

Mexican users recognize that these popular process technologies are not the most advanced available. But they are often preferred as a simple and low-cost solution. In general, the market has been slow to accept high-technology products. This is partly because of cost considerations and partly because GIS technology is not always fully understood by decision makers. This is gradually changing, and Canadian suppliers can sell high-technology solutions if they are properly presented.

Digitalización y Cartografía Urbana (DICARTU) is the only Mexican company that markets its own GIS package, under the name of *AUDOS*. The system is not compatible with the more traditional GIS packages, which has impeded its market acceptance. *DICARTU* is now re-working the system to make it more flexible. Another company, *Sistemas Ortofotogramétricos Ingeniería Aplicada (SOFIA)* is reportedly developing another Mexican software package.

Advanced photographic and remote sensing equipment is scarce in Mexico. The industry leader, *Sistemas de Información Geográfica (SIGSA)*, uses old German cameras in its aircraft. In general, photographic and production equipment is European, and software/technology is from the United States. IBM and HP products are the most popular hardware choices. Satellite services are entirely imported, and generally come from French or American sources. The *Comisión Federal de Electricidad (CFE)*, Federal Electricity Commission, has shown some interest in Russian satellite services.

Two companies are active in the remote sensing and spatial data markets. *NIVELES* distributes Landsat satellite imagery and *COSMOCOLOR* provides Spot satellite imagery. Neither uses domestic technology.

INTEGRATION

The geographical information systems (GIS) subsector does not involve any formal horizontal linkages. Nonetheless, this is a very small field in Mexico and the leaders of the largest companies know each other very well. There are also frequent subcontracts between these companies. These informal linkages are reinforced by the frequent interchange of staff between the major suppliers and buyers.

There is only one example of vertical integration. *Ingenieros Civiles Asociados (ICA)* is a full service engineering company which is active in several sectors including transportation, environment, construction and geomatics. If *ICA* is involved in cadastral updates, in principle it has an advantage in related infrastructure development projects. Reportedly however, *ICA* is now refocussing on its core businesses and is reducing its geomatics activities.