements, including the notes thereto, (the "**Consolidated Financial Statements**"). The Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards ("**IFRS**"). All amounts herein, except per share data, are stated in thousands of Canadian dollars ("**CAD**") unless otherwise indicated. Unless otherwise noted, the information contained herein is dated as of October 31, 2018.*

Additional Information and Risk Factors

Additional information relating to the Company, including risk factors that may adversely affect or prevent the Company from carrying out all or portions of its business strategy are discussed in the Company's Annual Information Form ("**AIF**") and other filings available on SEDAR at www.sedar.com.

Caution Regarding Forward-Looking Statements

This MD&A contains forward-looking statements that relate to the Company's current expectations and views of future events. In some cases, these forward-looking statements can be identified by words or phrases such as "may", "will", "expect", "anticipate", "aim", "forecast", "estimate", "intend", "plan", "seek", "believe", "potential", "continue", "is/are likely to" or the negative of these terms, or other similar expressions intended to identify forward-looking statements. The Company has based these forward-looking statements on its current expectations and projections about future events and financial trends that the Company believes may affect its financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, among other things, statements relating to: the Company's ability to continue as a going concern; expectations regarding the Company's revenue, expenses, operations and cash flow; anticipated impact of changes to accounting policies; anticipated industry trends; anticipated new Order Bookings (as defined below); research and development spending levels; selling, general and administrative spending; revenue growth guidance; gross margin trending, anticipated future launch dates and launch locations for satellite assets, including the satellites comprising the Second-Generation Constellation; anticipated and continued benefits of the Second-Generation Constellation on-board Iridium NEXT; expected useful lives of satellite assets and anticipated completion of additional ground stations; the Company's intention to respond to certain procurement proposal requests and the outcome thereof.

Forward-looking statements are based on certain assumptions and analysis made by the Company in light of its experience and perception of historical trends, current conditions and expected future developments and other factors the Company believes are appropriate, and are subject to risks and uncertainties. Although the Company believes that the assumptions underlying these statements are reasonable, they may prove to be incorrect. Whether actual results, performance or achievements will conform to the Company's expectations and predictions is subject to a number of known and unknown risks, uncertainties, assumptions and other factors, which are discussed in greater detail in the Company's AIF.

Non-IFRS Measures

In this MD&A, the Company provides information about Order Bookings; Adjusted Earnings Before Interest, Taxes, Depreciation and Amortization ("**Adjusted EBITDA**"); and Subscription Revenue (as defined below). Order Bookings, Adjusted EBITDA, and Subscription Revenue are not defined by IFRS and the Company's measurement of them may vary from that used by others. These non-IFRS measures are not recognized measures under IFRS and do not have a standardized meaning prescribed by IFRS, and are therefore unlikely to be comparable to similar measures presented by other companies. Rather, these measures are provided as additional information to complement the IFRS measures by providing further understanding of the Company's results of operations from management's perspective. Accordingly, they should not be considered in isolation or as a substitute for analysis of the Company's financial information reported under IFRS.

The Company defines "Order Bookings" as the dollar sum of fully executed contracts for the supply of products and/or services to its customers received during a defined period of time. Order Bookings are indicative of firm future revenue streams; however, they do not provide a guarantee of future net income and provide no information about the timing of future revenue.

The Company measures Adjusted EBITDA as net income plus interest, taxes, depreciation and amortization, unrealized foreign exchange losses, share-based compensation costs, and impairment losses, less unrealized foreign exchange gains, other income and restructuring expense recovery. The Company believes that Adjusted EBITDA provides useful supplemental information as an indication of the income generated by its main business activities before taking into consideration how they are financed or taxed and excluding the impact of items that are considered by management to be outside of the Company's ongoing operating results. Adjusted EBITDA should not be construed as an alternative to net income (loss) determined in accordance with IFRS as an indicator of the Company's performance or to cash flows from operating, investing and financing activities as a measure of liquidity and cash flows.

The Company defines "Subscription Revenue" as the dollar sum of fully executed contracts for its products and/or services to its customers that are subscription-based, typically sold with a one-year period of service and recognized in the Company's "Subscription Services" segmented revenue.

Overview

The Company is a leading provider of global maritime vessel data for ship tracking and maritime situational awareness solutions. Since its establishment in 2009, the Company has pioneered Satellite Automatic Identification System ("**S-AIS**") maritime surveillance and has delivered to its clients a view of maritime behaviours across all regions of the world's oceans that is unrestricted by terrestrial limitations. The Company has deployed an operational data processing supply chain with its First-Generation Constellation, receiving ground stations, patented decoding algorithms, and advanced Big Data processing and distribution facilities. This ground-breaking system provides a comprehensive picture of the location of Automatic Identification System ("**AIS**") equipped maritime vessels throughout the world and allows the Company to deliver data and information services characterized by high performance, reliability, security, and simplicity to large international markets.

The Consolidated Financial Statements include the accounts of the Company's Subsidiary, exactEarth Europe Ltd. ("**Subsidiary**") with inter-company transactions and balances eliminated. The Company has two locations, one in Cambridge, Ontario, Canada and the other in Harwell, United Kingdom.

Key Components and Functions of the Company's Product Offering

AIS

Since 2004, all major ships in the world have been required by the International Maritime Organization ("**IMO**") to carry an AIS transponder which constantly transmits VHF radio signals containing information about the ship (name, destination, cargo) as well as its movement (position, course, heading speed, etc.). Today the Company is capturing AIS data on more than 300,000 vessels. This capability is further enhanced by the Company's patented capability to track small vessels in the open ocean utilizing a new class of specially modified Class B AIS transponders. The Company anticipates that with this added capability, its addressable market will increase to more than one million vessels by 2020.

AIS was originally designed as a collision avoidance system; however, it has been widely recognised for some time that such open broadcast information can be collected and used to track and monitor shipping activity close to shore from terrestrial AIS stations. Terrestrial systems are physically limited by the curvature of the earth and are only effective for approximately 50 nautical miles, or approximately 90 kilometres. The Company has led the way in overcoming this limitation by pioneering the reception of such AIS signals from low earth orbit ("**LEO**") satellites, thus eliminating the distance restriction imposed by the terrestrial AIS stations, and for the first time in maritime history, providing a real-time unrestricted global view of all shipping regardless of location, or proximity to a coastline.

Satellites

The Company receives AIS data from its constellation of LEO satellites. The first satellite, EV-0 was launched by exactEarth's previous parent company, COM DEV International Ltd., in 2008 for the purpose of validating the concept of collecting maritime AIS signals from space, but is now non-operational. Between 2011 and 2013, the Company launched and commissioned four more advanced AIS satellites, designated as EV-1, EV-2, EV-5 and EV-6. These satellites incorporated advanced AIS payloads designed to further improve AIS message detection from space. The Company's satellite constellation grew once again in December 2014 with the successful integration of three advanced in-orbit AIS satellites into the exactView constellation through a contract under which the Company purchased one satellite, EV-11, and licensed data month to month from two more. The Company's equatorial satellite, EV-9, was launched and commissioned in 2015. The data from these additional AIS satellites significantly increased the capacity of the Company's global vessel monitoring service and further enhanced its world-leading AIS message detection performance from space.

The Company expects to receive data from two additional satellites EV-7 and EV-8. EV-7 was launched on June 22, 2016 and EV-8 was launched on the PAZ satellite on February 22, 2018. Commissioning is underway on EV-7. Commissioning was completed on EV-8 on December 6, 2018. EV-8 is operated by Hisdesat Servicios Estratégicos, S.A. ("**Hisdesat**"), one of the Company's significant shareholders. Upon launch of EV-8, the Company was obliged to pay 100 Euro ("**EUR**") to Hisdesat as a one-time fee and, when commissioning was completed, an additional fee of 200 EUR became payable.

As part of the Company's restructuring effort that commenced in October 2016, the Company cancelled its commitment on the two leased satellites in the first quarter of 2017.

On February 3, 2017, the Company lost contact with EV-5. When subsequent recovery efforts were not successful, the Company filed an insurance claim which was paid in full in April 2017. For more details on this transaction please refer to the section "Other Income" of this MD&A.

