

Accordingly, geomatics companies are changing their strategy. For example, in the past, distributors of GIS products would just look at selling the software license and forget about the customer. Now these geomatics companies enter the market by selling their services and later selling their products. Due to the rapid changes in software and hardware, clients are asking geomatics companies to integrate new products into their existing information systems. Some geomatics companies have become so customer service oriented they will even recommend a competitor's product if it fits the needs of the customer better than their own. On top of this, all geomatics companies interviewed had a consulting arm to help augment their core business or, if they were a consulting company, they have tried to add other geomatics services to their portfolio.

So what does this mean for Canadian geomatics companies? Canadian companies can take advantage of these changes by offering their expertise and knowledge of geomatics through consulting services. For Canadian companies which have developed specialized GIS software applications for many different industries, Colombian companies are ready to distribute these products. What is increasingly apparent is that Colombian companies are interested in talking to foreign companies about developing strategic alliances.

### **C) Remote Sensing**

In Colombia the remote sensing market is serviced by both satellite and airborne platforms. The current optical satellites that provide remote sensing services in Colombia are LANDSAT (U.S.) and SPOT (French). The microwave satellites available are the ERS satellites (European Space Agency), JERS-1 (Japan) and RADARSAT (Canada). The Colombian government currently has no plans to launch its own satellite and will be using the remote sensing services of foreign satellites in the foreseeable future.

The next decade promises to provide an explosion in the amount of global land data available from satellites. If all of the proposed satellites orbit as scheduled, by the year 2000 a minimum of 19 satellites will be in orbit providing land data resolutions from 1 to 30 metres in panchromatic, multispectral, and radar formats. It will only be a matter of time before these satellite services enter the Colombian market. Already some Colombian geomatics firms are eager to represent new satellite services. In the near future, the services of recently operational IRS-1 C (India) optical satellite and the JERS 2A (Japan) microwave satellite may be introduced to the Colombian market.

There are limited airborne remote sensing services in Colombia. The only local geomatics company with airplanes able to provide this service without outside assistance is F.A.L. Ltd. Some Canadian companies have teamed up with local Colombian geomatics companies to provide airborne remote sensing services. These Canadian companies provided the airplanes and the photographic equipment. These remote sensing services were provided at higher resolutions than satellite services could furnish for clients involved in the oil & gas, mining and agricultural sectors. Contracts have also been awarded for lower resolution imagery provided by higher flying aircraft, which competed directly with the satellite services. To date, there has been no airborne radar imaging in Colombia. Due to the cloud cover in Colombia an opportunity exists for low cost airborne radar imaging services.