EXACTEARTH LTD. (the “Company”)
MANAGEMENT’S DISCUSSION AND ANALYSIS

*The following management discussion and analysis (“**MD&A**”) is prepared as of January 23, 2018, and provides information that management believes is relevant to an assessment and understanding of our operations and financial condition for the financial year ended October 31, 2017. This MD&A should be read in conjunction with our audited 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 are stated in thousands of Canadian dollars (“**CAD**”) unless otherwise indicated. Unless otherwise noted, the information contained herein is dated as of October 31, 2017.*

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 our 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”, “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. We have based these forward-looking statements on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, among other things, statements relating to: expectations regarding our revenue, expenses and operations; anticipated impact of changes to accounting policies; anticipated industry trends; anticipated new Order Bookings; 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; our intention to respond to certain procurement proposal requests and the outcome thereof.

Forward-looking statements are based on certain assumptions and analysis made by us in light of our experience and perception of historical trends, current conditions and expected future developments and other factors we believe are appropriate, and are subject to risks and uncertainties. Although we believe that the assumptions underlying these statements are reasonable, they may prove to be incorrect. Whether actual results, performance or achievements will conform to our 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, we provide information about Order Bookings; earnings before interest, taxes, depreciation and amortization (“**EBITDA**”); Adjusted EBITDA; EBITDA Margin; and Subscription Revenue. Order Bookings, EBITDA, Adjusted EBITDA, EBITDA Margin, and Subscription Revenue are not defined by IFRS and our 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 our results of operations from management’s perspective. Accordingly, they should not be considered in isolation or as a substitute for analysis of our financial information reported under IFRS.

We define “Order Bookings” as the dollar sum of fully executed contracts for the supply of our products and/or services to our 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.

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

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

Overview

We are a leading provider of global maritime vessel data for ship tracking and maritime situational awareness solutions. Since our establishment in 2009, we have pioneered Satellite Automatic Identification System ("**S-AIS**") maritime surveillance and have delivered to our clients a view of maritime behaviours across all regions of the world's oceans that is unrestricted by terrestrial limitations. We have deployed an operational data processing supply chain with our 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 AIS equipped maritime vessels throughout the world and allows us 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 our Subsidiary with inter-company transactions and balances eliminated. We have two locations, one in Cambridge, Ontario, Canada and the other in Harwell, United Kingdom.

Key Components and Functions of our Product Offering

*Automatic Identification System ("**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.) In a typical seven-day period, we track approximately 165,000 AIS-equipped vessels. This capability is further enhanced by our patented capability to track small vessels in the open ocean utilizing a new class of specially modified Class B AIS transponders. We anticipate that with this added capability, our 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 100 kilometres). We have 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, and importantly, proximity to a coastline.

Satellites

We receive AIS data from our 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, we launched and commissioned four more advanced AIS satellites, including EV-1, EV-2, EV-5 and EV-6. These satellites incorporated advanced AIS payloads designed to further improve AIS message detection from space. Our satellite constellation grew once again in December 2014 when we announced the successful integration of three advanced in-orbit AIS satellites into our exactView constellation through a contract under which we purchased one satellite, EV-11, and licensed data from two more. These are month to month lease agreements which can be terminated by the company at any point and are subject to minimum service level requirements. Our new equatorial satellite, EV-9, was launched on September 28, 2015 and commissioning has been completed. The data from these additional AIS satellites significantly increased the capacity of our global vessel monitoring service and further enhanced our world-leading AIS message detection performance from space.

We expect to receive data from two additional satellites EV-7 and EV-8. EV-7 was launched on June 22, 2016 and commissioning is underway. EV-8 has been built and the launch is expected to take place on February 10, 2018. EV-8 will be launched on the PAZ satellite operated by Hisdesat, one of our significant shareholders. Upon successful launch of EV-8, we are obliged to pay €300 Euros to Hisdesat as a one- time fee.

As part of our restructuring effort that commenced in October 2016, we cancelled our commitment on our two leased satellites in the first quarter of 2017.

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

On April 28, 2017, the first four (of 58) of our Second-Generation Constellation of satellites using exactView™ RT Powered by Harris ("exactView RT") were put into service, thereby beginning the world's first global real-time S-AIS service. Fourteen additional exactView RT satellites are now commissioned, bringing the total number of satellites we have in service as of January 23, 2018 to 23 (5 First-Generation plus 18 Second-Generation)

Our collaboration with Harris Corporation is further described in the "Strategic Alliances" section below.

Ground infrastructure and data processing

We have deployed a network of international ground stations designed for highly reliable satellite data downlinking, storage and transmission to our 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 our two DPCs, both of which are located in Ontario, Canada.

