

# INTERMAP TECHNOLOGIES CORPORATION ANNUAL INFORMATION FORM YEAR ENDED DECEMBER 31, 2008

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March 26, 2009

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#### FORWARD LOOKING INFORMATION

In the interest of providing the shareholders and potential investors of Intermap Technologies Corporation ("Intermap" or the "Company) with information about the Company and its subsidiaries, including management's assessment of Intermap's and its subsidiaries' future plans and operations, certain information provided in this Annual Information Form ("AIF") constitutes forward-looking statements or information (collectively, "forward-looking statements"). Forward-looking statements are typically identified by words such as "anticipate," "expect," "project," "estimate," "forecast," "plan," "intend," "target," "believe," and similar words suggesting future outcomes or statements regarding an outlook. Although Intermap believes that these forward-looking statements are reasonable based on the information available on the date such statements are made, such statements are not guarantees of future performance and readers are cautioned against placing undue reliance on forward-looking statements. By their nature, these statements involve a variety of assumptions, known and unknown risks and uncertainties and other factors, which may cause actual results, levels of activity and achievements to differ materially from those expressed or implied by such statements.

The material factors and assumptions used to develop the forward-looking statements herein include, but are not limited to, the following: (i) Intermap will continue to maintain sufficient and effective production capabilities, including with respect to the cost to produce the Company's products; (ii) there will be no significant reduction in the availability of qualified and cost-effective human resources; (iii) the continued sales success of Intermap's products and services; (iv) the continued success of business development activities; (v) the continued existence and productivity of subsidiary operations; (vi) there will be no significant delays in the development and commercialization of Intermap products; (vii) new products will continue to be added to the Intermap portfolio; (viii) demand for 3D mapping products will continue to grow in the foreseeable future; (ix) there will be no significant barriers to the integration of Intermap's technology and products into customers' existing and proposed products; and (x) superior 3D mapping technologies/products do not develop prior to Intermap establishing its technology as the industry standard.

Intermap's forward-looking statements are subject to risks and uncertainties pertaining to, among other things, revenue fluctuations, loss of key customers, nature of government contracts, breakdown of strategic alliances, economic conditions, common share price volatility, availability of capital, information technology security, loss of proprietary information, competing technologies, and international and political considerations, including but not limited to those risks and uncertainties discussed under the heading "Risk Factors" and elsewhere in this AIF and the Company's other filings with securities regulators. The impact of any one risk, uncertainty or factor on a particular forward-looking statement is not determinable with certainty as these are interdependent and Intermap's future course of action depends on management's assessment of all information available at the relevant time. Except to the extent required by law, Intermap assumes no obligation to publicly update or revise any forward-looking statements made in this AIF, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements, whether written or oral, attributable to Intermap or persons acting on the Company's behalf, are expressly qualified in their entirety by these cautionary statements.

Unless otherwise noted, all dollar references in this AIF are expressed in United States dollars.

# **CORPORATE STRUCTURE**

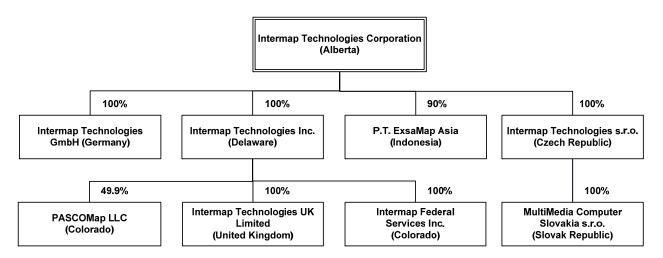
Intermap Technologies Corporation ("Intermap" or the "Company") was formed through the issuance of a Certificate of Amalgamation under the Business Corporations Act (Alberta) on February 25, 1997, as Intermap Technologies Limited. The Company changed its name to Intermap Technologies Corporation and consolidated its Class A Common shares (the "Shares" or "Common Shares") on a 12.5-to-one basis by Articles of Amendment filed on May 25, 1999.

The head office of Intermap is located at 8310 South Valley Highway, Suite 400, Englewood, Colorado, U.S.A. 80112. Its registered office is located at 1250 Standard Life Building, 639 – 5th Avenue S.W., Calgary, Alberta, T2P 0M9.

Intermap has six active, wholly-owned subsidiaries: Intermap Technologies Inc. ("Intermap U.S.A."), a corporation registered under the laws of Delaware, with its head office located in Englewood, Colorado; Intermap Federal Services Inc., a corporation registered under the laws of Colorado, with its head office located in Englewood, Colorado (a wholly-owned subsidiary of Intermap U.S.A.); Intermap Technologies UK Limited ("Intermap UK"), a corporation registered under the laws of the United Kingdom (a wholly-owned subsidiary of Intermap U.S.A.); Intermap Technologies GmbH ("Intermap GmbH"), a corporation registered under the laws of Germany with its head office located in Munich, Germany; Intermap Technologies s.r.o. ("Intermap s.r.o."), a corporation registered under the laws of the Czech Republic with its head office located in Prague, Czech Republic; and MultiMedia Computer Slovakia s.r.o., a corporation registered under the laws of the Slovak Republic (a wholly-owned subsidiary of Intermap s.r.o.); one majority-owned subsidiary, P.T. ExsaMap Asia registered under the laws of the Republic of Indonesia; and one 49.9% owned joint venture of Intermap U.S.A., PASCOMap LLC, a corporation registered under the laws of Colorado, with its head office located in Englewood, Colorado.

Intermap U.S.A. satisfies a United States federal government requirement that a United States entity own certain of the technology used by Intermap. Intermap GmbH was incorporated to operate certain of the assets acquired from Kreissparkasse München Starnberg of Munich, Germany. Intermap UK was incorporated to provide sales support activity within the United Kingdom and Europe. Intermap s.r.o. provides software development services for the Company. P.T. ExsaMap Asia provides internal data processing services for the Company's mapping operations. PASCOMap LLC was incorporated to process and sell third party satellite mapping data. The Company actively conducts business through Intermap, Intermap U.S.A., Intermap Federal Services Inc., Intermap UK, Intermap GmbH, Intermap s.r.o, and P.T. ExsaMap Asia.

The following chart illustrates the structure of the Company's subsidiaries.



## GENERAL DEVELOPMENT OF THE BUSINESS

# **General History**

Intermap was formed on January 31, 1996 and commenced active business operations on September 1, 1996. On November 11, 1996 the Company acquired all of the assets that had comprised the image mapping services division of Intera Information Technologies Corporation ("IITC"). These assets included cash and cash equivalents, employees, contracts, software, equipment, and goodwill. Many of the senior members of Intermap's original management team were long-term employees of the image mapping services division of IITC. Mr. Brian L. Bullock, President and Chief Executive Officer of the Company, was the President and Chief Executive Officer of IITC since the founding of that corporation in 1974. In 1995, the majority of the assets of IITC were sold to Schlumberger Ltd.

On November 11, 1996, Intermap acquired the rights to certain digital mapping technology under a Transfer, Assignment, and License Agreement (the "ERIM Agreement") among Intermap, Environmental Research Institute of Michigan ("ERIM"), and Intermap U.S.A.

ERIM had developed a digital mapping technology known as Interferometric Synthetic Aperture Radar for Elevation ("IFSAR") with funding from the United States of America Defense Advanced Research Projects Authority ("DARPA"). Under the agreement between ERIM and DARPA, any commercial exploitation of the system had to be conducted through a United States based company. Under the ERIM Agreement, ERIM assigned its rights to commercially exploit the technology to Intermap U.S.A. The original ERIM technology formed the basis of Intermap's IFSAR mapping technology, however, as a result of continuous improvement initiatives, Intermap has since replaced all of the software code that controls, operates, and processes the data associated with the IFSAR system. To date, more than 95 percent of the original hardware has also been replaced. Intermap's improvements to the original ERIM technology have resulted in elevation accuracy improvements of more than six times and resolution improvements of more than four times, compared to the original ERIM technology. ERIM (now part of General Dynamics) retained the ability to license the

original IFSAR technology to other parties; however, ERIM has no rights to any of the software or new hardware designs and improvements created by Intermap. To date, ERIM has not licensed it IFSAR technology to any other entity.

On February 25, 1997, Intermap amalgamated with a junior capital pool corporation (effectively a publicly listed shell company) listed on the Alberta Stock Exchange (now the TSX Venture Exchange).

From its inception until 2002, Intermap's business was primarily focused on providing three dimensional ("3D") digital elevation maps for customers under specific fee-for-service contract arrangements. These projects typically involved specified areas to be mapped around the world and were generally procured by governmental mapping or defense agencies.

On November 20, 2000, Intermap received a task order from prime contractor Boeing Autometric for the development of software production tools and the subsequent production of topographic data from the NASA/NIMA Shuttle Radar Topography Mission ("SRTM"). The SRTM mission flew on NASA's space shuttle in February 2000, providing near worldwide radar coverage for the creation of three-dimensional digital elevation model ("DEM") maps. The SRTM production contract was awarded to Intermap based on its processing technology and expertise. The total value of this contract and subsequent follow-on contracts totals approximately C\$15 million to date. Although the resolution and accuracy of the SRTM data is significantly less than Intermap produces with its IFSAR technology (see "Competition"), the software development tools created under this contract were later adapted for use with the NEXTMap program.

In 2002, Intermap commenced its NEXTMap® program, which is focused on collecting and processing 3D digital elevation datasets for entire countries. The NEXTMap program allows the Company to offer its products on an immediate delivery basis to a broad range of customers through low cost data licenses. Under the NEXTMap program, Intermap typically funds the costs of map creation up-front, in contrast to historical mapping methodologies in which such programs were completely underwritten by a single customer. The first country mapped under the NEXTMap program was Great Britain, which was completed in 2003. Management believed that the successful sales of licenses to multiple markets of NEXTMap® Britain products validated the NEXTMap business model, and the Company then began collecting data in the United States and Europe. The primary objective of the current NEXTMap program is to make commercially available all of Western European early in the second quarter of 2009, and the contiguous United States and Hawaii early in 2010.

In addition to the NEXTMap programs, Intermap continues to provide digital maps under fee-for-service contracts. Under both the fee-for-service and NEXTMap programs, Intermap retains ownership of the created map data and licenses the use of the data to its customers.

On April 5, 2002, Intermap acquired certain assets formerly operated by AeroSensing Radarsysteme GmbH ("AeroSensing"). These assets included a Gulfstream Aerospace Commander 1000 aircraft, two X-Band radar systems, and one P-Band radar system, as well as computers, workstations, and software. The purchase price for the assets totaled approximately C\$2.6 million. The acquisition gave Intermap the means to cost-effectively expand its data acquisition capacity.

In late 2003, Intermap announced its NEXTMap® USA program. Throughout 2004 and 2005, Intermap received contracts from various United States government customers under an early purchase offer for NEXTMap USA data. These customers included the United States Department of Agriculture ("USDA"), the National Oceanic and Atmospheric Administration ("NOAA"), and the National Geospatial-Intelligence Agency ("NGA").

In the third quarter of 2004, Intermap established a production facility in Jakarta, Indonesia to facilitate lower cost production of its data. The created entity was named P.T. ExsaMap Asia and is a 90 percent-owned subsidiary of Intermap. During 2008, the staff in this office increased to 500 and is currently running at full capacity. The Company, together with its predecessor company, has over 20 years of experience working in Indonesia, and in 2003 began a NEXTMap® Indonesia program based on previously and newly acquired data in the region.

In January 2006, Intermap added a second IFSAR-equipped Learjet 36 aircraft focused initially on data collection in the United States. This additional aircraft capacity enabled the Company to better support fee-for-service contracts around the world with its combined fleet of aircraft.

On June 21, 2006, Intermap obtained a listing on the AIM market of the London Stock Exchange plc under the symbol IMAP.

On March 1, 2007, Intermap acquired the shares and ongoing operations of MultiMedia Computer s.r.o., a Czech Republic software development company (now Intermap s.r.o.). The acquired business included an existing customer base, a recurring revenue stream, and a unique software development platform that Intermap used to enhance its production management tools. The development platform was also used in certain customer applications such as flood mapping within the insurance risk management industry. Intermap s.r.o. has successfully developed scalable software-based solutions for geographic information system ("GIS") applications, geographic data processing, and location-based services. All of the registered capital of Intermap s.r.o. was acquired for \$1.25 million in cash and \$0.5 million in equity comprised of 101,238 Class A common shares. The Intermap s.r.o. acquisition agreement provides for additional contingent compensation to be paid to the seller based on future sales of the Intermap s.r.o. technology for a period ending five years from the date of closing. The contingent compensation is based on a percentage of the sales price allocated to the acquired technology with such percentage totaling 20 percent for each of the first three years and 10 percent for each of the last two years. The minimum amount of contingent compensation to be paid is \$25 thousand per year and all contingent compensation is subject to the continuing employment of the seller by the Company.