On April 28, 2017, the first four (of fifty-eight) of the Company's Second-Generation Constellation of satellites using exactView™ RT Powered by Harris Corporation ("exactView RT") were put into service, thereby beginning the world's first global real-time S-AIS service. Forty-seven additional exactView RT satellites are now commissioned, bringing the total number of satellites in service as of January 23, 2019 to fifty-six (five First-Generation plus fifty-one Second-Generation). The Company is now seeing real-time operational performance (which the Company defines as message latency of less than one minute) from the fifty-one Second-Generation payloads which are currently in service. Four additional payloads have been previously launched and are expected to come into service when they reach their intended orbit and commissioning is completed, or to remain as in-orbit spares. Another successful launch took place on January 11, 2019. Ultimately, the Company plans to have fifty-eight Second-Generation Constellation satellites in service, not counting in-orbit spares.

The Company's collaboration with Harris Corporation ("Harris") is further described in the "Strategic Alliances" section below.

Ground infrastructure and data processing

The Company has deployed a network of international ground stations designed for highly reliable satellite data downlinking, storage and transmission to its primary data processing centre ("**DPC**") for processing and distribution. The ground station facilities provide reception of AIS payload downloads and securely cache the payload data locally. Ground stations are often equipped with redundant capabilities to ensure the highest level of reliability. Upon reception at a ground station, the AIS information is forwarded through an extensive secure Virtual Private Network using encrypted, high capacity links to one of the Company's two DPCs, both of which are located in Ontario, Canada.

Products and services

Through a variety of products and services, the Company provides what they believe to be the most advanced location-based information on maritime traffic commercially available today. The Company provides the flexibility needed to customize its products and services to suit the needs of customers on a timely basis.

Subscription Services encompasses the sale of Data-as-a-Service ("**DaaS**"), Software-as-a-Service ("**SaaS**") and Information-as-a-Service ("**IaaS**"). DaaS includes the provision of continuous data feeds in various formats and delivery systems through secure data connections over the Internet. The Company provides a SaaS solution that allows users to access the ship information derived from the Company's AIS data sources within an easy-to-use mapping environment. The Company's value-add Information Services product offerings encompass its IaaS solutions.

Data products include raw data and customized reports derived from the Company's extensive and growing archive which dates back to July 5, 2010. Revenue from the sale of these products is generally recognized when they are delivered to the customer and is not necessarily recurring in nature.

Other products and services include special projects with governments and space agencies to research methods and applications related to the satellite AIS business, Class B transponders (described in the "AIS" section above), as well as specific analysis and reporting contracts. These projects are sporadically announced by governments and there are no guarantees that they will be awarded to the Company. Revenue from these projects may span several months with no certainty that there will be similar projects in the future from which the Company will be able to earn revenue.

Customers

The Company's S-AIS data service customers include both government departments (defense; intelligence and security; search and rescue; border patrol and maritime safety; government and space agencies; as well as other ministries and organizations) and commercial and other customers (commercial fishing; business intelligence and risk management; port management; commercial offshore (oil and gas); commercial shipping; hydrographic and charting; as well as other academic and research institutions). The Company's S-AIS data service provides enhanced maritime domain awareness for improved vessel management, scheduling, environmental protection, search and rescue operations, and defence and border securing applications.

Strategic alliances and relationships

On June 8, 2015 the Company announced an agreement with Harris (the "**Harris Agreement**") which allows the Company to apply its expertise and technology in AIS signal detection from space on-board Iridium NEXT, Iridium's second-generation satellite constellation. The payloads utilize Harris' powerful AppStar applications platform and employs an in-orbit version of the Company's patented AIS detection algorithms, creating an unrivaled AIS detection capability for global maritime tracking. exactEarth's Second-Generation Constellation, called exactView RT, collects information across the entire maritime frequency band and provides real-time access to and from the ground enabling real-time delivery of the collected maritime information on a global scale.

When fully deployed, exactView RT is expected to provide real-time global coverage with enhanced detection performance as compared to other S-AIS systems. The robustness of the constellation, programmability of the payloads and support for multiple in-orbit applications makes this the global maritime information collection system designed to meet and exceed the needs and expectations of the world's maritime community for the foreseeable future.

As part of the Harris Agreement, the two companies share their respective AIS product revenue with each other. If launches continue to be successful and timely, the constellation will reach Initial Operating Capacity ("**IOC**") in early calendar 2019. At the point of IOC, the Company is to pay Harris 40% of annual data revenue on the first US$40,000 of annual revenue, and 33% of additional revenues. Prior to IOC, the revenue share is proportional to the number of payloads in-service one year prior. One of the stipulations of the revenue sharing agreement is that the Company will pay Harris $50 USD per year for each satellite put in service as part of the Second-Generation Constellation (up-to $750 USD per quarter). For the year ended October 31, 2018, the Company has paid $636 and recorded $1,846 as being payable to Harris in the Company's financial statements. Please refer to the Company's AIF for details pertaining to the Harris Agreement.

On November 23, 2015, the Company announced an $2,000 Australian dollar ("**AUD**") (CAD$1,894) minority ownership investment in technology company, Myriota Pty Ltd. ("**Myriota**") of Adelaide, Australia. As part of the Myriota investment, the Company has obtained an exclusive licence to utilise their technology for vessel tracking in the maritime market. The Myriota technology uses advanced signal processing Intellectual Property ("**IP**") developed at the University of South Australia (UniSA) in order to develop advanced terminals, infrastructure, and applications for the fast-growing Satellite Internet of Things (SIoT) global market. This core IP has been developed to create a disruptively low-cost solution for the SIoT market which will have the capability of supporting many millions of global users. Myriota is particularly focused on the location tracking and sensor data applications markets. The Company's investment of AUD$2,000 has been recorded as a technology licence and classified as an intangible asset. The Company will pay a 3.5% royalty on revenue derived from the technology under licence. It is expected that this intangible will be in use in late calendar 2019 and royalties will begin at that time. Myriota completed an AUD$20,000 equity raise in the three months ended April 30, 2018. The equity raise, completed at a significantly higher valuation for Myriota, resulted in the dilution of the Company's ownership interest to 18% from 30%. For additional information, refer to note 5 (Investment) and note 7 (Intangible assets) in the Notes to the Consolidated Financial Statements.

On April 14, 2016, the Company announced a twenty-four-month strategic alliance with Larus Technologies Corporation ("**Larus**"), an Ottawa-based provider of adaptive learning and predictive analytics software. Under the strategic alliance, the two companies have been working together to develop and market Big Data analytics-based software applications and information services for the global surveillance and intelligence markets. These products are part of the IaaS category described above. As part of the strategic alliance, the Company gains an exclusive license to Larus' Big Data analytics platform (Total::Insight™) for the maritime market for consideration of $700, which was paid over a twenty-four-month term. In return, Larus gains access to the Company's map visualisation IP for integration into Total::Insight-based solutions for non-maritime markets and to the Company's extensive data archive to perform advanced pattern-of-life analysis. the Company enhances existing, and develops new, maritime-focused information products and services by integrating technology from the Total::Insight™ platform into its existing maritime Big Data processing and supply chain IT infrastructure. New application areas include shipping movement and behavioural analysis and the companies will work together to advance the capabilities in the exciting area of predictive analytics. The Company will pay a royalty of 30% on the gross sales of products that are derived from the Larus Total::Insight™ technology. For additional information, refer to note 7 (Intangible assets), note 9 (Loans payable, financial instruments and foreign exchange) and note 12 (Commitments and contingencies) in the Notes to the Consolidated Financial Statements.

In June of 2018 the company entered into an Alliance Agreement with IHSMarkit. IHSMarkit is a large global information and data services corporation with more than 50,000 data customers worldwide and a significant presence in the global maritime information and financial services markets. Under the Agreement the Parties have created an AIS Platinum global real time vessel tracking and vessel information product that combines the Company's real time global S-AIS data feed and IHSMarkit's terrestrial AIS data feed and vessel information. AIS Platinum is a premium offering into the market place, which can be marketed and sold by both parties. IHSMarkit has a significant market presence and the Company is anticipating that the relationship with IHSMarkit will contribute to orders growth commencing in future quarters.