Products and services

Through a variety of products and services, we provide what we believe to be the most advanced location-based information on maritime traffic commercially available today. We provide the flexibility needed to customize our products and services to suit the needs of our 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. We provide a SaaS solution that allows users to access the ship information derived from our AIS data sources within an easy-to-use mapping environment. Our value-add Information Services product offerings encompass our IaaS solutions.

Data Products include raw data and customized reports derived from our 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 exactEarth. Revenue from these projects may span several months with no certainty that there will be similar projects in the future from which we will be able to earn revenue.

<u>Customers</u>

Our 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). Our 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 we announced the Harris Agreement which allows us to apply our expertise and technology in AIS signal detections from space on-board Iridium NEXT. The payloads utilize Harris' powerful AppStar applications platform and employs an in-orbit version of our 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, once fully deployed, will provide 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 will provide persistent real-time global coverage with detection performance rivaling ground-based 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 will share their respective AIS product revenue with each other. One of the stipulations of the revenue sharing agreement is that we 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). As of October 31, 2017 we have paid $47 and recorded $151 as being payable to Harris in our financial statements. Please refer to the Company's AIF for details pertaining to the Harris Agreement.

The first four SpaceX launches took place during the 2017 calendar year. Each launch carried ten Iridium satellites, of which thirty-two contained exactEarth hosted AIS payloads. To date, eighteen payloads have been brought into service. The remaining fourteen are expected to come into service in 2018 after they travel to their final orbits. Four more launches are scheduled to be completed during calendar 2018. Ultimately, we plan to have 58 second-generation satellites in orbit, not counting in-orbit spares. Our revenue stream from the Harris Agreement began in the fourth quarter of 2017, with a gradual ramp-up until 2020, when we expect to achieve the full potential revenue stream.

On November 23, 2015, we announced an AUD$2,000 (CAD$1,894) minority ownership investment in technology company, Myriota Pty Ltd. ("**Myriota**") of Adelaide, Australia. As part of the Myriota investment, exactEarth has obtained an exclusive license to utilise their technology 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. Our 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 during Fiscal 2018 and therefore royalties will begin at that point. For additional information, refer to note 4 (Investment) and note 7 (Intangible assets) in the Notes to the Consolidated Financial Statements.

On April 14, 2016, we 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 Agreement, the two companies are 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 Agreement, exactEarth gains an exclusive license to Larus' Big Data analytics platform (Total::Insight™) for the Maritime market for consideration of $700, payable in twenty-four equal monthly payments commencing April 15, 2016. In return, Larus gains access to exactEarth's map visualisation IP for integration into Total::Insight-based solutions for non-Maritime markets and to exactEarth's extensive data archive to perform advanced pattern-of-life analysis. exactEarth will enhance existing, and develop 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 will include shipping movement and behavioural analysis and the companies will work together to advance the capabilities in the exciting area of predictive analytics. The Agreement includes an option to purchase all of the shares of Larus during the twenty-four-month term of the agreement and during the six months following completion of the alliance. The option to purchase is currently valued at nil. At the end of the twenty-four-month term, we will begin paying 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 December 2015, the Government of Canada ("GoC") initiated a request-for-proposal ("RFP") competitive process to procure S-AIS services. The contract was awarded exclusively to exactEarth on May 5, 2016 at a service level that was well below that which it previously subscribed to. The awarded contract value represented approximately $100 per year, which is approximately $7,100 per year lower than the annual revenue level generated by exactEarth for S-AIS data services that was previously provided to the GoC for their domestic use. The GoC initiated a second RFP to procure S-AIS services in October 2016. On February 24, 2017, we received notice from the GoC that our proposal had not been selected for the new S-AIS contract. While the loss of revenue from the current contract with the GoC is not significant, the GoC remains a customer of ours and we will continue to explore ways to work with them, such as the Polar Epsilon 2 project, which we announced in November 2016.

On May 5, 2016, Innovation, Science and Economic Development Canada announced a $54,000 Technology Demonstration Program contribution to MDA Systems Ltd. ("MDA") 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, exactEarth entered into a Technology Demonstration Program Collaboration Agreement ("TDP Agreement") with MDA 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 funding recognized as an offset to cost of revenue in the year ended October 31, 2017 was $381. We had recognized $667 as at October 31, 2016, therefore, the total recovery to date is $1,048.

In August 2016, we negotiated an agreement with Software Radio Technology ("SRT") to be non-exclusive enabling us to partner with other Class B transponder vendors. SRT continues to act as a manufacturer and distributor for the physical identifiers (transponders) while we provide the data collection and distribution services.