On July 16, 2007, Intermap announced a joint development agreement with Visteon Corporation ("Visteon"), to provide Visteon with 3D road geometries for the entire country of Germany. Intermap and Visteon intend for the data to be incorporated into the development of advanced applications for use in automotive systems with an initial focus on predictive adaptive front lighting systems. Predictive lighting systems offer enhanced visibility for drivers at night without impairing vision for oncoming traffic by providing headlight steering that anticipates road curves and slopes instead of waiting for steering input.

On August 13, 2007, the Company announced the launch of its AccuTerra® product that provides existing and new outdoor global positioning system ("GPS") and Personal Navigation Device ("PND") products with digital terrain maps and off-road points-of-interest ("POI").

In December 2007, Intermap announced an agreement with Magellan to provide Intermap's AccuTerra map product for two of their lines of handheld GPS devices.

In January 2008, Intermap announced an agreement with Bushnell Outdoor Products that enables recreational enthusiasts to download AccuTerra outdoor map content for the new ONIX series of handheld GPS devices.

On May 5, 2008, Intermap announced that it had completed the data collection of its NEXTMap® Europe mapping program. Approximately 2.57 million square kilometers ("km²") of data was collected across Europe, including Austria, Belgium, Czech Republic, Denmark, England, France, Germany, Irish Republic, Italy, Luxembourg, Netherlands, Northern Ireland, Portugal, Scotland, Spain, Switzerland, and Wales.

In September 2008, the Company announced an agreement with Guy Carpenter & Company, LLC, a leading global risk and reinsurance specialist in France to supply them with high-resolution digital elevation models from the Company's NEXTMap Europe dataset. The models will be used in the development of comprehensive flood hazard maps and a national flood model for all of France. As part of the agreement, Intermap will be adding the resultant flood maps to its risk management solutions portfolio near the end of 2009. This development allows the Company to offer risk management solutions for the French market and, in Intermap's view, to set the flood risk assessment standard for years to come in France.

On December 10, 2008, Intermap announced the expansion of its AccuTerra GPS maps product line into Western Europe. The product line is derived from elevation data collected as part of the NEXTMap<sup>®</sup> Europe mapping program and provides to the end users high accuracy shaded relief imagery, topographic contour lines, hydrology detail, and land cover classifications.

On December 12, 2008, Intermap announced a partnership agreement with Lowrance, a leader in outdoor navigation and wholly-owned brand of Navico Holding AS to offer AccuTerra maps for Lowrance's enhanced outdoor GPS devices in the United States and Europe.

As of December 31, 2008, Intermap had collected (i) 7.96 million km² of NEXTMap USA data, representing approximately 99 percent of the continental United States and Hawaii, and (ii) 2.57 million km² of the NEXTMap Western Europe data, representing 100 percent of the program.

In January 2009, the Company announced that its NEXTMap® Europe program reached two significant milestones in December 2008, making elevation data commercially available for the entire countries of France and Italy.

## **DESCRIPTION OF THE BUSINESS**

## **General Overview**

With the introduction of GPS and Internet mapping services, Intermap believes people have become more "location aware" and are now consumers of navigation-related products and services. GPS devices and related applications have found their way into the mainstream markets through incar navigation systems, handheld GPS devices, and GPS-enabled cell phones. This awareness has created a multi-billion dollar Location-Based Services ("LBS") industry with related products and applications on the Internet, in handheld devices, in automobiles, and in wireless services. Participants in the LBS industry include companies such as NAVTEQ (now part of Nokia) and Tele Atlas (now part of TomTom) providing driving directions and navigation; Google and Microsoft supplying geographic location search and terrain viewing; Garmin Ltd., TomTom NV, Magellan Inc., Bushnell Outdoor Products, MiTAC Digital Corp., and Navico supplying personal navigation devices; and many others.

Most of the data content used in LBS applications to date has come from routable data consisting of essentially digital road maps, addresses, points of interest, and unique information layers used to optimize routing. The positional accuracy of the underlying map content used in many of these GPS applications is less than the positional accuracy of the GPS device itself, and often lacks information in the vertical dimension. The quality of the information on a typical digital map is sparse, as it is generally represented by only lines (e.g., roads and contours) and broad delineation of objects or areas (e.g., lakes, shopping centers, golf courses, and parks).

Intermap believes the proliferation of new LBS applications, combined with customer demand for higher accuracy and more intuitive user interfaces and displays, has created demand for three-dimensional maps and related terrain and road data. Using its proprietary IFSAR technology, Intermap is responding to the LBS industry demands by providing highly accurate 3D digital elevation maps and related products to customers worldwide. Intermap also believes its products better meet the requirements of GPS-enabled applications by offering significantly improved accuracy, three-dimensional viewing, and a terrain view that users can relate to more easily than a traditional line map (see Figure 1 and Figure 2).

Figure 1 - Traditional Topographic Map



Figure 2 – Intermap Digital Map



Like NAVTEQ and Tele Atlas, and unlike many other mapping companies, Intermap retains ownership of its data by licensing only the use of its 3D digital map data to its customers. Through its NEXTMap program, Intermap is striving to become the premier worldwide provider of digital topographic map products for large contiguous areas and entire countries. Intermap currently has 3D maps commercially available for six countries in Europe, several full and partial states in the United States, and many other areas worldwide. Intermap's objective is to have these 3D digital maps commercially available for all of Western Europe early in the second quarter of 2009; and the contiguous United States and Hawaii in early 2010.

Intermap believes that full coverage of the United States and Western Europe will create a critical mass of highly accurate 3D digital maps, thereby creating demand for its products in the LBS markets. This is particularly the case in consumer markets, for which large contiguous data coverage is believed to be required in order for products to achieve broad customer support. Intermap believes a similar critical mass was experienced with the 2D road map suppliers NAVTEQ and Tele Atlas once their national databases were complete. Once these companies were able to offer road navigation databases in the United States and Europe, demand for their products increased significantly.

Intermap's NEXTMap products are intended to replace the older and less accurate national and regional maps provided by some in-country government agencies. Applications for Intermap's 3D digital maps include:

- Geographic Information Systems ("GIS")
- Insurance risk modeling and watershed analysis
- 3D map data for recreational GPS devices and GPS enabled SmartPhone devices
- Satellite and aerial image rectification
- Military
- Line-of-sight analysis
- Base mapping
- 3D visualization for on-road PNDs and in-dash navigation systems
- Flight simulation
- Precision farming and forestry
- Surface analysis
- Landslide hazard analysis
- Internet visualization and mapping
- Intelligent Transportation Systems
- Advanced Driver Assistance Systems ("ADAS") offering higher fuel efficiency, emissions reductions, and improved safety

Intermap collects the underlying data for its 3D map products using its proprietary IFSAR radar technology mounted in an aircraft. The Company has three IFSAR-equipped airplanes that provide operational flexibility related to accuracy, speed, and geographical location of the data collection. Intermap's radar-based technology allows it to collect data at any time including under conditions such as cloud cover or darkness, which are conditions that limit most competitive technologies. The IFSAR technology also enables data to be collected over larger areas, at higher collection speeds, and at accuracy levels that are difficult to achieve with competitive systems. Once the raw digital map

data is collected, it is then processed to create three different geospatial datasets: digital surface models, digital terrain models, and orthorectified radar imagery. These datasets can then be further processed and/or augmented with additional data to create value-added products such as contour maps and topographic line maps.

All of the Company's data production is controlled and managed through Intermap's ISO 9001:2000 quality management system. The majority of the data production is carried out in-house, although Intermap has available alternative suppliers who can provide additional capacity on an as-required basis.

The Company licenses its 3D digital maps to customers either on a fee-for-service contract basis or through its NEXTMap programs. Intermap retains ownership of the mapping data and is able to sell the mapping data multiple times to different customers within the same market and across different markets. The Company distributes its mapping products through direct sales, channel partners, and distributor arrangements, both nationally and internationally.

## **Summary of Products**

Intermap creates three core digital map products as follows:

**Digital Surface Model ("DSM")** – is a digital elevation model that measures the top surface of the earth and objects located on it. The DSM is derived from the radar hitting the top of objects or the "first-reflective-surface". The DSM data includes buildings, vegetation, roads, and natural terrain features. Examples of DSM-related applications include line-of-sight calculations for cell tower placement, property development analysis, and military operations support. A DSM can also be used as a comparatively inexpensive means to improve the accuracy of cartographic products such as topographic line maps and road maps.

Digital Terrain Model ("DTM") - is a topographic model of the "bare earth". A DTM is a DSM that has had vegetation, buildings, and other cultural features digitally removed, leaving just the underlying terrain. This is achieved using Intermap's proprietary software tools that create terrain elevations based on measurements of the ground contained in the original radar data. A DTM provides a geometrically correct reference frame over which other data layers, such as aerial photography and other types of images, can be draped. The DTM, coupled with surface analysis tools, supports applications such as the development of accurate topographic maps. The DTM is also a valuable component in analysis involving various terrain characteristics such as profile, cross-section, line-of-sight, aspect, and slope. Examples of DTM-related applications include flood modeling, agricultural land analysis, recreational GPS applications, Internet mapping, and ADAS applications.

Orthorectified Radar Imagery ("ORI") – is a grayscale image of the earth's surface that looks similar to a black-and-white photograph. An ORI is derived from the intensity of the radar wave that is rebounded from the earth's surface back to the IFSAR system. The radar image is then processed using the DSM to remove the distortions that are inherent with any image collection process. This rectification process results in each pixel in the image being located in its correct geometric position. The ORI is typically used as the basis for extracting terrain features such as roads, trees, and buildings for other mapping applications such as topographic line maps.

Using the above core products as foundation elements, Intermap produces other mapping and image products for its customers tailored to customer-specific accuracy requirements, file formats, and coordinate systems. These products include:

**Contour Maps** – a topographic map that shows contour intervals. Because these contour maps are based on the DTM, Intermap is able to offer higher accuracy digital map products than traditional governmental created products (e.g. U.S. Geological Survey maps).

**Topographic Line Maps ("TLM")** – a map that shows major features such as hydrology, major transportation routes, physical features, and political boundaries.

**Thematic Maps** – a map that focuses on certain features such as vegetation, geology, hydrology, and land use. These maps are processed to accentuate relevant features to the customer and to leave out irrelevant features.

Intermap has also developed products targeted at specific markets. One such product is AccuTerra, which is focused on the outdoor hand-held GPS device market, the PND market, and the SmartPhone market. AccuTerra gives GPS users the ability to visualize trails and other points of interest in the context of the natural terrain. The user interface can include; (i) realistic 2D and 3D views; (ii) accurate elevation information; (iii) clearly identified and classified trails, paths, and roads; (iv) outdoor-specific points of interest such as campgrounds, service facilities, and trailheads; (v) the ability to route to points of interest and track progress; (vi) easy-to-reference visualization tools to improve trip planning and safety; and (vii) a land use display that depicts the location of public and private property, including areas of restricted use.

# Related Mapping Services

Intermap produces value-added map and image products on a fee-for-service contract basis by layering publicly and commercially available data onto the Company's base digital map data. These layers can include objects such as roads, hydro lines, waterways, sewers, building structures, and vegetation. This information can then be manipulated, enhanced, and analyzed using commercially available GIS software. This allows the customer to analyze a variety of data for use in vehicle routing, utility planning, land-use planning, wetland and vegetation monitoring, land resources inventory, water management, coastal flood zone monitoring, telecommunications network planning, forest cover analysis, forest harvest analysis, soil erosion monitoring, forest depletion, and forest regeneration planning.

Intermap also provides training services to its customers. This training generates revenue and is used as part of the Company's overall marketing program to educate customers, suppliers, and partners about Intermap's products and services. New Internet based e-learning programs are available on the Company's Web site and is the preferred delivery channel for training.

## Applications Software

Although Intermap's customers often use industry-available software packages from companies such as Environmental Systems Research Institute, Inc. ("ESRI") and Autodesk to view, analyze, and manipulate GIS data, the Company also provides its own software to customers who do not have these advanced software packages or to customers who require a more specialized application.

Intermap's current application software includes products such as eyeTour® (3D visualization), Global Mapper® (basic GIS tools), and Acquarius.net® (a software development platform). These software applications allow users to display, measure, manipulate, and edit and manage images, elevation data, vector datasets (such as roads), property boundaries, and flood zones.

eye'Tour – is a 3D visualization engine that does not require data to be stored in a proprietary format as is the case with other similar commercially available products. The eyeTour application works directly with NSDI (National Spatial Data Infrastructure) compliant data formats and allows pan, zoom, and roam features with the movement of the user's mouse. The application can handle full-resolution NEXTMap products, which is a benefit over competing products.

**Global Mapper** – allows users to display, make measurements, convert, edit, print, track GPS, and apply GIS functionality to datasets in a software package meant for desktop applications.

**Acquarius.net** – enables Internet or intranet GIS applications to work across multiple servers and platforms. It allows users to access a wide diversity of geospatial data types and to be able to overlay, interact with, and use those data types to solve problems on an address-specific basis (e.g., flood risk analysis). It also features ease of use as it is built on Microsoft.net<sup>®</sup> technology.

