

EXECUTIVE SUMMARY—AEROSPACE AND AIR TRANSPORTATION

In 1991/92, Indonesia's 146 public airports handled 10.9 million passengers on 6 domestic airlines, 29 international carriers, 17 domestic charter companies, and 50 private general aviation companies. Of the 756 aircraft registered by the Directorate General of Air Communication, 30% were registered to the scheduled airlines, 25% were registered by charter companies, and 45% were registered to general aviation companies. 24% of Indonesia's total fleet are helicopters, 48% are fixed-wing, smaller aircraft, while the remainder are heavy transport aircraft.

Indonesia has been working to increase its airline production capabilities. In operation since 1977, IPTN, the state-owned airline company, produces the CN-212 and CN-235 aircraft under license and joint production agreements with CASA of Spain as well as five types of helicopters (NBO-105, NSA-330 PUMA, NSA-332 Super PUMA, NBK-117, and NB-412) under various licensing agreements.

Because many of the scheduled airlines' fleets are dependent on turboprops, market demand exists for the replacement of F-27's before IPTN production of N-250 turboprops begins in 1996. In addition, due to Indonesia's aging air fleet, there is considerable market opportunity for fleet replacement and overhaul as companies race to compete to attract new customers.

Imports of airplanes reached US\$ 306.3 million in 1991 and US\$ 98.3 million in 1992. Imports of parts and components for helicopters are quite substantial, accounting for US\$ 406.3 million in 1990. IPTN is the primary buyer of helicopter parts and components. Aircraft and parts imported for government agencies and state airlines are free of duty while planes imported for corporations are taxed at 2.5% and, for private use, at 30%. Most parts including engines, propellers, rotors, and subassemblies are subject to 10% VAT.

The Directorate General of Air Communications is responsible for issuing all aircraft import licenses while the Agency for the Assessment and Application of Technology must approve all import licenses. The import of aircraft or helicopters which have similar function to those produced by IPTN is prohibited. IPTN, however, still imports most of the components it uses in its joint venture/licensing production as well as most repair parts.

EXECUTIVE SUMMARY—REMOTE SENSING

Following the inauguration of Indonesia's multifunction earth station in September 1993, the remote sensing industry is poised to take off. Operated by the National Aeronautics and Space Institute (LAPAN), the earth station, which is located in South Sulawesi, is capable of accessing data from natural resource satellites such as LANDSAT, SPOT, and ERS-1 and will provide a significant increase in data availability.

The public sector dominates the remote sensing field. Three key government agencies are: The National Coordination Agency for Surveys and Mapping (BAKOSURTANAL), The National Aeronautics and Space Institute (LAPAN), The Agency for the Assessment and Application of Technology (BPPT). Currently, there are 102 centers that process digital image data. 56 are run by government agencies, 14 are connected to universities, and 32 belong to the private sector.

Almost 100% of remote sensing software is imported, with about 60% from the US manufacturers. Software and equipment imported for government agencies are free of duty while software imported for private organizations is taxed at 10-12.5% plus 10% VAT.

In the 1990's, externally aided public sector projects offer the greatest and most accessible business opportunities in the geomatics field. By 1991, external donors had provided over US\$ 330 million for land resource evaluation and planning in Indonesia. Currently, two Asian Development Bank projects, the Second Land Resources Evaluation Project (US\$ 95 million) and the Marine Resources Evaluation and Planning Project (US\$ 33 million, foreign component), have sizable remote sensing components.

Private sector firms serve the petroleum, forestry, and mining sectors. Some of the firms are well established and offer a sophisticated menu of services including SLAR, global positioning systems, DOPPLER surveys, photogrammetric mapping, orthophoto mapping, and airborne geophysics.

BIDDING PROCEDURES

Although Indonesian laws do not require a local agent or partner for private sector projects, for practical purposes, Canadian companies have found a local agent crucial for building business in Indonesia. One necessary attribute for any potential Indonesian agent or distributor is an extensive network of appropriate contacts—both with senior level decision-makers and those at middle level responsible for implementation.

Winning a tender offer in Indonesia is likely to involve considerable investment in time, energy, and money. Convincing the potential client of the company's *long-term commitment* to the Indonesian market and *price-competitiveness* are of primary importance to a successful business strategy. A firm may want to consider undertaking small and marginally profitable work initially in order to gain a better understanding of the market and to build a local profile. Similarly, firms should always be on the lookout for subcontracting opportunities.