

## **Mackenzie Valley Fibre Link**

Key policy objectives of the Canadian Chamber of Commerce include the development of the North, support for rural and remote high speed communication systems and Canadian Sovereignty.

There are currently approximately 75 remote sensing satellites in polar orbits. Within the next decade, it is expected that an additional 300 remote sensing satellites will be launched. However, there is a growing shortage of ground station facilities worldwide. In recent years, both domestic and foreign parties have identified Inuvik, Northwest Territories as an optimal location for the development of satellite earth stations to download a rapidly growing number of scientific, commercial and government/military polar orbiting low earth orbiting (LEO) satellites. With the recent commissioning of a satellite ground station (Inuvik Satellite Station Facility - ISSF), Inuvik compliments the European ground stations and has the potential to become one of the world's most important satellite receiving ground stations, providing Canada with a leading role in satellite data acquisition and dissemination. However, satellite ground stations require a very large amount of data to be transported to worldwide Space Agencies, governments and private sector clients. A high speed fibre optic link is the single lacking piece of infrastructure required to enable the significant growth of a national and international class satellite earth station at Inuvik, and to link the station to southern Canada and the world.

The Government of the Northwest Territories (GNWT) and the Federal Government (INAC) have, for a number of years explored the possibility of the construction of a high speed fibre optic link utilizing the Mackenzie Valley corridor to connect communities (along the Mackenzie Valley and in the Mackenzie Delta) to high speed Canadian fibre optic networks in the south. In January 2011, the GNWT commissioned a study entitled "Mackenzie Valley Fibre Link - Feasibility". The study defines the potential for ground station development as well as the requirement for the fibre optic facilities. The study further identifies the potential revenue, cost and possible sources of infrastructure funding under current government programs and the shortfall of capital requirements. The combination of significant private sector opportunities, and public investment would provide the opportunity for substantial revenue generation; for example, a ground station located in Kiruna, Sweden generated an estimated \$150 million in gross revenue in 2010.

Canada has significant space assets and continues to invest in space borne surveillance satellites for sovereignty, biological, agricultural, land management, resource development and climate change purposes as well as for coastal surveillance and search and rescue. A northern located Ground Station will enhance the control of northern waterways and assertions of Canadian sovereignty. A Mackenzie Valley Fibre Optic Link will provide a modern high speed communications infrastructure to the Western Arctic and Mackenzie Valley. The benefits include economic growth, job creation, the attraction of world class investment, and further opportunities for resource development and economic diversification. The link will also improve health care for remote northern communities and improve education and employment options for Canada's Aboriginal peoples in the Northwest Territories.

### **Recommendation**

That the federal government review the completed Mackenzie Valley Fibre Link - Feasibility Study with a view to participating in a public/private ownership structure to construct a Mackenzie Valley Fibre Optic Link that would enable further development of Canada's expertise and competitiveness.