## **Revenue and Business Model**

Intermap operates in one industry segment, digital mapping and related services, with two different classifications of revenue: Contract Services (fee-for-service contracts) and Multi-client Data Library licenses (NEXTMap).

#### Contract Services

The Company's contract services business typically involves a client requesting a digital map for a specific area and purpose outside of the Company's NEXTMap area of collection. Intermap creates the digital maps on a fee-for-service contract basis and then licenses the use of the data and/or digital maps to the customer. These custom projects have traditionally been conducted as a result of government or commercial contracts. From time to time, the Company also collects data on a speculative basis, that is, without a contract in place for the collection or licensing of the data to be collected. Prior to the start of any speculative collection, the Company typically receives an expression of interest in all or part of the data from one or more customers, which may include indications of the price that the customer may be prepared to pay and the estimated timing before a commitment to purchase the data could be made. Project-specific contractual mapping and speculative data sales have historically generated significant revenues and margins for the Company, however they are unpredictable in timing and value, thus creating sources of revenue and margins that can vary significantly on a quarter-to-quarter and year-over-year basis. See "Risk Factors – Revenue Fluctuations and Speculative Data Collection".

# Multi-client Data Library Licenses (NEXTMap)

With its NEXTMap business, Intermap's objective is to create a library of digital maps which can be licensed to a broad group of customers. Since the cost of collecting and processing the digital map data can be spread over a larger customer base, Intermap can offer its digital map products to customers at a price that is significantly lower than under a custom project basis. The Company believes the lower price also serves to expand the available market for the data by enabling a wider

range of applications to be developed and makes the use of the data attractive for customers who otherwise could not afford it. As such, the customers for NEXTMap products include not only large government agencies, but also commercial companies and smaller government agencies at the state, county, and municipal level.

Demand for NEXTMap data has been further enhanced by the immediate availability of the data from the Company's e-commerce data store or from the e-commerce capabilities of its value-added business partners. Provided the requested data is in inventory, customers can receive their digital map data via the Internet, a CD/DVD, or from other available storage media within two to three days. Small areas can be downloaded immediately from the Internet. This contrasts with competitive offerings where data delivery could take months because the data must first be collected and processed prior to its delivery to the end customer.

Intermap also believes the NEXTMap business model provides a competitive "first mover" advantage. The experience of other companies that have created 2D databases is that a critical mass of coverage is required before business partners will create new applications that can be sold into scalable markets. Intermap believes it will achieve this critical mass coverage with the completion of its NEXTMap programs in Western Europe and the United States in 2009 and early in 2010, respectively. Any future competitors hoping to offer 3D digital maps on the same basis as Intermap will likely be faced with higher capital costs and a lower probability of success, as they will be competing for customers who are able to purchase map data with immediate availability from Intermap. The Company believes that its NEXTMap programs will allow it to be first to market in critical new applications such as insurance risk analysis; GPS enabled consumer electronics devices; and automotive applications.

# **Revenues by Product Category**

The Company recorded revenues for the following categories of products and services during the two most recently completed financial years:

(in thousands of United States dollars)	2008	2007
Contract Services Multi-client Data Library licenses (NEXTMap)	\$26,212 10,812	\$28,211 5,576

# **Pricing**

Pricing for contract services work varies by customer and their individual requirements. The project price under a contract is typically negotiated with the customer up-front as a function of the area requested, its location, terrain characteristics, and the type of license requested.

Pricing for NEXTMap data can vary widely because Intermap uses a value-based pricing strategy which attempts to align the price charged with the value that the data generates for the end user and the benefits received from its use. For example, NEXTMap Britain data for use in New Horizon's Microsoft Flight Simulator plug-in application sells for less than \$100 retail per unit, whereas a license for use in a GIS application owned by a large enterprise is priced at nearly \$1 million.

# **NEXTMap Strategy**

The Company has been pursuing its NEXTMap strategy since 2002, starting with its NEXTMap Britain program. The NEXTMap strategy involves the collecting and processing of 3D digital elevation datasets for entire countries around the world. The commercial success of NEXTMap Britain, and subsequent demand from customers for additional geographic markets, has led the Company to pursue the creation of NEXTMap datasets in the United States and Western Europe. These areas have the largest number of potential customers and represent the largest markets for geographical information. Intermap's primary objective related to its NEXTMap programs is to make commercially available the dataset for Western Europe early in the second quarter of 2009, and the dataset for the contiguous United States and Hawaii in early 2010.

The historical development of the NEXTMap program is as follows:

# **NEXTMap Britain**

On November 12, 2001, the Company entered into an agreement with a commercial partner that provided C\$3.2 million to fund a portion of the costs of the NEXTMap Britain project. The NEXTMap Britain dataset covered all of England, Wales, and the southern portion of Scotland, and was completed in May 2003. During late 2003, the remainder of Scotland was collected and added to the NEXTMap Britain database.

Ownership of the data is retained by Intermap; the data is licensed either directly to the customer or through the Company's e-commerce data store and other authorized distributors in the United Kingdom. The sale of licenses for NEXTMap Britain data have exceeded \$13 million to date.

## **NEXTMap USA**

The Company commenced data acquisition for the NEXTMap USA project late in 2003 and at the end of 2008, the NEXTMap USA library included datasets from 35 states, including complete datasets of California, Florida, Hawaii, Mississippi, and Oklahoma. As of December 31, 2008, Intermap had collected 7.96 million km² of NEXTMap USA data, representing 99 percent of the program. The data collection portion of the NEXTMap USA program was finished on March 16, 2009, with the entire dataset scheduled to be fully processed and commercially available for sale in early 2010.

The Company has agreements with a number of partners to buy full or partial NEXTMap USA datasets. One of these partners is the NGA, which has committed to purchase all of the NEXTMap USA data. The USDA has also agreed to purchase large areas of the United States in support of its mapping programs. Additionally, the NOAA, has made purchases of NEXTMap USA data with a focus on coastal regions.

As of December 31, 2008, NEXTMap USA licenses have totaled approximately \$20 million. The Company believes that NEXTMap USA sales will increase significantly once the dataset is completed for the entire NEXTMap USA program area as Intermap believes many of the key target markets require large regional or full country coverage.

# **NEXTMap Europe**

Driven by demand within the European automotive, government, and insurance risk management sectors, the Company's NEXTMap Europe plan includes the mapping of Western European countries, including Austria, Belgium, Czech Republic, Denmark, England, France, Germany, Irish Republic, Italy, Luxembourg, Netherlands, Northern Ireland, Portugal, Scotland, Spain, Switzerland, and Wales. As of December 31, 2008, there were completed datasets available for the entire countries of England, Germany, France, Scotland, and Wales. As of December 31, 2008, collection of data totaled approximately 2.57 million km² representing 100 percent of the entire NEXTMap Europe project. The processing of the entire dataset is expected to be complete early in the second quarter of 2009 and once complete; Intermap believes this dataset will be the most accurate 3D digital elevation model of Western Europe in existence.

# **Principal Markets**

## Market Overview

Intermap believes that new market opportunities for mapping databases are being driven by the proliferation of GPS technology in handheld devices, automobiles, and commercial vehicles. GPS devices allow users and equipment to be precisely positioned horizontally and vertically virtually anywhere on the planet. This positional information is then typically represented in map enabling point-to-point measurement and navigation. As the price of GPS enabled devices has continued to decline, the number of related navigation and geographical positioning applications has continued to increase.

The combining of GPS technology with routable maps has led to the creation of in-car and personal navigation systems that have collectively become a multi-billion dollar market. Internet companies such as Google and Microsoft that offer location-specific advertising and search for their customers have also created a multi-billion dollar market in the form of LBS advertising revenue. Intermap believes these multi-billion dollar LBS markets are being fueled by location-aware consumers. The underlying data enabling the growth of these markets is currently comprised of two-dimensional digital road maps, addresses, points of interest, and road characteristics (one-way streets, intersections, turn restrictions, etc.) that provide optimum routing to the user.

The Company believes that new applications are emerging in the LBS industry due to the availability of highly accurate 3D data such as elevation, slope, accurate centerline geometry, color imagery, and 3D imagery. This mapping content can be the catalyst for new emerging applications that allow both people and machines to be location aware. When a machine, such as a farm tractor, construction equipment, or an automobile becomes location aware, its efficiency and utility can be significantly enhanced. With the use of 3D map data, additional systems and functionality can be integrated into (i) handheld devices to enhance user utility, (ii) automobiles to enhance fuel efficiency and safety, and (iii) machinery to enhance productivity. Intermap believes that new LBS applications and markets will continue to emerge based on the availability of highly accurate 3D mapping data. Through Intermap's NEXTMap programs, the Company believes it is in a strong position to supply this 3D data to the LBS market.

Intermap believes that several markets requiring highly accurate 2D and 3D data are gaining support among the hardware Original Equipment Manufacturer's ("OEMs") as follows:

#### Consumer Electronics

In the handheld consumer electronics market, end users are increasingly demanding applications, features, and devices that blend professional needs and personal lifestyles. The rapid emergence of the SmartPhone reflects these trends, and Intermap believes that these devices will become the predominant mobile platform in the coming two to three years. Finding your way was once the domain for map readers, but in recent times, an individual's orientation has been enhanced with tools such as MapQuest, Google Maps, Google Earth, Microsoft's Virtual Earth, and voice guided in-car navigation. This is important as Intermap believes that millions of non-map readers will want new and innovative ways to orient themselves – to find out where they are through the use of improved devices and map content.

Intermap's goal is to leverage the dedicated GPS market as an entry point to the much larger mainstream navigation markets such as PNDs and Smart Phones. As the entire NEXTMap database in the United States and Europe becomes available, Intermap's AccuTerra content will continue to be enhanced to include the depth, breadth, and detail that can be created through these NEXTMap products.

Intermap's vision for the handheld GPS market includes a range of 3D rendering and position-tracking capabilities in handheld consumer electronics devices. A 3D interface, coupled with supporting 3D data such as streetscapes and other terrain information, can enhance both the user understanding and usability of the data and devices. This type of interface requires 3D terrain data at a resolution that can be provided by Intermap's DSM and DTM products.

Dedicated GPS Devices: Dedicated GPS devices are handheld units targeted at outdoor recreation users. These devices typically feature topographic maps and rugged designs. They are used for planning and participating in outdoor recreation activities, usually in non-urban settings. The standard map content platforms used for outdoor visualization have been USGS (United States Geological Survey) topographic maps, Google Maps, Google Earth, and Microsoft's Virtual Earth. The largest GPS OEM is Garmin, with some statistics showing them holding a 73 percent market share for dedicated handheld outdoor devices in the 2.5 million annual units United States market, and a 68 percent market share in the 1.1 million annual units European market. In recent years, Magellan, Bushnell, and Navico have gained market share and Intermap's AccuTerra product has been selected by all three of these companies for use in their devices. Initial implementation of the AccuTerra product with selected Magellan devices took place in July of 2008 and expanded use of AccuTerra map data is expected throughout 2009. The introduction of AccuTerra products in Bushnell and Navico devices is scheduled for mid-year 2009.

Penetration into the dedicated GPS device market provides Intermap with a significant foothold in the GPS device industry. Because it is a niche application, the Company has an opportunity to become a major content provider to the industry. Even though Magellan, Bushnell and Navico have continued to invest resources in creating hardware that can be targeted to the outdoor market, none of these companies have focused on the development of improved content. Instead they have reached out to third parties for their base maps and content. This creates an opportunity for Intermap to become the provider of choice in this industry and become the established content and visualization provider for dedicated device OEMs.

<u>Personal Navigation Devices (PNDs):</u> A PND is a portable electronic product that combines a positioning capability (such as GPS) with navigation functions to enable its primary use of in-car navigation. Today's PNDs are targeted at automobile drivers and getting people from Point A to Point B. As these device manufacturers add more features and functionality, Intermap believes that they will also seek better and more compelling visualization and orientation tools in their devices. The largest PND supplier in the United States is Garmin, with some statistics showing them with nearly 50% of the 14 million unit annual market. In Europe, TomTom is the largest supplier and has captured 38% of the 19 million unit annual market. Intermap believes the PND market will continue to be dynamic over the next several years as devices become more feature and content rich, as competition stiffens, and as hardware and software undergo improvements in functionality, memory usage, and ability to display more sophisticated content.

Intermap's AccuTerra and NEXTMap products can enable improved orientation and visualization for these dedicated PNDs. Intermap's visualization products can provide OEMs with a visualization platform that Intermap believes cannot be duplicated by the current competition. As a result, Intermap believes that through the use of its NEXTMap data as the base visualization layer, the opportunity exists for it to become the provider of choice for all OEMs in the PND market. Additionally, Intermap's products provide a one-stop solution for any OEM.

