

# **OPSENS INC.**

# ANNUAL INFORMATION FORM

FOR THE FISCAL YEAR ENDED AUGUST 31, 2016

November 16, 2016

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## 1. PRELIMINARY COMMENTS

THE INFORMATION IN THIS ANNUAL INFORMATION FORM IS DATED AS AT AUGUST 31, 2016, UNLESS INDICATED OTHERWISE. ALL REFERENCES TO DOLLAR AMOUNTS IN THIS ANNUAL INFORMATION FORM ARE REFERENCES TO CANADIAN DOLLARS, UNLESS STATED OTHERWISE.

This Annual Information Form may contain or incorporate by reference forward-looking statements about the objectives and strategies of Opsens Inc. ("Opsens" or the "Corporation") as well as management's expectations regarding its future growth, financial position and results of operations and the Corporation's activities. These statements are forward-looking because they are based on assumptions about future economic conditions and courses of action that will be undertaken by the Corporation. These statements are subject to a number of risks and uncertainties, which may cause actual results to differ materially from those contemplated by the forward-looking statements. The Corporation believes that the expectations reflected in these forward-looking statements are reasonable. However, there is no guarantee that the Corporation's expectations in this regard will prove to be accurate and the reader must not unduly depend on them. The forward-looking statements are made on the date of this Annual Information Form. The Corporation is under no obligation to revise or update these forward-looking statements in order to reflect the events or circumstances that occur after the date of this Annual Information Form, except when it is required by law. There is no guarantee that the results, performance or actual outcomes explicitly or implicitly expressed in these forward-looking statements will be achieved or, if they are achieved, will result in a profit.

The Corporation's actual results may significantly differ from that indicated in the forward-looking statements resulting from the risk factors described in the section "Risk Factors" of this Annual Information Form.

## 2. CORPORATE STRUCTURE

## 2.1 Name, Address and Incorporation

The Corporation was incorporated under the Part IA of the *Companies Act* (Québec) by articles of incorporation dated as of February 22, 2006 under the name "DCB Capital Inc." and its French version "Capital DCB inc."

In connection with its qualifying transaction pursuant to the TSX Venture Exchange (the "TSXV") policies, the Corporation changed its name for "Opsens Inc." on October 3, 2006 and amalgamated with 9174-3369 Québec Inc. on October 4, 2006.

The Corporation has been governed by the *Business Corporations Act* (Québec) ("QBCA") since it replaced on February 14, 2011 the provisions of the *Companies Act* (Québec) relating to the incorporation and operation of business corporations.

In order to benefit from the provisions of section 153 of the QBCA, the Corporation amended its articles on February 6, 2012, in order to allow the directors of the Corporation to appoint one or more additional directors to hold office for a term expiring not later than the close of the next annual shareholders meeting, provided that the total number of directors so appointed may not exceed one third of the number of directors elected at the previous annual shareholders meeting.

The Corporation's head and registered office is located at 750, boulevard du Parc-Technologique, Québec, Québec G1P 4S3.

# 2.2 Intercorporate Relationship

The Corporation beneficially owns 100% of votes attaching to all voting securities of the corporation Opsens Solutions Inc. ("Opsens Solutions") incorporated under the *Business Corporations Act* (Alberta).

In this Annual Information Form, unless otherwise indicated, "Corporation" means the Corporation and its subsidiary Opsens Solutions.

# 3. GENERAL DEVELOPMENT OF THE BUSINESS

The Corporation aims to become a key player in the guidewire Fractional Flow Reserve ("FFR") market with its OptoWire, a nitinol-based optical guidewire for FFR. The OptoWire provides intra-coronary blood pressure measurements with unique, patented optical pressure guidewire technologies. It is immune to adverse effects related to blood contact and allows easy and reliable connectivity that leads to reliable FFR measurements in extended conditions of usage. The OptoWire is also designed to provide cardiologists with a guidewire delivering optimized performances to navigate coronary arteries and cross blockages with ease and safety.

The Corporation is also involved in industrial activities. Opsens' technology, expertise and products can serve several markets including aerospace, geotechnical, infrastructures, oil and gas, mining, laboratories and others. The inherent safety of Opsens fiber-optic sensors allied with their robustness make them an attractive choice for those applications. Opsens' broad portfolio of products and technologies can be adapted to measure various parameters in the most harsh conditions and provide significant advantages in terms of production optimization and reduced risk to the environment and health.

The Corporation is also selling fiber optic sensor systems to oil and gas producers, providing them with reliable real-time downhole pressure and temperature information about their wells during operation. The ability to confidently control bottomhole pressure at high temperatures for artificial lift systems such as electrical submersible pumps allows operators to improve steam/oil ratios and to reduce operating and lifting costs.

In March 2016, Opsens moved into its new headquarters. The state-of-the-art facility will help Opsens expand on its medical activities. After an interruption in the production to allow relocation, production resumed and gradually, the pace has been accelerating. The move has affected revenue growth in the third quarter of fiscal 2016. However, completion of the move will accelerate growth to meet the increasing demand for Opsens' FFR products.

On September 1, 2015, the Corporation completed the reorganization of its corporate structure. As part of this reorganization, the industrial activities of the Corporation, including oil and gas, will be consolidated in the Opsens Solutions business unit. As a result, only the medical activities will remain in the Opsens business unit.

# 3.1 Three-Year History

The events described below have influenced the general development of the business of the Corporation during the first months of the fiscal year to end August 31, 2017 and the last three fiscal years of the Corporation ended August 31, 2016, 2015 and 2014.

## Beginning of Fiscal Year 2017

A detailed analysis of expected changes in the activities of the Corporation during fiscal year 2017 is presented in "Business Strategy" of the Management's Discussion and Analysis for the fiscal year ended August 31, 2016 available on SEDAR at www.sedar.com.

On September 26, 2016, Opsens announced the 510(k) clearance from the U.S. Food and Drug Administration ("FDA") for the OptoMonitor II, a new multimodality monitor combining the ability to measure FFR along with measuring intravascular and intracatheter pressure.

In the United States, Opsens already sells its products to measure FFR for the diagnostic and treatment guidance in patients with coronary heart disease. The OptoMonitor II is now indicated to be used with FDA cleared Occlusion Perfusion Catheter® (OPC) from Advanced Catheter Therapies, Inc. and its partner Toray Industries, Inc. The OPC is indicated for localized infusion or irrigation diagnostic and therapeutic agent to the peripheral vasculature.

On September 22, 2016 Opsens announced an exclusive distribution agreement between Opsens Solutions and Precise Downhole Services Ltd. ("Precise DHS") for the commercialization of its products dedicated to the Canadian oil and gas market. Precise DHS will be the exclusive distributor for the OPP-W sensor product line in the Canadian territory.

Precise DHS is a Canadian corporation engaged in the business of reservoir monitoring for the heavy oil industry with turnkey packages from manufacturing, installation to final commissioning. The corporation is recognized for its expertise and capabilities of providing solutions for the measurement of downhole pressure and temperature. As part of the agreement, Opsens Solutions appoints Precise DHS as an exclusive distributor for the OPP-W sensor product line in the Canadian territory.

On September 7, 2016, Opsens announced the appointment of Mr. Pat Mackin as a Director of the Corporation. Mr. Mackin brings over 25 years of experience in the medical device industry. Since September 2014, Mr. Mackin has been President and Chief Executive Officer of CryoLife, Inc. (NYSE:CRY) ("CryoLife"), a leader in the manufacturing, processing, and distribution of implantable living tissues and medical devices used in cardiac surgical procedures. CryoLife markets and sells products in more than 80 countries worldwide.

## Fiscal Year 2016

On August 15, 2016, Opsens announced that OptoWire's performance was highlighted in the Circulation Journal, the Official Journal of the Japanese Circulation Society.

On June 22, 2016, Opsens announced receipt of Health Canada approval to sell the OptoWire II in Canada.

On May 17, 2016, Opsens announced it has completed a non-brokered private placement for gross proceeds of approximately \$5,000,000. In connection with the offering, the Corporation issued a total of 4,761,000 units at a price of \$1.05 per unit. Each unit consists of one common share in the capital stock of Opsens and one-half of one common share purchase warrant, with each whole common share purchase warrant entitling the holder thereof to purchase one common share at a price of \$1.55 until November 16, 2017.

On March 16, 2016, Opsens announced the 510(k) clearance from the U.S. FDA for the OptoWire II, an optical guidewire developed to measure FFR.

Opsens had already received FDA approval for the OptoWire I, the first generation of its optical guidewire. The OptoWire II is a new design comprising a hydrophilic coating that further improves the performance of the guidewire in the most tortuous and calcified vessels.

On March 8, 2016, Opsens announced that it had been recognized in the top performing Technology companies in the 2016 TSX Venture 50<sup>®</sup>. The TSX Venture 50<sup>®</sup> ranks the top 10 companies in five major industry sectors, identifying the ones that have shown strong results on three equally weighted criteria of market performance: market capitalization growth, share price appreciation and trading volume.

On January 25, 2016, Opsens announced the hiring of George Quinoy as Vice President / General Manager U.S. Commercial Sales & Operations. He will be responsible for the U.S. commercialization of Opsens' products intended to measure FFR. Opsens' FFR products, the OptoWire and the OptoMonitor, are designed to optimize the diagnostic and guide treatment in patients with coronary artery disease.

On December 22, 2015, Opsens announced it has completed a public offering for aggregate gross proceeds of approximately \$5,000,000. In connection with the offering, the Corporation issued a total of 5,681,819 units at a price of \$0.88 per unit. Each unit consists of one common share in the capital stock of Opsens and one-half of one common share purchase warrant, with each whole common share purchase warrant entitling the holder thereof to purchase one common share at a price of \$1.20 until June 22, 2017.

The Corporation also issued 313,886 broker warrants to the syndicate of agents as additional compensation, each broker warrant entitling the holder to purchase one common share at a price of \$0.88 until June 22, 2017.

On November 30, 2015, Opsens announced receipt of orders worth more than \$1.2 million for its products to measure FFR from the Japanese market. The orders placed by Opsens' Japanese distributor, a player in interventional cardiology at the head of a well-organized distribution network, more than double Opsens' FFR revenues from fiscal year 2015.

On November 26, 2015 Opsens announced that its Japanese partner had received Shonin approval from the Japanese Ministry of Health, Labour and Welfare to market the OptoWire II in Japan.

On November 12, 2015, Opsens announced it has been granted CE marking for the OptoWire II, the improved version of its pressure guidewire OptoWire (the "OptoWire I") developed to measure FFR in patients with coronary artery disease. CE Marking allows Opsens to sell the OptoWire II in Europe, the world's second largest market.

On November 11, 2015, Opsens announced that the OptoWire I and OptoMonitor (the "FFR Products") were used for the first time in the United States by Dr. Morton J. Kern and Dr. Arnold Seto at the University of California, Irvine and VA Long Beach, California.

On October 28, 2015, Opsens announced that the OptoWire I, its guidewire to measure FFR, had reached a milestone, having been used in 1,000 patients.

On September 16, 2015, Opsens announced the hiring of Mr. Anthony E. Gibbons as Vice President, Sales and Marketing. He will be responsible for the global commercialization plan for Opsens' products to measure FFR.

On September 16, 2015, Opsens announced that Mr. Lucien Goffart had resigned from the Board of Directors of the Corporation.

On September 3, 2015, Opsens announced the reorganization of its corporate structure. As part of this reorganization, only the medical activities will remain in the Opsens business unit, while the industrial activities of the Corporation, including oil and gas, will be consolidated in the Opsens Solutions business unit.

## Fiscal Year 2015

On August 28, 2015, Opsens announced a partnership agreement between Opsens Solutions and Precise DHS for the installation of its products for the oil and gas market in Western Canada.

On July 21, 2015, Opsens announced it had received Health Canada's approval to commercialize its FFR Products in Canada.

On June 25, 2015, Opsens announced it is going forward with a massive expansion to increase the manufacturing capacity and accommodate its growing number of employees by moving its medical activities into a nearly 30,000 square foot building. Therefore, the Corporation has signed a long-term lease as the sole tenant of a building that is highly compatible with its activities. This facility will become the Corporation's new headquarters and will host the bulk of its production, research and development, sales and administrative activities.

On June 15, 2015, Opsens announced the 510(k) clearance from the U.S. Food and Drug Administration ("FDA") for its FFR Products, giving Opsens permission to sell its products in the United States.

On May 20, 2015, Opsens announced the first use of its FFR Products by Dr. Nico Pijls in Eindhoven, the Netherlands. Dr. Pijls is one of the pioneers of FFR and collaborated extensively to establish FFR as the gold standard in the evaluation of coronary lesions.

On March 31, 2015, Opsens announced that its common shares had begun trading under the ticker symbol "OPSSF" on the OTCQX marketplace in the United States. The trading of Opsens' common shares in the United States will significantly increase its visibility among institutional and individual American investors.