<u>Funding sources</u>

On May 5, 2016, Innovation, Science and Economic Development Canada announced a $54,000 Technology Demonstration Program contribution to MDA Systems Ltd., which changed its name to Maxar Technologies in 2017 ("**Maxar**"), and its partners. The funding is designed to support large scale technology demonstration projects related to the Canadian aerospace, defence, space, and security industries. On May 9, 2016, the Company entered into a Technology Demonstration Program Collaboration Agreement ("**TDP Agreement**") with Maxar as a Partner Recipient under the Technology Demonstration Program related to Space Technology and Advanced Research ("**STAR**"). The TDP Agreement provides funding at 50% of eligible costs in respect of STAR projects to a maximum total funding value of $1,250. This funding is available to partially offset eligible STAR project costs during the period commencing August 12, 2014 and ending March 31, 2022. The Company submitted its final claim in the third quarter of 2018 and have recognized a cumulative total recovery to date of $1,250. The funding recognized as an offset to cost of revenue in the year ended October 31, 2018 was $202 (October 31, 2017 – $381).

On October 18, 2018 the Company signed a loan agreement with the Strategic Innovation Fund ("**SIF**"). Under this agreement, the Company is eligible to receive funding for certain expenditures incurred from February 13, 2018 to February 12, 2021 to a maximum of $7,206. The loan is repayable in 15 annual payments beginning February 28, 2024. The repayment values are dependent upon a calculated Performance Factor, which is used to calculate a Repayment Rate. The Repayment Rate is applied to annual Gross Business Revenue and for the payment in February of the subsequent year. During the year ended October 31, 2018, the Company received payment for the first claim of $1,425. An additional receivable of $128 was recorded for unclaimed funding related to expenses incurred prior to October 31, 2018. The SIF loan is measured at fair value using an interest rate of 14% based on the market interest rate for a comparable instrument with a similar term, resulting in a loan balance of $336 at October 31, 2018. The difference between the fair value at inception and the loan proceeds received is recorded as a government grant, which is recognized as an operating grant and a capital grant based on the relative proportion of eligible expenditures incurred. For additional information, refer to note 4 (Government assistance) in the Notes to the Consolidated Financial Statements.

On December 13, 2018, the Company completed an offering of Convertible Debentures at a price of $1 per Convertible Debenture for gross proceeds of $13,000. The Convertible Debenture Financing represented the culmination of an extensive review of strategic alternatives by the Special Committee which will provide the Company with a solid financial footing going forward. Each Convertible Debenture is convertible into 2,000 Common Shares of the Company, being an effective conversion price of 50 cents per share at the option of the holder (subject to customary adjustments from time to time), at any time prior to the fifth anniversary of the closing date. The net proceeds of $11,500 from the Convertible Debenture Financing will be used to fund the Company's ongoing working capital needs in support of business operations and for general corporate purposes. For additional information, refer to note 21 (Subsequent events) in the Notes to the Consolidated Financial Statements.

Staffing

The Company relies on the knowledge and talent of its employees and makes use of their expertise in satellite operations, Big Data architecture, web services, software and product development, and consulting services. With the deployment of the Company's First-Generation Constellation nearing completion, the Company is now able to reduce its satellite infrastructure operating costs as the Company continues to transition to an information and intelligence company.

The number of full-time employees at October 31, 2018 was 40 (October 31, 2017 – 46).

Overall Performance

Revenue was $12,955 for the year ended October 31, 2018, compared to $12,833 for the year ended October 31, 2017. The Company's major application market segments are government and commercial. Government customers contributed $6,239 to the revenue for the year ended October 31, 2018, compared to $6,789 for the year ended October 31, 2017. The decrease in year over year revenue was primarily due to non-cash revenue earned in the first quarter of 2017 related to the EV-9 asset transfer arrangement, described in the "Revenue" section below. Commercial revenue for the year ended October 31, 2018 was $6,716, compared to $6,044 for the year ended October 31, 2017. Commercial revenue for the year ended October 31, 2018 includes $250 of non-monetary revenue resulting from the exchange of AIS data not licenced for commercial use for data processing services.

Revenue related to Subscription Service orders will typically be realized over a twelve-month period, while revenue related to product orders is realized upon delivery. The backlog of orders won but not yet recognized in revenue is $31,482, compared to $25,996 of backlog reported at October 31, 2017. Revenue of $11,677 from the current backlog is forecasted to be earned in 2019 while $9,835 is expected to be earned in 2020. The balance of $9,970 is expected to be earned between 2021 and 2027.

The Company's foreign currency denominated backlog gets affected by fluctuation in foreign exchange rates. The Company's closing backlog for any given quarter gets revalued as the CAD strengthens or weakens in relation to the Great Britain Pound ("**GBP**"), EUR or US dollar ("**USD**"), as applicable. The foreign exchange rates at October 31, 2018 were: GBP $1.6775, EUR $1.4876, USD $1.3142, while the foreign exchange rates at October 31, 2017 were: GBP $1.7095, EUR $1.5014, USD $1.2893. The weakening CAD in the year ending October 31, 2018 resulted in an increase of $1,536 in backlog (October 31, 2017 – decrease of $998).

The following chart summarizes orders and backlog:

	Years ended October 31	
	2018	2017
Opening backlog	$ 25,996	$ 22,551
New orders	16,905	17,276
Foreign exchange adjustment on opening backlog	1,536	(998)
Revenue	(12,955)	(12,833)
Closing backlog	$ 31,482	$ 25,996

Volatility in exchange rates between Canadian and foreign currencies such as GBP, EUR and USD impact the business as a portion of the Company's revenues are billed in non-Canadian currencies (predominately in USD) and recognized in the Company's Consolidated Statements of Financial Position in the form of cash, receivables, and payables. The Bank of Canada average noon GBP/CAD exchange rates during the year ended October 31, 2018 was $1.7298, compared to an average of $1.6666 in 2017. The Bank of Canada average noon EUR/CAD exchange rates during the year ended October 31, 2018 was $1.5290, compared to an average of $1.4519 in 2017. The Bank of Canada average noon USD/CAD exchange rates during the year ended October 31, 2018 was $1.2870, compared to an average of $1.2503 in 2017. Foreign exchange for the year ended October 31, 2018 was a loss of $55 compared to a gain of $43 for the year ended October 31, 2017.

Adjusted EBITDA for the year ended October 31, 2018 was a loss of $3,210 compared to a loss of $4,387 for the year ended October 31, 2017. The reduced Adjusted EBITDA loss for the year ended October 31, 2018 was driven primarily by higher revenue and lower SG&A, product development and R&D and other expense, partially offset by higher cost of revenue. Please refer to the Adjusted EBITDA reconciliation included later in this MD&A.

For an analysis of the risks the Company faces, please refer to the "Risk Factors" section in the Company's AIF.

Selected Annual Information

(in thousands of dollars except per share amounts)	2018	2017	2016
Revenue	$ 12,955	$ 12,833	$ 18,918
Gross margin	4,322	4,215	9,146
Gross margin	33.4 %	32.8%	48.3%
Impairment loss	10,885	26,886	27,987
Restructuring expense (recovery)	(2)	(99)	1,744
Adjusted EBITDA(1)	(3,210)	(4,387)	523
Adjusted EBITDA Margin(1)	(24.8%)	(23.2%)	2.8%
Earnings (loss) from operations	(15,935)	(35,158)	(32,903)
Net loss	(16,223)	(33,834)	(35,963)
Basic and diluted loss per share	(0.75)	(1.57)	(1.90)
Total assets	15,624	31,148	67,822
Deferred revenue	2,412	2,252	1,968
Other current liabilities	5,250	4,843	7,365
Long-term loans and borrowings	498	662	1,188
Other non-current liabilities	257	388	758

(1) As defined in non-IFRS measures.

Results of Operations

Revenue

The Company sells products in three broad categories: Subscription Services, Data Products, and Other Products and Services. Generally, Subscription Services are sold with a twelve-month period of service with revenue recognized equally over the contract term. Data Products and Other Products and Services are generally sold on an as-demanded basis and the revenue is recognized when the product is delivered to the customer, or for long-term projects, on a percentage of completion basis. Revenue for the Data Products and for the Other Products and Services tends to be less predictable and is subject to fluctuations from one period to the next.

