EDGEWATER WIRELESS SYSTEMS INC.

MANAGEMENT DISCUSSION AND ANALYSIS
FOR THE QUARTER ENDING JULY 31, 2019

(IN CANADIAN DOLLARS UNLESS OTHERWISE STATED)

This Management Discussion and Analysis ("MD&A") of Edgewater Wireless Systems Inc. should be read in conjunction with the Company's audited consolidated financial statements and related notes for the years ended April 30, 2019 and April 30, 2018. These audited consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"). All dollar amounts included therein and in this MD&A are expressed in Canadian Dollars unless otherwise noted. The information contained within this MD&A is current to September 27th, 2019. Additional information of the Company is available on SEDAR at www.sedar.com.

Forward-Looking Information

Certain information contained herein including (without limitation) financial and business prospects and financial outlooks, may constitute forward-looking information which reflects management's current expectations regarding future events, conditions, plans and intentions, growth, results of operations, financial position, performance and business prospects and opportunities, future technological developments, future revenue generation, creation of new customer accounts, increased efficiency of our operations, our ability to take advantage of current market conditions, population trends, and predictions of future actions, plans or strategies. Words such as "may", "will", "should", "could", "anticipate", "believe", "expect," "intend", "plan", "potential", "continue" and similar expressions have been used to identify such forward-looking information. In connection with such forward-looking information, certain assumptions have been made about our business, the economy and other matters. By its nature, such information is subject to certain risks and uncertainties, known and unknown, including, without limitation:

- *technological change;*
- *development of new products;*
- *proper performance of equipment;*
- *the risks associated with credit;*
- *the exchange rate of the U.S. dollar and other currency fluctuations;*
- *changes in accounting policies and estimates;*
- *changes in consumer preferences, customer demand for our products and services and our ability to maintain customer relationships;*
- *disruption to manufacturing and distribution activities due to labour disruptions, bad weather, natural disasters and other unforeseen adverse events;*
- *the recruitment and hiring of competent personnel; and*
- *the discontinuation by our suppliers of certain technologies or the exiting by one of our suppliers from the electronics market;*
- *the availability of sufficient and appropriate financing.*

The above (and other) factors could cause our actual results, performance or achievements to be materially different from any future results, performance or achievements that may be expressed or implied in such forward-looking information. See also "Risks and Uncertainties" below. Should one or more of these risks or uncertainties materialize, or should the assumptions underlying our projections or forward-looking information prove incorrect, our actual results may vary materially. We do not intend and do not assume any obligation to update such forward-looking information whether as a result of new information, plans, events or otherwise, unless required by law.

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Corporate Structure

Edgewater Wireless Systems Inc. (the "Company" or "Edgewater") was incorporated on January 8, 1980 under the British Columbia Company Act and continued on January 22, 1987 under the Canada Business Corporations Act. The Company adopted its current name at a meeting of shareholders on January 12, 2012. The Company is a development stage company. The Company's shares trade on the TSX Venture Exchange under the symbol YFI and on the OTC QB under the symbol KPIFF.

The Company's head office is 408 Churchill Avenue North, Ottawa, Ontario, Canada and the Company maintains a presence in the USA and Europe, the Middle East and Africa ("EMEA") regions and is developing sales and distribution capability globally.

Description of the Business

We make Wi-Fi. Better.

Edgewater Wireless (www.edgewaterwireless.com) is the industry leader in innovative Wi-Fi Spectrum Slicing technology for residential and commercial markets. A disruptive, next-generation approach to wireless, Wi-Fi Spectrum Slicing optimizes scarce spectrum aimed at delivering demanding applications like video, gaming, and voice applications at the highest quality-of-service possible.

Backed by 24+ patents, we deliver high-performance MCSR™ silicon, advanced, MCSR™ powered Access Points and Intellectual Property (IP) licensing to OEM[1] and ODM[2]; service providers; and silicon manufactures.

Due to the nature of the large-scale network deployments, silicon level integrations and IP licensing of the Company's MCSR™ products, management expects operating results to fluctuate significantly quarterly. The results of operations for interim periods should not be relied upon as an indication of future performance.

Wi-Fi Spectrum Slicing: In-Band Wi-Fi Spectrum Slicing allows spectrum to be divided into multiple, concurrent channels within a single coverage area.
For example, in the 2.4 GHz ISM band, Wi-Fi Spectrum Slicing can deliver Wi-Fi service on up to 3 concurrent channels (i.e. 1, 6, and 11). Using standards compliant Wi-Fi, Wi-Fi Spectrum Slicing is a powerful approach to reducing contention and delivering the highest quality-of-service to the most users.

Spectrum: Spectrum relates to the radio frequencies allocated to the mobile industry and other sectors for communication over the airwaves.

MCSR™: The Company began to adopt new branding for our **multi-channel radio technology** and is transitioning to the term MCSR™ from the channel denoted WiFi3™ to better reflect current and future product iterations.

