Effigis is a technology innovation company that has been designing innovative geospatial solutions since 1991 to increase the productivity and efficiency of businesses around the world, through a wide range of data collection and satellite images analysis tools. It is a one-stop source for all the geoinformation needs of its clients in terms of land mapping, field operations, asset management, and cable network monitoring.
We leverage the talent, expertise and passion of our geomatics professionals, engineers, land surveyors, geographers, geologists, agronomists and technicians, combined with our cutting-edge technologies, to meet the unique needs of our clients, regardless of their sector or the size of their project.

Customized solutions
We offer solutions adapted to the needs of various industries, including aerospace, aeronautics, precision agriculture, environment, forestry, engineering consulting, utilities, telecommunications, as well as mining, oil and gas. We use GPS and mobile technologies to better understand, monitor and manage territories, equipment, infrastructure, and field operations.

We help companies in their decision-making, by implementing solutions based on geospatial databases and services such as geological mapping, topographic mapping, mineral targeting and monitoring of environmental changes. Our services also include structure engineering, infrastructure survey, network patrol and geospatial information system development.

High resolution satellite image distribution and resale
As a commercial partner of some of the largest satellite imaging distribution networks around the globe, Effigis gives its clients access to a vast selection of commercial Earth observation satellites. Our team of qualified specialists guides them to choose the images best suited to their needs and the specific conditions of their project.

Proprietary products
Effigis develops and propels the following proprietary solutions:

- **CPAT FLEX**, a modular GPS-based leakage/ingress monitoring solution that helps broadband operators improve the efficiency of their fleet operation and system plant maintenance.

- **OnPOZ Precision Positioning**, which is a complete suite of applications that allows users to easily and accurately collect, record and post-process geospatial data.

- **FieldApex**, an accurate, trusted and simple fertilizer application management platform that facilitates decision-making while maximizing agricultural profitability. Its SCAN.AI algorithm was developed and validated by agronomists and independent scientists.

ISO 9001:2015 certification
This recognition granted by QUASAR certifies the implementation of a quality management system that satisfies the requirements of the latest ISO 9001 standard. With this certification, Effigis ensures that it maintains a high standard of quality in the services it offers, with the goal of improved client satisfaction.
CPAT FLEX is a modular and scalable monitoring platform that uses GPS-based technologies to help CATV operators preserve the quality of their network while improving the efficiency of their operations and the client experience.
CPAT FLEX – LEAKAGE AND INGRESS DETECTION

The most comprehensive broadband cable network leakage and ingress monitoring platform

As Cable TV technologies progress and operators start deploying Remote PHY and DOCSIS 3.1 (FDX) infrastructures, CPAT FLEX will continually be at the forefront to support new technologies. Today, cable companies are under pressure to have their services delivered, installed and running quickly.

CPAT FLEX offers a GPS-based continuous monitoring system that automatically detects and captures cable leakage and ingress events accurately and reliably. It was designed bearing in mind cable operators’ challenges of reducing truck rolls and operating costs, saving countless hours of staff time, while optimizing their networks and improving customer satisfaction.

Designed as a family of independent modules, CPAT FLEX allows you to customize your monitoring configuration depending on your needs.

- Leakage monitoring;
- Ingress monitoring;
- Pressure testing;
- Geo-targeting.

Modular
Customize your CPAT FLEX system according to your specific monitoring requirements and pay only for what you need.

Hands-off operation
CPAT onboard devices require absolutely no intervention from field technicians while they perform their daily work routine.

Efficient and fast
CPAT Connections, coupled with the ARD4 and the DRV3, provides a leakage management system that enables operators to find and fix leaks quickly, minimize tech time, assess network health and gauge the effectiveness of leakage maintenance efforts.

The ONLY ingress monitoring solution
No need to shop around: CPAT FLEX is the only GPS-based ingress monitoring solution presently available on the market.