Revenues for the year ended October 31, 2018:

	Subscription Services	Data Products	Other Products & Services	Total Revenue
Government departments	$ 5,149	$ 458	$ 632	$ 6,239
Commercial and other	6,145	509	62	6,716
Total revenue	$ 11,294	$ 967	$ 694	$ 12,955

Revenues for the year ended October 31, 2017:

	Subscription Services	Data Products	Other Products & Services	Total Revenue
Government departments	$ 5,344	$ 306	$ 1,139	$ 6,789
Commercial and other	5,273	685	86	6,044
Total revenue	$ 10,617	$ 991	$ 1,225	$ 12,833

The Company's total revenue for the year ended October 31, 2018 was $12,955 compared to $12,833 for the year ended October 31, 2017. The Company anticipates that the drivers for the next phase of revenue growth will be the expansion of its Second-Generation Constellation on-board Iridium NEXT, new analytics applications for the S-AIS and maritime information services markets and sales traction within the small vessel tracking market.

The Company's Subscription Services revenue is generally earned on a monthly recurring basis under annual or multi-year contracts and therefore provides a solid foundation for its revenue growth. Subscription Services revenue for the year ended October 31, 2018, was $11,294 compared to $10,617 for the year ended October 31, 2017. Subscription Services revenue represented 87% of the Company's total revenue for the year ended October 31, 2018 compared to 83% for the year ended October 31, 2017. The increase in Subscription Services revenue was primarily due to the addition of new subscription customers and $94 of non-cash revenue resulting from the trade of AIS subscription data for data processing services for the year ended October 31, 2018, partially offset by non-cash revenue recognition of $618 for the year ended October 31, 2017 related to the EV-9 asset transfer arrangement. Net of the non-cash revenue, Subscription Services revenue increased by $1,201 in the year ended October 31, 2018 due to the addition of new subscription customers. The EV-9 asset transfer was an arrangement under which the Company provided in-kind datasets at a value of $3,666 in exchange for title to the EV-9 satellite. All datasets were transferred as at January 31, 2017.

Revenue from Data Products was $967 for the year ended October 31, 2018, compared to $991 for the year ended October 31, 2017. This type of revenue is generated from on-demand customer requests and are therefore variable in its timing. The decrease is due to fewer data products purchased in the year ended October 31, 2018, partially offset by $156 of non-cash revenue resulting from the trade of AIS archive data not licenced for commercial use for data processing services in the year ended October 31, 2018.

Revenue from Other Products & Services was $694 for the year ended October 31, 2018 compared to $1,225 for the year ended October 31, 2017. The decrease is due to timing of delivery of services related to ongoing percentage of completion projects, primarily with small vessel opportunities.

Revenue by quarter

	Subscription Services	Data Products	Other Products & Services	Total Revenue
Q1 2017	$ 3,038	$ 208	$ 90	$ 3,336
Q2 2017	$ 2,326	$ 341	$ 1,044	$ 3,711
Q3 2017	$ 2,572	$ 309	$ 53	$ 2,934
Q4 2017	$ 2,681	$ 133	$ 38	$ 2,852
Q1 2018	$ 2,506	$ 84	$ 246	$ 2,836
Q2 2018	$ 2,463	$ 594	$ 122	$ 3,179
Q3 2018	$ 2,923	$ 28	$ 220	$ 3,171
Q4 2018	$ 3,402	$ 261	$ 106	$ 3,769

The quarter-over-quarter variance in revenue is caused by the mix in the type of revenue earned in each quarter. Subscription Services revenue tends to be steady due to the generally recurring nature of those client agreements. Data Products revenue is on-demand and therefore less predictable. Other Products & Services revenue is predominantly project-based revenue and the timing of revenue recognition varies depending on the progress of the projects. For some of the Company's projects, revenue recognition is based on percentage completion calculated using costs to date as a percentage of estimated total cost. Small vessel contract revenue recognition is based on progress with the installation of Class B transponders. Therefore, revenue will vary quarter to quarter based on the progress made on the various projects.

The operating results for interim periods should not be relied upon as an indication of results to be expected or achieved in any future period or any fiscal year as a whole. The Company has experienced lower than planned revenue combined with operating losses resulting in a reduction in forecasted future cash flows. However, in recent quarters, the trend for Subscription Services revenue has been positive as sales momentum has bene generated with exactView RT, the Company's real-time S-AIS service. Factors affecting the Company's revenue and results are described in greater detail under the heading "Risks Relating to Our Business and Industry" in the Company's AIF.

Gross margin

	Years ended October 31	
	2018	2017
Gross profit	$ 4,322	$ 4,215
Gross margin	33.4%	32.8%

Gross margin for the year ended October 31, 2018 was 33.4% compared to 32.8% for the year ended October 31, 2017. Gross margin increased in the year ended October 31, 2018 due to increased revenue and relatively flat cost of revenue. Cost of revenue increased slightly due to higher satellite operating costs related to the Second-Generation Constellation and increased terrestrial data costs, partially offset by decreased data processing and project related costs, the reimbursement of costs related to the TDP Agreement and $1,154 of SIF funding recognized against cost of revenue. Costs increase relative to the number of satellites and ground stations, and volume of data processing, rather than relative to the number of customers. Therefore, as the Company's satellite constellation expands, the Company expects that its cost base will grow more quickly than the growth of its revenues which will result in decreased gross margins in the short term. As the Company's customer base subsequently grows, the revenue increase is expected to exceed the cost base increase and result in higher gross margin over the long term.

SG&A expenses

SG&A expenses for the year ended October 31, 2018 were $6,255 compared to $7,004 for the year ended October 31, 2017. SG&A expense decreased year over year due to reversal of bad debt, reduced Restricted Share Unit ("**RSU**"), Deferred Share Unit "(**DSU**") and stock option expenses resulting from decreased share price, vesting, settlement and forfeitures, decreased spending on conferences, travel and consulting and moving expenses included in the first quarter of 2017, partially offset by increased selling expense and professional fees.

Product development and R&D expenses

Product development and R&D expenses for the year ended October 31, 2018 were $1,418 compared to $1,692 for the year ended October 31, 2017. The Company continued to focus on developing more web-based functionality as well as new analytics-based product offerings during fiscal 2018.

The Company incurred $345 on R&D expenses for the year ended October 31, 2018 compared to $242 for the year ended October 31, 2017. The R&D expense was incurred on the development of new data processing capabilities and on Project VESTA, a collaboration of various partners in the UK including the Company's Subsidiary, sponsored by the UK Space Agency. Project VESTA has an objective to demonstrate a satellite-based, two-way maritime communications system representing initial implementation of VHF Data Exchange System (VDES) technology. The Company's Project VESTA responsibilities focus on the ground segment of the VDES system, including the satellite feeder link, a ship-based test station and the ability to control the overall VESTA network. The launch occurred in December 2018 and the satellite is currently undergoing in orbit commissioning. VDES networks using LEO satellites have the potential to become a new service offering in the future, complementary to the Company's S-AIS business.

Impairment losses

At the end of each reporting period, the Company assesses whether there are events or circumstances indicating that an asset may be impaired. Such events or circumstances notably include material adverse changes which in the long-term impact the economic environment or the Company's assumptions or objectives. The Company considers the relationship between its market capitalization and the book value of its equity, among other factors, when reviewing for indicators of impairment because the Company as a whole has been assessed as a single cash generating unit ("**CGU**"). The recoverable amount is the greater of value in use ("**VIU**") and fair value less costs of disposal.

During fiscal 2018, the market capitalization of the Company was below the carrying value for a sustained period of time particularly during the fourth quarter of the fiscal year. This is considered an indicator of impairment. Management assessed the recoverable amount for the impairment test based on fair value less cost to sell using a market approach. The fair value less estimated cost to sell of $7,206 was determined using a market capitalization based on the share price on October 31, 2018. The carrying value, represented by the book value of the Company's shareholder's equity was $18,091. The carrying value was higher than the book value by $10,885 (October 31, 2017 – $26,886). As a result, at October 31, 2018, impairment losses recognized are $7,617 (October 31, 2017 – $18,804) related to property, plant and equipment and $3,268 (October 31, 2017 – $8,082) related to intangible assets, allocated on a pro-rata basis. The impairment amount has been recorded in the Statement of loss and comprehensive loss. For additional information, refer to note 6 (Property, plant and equipment), note 7 (Intangible assets) and note 8 (Impairment of long-lived assets).