[1] OEM refers to Original Equipment Manufacturers or companies who manufacture products for other companies (Source: https://en.wikipedia.org/wiki/Original_equipment_manufacturer)
[2] ODM refers to Original Design Manufacturers or companies who manufacture products which are in term rebranded by another company (Source: https://en.wikipedia.org/wiki/Original_design_manufacturer)

Market Opportunity

According to the Wireless Broadband Alliance (WBA), there are 8 billion Wi-Fi devices in use today, and 3 billion new Wi-Fi devices were added over the last 12-months[3]. It is a ubiquitous technology connecting everything including smartphones, iPads, and laptops to countless other devices like cameras, thermostats, and even lightbulbs. By 2021, the WBA forecasts the market will reach 3.5 devices and connections per capita.

Close to 70% of smartphone traffic is carried over Wi-Fi, and the requirements are projected to rapidly grow at 47% compound annual growth rate (CAGR) over the next 5-years[4]. Wi-Fi has become a critical element of our everyday lives.

Since 1999, when Wi-Fi was first envisioned by the Institute of Electrical and Electronics Engineers (IEEE), chipset manufacturers, like Broadcom, Qualcomm and the like, have universally followed the same approach relying on a single-channel radio architecture. Like a single-lane road with a single vehicle on it, the single-channel radio approach works well for few users in clean RF environments. However, as the number of vehicles on the roads grows, or interference grows, single-channel Wi-Fi struggles to provide the basic connectively on which we rely (IEEE paper[5]).

At Edgewater Wireless, we believe single-channel Wi-Fi has quite simply reached the end of its lifecycle. The industry is ripe for change and Wi-Fi Spectrum Slicing represents the future of Wi-Fi.

Note, the IEEE, the organization best known for developing standards in the computer and electronics industry, published a research paper detailing and supporting the impacts on spectrum utilization of wide channels vs multiple, narrow channels in high-density applications.

Our market opportunity has two distinct tracks:

The first is in the Enterprise market, where we have validated our unique technology design with players like Kroger and Mediacom. The second, as the press coverage indicates, is the massive Consumer (home) market where we've made considerable progress with our alliance with CableLabs.

In the competitive **$5.8 billion Enterprise market**[6], we've made strides supplying Silicon solutions (chips & modules) or complete Access Points, and we've displaced established incumbent players in tier-one accounts. However, growth in the Enterprise space is capital intensive in building and scaling production and sales.

In the **$12.9 billion Consumer (home) market**[7], we made a significant step up with our CableLabs and TelCo relationships. Multi-channel residential applications, like the emerging Dual Channel Wi-Fi™ standard, are also a strong validation of our approach and is a great stepping stone to deliver many Wi-Fi channels supported by our MCSR™. We are now in front of numerous suppliers in North America and Worldwide with our differentiated offer. In the supply market, there are less than ten significant terminal equipment players – companies like Arris,

[3] Monica Paolini, WBA Annual Industry Report 2019, Wireless Broadband Alliance (Source: https://www.wballiance.com/resource/wba-annual-industry-report-2019/) [October 2018]
[4] Monica Paolini, WBA Annual Industry Report 2019, Wireless Broadband Alliance (Source: https://www.wballiance.com/resource/wba-annual-industry-report-2019/) [October 2018]
[5] Daldoul, Yousri; Meddour, Djamal-Eddine and Ksentini, Adlen IEEE 802.11ac: Effect of Channel Bonding on Spectrum Utilization in Dense Environments (Source: https://ieeexplore.ieee.org/document/7997013)
[6] Source: IDC Worldwide Quarterly WLAN Tracker updates (https://www.idc.com/getdoc.jsp?containerId=prUS44264918)
[7] Source: https://www.prnewswire.com/news-releases/home-wi-fi-router-and-extender-market-to-be-worth-us-129569-mn-by-2026-transparency-market-research-681596821.html

Technicolor, Hitron, Cisco, Belkin, etc., who are supplied by an even smaller number of silicon (chip) vendors such as Qualcomm, Broadcom, Intel, and others. We're currently engaged with key decision-makers and continue to build strategic relationships with major vendors leveraging our industry relationships.

Given the massive volumes represented by Consumer terminal devices like gateways, smart TVs and set-top boxes and the strong legacy positions of the incumbent vendors, we are executing on our strategy in the residential market to ***secure licensing agreements*** for our Intellectual Property (IP) with the very large Silicon manufacturers and offering silicon solutions (chips) to Vendors / Manufacturers (OEMs), where required. Bids from TelCos individually can be 10 million units per year. The market volume size for Residential CPE (DSL, Cable, and FTTP) in the USA alone is estimated to reach **a staggering 49 million units per year by 2022**[8].

Securing licenses to use our patented Wi-Fi Spectrum Slicing approach is one of our milestones and -- depending on negotiations and volumes – could mean earning a royalty for each device/module sold, an upfront fee for past R&D and annual support fees. Importantly, the business investment is relatively low compared with hardware-based production businesses as it is confined mainly to OPEX for sales, partner management, tech support, project management, and legal. Financially, *multiples can be much higher for IP based business with recurring revenues* vs. production businesses.

Discussion of Operating Results

Operating results for the quarter were as follows:

- Q1 2020 revenues of $0, represents a significant decrease over the same quarter a year earlier.

- A post-packaging silicon chip yield issue and resulting supply line disruption impacted revenue for the quarter. We have implemented and are testing process improvements and anticipate resuming limited shipping in 8 to 10 weeks, prior to a full production solution being developed to fulfil both todays orders and anticipated growth. Both are subject to new capital investment

- The updated chip design and full production solution is in process. We anticipate, subject to funding, that these new chips could be delivered in 6 to 9 months and permit a resumption in the ramping of our product revenue.

