

SINGAPORE

Overview

As one of the world's most vibrant economies, a so-called "Asian Tiger," Singapore acts as a role model for many third world nations. Singapore's per capita income of \$24,000 is now higher than Britain's. Singapore, also has one of the highest savings rates, about 56% of GDP (1995 estimate), largely the result of compulsory contributions to a government managed Central Providence Fund. Government of Singapore (GOS) predictions call for 6-8 per cent growth over the next 5 years, spurred by the continued expansion of the manufacturing sector.

Singapore is the busiest port in the world in terms of shipping tonnage. It is also the world's top bunkering port, a major transshipment hub, and a global warehousing and distribution center for the Asia Pacific region. Although Singapore has no indigenous energy resources, its five refineries have made it the third largest oil refining center in the world (by capacity) after Houston and Rotterdam. Singapore has also become a leading financial and business center in the region.

	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>
GDP (US\$ Bil)	84.7	91.1	98.0	105.8	113.0	120.7	129.0
% Change In GDP	8.3	7.5	7.6	8.0	6.9	6.8	6.9
Consumer Price Index (%)	1.8	1.9	1.9	2.0	2.2	2.2	2.2

The U.S. is the largest foreign investor in Singapore. Cumulative U.S. direct investment in Singapore is \$ 12.6 billion as of 1995. American holdings in Singapore are concentrated in the petroleum, chemical, and electronics industries. For example, Seagate, one of the largest computer disk drive manufacturers in the world, just completed a \$1 billion investment in Singapore to include a 100,000 square foot manufacturing facility. These investments serve as the conduit for the inflow of American goods and services. As a result, Singapore was the United States' ninth largest export market and import source in 1995.

Singapore has one of the world's most open investment regimes, through which it seeks to overcome land, resource, and labor limitations. It attempts to attract firms that can build up the country's technological base and improve its labor force. Singapore's economy is based on a strong and stable government that fosters free trade. Investment policies are transparent, and the bureaucracy is not oppressive. There are no taxes on capital gains and few restrictions on foreign ownership of businesses. In fact, the Swiss based World Economic Forum cited Singapore as the world's most competitive economy. Multinational corporations, especially in high technology

sectors, value Singapore's superb infrastructure, manufacturing, and support facilities and view it as the gateway to the continually explosive expansion in the wider Asian markets.

Singapore maintains restrictions on investment in a limited number of sectors. For example, armaments manufacturing is strictly closed to foreign investment. Other sectors where foreign investments are limited include: news media, telecommunications, broadcasting, property ownership, and domestic banks.

Defense Industry Environment

Singapore's annual defense budget is capped at 6 percent of GDP. In FY 96, actual spending will be approximately 4.3 percent of GDP (\$4.1 Billion). Singapore prefers to buy American defense related products primarily because of the technological advantages and the superior logistical support provided. As of FY96, Singapore had ordered 2.3 billion dollars worth of arms from the U.S. under the Foreign Military Sales (FMS) program. Additionally, cumulative commercial purchases (1991-1996) of American defense related products are estimated to exceed \$ 1 billion. The chart below summarizes Singapore's defense spending for the next five years and the projected amount of FMS sales.

	1995	1996	1997	1998	1999	2000	2001
Def spending (US \$ Bil)	4.0	4.1	4.4	4.8	5.1	5.3	5.6
FMS Sales (US \$ Mil)	156	282	350	400	450	500	550

As a small nation state with a population of about 3.0 million, Singapore's defense strategy is similar to Israel's relying mostly on conscripts and reservists (250,000), high tech weaponry, and a small cadre of highly trained active duty military (53,900; Army - 45000, Navy - 2900, & Air Force - 6000)¹. The Singapore Armed Forces'(SAF) mission is to enhance the country's peace and security through deterrence, and should deterrence fail, to secure a swift and decisive victory over an aggressor. The SAF meets these objectives by fostering extensive friendly defense relationship in the region and beyond, and by maintaining a highly trained, technologically superior defense force. While small in comparison to most, the SAF is, without a doubt, the best trained and equipped force in the SE Asian region. The following chart outlines the type of equipment that the Singapore Armed Forces (SAF) currently possesses and/or will take delivery of in the near future.

SINGAPORE ARMED FORCES - MAJOR EQUIPMENT

<u>ARMY</u>	<u>NAVY</u>	<u>AIR FORCE</u>
CENTURION MBT (63) (105 mm)	CORVETTES (6) VICTORY CLASS)	F-16 A/B (6) F-16 C/D (30)*
AMX-13SM1 (300) (75 mm)	MSL GUNBOATS (6) (HARPOON/GABRIEL)	A-4-SU (58) (SKYHAWK)
AMX-10P PAC 90 (22) (90mm)	PATROL VESSELS (12) (FEARLESS CLASS)	UH-1H (40) (HUEY)
M113A2 (720)	LST (5) (EX-US 511-1152 CL)	AS550 (30) (FENNEC)
FH-2000 (18) (198mm TOWED)	RAMP POWERED FIGHTERS (4)	AS 322m 18 (SUPERPUMA)
FH-88 (52) (155mm TOWED)	FAST CRAFT FOR EQUIPMENT (25)	CH-47 (6) (CHINHOOK)
AN/TPQ-36/-37 (2) (SURV ART/MOR)	SUBMARINES (1) (LEASED)	E-2C (4) (HAWKEYE)
V200 COMMANDO (247) (ARMORED CAR)		F-5E/F (49) (TIGER)
		KC-135R (4)*
		FOKKER 50 (9) (MPA)

* AWAITING DELIVERY (1998-2000)

Singapore has a special economic and military relationship with the U.S.. Although non-treaty and non-aligned, Singapore has always been a strong supporter of American presence in the region. It was the only country to offer facilities to the U.S. military when U.S. forces left Clark Air Base and Subic Air and Naval Bases in the Philippines due to both political and geophysical imperatives. Currently Commander, Logistics Western Pacific (COMLOG WESTPAC) uses Singapore's military facilities to coordinate logistical support for Seventh Fleet forces deployed in the Asia-Pacific region.