On January 20, 2015, Opsens announced the appointment of Mr. Denis Harrington as a Director of the Corporation. Mr. Harrington owns a management and strategy consulting firm he founded in 2012. Prior to managing his own corporation, he worked for several medical companies and, among other things, led BridgePoint Medical, Inc., as President and Chief Executive Officer, from the development stage through commercialization and to a successful acquisition by Boston Scientific Corporation in October 2012.

On January 12, 2015, Opsens announced the first use of its FFR Products in Europe by one of the founding fathers of FFR, Dr. Bernard De Bruyne, at the Cardiovascular Center Aalst, Belgium.

On January 8, 2015, Opsens announced receipt of a large order worth more than \$1 million for fiber optic sensor systems in order to meet the needs of one of the world's largest mining companies in mining operations in South America. Opsens will provide a monitoring system that will optimize mining operations to prevent negative impact on the environment.

On December 22, 2014, Opsens announced the first use of its FFR Products in several patients by Dr. Shigeru Saito during the 21<sup>st</sup> Kamakura Live Demonstration Course 2014 in Yokohama (Japan), an event to introduce to Japanese cardiologists new medical devices and practices intended to improve the treatment and the health of patients.

On November 19, 2014, Opsens announced it had been granted CE marking for its FFR Products, which allows these products to be marketed in Europe.

On October 7, 2014, Opsens sent out an update on its FFR Products' path to commercialization, including details on the first clinical work on humans and a progress report on regulatory activities. In its release, Opsens announced that following receipt of Health Canada's authorization to conduct a pilot study to assess usability, functionality and safety of its FFR Products in patients with ischemic coronary artery disease who are referred for diagnostic angiography, 27 patients had been enrolled at the *Institut universitaire de cardiologie et de pneumologie de Québec* - Québec Heart and Lung Institute. Opsens reported that its FFR Products had been successfully used in the diagnosis of 27 patients and that the Corporation was planning on completing the study and would enroll up to 50 patients to gather additional data on its FFR Products.

Opsens also reported it had filed a premarket 510(k) notification with the U.S. FDA in the United States and for CE marking in Europe to obtain approval to sell its FFR Products in these markets.

On October 2, 2014, Opsens announced that its Japanese distributor received Shonin approval from the Japanese Ministry of Health, Labor and Welfare to market its FFR Products in Japan.

#### Fiscal Year 2014

On August 1, 2014, Mr. Pierre Carrier resigned from his position of director and Chairman of the Board of Directors of Opsens.

On May 8, 2014, Opsens appointed Mr. Lucien Goffart to its Board of Directors. Mr. Goffart is an international sales and marketing specialist in interventional cardiology devices. His hiring shows that Opsens is highly committed to breaking into the FFR market.

On May 1, 2014, Opsens won two awards at the 7<sup>th</sup> Annual Stock Corporation Gala.

On April 15, 2014, Opsens granted an exclusive worldwide license to Abiomed, Inc. ("Abiomed") for an aggregate amount of US\$6 million (the "License Agreement"). With the License Agreement, Opsens will supply the sub-assembly of its miniature optical pressure sensor to be integrated in Abiomed's circulatory assist devices. Abiomed paid US\$1.5 million (\$1,647,000) upon closing, while the balance will be disbursed based on the achievement of certain milestones, such as the meeting of certain performance requirements, the filing of a regulatory application, the obtaining of a regulatory approval and the transfer of manufacturing to Abiomed. See section "Material Contracts" of this Annual Information Form.

On February 18, 2014, Opsens completed a public offering for aggregate gross proceeds of \$8,505,104. In connection with the offering, the Corporation issued a total of 5,340,220 units at a price of \$0.75 per unit and 6,164,300 common shares at a price of \$0.73 per common share. Each unit consists of one common share in the capital stock of Opsens and one-half of one common share purchase warrant, with each whole common share purchase warrant entitling the holder thereof to purchase one common share at a price of \$1.05 until February 18, 2016.

The value of one-half of one common share purchase warrant was established at \$0.02, being the difference between the issuing price of \$0.75 per unit and of \$0.73 per common share. Expenses of the offering include 7% underwriting fees of \$595,357 and other professional fees and miscellaneous fees of \$373,991 for total fees of \$969,348.

The Corporation also issued 805,316 broker warrants to the syndicate of underwriters as additional compensation, each broker warrant entitling the holder to purchase one common share at a price of \$0.73 until February 18, 2016.

On February 12, 2014, Opsens was named a 2014 TSX Venture  $50^{\circ}$  corporation by the TMX Group. The TSX Venture  $50^{\circ}$  ranks the top 10 companies in five major industry sectors, identifying emerging companies that have shown strong results in key measures of market performance. Opsens was ranked among the top Canadian Technology and Life Sciences companies.

On January 7, 2014, Opsens' Japanese distributor submitted the application for Shonin approval to the Pharmaceuticals and Medical Devices Agency of the Ministry of Health, Labour and Welfare of Japan, completing the first regulatory filing toward FFR commercialization. Once approval has been secured, Opsens will be allowed to sell its FFR Products in Japan.

On November 13, 2013, Opsens was named as one of Canada's fastest growing technology companies in the Deloitte Technology Fast 50<sup>TM</sup> awards for technological innovation, entrepreneurship, rapid growth and leadership, based on the percentage of revenue growth over five years.

# 4. <u>DESCRIPTION OF THE BUSINESS</u>

#### 4.1 General

The Corporation focuses on the measure of FFR in interventional cardiology. Opsens offers an advanced optical-based pressure guidewire, the OptoWire, that aims at improving the clinical outcome of patients with coronary artery disease. Opsens is also involved in industrial activities. The Corporation develops, manufactures and installs innovative fibre optic sensing solutions for critical applications such as the monitoring of oil wells and other demanding industrial applications.

## A) Summary

In order to strengthen its medical identity to develop its full potential in the FFR market, the Corporation reorganized, on September 1, 2015, its corporate structure. Following the reorganization, the Corporation is now organized into two segments: Medical and Industrial.

Medical segment: In this segment, Opsens focuses mainly on the measure of FFR in interventional cardiology.

Industrial: In this segment, Opsens' develops, manufactures and installs innovative fiber optic sensing solutions for critical applications such as the monitoring of oil wells and other demanding industrial applications.

The principal factors employed in the identification of the two segments reflected in this note include the Corporation's organizational structure, the nature of the reporting lines to the President and Chief Executive Officer and the structure of internal reporting documentation such as management's accounts and budgets.

Sales between segments are carried out at cost plus a reasonable margin.

The following table shows the revenues and the percentage for each reportable segments of the Corporation for the fiscal years ended August 31, 2016 and 2015.

	Fiscal Years Ended August 31				
Sales to Third Parties	2016 (\$)	2016 (%)	2015 (\$)	2015 (%)	
Medical Segment	6,429,256	67.0	5,034,767	58.1	
Industrial Segment	3,171,561	33.0	3,629,963	41.9	
Total	9,600,817	100.0	8,664,730	100.0	

## Medical Segment

Under this reportable segment, the Corporation has integrated its miniature fiber optic pressure sensor into an innovative guidewire designed to navigate through the vascular system to reach lesions with ease. The technical advantages of the Corporation's products to measure FFR are likely to enable it to take a share of the market.

In fact, the FFR market reached approximately US\$350 million in 2015. Management estimates a potential market of approximately US\$1 billion in the medium term. The FFR measurement is recognized as the standard in the diagnosis of the severity of coronary lesions, which leads to better outcomes for patients.

FFR is an index of the functional severity of coronary stenosis that is calculated from pressure measurements taken before and after a narrowing of the arteries during coronary angiography. This approach provides an immediate diagnostic that allows a better assessment of the suitability of the installation of a stent to improve blood circulation in the cardiovascular system.

For the marketing of its products to measure FFR, the Corporation anticipates the establishment of partnerships with distributors in every major geographic areas. The Distribution Agreement covering Japan, Korea and Taiwan was signed on November 19, 2012 with a Japanese-based medical corporation in a US\$5 million transaction. Under the terms of the Distribution Agreement, conditions are as follows:

- US\$3 million for the distribution rights for the Corporation's FFR Products for Japan, Korea and Taiwan, which includes:
  - US\$2 million at signing;
  - US\$1 million upon receipt of regulatory approval for the Corporation's FFR Products in Japan, which was obtained on October 2, 2014;
- US\$2 million in convertible debenture at signing.

The Corporation has signed distribution agreements for many countries in Europe and in the Middle East. Additional distribution agreements are being negotiated and should be finalized in 2017 and beyond.

As part of its continuous improvement process, the Corporation will continue to develop the OptoWire and the OptoMonitor to provide cardiologists with the most effective tools. The development of new versions of the OptoWire and the OptoMonitor to measure FFR represents Opsens' most important research and development project. During fiscal 2016, the Corporation completed filings for product approval for commercial purposes for the OptoWire II in the most important markets - the United States, Europe, Japan and Canada. During fiscal 2016, the Corporation also received clearances for commercial purposes in all these markets. Despite the high performance of its products, the Corporation has identified additional opportunities to improve its products. Efforts will be dedicated on these improvements in fiscal 2017. The development of these improvements is in its early stages. As for the OptoMonitor, a new display was marketed in fiscal 2016. In fiscal 2017, Opsens also expects to market a new version of the OptoMonitor. Development of this project will be managed by internal resources but will also rely on outside contractors to supplement when required to achieve success. To bring these projects to approval, the

Corporation plans to invest approximately \$3.2 million, in addition to amounts received as grants and tax credits.

## **Industrial Segment**

Under this reportable segment, the Corporation's technology, expertise and products can serve several markets including aerospace, geotechnical, infrastructures, oil and gas, mining, laboratories and others.

**Structural Health Monitoring Market**: the opportunities in this market are related principally to strain, load and displacement measurements. The applications are found in geotechnical, civil engineering, energy, aerospace and oil and gas sectors. The monitoring of civil engineering structures accounts for a large proportion of this market. Only in Europe, there is more than five billion square meters of dams and bridges. In the United States alone, there are 67,000 unmonitored bridges with an anticipated cost to repair or replace of US\$76 billion. New industrial versions of the strain sensor like the extensometer and load cell are the main flagship products for these applications.

**Pressure Monitoring Solution Market**: the opportunities in this market are principally related to absolute and differential pressure measurements. The measure of the pressure is found in many industrial applications of the energy, geotechnical, oil and gas and aerospace sectors. New industrial versions of the pressure sensor and the recent addition of a differential pressure sensor are the main flagship products for these applications.

**Traditional Niche Applications Market**: include niche applications in which Opsens is currently involved like the electro explosive device (EED) application. It also includes applications such as SAGD in Western Canada and laboratories applications (special projects and custom products). In Canada, in the past, the Corporation carried out manufacturing, sales and installation of its products. Since September 22, 2016, marketing of oil and gas products is done through a third party, Precise DHS. Precise DHS is a Canadian corporation operating in the heavy oil industry, specializing in compliance of reservoirs monitoring requirements in Western Canada.

The WLPI-2, the new and improved signal conditioner platform, represents the most important research and development project of the Corporation. During fiscal 2016, the Corporation made good progress in the design development phase. During fiscal year 2017, the Corporation's research and development team should complete the design development and the transfer to production. All the research and development efforts are conducted by the Corporation's employees. The Corporation plans to invest up to approximately \$175,000 to finalize the project.

#### B) Production and Services

# **Medical Segment**

Under this reportable segment, the Corporation devotes extensive efforts to its FFR activities. In this area, Opsens develops, manufactures and markets a comprehensive medical product that is sold through a network of distributors and a direct sales force. Developed by the Corporation, the OptoWire is the first patented nitinol-based optical guidewire for FFR. The OptoWire provides intra-coronary blood pressure measurements with unique, patented optical pressure guidewire technologies. It is immune to adverse effects related to blood contact, and allows easy and reliable connectivity that leads to reliable FFR measurements in extended conditions of usage. The OptoWire is also designed to provide cardiologists with a guidewire that provides optimal performance to navigate coronary arteries and cross blockages with ease and safety. Paired with its guidewire, Opsens has developed the OptoMonitor. The OptoWire and OptoMonitor combination allows its users to consolidate patient information on their hemodynamic system, which is also offered by competitors' products.

Opsens has developed a new version of the OptoWire I, the OptoWire II, a guidewire for FFR with all the qualities of the OptoWire I, but coated with a hydrophilic sheath that further facilitates navigation in the most tortuous and calcified vessels. This new version is the one Opsens selected for large-scale commercialization.

Sensors for medical instrumentation measure the temperature and pressure. The main features of these sensors are size, strength and the absence of drift during operation. In medical instrumentation, the Corporation markets products as original equipment manufacturer or directly to end-users. These products are in the commercial phase.