In August 2016, we won our first small-vessel contract with the Ghana Fisheries Commission, an agency of the Ministry of Fisheries and Aquaculture Development (MOFAD) of the Government of Ghana, for the supply, installation, training and commissioning of Class B AIS on 450 fishing vessels. The contract is for a twelve-month period. As of October 31, 2017, we have completed installation on 250 boats while the other 200 have been delivered as spares. The revenue recognized on this project as of October 31, 2017 is $1,250.

We also announced a small vessel tracking contract with the UK Space Agency in the first quarter of fiscal 2017. This contract has a similar arrangement to the Ghana Fisheries Commission contract and involves 1,550 fishing vessels - 1,500 in South Africa and 50 in Madagascar. During fiscal 2017, 200 spare units were delivered and 11 units were deployed. Deployment remains in the very early stages. The total revenue recognized on this project as of October 31, 2017 is $474.

On June 1, 2017 we entered into a collaboration agreement with German based JAKOTA Cruise Systems GmbH (Fleetmon) to enable Fleetmon the ability to use and sell exactEarth's satellite AIS data (S-AIS) products and to enable exactEarth the ability to use and sell Fleetmon's terrestrial AIS (T-AIS) data products. The addition of the Fleetmon real-time T-AIS capability further enhances exactEarth's revolutionary real-time S-AIS service, and provides the most extensive and comprehensive AIS information available. Our agreement with Fleetmon operates on a revenue share basis. In general, both parties will co-ordinate opportunities in the market to minimize direct competition with each other. Our agreement with our previous Terrestrial AIS Data and Services provider, Genscape International Inc., expired in the third quarter.

Staffing

We rely on the knowledge and talent of our employees and we make use of their expertise in satellite operations, Big Data architecture, web services, software and product development, and consulting services. With the deployment

of our First-Generation Constellation nearing completion, we are now able to reduce our satellite infrastructure operating costs as we continue to transition to an information and intelligence company.
In November 2016, we announced a restructuring aimed at re-organizing and streamlining our organization in order to enhance our data delivery, strengthen our sales capabilities, and lower our cost base. The restructuring resulted in the termination of 14 employees effective October 13, 2016.

The number of full-time employees at October 31, 2017 was 46 (October 31, 2016 – 49).

Overall Performance

Revenue was $12,833 for the year ended October 31, 2017, compared to $18,918 in 2016. Governments are our primary target market since our system capabilities are closely matched to their service requirements. Government customers contributed $6,789 to the revenue in the year ended October 31, 2017, compared to $13,635 in 2016. The change in year-over-year revenue was primarily due to lower revenue generated from the GoC contract during the first quarter of 2017 and the completion of revenue recognition related to the EV-9 asset transfer arrangement described later in this document in the section titled "Revenue". Commercial revenue for the year ended October 31, 2017 was $6,044, up 14% compared to $5,283 in 2016.

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 $25,996, up 16% from the $22,551 backlog reported at October 31, 2016. Revenue of $7,904 from the current backlog is forecasted to be earned in 2018 while $6,854 is expected to be earned in 2019. The balance of $11,238 will be earned between 2020 and 2024.

Our foreign currency denominated backlog gets affected by fluctuation in FX rates. Our closing backlog for any given quarter gets revalued as the Canadian dollar strengthens or weakens in relation to the USD, GBP or Euro, as applicable. The FX rates at October 31, 2017 were: USD $1.2893, GBP $1.7095, EUR $1.5014, while the rates at October 31, 2016 were: USD $1.3411, GBP $1.6412, EUR $1.4721. The strengthening of the Canadian dollar in the year resulted in a $998 downward adjustment to our closing backlog from 2016.

The following chart summarises orders and backlog:

	Three months ended October 31,		Years ended October 31,	
	2017	2016	2017	2016
Opening Backlog	$ 25,858	$ 20,590	$ 22,551	$ 14,301
New Orders	2,984	6,070	17,276	26,974
FX Adjustment on opening backlog	6	(801)	(998)	194
Revenue	(2,852)	(3,308)	(12,833)	(18,918)
Closing Backlog	$ 25,996	$ 22,551	$ 25,996	$ 22,551

Volatility in exchange rates between Canadian and foreign currencies such as the US dollar, the Euro and the Pound sterling impact the business as a portion of our revenues are billed in non-Canadian currencies (predominately in US dollars) and recognized in our Consolidated Statements of Financial Position in the form of cash, receivables, and payables. The Bank of Canada average noon GBP/CAD exchange rate during the year ended October 31, 2017 was $1.6666, compared to an average of $1.8565 in 2016. The Bank of Canada average noon Euro/CAD exchange rate during the year ended October 31, 2017 was $1.4519, compared to an average of $1.4711 in 2016. The Bank of Canada average noon USD/CAD exchange rate during the year ended October 31, 2017 was $1.2503, compared to an average of $1.3263 in 2016.