We continue to hold open orders for $839,873 of goods and services to be delivered. These are open orders with no fixed terms for delivery or associated financial penalties.

Results and Accomplishments:

Key highlights include:

Operations, innovation, and technology partnerships:

- **Silicon Production Milestone:** As a consequence of lower than expected yield and anticipated growth, we accelerated our Silicon Design and Production program and have achieved a significant milestone in producing the next generation of MCSR™ silicon. With additional capital, we anticipate moving to tape-out cost-optimized silicon later this year. Shifting to newer foundry processes and implementing design

[8] Source: *Broadband CPE Market Tracker Q3 2018*, IHS Markit, USA.

improvements are geared toward improving production yield, reducing cost, and increasing the performance of MCSR™ silicon solutions.

Commercial engagements:

During the reporting period, business development efforts focused on raising the profile of Edgewater with potential strategic partners to drive the adoption of Wi-Fi Spectrum Slicing in the residential and enterprise markets. Key highlights include:

- **Launch of IP Licensing Program:** Building on the momentum gained with the emergence of the Dual Channel Wi-Fi™ standard, we launched our Licensing Program. Our patented approach and expertise will enable silicon manufacturers to implement Wi-Fi Spectrum Slicing on their platforms – dramatically reducing time to market for the next phase of residential Wi-Fi innovation and potentially, driving high margin, capital-efficient growth.

- Launch of the emerging **Dual Channel Wi-Fi™** standard and the official unveiling by Edgewater of the powerful new Dual Channel Wi-Fi™ software for the global Linux OpenWrt development community. The work, done in conjunction with CableLabs®' plan to drive global adoption of Dual Channel Wi-Fi™ for more efficient and reliable connectivity, dovetails with Edgewater's Wi-Fi Spectrum Slicing architecture and has driven tremendous media and press coverage. (LINK)
    - First declaration by a global body that **one channel is not enough**. Multi-channel is the future of Wi-Fi and wireless.
- **Global Invacom Selects Edgewater Wireless for Bx-WiFi Partnership**: *Revolutionary high-density Wi-Fi platform to be used for Bx-WiFi development*. Edgewater Wireless was selected to partner with Global Invacom and the BBC for the further development of Broadcast WiFi ("Bx-WiFi"), a technology that enables live, high quality and large-scale event video streaming over a Wi-Fi network. The application is ideally suited to our Wi-Fi Spectrum Slicing, MCSR™ technology.

Press and media coverage can be found at www.edgewaterwireless.com/.

Our Vision is to Make Wi-Fi Better.

While Edgewater Wireless could follow the traditional, single-channel radio architecture or "single-lane road" approach taken by the likes of Qualcomm, Broadcom etc., we're innovating for the wireless future – where the exponential growth in connected devices continues to overburden these single-lane roads.

Our path is to solve for the next generation of Wi-Fi, where the limits of traditional Wi-Fi architecture and the physical science of limited spectrum are already reaching their breaking points. Our opportunity is to solve the issues facing Wi-Fi today, and over the years to come – in the home and in businesses.

Together, with the support of our investors, our customers and our entire team, we will achieve success by building and innovating around our highly differentiated Wi-Fi Spectrum Slicing technology; MCSR™.

MCSR™ is innovative, it is disruptive and it is the future of Wi-Fi.

The Wireless Broadband Alliance (WBA) is an industry association formed to promote interoperability between operators in the Wi-Fi industry, with the aim of providing an excellent user experience. Chaired by AT&T (NYSE: T), members of the WBA include Telco/Cable Cos, such as BT (NYSE: BT), Comcast (NASDAQ: CMCSA) and Charter (NASDAQ: CHTR), and leading technology companies such as Cisco (NASDAQ: CSCO), Intel (NASDAQ: INTC), Qualcomm (NASDAQ: QCOM), The Cloud and Nokia (HEL: NOKIA). WBA member operators collectively serve more than 2 billion subscribers and operate more than 30 million hotspots globally.

Review of Annual Results – 1st Quarter ended July 31, 2019 ("FY 2020") compared to the year ended July 31, 2018 ("FY 2019").

The Company recorded a net loss of $696,078 for Q1FY2020 as compared to a net loss of $507,798 for FY 2019. The increase in the loss of $188,280 is attributable to the following:

Revenue in Q1FY2020 was $Nil as compared to Q1FY2019 of $77,700.

Sales and marketing expenses increased to $227,959 in Q1FY2020 as compared to $54,621 in Q1FY2019. The increase is attributed to the engagement of two firms to assist in raising our profile nationally and internationally and an overlap of contracts from Fiscal 2019. This overlap will be eliminated in Q2.

General and administrative expenses increased by $2,453 to $229,565 in Q1FY2020 compared to $227,112 in Q1FY2019. Stock base compensation rose as options vest to $60,870 in Q1FY2020 compared to $25,215 in Q1FY2019. From a resource perspective, salaries and consulting services increased to $85,344 in Q1FY2020 from $82,446 in Q1FY2020. Professional fees saw a decrease of $1,695 from the same period in Q1FY2019 to $49,959 in Q1FY2020. Travel expenses were $9,400 in Q1FY2020 as compared to $17,497 in Q1FY2019, a decrease of $8,047.