#### **Industrial Segment**

Fiber optic sensors perform well in the presence of electromagnetic fields, radiofrequencies, micro-waves, high-intensity magnetic waves (MR) or high temperatures, elements that typically disrupt results with conventional sensors.

In the industrial sector, customers' needs are wide-ranging and require measuring various parameters like pressure, temperature, strain and others. The Corporation is focusing on business opportunities with highest returns and has developed new products to fulfill their specific needs. Amongst others, the new OPP-G fiber optic pressure sensor and the new OEC fiber optic extensometer sensors have grabbed the attention of many industries such as aerospace and energy.

Under this reportable segment, the Corporation commercializes optical and conventional sensors connected to readout units to measure temperature and pressure for the oil and gas industry in Alberta, Canada. Opsens Solutions uses an experienced supplier, Precise DHS, to distribute and install these sensors. The Corporation manufactures the majority of its products in its facility located in Québec City. The Corporation's manufacturing strategy for its products is to use third-party manufacturing partners for certain proprietary components used in the final assembly. The Corporation performs incoming inspection and calibration on these components, assemble them into finished devices and test the final product to assure quality control.

#### OPP-W

The OPP-W fiber optic sensor to measure pressure and temperature operates in the harsh SAGD production well environment. These wells are hydrogen rich, therefore extremely corrosive and operate at high temperatures, up to  $300^{\circ}$ C.

The OPP-W fiber optic sensor system is in the commercial phase. In March 2013, the Corporation received its largest order to date to supply and install 48 sensors in an Alberta SAGD oil sands project.

# C) Specialized Skill and Knowledge

# **Medical Segment**

Under this reportable segment, the Corporation has a research and development department that includes engineering, testing and prototyping. This department employs eleven people who work, on a permanent basis, to improve existing products and do research and development for new products. These employees are engineers and optical and software technicians.

## **Industrial Segment**

Under this reportable segment, the Corporation has a research and development department that includes engineering, testing and prototyping. This department employs eight people who work, on a permanent basis, to improve existing products and do research and development for new products. These employees are engineers and optical and software technicians.

# **D)** Competitive Conditions

The competitive conditions vary depending on the markets where the Corporation's sensors are used. In general, the products offered by the Corporation have an added value compared with conventional and optical systems typically used in various conditions. The Corporation makes sure it highlights this added value when addressing its target markets.

# Medical Segment

In the FFR market, four corporations offer products to measure FFR. These corporations are St. Jude Medical, Inc., Volcano Corporation, Boston Scientific Corporation and ACIST. Both St. Jude Medical, Inc. and Volcano Corporation use electrical sensors in their guidewire to get the blood pressure measurement. ACIST uses fiber optic sensors combined with a microcatheter used over a standard guidewire. The Corporation and Boston Scientific Corporation use optical sensors in their guidewire to get the blood pressure measurement. The Corporation's guidewire instrumented with a pressure sensor is different on several aspects, from accuracy and reliability of the sensing technology, the mechanical performances of the guidewire and to the connectivity. Optical sensing technology aims to provide reliable measurement in the human body. The main geographic markets where the competitive companies are selling their products to measure FFR are the United States, Europe and Japan.

## **Industrial Segment**

The Corporation industrial line of fiber optic sensors offers unique advantages over traditional sensors in many industries. For example, traditional sensors need to be shielded and grounded for their safe operation in aircrafts and spaceships. The use of composite materials in the newly developed versions of these flying structures have seriously reduced the natural shielding and grounding capacity provided by the older metallic version of these structures. The Corporation fiber optic strain and pressure sensors received attention from majors players in the aerospace industry because they do not require any shielding or grounding and also because of their ease of deployment.

In the Industrial Segment, several companies manufacture conventional and optical sensors to measure strain, temperature, pressure and other parameters. Competition comes from local corporations as well as international corporations located all around the world.

In the oil and gas upstream applications using thermal recovery methods like SAGD, the capacity to control bottom hole pressure and temperature helps improving the steam/oil ratio and to reduce operating and pumping costs. Integration of the Corporation's OPP-W fiber optic pressure and temperature sensor in thermal recovery methods allows operators, production and reservoir engineers to monitor in real time, over a large area, pressure and temperature at the bottom of the wells. They can manage efficiently the heavy oil production reservoirs.

In the oil and gas sector, competition comes from conventional measuring systems like bubble tubes (to measure pressure) and thermocouples (to measure temperature). Several oil services companies offer these types of sensors. Competition also comes from other suppliers of optical measuring systems to measure distributed temperature like Schlumberger Limited, WellDynamics, Inc., Baker Hughes Incorporated and Weatherford International plc. These very large companies are offering their products worldwide.

#### E) New Products

#### Medical Segment

To complement and enhance its offering, the Corporation is constantly developing and offering new products or instruments that complement or improve existing products and instruments. For this reportable segment, the new products to be marketed are the OptoWire III and the OptoMonitor II.

As of the date of this Annual Information Form, the Corporation received approval to commercialize its FFR products in the United States, Europe, Japan and Canada. The Corporation has begun commercialization of the OptoWire II at the beginning of calendar year 2016.

# **Industrial Segment**

The Corporation is continuously maintaining its line of products and solutions at the cutting edge of the technology in order to meet the most challenging needs of its customers. New products like the CorSens unit and the differential pressure sensors released for this reportable segment will help the Corporation to keep its leading position in that matter.

## F) Components

Raw material used by the Corporation is mostly electronic and optical parts. The Corporation's supply policy allows access to more than one supplier for a large proportion of its needs. The Corporation has never had significant supply problems in the past and does not foresee supply problems in the near future for any of its reportable segments. Delivery of electronic parts and of a few optical components may occasionally be delayed. To overcome this problem, the Corporation maintains a minimum inventory level for the most strategic parts and components and is also always looking for alternative suppliers for both of its reportable segments. The Corporation does not expect unusual price increases for its raw material in the coming quarters for both of its reportable segments. For its products to measure FFR, the Corporation signed supply agreements with key suppliers to minimize the risk of supply interruption.

# **G)** Intangible Properties

#### i) Patents

Considering the time and investment required to develop new products, the Corporation's first strategic move is to protect its intellectual property. To allow the Corporation to serve its markets, to benefit from freedom of operation and to protect its innovations, it holds, as of the date of this Annual Information Form, ten patents and filed three patent applications covering geographical areas such as Canada, the United States, Europe, Japan and China. The Corporation's patents expire at various dates through 2036. The Corporation intends to continue to expand its intellectual property position to protect the design and use of its products.

# ii) Trademark

The Corporation is the holder of the PSens trademark registered in Canada since May 16, 2006. Such registration will expire on May 16, 2021.

The Corporation is the holder of the OptoWire trademark registered in Japan and the United States and it will expire in 2024 and 2026, respectively.

The Corporation is the holder of the OptoMonitor trademark registered in Japan and the United States and it will expire in 2024 and 2026, respectively.

## iii) License

On April 15, 2014, the Corporation announced it had entered into the License Agreement with Abiomed in connection with its miniature optical pressure sensor technology for applications in circulatory assist devices. The Corporation has granted Abiomed an exclusive worldwide license to integrate its miniature optical pressure sensor in connection with Abiomed's circulatory assist devices. Under the agreement, Abiomed will pay Opsens an aggregate amount of US\$6 million. Of that amount, US\$1.5 million (\$1,647,000) was paid upon closing, while the balance will be disbursed based on the achievement of certain milestones, such as the meeting of certain performance requirements, the filing of a regulatory application, the obtaining of a regulatory approval and the transfer of manufacturing to Abiomed. See section "Material Contracts" of this Annual Information Form.

On August 16, 2010, Opsens reached an agreement to license its technology in the high-power transformers business to a subsidiary of LumaSense Technologies Inc. of Santa Clara, California, representing Opsens' exit from that line of business. Such agreement gives exclusive and perpetual rights to use Opsens' technology in the transformer business.

# H) Cycles

The seasonal and/or cyclical aspect is not currently significant for both reportable segments of the Corporation. For the Industrial Segment, activities are generally higher in fall and winter quarters for the sector.

## I) Environmental Protection

The Corporation is subject to various federal, provincial and local environmental and occupational health and safety laws and regulations in Canada where operations in both of its reportable segments are conducted. Such laws and regulations concern notably wastewater, storm water flows and disposal of solid waste. Production facilities occasionally produce small quantities of hazardous waste that is recycled or transferred off site in accordance with the applicable regulations.

The Corporation complies in all material aspects with Canadian environmental requirements. Investment in capital property and other expenditures are made and incurred in a timely manner to maintain said compliance. These investments made with regards to environmental protection have had no operational or financial impact on the expenses in capital property, earnings or on the competitive position in both reportable segments of the Corporation.

## J) Employees

As of August 31, 2016, the Corporation counted 111 employees in both reportable segments. Of this number, 88 employees, working for the Medical Segment, are located in Canada, Ireland and the United States. 23 employees, working for the Industrial Segment, are all located in Canada.

The Corporation's group of employees is composed of a multidisciplinary team grouping scientific and technical expertise in various fields such as software development, electronics, optics, physics, chemistry, civil engineering, mechanical engineering and geomechanical engineering. The Corporation provides its employees with an environment that is favourable to sustained development of their skills and full achievement of their ambitions. Training and development of the employees are key elements in the Corporation's growth.

Employees of both reportable segments of the Corporation are not unionized. Working conditions, that are periodically revised, are governed by written agreement between on the one hand any reportable segments of the Corporation and on the other hand their respective employees.

## **K)** Foreign Operations

The proportion of export revenues in consolidated sales should be assessed in relation to business growth in the medical field, especially in FFR.

The following table presents the Corporation's consolidated revenues in both reportable segments by geographic sector for the fiscal years ended August 31, 2016 and 2015.

	Fiscal Years Ended August 31		
Revenues per Geographic Sector <sup>(1)</sup>	2016 (\$)	2015 (\$)	
Japan	3,521,669	3,978,097	
Canada	2,207,299	1,350,228	
United States	1,506,971	870,179	
Chile	6,396	1,169,182	
Other <sup>(2)</sup>	2,358,482	1,297,044	
Total	9,600,817	8,664,730	

#### Notes:

- (1) Revenues are attributed to the geographic sector based on the clients' location.
- (2) Comprised of revenues generated in countries for which amounts are individually not significant.

## L) Lending

The investment policy is approved by the Board of Directors of the Corporation and it is primarily focused on the protection of capital while considering the performance and fiscal aspects. The Corporation carries out investment transactions with recognized financial institutions with credit ratings of at least A and higher, in either bonds, money market funds or guaranteed investment certificates.

#### 4.2 Risk Factors

The Corporation operates in an industry that contains various risks and uncertainties. The risks and uncertainties listed below are not the only ones to which the Corporation is subject. Additional risks and uncertainties not presently known by the Corporation, or which the Corporation deems to be currently insignificant, may impede the Corporation's performance. The materialization of one of the following risks could harm the Corporation's activities and have significant negative impacts on its financial situation and its operating results. In that case, the Corporation's stock price could be affected.

In the FFR market, the Corporation is dependent on the success of the OptoWire, its guidewire measuring FFR and cannot be certain that it will achieve the broad acceptance necessary to develop a profitable business. Expected future revenues are primarily derived from sales of the OptoWire. The OptoWire is designed to provide cardiologists with a pressure guidewire to navigate coronary arteries and cross blockages with ease, while also measuring intra-coronary blood pressure. The Corporation expects that sales of its FFR products will account for a majority of its revenues for the foreseeable future, however it is difficult to predict the penetration and future growth rate or size of the market for FFR technology. The expansion of the FFR market depends on a number of factors, such as:

• physicians accepting the benefits of the use of FFR products in conjunction with angiography;

- physician experience with FFR products either used alone or jointly used in a single percutaneous coronary intervention, or PCI;
- the availability of training necessary for proficient use of FFR products, as well as willingness by physicians to participate in such training;
- the additional procedure time required for use of FFR products compared to the perceived benefits;
- the perceived risks generally associated with the use of the FFR products and procedures, especially its new products and procedures;
- the placement of the FFR products in treatment guidelines published by leading medical organizations;
- the availability of alternative treatments or procedures that are perceived to be or are more effective, safer, easier to use or less costly;
- hospitals' willingness, and having sufficient budgets, to purchase the FFR products;
- the size and growth rate of the PCI market in the major geographies in which the Corporation operates;
- the availability of adequate reimbursement; and
- the success of the Corporation's marketing efforts and publicity regarding FFR technology.

Even if FFR technology gains wide market acceptance, the FFR products may not adequately address market requirements and may not continue to gain market acceptance among physicians, healthcare payors and the medical community due to factors such as:

- the lack of perceived benefit from information related to pressure characteristics of blood around blockages available to the physician;
- the actual and perceived ease of use of the FFR products;
- the quality of the measurements provided by the FFR products;
- the cost, performance, benefits and reliability of the FFR products relative to competing products and services; and
- the extent and timing of technological advances.