Adjusted EBITDA for the year ended October 31, 2017 was ($4,387) compared to $523 in 2016. The decrease in Adjusted EBITDA for the year ended October 31, 2017 was driven primarily by lower revenue from the GoC contract renewal, partially offset by decreased cost of revenue and operating expenses. Please refer to the Adjusted EBITDA reconciliation included later in this MD&A.

For an analysis of the risks we face, please refer to the "Risk Factors" section in our AIF.

Selected Annual Information

(in thousands of dollars except per share amounts)	2017	2016	2015
Revenue	$ 12,833	$ 18,918	$ 26,600
Gross margin	4,215	9,146	16,486
Gross margin	32.8%	48.3%	62.0%
Impairment loss	26,886	27,987	-
Restructuring expense (recovery)	(99)	1,744	-
Adjusted EBITDA[1]	(4,387)	523	9,033
Adjusted EBITDA Margin[1]	(23.2%)	2.8%	34.0%
Earnings (loss) from operations	(35,158)	(32,903)	571
Net loss	(33,834)	(35,963)	(1,055)
Basic and diluted loss per share	(1.57)	(1.90)	(0.09)
Total assets	30,960	67,822	82,044
Deferred revenue	2,064	1,968	1,037
Other current liabilities	4,843	7,365	11,622
Loans and borrowings	662	1,188	46,237
Other non-current liabilities	388	758	82

(1) As defined in non-IFRS measures.

Results of Operations

Revenue

We sell 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, 2017:

(in thousands of dollars)	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

Revenues for the year ended October 31, 2016:

(in thousands of dollars)	Subscription Services	Data Products	Other Products & Services	Total Revenue
Government departments	$ 10,386	$ 1,855	$ 1,394	$ 13,635
Commercial and other	4,693	590	-	5,283
Total revenue	$ 15,079	$ 2,445	$ 1,394	$ 18,918

Our total revenue for the year ended October 31, 2017 was $12,833 compared to $18,918 in 2016. We anticipate that the drivers for the next phase of revenue growth will be the expansion of our 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.

Our Subscription Services revenue is generally earned on a monthly recurring basis under annual or multi-year contracts and therefore provides a solid foundation for our revenue growth. Subscription Services revenue for the year ended October 31, 2017, was $10,617 compared to $15,079 in 2016. The decrease in Subscription Services revenue was primarily due to lower revenue generated from the GoC contract during the first quarter of 2017 and the completion of revenue recognition related to the EV-9 asset transfer arrangement. The EV-9 asset transfer was an arrangement under which we 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. For additional information, refer to note 12 (Commitments and Contingencies) in the Notes to the Consolidated Financial Statements. Subscription-based revenue represented 83% of our total revenue in the year ended October 31, 2017 compared to 80% in 2016.

Revenue from Data Products was $991 in the year ended October 31, 2017, compared to $2,445 earned in 2016. The Data Products revenue for 2016 was generated primarily from the provision of historical data of $1,687 as part of the EV-9 asset transfer.

Revenue from Other Products & Services was $1,225 in the year ended October 31, 2017 compared to $1,394 in 2016. This revenue type is generated from on-demand customer requests and is therefore variable in its timing.

Revenue by quarter

(in thousands of dollars)	Subscription Services	Data Products	Other Products & Services	Total Revenue	Basic & Diluted (Loss) per Share
Q1 2016	$ 5,382	$ 304	$ 694	$ 6,380	$ (0.09)
Q2 2016	$ 4,052	$ 959	$ 211	$ 5,222	$ (1.89)
Q3 2016	$ 2,822	$ 1,016	$ 170	$ 4,008	$ (1.77)
Q4 2016	$ 2,823	$ 166	$ 319	$ 3,308	$ (1.90)
Q1 2017	$ 3,038	$ 208	$ 90	$ 3,336	$ (0.09)
Q2 2017	$ 2,326	$ 341	$ 1,044	$ 3,711	$ (0.02)
Q3 2017	$ 2,572	$ 309	$ 53	$ 2,934	$ (0.12)
Q4 2017	$ 2,681	$ 133	$ 38	$ 2,852	$ (1.34)

The quarter over quarter variance in revenue is caused by the mix in the type of revenue earned in that 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 revenues and the timing of revenue recognition varies depending on the progress of the projects. For some of our projects this is based on percentage completion based on costs to date as a percentage of estimated total cost, while in the case of the small vessel contracts, it is based on our progress in the installation of the Class B transponders. Therefore, revenues 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 revenues combined with operating losses resulting in a reduction in forecasted future cash flows. Factors affecting our revenue and results are described in greater detail under the heading “Risks Relating to Our Business and Industry” in our Annual Information Form.