Other expenses (income)

	Years ended October 31		
	2018	2017	Change
Other income	$ -	$ (1,455)	$ 1,455
Other expense	49	197	(148)
Restructuring expense recovery	(2)	(99)	97
Foreign exchange loss (gain)	55	(43)	98
Interest income	(38)	(79)	41
Interest expense	72	131	(59)
Income tax expense	152	24	128
Total other expense (income)	$ 288	$ (1,324)	$ 1,612

Other income

Other income was nil for the year ended October 31, 2018 compared to $1,455 for the year ended October 31, 2017. The 2017 income was the result of an insurance claim for the insured value of EV-5 less the remaining book value of the asset.

Other expense

Other expense was $49 for the year ended October 31, 2018 compared to $197 for the year ended October 31, 2017. The 2018 expense relates to severance, while the 2017 expense related to severance, maternity leave top-up and loss on disposal of assets.

Restructuring expense recovery

In November 2016, the Company announced a restructuring aimed at re-organizing and streamlining its organization in order to enhance data delivery, strengthen sales capabilities, and lower the cost base. The restructuring resulted in the termination of 14 employees effective October 13, 2016. The $2 recovery in the year ended October 31, 2018 and $99 recovery in the year ended October 31, 2017 relates to the revaluation of RSUs and adjustments to benefits payable.

Foreign exchange loss (gain)

Foreign exchange amounts in the Consolidated Statements of Comprehensive Loss include realized and unrealized gains and losses that result from translation of foreign denominated balances in the Company's Consolidated Statements of Financial Position. The impact of translation of outstanding foreign denominated balances in the Consolidated Statements of Financial Position and of settling foreign denominated balances into cash during the year ended October 31, 2018 was a loss of $55 compared to a gain of $43 during the year ended October 31, 2017.

Interest income

The Company's interest income for the year ended October 31, 2018 was $38 compared to $79 for the year ended October 31, 2017. Interest income decreased as cash balances declined over the year.

Interest expense

The Company's interest expense for the year ended October 31, 2018 was $72 compared to $131 for the year ended October 31, 2017. Interest expense is decreasing as outstanding loan balances are repaid.

Income tax expense

The Company's income tax expense for the year ended October 31, 2018 was $152 compared to $24 for the year ended October 31, 2017. Income tax expense increased due to withholding tax that is not expected to be recoverable.

Adjusted EBITDA

	Year ended October 31	
	2018	2017
Net loss	$ (16,223)	$ (33,834)
Interest income	(38)	(79)
Interest expense	72	131
Income tax expense	152	24
Depreciation and amortization	1,699	3,791
Unrealized foreign exchange gain	(53)	(376)
Share-based compensation	298	624
Impairment Loss	10,885	26,886
Restructuring expense (recovery)	(2)	(99)
Other income	-	(1,455)
Adjusted EBITDA	$ (3,210)	$ (4,387)

Adjusted EBITDA for the year ended October 31, 2018, was a loss of $3,210 compared to a loss of $4,387 for the year ended October 31, 2017. The improvement year over year was driven by increased revenue and decreased SG&A, product development and R&D and other expense, partially offset by increased cost of revenue. Management believes that Adjusted EBITDA provides a relevant measure of the results of the Company's main business activities before taking into consideration how they are financed or taxed and excluding the impact of certain non-cash expenses and items that are considered to be outside of the Company's ongoing operating results.

Net loss

Net loss was $16,223 for the year ended October 31, 2018, compared to $33,834 for the year ended October 31, 2017. The net loss decreased primarily due to higher revenue and decreases in SG&A, product development and R&D, depreciation and amortization, impairment losses and other expenses, partially offset by a decrease in other income and increased cost of revenue and foreign exchange loss.

Fourth Quarter Review

Revenues for the three months ended October 31, 2018:

(in thousands of dollars)	Subscription Services	Data Products	Other Products & Services	Total Revenue
Government departments	$ 1,630	$ 58	$ 106	$ 1,794
Commercial and other	1,772	203	-	1,975
Total revenue	$ 3,402	$ 261	$ 106	$ 3,769

Revenues for the three months ended October 31, 2017:

(in thousands of dollars)	Subscription Services	Data Products	Other Products & Services	Total Revenue
Government departments	$ 1,367	$ 7	$ 38	$ 1,412
Commercial and other	1,314	126	-	1,440
Total revenue	$ 2,681	$ 133	$ 38	$ 2,852

Revenue for the three months ended October 31, 2018 was $3,769 with a cost of revenue of $1,497 resulting in a gross profit of $2,272. The corresponding results for the three months ended October 31, 2017 was revenue of $2,852, cost of revenue of $1,998 and a gross profit of $854. Gross margin for the three months ended October 31, 2018 was 60.3% compared to 29.9% for the three months ended October 31, 2017. Gross margin increased in the three months ended October 31, 2018 due to an increase in revenue and a decrease in cost of revenue. Cost of revenue decreased primarily due to $1,154 of SIF funding recognized against cost of revenue, partially offset by higher satellite operating costs related to the Second-Generation Constellation and increased terrestrial data costs.

Adjusted EBITDA

	Three months ended October 31	
	2018	2017
Net loss	$ (10,322)	$ (28,966)
Interest income	(5)	(20)
Interest expense	14	29
Income tax expense	30	8
Depreciation and amortization	451	916
Unrealized foreign exchange gain	72	(432)
Share-based compensation	(168)	173
Impairment Loss	10,885	26,886
Restructuring expense (recovery)	-	(12)
Adjusted EBITDA	$ 957	$ (1,418)

Adjusted EBITDA for the three months ended October 31, 2018, was a gain of $957 compared to a loss of $1,418 for the three months ended October 31, 2017. The improvement year over year was driven by increased revenue and decreased cost of revenue, SG&A, product development and R&D and other expense. Management believes that Adjusted EBITDA provides a relevant measure of the results of the Company's main business activities before taking into consideration how they are financed or taxed and excluding the impact of certain non-cash expenses and items that are considered to be outside of the Company's ongoing operating results.

Operating expenses for Q4 2018 decreased compared to Q4 2017. Impairment losses of $10,885 recognized in Q4 2018 compared to $26,886 recognized in Q4 2017 was the primary driver of the decrease in operating loss from $29,236 in Q4 2017 to $10,210 in Q4 2018.

The Net loss for Q4 2018 was $10,322 while Q4 2017 reported a Net loss of $28,966. The net loss in the quarter was reduced primarily due to higher revenue and lower cost of revenue, operating expenses, including impairment, and other expenses partially offset by higher foreign exchange loss.

Financial position

The following chart outlines the changes in the Consolidated Statements of Financial Position between October 31, 2017 and October 31, 2018:

(in thousands of dollars)	Increase/ (Decrease)	Explanation
Cash	$ (3,343)	The decrease in cash is due to ongoing operational expenses, partially offset by collections and SIF funding received.
Short-term investments	$ 49	Short-term Guaranteed Investment Certificates purchased as collateral against credit facilities.
Accounts receivable	$ 320	The accounts receivable balance fluctuates with changes in billings and collections.
Unbilled revenue	$ 298	The unbilled revenue reflects the amount of revenue recognized in advance of billings.
Prepaid expenses and other assets	$ (612)	The decrease relates to the expiry of in orbit insurance for certain First-Generation Constellation satellites.