Product development expenses in Q1FY2020 were $215,746 as compared to $214,061 in Q1FY2019. Contractor fees were $116,082 in Q1FY2020 an increase of $43,752 from fees of $72,330 in Q1FY2019 the increase is a result of decrease in salaries. For clarity, we have previously referred to contractors as consultants when in fact, they should more properly be identified as contractors. For Q1FY2020 salaries posted a decrease of $30,058 to $82,241 from $112,299 in Q1FY2019. Amortization expenses were $3,079 in Q1FY2020 compared to $4,132 in Q1FY2019.

Operations expenses were similar year over year at $27,601 in Q1FY2020 as compared to $26,794 in Q1FY2019. Expenses recorded in this category relates to the rental agreement for our premises.

Finance expenses increased to $3,582 in Q1FY 2020 as compared to $179 in Q1FY2019. The expense is attributed to the Note Payable interest.

Interest income in Q1FY2020 decrease to $51 in the quarter as compared to $1,591 in Q1FY2019.The income in Q1FY2019 was attributed to interest earned on HST returns.

The foreign exchange income for Q1FY2020 was $8,412 and was the result of the decrease in the foreign exchange adjustment on US payables we have on the books. Conversely in Q1FY2019 this was an expense of $6,447. The Company continues to carry significant payables in US dollars and the fluctuation of the dollars results in exchange gains and losses.

The company incurs the majority of its expenses in Canadian dollars while much of our goods purchased for sale and our sales are denominated in US currency. As the proportion of sales grows, we will continue to match product purchase costs to revenue generated to minimize the FX effect. There will be timing issues which means that there will not be an exact matching but as our book grows our ability to balance these funds flows will grow with it.

Common Shares Outstanding

During the period, the Company completed a Non-Brokered Private Placement ("NBPP") of 11,000,000 units at a price of $0.10 per unit for gross proceeds of $1,100,000. Each unit consisted of one common share of the Company and one-half of one non-transferrable share purchase warrant. Each warrant entitles the holder to acquire an additional common share of the Company at a price of $0.20 for a period of 24 months from the date of first closing date on June 26th, 2019. In addition, 210,000 warrants were issued as finder warrants.

At September 27th, 2019, there were 169,738,630 common shares issued and outstanding, compared to the 158,738,630 which were issued and outstanding as at April 30th, 2019.

At July 31st, 2019, a total of 13,762,501 stock options were outstanding which entitle the holders to acquire the same number of common shares at exercise prices from $0.05 to $0.31 per share. Not all stock options were exercisable at July 31, 2019 due to vesting provisions. There was no change in the number of stock options outstanding as at September 27th, 2019.

As at July 31st, 2019, there are 36,299,064 warrants outstanding with strike prices which ranged from $0.20 and to $0.75 and maturities to September 1st, 2023. The same number of warrants were still outstanding as at September 27th, 2019.

Included in the outstanding warrants are 3,021,076 warrants which were issued in connection with the UpRamp Fiterator program. These warrants have a strike price of $0.375 per common share and a maturity date of September 1st, 2020. These warrants have an accelerated exercise provision when the daily volume weighted average trading price of the common shares of the Company on the TSX Venture Exchange (or such other stock exchange where the majority of the trading volume occurs) exceeds $0.45 on each of those 15 consecutive days.

Summary of Quarterly Results

(***Amounts are presented in thousands of Canadian dollars except loss per share figures***)

Quarter ended	July 31/19	April 30/19	Jan 31/19	Oct 31/18	July 31/2018	April 30/18	Jan 31/18	Oct 31/17
Revenues	$0.0	$26.2	$188.9	$127.9	$77.7	$(0.6)	$23.6	$21.9
Revenue percentage increase (decrease) relative to preceding quarter	(100.0%)	(81.1%)	47.7%	64.6%	nm	(2540)%	7.7%	(21%)
Gross margin	$(0.1)	$8.2	$46.7	$33.1	$19.8	$(24.4)	$20.2	$2.0
- *as a percentage*	*Nm*	*31.3%*	*24.7%*	*25.9%*	*25.5%*	*(4,066)%*	*85.6%*	*9.1%*
Net Loss	$(696.1)	$(771.1)	$(813.1)	$(714.5)	$(507.8)	$(909.0)	$(925.9)	$(1,120.6)
Loss per share -basic and diluted	$(0.004)	$(0.005)	$(0.005)	$(0.005)	$(0.003)	$(0.006)	$(0.006)	$(0.008)
Weighted Average number of common shares outstanding	162,086,456	158,738,630	158,711,465	155,631,472	146,699,290	146,568,367	143,879,137	140,843,749

Q1 2020 Highlights:

- Q1 2020 revenues were impacted by post-packaging yield issues on silicon which resulted in supply line disruption. Our engineering, software and product teams were all focused on addressing these issues and developing effective solutions. To conserve cash, we remain thinly staffed and our teams performed exceptionally well under these constraints. Consequently, the Company was unable to generate any product or services revenue during the period.