Growth in Subscription Services revenue is expected to be muted until our Second-Generation Constellation and exactView RT are fully capable of delivering S-AIS service in real-time.

Gross margin

	Three months ended		Year ended	
(in thousands of dollars)	October 31, 2017	October 31, 2016	October 31, 2017	October 31, 2016
Gross profit	$ 854	$ 701	$ 4,215	$ 9,146
Gross margin	29.9%	21.2%	32.8%	48.3%

Gross margin for the year ended October 31, 2017 was 32.8% compared to 48.3% in 2016. Our gross margin decreased from last year due to lower revenue in all three broad categories: Subscription Services, Data Products, and Other Products and Services. Our cost of revenue benefited, in part, by the reimbursement of costs related to the TDP Agreement. 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 our customer base expands, we expect that our cost base will grow more slowly than the growth of our revenues which will result in increased gross margins. We have substantively completed the build-out of our ground station expansion.

Selling, general and administrative expenses

Selling, general and administrative (SG&A) expenses in the year ended October 31, 2017 were $7,004 compared to $7,463 in 2016. SG&A decreased year-over-year due primarily to decreased payroll expenses resulting from the restructuring undertaken in October 2016. SG&A may fluctuate from quarter to quarter depending on the volume of new subscriptions versus renewals and the timing of renewals, since commission expenses are included in the SG&A line.

Product development & research and development (“R&D”)

Product Development expenses in the year ended October 31, 2017 were $1,450 compared to $1,940 in 2016. We continued to focus on developing more web-based functionality as well as new analytics-based product offerings during fiscal 2017.

We incurred $242 on Research and Development expenses in the year ended October 31, 2017 compared to $10 in 2016. The R&D expense was incurred on Project VESTA, which has an objective to demonstrate a satellite-based, two-way maritime communications system representing initial implementation of VHF Data Exchange System (VDES) technology. Our 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. Once the VESTA satellite is launched, (forecasted for the first quarter of 2018), we will use the VESTA network to perform various VDES related demonstrations. VDES networks using low-earth orbit (LEO) satellites have the potential to become the next level of maritime services from exactEarth, complementary to our S-AIS business. Project VESTA is sponsored by the UK Space Agency and is a collaboration of various partners in the UK including ourselves through our exactEarth Europe subsidiary.

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 CGU. The recoverable amount is the greater of value in use (“VIU”) and fair value less costs of disposal.

During fiscal 2017, 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 prepared a detailed forecast for use in a VIU model but there were significant uncertainties inherent in the input assumptions and therefore management decided it was prudent to deem that the recoverable amount used in the impairment test be based on fair value less cost to sell using a market approach. The fair value less cost to sell of $22,987 was determined using a market capitalization based on the 5-day volume-weighted average price up to and including October 31, 2017. The carrying value, represented by the book value of the Company’s shareholder’s equity was $49,873. The carrying value was higher than the book value by $26,886 (2016 – $27,987). As a result, at October 31, 2017, impairment losses recognized are $18,804 (2016 – $17,728) related to property, plant and equipment and $8,082 (2016 – $10,259) 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)

	Three months ended October 31			Year ended October 31		
	2017	2016	Change	2017	2016	Change
Other Income	$ -	$ (210)	$ 210	$ (1,455)	$ (55)	$ (1,400)
Other expense	-	-	-	197	-	197
Restructuring expense (recovery)	(12)	1,744	(1,756)	(99)	1,744	(1,843)
Foreign exchange loss (gain)	(275)	101	(376)	(43)	1,026	(1,069)
Interest expense (income)	9	(8)	17	52	304	(252)
Total other expense (income)	$ (278)	$ 1,627	$ (1,905)	$ (1,348)	$ 3,019	$ (4,367)

Other income

On February 3, 2017 the company lost contact with one of its Satellites, EV5. When subsequent recovery efforts were not successful, the company filed an insurance claim for the full insured value of the satellite amounting to $3,500. The settlement was received in April 2017.

We accounted for this transaction by offsetting the remaining book value of the asset against the insurance settlement and including the net amount as other income. The details are as follows:

Proceeds from insurance claim for EV 5	$	3,500
Total cost of EV 5		4,633
Depreciation and impairment charged to EV 5		(2,588)
Other income as reported	$	1,455

This isolated satellite issue has not had a material adverse effect on service levels. Additionally, the first eighteen of our second-generation satellites are in service as of the date of this report, which begins the roll-out of the 58-satellite exactView RT constellation being produced under the Company's agreement with the Harris Corporation.