<u>SmartPhones</u>: The emergence of the SmartPhone (web-enabled, 3G devices) and the recent addition of GPS capability, has had a significant impact on the mobile market. The early dominant providers in this market have been Nokia and Research In Motion (the maker of Blackberry), but a substantial amount of development activity has taken place recently with the introduction of Apple's iPhone and iPhone 3G products. The SmartPhone market is large and growing dramatically. As manufacturers add 3G capability, better interfaces, and more services, adoption is expected to grow at an ever increasing rate. The United States SmartPhone market is expected to exceed 92 million units sold in 2009 and in Europe there is projected to be over 100 million units sold in 2009, but these statistics are subject to changing economic conditions within these regions. Many of these users are expected to replace laptop computers with their SmartPhones, leading to dramatic changes in features, functionality, content, and access time.

Intermap's AccuTerra product for the SmartPhone is targeted at users who want to enjoy their favorite outdoor destinations and at the same time use a high quality map to stay oriented, and to track the trail or path they are on. Intermap believes the SmartPhone market is emerging as the primary market for orientation and geovisualization. Like today's PND market, in the mid-term it is likely that competitive pressures and differentiation will be based on enriched content, applications, and information layers. Intermap believes it is well positioned to provide a portion of this differentiation by securing relationships with SmartPhone manufacturers based on NEXTMap's unique visualization qualities and AccuTerra data and coverage. Intermap is targeting to make AccuTerra content available for new devices during 2009, including Apple's iPhone in early 2009.

## Automotive

The global economic crisis is significantly impacting the automotive industry as companies attempt to meet increasing consumer demands for energy management, safety, and convenience applications, and adhere to stringent government regulations concerning fuel consumption and CO<sub>2</sub> emissions. In response to this crisis, the United States government has implemented a financial stimulus package to help stabilize North American car makers. The automotive industry OEMs and Tier 1 suppliers

are also responding with shortened product launch cycles, the adoption of new technologies, and are collaborating more closely with their supply chain partners. These industry trends may prove to be beneficial to Intermap. Intermap's 3D road vector data with the ability to predict the road ahead, provides measurable value for applications related to key markets, including: fuel efficiency, battery management for the emerging Hybrid Electric Vehicle ("HEV") market, and select Advanced Driver Assistance Systems ("ADAS") applications. In addition, navigation systems are being readied for the adoption of 3D visualization data that will require uniform terrain data, which Intermap's NEXTMap programs can provide. Numerous programs within the automotive industry require high-resolution 3D-enabled roadway network databases that Intermap's elevation and image products can readily support.

Automotive initiatives require patience and a long-term focus. Given the multi-year duration of automotive product life cycles, applications and/or markets tend to develop slowly; final implementation may take place over a period of several years. However, once an application has been accepted and implemented, past history with suppliers to the automotive industry has shown that unit growth and associated revenue can occur rapidly and over a condensed period of time.

Commercial Vehicle Fuel Efficiency and Powertrain Management: Research conducted by Intermap and its partners within the Unites States and Europe has shown that the inclusion of 3D road vectors in heavy trucks can be used to manage vehicles' drive trains to improve fuel economy. An Auburn University report late in 2007 reported that early results showed that truck fuel consumption can be reduced up to three percent without significantly increasing travel time, when compared with a conventional cruise control system. According to the American Trucking Association, motor carriers spent \$103.3 billion on fuel in 2006. Shorter commercial vehicle development cycles, combined with existing OEM enthusiasm, present an ideal entry point to establish 3D roads industry credibility and to achieve initial revenue from Intermap's automotive initiatives. Applications will first target new vehicle (Class 8 long-haul trucks) embedded solutions. Aftermarket opportunities are still to be determined, but Intermap believes that these could also present a significant opportunity. Intermap is currently engaged in the bidding process with two OEMs, has a partnership contract with a Tier 1 supplier, and has established itself as one of the two principal competitors within this segment.

<u>ADAS</u>: In the automotive market, 3D road vectors can be used in applications such as adaptive front lighting systems, curve warning systems, and predictive pass advisory systems. A driver's situational awareness can also be enhanced through the use of 3D photorealistic displays in navigation systems. Intermap is currently engaged in discussions with several Tier 1 automotive suppliers regarding automotive applications using NEXTMap data. Additionally, once the 3D road data is incorporated into a vehicle, Intermap believes that other existing systems can then be enhanced or improved such as brake management optimization, adaptive cruise control, lane departure warning, lane keeping assist, collision mitigation braking, and forward-sensing collision warning.

<u>HEVs:</u> Passenger car energy management optimization is a broad segment that is rapidly evolving due to global economic conditions, fuel price volatility, and government mandates (i.e., CO<sub>2</sub> emission limits in Europe and fuel economy Corporate Average Fuel Economy ("CAFE") standards in the United States). Intermap's initial target within this segment is passenger car HEVs. Vehicle manufacturers have recognized that utilizing map information to predict the upcoming road can help them optimize powertrain system algorithms resulting in improved fuel economy and a reduction in battery size. Intermap believes that its coverage for all road function classes is essential

to this optimization and is seen by the Company as a key competitive advantage. During 2008, Intermap worked with both Clemson University and a Tier 1 automotive supplier to analyze the impact of map data through simulation. Early results were positive and justified further vehicle-level testing during 2009.

<u>In-Dash Visualization</u>: For several years, automotive OEMs and Tier 1 suppliers have been showing interest in visually enhancing existing in-dash navigation systems. Since the enabling technology is now in place and Tier 1 suppliers have been utilizing lesser quality data sets, some suppliers have concluded that better resolution data would be desirable. As such, Intermap believes that market demand for 3D visualization may commence as early as late 2009, with the first applications expected to be available in luxury and near-luxury vehicles' in-dash navigations systems. In addition, certain device makers are making 3D terrain visualization data available on their portable and in-dash navigation systems. Intermap believes the visualization market opportunities are expected to ramp in both Europe and North America from 2 percent of luxury vehicles with navigation systems in 2009 to 80 percent of luxury and near-luxury vehicles with navigation systems in 2016. Visualization using Intermap's 3D NEXTMap products can represent a significant early revenue opportunity for the Company. This segment represents both a strategic and convergence initiative intended to establish NEXTMap as the conflation foundation to be used for geospatial databases for consumer-targeted map data.

# Insurance Risk Management

<u>Flood and Watershed Analysis:</u> Flood modeling applications have a broad appeal to insurance companies, government agencies, and corporate enterprises. In 2003, an address-specific flood risk analysis was produced by a third party engineering firm for Norwich Union Insurance ("NUI") in the United Kingdom using NEXTMap Britain data. NUI reported that its use of this risk analysis product provided significant savings to them by providing better management of their overall flood risk portfolio. This NEXTMap Britain-based product allowed NUI to more precisely purchase reinsurance associated with their flood risk exposure and significantly reduced their payouts during flood events. Intermap believes that it is well positioned to provide similar risk management applications to insurance companies throughout Western Europe and in the United States that utilize the Company's comprehensive NEXTMap dataset.

In early 2007, Intermap purchased MultiMedia Computer s.r.o. ("Intermap s.r.o."), a Czech Republic-based software development company that had a unique software development platform used to manage, analyze, and visualize 3D digital elevation data. The platform is used in the delivery of insurance risk management applications. During 2007, Intermap entered into an agreement with European insurance company SwissRe to introduce a new flood risk product for several countries in Europe. This product integrates Intermap s.r.o.'s software development platform with SwissRe's flood algorithms and Intermap's NEXTMap data. The product will be directed towards the European risk management market, but Intermap expects it to eventually be used in the United States market as well. The first target users for this product are direct insurers and large corporate enterprises. Eventually, Intermap envisions that its insurance risk management products will also become consumer-focused products offered over the Internet to home owners and prospective property buyers.

In September 2008, the Company announced an agreement with Guy Carpenter & Company, LLC, a leading global risk and reinsurance specialist in France to supply them with high-resolution digital

elevation models from the Company's NEXTMap Europe dataset. The models will enable the development of comprehensive flood hazard maps and national flood model for all of France. As part of the agreement, Intermap will be adding the resultant flood maps to its risk management solutions portfolio near the end of 2009. This development allows the Company to offer risk management solutions to the French market and Intermap believes the opportunity exists for it to be the flood risk assessment standard in France for years to come.

#### Other Markets

<u>3D Visualization:</u> Traditional 3D visualization applications involving the draping of thematic or place-specific data over 3D landscapes has primarily been associated with activities such as land-use planning (visual impact on new developments), in-office viewing of real estate properties, and virtual tourism. Intermap's DTM products can provide the base data layer for such applications, but at a much improved accuracy level than has historically been achieved through traditional map suppliers. Intermap's commercial 3D visualization products made available through the Company's channel partners include: (i) Photoscape 3D – a Great Britain fly through product; (ii) Global Mapper – a geospatial analysis tool kit; and (iii) eyeTour – a 3D visualization product. In 2007, Microsoft selected NEXTMap Britain data to power its Virtual Earth Internet visualization application in the United Kingdom.

<u>Flight Simulation</u>: During 2004, Intermap's 3D terrain data of England and Wales was used by Horizon Simulation Ltd. ("Horizon"), to create a plug-in for the Microsoft Flight Simulator consumer product. In the fourth quarter of 2006, Microsoft released the Flight Simulator-X product, which featured a new visualization engine that could handle the full resolution of Intermap's NEXTMap datasets. Accordingly, Horizon released a new version of the terrain plug-in that provided clarity, accuracy, and detail in the terrain visuals. In early 2008, FS Dreamscapes entered into an agreement with Intermap to use NEXTMap USA data to also create terrain plug-ins for Microsoft's Flight Simulator-X product.

In addition to the markets listed above, Intermap is marketing NEXTMap data to a number of traditional GIS markets. In these markets, customers typically use desktop-based GIS and engineering systems offered by strategic partners such as ESRI and Autodesk for planning, engineering, environmental management, site or route selection, and permitting.

## Government Agencies

Intermap's primary source of revenue has historically come from government contracts with national mapping agencies. The Company is a leading commercial supplier of DEMs to United States federal agencies, including the NGA, USGS, NOAA and USDA. As the Company collects NEXTMap data around the world, increased opportunities exist for selling licensed DEM products to government agencies outside of the United States.

## Commercial Target Markets

In addition to the insurance risk management market discussed above, Intermap sells data licenses to commercial organizations involved in activities as diverse as forest management, cell tower locating and construction. Clients include oil and gas companies, pipeline companies, power distribution companies, mining companies and forest management companies. Wireless carriers are probably the

largest commercial purchaser of NEXTMap data as they use the data to determine the most effective placement of their transmission towers. In some cases, Intermap's data is so detailed that it needs to be de-resolved so that it does not overwhelm the software tools used by the customer. Intermap expects that the commercial suppliers of this software will eventually offer upgraded products that will make it possible to use Intermap's full-resolution data as has already occurred in the flight simulation market. Intermap believes that the availability of upgraded engineering and analysis software will also enhance the demand for its data.

# **Selling and Distribution Methods**

Data distribution occurs through direct sales, channel partners, value-added partners, or through the Company's Internet-based store at www.terrainondemand.com.

## **Direct Sales**

Direct sales are carried out through a commissioned sales team employed by the Company. The direct sales team is responsible for the sales of both contract services work and the licensing of NEXTMap data.

## **Channel Partners**

In order to reach markets not easily accessed by traditional direct selling efforts, the Company uses a network of channel partners. These partnerships are established to broaden the Company's customer base, penetrate new markets, and establish recurring revenue streams. The channel partners are generally well-positioned in broad and diverse vertical markets that have little or no overlap with Intermap's traditional markets. The channel partners distribute the Company's NEXTMap data to their principal markets, and create and sell solutions or consumer products based on the Company's NEXTMap data. Ultimately, Intermap's selection of a channel partner is governed by its ability to promote an integrated solution or product to mass markets, thereby creating an opportunity for recurring revenue to the Company.

The Company has a well-established network of channel partners in Great Britain that promote the Company's NEXTMap Britain products. These channel partners include those that distribute the Company's data, as well as those that integrate this data into consumer products. The Company has taken a strategic approach in securing other partners possessing either a national color imagery database or the technology to develop consumer products containing a three-dimensional visualization component.

Over the past three years, to coincide with its NEXTMap USA and NEXTMap Europe programs, the Company established channel partner networks in the United States and Europe. This effort is continuing with many partnerships in place and others in various stages of prequalification. The Company is focusing on partnering with companies in 3D visualization, tourism and emerging Internet mapping markets.

Examples of Intermap Channel Partners include:

- Autodesk
- ESRI
- Definiens
- Spatial Energy
- Harris Corporation
- MapMart
- Bluesky
- Cities Revealed
- Environment Systems
- Getmapping
- Infoterra
- Promap
- ESRI Geoinformatik GmbH
- Centremaps
- Dotted Eye
- eMapSite
- Atlas Tech
- Loy Surveys
- Curtis Aerial Photography

- Eagle Aerial Imaging
- Geoville Group
- The XYZ Digital Map Co.
- Resource Strategies
- Antara Grafik
- DES
- GeoContent
- GAFag
- Geodis Brno
- Stereocarto
- Air Data
- Geosys
- Apogee
- Credent
- Earthline
- PASCO
- GeoSpatial Solutions
- FS Dreamscapes
- PT. EXSA

# Business Partnerships

Intermap has also developed a series of business partnerships created to offer collaborative products in various markets. Examples of Intermap's business partners include:

- Hella
- Visteon
- Auburn University
- Clemson University
- Harman Becker

- Siemens VDO (now Continental Corporation)
- Navico
- Bushnell
- Magellan

## **Production Process**

The Company owns all of the technology required to collect, process, edit and deliver products to its customers. All of the Company's production processes, quality assurance and quality control processes are documented under the Company's ISO 9001:2000 Quality Management System.