Future technology readiness
In a technology-driven world of test and measurement products, it becomes increasingly important to stay ahead of the curve and remain at the forefront of innovation. Developing a sustainable competitive advantage can help to satisfy customer needs and instill a sense of trust that grows customer confidence in the business.
We have been building a strong track record in infrastructure inventory for close to 25 years. This involvement has allowed us to collect millions of assets on the territory and stand out as a leader in infrastructure inventory in Eastern Canada.
Our infrastructure inventory services include planning, surveying, quality assurance and management for your projects as dictated by your priorities and needs.

Our team is made of GPS professionals and technicians specialised in network management. This guarantees the quality of the geolocation of your assets with a high degree of confidence. The data we gather about your networks, buildings or infrastructure position or description accurately reflect reality while strictly respecting your budget and timeframe.

Our quality control and assurance processes help generate very reliable data, considerably shortening the time spent on design and engineering activities.
We help you improve the quality and longevity of your networks. Backed by the latest hardware and the support of a dedicated R&D department, our patrol teams hit the road to protect the quality of your networks. You respect your objectives, your budget and government standards, without worrying about operational and technical details.
Our network maintenance services take advantage of our unmatched experience in broadband network monitoring and in infrastructure inventory and inspection. They include:

**Leakage audit patrols**
Free up your resources. Our teams specialized in broadband networks leakage detection take charge of your CLI audit patrols and give you accurate reports that comply with government standards.

**Repair services**
Let us solve your problems. We provide unique, custom services to manage and repair leakage and ingress problems in your networks. You set your objectives; we take care of the rest.

**Pole inspection**
Manage your assets efficiently. We’ve been managing pole inspection projects since 1997, on behalf of electrical and telecommunications companies. Our expertise and our good knowledge of networks prove invaluable when it comes to speeding up your optic fibre deployment projects (FTTH).
As leaders in the field, we have more than 25 years of experience in the analysis, design, development and implementation of geospatial solutions based on the use of geographic information systems (GIS). Our goals are to understand your business process and efficiently respond to your needs.
We deliver innovative GIS-based solutions that become valuable decision-support tools, whatever your sector of activity.

Our technological choices are driven by our comprehensive view, our multidisciplinary resources, our knowledge of the key GIS technologies and the expertise that we have gained in using GIS for more than 25 years.

We deliver turn-key services that include all the data lifecycle steps, from gathering to distribution to updates.

We help you optimize your business intelligence using geospatial information with the following:

- needs analysis;
- data quality integration and certification;
- meta data production;
- online data distribution (Web GIS);
- development and implementation of custom solutions;
- engineering and integration of complete solutions including electronic equipment;
- proficiency in key GIS and DBMS technologies;
- involvement in Open Source technologies.

Services well-adapted to your industry

- Public administration
- Environment
- Mining, oil and gas
- Utilities
- Telecommunications
We produce a number of map products tailored to your specific needs. We have developed a unique expertise in producing thematic and topographic data from stereo satellite images. Also, thanks to the broad range of experience that our personnel have gained on the Quebec Cadastral Renovation Program in the past 20 years, we can meet all your cadastral mapping needs.
Our land-based mapping services form a series of accessible and indispensable tools for the analysis, decision-making and communications surrounding any land-related project. They include:

**Topographic mapping**
We specialize in the production of topographic maps starting at scales of 1:2,000, digital surface models, digital elevation models, contour lines and slope maps.

**Cadastre**
We provide services for the management of real estate securities (easements, property title certificates, emphyteutic leases, etc.). Our professionals, who belong to the Ordre des arpenteurs-géomètres du Québec, can take charge of all your property management activities.

**Thematic mapping**
The data we provide you with are produced by our thematic specialists (geomorphologist, forestry expert or geologist) who extracts the information directly using digital photogrammetric workstations.

**Mining titles and oil and gas licenses**
Let us help you identify and manage your mining titles or oil and gas licenses.