(in thousands of dollars)	Increase/ (Decrease)	Explanation
Property, plant and equipment	$ (8,567)	The decrease in property, plant and equipment is due to depreciation of $1,265, impairment of 7,617, SIF funding of $63, reimbursement from LuxSpace for services related to EV-10 of $541, and a reversal of M3M satellite value of $359 at the conclusion of arbitration with Honeywell, offset by additions of $1,278.
Intangible assets	$ (3,685)	The decrease in Intangible assets is due to depreciation of $434 and impairment of $3,268, offset by additions of $17.
Accounts payable and accrued liabilities (current and non-current)	$ 1,108	The balance fluctuates based on timing of goods and services received and payments.
Deferred revenue	$ 160	Deferred revenue reflects billings that occur in advance of revenue recognition.
Restructuring provision	$ (388)	The decrease is due to payments and adjustments of salary continuance for three employees affected by the restructuring in October 2016.
Loans payable (current and non-current)	$ (272)	The decrease is due to principal payments made on the FED DEV and Larus debt, partially offset by the new SIF loan.
Long-term incentive plans (current and non-current)	$ (336)	The decrease is due to the reallocation of RSU payable to contributed surplus upon amendment to the Share Unit Plan to allow RSUs to be equity settled and the revaluation of previously accrued units due to a decrease in stock price, partially offset by continuing accrual of DSU payable.
Contributed surplus	$ 381	The increase is related to reallocation of RSU payable to contributed surplus and expense recognized on RSUs and stock options during the year. Stock options and RSUs will be equity settled.
Accumulated other comprehensive loss	$ 33	The increase is due to the foreign exchange translation of the Company's Subsidiary.
Deficit	$ (16,223)	The decrease represents net loss of $16,223.

Liquidity and capital resources

The key liquidity and capital resource items are as follows:

	October 31, 2018	October 31, 2017	% Change
Cash	$ 4,774	$ 8,117	(41%)
Short-term investments	$ 49	$ -	n/a
Trade accounts receivable	$ 3,491	$ 3,171	10%
Prepaid and other current assets	$ 654	$ 1,266	(48%)
Accounts payable and accrued liabilities	$ 4,780	$ 3,722	28%
Loans payable – current	$ 459	$ 567	(19%)

Working Capital

Working capital decreased $3,855 during the year ended October 31, 2018 to $2,217. The decrease since October 31, 2017 is driven by the following:

		Increase / (Decrease) to working capital
Decrease in cash	$	(3,343)
Increase in short-term investments		49
Increase in trade accounts receivable		320
Increase in unbilled revenue		298
Decrease in prepaid expenses and other assets		(612)
Increase in accounts payable and accrued liabilities		(1,058)
Increase in deferred revenue		(160)
Decrease in restructuring provision		388
All other		263
Total	$	(3,855)

Current assets are available at varying times within twelve months following the balance sheet date. Cash is readily available to settle obligations related to current and future expenditures.

Significant cash flows:

	Year ended October 31			
		2018		2017
Cash used in operating activities	$	(3,038)	$	(7,707)
Cash (used in) from investing activities		(1,168)		2,995
Cash from (used in) financing activities		698		(801)
Effect of exchange rate changes on cash		165		(50)
Net decrease in cash	$	(3,343)	$	(5,563)
Cash, beginning of the period		8,117		13,680
Cash, end of the period	$	4,774	$	8,117

The Company manages its liquidity and capital resources to provide sufficient cash to meet short and long-term operating and development plans, debt obligations, and other contractual obligations when due. Prior to the completion of the Spinout Transaction, the Company used loans from shareholders as primary sources of liquidity. On October 18, 2018, the company signed a loan agreement with SIF to receive funding for certain expenditures incurred from February 13, 2018 to February 12, 2021 to a maximum of $7,206. On December 13, 2018 the Company completed an offering of Convertible Debentures at a price of $1 per Convertible Debenture for gross proceeds of $13,000, and net proceeds after financing costs of $11,500 to fund short-term operating costs. As a result of this recent funding management believes capital resources as of the date of this MD&A are sufficient to fund current operations, forecasted capital expenditures, and contractual obligations in 2019. For additional information, refer to note 4 (Government assistance) and note 21 (Subsequent events) in the Notes to the Consolidated Financial Statements.

With respect to longer-term funding requirements, the Company believes future cash flows generated from operations and other sources of liquidity will be available. Under present conditions, the Company believes it has sufficient access to capital and debt markets. There is a risk that the cost of obtaining capital resources from capital and debt markets may increase in the future as lenders and institutional investors may increase interest rates, impose tighter lending standards, or refuse to provide any new funding. Despite present market conditions, changes in the

Company's business, unforeseen opportunities or events, and other external factors may also adversely affect liquidity and the availability of additional capital resources. Due to these factors, the Company cannot be certain that funding, if needed, will be available to the extent required, or on acceptable terms. If the Company is unable to access funding when needed on acceptable terms, the Company may not be able to fully implement current business plans, take advantage of business opportunities, or respond to competitive pressures, any of which could have a material adverse effect on the Company's operational and financial results. No assurance can be given that the Company will be successful in meeting sales targets, reducing costs or obtaining additional financing either through debt or equity. The Company has experienced losses and negative cash flows from operations. However, the Company may elect to reduce its planned expenditures concurrent with prevailing conditions. The Company believes that this financial flexibility to adjust its spending levels will provide it with sufficient liquidity to meet its future operational goals and financial obligations. For additional information, refer to note 2 b) (Significant Accounting Policies, Basis of presentation) in the Notes to the Consolidated Financial Statements.

Operating activities

Cash used in operations for the year ended October 31, 2018 was $3,038, compared to cash used in operations of $7,707 for the year ended October 31, 2017. The decrease in cash used in operations was primarily due to the decrease in net loss adjusted for non-cash items.

Investing activities

Cash used in investing activities for the year ended October 31, 2018 was $1,168 compared to $2,995 generated from investing activities for the year ended October 31, 2017. The cash used in the year ended October 31, 2018 includes the acquisitions of long-lived assets offset by reimbursement related to SIF funding and from LuxSpace related to EV-10. The cash generated in the year ended October 31, 2017 includes the acquisitions of long-lived assets offset by reimbursement from LuxSpace related to EV-10 and the insurance settlement of $3,500 for the EV-5 satellite.

Financing activities

Cash flows from financing activities for the year ended October 31, 2018 were $698 compared to $801 used for financing in the year ended October 31, 2017. Financing cash flows in 2018 were related to the SIF loan advance, offset by repayment of long-term liabilities and purchase of short-term investments.

Contractual obligations

The following table outlines the contractual cash obligations (excluding accounts payable and accrued liabilities) as at October 31, 2018:

	Total	Less than one year	1-3 years	4-5 years	>5 years
Lease obligation	$ 371	$ 124	$ 247	$ -	$ -
Government loans	2,210	492	165	-	1,553
Capital commitments	3,741	243	714	1,856	928
Harris commitment	41,890	3,352	6,702	6,702	25,134
Total contractual obligations	$ 48,212	$ 4,211	$ 7,828	$ 8,558	$ 27,615

As at October 31, 2018, the Company had various contractual cash obligations, including government debt, capital commitments and commitment under the Harris Agreement. For additional information, refer to note 4 (Government assistance) and note 12 (Commitments and Contingencies) in the Notes to the Consolidated Financial Statements.

Credit facilities

On October 1, 2018 the company agreed to terminate its' $2,000 line of credit agreement with The Canadian Imperial Bank of Commerce ("CIBC"). The company purchased two Guaranteed Investment Certificates totalling $49 from CIBC as collateral for a line of credit for $29 and other credit facilities of $20.

Off-balance sheet arrangements

As at October 31, 2018, the Company does not have any off-balance sheet arrangements, other than operating leases as disclosed in note 12 (Commitments and contingencies) in the Notes to the Consolidated Financial Statements.

Proposed transactions

The Company did not have any proposed transactions as at October 31, 2018.

FINANCIAL INSTRUMENTS

We are exposed, through our operations, to foreign currency risk, credit risk, liquidity risk, interest rate risk and fair value risk. The overall objective of the Board is to set policies that seek to reduce risk as far as possible without unduly affecting the Company's competitiveness and flexibility.

Foreign Currency Risk

Foreign currency risk is the risk that a variation in exchange rates between the CAD and USD or other foreign currencies will affect our operations and financial results.