If FFR technology generally, or the FFR products specifically, do not gain wide market acceptance, the Corporation may not be able to achieve its anticipated growth, revenues or profitability and its results of operations would suffer.

The risks inherent in the Corporation's international operations may adversely impact its revenues, results of operations and financial condition. The Corporation anticipates that it will derive a significant portion of its revenues from operations in Japan, the United States and Europe. As the Corporation expands internationally, it will need to retain and train its distributors, hire, train and retain qualified personnel for its direct sales efforts and train other personnel in countries where language, cultural or regulatory impediments may exist. The Corporation cannot ensure that distributors, physicians, regulators or other government agencies outside Canada will accept its products, services and business practices. Current or future trade, social and environmental regulations or political issues could restrict the supply of resources used in production or increase its costs. Compliance with such regulations is costly. Any failure to comply with applicable legal and regulatory obligations could impact the Corporation in a variety of ways that include, but are not limited to, significant criminal, civil and administrative penalties, including imprisonment of individuals, fines and penalties, denial of export privileges, seizure of shipments and restrictions on certain business activities. Failure to comply with applicable legal and regulatory obligations could result in the disruption of the Corporation's manufacturing, shipping and sales activities. The Corporation's international sales operations expose it and its representatives, agents and distributors to risks inherent in operating in foreign jurisdictions, including:

- the Corporation's ability to obtain, and the costs associated with obtaining export licenses and other required export or import licenses or approvals;
- changes in duties and tariffs, taxes, trade restrictions, license obligations and other non-tariff barriers to trade:
- burdens of complying with a wide variety of foreign laws and regulations related to healthcare products;
- costs of localizing product and service offerings for foreign markets;
- business practices favoring local companies;
- longer payment cycles and difficulties collecting receivables through foreign legal systems;
- difficulties in enforcing or defending agreements and intellectual property rights;
- differing local product preferences, including as a result of differing reimbursement practices;
- fluctuations in foreign currency exchange rates and their impact on the Corporation's operating results; and
- changes in foreign political or economic conditions.

The Corporation cannot ensure that one or more of these factors will not harm the Corporation. Inability to expand the Corporation's international operations would adversely impact its revenues, results of operations and financial condition.

If the third-party distributors that the Corporation will rely on to market and sell its products are not successful, the Corporation may be unable to increase or maintain its level of revenues. A portion of its revenue will be generated by third-party distributors, especially in international markets. If these distributors cease or limit operations or experience a disruption of their business operations, or are not successful in selling the Corporation's products, it may be unable to increase or maintain its level of revenues, and any such developments could negatively affect its international sales strategy. Over the long term, the Corporation intends to grow its business internationally, and to do so it will need to attract additional distributors to expand the territories in which the Corporation does not directly sell its products. The Corporation's distributors may not commit the necessary resources to market and sell its products. If current or future distributors do not continue to distribute the Corporation's products or do not perform adequately or if the Corporation is unable to locate distributors in particular geographic areas, it may not realize revenue growth internationally.

The Corporation may require significant additional capital to pursue its growth strategy, and its failure to raise capital when needed could prevent the Corporation from executing its growth strategy. The Corporation believes that its existing cash and cash equivalents will be sufficient to meet its anticipated cash needs for at least the next 12 months. However, the Corporation may need to obtain additional financing to pursue its strategy, to respond to new competitive pressures or to act on opportunities to acquire or invest in complementary businesses, products or technologies. The timing and amount of the Corporation's working capital and capital expenditure requirements may vary significantly depending on numerous factors, including:

- market acceptance of its products;
- the revenues generated by its products;
- the need to adapt to changing technologies and technical requirements, and the costs related thereto;
- the costs associated with expanding its manufacturing, marketing, sales and distribution efforts;
- the existence and timing of opportunities for expansion, including acquisitions and strategic transactions; and
- costs and fees associated with defending existing or potential litigation.

If the Corporation fails to properly manage its anticipated growth, the Corporation could suffer. Rapid growth of the Corporation is likely to place a significant strain on its managerial, operational and financial resources and systems. To execute the Corporation's anticipated growth successfully, it must attract and retain qualified personnel and manage and train them effectively. The Corporation anticipates hiring additional distributors and personnel to assist in the commercialization of its current products and in the development of future products. The Corporation will be dependent on its personnel and third parties to effectively market and sell its products to an increasing number of customers. It will also depend on its personnel to develop and manufacture in anticipated increased volumes its existing products, as well as new products and product enhancements. Further, the Corporation anticipated growth will place additional strain on its suppliers resulting in increased need for it to carefully monitor for quality assurance. Any failure by the Corporation to manage its growth effectively could have an adverse effect on its ability to achieve its development and commercialization goals.

If the Corporation is unable to protect its intellectual property effectively, its financial condition and results of operations could be adversely affected. Patents and other proprietary rights are essential to the Corporation and its ability to compete effectively with other companies is dependent upon the proprietary nature of its technologies. The Corporation also relies upon trade secrets, know-how, continuing technological innovations and licensing opportunities to develop, maintain and strengthen its competitive position. The Corporation seeks to protect these, in part, through confidentiality agreements with certain employees, consultants and other parties. The Corporation pursues a policy of generally obtaining patent protection in both Canada and in key foreign countries for patentable subject matter in its proprietary devices and also attempt to review third-party patents and patent applications to the extent publicly available to develop an effective patent strategy, avoid infringement of third-party patents, and monitor the patent claims of others.

The Corporation currently owns numerous Canadian and foreign patents and has patent applications pending. The Corporation cannot be certain that any pending or future patent applications will result in issued patents, that any current or future patents issued will not be challenged, invalidated or circumvented or that the rights granted thereunder will provide a competitive advantage to it or prevent competitors from entering markets which the Corporation currently serves. In addition, the Corporation may have to take legal action in the future to protect its trade secrets or know-how or to defend itself against claimed infringement of the rights of others. Any legal action of that type could be costly and time consuming to the Corporation despite insurance policies owned by the Corporation and it cannot be certain of the outcome. The invalidation of key patents or proprietary rights which the Corporation owns or an unsuccessful outcome in lawsuits to protect its intellectual property could have a material adverse effect on its financial condition and results of operations.

Pending and future patent litigation could be costly and disruptive to the Corporation and may have an adverse effect on its financial condition and results of operations. The Corporation operates in an industry that is susceptible to significant patent litigation and, in recent years, it has been common for companies in the medical device field to aggressively challenge the rights of other companies to prevent the marketing of new devices. Companies that obtain patents for products or processes that are necessary for or are useful to the development of its products may bring legal actions against the corporation claiming infringement. Defending intellectual property litigation is expensive and complex and outcomes are difficult to predict. Any pending or future patent litigation may result in significant royalty or other payments or injunctions that can prevent the sale of products and may cause a significant diversion of the efforts of the Corporation's technical and management personnel. While the Corporation intends to defend any such lawsuits vigorously, it cannot be certain that it will be successful. In the event that the Corporation's right to market any of its products is successfully challenged or if the Corporation fails to obtain a required license or is unable to design around a patent, the Corporation's financial condition and results of operations could be materially adversely affected.

Quality problems with the processes and products could harm the Corporation's reputation for producing high-quality products and diminish its competitive advantage, sales and market share. The manufacturing of the FFR products is a highly rigorous and complex process, due in part to strict regulatory requirements. Any failure to manufacture the FFR products in accordance with product specifications could result in increased costs, lost revenues, field corrective actions, customer dissatisfaction or voluntary product recalls, any of which could harm the Corporation's profitability and commercial reputation. Problems may arise during manufacturing for a variety of reasons, including equipment malfunction, failure to follow specific protocols and

procedures and problems with raw materials. Quality is extremely important to the Corporation and its customers due to the serious and costly consequences of product failure. The Corporation's quality certifications are critical to the marketing success of its products. If the Corporation fails to meet these standards, its reputation could be damaged, it could lose customers, and its revenue and results of operations could decline. Aside from specific customer standards, the success of the Corporation depends generally on the ability to manufacture, to exact tolerances, precision-engineered components, subassemblies, and finished devices from multiple materials. If the components fail to meet these standards or fail to adapt to evolving standards, the Corporation's reputation as a manufacturer of high-quality devices will be harmed, its competitive advantage could be damaged, and it could lose customers and market share.

The loss of any of the Corporation's sole-source suppliers or an increase in the price of inventory supplied to it could have an adverse effect on the Corporation's financial condition and results of operations. The Corporation purchases certain supplies used in its manufacturing processes from single sources due to quality considerations, costs or constraints resulting from regulatory requirements. Agreements with certain suppliers are terminable by either party upon short notice and the Corporation has been advised periodically by some suppliers that in an effort to reduce their potential product liability exposure, they may terminate sales of products to customers that manufacture implantable medical devices, and the Corporation may not be able to establish additional or replacement suppliers for certain components or materials quickly. In addition, the Corporation may lose a sole-source supplier due to, among other things, the acquisition of such a supplier by a competitor (which may cause the supplier to stop selling its products to it) or the bankruptcy of such a supplier, which may cause the supplier to cease operations. A reduction or interruption by a sole-source supplier of the supply of materials or key components used in the manufacturing of the Corporation's products or an increase in the price of those materials or components could adversely affect the Corporation's financial condition and results of operations.

The Corporation's might encounter challenges relating to the management and operation of its new facility, and the expansion has and will continue to increase its fixed costs, which may have a negative impact on its financial results and condition. In 2016, the Corporation proceeded to a massive expansion to increase its manufacturing capacity and accommodate its growing number of employees. The Corporation concluded a leasing agreement for a 30,000 square foot building. There is no guarantee that the Corporation will be able to successfully operate this facility in an efficient or profitable manner. If the Corporation is unable to operate this facility in a timely and cost-effective manner, or at all, then it might experience disruption in its operations, which could negatively impact its business and financial results.

Instability in international markets or foreign currency fluctuations could adversely affect the Corporation's results of operations. The FFR products will be marketed in many countries, with its largest geographic markets being Japan, Europe, and the United States. As a result, the Corporation's faces currency and other risks associated with its international sales. The Corporation is exposed to foreign currency exchange rate fluctuations due to transactions denominated primarily in United States dollars and Euros, which may potentially reduce the Canadian dollars the Corporation receives for sales denominated in any of these foreign currencies and/or increase the Canadian dollars the Corporation reports as expenses in these currencies, thereby affecting its reported consolidated revenues, profit margins and results of operations. Fluctuations between the currencies in which the Corporation does business will cause foreign currency transaction gains and losses. The Corporation cannot predict the effects of currency

exchange rate fluctuations upon its future operating results because of the number of currencies involved, the variability of currency exposures and the volatility of currency exchange rates.

In addition to foreign currency exchange rate fluctuations, there are a number of additional risks associated with the Corporation's international operations, including those related to:

- the imposition of or increase in import or export duties, surtaxes, tariffs or customs duties;
- the imposition of import or export quotas or other trade restrictions;
- foreign tax laws and potential increased costs associated with overlapping tax structures;
- compliance with import/export laws;
- longer accounts receivable cycles in certain foreign countries, whether due to cultural, economic or other factors;
- changes in medical reimbursement programs and regulatory requirements in international markets in which the Corporation operates; and
- economic and political instability in foreign countries, including concerns over excessive levels of sovereign debt and budget deficits in countries where the Corporation markets its products that could result in an inability to pay or timely pay outstanding payables.

Modifications to the Corporation's products may require new regulatory clearances or approvals or may require the Corporation to recall or cease marketing its products until clearances or approvals are obtained. Modifications to the Corporation's products may require the submission of new regulatory filings. If a modification is implemented to address a safety concern, the Corporation may also initiate a recall or cease distribution of the affected device. In addition, if the modified devices require the submission of a new regulatory filing and the Corporation distributes such modified devices without obtaining regulatory clearances or approvals, then the Corporation may be required to recall or cease distributing the devices. Regulatory bodies can review a manufacturer's decision not to submit a modification and may disagree. Regulatory bodies can also on their own initiatives determine that clearances or approvals are required. The Corporation may make additional modifications in the future that it believes do not or will not require clearance or approval. If the Corporation begins manufacture and distribution of the modified devices and regulatory bodies later disagree the Corporation's determination and require the submission of new regulatory filing for the modifications, the Corporation may also be required to recall the distributed modified devices and to stop distribution of the modified devices, which could have an adverse effect on its business. If the regulatory bodies do not clear or approve the modified devices, the Corporation may need to redesign the devices, which could also harm its business. When a device is marketed without a required clearance or approval, the regulatory bodies have the authority to bring an enforcement action, including injunction, seizure and criminal prosecution. Regulatory bodies consider such additional actions generally when there is a serious risk to public health or safety and the Corporation's corrective and preventive actions are inadequate to address the regulatory bodies' concerns.