Areas targeted for collection are first flight-planned by Intermap's operations staff. Field crews are then dispatched to install GPS-based ground control points, as required. The aircraft and radar are subsequently flown to collect data over the target locations. The collected raw radar data is sent to the Company's interferometric processing ("IP") center in Denver, Colorado. During IP, the raw radar data and GPS information are converted into a fully orthorectified (corrected) image and a digital surface model on a flight line basis. These flight line products are then mosaiced together into map sheets.

The resulting map sheets are then sent to the Company's editing centers in Ottawa, Jakarta, or our contract editing facility in Bangkok where the data undergoes a 3D edit to remove any radar-induced artifacts. At this time, the DTM is produced through proprietary algorithms that select all points on the ground, while points on the tops of trees or buildings are removed. Throughout the production process, the data is continually checked through independent verification and validation. This independent verification and validation process is separate from quality assurance, which is undertaken throughout the production process. The three core products - DSM, DTM, and ORI – are then delivered to the Intermap data store. Should customers have data requirements other than the core product, a "professional services" team modifies the core product to meet the customer requirements. Within its production processes, the Company uses over 45 exclusive and proprietary software programs.

The Company needs well trained technical staff having knowledge in radar-related disciplines and/or mapping. Intermap fills a portion of this requirement for engineers, scientists, and technicians through recruitment programs at accredited colleges and universities. Career paths usually lead from technician, to design engineer or software developer, to manager. In addition, the requirement for mapping specialists is fulfilled from the conventional mapping community or through graduates of GIS programs at both community colleges and universities.

# **Technology**

The Company's ability to produce digital maps over large areas and with a high level of detail and accuracy results from its proprietary IFSAR digital mapping technology. This technology remotely and simultaneously collects latitude, longitude, and elevation (x, y, and z coordinates) data with an extremely high level of efficiency relative to other mapping technologies. An added benefit of the IFSAR technology is the ability to collect data in poor visibility conditions (night or overcast) and to fly at high altitudes, which facilitates a wide swath of data collection of 10km. The Company's highest level of IFSAR technology DEM product provides a vertical accuracy of up to 50cm and horizontal resolution of up to 62.5cm. Intermap believes it has a strong leadership position in the mapping industry as a result of its IFSAR technology.

The Company operates three IFSAR systems which consist of two X-band radar antennae coupled to a transmitter receiver and data storage system mounted in two Learjet 36A aircraft and a King Air 200T aircraft. Data collection in all three dimensions occurs simultaneously from the two antennae located in each aircraft. A digital correlation process then extracts terrain height information used to geometrically correct the radar image. The IFSAR technology uses GPS data, together with onboard laser-based inertial measurement data to attain highly accurate positioning control. The accuracy of the system's positioning information, along with careful baseline calibration, reduces the likelihood that additional location measurements are required in subsequent processing steps.

Compared to competing technologies, the Company's ability to produce data on time and within a specified budget is largely due to the IFSAR technology's all-weather acquisition capability (with the exception of abnormally high winds and turbulence) and its superior speed and efficiency. The post-collection processing of the data is also less labor-intensive than competing technologies (see "Competition").

# Technology Development

The predecessor technology to the current IFSAR system was acquired from ERIM in 1996. To meet the needs of its customers and to reach a larger section of the conventional mapping market, Intermap completed a major upgrade to its IFSAR technology in the fall of 2001. The upgrade increased the vertical accuracy of the IFSAR production system from 3 meters to 1 meter and improved the image resolution from 2.5 meters to 1.25 meters.

In early 2003, Intermap began development of the fourth generation of its proprietary IFSAR radar technology for integration into a King Air 200T aircraft. The upgrade took the best of the Company's prior technologies and repackaged them into an easier-to-maintain, line-replaceable system to increase accuracy, image quality, and production levels. The King Air platform was chosen for its low cost, its versatility with smaller airports, and the worldwide availability of parts and maintenance centers. This development also upgraded overall performance to 50cm in the vertical and 62.5cm image resolution in the horizontal. The King Air system went into service during the third quarter of 2004.

During the fourth quarter of 2004 and throughout 2005, Intermap developed enhancements to its pre-existing X/P-band radar system. P-band technology operates at a specific radar wavelength that allows it to penetrate vegetation cover and to reveal underlying areas of the ground. Intermap has identified a clear need for a mapping technology that will measure the ground surface under a vegetation canopy. Intermap demonstrated its P-band technical capability with the completion of several P-band contracts in Southeast Asia tropical areas during 2005; however, it also determined that the technology had some limitations related to its use in populated areas.

In 2005, Intermap's engineering division produced an enhanced Interferometric Processing system installed in the Company's Denver office. This system processes the initial spatially accurate image data collected from the aircraft. The result of the enhanced IP system was a 46 percent increase in data processing throughput without any increase in associated staffing.

In January 2006, the Company acquired a second Learjet 36A and commenced the building of the latest-generation IFSAR radar system designed for that aircraft. This IFSAR radar system went into service during the second quarter of 2007 and was used predominately on NEXTMap USA collection during the remainder of the year.

In 2007 and 2008, Intermap undertook the development and testing of an L-band IFSAR radar system to replace the previously developed P-band system. Even though Intermap's P-band system has the ability to penetrate vegetation, it is difficult to use in populated areas because of the electromagnetic interference it causes with other signal emitters. L-band IFSAR does not interfere with other emitters and may prove capable of measuring the ground surface beneath vegetation cover.

## Competition

Aerial photography, coupled with photogrammetry, has historically been the technology used by the mapping industry to create terrain elevation models. It provides relatively detailed images at a high relative cost and is primarily applicable to local area maps (counties and towns). It is also the means by which elevation data was created in most national topographical maps, including those supplied

by the USGS in the United States. The photogrammetric approach, when coupled with large-scale aerial photography, can produce high-resolution elevation data (better than 15cm). The limitation is that each elevation point must be measured individually by an operator. This makes the map-making process extremely time consuming and expensive. Intermap estimates that it took the USGS 60 years and approximately \$2 billion to originally map the United States. Many of Intermap's competitors use only aerial photographs for map creation. As a result of a low barrier to entry, the aerial photography market segment is crowded, offers low margins as a result of the intense competition, and is now only used in small areas.

There are a number of remote sensing technologies that compete with Intermap's IFSAR technology as summarized in the table below:

	IFSAR	LIDAR	OTHER IFSAR SYSTEMS	SATELLITE IMAGERY
Description	Aircraft with an X-Band sensor. Flies 6-10 km above ground, collecting data in a single band.	Laser pulse technology used in both aircraft and ground equipment.  Airborne data is collected at 50m to	A variation of IFSAR using both X-Band for the top surface and P-Band to penetrate vegetation.	Collected using the SPOT-5 satellite's stereo HRS capabilities.
	Used by Intermap	3.5km above ground.  Low barrier to entry with many suppliers.	Airborne data is collected at 12km above ground. Used by EarthData	Collected 832km above the Earth's surface. Marketed by Spot Image Corp.
DEM Vertical Accuracy DEM Horizontal	50cm	15-50cm	1.0m	10.0m
Accuracy  Collection	2.0m	0.5-1.0m	2.0-3.0m	15.0m
Rates <b>DEM Cost</b>	6,000 km <sup>2</sup> /hr \$10-80/km <sup>2</sup>	200 km <sup>2</sup> /hr \$150-250/km <sup>2</sup>	18,000 km <sup>2</sup> /hr \$30+/km <sup>2</sup>	5,000 km <sup>2</sup> /hr \$4-11/km <sup>2</sup>

#### **LIDAR**

Intermap believes that LIDAR is the most competitive technology to IFSAR based on its availability and accuracy. The equipment is easily obtainable and mapping services are usually offered by companies on a fee-for-service basis. Pricing, while project specific, typically ranges from about \$150 to \$250 per square kilometer, roughly six to ten times the cost of Intermap's products. However,

given the high level of competition in the LIDAR sector, it is likely that prices will be driven down. Although LIDAR is capable of higher accuracy than Intermap's IFSAR technology, the major obstacles to its widespread adoption are its inability to cover large areas efficiently, limited ability to fly in poor weather conditions, and a much higher cost associated with collecting large areas relative to IFSAR.

# Other IFSAR Systems

The Company believes there are two other active commercial companies worldwide with IFSAR technology.

In 2002, a new company called Orbisat da Amazonia S.A. ("Orbisat") undertook the building of an IFSAR system to use on a project in South America. The key technical personnel at Orbisat include a former founder of AeroSensing, so the Company expects the design philosophy used in the Orbisat IFSAR system to be similar to the design of the system Intermap acquired from AeroSensing in 2002. Orbisat was largely inactive in the market place until early 2007, when it appeared as a bidder for new business in Southeast Asia.

EarthData has an IFSAR system mounted in a Gulfstream II aircraft called GeoSAR. EarthData has historically concentrated its IFSAR sales efforts on fee-for-service work with the United States military and its business does not incorporate the strategy of building and licensing a digital map database. EarthData is active in the IFSAR market and the Company believes that they will remain an active competitor to Intermap during 2009.

# Satellite Imagery

Three high-resolution commercial satellite imagery companies have either recently launched, or intend to launch, satellites designed to create digital images from space.

For technical and economic reasons, Intermap believes it is impractical to use satellite data to generate stereo images of large areas and apply photogrammetry to create elevation data. Intermap has previously sold terrain data to two satellite companies in order to provide them with the elevation data they require to rectify their satellite imagery for their customers. Intermap also sells terrain data each year to NGA, which is the largest customer for the satellite companies. The Company regards satellite imagery as a complementary data layer, providing color images that can be draped over Intermap's terrain data.

A new radar satellite ("TerraSAR-X") was launched in 2007 by the German military. The initial satellite is a two-dimensional SAR satellite with 3-meter pixel resolution in strip map mode and 1-meter resolution in spotlight mode. TerraSAR-X cannot provide elevation data (3D data) from an IFSAR mode until a second satellite is launched, which is scheduled to occur in 2010. Intermap is currently working with data from the TerraSAR-X satellite to determine the level of accuracy of elevation data that can be achieved through the use of its radargrammetry technology – a technique that Intermap used with previous-generation airborne SARs and the Radarsat satellite. During 2008, Intermap entered into a joint venture with a Japan based mapping company to process and sell satellite elevation data from the TerraSAR-X satellite. Intermap has the ability to bring data production processes, know-how, and tools into this collaborative effort, as well as providing data collection and distribution capabilities that could be coupled with future NEXTMap initiatives.

A NASA space shuttle mission flown in February 2000 generated near worldwide digital map coverage of the Earth's surface, using IFSAR radar. Intermap was a member of one of two teams chosen by the NGA to produce and edit the shuttle mission data. The digital maps generated by the mission appear to have a vertical accuracy of 10 to 16 meters with approximately 30 to 90 meter horizontal resolution. This data is not sufficiently precise for most commercial applications such as automobile navigation, aviation safety, environmental control, engineering, and flood management. While Intermap expects competitors to eventually develop or acquire technology that competes with its IFSAR digital mapping capabilities, the Company believes that it has a lead in accuracy, efficiency, production throughput, and software tools to manage the production process. The Company's business initiatives, NEXTMap, and its e-commerce data store are intended to capitalize on the market lead Intermap believes it currently enjoys.

# **Intangible Properties**

To significantly increase its market share, the Company is positioning itself as an industry leader and innovative enabler in GIS/Geospatial markets and 3D applications in consumer markets.

**Print & Online Branding**: all Intermap advertising and lead-generation campaigns are focused on creating corporate and NEXTMap brand recognition by using the entire Intermap Technologies name and registration mark with the NEXTMap product suite in all online and print copy.

**Terrainscapes**<sup>™</sup> and **AccuTerra**<sup>®</sup>: trade marking these unique brand names has increased industry awareness within the domains the trademarks are used.

**Webinars:** these 50-minute topical online events fall under the Terrainscapes umbrella and attract higher-level decision makers who are unable to spend a half-day away from the office at a physical seminar event.

White Papers and Case Studies: these intellectual properties are showcased on both the Company and Partner websites.

**Website:** the Company continued to provide updates to its website during 2008. All customer-facing materials have been revised to mimic the site's look and feel to drive brand recognition and support marketing campaigns directed at promoting thought leadership and industry enablement in five different languages.