- The Q4 2019 revenue of $24,200 was primarily derived from the MCSR™ application development activities.
- Management has previously noted that as the Company transitions from a development stage company to a production and licencing company, our revenue as well as our gross margins can be expected to fluctuate widely on a period to period basis. This was extreme in this quarter.
- Gross margin in 2019 Q4 was negative. In reconciling the invoicing from the contract manufacturer to the physical goods received, it was determined that our cost of goods sold in the first three quarters had been understated. This was corrected in Q4.
- Net loss of $696,078 in Q1 2020, an increase of $188,280 over the same period last year.

Related party transactions

Transactions with key management personnel

For the year ended April 30, 2019, options were granted on November 7th, 2018to the directors or senior officers of the Company comprising 1,525,000 for directors and 1,240,000 for senior officers respectively. No new options have been issued since the end of our fiscal year.

In December 2018, one of the Directors advanced $90,000 by way of a demand promissory note. This note stipulated a risk adjusted interest rate of 12% per annum. When the term extended beyond the collection of an outstanding HST rebate, the interest rate was adjusted to 15% per annum and accrued on a quarterly basis until the note is repaid.

This note is still outstanding and interest totaling $8,053 has accrued with $3,537 of interest accrued in Q1/2020. The note has not been paid in accordance with its terms and continues with the forbearance of the note holder.

The Company’s compensation program provides that total compensation for senior management may include a combination of base salary, and objective-based incentives as well as the same health and insurance benefit programs as provided to all other employees. All directors and officers are eligible to receive stock options.
Senior management personnel are not entitled to any post-employment benefits other than those available to all employees. Severance to be paid upon the involuntary termination of a member of senior management is equivalent to three month’s salary on or before completion of two years of their employment and six month’s salary thereafter.

Liquidity

The Company is still considered to be in the development stage as it has not earned substantial revenue from the sale of its products. During the quarter ended July 31, 2019, the Company incurred a net loss of $696,078 and negative cash flow from operating activities of $994,896. There are material uncertainties that may cast significant doubt about the Company’s ability to continue as a going concern because the continuation of the Company's operations, including product development and marketing activities is dependent upon the Company's ability to fund its working capital requirements through either debt or equity financing.

It takes significant capital to bring product to market and to successfully execute on our sales plan but we are prudent in managing expenses to preserve cash while continuing to pursue additional financing.

Management manages its cash consumption while pursuing strategic initiatives for building the business and pursuing additional financing. However, there can be no assurance that the Company will be able to generate sufficient product sales or secure the necessary financing to meet continuing needs, or if the financing is available, that it will be on terms acceptable to the Company. If the Company cannot secure additional financing on terms acceptable to it or generate sufficient product sales, the Company will have to consider additional strategic alternatives which may include, among other strategies, cost curtailments, the monetization of intangible assets, or seeking to out-license and/or divest assets. As a result, there is significant doubt as to whether the Company will be able to continue as a going concern and realize its assets and pay its liabilities as they become due. Additionally, the issuance of common shares by the Company could result in significant dilution in the equity interest of existing shareholders.

Changes in Accounting Standards

These pronouncements have been adopted in the Company's accounting policy for the first period beginning after the effective date of the pronouncement. Information on new standards, amendments and interpretations that are expected to be relevant to the Company's consolidated financial statements is provided below. Certain other new standards and interpretations have been issued but are not expected to have an impact on the Company's consolidated financial statements.

IFRS 9, "Financial Instruments"

On July 24, 2014 the IASB issued the complete IFRS 9 (IFRS 9 (2014)). The mandatory effective date of IFRS 9 is for annual periods beginning on or after January 1, 2018 and must be applied retrospectively with some exemptions. Early adoption is permitted. The restatement of prior periods is not required and is only permitted if information is available without the use of hindsight.

IFRS 9 (2014) introduced new requirements for the classification and measurement of financial assets. Under IFRS 9 (2014), financial assets were classified and measured based on the business model in which they are held and the characteristics of their contractual cash flows. The standard introduced additional changes relating to financial liabilities. It also amended the impairment model by introducing a new 'expected credit loss' model for calculating impairment.

IFRS 9 (2014) also includes a new general hedge accounting standard which aligns hedge accounting more closely with risk management. This new standard did not fundamentally change the types of hedging relationships or the requirement to measure and recognize ineffectiveness, however it will provide more hedging strategies that are used for risk management to qualify for hedge accounting and introduce more judgement to assess the effectiveness of a hedging relationship.

Special transitional requirements have been set for the application of the new general hedging model.

The Company adopted IFRS 9 (2014) in its financial statements for its annual period which began on May 1,2018 but is not affected by the hedge accounting standard in the 2019 FY because it did not do any hedging.

The adoption of this standard did not have a material impact on the Company's consolidated financial statements and related disclosures.

IFRS 15, "Revenue from Contracts with Customers"

IFRS 15 provides a single, principles based five-step model for revenue recognition to be applied to all customer contracts and requires enhanced disclosures. The standard also provides guidance relating to customer acquisition costs.

The Company adopted IFRS 15 Revenue from Contracts with Customers with a date of initial application of May 1, 2018 using the modified retrospective approach. The Company will provide expanded disclosures related to the nature, amount and timing of the revenue when appropriate. In addition, the Company has elected to make use of the following practical expedients:

- IFRS 15 is only applied to revenue contracts that are not completed as of the date of applying the standard as of May 1, 2018; and
- The Company will expense sales commission costs when incurred if the amortization period is less than 12 months.