If the Corporation or its suppliers fail to comply with regulatory bodies' quality system or ISO quality management systems, manufacturing of its products could be negatively impacted and sales of its products could suffer. The Corporation's manufacturing practices must be in compliance with regulatory bodies' quality system regulation, which governs the facility, methods, controls procedures, and records of the design, manufacture, packaging, labeling, storage, shipping, installation, and servicing its products intended for human use. The Corporation is also subject to similar state and foreign requirements and licenses, including the current Good Manufacturing Practice (cGMP) for medical devices, the Medical Device Directive (93/42/EEC) and the ISO 13485 Quality Management Systems, standard applicable to medical devices. In addition, the Corporation must engage in regulatory reporting in the case of potential patient safety risks and makes available its manufacturing facility, procedures, and records for periodic inspections and audits by governmental agencies. If the Corporation fails to comply with these regulations and standards, its operations could be disrupted and its manufacturing interrupted, and it may be subject to enforcement actions if its corrective actions are not adequate to ensure compliance.

The Corporation's products may in the future be subject to product recalls or voluntary market withdrawals that could harm its reputation, business and financial results. Local and foreign governmental authorities have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture that could affect patient safety. Manufacturers may, under their own initiative, recall a product if any material deficiency in a device is found or suspected. A government-mandated recall or voluntary recall by the Corporation or one of its distributors could occur as a result of component failures, manufacturing errors, design, labeling defects or other issues. Recalls, which include corrections as well as removals, of any of the Corporation's products would divert managerial and financial resources and could have an adverse effect on its financial condition, harm its reputation with customers, and reduce its ability to achieve expected revenues.

The Corporation is required to comply with medical device reporting, or Medical Devices Regulations (MDR), requirements and must report certain malfunctions, deaths, and serious injuries associated with its products, which can result in voluntary corrective actions or agency enforcement actions. Under the MDR, medical device manufacturers are required to submit information to regulatory bodies when they receive a report or become aware that a device has or may have caused or contributed to a death or serious injury or has or may have a malfunction that would likely cause or contribute to death or serious injury if the malfunction were to recur. All manufacturers placing medical devices on the market are legally bound to report any serious or potentially serious incidents involving devices they produce or sell to the competent authority in those jurisdictions the incident occurred. If this were to happen to the Corporation, the relevant competent authority would file an initial report, and there would then be a further inspection or assessment if there were particular issues. This would be carried out either by the competent authority or it could require that British Standard Institution (BSI), as the notified body, carry out the inspection or assessment.

Malfunctions of the Corporation's products could result in future voluntary corrective actions, such as recalls, including corrections, or customer notifications, or agency action, such as inspection or enforcement actions. If malfunctions do occur, the Corporation cannot guarantee that it will be able to correct the malfunctions adequately or prevent further malfunctions, in which case we may need to cease manufacture and distribution of the affected devices, initiate voluntary recalls, and redesign the devices; nor can we ensure that regulatory authorities will not take actions against us, such as ordering recalls, imposing fines, or seizing the affected devices. If someone is harmed by a malfunction or by product mishandling, the Corporation may be subject to product liability claims. Any corrective action, whether voluntary or involuntary, as well as defending ourselves in a lawsuit, will require the dedication of time and capital, distract management from operating the business, and may harm the Corporation's reputation and financial results.

The Corporation has a limited operating history, and cannot assure you that it achieves and sustains profitability in future periods. The Corporation was incorporated in 2006 and has been profitable, on a full year basis, only in 2010. Net losses for fiscal years ended August 31, 2016 and 2015 were \$9,276,000 and \$2,884,000, respectively. To the extent that the Corporation is able to increase revenues, it expects its operating expenses will also increase as the Corporation will be expanded to meet anticipated growing demand for its products and will devote resources to its sales, marketing and research and development activities. If the Corporation is unable to reduce its operating expenses, the Corporation may not achieve profitability. Additionally, expenses will fluctuate as the Corporation makes future investments in research and development, selling and marketing and general and administrative activities, including as a result of new product introductions. This will cause the Corporation to experience variability in its reported earnings and losses in future periods. You should not rely on the Corporation's operating results for any prior quarterly or annual period as an indication of its future operating performance.

**Dependence upon a limited number of clients**. Although the Corporation has numerous clients, a relatively small number of them contribute a significant percentage of the Corporation's consolidated revenues. For the year ended August 31, 2016, revenues from one client represented individually more than 10% of the total revenues of the Corporation, i.e. approximately 37%. The Corporation believes that the degree of dependence will diminish as its sales progress. However, if this client reduces current or expected purchases, this could have unfavourable impacts on the Corporation's activities, its revenues, its financial position and its operating results.

The Corporation faces intense competition and may not be able to keep pace with the rapid technological changes in the medical devices industry. The medical device market is intensely competitive and is characterized by extensive research and development and rapid technological change. The Corporation's future customers will consider many factors when choosing suppliers, including product reliability, clinical outcomes, product availability, inventory consignment, price and product services provided by the manufacturer, and market share can shift as a result of technological innovation and other business factors. Major shifts in industry market share have occurred in connection with product problems, physician advisories and safety alerts, reflecting the importance of product quality in the medical device industry, and any quality problems with the Corporation's processes, goods and services could harm its reputation for producing high-quality products and erode its competitive advantage, sales and potential market share.

The Corporation's competitors are larger companies which have significantly greater resources and broader product offerings than the Corporation, and it anticipates that in the coming years, other technologies or corporations could enter the FFR market. In addition, the Corporation expects that competition will intensify with the increased use of strategies such as consigned inventory, preferential pricing and bundling of products, and the Corporation anticipates increasing price competition as a result of managed care, consolidation among healthcare providers, increased competition and declining reimbursement rates. Product introductions or enhancements by competitors which have advanced technology, better features or lower pricing may make the Corporation's products or proposed products obsolete or less competitive. As a result, the Corporation will be required to devote continued efforts and financial resources to bring its products under development to market, enhance its existing products and develop new products for the medical marketplace. If the Corporation fails to develop new products, enhance existing products or compete effectively, the Corporation's financial condition and results of operations will be adversely affected.

Failure to innovate may adversely impact the Corporation's competitive position and may adversely impact its ability to drive price increases for its products and its product revenues. The Corporation's future success will depend upon its ability to innovate and introduce enhancements to its existing products in order to address the changing needs of the marketplace. The Corporation also relies on product enhancements to attempt to drive price increases for its products in its markets. Frequently, product development programs require assessments to be made of future clinical need and commercial feasibility, which are difficult to predict. Customers may forego purchases of its products and purchase its competitors' products as a result of delays in introduction of its new products and enhancements, failure to choose correctly among technical alternatives or failure to offer innovative products or enhancements at competitive prices and in a timely manner. Any delays in product releases may negatively affect the Corporation.

Delays in planned product introductions may adversely affect the Corporation and negatively impact future revenues. The Corporation may in the future experience delays in various phases of product development and commercial launch, including during research and development, manufacturing, limited release testing, marketing and customer education efforts. Any delays in the Corporation's product launches may significantly impede its ability to successfully compete in its markets and may reduce its revenues. The Corporation and its future collaborators may fail to develop or effectively commercialize products covered by its future collaborations if:

- the Corporation does not achieve its objectives under its collaboration agreements;
- the Corporation or its collaborators are unable to obtain patent protection for the products or proprietary technologies the Corporation develops with its collaborations; or
- the Corporation or its collaborators encounter regulatory hurdles that prevent commercialization of its products.

If the Corporation or its collaborators are unable to develop or commercialize products as planned, or if conflicts arise with its collaborators, the Corporation will be delayed or prevented from developing and commercializing products, which will harm the Corporation and financial results.

Divestitures of any of the Corporation's businesses or product lines may materially adversely affect the Corporation, results of operations and financial condition. The Corporation continues to evaluate the performance of all of its businesses and may sell a business or product line. Any divestitures may result in significant write-offs, including those related to intangible assets, which could have a material adverse effect on the Corporation's business, results of operations and financial condition. Divestitures could involve additional risks, including difficulties in the separation of operations, services, products and personnel, the diversion of management's attention from other business concerns, the disruption of the Corporation's business and the potential loss of key employees. The Corporation may not be successful in managing these or any other significant risks that it encounters in divesting a business or product line.

If the Corporation's facilities or systems are damaged or destroyed, it may experience delays that could negatively impact its revenues or have other adverse effects. The Corporation's facilities may be affected by natural or man-made disasters. If one of its facilities were affected by a disaster, the Corporation would be forced to rely on third-party manufacturers or to shift production to another manufacturing facility. In such an event, the Corporation would face significant delays in manufacturing which would prevent it from being able to sell its products. In addition, the Corporation's insurance may not be sufficient to cover all of the potential losses and may not continue to be available to it on acceptable terms, or at all. Furthermore, although its computer and communications systems are protected through physical and software safeguards, they are still vulnerable to fire, storm, flood, power loss, earthquakes, telecommunications failures, physical or software break-ins, software viruses, and similar events, and any failure of these systems to perform for any reason and for any period of time could adversely impact the Corporation's ability to operate.

The Corporation is subject to stringent domestic and foreign medical device regulation and any adverse regulatory action may materially adversely affect its financial condition and business operations. The Corporation's products, development activities and manufacturing processes are subject to extensive and rigorous regulation by numerous government agencies. To varying degrees, each of these agencies monitors and enforces the Corporation's compliance with laws and regulations governing the development, testing, manufacturing, labelling, marketing and distribution of its medical devices. The process of obtaining marketing approval or clearance from these government agencies for new products, or for enhancements or modifications to existing products, could:

- take a significant amount of time;
- require the expenditure of substantial resources;
- involve rigorous pre-clinical and clinical testing, as well as increased post-market surveillance; and
- involve modifications, repairs or replacements of the Corporation's products, and result in limitations on the indicated uses of its products.

The Corporation cannot be certain that it will receive required approval or clearance from government agencies for new products or modifications to existing products on a timely basis. The failure to receive approval or clearance for significant new products or modifications to existing products on a timely basis could have a material adverse effect on the Corporation's financial condition and results of operations.

Foreign governmental regulations have become increasingly stringent and more common, and the Corporation may become subject to even more rigorous regulation by foreign governmental authorities in the future. Penalties for a corporation's noncompliance with foreign governmental regulation could be severe, including revocation or suspension of a corporation's business license and criminal sanctions. Any domestic or foreign governmental medical device law or regulation imposed in the future may have a material adverse effect on the Corporation's financial condition and business operations.

The FFR procedures and the cardiovascular field in general are continually the subject of clinical trials conducted by the Corporation's competitors or other third parties, the results of which may be unfavorable, or perceived as unfavorable by the market, and could have a material adverse effect on the Corporation's financial condition and results of operations. Unfavorable or inconsistent clinical data from existing or future clinical trials conducted by the Corporation, by its competitors or by third parties, or the market's perception of this clinical data, may adversely impact its ability to obtain product approvals, the size of the markets in which the Corporation participates, its position in, and share of, the markets in which the Corporation participates and the Corporation's financial condition and results of operations.

Any defects or malfunctions in the computer hardware or software the Corporation utilizes in its products could cause severe performance failures in such products, which would harm its reputation and adversely affect its results of operations and financial condition. The Corporation's existing and new products depend and will depend on the continuous, effective and reliable operation of computer hardware and software. Any defect, malfunction or other failing in the computer hardware or software utilized by the Corporation's products, including products it develops in the future, could result in inaccurate readings, misinterpretations of data, or other performance failures that could render the Corporation's products unreliable or ineffective and could lead to decreased confidence in its products, damage to its reputation, reduction in its sales and product liability claims, the occurrence of any of which could have a material adverse effect on the Corporation's results of operations and financial condition. Although the Corporation updates the computer software utilized in its products on a regular basis, there can be no guarantee that defects do not or will not in the future exist or that unforeseen malfunctions, whether within the Corporation's control or otherwise, will not occur.

If the Corporation fails to obtain or maintain, or experience significant delays in obtaining, regulatory clearances or approvals for its products or product enhancements, the Corporation's ability to commercially distribute and market its products could suffer. The Corporation's products are subject to rigorous regulation by federal, provincial, state and foreign governmental authorities. The Corporation's failure to comply with such regulations or to make adequate, timely corrections, could lead to the imposition of injunctions, suspensions or loss of marketing clearances or approvals, product recalls, manufacturing cessation, termination of distribution, product seizures, civil penalties, or some combination of such actions. The process of obtaining regulatory authorizations to market a medical device can be costly and time consuming, and there can be no assurance that such authorizations will be granted on a timely basis, if at all. If regulatory clearance or approvals are received, additional delays may occur related to manufacturing, distribution or product labeling.