Other expense

The other expense of $197 in the year ended October 31, 2017 includes moving expenses, maternity leave top-up expense and severance expense for an employee that was terminated in June 2017.

Restructuring expense (recovery)

As set-out above in the "Staffing" section, we underwent a restructuring in October 2016. The $99 expense recovery relates to the adjusting of the restructuring reserve revalued in October 2017 for the accrual for Stock Options and RSU/PSU payouts owed to the 14 employees that were terminated. The reserve was reduced as there were two employees identified that no longer qualified for continuance payments. There was also a decrease in the share price from $1.48 at October 31, 2016 to $1.06 at October 31, 2017.

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 our 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, 2017 was a gain of $43 compared to a loss of $1,026 in 2016.

Interest expense (income)

Our net interest expense for the year ended October 31, 2017 was $52 compared to $304 in 2016. Interest expense is decreasing as outstanding loan balances are repaid.

Adjusted EBITDA

	Three months ended October 31		Year ended October 31	
	2017	2016	2017	2016
Net loss	$ (28,966)	$ (4,135)	$ (33,834)	$ (35,963)
Interest expense (income)	9	(8)	52	304
Income tax expense	8	41	24	41
Depreciation and amortization	916	926	3,791	4,649
EBITDA	$ (28,033)	$ (3,176)	$ (29,967)	$ (30,969)
Unrealized foreign exchange loss	(432)	68	(376)	906
Share-based compensation	173	401	624	855
Impairment losses	26,886	-	26,886	27,987
Restructuring expense (recovery)	(12)	1,744	(99)	1,744
Other income	-	-	(1,455)	-
Adjusted EBITDA	$ (1,418)	$ (963)	$ (4,387)	$ 523

Adjusted EBITDA for the year ended October 31, 2017, was a loss of $4,387 compared to a gain of $523 at October 31, 2016. The decrease was driven by decreased interest expense, depreciation, unrealized foreign exchange loss, share-based compensation, impairment losses and restructuring costs and increased other income, partially offset by a lower net loss. Management believes that Adjusted EBITDA provides a relevant measure of the results of our 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 our ongoing operating results.

Net loss

Net loss was $33,834 in 2017, compared to $35,963 in 2016. The net loss for 2017 excluding the non-cash impairment of $26,886, other income of $1,455 and the restructuring reversal of $99 was $8,502. The net loss for 2016 excluding the non-cash impairment of $27,987 and the restructuring charge of $1,744 was $6,232. This adjusted net loss of $8,502 is greater than the 2016 net loss of $6,232 primarily due to lower revenue, which was partially offset by decreases in cost of revenue, selling, general and administrative expense, product development expenses and interest expense.

Financial position

The following chart outlines the changes in the Consolidated Statements of Financial Position between October 31, 2017 and October 31, 2016:

(in thousands of dollars)	Increase/ (Decrease)	Explanation
Cash	$ (5,563)	The decrease in cash is due to ongoing operational expenses and lower billings/collections.
Accounts receivable	$ 1,393	The accounts receivable balance fluctuates with changes in billings and collections.
Inventory	$ (425)	Prior year inventory related to purchased small vessel tracking Class B transponders for customer contracts. These transponders have been delivered to the customer.

(in thousands of dollars)	Increase/ (Decrease)	Explanation
Unbilled revenue	$ (369)	The unbilled revenue reflects the amount of revenue recognized in advance of billings.
Prepaid expenses and other assets	$ 399	The increase relates to other assets consisting of transponders paid for by and delivered to customers, but not yet installed.
Property, plant and equipment	$ (18,847)	The decrease in Property, plant and equipment is due to impairment of $18,804, depreciation of $2,958, write off EV-05 net book value of $2,045, cancellation of the southern hemisphere grounds station $695, and billings to LuxSpace for EV-10 of $396, offset by the increase from the transfer of EV-09 from intangible assets data rights to satellites $4,654 and other additions of $1,396. Other deductions and translation adjustments account for the difference.
Intangible assets	$ (13,450)	The decrease in Intangible assets is due to impairment of $8,082, the transfer of EV-09 from intangible assets to property, plant and equipment of $4,654 and depreciation of $833, offset by additions of $119.
Accounts payable and accrued liabilities (current and non-current)	$ (1,664)	The decrease includes $988 resulting from the renegotiation of a ground station contract and $447 in payments for Small Vessel transponders hardware and installation.
Deferred revenue	$ 96	Deferred revenue reflects billings that occur in advance of revenue recognition.
Restructuring provision (current and non-current)	$ (1,208)	On going payments due to salary continuance for 14 employees affected by the restructuring in October 2016.
Loans payable and Government loan payable (current and non-current)	$ (675)	The decrease is due to principal payments made on the Government and Larus liabilities during the year.
Long-term incentive plans (current and non-current)	$ 129	The increase is due to the continuing accrual of RSU payable.
Contributed surplus	$ 371	The increase is related to expense recognized on stock options during the year. These stock options will be equity settled.
Accumulated other comprehensive loss	$ (89)	The decrease is due to the foreign exchange translation of our UK subsidiary.
Deficit	$ (33,834)	Net loss of $33,834.