Revenue is recognized upon transfer of control of promised goods or services to the customer in an amount that reflects the consideration the Company expects to receive for those goods and services. The Company's goods or services are generally distinct and accounted for as separate performance obligations. A good or service is distinct if the customer can benefit from it on its own or together with other readily available resources, and the Company's promise to transfer the good or service is separately identifiable from any other promises in the contractual arrangement with the customer. For contracts where services are rendered revenue is recognized on the level of effort measured against total effort required to complete the contract.

The adoption of this standard did not have a material impact on the Company's consolidated financial statements and related disclosures.

IFRS 16: Leases

On January 13, 2016 the IASB issued IFRS 16 Leases. The new standard is effective for annual periods beginning on or after January 1, 2019. Earlier application is permitted for entities that apply IFRS 15 Revenue from Contracts with Customers at or before the date of initial adoption of IFRS 16. IFRS 16 will replace IAS 17 Leases.

This 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 12 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. Transitional provisions have been provided.

The Company adopted IFRS 16 for the annual period beginning on May 1, 2019. We have no leases currently which would be affected by this standard, so its impact on our financial statements and related documentation will be minimal until that changes.

Financial Instruments and Other Instruments

Refer to Note 20 of the Consolidated Financial Statements for the year ended April 30, 2019.

Risk and Uncertainties

Market Risk

There are a number of influences in the market. The economic situation either in specific countries or globally, including levels of government expenditures, monetary policy, capital availability, consumer confidence or levels of economic activity, could worsen leading to a potential slowdown or reduction in spending on infrastructure equipment. Management has also targeted a number of regions where growth is expected to be higher than the global average and is targeting countries that are spending on infrastructure and on large infrastructure projects such as countries on the African continent and South America, in addition to North America and parts of Europe. Management also recognizes the need for prudent cash flow management and the need to target qualified sales and marketing activities that represent low risk and high return.

Market risk also includes political risk and the uncertainty associated with unstable or changing governments due to political or socio-economic upheaval. The Company is dealing primarily with countries that have demonstrated a high degree of stability and, in all cases, better than typical economic strength.

Competition and competing technologies lead to competitive risks as new technologies and products are developed. Management recognizes the need to invest in research and development in order to continue to add high value, differentiated capabilities to expand both the depth and the breadth of the product offering. Management is looking at various acquisition strategies that would enhance the Company's position in product breadth and product features based on market drivers. Management recognizes the need to ensure customer satisfaction through all phases of the sales cycle. Management also intends to invest in competitive intelligence and analysis relating to the dynamics of the market, trends in technology and in competing products as they are introduced into the market.

Operational Risk

There are a number of circumstances that could affect a supplier's ability to supply a component; such as financial, political, technical, natural disaster or just a business decision to no longer supply the particular component. Should this happen and, depending on the nature of the component, the resulting impact ranges between identifying a substitute component with little to no redesign effort to the system or subsystem to affecting a redesign of a system or subsystem to accommodate a potential part change.

The Company endeavours to use components that are available from more than one supplier whenever possible. The Company has experience managing obsolescence issues. The Company also has four custom components that are unique and available only to the Company. They are fabricated by a large, multi-national semiconductor company that has multiple fabrication facilities around the world. In this case, these components may only be available from a single supplier but the risks are mitigated by the single supplier's ability to source the components from multiple world-wide sites. Lastly, the Company has engaged with a contract manufacturer which is responsible for the assembly and distribution of the Company's products. As part of the criteria for selecting a contract manufacturer, the Company made it a requirement for the manufacturer to have more than one site and to have operations in more than one country in order to mitigate the risk of that supplier being unable to manufacture and distribute the Company' products as needed.

Although the Company will endeavor to have suppliers with operations in multiple countries where the Company's product could be built in order to obviate issues related to political and socio-economic changes, failure to develop multiple key suppliers will put the Company at risk that the business failure of a single-source supplier will disrupt its business.

Revenues were severely impacted by post-packaging yield issues on silicon which resulted in supply line disruption. The rate of yield improvement has been much slower than expected. We have identified the issue and have defined improvements and have engaged the appropriate resources required to remedy, but these are taking time to implement. In addition, and subject to further capital investment, we are undertaking an improved chip design and expansion of our chip production to improve supply lines and cater for growth

Management also recognizes that contractual risks may create adverse issues in running the business. Management has engaged experienced contracts experts to help mitigate contractual risk with key customers. The prudent use of export insurance through organizations such as Export Development Canada ("EDC") will help to mitigate contractual and payment risks with key customers.

Particularly in its early years, the Company's revenues will occasionally be derived from a few, large customers engaged in network deployments scheduled over extended periods of time. With such concentration of revenues, the Company's operating results will be highly dependent not only on its own performance but on the performance of those customers to execute against their deployment plans.

Staffing and Human Resources Risk

Management has built a core team of professionals experienced in telecommunications and network technology, product development, manufacturing, sales and marketing. The Company has implemented a stock option program that will provide long term incentive for key employees. The Company has also established a compensation committee to ensure that key employees are fairly compensated. The Company is headquartered in Ottawa, Ontario, where there is a substantial high-tech community and, as such, a large community of engineers, technologists, software developers and others experienced in the telecommunications and networking market space; however, there is a risk that qualified personnel will not be available or, if available, will be prohibitively expensive. See "Reliance on Key Personnel" below.