Cost containment pressures and domestic and foreign legislative or administrative reforms resulting in restrictive reimbursement practices of third-party payors or preferences for alternate therapies could decrease the demand for products purchased by the Corporation's customers, the prices which they are willing to pay for those products and the number of procedures using its devices. FFR products will be purchased principally by healthcare providers that typically bill various third-party payors, such as governmental, private insurance plans and managed care plans, for the healthcare services provided to their patients. The ability of customers to obtain appropriate reimbursement for their services and the products they provide from government and third-party payors is critical to the success of medical technology companies. The availability of reimbursement affects which products customers purchase and the prices they are willing to pay. Reimbursement varies from country to country and can significantly impact the acceptance of new technology. After the Corporation develops a promising new product, it may find limited demand for the product unless reimbursement approval is obtained from private and governmental third-party payors.

Major third-party payors for healthcare provider services continue to work to contain healthcare costs. The introduction of cost containment incentives, combined with closer scrutiny of healthcare expenditures by both private health insurers and employers, has resulted in increased discounts and contractual adjustments to healthcare provider charges for services performed and in the shifting of services between inpatient and outpatient settings. Initiatives to limit the growth of healthcare costs, including price regulation, are also underway in several countries in which the Corporation will do business. Implementation of healthcare reforms in the United States and in significant overseas markets such as Germany, Japan and other countries may limit the price or the level at which reimbursement is provided for the Corporation's products and adversely affect both its pricing flexibility and the demand for its products. Healthcare providers may respond to such cost-containment pressures by substituting lower cost products or other therapies for the Corporation's products.

Consolidation in the healthcare industry could lead to demands for price concessions or limit or eliminate the Corporation's ability to sell to certain of its significant market segments. The cost of healthcare has risen significantly over the past decade and numerous initiatives and reforms initiated by legislators, regulators and third-party payors to curb these costs have resulted in a consolidation trend in the medical device industry as well as among the Corporation's future customers, including healthcare providers. This in turn has resulted in greater pricing pressures and limitations on the Corporation's ability to sell to important market segments, as group purchasing organizations, independent delivery networks and large single accounts. The Corporation expects that market demand, government regulation, third-party reimbursement policies and societal pressures will continue to change the worldwide healthcare industry, resulting in further business consolidations and alliances which may exert further downward pressure on the prices of its products and adversely impact the Corporation's financial condition and results of operations.

The success of the OptoWire depends upon strong relationships with physicians and other healthcare professionals. If the Corporation fails to build working relationships with physicians and other healthcare professionals, many of its products may not be developed and marketed in line with the needs and expectations of the professionals who support its products. The research, development, marketing and sales of many of its new and improved products is dependent upon the Corporation maintaining working relationships with physicians as well as other healthcare professionals, who are becoming increasingly instrumental in making purchasing decisions for its products. The Corporation relies on these professionals to provide it with considerable knowledge and experience regarding its products and the marketing and sale of its products. Physicians also assist the Corporation as researchers, marketing consultants, product consultants, inventors and as public speakers. If the Corporation is unable to maintain its strong relationships with these professionals and continue to receive their advice and input, the development and marketing and sales of its products could suffer, which could have a material adverse effect on its financial condition and results of operations. The Corporation's relationships with physicians and other healthcare professionals and other providers that use its products are regulated under various laws. In addition, the Corporation has in place and is continuously improving its internal business integrity and compliance program and policies. Failure to comply with the United States federal antikickback law or similar state or foreign law could result in criminal or civil penalties.

## 5. DIVIDENDS AND DIVIDEND POLICY

As of the date of this Annual Information Form, the Corporation has not declared or paid any dividends on its issued and outstanding common shares in the last three most recently completed fiscal years. The payment of dividends in the future will be dependent on the Corporation's earnings, financial condition and such other factors as the Board of Directors of the Corporation considers appropriate.

However, the Corporation's current policy is to reinvest future earnings in order to finance its growth and the development of its business. As a result, the Corporation does not intend to pay dividends in the foreseeable future.

# 6. GENERAL DESCRIPTION OF THE CAPITAL STRUCTURE

#### 6.1 Common Shares

The Corporation's authorized capital consists of an unlimited number of common shares without par value. As of August 31, 2016, 72,629,038 common shares were issued and outstanding as fully paid and non-assessable (72,995,038 common shares as of the date of this Annual Information Form).

Each common share gives its holder the right to one vote and the right to receive notice of and attend all shareholders meetings of the Corporation. The common shares give their holders the right to receive, for each fiscal year of the Corporation, a dividend, when declared, in the amount and according to the terms the Board of Directors of the Corporation determines at its discretion. In the event of the voluntary or forced winding up of the Corporation, or a distribution of its assets for any reason whatsoever, the common shares give their holders the right to receive the remaining assets of the Corporation.

The common shares do not have any pre-emptive, conversion or redemption rights, and all have equal voting rights. There are no special rights or restrictions of any nature attached to any of the common shares, all of which rank equally as to all benefits which might accrue to the holders of the common shares.

# 6.2 Stock Options Issued under the Corporation's Stock Option Plan

During the fiscal year ended August 31, 2016, 2,154,750 stock options were granted by the Corporation, collectively entitling the holders thereof to purchase an aggregate of up to 2,154,750 common shares as follows:

Date of Grant	Number of Outstanding Stock Options	Exercise Price	Expiry Date
2015-09-07	400,000	0.70 \$	2020-09-06
2015-10-04	100,000	0.80 \$	2020-10-03
2015-11-23	25,000	0.90 \$	2020-11-22
2015-11-24	25,000	0.90 \$	2020-11-23
2016-01-18	1,007,250	0.93 \$	2021-01-17
2016-02-08	300,000	0.90 \$	2021-02-07
2016-04-18	97,500	1.20 \$	2021-04-17
2016-05-02	50,000	1.22 \$	2021-05-01
2016-08-08	150,000	1.66 \$	2021-08-07

For further details about the stock options granted by the Corporation as of August 31, 2016, reference is made to note 15 to the Corporation's consolidated financial statements for the last fiscal year ended August 31, 2016 which are available on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>.

The Board of Directors of the Corporation may grant stock options to employees, officers or directors of the Corporation or one of its subsidiaries and to consultants in accordance with the "Opsens inc. 2011 Restated Stock Option Plan" (the "Plan"), as adopted by the Board of Directors on November 14, 2011 and amended on December 20, 2013.

For the full text of the Plan, reference is made to Schedule "B" of the Corporation's Management Proxy Circular dated December 9, 2015, prepared in connection with the most recent annual general and special meeting of shareholders held on January 18, 2016.

## 6.3 Warrants

On May 16, 2016, the Corporation completed a non-brokered private placement and issued 4,761,000 units in connection with the offering. Each unit consists of one common share in the capital stock of the Corporation and one-half of one common share purchase warrant, with each whole common share purchase warrant entitling the holder thereof to purchase one common share at a price of \$1.55 until November 16, 2017. The Corporation then issued an aggregate of 2,380,500 warrants under such offering.

On December 22, 2015, the Corporation completed a public offering and issued 5,681,819 units in connection with the offering. Each unit consists of one common share in the capital stock of the Corporation and one-half of one common share purchase warrant, with each whole common share purchase warrant entitling the holder thereof to purchase one common share at a price of \$1.20 until June 22, 2017. The Corporation then issued an aggregate of 2,840,910 warrants under such offering.

The Corporation also issued 313,886 broker warrants to the syndicate of agents as additional compensation, each broker warrant entitling the holder to purchase one common share at a price of \$0.88 until June 22, 2017.

Concurrently with the public offering, the Corporation completed a non-brokered private placement and issued 184,400 units in connection with the offering. Each comprises the same terms and conditions than the units issued under the public offering. The Corporation then issued an aggregate of 92,200 warrants under such offering.

#### **6.4** Convertible Debenture

On November 19, 2012, the Corporation signed the Distribution Agreement with a Japanese-based medical corporation, granting distribution and other rights for its FFR Products for Japan, Korea and Taiwan in a US\$5 million transaction. Pursuant to the terms of the Distribution Agreement, the Corporation issued a US\$2 million subordinated secured convertible debenture (the "Debenture") maturing November 19, 2017. The Debenture bears interest at a rate of 2.0% per annum, payable at maturity. At the holder's option, the Debenture may be converted into common shares of the Corporation at any time up to the maturity date, at a conversion price representing the market price of the shares. However, the conversion price is subject to a minimum of \$0.50 and a maximum of \$0.75 per common share (the "Conversion Price").

The Debenture is also convertible at the Corporation's option at the Conversion Price if the volume-weighted average closing price per common share for the twenty trading days immediately preceding the fifth trading day before such conversion date is at least \$1.20 and if a minimum of 50,000 common shares have traded during each of the twenty trading days taken into account in the calculation of the Conversion Price.

For further details about the Debenture as of August 31, 2016, reference is made to note 14 to the Corporation's consolidated financial statements for the last fiscal year ended August 31, 2016 which are available on SEDAR at www.sedar.com.

## 7. MARKET FOR SECURITIES

## 7.1 Market

The Corporation's common shares have been listed on the TSXV since October 17, 2006 under the trading symbol "OPS".

# 7.2 Trading Price and Volume

The following table shows the variation in price and the trading volume of the Corporation's common shares on the TSXV on a monthly basis for each month of the fiscal year ended August 31, 2016.

Months	High (\$)	Low (\$)	Trading Volume
September 2015	0.90	0.66	954,712
October 2015	0.92	0.76	668,729
November 2015	0.95	0.85	559,269
December 2015	1.03	0.84	987,540
January 2016	0.98	0.85	751,776
February 2016	0.96	0.80	1,037,157
March 2016	1.28	0.93	1,235,491
April 2016	1.27	1.11	926,889
May 2016	1.83	1.22	1,309,241
June 2016	1.67	1.41	1,056,000
July 2016	1.68	1.44	790,581
August 2016	1.70	1.51	980,656

# 8. <u>ESCROWED SECURITIES</u>

As of August 31, 2016, common shares of the Corporation were neither held in escrow nor subject to a contractual restriction on transfer.

# 9. <u>DIRECTORS AND OFFICERS</u>

# 9.1 Name, Occupation and Securities Holding

The following table contains certain information on the Corporation's current directors and executive officers as of the date of this Annual Information Form. The directors of the Corporation are elected at the annual general meeting of shareholders for a term of office ending at the following annual general meeting or until their successor is duly elected, unless their position becomes vacant earlier.

# Claude Belleville Province of Québec, Canada

Director of Opsens since October 2006

Vice-President, Medical Devices of Opsens

# Number of common shares held: 4,280,113<sup>(1)</sup>

Mr. Claude Belleville is Vice-President, Medical Devices and Director of Opsens since October 2006. His primary responsibilities are to oversee the medical sector's activities by orienting the main lines of commercial and intellectual property development, planning the work and seeing to the implementation of the Corporation's action plan. In May 1994, he co-founded FISO Technologies Inc., a corporation specializing in the manufacture of fiber optic sensors, for which he acted as President from May 1994 to December 2002, then as Vice-President of Research and Development until August 2003. In addition to seeing to the management of this corporation, he was responsible for the development of fiber optic sensors and contributed to the development of numerous fiber optic sensing products and technologies. He obtained a Bachelor's degree in Physical Engineering (Optics and Photonics) in May 1986 and a Master's degree in Optics in May 1988 from Université Laval.

# Gaétan Duplain Province of Québec, Canada

Director of Opsens since October 2006

Director of Opsens Solutions since December 2007

President of Opsens Solutions since September 2015

# Number of common shares held: 4,726,956

Mr. Gaétan Duplain is President of Opsens Solutions since September 2015. He is also a Director of Opsens since October 2006. From October 2006 to September 2015, he was Vice-President, Oil and Gas of Opsens. His primary responsibilities are to oversee Opsens Solutions activities by orienting the main lines of commercial and intellectual property development, planning the work and seeing to the implementation of the Corporation's action plan. In May 1994, he co-founded FISO Technologies Inc., a corporation specializing in the manufacture of fiber optic sensors, for which he acted as Vice-President from July 1994 to August 2003. While with this corporation, Mr. Duplain acquired experience in high-tech business development and strategic planning. He obtained a Bachelor's degree in Physical Engineering from Université Laval in May 1985 and a Master's degree in Optics and Laser from the same university in May 1986.