The majority of our revenue is transacted in CAD; however, portions of the revenue are denominated in GBP, EUR and USD. Purchases, consisting primarily of the majority of salaries, certain operating costs, and manufacturing overhead, are incurred primarily in CAD. Our foreign operations are conducted through our Subsidiary. The assets and liabilities of the foreign operations are translated into CAD using the exchange rates in effect at the dates of the consolidated statements of financial position. Foreign currency risks arising from translation of assets and liabilities of foreign operations into our functional currency are generally not hedged. Fluctuations in foreign exchange rates could result in unanticipated fluctuations in our operating results. We have transactions that are denominated in GBP, EUR and USD but do not have exposure to any highly inflationary foreign currencies.

Based on our net exposure on our outstanding foreign currency denominated monetary assets and liabilities at October 31, 2018, a 10% weakening in the CAD in relation to the GBP would have decreased the Company's net loss in the year ended October 31, 2018 by approximately $129. Based on our net exposure at October 31, 2018, a 10% weakening in the CAD in relation to the EUR would have decreased the Company's net loss for the year ended October 31, 2018 by approximately $146. A 10% weakening in the CAD in relation to the USD would have decreased the Company's net loss for the year ended October 31, 2018 by approximately $266. A 10% strengthening in the CAD in relation to these currencies would have had the opposite effect.

Credit Risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Financial instruments that are potentially subject to credit risk consist primarily of cash and trade and other receivables.

We attempt to mitigate our credit risk by dealing only with large financial institutions with good credit ratings. All of the financial institutions that we transact with meet these qualifications; however, there can be no guarantee as to the solvency or reliability of such counterparties. Cash is maintained with financial institutions of reputable credit and may be redeemed upon demand.

Credit risk also arises from the inability of customers to discharge their obligation to us. If one or more customers were to delay, reduce or cancel Order Bookings, our overall Order Bookings may fluctuate and could adversely affect our operations and financial conditions. In the normal course of business, we monitor the financial condition of our customers and review the credit history of each new customer.

The Company has policies to limit the amount of risk with each individual customer, and exposure to bad debts is managed as part of the Company's normal activities. Each customer's credit rating is assessed considering its financial position, past experience and other factors. Credit limits are regularly monitored, and the Company has formal procedures for detecting objective evidence of impairment of trade receivables. Based on a review of trade accounts receivable, an allowance for doubtful accounts of $5 was recorded at October 31, 2018 (October 31, 2017 – $354). The maximum exposure relating to trade and other receivables at October 31, 2018 was $3,491 (October 31, 2017 – $3,171).

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they become due. We monitor our risk to a shortage of funds using a rolling twelve-month cash flow forecast. This forecast considers the maturity of our financial assets (e.g., accounts receivable, other financial assets), liabilities (e.g., payables, loans), and projected cash flows from operations. Our policy is to ensure adequate funding is available from operations, established lending facilities and other sources as required. An inability to properly manage our liquidity risk could have a material adverse effect on our results of operations, business prospects and financial condition.

To date, the Company has a history of operating losses (year ended October 31, 2018 – $16,223 year ended October 31, 2017 – $33,834, year ended October 31, 2016 – $35,963) and generating insufficient cash flows from operations to fund its activities (year ended October 31, 2018 – outflows of $3,038, year ended October 31, 2017 – outflows of $7,707, year ended October 31, 2016 – outflows of $2,857).

Interest Rate Risk

Our risk exposure to market interest rates relates primarily to new financing that we may undertake. Our policy will be to review our borrowing requirements on a continual basis and to enter into fixed or variable interest rate borrowing arrangements as required.

Fair Value Risk

Fair values have been determined for measurement and/or disclosure purposes. When applicable, further information about the assumptions made in determining fair values is disclosed in the Financial Statement notes specific to that asset or liability.

Summary of Significant Accounting Policies

Critical accounting estimates

The preparation of the Company's Consolidated Financial Statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities. These estimates are based upon management's historical experience and various other assumptions that are believed by management to be reasonable under the circumstances. Such assumptions and estimates are evaluated on an ongoing basis and form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources as well as the periodic recognition of revenue and cost of revenue. Actual results could differ from these estimates.

The Company believes the following critical accounting policies affect the more significant estimates and assumptions used in the preparation of its Consolidated Financial Statements.

Revenue recognition

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Company and the revenue can be reliably measured, regardless of when payment is being made. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duty. The Company assesses its revenue arrangements against specific criteria in order to determine if it is acting as principal or agent. The Company has concluded that it is acting as a principal in all of its revenue arrangements. The following specific recognition criteria must also be met before revenue is recognized:

Sale of Data

The majority of revenue is derived from the sale of data subscriptions. For subscription revenue, the timing of cash flows generally precedes the recognition of revenue and income. Any initial payments are deferred and recognized rateably as data is delivered over the subscription period.

Revenue is recognized upon delivery for non-subscription data sales.

Provision of Products and Services

The Company occasionally provides goods, including Class B transponders, and services to its customers under long-term contracts. When there are more than one good or service included in an arrangement, it is necessary to assess the whether those components should be separated or combined for purposes of recognizing revenue. Further, it is necessary to assess the fair value of distinct components and allocate the total contract value based on the relative fair values. The fair value of each product or service is determined considering sales of the products or services on a stand-alone basis and the Company's pricing policies.

The Company recognizes revenue on long-term contracts based on the stage of completion in accordance with International Accounting Standard ("**IAS**") 18 if the contract is a service contract or IAS 11 if the contract represents a construction contract. Depending on the nature of the contract, the stage of completion may be assessed based on costs incurred relative to the estimated total contract costs or other measures. Losses on such contracts are accrued when the estimate of total costs indicates that a loss will be realized. Accruals are drawn down as loss contracts progress. Contract billings received in excess of recognized revenue are included in current liabilities as deferred revenue.

Project costs to complete

At the outset of each customer project, an estimate of the total expected cost to complete the scope of work under contract is made. For those contracts where revenue is recognized based on actual costs incurred relative to estimated total costs, these estimates are reviewed and revised to reflect current expectations of cost to complete, and total cost. These estimates are based on specific knowledge of the status of the project, as well as historical understanding of costs on similar projects. Cost elements include material, direct labour, and overhead costs, with labour and overhead costs being determined using pre-established costing rates applied to estimated labour hours required to complete the scope of work under contract. These estimates are reviewed on a monthly and quarterly basis to ensure the estimates reflect the current expectations for total costs, however this is not a guarantee that unforeseen or additional costs will not be incurred, which would have an impact on project total cost, reported revenue and gross margins. Management believes it has effective control procedures in place to ensure the validity of these estimates at the time they are made.

Allowance for doubtful accounts

The Company has established an allowance for doubtful accounts taking into consideration aging of the receivables, communications with customers, credit issues, and historical losses. The Company will increase the allowance for specific accounts if there is objective evidence that the customer is experiencing significant financial difficulty.

Useful life of intangible and long-term assets

The Company has established policies for determining the useful life of its intangible and long-term assets, and amortizes the costs of these assets over those useful lives. The useful life for each category of asset is determined based on the expectation of its ability to continue to generate revenues, and thus, cash flows. This ability is tested periodically to ensure the conditions still exist to allow the asset to be reflected at its net-recorded value in the Company's accounts, and any impairment to the valuation is reflected in such accounts at the time the impairment is determined.

Recoverable amount for long-lived assets

An asset's recoverable amount is the higher of an asset's or cash generating unit's fair value less costs to sell and its value in use, and is determined for an individual asset or at the CGU level if individual assets do not have largely independent cash inflows. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU. In determining fair value less costs to sell, recent market transactions are taken into account, if available. If no such transactions can be identified, an appropriate valuation model is used. Given the Company is a single CGU, the market capitalization of the Company is a relevant measure of FVLCS.

Capitalization of development costs

When capitalizing development costs, the Company must assess the technical and commercial feasibility of the projects and estimate the useful lives of resulting products. Determining whether future economic benefits will flow from the assets, and therefore, the estimates and assumptions associated with these calculations are instrumental in: (i) deciding whether project costs can be capitalized, and (ii) accurately calculating the useful life of the Company's projects.

Financial instruments

The valuation of the Company's financial instruments requires estimation of the fair value of each instrument at the reporting date. Details of the basis on which fair value is estimated are provided in note 9 (Loans payable, financial instruments and foreign exchange) in the Condensed Notes to the Consolidated Financial Statements.