Liquidity and capital resources

The key liquidity and capital resource items are as follows:

(in thousands of dollars)	October 31, 2017	October 31, 2016	% Change
Cash	$ 8,117	$ 13,680	(41%)
Trade accounts receivable	$ 3,171	$ 1,778	78%
Inventory	$ -	$ 425	(100%)
Prepaid and other current assets	$ 1,266	$ 867	46%
Accounts payable and accrued liabilities	$ 3,722	$ 5,431	(32%)
Loans payable	$ 1,229	$ 1,904	(35%)

Working Capital

Working capital decreased $2,139 during 2017 to $6,072. The decrease since 2016 is driven by:

(in thousands of dollars)	Increase / (Decrease) to working capital
Decrease in cash	$ (5,563)
Increase in trade accounts receivable	1,393
Decrease in inventory	(425)
Decrease in unbilled revenue	(369)
Increase in prepaid expenses and other assets	399
Decrease in accounts payable and accrued liabilities	1,709
Increase in deferred revenue	(96)
Decrease in current portion of restructuring provision	766
All other	47
Total	$ 2,139

Current assets are available at varying times within twelve months following the balance sheet date. Cash are readily available to settle obligations related to current and future expenditures. Management believes these provisions will not adversely affect the Company's ability to meet its commitments when due.

Significant cash flows:

(in thousands of dollars)	2017	2016
Cash used in operating activities	$ (7,707)	$ (2,857)
Cash from (used in) investing activities	2,995	(8,559)
Cash (used in) from financing activities	(801)	22,744
Effect of exchange rate changes on cash	(50)	(13)
Net increase in cash	$ (5,563)	$ 11,315
Cash, beginning of the period	13,680	2,365
Cash, end of the period	$ 8,117	$ 13,680

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 however, going forward, the Company plans to use cash flows from operations. For potential funding of large transactions such as acquisitions, the Company may look to the private and public capital markets and government incentive programs as a source of financing. Management believes capital resources at October 31, 2017 are sufficient to fund current operations, forecasted capital expenditures, and contractual obligations in 2018.

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. 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, 2017 was $7,707, compared to cash used in operations of $2,857 in 2016. The increase in cash used in operations for 2017 was primarily due to changes in working capital and payments related to the restructuring provision.

Investing activities

Cash from investing activities for the year ended October 31, 2017 was $2,995 compared to $8,559 used in 2016. The cash generated in the year includes the insurance settlement of $3,500 for the EV-5 satellite in April 2017 offset by acquisitions of long-lived assets.

Financing activities

Cash flows used in financing activities for the year ended October 31, 2017 were $801 compared with cash generated of $22,744 in 2016. Financing activities in 2017 were primarily related to repayment of long-term liabilities. The increased financing activities in the year ending October 31, 2016 was related to issuing common shares worth $20,440 and Shareholder loan advances, offset by repayment long-term liabilities.

Contractual obligations

The following table outlines the contractual cash obligations (excluding accounts payable and accrued liabilities) as at October 31, 2017:

(in thousands of dollars)	Total	Less than one year	1-3 years	4-5 years	>-5 years
Lease obligation	$ 422	$ 95	$ 327	$ -	$ -
Government loan	1,190	492	698	-	-
Larus Technologies debt	145	145	-	-	-
Restructuring reserve	388	388	-	-	-
Capital commitments	3,298	36	452	1,873	937
Harris commitment	6,450	516	1,032	1,032	3,870
Fleetmon revenue share guarantee for Q1 2018	53	53	-	-	-
Total contractual obligations	$ 11,946	$ 1,725	$ 2,509	$ 2,905	$ 4,807

As at October 31, 2017, we had various contractual cash obligations, including Government debt and capital commitments.

Fourth Quarter Review

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

Revenues for the three months ended October 31, 2016:

(in thousands of dollars)	Subscription Services	Data Products	Other Products & Services	Total Revenue
Government departments	$ 1,544	$ 31	$ 319	$ 1,894
Commercial and other	1,279	135	-	1,414
Total revenue	$ 2,823	$ 166	$ 319	$ 3,308

Revenue for the three months ended October 31, 2017 was $2,852 with a cost of revenue of $1,998 resulting in a gross margin of $854. The corresponding results for the three months ended October 31, 2016 was revenue of $3,308, cost of revenue of $2,607 and a gross margin of $701.