# **Business Cycles**

The Company's business is dependent on two cycles. The Company's contract services business is highly dependent on United States federal government budgeting cycles and, to a lesser extent, data re-sales to state and local governments that are also subject to government budgeting cycles. In addition to these governmental cycles, the Company's data acquisition functions are restricted in the northern United States, Canada, and Europe by weather activity, including snow on the ground and increased wind turbulence associated with winter weather patterns.

## **Employees**

As of December 31, 2008, Intermap had 891 employees located as follows: 207 in Calgary and Ottawa, Canada; 199 in Englewood, Colorado; 33 in Munich, Germany; 1 in the United Kingdom; 34 in the Czech Republic; and 430 in Jakarta, Indonesia.

# **Foreign Operations**

The Company operates through its six active subsidiaries which are based in the United States, Germany, Czech Republic, United Kingdom, and Indonesia. The Company has a long history of performing projects in a wide variety of countries in addition to the countries in which it resides. For fiscal 2008, approximately 22% of Intermap's revenue was derived from the United States, 71% from Asia, and 7% from Europe. For more details, see "Risk Factors – Foreign Operations" below and the financial statement note entitled "Segmented Information" of the consolidated financial statements for the year ended December 31, 2008, a copy of which is filed and is available on SEDAR at www.sedar.com

## RISK FACTORS

The risks and uncertainties described below are not exhaustive. Additional risks not presently known or currently deemed immaterial may also impair the Company's business operation. If any of the events described in the following business risks actually occur, overall business, operating results, and the financial condition of the Company could be materially adversely affected.

#### Revenue Fluctuations

Intermap's revenue has fluctuated over the years. Mapping projects are scheduled according to client requirements and the timing of regulatory and/or budgetary decisions. The commencement or completion of projects within a particular quarter or year, the timing of regulatory approvals, operating decisions of clients, the speculative collection of data, and the fixed-cost nature of Intermap's business, among other factors, may cause the Company's results to vary significantly between fiscal years and between quarters in the same fiscal year.

## **Key Customers**

During the 2008, 2007, and 2006 fiscal years, one customer, the NGA, an agency of the United States federal government which serves as the purchaser of geospatial data for numerous other government organizations, accounted for approximately 80%, 59%, and 41%, respectively, of the Company's total revenue. To the extent that significant customers cancel or delay orders, Intermap's sales, income, and cash flow could be materially and adversely affected.

## Nature of Government Contracts

Intermap conducts a significant portion of its business either directly or in cooperation with the United States government, other governments around the world, and international funding agencies. In many cases, the terms of these contracts provide for cancellation at the option of the government or agency at any time. In addition, many of Intermap's products and services require government appropriations and regulatory licenses, permits and approvals, the timing and receipt of which are

not within Intermap's control. Any of these factors could have an effect on Intermap's revenue, earnings, and cash flow.

# Breakdown of Strategic Alliances

Intermap has fostered a number of key alliances over the past several years and intends to enter into new alliances in the future. The Company believes these new alliances will help enable access to significant scalable markets that would not otherwise be accessible in a timely manner. The breakdown or termination of some or all of those alliances could have a material impact on the Company. At this time, the Company is not aware of any material issues in its strategic relationships. Should any one of these companies be unable to continue its alliance with Intermap, or otherwise choose to dissolve the relationship, the Company would seek to replace the connection with other entities, but there is no guarantee such replacement would occur.

## General Economic Trends

The worldwide economic slowdown and tightening of credit in the financial markets may impact the business of our customers, which could have an adverse effect on Intermap's business, financial condition, or results of operations. Adverse changes in general economic or political conditions in any of the major countries in which Intermap does business could also adversely affect Intermap's operating results.

## Common Share Price Volatility

The market price of the Company's common shares has fluctuated widely in recent periods and is likely to continue to be volatile. A number of factors can affect the market price of Intermap's common stock including (i) actual or anticipated variations in operating results, (ii) the low daily trading volume of the Company's stock, (iii) announcement of technological innovations or new products by the Company or its competitors, (iv) competition, including pricing pressures and the potential impact of competitors products on sales, (v) changing conditions in the digital mapping and related industries, (vi) unexpected production difficulties, (vii) changes in financial estimates or recommendations by stock market analysts regarding Intermap or its competitors, (viii) announcements by Intermap or its competitors of acquisitions, strategic partnerships, or joint ventures, (ix) additions or departures of senior management, and (x) changes in economic or political conditions.

Additionally, in recent years, the stock market in general, and shares of technology companies in particular, have experienced extreme price and volume fluctuations. These fluctuations have often been unrelated or disproportionate to the operating performance of these technology companies. These broad market and industry fluctuations may harm the market price of Intermap's common stock, regardless of its operating results.

## Availability of Capital

The Company believes that its current working capital and expected future cash flows from operations are sufficient for its foreseeable needs. However, if unexpected expenses, a reduction in forecasted revenue, or a substantial disruption to the business is encountered, the Company could be forced to raise additional working capital. Intermap currently has no commitments for additional working capital funding and so its ability to meet any unexpected liquidity needs is uncertain. If

additional funds are raised through the issuance of equity securities, shareholders may experience significant dilution. Furthermore, if additional financing is not available when required, or is not available on acceptable terms, the Company may be unable to develop or market its products or to take advantage of business opportunities, or may be required to significantly curtail its business operations.

Intermap is uncertain what impact the current volatility in worldwide credit and equity markets may have on its ability to obtain future financing. Since the first quarter of 2008, there has been unprecedented turmoil in equity and credit markets, hedge fund closures, and massive market interventions by the United States and foreign governments. Because of the severity of these market events and because the markets currently remain highly volatile, the Company cannot predict what effect these events will have on its ability to obtain financing in the future, if required.

# Information Technology Security

The success of the NEXTMap program has resulted in the NEXTMap database becoming the single most valuable asset of the Company. While Intermap has invested in database management, information technology security, firewalls, and offsite duplicate storage, there is a risk of a loss of data through unauthorized access or a customer violating the terms of the Company's end user licensing agreements and distributing unauthorized copies of its data. Intermap has invested, and will continue to invest, in both legal resources to strengthen its licensing agreements with its customers and in overall information technology protection.

# Loss of Proprietary Information

Intermap does not hold patents on the technology used in its operations and relies principally on trade secrets, know-how, expertise, experience, and the marketing ability of its personnel to remain competitive. Although Intermap requires all employees, consultants, and third parties to agree to keep its proprietary information confidential, no assurance can be given that the steps taken by Intermap will be effective in deterring misappropriation of its technologies. Additionally, no assurance can be given that employees or consultants will not challenge the legitimacy or scope of their confidentiality obligations, or that third parties, in time, could not independently develop and deploy equivalent or superior technologies.

#### Executive Talent

Intermap is in a growth phase in its markets. This growth, coupled with the development of new product lines in risk management, consumer electronics, and automotive applications, will require additional executive talent. The Company is investing in training, leadership development, succession planning, and recruitment in response to the rapid growth of the Company. Although Intermap has a talented team of experienced executives, it may not be able to further develop executive talent internally or attract enough new executive talent to effectively manage the anticipated growth.

# Capital Expenditures for NEXTMap USA and NEXTMap Europe

NEXTMap USA and NEXTMap Europe are capital-intensive undertakings. The Company has existing customers for certain of this data and intends to continue to seek new customers who will partially offset the costs of collecting and processing the data that comprises the NEXTMap

database. While the Company believes it will have sufficient capital to complete its NEXTMap USA and NEXTMap Europe programs, there are no guarantees that future sales of NEXTMap products will provide sufficient capital to permit the Company to complete the processing of both of the NEXTMap datasets.

## Speculative Data Collection

From time to time, the Company collects data on a speculative basis. While the Company generally undertakes this activity with a reasonable expectation that it will be able to subsequently enter into a contract relating to the data collected, there is no assurance that it will be able to do so and, as a result, the costs of collecting the data may not be recovered on a timely basis, or at all.

# Extent of Proposed Mapping Geographies and Updating Data

The new targeted markets proposed for Intermap involve mapping geographies of significant size. Anticipated improvements in mapping data resolution will further compound the amount of required data acquisition and handling. Updating the mapping data on a regular basis will prove similarly demanding. Both mapping and processing system throughput will need to be revisited and monitored to ensure continued architectural and throughput robustness.

# New Competing Technologies

It is possible that commercially available satellite images could, in the future, match the image resolution offered by the Company's IFSAR technology. However, the Company believes that the technology to perform three-dimensional radar imaging from space over large areas at 1-meter resolution with postings every 5 meters is considered to be five or more years away. In any event, Intermap is aggressively developing modifications in its data collection capabilities to continuously improve its accuracy and the cost efficiencies of its IFSAR technology. Although there are only a few direct Intermap competitors currently, the industry is characterized by rapid technological progress. Intermap's ability to continue to develop and introduce new products and services, or incorporate enhancements to existing products and services, may require significant additional research and development expenditures and investments in equipment. Any required additional financing needed by the Company to remain competitive may not be available or, if available, may not be on terms satisfactory to the Company.

## Exporting Products – Political Considerations

Internap's data collection systems contain technology that is classified as a defense article under the International Traffic and Arms Regulations. All mapping efforts undertaken outside the United States, therefore, constitute a temporary export of a defense article, requiring prior written approval by the United States Department of State for each country within which mapping operations are to be performed. The Company does not currently anticipate that requirements for export permits will have a material impact on the Company's operations, although either government policy or government relations with select foreign countries may change to the point of affecting the Company's operational opportunities. The data produced by Intermap's IFSAR system falls under Department of Commerce regulations and is virtually unrestricted.

# Foreign Operations

A significant portion of Intermap's revenue is expected to come from customers outside of North America and is therefore subject to additional risks, including foreign currency exchange rate fluctuations, agreements that may be difficult to enforce, receivables difficult to collect through a foreign country's legal system, and the imposition of foreign-country-imposed withholding taxes or other foreign taxes. Intermap relies on contract prepayments or letters of credit to secure payment from certain of its customers when deemed necessary. The Company also secures export credit insurance on many of its international receivables, which greatly reduces the commercial and political risks of operating outside of North America.

# Political Instability

Intermap understands that not every region enjoys the political stability that is taken for granted in North America. Developments in recent years in the Middle East and Asia illustrate this clearly. Political or significant instability in a region where Intermap is conducting data collection activities, or where Intermap has clients, could adversely impact Intermap's business.

# Global Positioning System ("GPS") Failure

GPS satellites have been available to the commercial market for many years now. The continued unrestricted access to the signals produced by these GPS satellites is a requirement in the collection of the Company's IFSAR data. A loss of GPS would have such a global impact that it is believed that controlling authorities would almost certainly make another system available to GPS receivers in relatively short order.

## Regulatory Approvals

The development and application of certain of the Company's products requires the approval of applicable regulatory authorities. A failure to obtain such approval on a timely basis, or material conditions imposed by such authority in connection with the approval, would materially affect the prospects of the Company.

## Aircraft/Radar Lost or Damaged

Although the Company believes that the probability of one of its aircraft or radar sustaining significant damage or being lost in its entirety is low, such damage or loss could occur. Now that the data collection associated with the NEXTMap USA and NEXTMap Europe programs is complete, the Company is expected to have available one or two additional aircraft at any given time for data collection purposes. The risk to the Company of loss or damage to an aircraft is therefore considered to be minimal. In the event that one of the radar mapping systems is lost in its entirety through the destruction of the aircraft, it would take the Company approximately 6 to 9 months to replace the lost equipment if required.

# Force Majeure

The Company's projects may be adversely affected by risks outside of its control including labor unrest, civil disorder, war, subversive activities or sabotage, fires, floods, explosions or other catastrophes, epidemics, or quarantine restrictions.

## **DIVIDENDS**

The Company has not paid any cash dividends on any class of shares during the three most recently completed financial years. Further, the Company has not paid any cash dividends since its inception and does not intend to pay any cash dividends in the foreseeable future. The Company intends to retain any earnings to finance its operations.

## DESCRIPTION OF CAPITAL STRUCTURE

# General Description of Capital Structure

The Company's authorized capital consists of an unlimited number of Class A common shares (the "Common Shares") and an unlimited number of Class A participating preferred shares without par value. At the close of business on December 31, 2008, there were 46,188,713 Class A common shares issued and outstanding. There are no preferred shares currently issued and outstanding.

Each common share entitles the holder thereof to (i) dividends if, as and when declared by the directors; (ii) one vote at all meetings of holders of common shares; and (iii) participate in any distribution of the Company's assets upon liquidation, dissolution, or winding up.

Each preferred share entitles the holder thereof to (i) dividends if, as and when declared by the directors; (ii) one vote at all meetings of the shareholders of the Company; and (iii) participate (after receiving in priority to the holders of Class A common shares, a sum equal to its purchase price) in any distribution of the Company's assets upon liquidation, dissolution or winding up.

## MARKET FOR SECURITIES

The outstanding common shares of the Company are listed and posted for trading on the Toronto Stock Exchange under the symbol "IMP" and the AIM market of the London Stock Exchange plc under the symbol "IMAP".

