# • • Geographic Information Systems •

# 3. MARKET ASSESSMENT

## **COMPETITION**

#### Mexico

Although there is a growing demand for geographic information systems in Mexico, the supply side is undeveloped and still very open. One Mexican company, Sistema de Información Geografica, S.A. (often referred to as "Sigsa" in the industry), is providing geographic information systems in the country. It is considered the big player locally. The company offers services in photogrammetry, system development, cadastre, data conversion, GIS and map printing. Its operations are completely automated, using ArcInfo and Microstation software. Sigsa is the authorized representative for ESRI Inc. of California for the distribution of "ArcInfo". There are about 50 ArcInfo systems now installed in Mexico.

The other popular software program in Mexico is "Geographix", which is used by some government departments. "Mundocart", a Spanish-language program, has also been used, but with mixed reviews. Most mapmaking is currently done either manually or using AUTOCAD.

Most Mexican geomatics firms do not have the technology or the resources to enter the GIS market on their own. They are very interested in entering into agreements with Canadian geomatics firms to act as representatives or distributors in Mexico. Such a strategic alliance would be beneficial for Canadian companies wanting to penetrate the Mexican market. The Mexican firms are already established in the industry and have the network and knowledge of the market to successfully commercialize the GIS. Their permanent presence in Mexico is also advantageous in that long-term ties can be cultivated with buyers and information about new opportunities that are developing is more easily accessible. Most importantly, requirements for many public competitions in government and PEMEX specify that the supplier have an appointed representative in Mexico.

#### International

Intergraph of Huntsville, Alabama, has been successful in penetrating the Mexican market. The company won the international competition to install a geographic information system for the SICORI department of PEMEX. The contract includes hardware, software, installation, support and training.

Intergraph was also involved in the installation of a smaller GIS for SEDESOL.

Harvard Design and Mapping Co. Inc. of Cambridge, Massachusetts, was present at the REP-COM '92 exposition at the United States Trade Center in December 1992. The company has targeted Mexico and will focus on environmental issues with the idea of using GIS in pollutionreduction programs.

Canadian geomatics firms have been successful in establishing recognition in the GIS area. Followup interviews to the GIS presentation at the Canadian Embassy showed a strong acceptance in using GIS services of Canadian companies. A major project with the National Institute of Statistical and Geographic Information (INEGI) will give Canadian GIS expertise a strong advantage, as anything related to maps usually centres around or originates with INEGI.

## **MARKET OPPORTUNITIES**

Interviews were conducted with government departments, Mexican geomatics firms and industry officials. The following are specific market opportunities for geographic information systems that will be coming up in 1993.

#### PEMEX

Numerous opportunities are developing in PEMEX. Of all government entities, PEMEX is the best financed, given its lucrative revenue-producing role for the government. In 1990, PEMEX had U.S.\$18 billion in gross revenues and a U.S.\$10 billion gross profit of which 90 percent went to the government in royalties and taxes. It is in the strongest position to purchase state-of-the-art technology.

The national petroleum company is currently undergoing a reorganization that will leave it with a corporate group and four independent business units. The independent business units will be divided

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