# Denis M. Sirois Province of Québec, Canada

Chairman of the Board of Directors of Opsens since January 2015

Member of the Audit Committee, member of the Human Resources and Compensation Committee and Chairman of the Nomination Committee of Opsens

# Number of common shares held: 376,000

Mr. Denis M. Sirois is Vice-President Investments of Telesystem Ltd., a private global media and technology holding corporation, since March 2006. Mr. Sirois has over fifteen years of experience in corporate finance, mergers and acquisitions and private equity investment. During the course of his career, Mr. Sirois has been involved in numerous investment transactions involving corporations of all sizes. He began his career with corporation Bureaux de crédit collectifs Ltée ("BCCL") where he became General Manager in 1993. BCCL was a Québec's leader in credit information systems and was acquired by Equifax Inc. in 1996. Mr. Sirois moved on as Executive Vice-President of Exaclan Inc., a private holding corporation. Mr. Sirois currently sits on the board of directors of Telesystem Ltd., iPerceptions Inc., CJL Capital Inc., Exaclan Inc., Prevtec Microbia Inc., Hortau Inc., Le Devoir inc. and Telesystem Energy Ltd.

## Denis Harrington Minnesota, United States

Director of Opsens since January 2015

Member of the Human Resources and Compensation Committee, member of the Nomination Committee and member of the Audit Committee of Opsens

# Number of common shares held: nil

Mr. Denis Harrington is the owner of DLH Consulting, LLC, a management and strategy consulting firm he established in December 2012. He currently works with several technology corporations that he is advising as Strategic Consultant and/or as board of directors' member. From February 2011, he served as President and Chief Executive Officer for BridgePoint Medical, Inc., a corporation that developed a proprietary, catheter-based system to treat coronary chronic total occlusion, successfully leading that corporation from the development stage through commercialization and to a successful acquisition in October 2012 by Boston Scientific Corporation, a worldwide developer, manufacturer and marketer of medical devices whose products are used in a range of interventional medical specialties. Mr. Harrington came to BridgePoint Medical, Inc. from Boston Scientific Corporation and SCIMED Life Systems, Inc. (acquired by Boston Scientific Corporation in 1995), a corporation he joined in January 1993. Prior to leaving Boston Scientific Corporation, he served as Senior Vice-President of Cardiology, Rhythm and Vascular Sales - managing over 1,800 peoples and US\$3 billion in revenue. Prior to that, he held numerous roles of increasing responsibility in the U.S. Sales organization – including Sr. Vice-President Cardiology Sales, where he was responsible for driving the highest four-year revenue growth in the history of Boston Scientific Corporation and played an integral role in the launch of Boston Scientific Corporation's Taxus and Promus Drug Eluding Stent platform – driving unprecedented revenue growth for the corporation. From 1988 to 1993, Mr. Harrington served as a Sales Consultant and then Region Manager for Walter Lorenz Surgical Instruments, Inc. where he was named Sales Representative of the Year in 1991. In 1983, he graduated of the United States Military Academy at West Point and he served for five years in the United States Army, attaining the rank of captain. His service was focused in various leadership capacities including platoon and company-level leadership roles.

### Jean Lavigueur Province of Québec, Canada

Director of Opsens since January 2012

Chairman of the Audit Committee of Opsens

# Number of common shares held:

Mr. Jean Lavigueur is Chief Financial Officer of Coveo Solutions Inc., a software as a service leader in the field of enterprise search engines since April 2006. Before Coveo Solutions Inc., he co-founded and served as Chief Financial Officer of Taleo Corporation (NASDAQ:TLEO), a corporation providing talent management and staffing solutions on the Web, from March 1999 to May 2005, and served from June 2005 to December 2005 in other capacities, including Vice-President, Finance. Prior to Taleo Corporation, Mr. Lavigueur served as Chief Financial Officer of Baan Supply Chain Solutions, a corporation specializing in the enterprise resource planning (ERP), from May 1996 to February 1999, and as Chief Financial Officer of Berclain Group Inc., a supply chain management solutions vendor acquired by BAAN, from May 1991 to April 1996. Prior to his employment with Berclain Group Inc., Mr. Lavigueur worked in the divisions of Coopers & Lybrand and tax PricewaterhouseCoopers LLP), a public accounting firm. He was a member of the board of directors and of the Audit Committee of Wanted Technologies Corporation (TSXV:WAN), a software as a service corporation that provides real-time market intelligence data for recruitment market, from May 2014 to November 2015 and was the Chairman of its Special Committee of Independent Directors when the corporation was sold and privatized. He was a member of the board of directors of iPerceptions Inc. (TSXV:IPE), a web-focused Voice of Customer analytics provider, from June 2007 to March 2012, and was the Chairman of its Audit Committee and of its Special Committee of Independent Directors when this corporation was sold and privatized. Mr. Lavigueur was also a member of the board of directors of Cossette Inc. (TSX:KOS), one of the largest advertising and communications corporation in Canada, and was the Chairman of its Audit Committee and of its Special Committee of Independent Directors when the corporation was sold and privatized in 2009. Mr. Lavigueur holds a Bachelor's degree in Business Administration from Université Laval. He is a member of the Ordre des comptables professionnels agréés du Ouébec.

#### Pat Mackin

Director of Opsens since September 2016

# Number of common shares held: 44 100

Mr. Pat Mackin is President and Chief Executive Officer and Chairman of CryoLife, Inc. (NYSE:CRY) ("CryoLife") since September 2014, a leader in the manufacturing, processing, and distribution of implantable living tissues and medical devices used in cardiac surgical procedures. CryoLife markets and sells products in more than 80 countries worldwide.

Before joining CryoLife, from August 2007 to July 2014, he was President of the Cardiac Rhythm Disease Management Division at Medtronic, Inc. (NYSE:MDT) ("Medtronic"). From 2004 to 2006, also at Medtronic, he held the positions of Vice President, Vascular, Western Europe where he launched the Corporation's first drug-eluding stent called "Endeavour" and Vice President and General Manager, Endovascular Business Unit. Prior to joining Medtronic, from 1996 to 2002, Mr. Mackin worked for six years at Genzyme, Inc., serving as Senior Vice President and General Manager for the Cardiovascular Surgery Business Unit and as Director of Sales, Surgical Products division. From 1991 to 1996, Mr. Mackin spent five years at Deknatel/Snowden-Pencer, Inc. in various sales and marketing roles and three years as an Officer in the U.S. Army. Mr. Mackin received an MBA from the Kellogg School of Management at Northwestern University and is a graduate of the United States Military Academy at West Point.

## Louis Laflamme Province of Québec, Canada

Director of Opsens since January 2013

President and Chief Executive Officer of Opsens

Member of the Nomination Committee of Opsens

# Number of common shares held: 440.000<sup>(2)</sup>

Mr. Louis Laflamme is President, Chief Executive Officer and Director of Opsens since January 2013. His primary mandate is to see to the operational management of the Corporation. He has been Chief Financial Officer and Corporate Secretary of Opsens from November 2005 to December 2012. From March 2005 to November 2005, he held the position of Director, Finance and Administration for DEQ Systems Corp., a corporation specialized in the manufacturing and distribution of electronic systems for gaming tables in casinos. From July 2002 to February 2005, Mr. Laflamme held various positions in the administrative department including the position of Vice-President Finance of TGN Biotech Inc., a corporation specializing in research and development in biotechnology. From January 2002 to July 2002, Mr. Laflamme also acted as Corporate Controller at St-Raymond Forest Products Ltd, a corporation involved in the manufacturing of veneers. From October 1998 to December 2001, he was Senior Auditor in the assurance and advisory department for Samson Bélair/Deloitte & Touche (SENC). He is a member of the Ordre des comptables professionnels agréés du Ouébec. He holds a Bachelor's degree in Business Administration from Université Laval obtained in May 1998.

## Thierry Dumas Province of Québec, Canada

Chief Financial Officer and Corporate Secretary of Opsens

# Number of common shares held: 41.000<sup>(3)</sup>

Mr. Thierry Dumas is Chief Financial Officer and Corporate Secretary of Opsens since January 2013. His principal tasks consist in defining and executing the financial strategy of the Corporation towards the shareholders and the financial community as well as in the operational activities. From June 2011 to August 2012, he held the position of Corporate Controller of Atrium Innovations Inc., a corporation specialized in the development, manufacturing and commercialization of science-based natural dietary supplements endorsed by health professionals. From June 2009 to June 2011, Mr. Dumas served as Corporate Controller of EnGlobe Corp., a worldwide leader in integrated environmental services that developed a unique expertise in the management of organic waste materials and in reusing or recovering decontaminated soils as well as in the precision testing and calibration of bulk tanks and storage systems. From October 1996 to May 2009. Mr. Dumas held various positions at PricewaterhouseCoopers LLP and Ernst & Young LLP, working his way up to Senior Manager. Mr. Dumas is a member of the Ordre des comptables professionnels agréés du Québec. He holds a Bachelor's degree in Business Administration from Université Laval obtained in 1996.

### Anthony E. Gibbons Florida, United States

Vice-President, Sales and Marketing of Opsens

# Number of common shares held: 156,000

Mr. Anthony E. Gibbons is Vice-President, Sales and Marketing of Opsens since September 2015. His principal tasks consist of defining and establishing high level sales and marketing strategies. Since July 2012, he has been a partner of ByOwner.com, a firm providing tactical and strategic advices to various corporations. From January 2013 to April 2014, he served as Vice-President International at Thoratec Corporation, a corporation that develops, manufactures, and markets proprietary medical devices used for mechanical circulatory supports for the treatment of heart-failure patients. From July 1991 to July 2011, he held various positions with Boston Scientific Corporation, a worldwide developer, manufacturer and marketer of medical devices whose products are used in a range of interventional medical specialties, working his way up to President, Intercontinental. Mr. Gibbons holds a Bachelor's degree of Science with dual majors in economics in marketing from Alfred University obtained in January 1987.

### Notes:

- (1) Mr. Claude Belleville personally owns 4,076,059 common shares and holds 204,054 common shares through a registered retirement savings plan.
- (2) Mr. Louis Laflamme personally owns 190,000 common shares, owns 84,000 common shares through 9114-6811 Québec inc., a corporation controlled by Mr. Laflamme, and holds 166,000 common shares through a registered retirement savings plan.
- (3) Mr. Thierry Dumas personally owns 24,000 common shares and holds 17,000 common shares through a registered retirement savings plan.

As of the date of this Annual Information Form, as a group, the Corporation's current directors and executive officers beneficially owned, directly or indirectly, an aggregate of 10,064,169 common shares representing 13.79% of the Corporation's outstanding common shares.

The Corporation does not have direct information on the common shares beneficially owned by the above-mentioned persons or over which they exercise control or direction. This information was provided by the directors and executive officers individually.

## 9.2 Cease Trade Orders, Bankruptcies, Penalties or Sanctions

To the knowledge of the Board of Directors of the Corporation and based on the information provided by the directors or executive officers of the Corporation, none of these persons:

- (a) is, as at the date of this Annual Information Form, or was within 10 years before this date, a director, chief executive officer or chief financial officer of any corporation, including the Corporation, that was subject to one of the following orders:
  - (i) a cease trade order, an order similar to a cease trade order or an order that denied the corporation access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, while the person was acting in the capacity as director, chief executive officer or chief financial officer; or
  - (ii) a cease trade order, an order similar to a cease trade order or an order that denied the corporation access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, and issued after the person ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while the person exercised these duties.

To the knowledge of the Board of Directors of the Corporation and based on the information provided by the directors or executive officers of the Corporation or shareholders holding a sufficient number of securities of the Corporation to affect materially the control of the Corporation, none of these persons:

- (a) is, as at the date of this Annual Information Form or has been within the 10 years before this date, a director or executive officer of any corporation, including the Corporation, that, while the person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- (b) has, within the 10 years before the date of this Annual Information Form, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder; and
- (c) has been subject to:
  - (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or
  - (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Notwithstanding the above, Mr. Denis M. Sirois and Mr. Jean Lavigueur were Directors of iPerceptions Inc. when a management cease trade order was issued on August 30, 2007 because this corporation had not complied with the obligations of filing financial statements and management discussion & analysis as required under *Regulation 51-102 respecting Continuous Disclosure Obligations*. This cease trade order was revoked on December 3, 2007. Also, Mr. Denis M. Sirois is a Director of CJL Capital Inc., a corporation whose securities were suspended from trading effective September 12, 2012 and transferred to NEX thereafter for failure to complete a qualifying transaction within 24 months of listing on the TSXV. Effective at the close of business on September 10, 2015, CJL Capital Inc. was delisted from the NEX for failure to pay its quarterly listing maintenance fee.

## 10. <u>LEGAL PROCEEDINGS AND REGULATORY ACTIONS</u>

Since the beginning of the fiscal year ended August 31, 2016 and as of the date of this Annual Information Form, there was no legal proceedings outstanding or regulatory actions pending involving the Corporation or any of its properties or to which the Corporation is a party or to which its properties are subject, nor to the knowledge of the Corporation are any such legal proceedings contemplated or such regulatory actions threatened, as of the date hereof, which could become material to a purchaser of securities of the Corporation.

Since the beginning of the fiscal year ended August 31, 2016 and as of the date of this Annual Information Form: (i) the Corporation has not been the subject of penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority; (ii) the Corporation has not entered into any settlement agreement before a court relating to securities legislation or with a securities regulatory authority; and (iii) no penalties or sanctions has been imposed by a court or regulatory body against the Corporation that would likely be considered important to a reasonable investor in making an investment decision.