Trading Price and Volume (in Canadian dollars)

Intermap Technologies Corp. TSX Share Price Information FY 2008			
<u>Month</u>	High	Low	Total Volume
January 2008	\$10.45	\$5.66	2,520,400
February 2008	8.18	5.55	5,744,100
March 2008	6.18	4.71	2,688,100
April 2008	6.26	5.03	2,089,200
May 2008	6.50	5.65	1,254,700
June 2008	6.20	5.03	1,259,400
July 2008	6.16	4.25	3,274,500
August 2008	5.23	4.00	406,200
September 2008	4.88	2.50	1,669,200
October 2008	3.04	2.02	1,796,400
November 2008	3.19	1.25	789,000
December 2008	2.00	1.20	2,465,300

# **DIRECTORS AND EXECUTIVE OFFICERS**

Set out below are the names of the directors and executive officers of the Company, their residences, their positions held within the Company, and their principal occupations in the last five years.

Name, Present Office Held and Residence	Director Since	Principal Occupation
Brian L. Bullock President, Chairman of the Board, Director Colorado, U.S.A.	February 25, 1997	Chief Executive Officer and President of the Company
Terry J. Owen <sup>(1)(2)</sup> Director Alberta, Canada	January 14, 2008	Chief Executive Officer and President of Hammerstone Corp. since February 2009; prior thereto President and Chief Executive Officer, Trimac Transportation Services L.P.
Edward S. Evans, III <sup>(1)(3)</sup> Director Michigan, U.S.A.	February 25, 1997	Retired, General Dynamics Advanced Information Systems

Name and Present Office Held	Director Since	Principal Occupation
<b>Dr. Craig Marks</b> <sup>(2)</sup> Director Michigan, U.S.A.	January 1, 1998	Director and former Chairman of Altarum
<b>Donald R. Gardner</b> <sup>(1)(2)</sup> Director Alberta, Canada	November 26, 1998	Chief Executive Officer of Canadian Spirit Resources Inc. since January 2008 and previously CFO since January 2003
Larry G. Garberding <sup>(1)(3)</sup> Director Michigan, U.S.A.	August 15, 2001	Member of the Board of Directors of several corporations
Jerald S. Howe, Jr. (2)(3) Director Maryland, U.S.A.	January 13, 2005	Principal of InSequitur LLC; prior thereto Senior Vice President of Olive Group from May 2006 to January 2008; prior thereto Principal of Argotyche, Inc. from November 2005 to May 2006; prior thereto Vice President of SRA International from December 2004 to November 2005; prior thereto Principal of Argotyche, Inc. from October 2003 to December 2004
Richard Mohr Senior Vice President and Chief Financial Officer Colorado, U.S.A	N/A	Senior Vice President and Chief Financial Officer of the Company
Eric DesRoche Senior Vice President, Automotive and Consumer Electronics Colorado, U.S.A.	N/A	Senior Vice President of the Company
Garth Lawrence Senior Vice President, Business Operations Colorado, U.S.A.	N/A	Senior Vice President of the Company
Walter Sedlacek Vice President and Chief Technical Officer Colorado, U.S.A.	N/A	Vice President and Chief Technical Officer of the Company; prior thereto was Managing Director of Intermap Technologies GmbH

# **Notes:**

- 1. Member of Audit Committee
- Member of Compensation Committee
   Member of Corporate Governance Committee

The directors will hold office until the next annual general meeting of the shareholders. The directors and executive officers in aggregate own or control 2.7% of the issued and outstanding Common Shares of the Company.

During the past five years, each director's principal occupation has been as indicated above except as described in the following brief biographical notes.

**Brian L. Bullock** has been president, chief executive officer and a director of Intermap since its incorporation. Since 1974, Mr. Bullock served as president, chief executive officer and a director of IITC Holdings Ltd. and its predecessor companies. Mr. Bullock holds Bachelor of Engineering and Master of Engineering degrees from Brigham Young University.

Terry J. Owen is the Chief Executive Officer and President of Hammerstone Corporation effective February 2009. Effective January 1, 2008, Mr. Owen retired as president and chief executive officer of Trimac Transportation Services L.P. a publicly traded income trust involved in bulk materials transportation and related logistics, a position he held since February 2005. From 1994 to February 2005, Mr. Owen held various other executive positions with Trimac Corporation and related companies including general counsel (1994-1996), chief financial officer (1997-1999), executive vice president (2000-2004), and president (2004-2005). Prior to joining Trimac, Mr. Owen was a partner of the Macleod Dixon law firm where he practiced corporate, securities, and mergers/acquisitions law. Mr. Owen holds a Bachelor of Commerce degree in finance and a Bachelor of Laws degree from the University of Saskatchewan.

Edward S. Evans, III, prior to his retirement, was an executive with General Dynamics Advanced Information Systems of Ann Arbor, Michigan. Mr. Evans served as vice president of corporate development at Veridian-ERIM International from 1996 to 2000. From 1993 to 1995 he served as vice president of corporate finance at First Michigan Corporation. From 1990 to 1993 he served as President and CEO of Great Lakes Environmental Services, Inc. For 11 years prior to 1990 he was executive vice president of Ralph C. Wilson Industries. Mr. Evans holds a Bachelor of Science degree in industrial engineering from the University of Michigan and has completed the Executive Program in Business Strategy from Columbia University.

**Dr. Craig Marks** is currently a director (formerly the chairman of the board of trustees) of Altarum. From May 1997 to October 1999, Dr. Marks was the president of ERIM, the predecessor of Altarum. He received a Ph.D. in mechanical engineering from the California Institute of Technology and worked for 37 years in engineering and technology development in the automotive industry. He spent 27 years in engineering at General Motors and then went on to vice president positions within TRW and Allied Signal. After leaving Allied Signal, Dr. Marks was engaged as an adjunct professor at the University of Michigan.

**Donald R. Gardner** is chief executive officer of Canadian Spirit Resources Inc. of Calgary, Alberta. Mr. Gardner has over 20 years experience in the oil and gas industry and has held CFO positions with Canadian Spirit Resources Inc., Rigel Energy Corporation, and Esprit Exploration Ltd. (formerly Canadian 88 Energy Corp.) and other financial positions with Dome Petroleum Limited, ENCOR Energy Corporation Inc., Pemberton Securities Inc., and Alberta Energy Company Ltd. He obtained a Bachelor of Commerce degree from the University of Alberta in 1964 and a Master of Science degree in business administration from the University of British Columbia in 1973. Mr. Gardner is also a member of Financial Executives International.

Larry G. Garberding serves as a member of the boards of director of several corporations involved primarily in energy technology. Until his retirement on December 31, 2001, he was a director, executive vice president and chief financial officer of DTE Energy Company, a leading energy provider in the Great Lakes region. He held financial and operating positions with energy companies prior to joining DTE Energy in 1990. Mr. Garberding holds a Bachelor of Science degree from Iowa State University and is a Certified Public Accountant.

Jerald S. Howe, Jr. is currently a principal with InSequitur LLC, a Washington, D.C. consulting firm. From May 2006 to January 2008, he was a Senior Vice President of the Olive Group. From December 2004 to November 2005, Mr. Howe was vice president of SRA International. From October 2003 to December 2004, he was a principal with Argotyche Inc. From February 2000 through October 2003 he was senior vice president and general counsel for publicly traded Veridian Corporation of Arlington, Virginia (NYSE: VNX). Before that he was a partner with the law firm Steptoe & Johnson LLP, Washington, D.C., concentrating on aerospace law and transactions, federal contracts, and litigation in high technology procurement. He holds honors degrees from Princeton University, Oxford University, and Harvard Law School where he was editor of the Harvard Law Review.

## **Executive Officers Who Are Not Directors**

Members of the Intermap executive management team are:

Richard Mohr, Senior Vice President and Chief Financial Officer (Monument, Colorado, U.S.A.), joined Intermap in June 2003. Mr. Mohr has over 26 years of financial management experience focusing primarily in the technology industry in both public and private companies. Prior to joining Intermap, Mr. Mohr was the chief financial officer of DataPlay, Inc., a digital media storage company. Mr. Mohr's experience includes over thirteen years in the semiconductor and data storage industries holding positions of chief financial officer, executive vice president, and vice president of finance. Mr. Mohr is a Certified Public Accountant and holds a Master of Business Administration degree in finance and accounting from Regis University and a Bachelor of Sciences degree in accounting from Colorado State University. Mr. Mohr is also a member of Financial Executives International.

Eric DesRoche, Senior Vice President of Automotive and Consumer Electronics (Parker, Colorado, U.S.A.), has been with Intermap since January 2003. Prior to joining Intermap, Mr. DesRoche held the positions of vice president and senior vice president of the Colorado Springs, Colorado based mapping corporation Analytical Surveys, Inc. ("ASI") and ASI/Sanborn Colorado, LLC. Mr. DesRoche has over 20 years of technical and management experience, including starting his own geodetic surveying corporation and managing a large mapping firm. He has experience with GPS, precision positioning, cartographic mapping and LIDAR. Prior to his current position, he was senior vice president of strategic business development. He received a Bachelor of Science degree in geomatics engineering from the University of Calgary.

Garth Lawrence, Senior Vice President of Business Operations (Parker, Colorado, U.S.A.), has 36 years of experience in remote sensing and geomatics, 28 of which were with Intermap and its predecessor companies. In his current role, Mr. Lawrence manages the operations, engineering, sales, marketing, and customer care divisions of the Company. Before this present position, he was

vice president of customer care. Mr. Lawrence has a Bachelor of Science (earth sciences) degree from the University of Waterloo.

Walter Sedlacek, Vice President and Chief Technical Officer (Castle Rock, Colorado, U.S.A.), had a distinguished 28-year career with the U.S. Navy where he developed his project management skills and gained significant experience in quality management and process engineering. Mr. Sedlacek has been with Intermap since November 2000. In his current role, Mr. Sedlacek is tasked with the development of applications and delivery of capabilities to internal and external Intermap customers. Before his present position, Mr. Sedlacek served as vice president of information management and technology; director of customer care; and as managing director of Intermap Technologies GmbH. Mr. Sedlacek has a Bachelor of Science degree in engineering from Purdue University and a Master of Business administration degree from the University of Phoenix.

## **Cease Trade Orders**

No director or executive officer of the Company is, as of the date of this AIF, or was, within the 10 years before the date hereof, a director, chief executive officer or chief financial officer of any company (including the Company) that was the subject of a cease trade order, an order similar to a cease trade order or an order that denied the company access to any exemption under securities legislation that was in effect for a period of more than 30 consecutive days, that was issued (i) while that person was acting in such capacity and which resulted from an event that occurred while that person was acting in such capacity.

# **Bankruptcies**

No director or executive officer of the Company, or shareholder holding a sufficient number of securities to affect materially the control of the Company is, as of the date of this AIF, or has been, within 10 years before the date hereof, a director or executive officer of any company that, while that person was acting in such capacity, or within a year of that person ceasing to act in such 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.

No director or executive officer of the Company, or shareholder holding a sufficient number of securities to affect materially the control of the Company has, within the 10 years before the date of this AIF, 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.

## **Penalties or Sanctions**

No director or executive officer of the Company, or shareholder holding a sufficient number of securities to affect materially the control of the Company has been subject to 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 has been subject to 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.

## **Conflicts of Interest**

Circumstances may arise where members of our board of directors or officers are directors or officers of corporations which are in competition to our interests. No assurances can be given that opportunities identified by such board members or officers will be provided to us. Pursuant to the ABCA, directors who have a material interest in a proposed material transaction upon which our board of directors is voting are required to disclose their interests and refrain from voting on the transaction.

# LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Management of the Company is not aware of any existing or contemplated legal proceedings material to the Company, to which the Company is, or during the financial year ended December 31, 2008 was, a party or of which any of its property is, or during the financial year ended December 31, 2008 was, subject.

Management of the Company is not aware of any penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during the financial year ended December 31, 2008.

## INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

There were no material interests, direct or indirect, of directors or executive officers of the Company, or of any of the shareholders of the Company who beneficially own, directly or indirectly, or exercises control or direction over more than 10 percent of the Company's outstanding common shares, or any known associate or affiliate of such persons in any transactions within the three most recently completed financial years of the Company or during the current financial year which has materially affected, or is reasonably expected to materially affect, the Company or a subsidiary.

## TRANSFER AGENT AND REGISTRAR

The Company's transfer agent and registrar is Computershare Trust Company of Canada, located at 100 University Avenue, Toronto, Ontario, Canada M5J 2Y1.

## MATERIAL CONTRACTS

The Company has not entered into any material contract within the most recently completed financial year, or before the most recently completed financial year that is still in effect, and was not in the ordinary course of business.

# **INTERESTS OF EXPERTS**

There is no person or company whose profession or business gives authority to a statement made by such person or company and who is named as having prepared or certified a statement, report or valuation described or included in a filing, or referred to in a filing, made by the Company under National Instrument 51-102 during, or related to, the Company's most recently completed financial

year other than KPMG LLP, the Company's auditors. KPMG LLP is independent in accordance with the auditors' rules of professional conduct in Canada.

