INFO-ELECTRONICS SYSTEMS INC.
SYSTÈMES INFO-ÉLECTRONIQUES INC.

ISO 9001:2015 Registered Quality System

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1. INTRODUCTION

Incorporated in 1981, Info-Electronics Systems Inc. (**IES**) is a Canadian company headquartered in Montreal Canada. Our Indian Joint-Venture company, IES India, based in New Delhi, was incorporated in 1994. Our Quality Management System (**QMS**) is certified to be ISO 9001:2015 compliant by SAI Global.

IES is a partnership-oriented company. We work with and represent many North American companies in India and Canada. For our partners, we provide a presence in India and Canada without them having to incur huge marketing costs.

2. BUSINESS AREAS

Working in the field of computer-based technologies in Hydrometeorology, Remote Sensing and Environment Monitoring as a systems engineering and integration company, IES is stratified into the areas described in this section. We provide equipment from our various partners and provide integration services, software, training, installation and maintenance services. We also provide Project Management Services.

2.1. Software Development

IES provides software development services to various clients in Canada. With our QMS being ISO 9001:2015 certified, we have a well defined Software Development Life Cycle (**SDLC**) in which all software development processes including configuration management and verification and validation are included.

Our staff is very experienced in software development and we use state-of-the-art tools and technologies for software development. We have also developed a powerful set of tools for Verification and Validation as well as problem reporting and tracking.

2.2. Hydrology-Meteorology

IES' Hydro-Met Division is active in the development of various systems for top-class meteorological and hydrological organizations around the world, including Meteorological Service of Canada (**MSC**), India Meteorological Department (**IMD**), Central Water Commission of India (**CWC**), Snow and Avalanche Study Establishment (**SASE**), etc.

We provide turnkey data collection systems in the field of Disaster Management related to forecasting of Floods, Avalanches, Cyclones and severe Weather Conditions.

We sell hydromet instruments and sensors to meet the requirements of various clients.

This equipment includes Doppler Weather Radars (X, C and S-Bands), Satellite Ground Reception and Processing Systems, Automated Weather Stations and all type of hydro-meteorological sensors, Solar Radiation Measurement Systems and sensors, Greenhouse Gases Monitoring Systems, Integrated Precipitable Water Vapor systems, Hydromet Telemetry Systems, etc.

3. CUSTOMERS

We provide services to various organizations in Canada and around the world.

3.1. International Customers

We have provided products and services to more than a dozen countries. We have sold VSAT-based Reception Systems and Workstations for ICAO's Aviation Weather Distribution Systems and Radio Spectrum Monitoring Systems to these clients. We also implemented a comprehensive system for Weather Forecasting and TV Weather Rendering in Bahrain.

In India, we have implemented some major projects in Hydrology and Meteorology, as listed in Section 4 below. Our customers include India Meteorology Department (**IMD**), Central Water Commission (**CWC**), Snow and Avalanche Study Establishment (**SASE**), etc.

Currently, we are marketing some major Hydro-Met systems in collaboration with our partners (see Section 6) in India.

3.2. Canadian Customers

Our Canadian Customers include Government organizations and Private companies such as:

1. Meteorological Service of Environment Canada / Environment Canada
2. Department of National Defence
3. Canadian Space Agency
4. NAV CANADA
5. Canada Post
6. SITA (the largest Aviation services company)
7. Hydro Quebec
8. Caisse Populaire Desjardins
9. Ericsson, etc.

These services include system design, development, integration and software development, as well as CRM implementations.

4. PROJECT EXAMPLES

4.1. Projects Implemented

IES has implemented some very high profile projects in Canada and around the world. Some examples are:

1. Supply of a **network of 20 Microwave Radiometers** for the Indian Air Force. The project is in partnership with Radiometrics Corporation.
2. Environmental Sensing Capability – **Polar Epsilon Project** for the Department of National Defence (DND) of Canada. The project involved the installation of two MODIS Satellite Earth Reception Systems, the provision of equipment and related services, in conjunction with our partner, Global Imaging.
3. Supply of **20 Automatic Weather Stations (AWS)** with communication through INSAT and ARGOS satellites for SASE.