**Services well-adapted to your industry**
- Public administration
- Aeronautics / Space
- Agriculture
- Mining, oil and gas
- Forestry
- Consulting engineering
- Utilities
OnPOZ is a complete line of GNSS products for field and office. Designed for end-users, companies and OEMs/VARs, OnPOZ allows users to improve the reliability, consistency and integrity of their geolocalized data acquisition business process.

COLLECT GEO-LOCALIZED DATA AND GUARANTEE ITS ACCURACY
Software
OnPOZ Precision Positioning Software is a complete suite of applications that enables you to easily and accurately collect, record and post-process geospatial data.

EZTag CE™
Professional solution for GNSS/GIS data capture and management (descriptive and geometric data, points, lines and polygons).

EZField™
Powerful yet easy to use survey software for collecting GNSS survey data to obtain centimetre accuracy in static and semi-kinematic modes.

EZSurv®
GNSS Post-Processing software that provides a reliable and efficient RTK offline solution. Processes GPS, GLONASS, GALILEO and BEIDOU signals from different types of receiver brands. Compatible with industry standard data collection software.

OnPOZ GNSS Driver for ArcPad
Receiver-independent extension that adds the power of post-processing to ArcPad.

ONPOZ GNSS PRODUCTS
OEM solutions
Integrating new software into your product range allows you to achieve product differentiation and gain a significant competitive edge in order to access new revenue streams.

Hardware
SubX
All-in-one ultra-rugged multi-port L1-GPS/SBAS receiver.

XF101
High-end L1-GPS receiver that allows for post-processed centimetre accuracy.

Archer2 – GEO Mapping Solution
The best solution on the market in terms of signal tracking under dense canopy, reliability and results accuracy. Combines EZTag CE GIS/GNSS data collection software & EZSurv post-processing software.

Products well-adapted to your industry
- Public administration
- Agriculture
- Environment
- Forestry
- Consulting engineering
- Mining, oil and gas
- Utilities
- Telecommunications
For more than 25 years now, Effigis has been conducting a host of Earth Observation application development projects, with the support, among others, of the Canadian Space Agency, European Space Agency and Quebec's Ministry of Economic Development, Innovation and Exporting.
Our EO application development services leverage the use of radar and optical data to generate topographic maps, update land use and assess mineral potential. Projects completed or ongoing include:

ReauSO
Development of a methodology using radar imagery for the monitoring of wetland-related Canadian Environmental Sustainability Indicator and analysis of wetland loss.

CartoSAR-Nord
Use of RADARSAT-2 data to produce official national topographic maps on, and information for monitoring national parks in northern lands above the 81st parallel.

EO4M
Use of satellite images to help mining companies manage their waste and residues.

ADD-OT-TSX
Use of high-resolution radar images to provide map information for the monitoring of mining operations in cloud-prone tropical areas.

SARVeillance
Identification of disturbances to plant cover in protected natural environments and rural environments from a surveillance perspective.

StereoSAT-North, StereoSAT-Africa and StereoSAT-Peru
Optimization of the production of topographic and thematic data from satellite images.

ADD-OT
Development of products to help mining companies produce mandatory reports related to sustainable development.

EQeau
Development of an application for estimating the water equivalent of snow on the ground using RADARSAT satellite data.

MPAS
Operational integration of satellite, geophysical and geochemical data within a mineral potential assessment system.
We combine remote sensing with geology to create high value-added services for mining and oil exploration firms as well as governmental agencies. Backed by our geology and geomatics expertise, we meet your needs for geological studies applied to mineral and oil exploration, as well as geotechnical investigation.
Our geological services combine our geologists’ experience with the integration of geoscientific information derived from geophysical, geochemical and remotely sensed data.

**Spectral analysis**
Detect mineral indicators associated to lithological assemblages or to hydrothermal alteration based on the analysis of satellite multispectral or hyperspectral data.

**Geological mapping**
Improve your geological understanding of the territory being investigated. Our geologists map your sector of interest using satellite and geophysical data.