Though the remaining operating expenses for Q4 2017 were in line with the spending in Q4 2016, the Impairment losses of $26,886 recognized in 2017 were the primary driver of the increase in operating loss from $2,467 in Q4 2016 to $29,236 in Q4 2017.

As mentioned in the “staffing” section above, we announced a restructuring on November 2, 2016. This resulted in us recording a restructuring expense of $1,744 in the “Other expenses” section of the Consolidated Financial Statements in Q4 2016.

The Net loss for Q4 2017 was $28,966 while Q4 2016 reported a Net loss of $4,135.

Credit facilities

A Canadian Schedule I Bank has provided exactEarth Ltd. with a demand operating credit facility of $2,000. Canadian dollar loans will be available by way of overdrafts. Interest will be calculated at the bank’s prime rate per annum. US dollar loans will also be available by way of overdraft. US Interest will be calculated at US Base Rate per annum. This credit facility may be terminated by the bank at any time. There are no financial covenants established as yet, with the necessity for specific covenants assessed in future as financing needs of exactEarth Ltd. continue to evolve. As of October 31, 2017, $27 was drawn on the bank credit facility in the form of Letters of Guarantee required for certain customer contracts. There has been no further activity on this line of credit as of September 12, 2017.

Off-balance sheet arrangements

As at October 31, 2017, we do 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

We did not have any proposed transactions as at October 31, 2017.

Summary of Significant Accounting Policies

Critical accounting estimates

The preparation of our 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.

We believe the following critical accounting policies affect the more significant estimates and assumptions used in the preparation of our 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 the 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

We occasionally provide 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 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 won't 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

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

Useful life of intangible and long-term assets

We have established policies for determining the useful life of our intangible and long-term assets, and amortize the costs of these assets over those useful lives. The useful life for each category of asset is determined based on the expectation of our ability to continue to generate revenues, and thus, our 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 our 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, we 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 our projects.

Financial instruments

The valuation of our 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, 2017 compared to the accounting policies applied in the audited consolidated financial statements for the year ended October 31, 2016.

Future changes in accounting policies

A number of new standards, and 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.

IFRS 9 Financial instruments: classification and measurement ("IFRS 9")

In July 2014, the IASB issued the final version of IFRS 9, Financial Instruments, which reflects all phases of the financial instruments project and replaces IAS 39, Financial Instruments: Recognition and Measurement and all previous versions of IFRS 9. The standard introduces new requirements for classification and measurement, impairment, and hedge accounting. IFRS 9 is effective for annual periods beginning on or after January 1, 2018, with early application permitted. Retrospective application is required, but comparative information is not compulsory. The Company is evaluating the impact of adopting this new standard on its consolidated financial statements.

IFRS 15 Revenue from contracts with customers ("IFRS 15")

In May 2014, the IASB issued IFRS 15, which establishes a single comprehensive model of accounting for revenue arising from contracts with customers that an entity will apply to determine the measurement of revenue and timing of when it is recognized. IFRS 15 supersedes current revenue recognition guidance, which is found currently across several standards and interpretations including IAS 11, *Construction Contracts* and IAS 18, *Revenue*. The core principle of IFRS 15 is that an entity recognizes revenue to depict the transfer of promised goods and services to customers in an amount that reflects the amount an entity expects to be entitled in exchange for those goods and services. The new standard will also result in enhanced disclosures about revenue that would result in an entity providing comprehensive information about the nature, amount, timing and uncertainty of revenue and cash flows arising from the entity's contracts with customers. IFRS 15 is effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The standard becomes effective for the Company on November 1, 2018. The Company is currently assessing the impact of adopting this new standard on its consolidated financial statements.

IFRS 16, Leases ("IFRS 16")

On January 13, 2016, the IASB issued IFRS 16 which will replace International Accounting Standard ("IAS") 17, *Leases*. The new standard will be effective for fiscal years beginning on or after January 1, 2019. Earlier application is permitted for entities that apply IFRS 15 at or before the date of initial adoption of IFRS 16. The standard becomes effective for the Company on November 1, 2019. The new standard introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases with a term of more than twelve months, unless the underlying asset is of low value. A lessee is required to recognize a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. This standard substantially carries forward the lessor accounting requirements of IAS 17, while requiring enhanced disclosures to be provided by lessors. Other areas of the lease accounting model have been impacted, including the definition of a lease. The Company is currently assessing the impact of adopting this new standard on its consolidated financial statements.

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 International Financial Reporting Standards. 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, 2017, 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 21,614,120 as of the date of this MD&A.