Changes in Accounting Policies Including Initial Adoption

There were no changes to accounting policies during the year ended October 31, 2018 compared to the accounting policies applied in the audited Consolidated Financial Statements for the year ended October 31, 2017.

Future changes in accounting policies

A number of new standards, amendments to standards and interpretations are not effective for the Company and have not been applied in preparing the Consolidated Financial Statements. The following standards and interpretations have been issued by the International Accounting Standards Board ("**IASB**") and the International Financial Reporting Interpretations Committees with effective dates relating to the annual accounting periods starting on or after the effective dates as follows:

<u>IFRS 2, Share-based Payment ("IFRS 2")</u>

In June 2016, the IASB issued final amendments to IFRS 2, which clarifies how to account for certain types of share-based payment transactions. The amendments provide requirements on the accounting for: (i) the effect of vesting and non-vesting conditions on the measurement of cash-settled share-based payments; (ii) share-based payment transactions with a net settlement feature for withholding tax obligations; and (iii) a modification to the terms and conditions of a share-based payment that changes the classifications of the transaction from cash-settled to equity-settled. The amendments are effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The amendments become effective for the Company November 1, 2018. The Company is currently assessing the impact of adopting these amendments on its Consolidated Financial Statements.

<u>IFRS 9 Financial instruments: classification and measurement ("IFRS 9")</u>

IFRS 9 addresses the classification, measurement and recognition of financial assets and financial liabilities. IFRS 9 replaces the parts of IAS 39 that relate to the classification and measurement of financial instruments. IFRS 9 requires financial assets to be classified into two measurement categories:

- Financial assets measured at fair value; or
- Financial assets measured at amortized cost.

The determination is made at initial recognition. The classification depends on the entity's business model for managing its financial instruments and the contractual cash flow characteristics of the instrument. For financial liabilities, the standard retains most of the IAS 39 requirements.

Gains and losses on re-measurement of financial assets measured at fair value will be recognized in profit or loss, except that for an investment in an equity instrument, which is not held-for-trading, I FRS 9 provides, on initial recognition, an irrevocable election to present all fair value changes from the investment in other comprehensive income (loss) ("**OCI**"). The election is available on an individual share-by-share basis. Amounts presented in OCI will not be reclassified to profit or loss at a later date until the asset is derecognized or reclassified. IFRS 9 also includes a new general hedge accounting standard, which will align hedge accounting more closely with risk management.

IFRS 9 also includes:

- a third measurement category fair value through OCI for certain financial assets that are debt instruments: and
- a new expected credit loss ("**ECL**") model, which involves a three-stage approach whereby financial assets move through the three stages as their credit quality changes. The stage dictates how an entity measures impairment losses and applies the effective interest rate method. A simplified approach is permitted for financial assets that do not have a significant financing component (i.e. trade receivables). On initial recognition, entities will record a day-one loss equal to the 12-month ECL (or lifetime ECL for trade receivables), unless the assets are considered credit impaired.

The standard has a mandatory effective date for periods beginning on or after January 1, 2018. The Company is in the process of finalizing its assessment of the impact of I FRS 9 and will adopt IFRS 9 in the accounting period beginning on November 1, 2018.

<u>IFRS 15 Revenue from contracts with customers (“IFRS 15”)</u>

IFRS 15 is a new standard effective for fiscal years beginning on or after January 1, 2018 and may be early adopted. The standard contains a single model for revenue recognition that applies to contracts with customers. The Company intends to adopt I FRS 15 in its consolidated financial statements for the annual period beginning on November 1, 2018. The standard can be applied either (i) retrospectively to each prior reporting period presented with the option to elect certain practical expedients or (ii) retrospectively with the cumulative effect recognized at the date of initial adoption and providing certain additional disclosures.

The standard contains a single model for revenue recognition that applies to contracts with customers, which supersedes current revenue recognition guidance, including industry-specific guidance. The model features a contract-based five-step analysis of transactions to determine whether, how much and when revenue should be recognized. The new standard also provides guidance on whether revenue should be recognized over time or at a point in time as well as requirements for more informative disclosures. New estimation methodology and judgement-based thresholds have been introduced that may affect the amount and/or timing of revenue recognition.

The Company currently anticipates that the standard will affect the accounting for the following items:

- The assessment of the contract duration given termination provisions.
- The effect of modifications to certain contracts.
- Capitalization of costs to acquire contracts – Under the Company's current accounting policies, exactEarth generally expenses incremental commission costs as they are earned by employees. Under IFRS 15, the Company expects to capitalize and amortize commission costs that relate to contracts of more than one year on a systematic basis, consistent with the pattern of transfer of the goods or. services to which the commission costs relate.
- Increased disclosure of revenue, performance obligations and contract asset and liability balances.

The Company has yet to finalize the impact of the above-noted differences under I FRS 15. The Company expects to adopt IFRS 15 using the modified retrospective (cumulative effect) approach when it adopts IFRS 15, starting in the first quarter of its fiscal year ending October 31, 2019.

The Company has appointed a project team to manage the adoption and compliance with IFRS 15. The team is responsible for analyzing contracts, reviewing existing accounting policies and determining and quantifying differences between existing policies and IFRS 15. The team is also responsible for reviewing the Company's systems and data collection processes and will develop and implement new policies and processes to ensure that data is properly captured to meet the requirements of the new revenue standard. The team reports on its activities to the Audit Committee on a regular basis and has a plan for communicating the impact of IFRS 15 to the Company's stakeholders.

IFRS 16, Leases (“IFRS 16”)

IFRS 16 is a new standard effective for fiscal years beginning on or after January 1, 2019 and may be early adopted for companies that also apply I FRS 15. The standard replaces current guidance under IAS 17 and no longer distinguishes between a finance lease and an operating lease for lessees. Instead, for virtually all lease contracts the lessee recognizes a lease liability reflecting future lease payments and a "right-of-use" asset. Lessor accounting remains somewhat similar as under IAS 17. The Company intends to adopt IFRS 16 in its consolidated financial statements for the annual period beginning on November 1, 2019. The extent of the impact on the Consolidated Financial Statements of adoption of the standard has not yet been determined. However, the Company believes that on adoption of I FRS 16 there will be an increase to assets and liabilities on the Consolidated Statements of Financial Position to reflect the right-of-use asset and corresponding lease liability. The Company also expects an increase to finance costs and depreciation for the accretion of the lease liability and depreciation of right-of-use asset, respectively, as well as a decrease to operating costs related to rent expense.

International Financial Reporting Interpretations Committee 22, Foreign Currency Transactions and Advance Consideration

Foreign Currency Transactions and Advance Consideration clarifies the appropriate exchange rate to use on initial recognition of an asset, expense or income when advance consideration is paid or received in a foreign currency. The new interpretation is effective for annual periods beginning on or after January 1, 2018. The Company is currently assessing the impact of this new interpretation on its Consolidated Financial Statements.

International Financial Reporting Interpretations Committee 23, Uncertainty over Income Tax Treatments

Uncertainty over Income Tax Treatments provides guidance when there is uncertainty over income tax treatments including (but not limited to) whether uncertain tax treatments should be considered separately; assumptions made about the examination of tax treatments by tax authorities; the determination of taxable profit, tax bases, unused tax losses, unused tax credits, and tax rates; and the impact of changes in facts and circumstances. The new interpretation is effective for annual periods beginning on or after January 1, 2019. The Company is currently assessing the impact of the new interpretation in its Consolidated Financial Statements.

CONTROLS AND PROCEDURES

Disclosure controls and procedures

The Company’s disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by the Company in reports filed under Canadian securities laws is recorded, processed, summarized and reported within the time periods specified under those laws, and include controls and procedures that are designed to ensure that information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

Management’s report on internal control over financial reporting

Internal control over financial reporting is designed to provide reasonable, but not absolute, assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS. Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements on a timely basis. The Company used the Committee of Sponsoring Organizations of the Treadway Commission (COSO) 2013 framework to evaluate the effectiveness of internal control over financial reporting.

Changes in internal controls over financial reporting

The Company made no changes to internal controls over financial reporting during the quarter ended October 31, 2018, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

OUTSTANDING SHARE DATA

The number of issued and outstanding Common Shares was 21,626,288 as of the date of this MD&A.