**3D geological model**
We build 3D models of the sub-surface structural architecture to support mining, oil and gas exploration or operations.

**Mineral and hydrocarbon potential**
Increase your chances of discovery. Our specialists help you target the best sectors to explore in the field using ore deposit models.
Our 3D modeling services provide you with a faithful and accurate representation of your area of interest, whether on the surface or underground. Our visual simulation tools allow you to better appreciate the topography of a given site and make informed strategic or operational decisions.
Our 3D modeling services are especially useful when planning projects in the areas of transportation, energy, and natural resource exploration and exploitation. They include:

Visual simulation
Understand the topographic environment of a given site and make informed strategic or operational decisions.

3D sub-surface model
We build 3D models of the sub-surface structural architecture to support mining, oil and gas exploration or operations.
We provide a range of services for monitoring environmental changes and the condition of natural resources. Our operational solutions use Earth Observation imagery and help you identify and follow up on changes that happen anywhere on the planet.
Our monitoring services form valuable tools to monitor such things as climate changes, natural disasters or land-use.

Change detection
Using an automated process that consists of comparing images acquired on two or more different dates, we identify changes that have occurred in your area of interest.

Crop monitoring and crop yield
Our specialists develop crop yield diagnostic tools that take advantage of the possibility of acquiring images several times during the growing season.

Natural disasters
Following natural disasters such as floods and earthquakes, we provide, in urgent mode, satellite images and map information that help people in the field to plan and manage onsite operations.

Environmental studies
We support you in your social and environmental commitments and assist you in your decision-making process in sustainable development.

Services well-adapted to your industry
- Public administration
- Agriculture
- Environment
- Forestry
- Utilities
- Mining, oil and gas
We have been assisting you with your Earth Observation projects for more than 25 years. Besides providing you with satellite images tailored to your needs, we offer the image processing you require to conduct your projects. This high value-added processing ranges from improving image quality to producing geospatial information using the latest techniques.
Our image processing services let you get the most out of your satellite images by taking advantage of the unique and proven expertise of our specialists. These services include:

**Standard image processing**
We carry out several types of image processing that facilitate information extraction: orthorectification, colour balancing, enhancement, image fusion, mosaic creation and selection of appropriate spectral bands for optimal analysis.

**Interferometry**
Interferometry is used to produce digital surface models spanning very broad areas and to detect and assess very small ground deformations or structural movements with centimetre accuracy.

**Classification**
Our image classification services are beneficial for extracting information relevant to the user. They speed up the production of thematic maps by using an automated or semi-automated process.

---

**Services well-adapted to your industry**
- Aeronautics / Space
- Agriculture
- Forestry
- Consulting engineering
- Mining, oil and gas
- Public administration
We have been assisting our clients with their Earth Observation projects for more than 25 years. Our team of qualified specialists guides you to choose the images best suited to your needs and the specific conditions of your project.
**Images that fulfill your needs**
Whatever the scope of your request, or its complexity, urgency or budget restraints, our team has the knowledge and commercial relationships to fulfill even your toughest demands.

Following a deep analysis of your needs, we tailor our offering to the specific features of your project. We can access a broad selection of images in image banks, or plan the acquisition of new images covering any territory of interest to you. Whatever your request, we help you make the right choices.

---

**Numerous distribution agreements**
The preferred commercial partnerships we have formed with key satellite operators around the world let us work closely with them so that you get the best possible satellite images for your needs.

---

**Products well-adapted to your industry**
- Public administration
- Aeronautics / Space
- Environment
- Forestry
- Consulting engineering
- Mining, oil and gas

---

4101, Molson Street, Suite 400, Montreal QC H1Y 3L1, Canada
☎ +1 514 495-6500 | ☎ +1 888 495-6501 (Canada) | ☎ +1 514 495-4191 | effigis.com

© 2016 Effigis. All rights reserved | 001-000029-106