4. Developed and installed a Satellite Data Processing Ground Station for INSAT-2E (India's geo-stationary remote sensing satellite), called the **INSAT Meteorological Data Processing System (IMDPS)** for IMD. The system deals with the reception of absolutely raw remotely sensed data and produces imagery as well as derived products.
5. Installed a **Flood Monitoring System** for two of the major Indian rivers for CWC. We installed remote data logging stations, which transmit observed data to two Central Stations via satellite. The processing systems at these Central Sites process the data.
6. Developed and implemented a Satellite-based data distribution system for the Meteorological Service of Canada.
7. Installed a Web-based Weather Information Rendering and Display System (**WAFS-WebGIS**, developed by us) in Cuba and Somalia.
8. Installed Weather Information Processing and Presentation System (**ULTIMA**, developed by us) in more than a dozen countries including: Hong Kong, Venezuela, Cuba, Brazil, Somalia (Kenya), Canada, Brunei, USA, Bahrain, Korea, New Caledonia, Malta, Morocco, Algeria and India.
9. Completed the Tiger Project for Water Resources Management in Morocco. This project was done through the Canadian Space Agency.
10. Installed a Weather Forecast facility at the Bahrain Meteorological Service.

4.2. Feasibility Studies

Some of the Feasibility Studies which we have completed include:

1. A Feasibility Study for an Integrated Disaster Forecasting and Management System (**IDFMS**) for India.
2. A Feasibility Study for an Agricultural GeoCapacity Network System (**AGCN**) for agricultural planning for the state of Punjab and subsequently for rest of India.

5. IES PRODUCTS

IES is a very innovative company which performs a lot of Research & Development. In the past many years we have developed the following products in the field of meteorology:

(1) **WAFS-WebGIS**, a Web-based version of our **ULTIMA** weather briefing workstation. **WAFS-WebGIS**, for aviation meteorology, runs as a Web application from central Web servers and users can access all data, generate their custom products, save and print them - all this by just using an Internet Browser on a computer with no additional application software. **WAFS-WebGIS** has been sold to Cuba and Somalia.

(2) **WebGIS**, a Web-based package used as a generic viewer and handler of geographical information-based data for environmental applications.

(3) Legacy Product: **ULTIMA**, a Weather Briefing Workstation for aviation (WAFS - ISCS/SADIS) as well as for the meteorological community. **ULTIMA** is operational in such countries as Kenya (Somalia), Brazil, and Cuba, among others.

(4) Legacy Product: **WebULTIMA**, a Web-based Flight Information System which allows a user to define a flight and receive all related weather information for flight planning through the Internet. **WebULTIMA** has been installed at our client in Venezuela.

6. PARTNERS

IES works with the following partners in Canada and India and who are best in their field of equipment and services:

- ***Lufft,*** a top-class manufacturer in the production of state-of-the-art precision climate monitoring instruments, including low maintenance compact weather stations and intelligent sensors.
- ***Optical Scientific Inc. (OSI)*** who build the most advanced optical instruments in the world for measuring precipitation, air flow, turbulence, and visibility, including Automated Weather Observation Systems (AWOS).
- ***DTN*** which specializes in subscription-based services for the analysis and delivery of real-time weather, agricultural, energy, and commodity market information.
- ***Radiometrics Corporation (RDX)*** which manufactures atmospheric profiling radiometers; these radiometers provide continuous profiles of temperature, humidity and liquid content profile of the atmosphere up to 10 km. RDX also manufactures RAPTOR® radar wind profilers which incorporate advanced software, advanced signal processing and a digital transceiver system. RAPTOR radar wind profilers are available in boundary layer, tropospheric and stratospheric configurations.
- ***Global Imaging (GI)*** for Satellite Ground Stations for geostationary and polar-orbiting environmental satellites.
- Depending upon the user requirements, we work with such companies as ***Microcom Design, SIAP-Micros*** for implementation of Telemetry systems in India and Canada.
- ***EKO*** Instruments for Solar Radiation Equipment.
- ***Picarro Inc.*** who manufacture gas concentration and stable isotope analysis instruments (laser CRDS technology).
- In addition, we have partners who manufacture other types of meteorological and environmental monitoring equipment some of which are DAVIS, RM Young, etc.

NOTE: Our latest Company Profile is available at www.info-electronics.com