Financial Risk

Following the principles of conservative cash management, the Company's standard business terms and conditions make provisions for advance payment on product orders. In cases where extended payment terms are required, shipments are backed by credit insurance facilities from agencies such as the Export Development Corporation ("EDC") whenever possible. The Company continues to maintain export credit risk insurance Through EDC for sales being made to those countries where it currently considers sales to most likely occur. Several of the long-dated invoices are awaiting additional parts or service which has delayed payment and deferred taking collection action. This has not adversely affected their collectability.

Reliance on Strategic Relationships

In conducting its business, the Company relies on continuing existing strategic relationships and forming new ones with other entities in the wireless technology industry, such as joint venture parties and partners, and also certain regulatory agencies and governmental departments. While the Company has no reason to believe otherwise, there can be no assurance that its existing relationships will continue to be maintained or that new ones will be successfully formed and the Company could be materially adversely affected by changes to such relationships or difficulties in forming new ones.

International Risk

The Company continues to expand its international business, opportunistically, while the concentration of our efforts remain with the United States and Europe where we have a significant and growing profile. Foreign operations face additional specific local risks, which may adversely affect the Company, including: changes in legal and regulatory requirements (including tariffs and other trade barriers); less favourable intellectual property laws; any loss of key sales personnel in one of the Company's foreign offices could result in a significant loss of sales in that foreign country; changes in local tax rates and other potentially adverse tax consequences (including the cost of repatriation of earnings); collectability of accounts in foreign jurisdictions; and burdens of complying with a wide variety of foreign laws, including changing import and export regulations.

Future growth depends in large part on the ability to increase business in international markets. This will require significant management attention and financial resources, including capital to hire additional personnel and establish additional international facilities.

Protection of the Company's Intellectual Property

The Company's success will depend, in part, on its ability to protect its rights in its intellectual property. The Company will rely on various intellectual property protections, including patents, copyright, trademark and trade secret laws and contractual provisions, to preserve its intellectual property rights. Despite these precautions, it may be possible for third parties to obtain and use its intellectual property without its authorization. Policing unauthorized use of intellectual property is difficult, and some foreign laws do not protect proprietary rights to the same extent as the laws of Canada and the United States. Furthermore, many key aspects of networking technology are governed by industry-wide standards, which are freely available to all market entrants. To protect its intellectual property, the Company may become involved in litigation, which could result in substantial expenses, divert the attention of its management, cause significant delays and materially disrupt the conduct of its business.

Product Defects and Liability Claims

The Company is subject to proceedings and claims that may arise in the ordinary conduct of the business, which could include product and service warranty claims, which could be substantial. The Company's products are highly complex and sophisticated and could contain design defects or software errors that are difficult to detect and correct. The Company provides product warranties. If its products fail to perform as warranted, and it fails to resolve product quality or performance issues in a timely manner, sales may be lost and it may be forced to pay damages. In addition, because its products are sold and marketed in different countries, the products must function in and meet the requirements of many different environments and be compatible with different systems.

Any failure to meet customer requirements could materially affect its business, operating results and financial condition.

The occurrence of product defects and the inability to correct errors could result in the delay or loss of market acceptance of its products, material warranty expense, diversion of engineering and other resources from its product development efforts, and the loss of credibility with its customers, manufacturer's representatives, distributors, value-added resellers, systems integrators, original equipment manufacturers and end-users, any of which could have a material adverse effect on the Company's business, operating results and financial condition.

Substantial Capital Requirements

It is anticipated that the Company will make substantial capital expenditures in product development, marketing and ongoing operations. It may have limited ability to obtain the capital necessary to undertake or complete future research programs. There can be no assurance that debt or equity financing, or cash generated by operations, will be available or sufficient to meet these requirements or for other corporate purposes or, if debt or equity financing is available, that it will be on terms acceptable to the Company. Moreover, future activities may require the Company to alter its capitalization significantly. The inability of the Company to access sufficient capital for its operations could have a material adverse effect on the Company's financial condition, operating results or prospects.

Additional Requirement for Capital

The Company is likely to remain cash flow negative for some time and there can be no certainty that the Company will achieve or sustain profitability or positive cash flow from its operating activities. The future of the Company is dependent upon its ability to raise the required funding. There is no assurance that additional financing will be available on terms acceptable to the Company. Failure to obtain additional financing on a timely basis could cause the Company to reduce or terminate its operations. Any additional equity financing may be dilutive to shareholders and debt financing, if available, may involve restrictions on financing and operating activities.

Issuance of Debt

From time to time, the Company may enter into transactions to acquire assets or the shares of other corporations. These transactions may be financed partially or wholly with debt, which may increase the Company's debt levels above industry standards. Depending on future product development plans, the Company will require additional equity and/or debt financing that may not be available or, if available, may not be available on favourable terms.

The Company's articles will not limit the amount of indebtedness that the Company may incur. The level of the Company's indebtedness from time to time could impair the Company's ability to obtain additional financing in the future on a timely basis to take advantage of business opportunities that may arise.

