## **Consumer Electronics**

The Thai electronics industry has grown rapidly over the past five years, with an average annual growth rate of 34.2 percent. Thailand now uses high tariffs to attract consumer electronics factories which produce parts and components, thus building the country's subcontracting base.

An inexpensive and easily trained labour force, and government support in the form of tax and other incentives are the main reasons leading electronic product manufacturers are relocating their production bases, particularly from Japan, Taiwan, the USA and South Korea, in Thailand. With over 600 companies promoted by the Board of Investment (BOI), the industry has now branched out into more sophisticated consumer products such as microwave ovens, video tape players, floppy disk drives, electronic watches, facsimile machines and telephones. Thailand exported over \$4 billion worth of consumer electronics in 1990, and the final 1991 figure is expected to be nearly 20% above that.

Major investment opportunities in the electronics industry are found in consumer electronics, which still tends to be oriented towards the domestic market, computers and peripherals, where establishment of several large-scale manufacturers has laid the groundwork for further investment and telecommunications equipment to support the implementation of the country's numerous telephone projects.

## **Geomatics**

Both remote sensing and geographic information systems were introduced to Thailand over a decade ago. The first Thai earth station for receiving MSS DATA OF the OS LANDSAT satellites was built near Bangkok in 1981.

The station has since been upgraded and it currently can receive data from SPOT, NOAA and MOS-1. Geographic information systems were first used in Thailand in 1985 and since then the use of geomatics products and services has grown rapidly. There are currently about 20 government agencies involved in the use of remote sensing technologies and more than 30 known users of GIS technology in Thailand. Seven state universities are involved in the field of geomatics. The expertise developed in cooperation with several countries, including Canada, has expanded into many areas including agriculture, forestry, land use, computer science, geography, geology, hydrology, oceanography and multidisciplinary environmental monitoring.

Thailand is planning the integration of GIS with the remote sensing data for natural resource development and environmental monitoring. The Ministry of Science, Technology and Energy is in the process of setting up a National GIS Centre which aims to promote and develop GIS technology in Thailand. The Centre is expected to be in operation by 1996. The largest GIS application is cadastral, while the next largest is in the field of rural and agricultural development as well as land use planning. An estimate of the total cost of the