## 11. AUDIT COMMITTEE

#### 11.1 The Audit Committee's Charter

The Audit Committee's charter describes the duties, responsibilities and skills required of its members as well as the terms of their nomination and dismissal and their relationship with the Board of Directors. The charter is attached to this Annual Information Form as Schedule "A".

## 11.2 Composition of the Audit Committee

As of the date of this Annual Information Form, the Audit Committee is made up of the following individuals:

Name	Independent	Financially Literate
Jean Lavigueur (Chairman)	Yes	Yes
Denis Harrington	Yes	Yes
Denis M. Sirois	Yes	Yes

## 11.3 Relevant Education and Experience

For the relevant education and experience of the current Audit Committee members, see the table included in the "Directors and Officers" section of this Annual Information Form.

## 11.4 Audit Committee Oversight

During the Corporation's fiscal year ended August 31, 2016, there was no recommendation of the Audit Committee to nominate or compensate an external auditor that was not adopted by the Board of Directors.

### 11.5 Reliance on Certain Exemptions

At no time since the beginning of the Corporation's fiscal year ended August 31, 2016, the Corporation has not relied on the exemption in section 2.4 of *Regulation 52-110 respecting Audit Committees* (the "Regulation 52-110") or on an exemption granted by the securities authority under Part 8 of this regulation.

#### 11.6 Pre-Approval Policies and Procedures

The Audit Committee has not adopted specific policies or procedures with respect to the awarding of contracts for non-audit services. However, the Audit Committee approves, from time to time, the expenses that were incurred in connection with non audit-related services contracts.

#### 11.7 External Auditor Service Fees

For the fiscal years ended August 31, 2015 and August 31, 2016, the following external auditor service fees were or will be invoiced to the Corporation by Deloitte LLP ("Deloitte"):

	2015 (\$)	2016 (\$)
Audit Fees	67,475	57,500
Audit-Related Fees	8,560 <sup>(1)</sup>	10,830 <sup>(1)</sup>
Tax Fees	3,850 <sup>(2)</sup>	20,970 <sup>(2)</sup>
All Other Fees	-	62,060 <sup>(3)</sup>
Total	79,885	151,360

#### Notes:

- (1) These fees were incurred for assurance and related services that are reasonably related to the performance of the audit or review of the financial statements and are not reported under audit fees.
- (2) These fees were incurred for the validation of the scientific research and experimental development (SR&ED) technical report as well as assistance with various tax matters.
- (3) These fees were incurred for work performed in connection with the Short Form Prospectus.

### 11.8 Exemption

The Corporation is a "venture issuer" within the meaning of Regulation 52-110 and, as such, benefits from the exemption provided for in section 6.1 of this regulation.

## 12. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

There are no directors, executive officers or other persons that beneficially own, or control or direct, directly or indirectly, more than 10% of any class or series of the outstanding voting securities of the Corporation, nor any associate or affiliate of such persons that have had a material interest, direct or indirect, in any transaction within the three most recently completed fiscal years or during the current fiscal year that has materially affected or is reasonably expected to materially affect the Corporation.

#### 13. TRANSFER AGENT AND REGISTRAR

The Corporation's transfer agent and registrar is CST Trust Corporation ("CST"). The register of transfers of the Corporation's common shares is held at CST's offices located in its place of business at 2001 Robert-Bourassa Blvd., Suite 1600, Montréal, Québec H3A 2A6.

# 14. MATERIAL CONTRACTS

Except for the Distribution Agreement and the License Agreement, the Corporation did not enter into any material contract within the fiscal year ended August 31, 2016, or prior to the fiscal year ended August 31, 2016 and that is still in effect, other than contracts in the ordinary course of business.

## 15. INTERESTS OF EXPERTS

Deloitte act as the external auditor of the Corporation. As such, they have provided the independent auditor's report filed with the 2016 consolidated financial statements of the Corporation available on SEDAR at <a href="www.sedar.com">www.sedar.com</a>. In connection with the audit of the Corporation's consolidated financial statements for the fiscal year ended August 31, 2016, Deloitte has confirmed to be independent within the meaning of the *Code of Ethics of Chartered Professional Accountants* (Québec).

## 16. ADDITIONAL INFORMATION

Additional information regarding the Corporation, including directors' and officers' remuneration and indebtedness, the principal holders of the Corporation's securities and securities authorized for issuance under equity compensation plans, if applicable, is contained in the Corporation's Management Proxy Circular dated December 9, 2015, prepared in connection with the most recent annual general and special meeting of shareholders held on January 18, 2016.

Also, additional financial information is provided in the consolidated financial statements and the Management's Discussion and Analysis for the Corporation's fiscal year ended August 31, 2016.

Additional information regarding the Corporation is available on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a> and on the Corporation's Web site at <a href="https://www.opsens.com">www.opsens.com</a>.

#### **SCHEDULE "A"**

#### CHARTER OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

#### I. PURPOSE

The Audit Committee is a committee of the Corporation's Board of Directors. The primary role of the Audit Committee is to help the Board of Directors to fulfill its responsibilities with respect to financial information and controls toward the shareholders of the Corporation and the financial community. The external auditors report directly to the Audit Committee. The primary duties and responsibilities of the Audit Committee are as follows:

- to ensure the integrity of the Corporation's financial statements, and to review all financial reports and financial information provided by the Corporation to any government authority or issued to the public as well as all other relevant document;
- to recommend the nomination of external auditors and to review and assess their efficiency, to ensure their competence and independence, and to maintain open line of communication between the external auditors, financial operations management, executive officers and the Board of Directors of the Corporation;
- to act as an objective, outside party to oversee the methods of preparing the financial information, the application of internal controls and of rules respecting business management and financial risk, and compliance with legal, ethical and regulatory requirements;
- to encourage the continuous improvement and observance, at all levels, of the practices, methods and policies of the Corporation.

#### II. COMPOSITION

The Audit Committee, including its Chairman, is made up of at least three directors of the Corporation, the majority of whom may not be Corporation employees, officers or "control persons" as defined hereinbelow. The Board of Directors must ensure that all members are "financially literate" as defined hereinbelow. The members of the Audit Committee are nominated by the Board of Directors, at the annual meeting of the Board of Directors following the Annual Meeting, for the next year or until their successors are nominated or elected. The Board of Directors may dismiss a member of the Audit Committee by resolution at any time, at its discretion. Unless the Chairman is nominated by the entire Board of Directors, the members of the Audit Committee may appoint the Chairman by majority vote of all members of the Audit Committee.

#### III. DUTIES AND RESPONSIBILITIES

- 1. The Audit Committee is responsible for the following:
  - a) To review the audited annual consolidated financial statements and to recommend them to the Board of Directors for approval.
  - b) To review with the Corporation's financial operations management and external auditors the financial statements, management's discussion & analysis and any other

- documents relating to the financial results before they are filed with regulatory agencies and reported.
- c) To review any document that contains the audited annual consolidated financial statements or includes them by reference, such as prospectuses, press releases announcing financial results and interim results before they are reported.
- d) To amend or add to the Corporation's security policies from time to time. The Audit Committee reports to the Board of Directors annually on the relevance of the instructions in effect for management of the Corporation's security programs.
- 2. In fulfilling its mandate, the Audit Committee is required:
  - a) To see to the implementation of internal control measures and processes enabling the Chief Executive Officer and Chief Financial Officer to certify the financial statements and any other information document required under securities legislation.
  - b) To recommend external auditors to the Board of Directors, to evaluate their independence and effectiveness, and to approve the audit fees and any other remuneration paid to the external auditors.
  - c) To oversee relations between management and the external auditors, including the review of any letter of recommendation or any other external auditor's report, to discuss any significant difference of opinion or disagreement between management and the external auditors and to see that they are resolved.
  - d) To review annually all significant relations between the Corporation and the external auditors in order to evaluate the external auditors' independence and discuss this with them, and to report to the Board of Directors.
  - e) To review the performance of the external auditors and to approve any proposal for replacement when circumstances so warrant. To examine, with management, the reasons for retaining the services of other firms.
  - f) To meet periodically with the external auditors, without management in attendance, to discuss the main risks, internal controls and any approach undertaken by management to control these risks, and to discuss the accuracy and completeness of the financial statements. Specific attention should be paid to the capability of internal controls to detect any payment, transaction or method that may be deemed illegal or otherwise inappropriate.
  - g) To see to the availability of the external auditors in accordance with the needs of the Audit Committee and the Board of Directors. To ensure that the external auditors report directly to the Audit Committee and that they answer to the Board of Directors and the Audit Committee as auditor representatives towards whom the auditors are ultimately responsible.
  - h) To oversee the work of the external auditors retained for the preparation and issuance of an auditor's report or for other audit, review or certification services.

- i) To review and approve the policies regarding the hiring of employees or former employees of external auditors, past or present.
- j) To review the external audit program and fees.
- k) To review the external auditor's report on the audited annual financial statements.
- To review the problems identified during the audit and, if applicable, the limitations
  and restrictions imposed by management or any significant accounting issue for which
  management requests a second opinion.
- m) To review the observations, both positive and negative, made by the external auditors during their audit.
- n) To review with management and the external auditors the Corporation's main accounting policies, the impact of other applicable accounting policies, and the forecasts and decisions of management that may have a significant impact on the financial results.
- o) To review new accounting issues and their potential impact on the financial information of the Corporation.
- p) To review and approve any request for consultation with external auditors and to be informed of any request from management for non-audit services and the fees related thereto.
- q) To review with management, the external auditors and legal counsel any legal proceedings or claim, including tax assessments, that could have a significant impact on the Corporation's financial position and financial performance, and to ensure that they are disclosed in an appropriate manner.
- r) To review the conclusions of the external auditor's evaluation of the internal control system as well as management's response.
- s) To review with management the manner of ensuring and verifying the security of the Corporation's assets (including intellectual property) and information systems, the competence of the personnel holding key positions, and improvement projects.
- t) To review management's code of conduct and compliance with corporate governance policies.
- u) To review annually the legal requirements, the requirements of regulatory authorities, and the impact of any breach of these requirements on the financial information reported and on the Corporation's reputation.
- v) To receive periodic reports on the nature and scope of compliance with security policies. The Board of Directors must be informed of any non-compliance having significant consequences, and of the corrective measures and schedule proposed for remedying it.

- w) To review with management the accuracy and timeliness of the filings with regulatory authorities.
- x) To review the Corporation's business plans periodically.
- y) To review the annual audit program of the Corporation's external auditors.
- z) To review annually the Corporation's general insurance coverage to ensure sufficient protection of the Corporation's assets, including without limitation, directors and officers liability insurance and coverage of key personnel.
- aa) To carry out any other task required by the Corporation's articles and any relevant securities policy or regulation.
- bb) To implement methods in order to:
  - (i) receive and analyze complaints addressed to the Corporation in respect of audit, internal control or accounting matters; and
  - (ii) receive any confidential and anonymous observation from Corporation employees with respect to audit or accounting issues subject to security.
- 3. The Audit Committee may retain the services of external legal counsel or other counsel, communicate directly and independently with them, and pay their fees.
- 4. The Audit Committee reviews the Charter of the Audit Committee annually and recommends any amendment it deems appropriate to the Board of Directors.

## IV. SECRETARY

The Secretary of the Audit Committee is nominated by the Chairman.

## V. MEETINGS

- 1. The Audit Committee meets on the dates, at the times and in the places determined by the Audit Committee, at least four times a year. The Audit Committee meets with management and the external auditors separately at least once a year.
- 2. The members may meet in person, by telephone or by videoconference.
- 3. A written resolution signed by all members of the Audit Committee has the same value as one adopted at a meeting of the Audit Committee.
- 4. Meetings of the Audit Committee will be held from time to time, as decided by the Audit Committee or the Audit Committee Chairman, upon 48 hours' notice to all Audit Committee members. A quorum of Audit Committee members may waive the notice period.
- 5. A meeting of the Audit Committee may be called by any member of the Audit Committee or by the external auditors. The external auditors receive notice of all meetings of the Audit Committee.

6. The minutes of each Audit Committee meeting are tabled at the first meeting of the Board of Directors following such Audit Committee meeting.

# VI. QUORUM

A majority of members constitutes quorum at any Audit Committee meeting.

#### VII. DEFINITIONS

Under Regulation 52-110, Audit Committees:

"Financially literate individual" means "an individual who has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Corporation's financial statements."

"Control person" means "any person who holds, or is part of a group of persons who hold, a sufficient number of Corporation securities to enable him to exercise significant control over the Corporation or more than 20% of the Corporation's outstanding voting shares, unless it is obvious that the holder of these securities cannot exercise significant control over the Corporation."