Dilution

The Company may make future acquisitions or enter into financings or other transactions involving the issuance of securities of the Company which may be dilutive to current Shareholders.

Reliance on Key Personnel

The Company's success depends in large measure on certain key personnel. The loss of the services of such key personnel could have a material adverse effect on the Company. The Company does not anticipate that the Company will have key person insurance in effect for management. The contributions of these individuals to the immediate operations of the Company are likely to be of central importance. In addition, the competition for qualified personnel in the communications industry is intense and there can be no assurance that the Company will be able to continue to attract and retain all personnel necessary for the development and operation of its business. Investors must rely upon the ability, expertise, judgment, discretion, integrity and good faith of the management of the Company.

Third Party Credit Risk

The Company may be exposed to third party credit risk through contractual arrangements with joint venture partners, distributors of its products and other parties. In the event such entities fail to meet their contractual obligations to the Company such failures could have a material adverse effect on the Company and its cash flow from operations. The Company takes every reasonable action to mitigate this risk including, where appropriate, seeking export insurance.

Income Taxes

The Company will file all required income tax returns and believes that it will be in full compliance with the provisions of the Income Tax Act (Canada) and all applicable provincial tax legislation as well as the tax laws of such other countries as the Company may establish operations in; however, such returns are always subject to reassessment by the applicable taxation authority. A successful reassessment of the Company may have an impact on current and future taxes payable.

Governmental and Regulatory Requirements

Certain components of the Company's products may be subject to current or future regulation, including relating to environmental protection; for example, lead solder and wireless solutions. Regulatory agencies may make rulings or adopt new standards with which its solutions may need to be compliant. The timing and nature of these rulings or adoption of new standards may impact future sales to its customers, its ability to conform its solutions and/or to retain its market position. In addition, in the future, the Company may be required to comply with substance bans and product/component take-back requirements that would make the Company responsible for recycling and disposing of certain of its products/components that it has sold

Rapid Technological Change

The markets for the Company's products are characterized by rapidly changing technology, evolving industry standards and increasingly sophisticated customer requirements. The introduction by competitors of products embodying new technology and the emergence of new industry standards can render existing products obsolete and unmarketable and can exert price pressures on existing products. It is critical to the Company's success that it be able to anticipate and react quickly to changes in technology or in industry standards and successfully develop and introduce new, enhanced and competitive products on a timely basis. The Company cannot give assurance that it will successfully develop new products or enhance and improve its existing products, that new products and enhanced and improved existing products will achieve market acceptance or that the introduction of new products or enhanced existing products by others will not render the Company's products obsolete. The process of developing new technology is complex and uncertain, and, if the Company fails to accurately predict customers' changing needs and emerging technological trends, its business could be harmed. The Company must commit significant resources to developing new products before knowing whether its investments will result in products the market will accept. To remain competitive, the Company may be required to invest significantly greater resources than currently anticipated in product development and enhancement efforts and result in increased operating expenses.

Influence of Management

At September 27h, 2019, the directors, officers and advisors to the Company owned or controlled approximately 2.6% of the outstanding common shares of the Company. These shareholders may influence the outcome of most corporate actions requiring shareholder approval, including the election of directors of the Company and the approval of certain corporate transactions.

Competition

The markets in which the Company competes are characterized by rapid change, converging technologies, and a migration to networking and communications solutions that offer relative advantages. These market factors represent a competitive threat. The Company competes with numerous vendors in each product category. The overall number of competitors providing niche product solutions may increase. Also, the identity and composition of competitors may change as activity increases in the advanced technology markets and market adjacencies. As the Company continues to expand globally, it may be subject to new competition in different geographic regions, in particular, from experienced, price-focused competitors in Asia, especially from China. It is anticipated this competition will continue in the future.

Some competitors compete across many of the same product lines, while others are primarily focused in a specific product area. Barriers to entry are relatively low, and new ventures to create products that do or could compete with the Company's products are regularly formed. In addition, some competitors may have greater resources, including technical and engineering resources. As the Company expands into new markets, it will face competition not only from our existing competitors but also from other competitors, including existing companies with strong technological, marketing, and sales positions in those markets. The Company will also sometimes face competition from resellers and distributors of its own products. Further, companies with whom the Company will have strategic alliances in some areas may be competitors in other areas.

Dividend Policy

Payment of any future dividends will be at the discretion of the Board of Directors after taking into account many factors, including the Company's operating results, financial condition and current and anticipated cash needs. There is currently no intention to pay dividends in the near term.

Conflicts of Interest

Certain of the directors and officers of the Company also serve as directors, officers, advisors and/or consultants of other companies involved in the telecommunications sector. To the extent that such other companies may participate in ventures in which the Company may participate, there exists the possibility for such directors and officers could be in a position of conflict. Such directors and officers have duties and obligations under the laws of Canada to act honestly and in good faith with a view to the best interests of the Company and its shareholders. Accordingly, such directors and officers must declare and abstain from voting on any matter in which such director and/or officer may have a conflict of interest. This has not been an issue.

Resale of Shares

The continued operation of the Company will be dependent upon its ability to generate operating revenues. There can be no assurance that any such revenues can be generated. If the Company is unable to generate such revenues or obtain such additional financing, any investment in the Company may be lost. In such event, the probability of resale of the shares of the Company would be diminished.