exhaustive list of all government organizations and private companies. What it will provide is a starting point for those Canadian companies that want to enter the Colombian market). Over the years ahead, Colombia will provide numerous opportunities for Canadian geomatics firms. Canadian firms should look at 1997 as a period to develop contacts and relationships with Colombian businesses.

## A) Oil & Gas

This sector currently contains the largest private sector users of geomatics services and it will remain an important user of geomatics services. For Canadian geomatics firms with a specialized expertise in oil & gas services, Colombia will provide many opportunities.

Over the past several years, the Colombian oil & gas sector has grown phenomenally. Currently, total reserves of crude oil are estimated at 3.5 billion barrels, while total natural gas reserves are about 10 trillion cubic feet. In the short term growth is expected to continue as public and private investment is expected to top US\$ 10.7 billion from 1995 to 1998. In the long term, the development of the Colombian oil & gas sector will require approximately US\$ 17.5 billion until the year 2002. During this period, Canadian geomatics companies can provide their services at the exploration and exploitation stages of oil & gas development, along with providing geomatics services to help in the construction of pipelines.

The state-owned, ECOPETROL, and the private companies that maintain association contracts with this organization, are optimistic about the fields they are exploring. The most promising are those in the Colombian eastern plains (Llanos Orientales) near the area where the most important hydrocarbon discovery in Colombia was made at the beginning of the 1990s (the Cusiana-Cupiagua-Volcanera fields). In September, 1996 a new major oil find was discovered in the department of Cundinamarca near Medina. Development of these fields, and other promising explorations, should allow Colombia to increase its production of oil from an average of 600,000 barrels per day in 1996 to about one million barrels per day by 2000.

The industry is continuing to open to foreign investment and ECOPETROL is proceeding with the sale of new parcels of land to the private sector for exploration and development.

The most active petroleum companies in Colombia are ECOPETROL, BP and Occidental. However, according to the most recent exploration map, the companies that have exploration rights in Colombia include: Argossy, Bras Petro, Chevron, KELT (ELF), ESSO, LASMO, MAXUS, AMOCO, REPSOL, TEXACO, TRITON, TOTAL and Shell. Although these companies have exploration rights it does not necessarily mean they are actively working in Colombia. As well, new oil companies are constantly entering the market as the government continues auctioning off land for exploration.

Colombia has an abundance of natural gas reserves. Residential use of natural gas only started in 1986 with a gas pipeline between Ballenas and the cities of Barranquilla and Cartagena on the Northern coast. By 1991, natural gas represented only 5% of total energy consumption in Colombia. A Government decision to increase energy efficiency has facilitated a plan for a mass distribution program for natural gas, including an