In addition, none of the aforementioned persons or companies, nor any director, officer, or employee of any of the aforementioned persons or companies, is or is expected to be elected, appointed, or employed as a director, officer, or employee of the Company or of any of the Company's affiliates.

## AUDIT COMMITTEE INFORMATION

The text of Intermap Technologies Corporation's Audit Committee Charter is attached as **Schedule A.** 

# Composition of the Audit Committee

The members of our Audit Committee are Mr. Donald R. Gardner (Chair), Mr. Edward S. Evans III, Mr. Larry G. Garberding, and Mr. Terry Owen, each of whom is independent and financially literate. The relevant education and experience of each Audit Committee member is outlined below.

## Relevant Education and Experience

All members of the Audit Committee are financially literate and all members of the committee have accounting or related financial experience.

Mr. Gardner is currently the chief executive officer of an energy-related company in Calgary, Alberta, Canada. He has held chief financial officer and other financial management positions with this company and several other companies throughout his career. As part of his role in each of these positions, he was required to have extensive knowledge of the financial operations of the company for which he worked, including the understanding of balance sheets, income statements, and cash flow statements.

Mr. Garberding, prior to his retirement, was the executive vice president and chief financial officer of an energy-related company in the Great Lakes region of the United States. He also held financial-related positions with other companies prior to his employment with this company. As part of his role in each of these positions, he was required to have extensive knowledge of the financial operations of the company for which he worked, including the understanding of balance sheets, income statements, and cash flow statements.

Mr. Evans, prior to his retirement, was a successful businessman with several companies and held the positions of vice president of corporate development, vice president of corporate finance, and president and chief executive officer. As part of his role in each of these positions, he was required to have extensive knowledge of the financial operations of the companies for which he worked, including the understanding of balance sheets, income statements, and cash flow statements.

Mr. Owen currently holds the position of chief executive officer and president of a mining-related company and has previously held positions of president, chief executive officer, chief financial officer, and executive vice president of a publicly traded transportation services company prior to his retirement in January 2008. As part of his role in each of these positions, he was required to have extensive knowledge of the financial operations of the company for which he worked, including the understanding of balance sheets, income statements, and cash flow statements.

## **Audit Committee Oversight**

No recommendation of the Audit Committee to nominate or compensate an external auditor was adopted by the Board of Directors at any time since the commencement of its most recently completed financial year.

## **Pre-approval Policies and Procedures**

Any engagement of non-audit services by the Company's external auditors/accountants, including estimated fees, must be pre-approved by the Audit Committee and the Audit Committee must obtain an annual statement from the auditors regarding non-audit services.

## **External Auditor Service Fees**

#### Audit Fees

The aggregate fees billed by the Company's external auditor for audit services during 2008 and 2007 were C\$315,515 and C\$242,755, respectively.

#### **Audit Related Fees**

The aggregate fees billed by the Company's external auditor for assurance and related services that are reasonably related to the performance of the audit or review of the Company's financial statements and are not reported under the "Audit Fees" caption above during 2008 and 2007 were minimal.

# Tax Fees

The aggregate fees billed by the Company's external auditor for professional services relating to tax compliance, tax advice and tax planning during 2008 and 2007 were C\$333,074 and C\$215,795, respectively. The services provided were generally related to; (i) the review of tax provisions; (ii) tax return preparation; (iii) personal tax returns for expatriate employees; (iv) transfer pricing studies; and (v) tax related due diligence on a foreign corporation acquisition.

## All Other Fees

There were no other fees billed to the Company during the last two fiscal years for products and services provided by the Company's external auditors other than the services reported above in the prior three captions.

## ADDITIONAL INFORMATION

Additional information relating to the Company may be found on SEDAR at <a href="www.sedar.com">www.sedar.com</a>. Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under the Company's equity compensation plans, if applicable, is contained in the Company's information circular for the most recent annual meeting of shareholders that involved the election of directors. Additional financial information is provided in the financial statements and management's discussion and analysis for the year ended December 31, 2008.

## **SCHEDULE A**

# **AUDIT COMMITTEE CHARTER**

## **PURPOSE**

It is the policy of the Corporation to establish and maintain an Audit Committee (the "Committee"), composed of independent directors, to assist the Board in carrying out their oversight responsibility for the Corporation's external audit, internal controls, disclosure, financial reporting, and related risk management.

The Committee's function is one of oversight only and shall not relieve management of its responsibilities.

The Corporation's external auditor shall report directly to the Audit Committee.

## **ORGANIZATION**

- 1. The Committee shall consist of a minimum of three (3) directors.
- 2. Each director appointed to the Committee by the Board shall be independent as such term is defined in Section 1.4 of Multilateral Instrument 52-110.
- 3. Each member of the Committee shall be financially literate as such term is defined in Section 1.6 of Multilateral Instrument 52-110 and at least one (1) member shall have accounting or related financial management expertise.
- 4. The Board shall appoint the members of the Committee and may seek the advice and assistance of the Nominating and Corporate Governance Committee in identifying qualified candidates. The Board shall appoint one (1) member of the Committee to be the Chair of the Committee.
- 5. A director appointed by the Board to the Committee shall be a member of the Committee until replaced by the Board or until his or her resignation. A member shall cease to be a member of the Committee upon ceasing to be a director of the Corporation.
- 6. The Secretary of the Corporation shall be the Secretary of the Committee.

# RESPONSIBILITIES

- 7. The Committee's primary duties and responsibilities are to:
  - (a) Select and recommend the nomination and compensation of the external auditors.
  - (b) Oversee the independence, work and performance of the Corporation's external auditors.
  - (c) Review the principal risks that could impact the financial reporting of the Corporation and monitor how management is dealing with such risks.

- (d) Monitor the integrity of the Corporation's disclosure and financial reporting process and its system of internal controls regarding financial reporting and accounting compliance.
- (e) Monitor the Corporation's compliance with laws, regulations and internal policies that apply to financial or accounting matters.
- (f) Oversee the resolution of any disagreements among external auditors, management, and the internal auditing department, if any.
- 8. The Committee shall annually select and recommend to the Board the nomination of an external auditor, recommend the replacement of the current external auditor when circumstances warrant it, and monitor the independence, work, and performance of the external auditors. This shall include:
  - (a) Considering the views of management in respect of the nomination of the external auditors.
  - (b) Reviewing and recommending for approval by the Board, the terms of the external auditors' engagement, including the reasonableness of the proposed audit fees.
  - (c) Pre-approving any engagement for non-audit services to be provided by the external auditors' firm or its affiliates, together with estimated fees. This shall involve considering the potential impact of such services on the independence of the external auditors.
  - (d) When there is to be a change of external auditors, reviewing all issues and documentation related to the change, including the information to be included in the Notice of Change of Auditors and documentation called for under National Instrument 51-102 as defined in Section 4.11 and the planned steps for an orderly transition.
  - (e) Reviewing all reportable events, including disagreements, unresolved issues and consultations with external auditors, as defined by applicable securities policies, on a routine basis, whether or not there is to be a change of external auditors.
- 9. In carrying out its primary duties and responsibilities, the Committee shall:
  - (a) Review the annual audit plan with the external auditors and with management.
  - (b) Discuss with management and the external auditors any proposed changes in major accounting policies or principles, the potential impact of significant risks and uncertainties on future operations, and key estimates and judgments of management that may be material to financial reporting.
  - (c) Review with management and with the external auditors significant financial reporting issues arising during the most recent fiscal period and the resolution or proposed resolution of such issues.

- (d) Review any problems experienced or concerns expressed by the external auditors in performing an audit, including any restrictions imposed by management or significant accounting issues on which there were a disagreement with management.
- (e) Review periodically with management the Corporation's disclosure controls and procedures as such term is defined in Multilateral Instrument 52-109 and monitor the certification process set out therein.
- (f) Review audited annual financial statements and related documents in conjunction with the report of the external auditors and obtain an explanation from management of all significant variances between comparative reporting periods.
- (g) Consider and review with management, the internal control memorandum or management letter containing the recommendations of the external auditors and management's response, if any, including an evaluation of the adequacy and effectiveness of the internal financial controls of the Corporation and subsequent follow-up to any identified weaknesses.
- (h) Review with management and the external auditors the quarterly unaudited financial statements before release to the public.
- (i) Before release, review and, if appropriate, recommend for approval by the Board, all public disclosure documents containing audited or unaudited financial information including any press release, annual report, AIF, management discussion and analysis of operations, prospectus (and all documents which may be incorporated by reference into such prospectus), and all other securities offering documents of the Corporation.
- (j) Review periodically with management the internal procedures implemented to review any other public disclosure of financial information extracted or derived from the Company's financial statements.
- (k) Approve the hiring of any partners, employees, or former partners and employees of the Corporation's present and former external auditor.

## 10. In addition, the Committee shall:

- (a) Oversee the receipt, review, and follow-up of questions, concerns or complaints pursuant to the Corporation's Code of Business Conduct and Ethics and the procedures set out in Appendix "A" thereto.
- (b) Review with management, at least annually, the financing strategy and funding plans of the Corporation.
- (c) Review the amount and terms of any insurance to be obtained or maintained by the Corporation with respect to insurable risks inherent in its operations and potential liabilities incurred by the directors or officers in the discharge of their duties and responsibilities.

- (d) In conjunction with the Nominating and Corporate Governance Committee, monitor financial and accounting personnel succession planning within the Corporation, and review the appointments of the Chief Financial Officer and any key financial managers who are involved in the financial reporting process.
- (e) Inquire into and determine the appropriate resolution of any conflict of interest in respect of audit or financial matters.
- (f) Periodically review with management the need for an internal audit function.
- (g) Quarterly, review any legal matter that could have a significant impact on the Corporation's financial statements, and any enquiries received from regulators, or government agencies.
- (h) Review periodically with management the adequacy and effectiveness of the Corporation's policies and procedures for compliance with securities laws, regulatory requirements, and stock exchange rules.
- (i) Report to the Board at the earliest opportunity after each meeting, the results of its activities and any reviews undertaken and make recommendations to the Board as deemed appropriate.
- (j) Bi-annually assess the performance of the Committee.

#### **MEETINGS**

- 1. The Committee shall convene a minimum of four (4) times each year at such time and places as may be designated by the Chair of the Committee and whenever a meeting is requested by the Board, a member of the Committee, the external auditors, or a senior officer of the Corporation.
- 2. Notice of each meeting of the Committee shall be given to each member and to the external auditors, who shall be entitled to attend each meeting of the Committee and shall attend whenever requested to do so by a member of the Committee or the Secretary of the Committee.
- 3. Notice of a meeting of the Committee shall:
  - (a) Be in writing.
  - (b) State the nature of the business to be transacted at the meeting in reasonable detail.
  - (c) To the extent practicable, be accompanied by copies of documentation to be considered at the meeting.
  - (d) Be given at least forty-eight (48) hours notice preceding the time stipulated for the meeting or such shorter period as the members of the Committee may permit.

- 4. A quorum for the transaction of business at a meeting of the Committee shall consist of two (2) members of the Committee.
- 5. A member of the Committee may participate in a meeting of the Committee by means of such telephonic, electronic, or other communication facilities, provided it permits all persons participating in the meeting to communicate adequately with each other, and a member participating in such a meeting by any such means is deemed to be present at the meeting.
- 6. The Chair of the Committee (the "Chair") shall be appointed by the Board. The Chair shall have only those responsibilities and powers delegated to it herein and shall not have a second or casting vote. The Chair shall have the responsibility of reporting annually to the Board on the Committee's compliance with this Charter.
- 7. In the absence of the Chair of the Committee, the members of the Committee shall choose one of the members present to be Chair of the meeting and, in the absence of the Secretary of the Committee; the members shall choose one of the persons present to be the Secretary of the meeting.
- 8. By invitation, the CEO and other parties may attend meetings of the Committee; however, the Committee may meet separately at any time with the external auditors, invited management, or any other third parties as determined by the Committee.
- 9. At each regular meeting of the Committee, the agenda shall include an opportunity for the members of the Committee to meet in-camera.
- 10. Minutes shall be kept of all meetings of the Committee and shall be signed by the Chair and the Secretary of the meeting.
- 11. Minutes of the meetings of the Committee shall be retained by the Secretary of the Corporation and shall be available on request to any member of the Board.

## RESOURCES AND AUTHORITY

- 1. The Committee will be provided with resources commensurate with the duties and responsibilities assigned to it by the Board, including administrative support. If deemed necessary by the Committee, it will have the discretion to institute investigations of improprieties or suspected improprieties, including the standing authority to retain independent counsel or advisors and to set their compensation.
- 2. The Committee shall have the authority to:
  - (a) Inspect any and all of the books and records of the Corporation, its subsidiaries, and affiliates.
  - (b) Discuss with any officer of the Corporation, its subsidiaries and affiliates, the Chief Financial Officer and senior staff of the Corporation, any affected party, and the external auditors, such accounts, records, and other matters as any member of the Committee considers necessary and appropriate.
  - (c) Communicate directly with the internal and external auditors.