Singapore has a strong armaments industry which not only meets many of the military needs of the country, but is also an increasingly significant exporter to third world nations. In the early stages, the government developed and supported the industry as a means to continued industrial and technological growth and to support its "total defense capability." However, the companies that remain in existence have become profit making entities that now compete internationally. Singapore Technologies (ST) Pte LTD is the holding company for most of Singapore's armaments industry and many other government linked corporations. The company is divided into five strategic business areas (SBA): Engineering, Technology, Infrastructure & Lifestyle, Property, and Financial Services.

The engineering SBA manages most of the armaments industry to include such companies as: Chartered Industries of Singapore, ST Aerospace, ST Shipbuilding & Engineering, Unicorn, Allied Ordnance and ST Automotive. They produce most of the country's small arms and ammunition (SR88A - 5.56 Assault rifle and CIS 50MM MG), ships (Mine Counter-Measures Vessel & Corvettes), and field artillery pieces (FH-88 155 MM Field Howitzer). ST Aerospace is acknowledged as one of the premier aerospace companies in the region. They have expanded internationally in the areas of aircraft maintenance, modification and refurbishment to include contracts with the U.S. military for C-130 work.

Defense Opportunities

Singapore has shown interest in purchasing attack helicopters, communications equipment, missiles, advanced jet fighters, radar systems (all kinds), ASW technology, air defense weapons systems, and anti-mine warfare technology.

The greatest potential sales lie in the areas of information technologies. Singapore is interested in command, control, communications & intelligence (C3I) systems, simulation and gaming, and other high end information technologies.

Key MINDEF agencies involved in the purchase of new equipment/systems include the following:

- Defence Materiel Organization is responsible for acquisition and integration of weapons systems/equipment and platforms and can be reached the following address.

Defence Materiel Organization
16th Level Tower A, Defense Technology Towers
1 Depot Road
Singapore 109679
Tel: 65-373-4631
Fax: 65-275-4358

- Defence Science Organization is the defense related research and development arm of MINDEF.

Defence Science Organization
20 Science Park Drive
Singapore 118230
Tel: 65-776-2255
Fax: 65-775-9011

- The Command, Control and Communications Systems Organization (CSO) is responsible for development and integration of command, control, and communications systems.

Command, Control and Communications Systems Organization Ministry Of Defence (MINDEF)
Defense Technology Towers, Tower A
1 Depot Road
Singapore 109679
Tel: 65-373-2828
Fax: 65-373-3418

- The System and Computer Organization (SCO) is responsible for designing and developing information technology systems for MINDEF.

System & Computer Organization
Ministry Of Defence (MINDEF)
Defense Technology Towers, Tower A
1 Depot Road
Singapore 109679
Tel: 65-373-2600
Fax: 65-273-9052

Defense Procurement Process

If you have products to sell or services to offer to MINDEF, you should approach Defence Procurement Division (DPD) with a minimum of three sets of brochures, specifications, samples, etc. and make a direct appointment with the relevant purchasing executive concerned with the range of products or services to be sold. Submit a company brief, giving details of the products and/or services you can supply, capability, financial status, and contact information for the appropriate sales executive. This will assist the Defence Procurement Division to place your company in MINDEF's potential suppliers list. It is MINDEF policy to deal directly with suppliers, not with intermediaries or agents. U.S. manufacturers that want to have a local presence in Singapore should consider the following alternatives:

- Establishment of an office, subject to MINDEF's security requirements, including security clearance of their personnel to deal with MINDEF;
- Utilize the offices and services of the U.S. Embassy in Singapore such as the Office of Defense Cooperation and the U.S. Commercial Service;
- Work with government-linked companies (such as any of the Singapore Technology companies) that are able to provide the requisite support and liaison with MINDEF and that meet MINDEF'S requirements for physical and personnel security.

MINDEF invites quotations for low-value, off-the-shelf items that do not require elaborate purchase terms or conditions. Normally, companies are asked to state only the price, delivery and payment terms.

Tenders are invited for higher value and complex purchases. Tenders are required to comply with MINDEF'S standard conditions of tender or contract, normally enclosed in the invitation to tender. Open tenders are advertised in the local newspapers every Friday and on Teleview. Only local companies registered as government contractors with the central procurement office are eligible to participate. Tender documents are collected from the DPD's tender office, located on the ground floor of the DPD's Defense Technology Tower office.

Defence Procurement Division
Ministry Of Defence (MINDEF)
Defense Technology Towers, Tower A
1 Depot Road
Singapore 109679

Tel: 65-373-4189
Fax: 65-373-8443

MINDEF has also established PROFNET (Procurement and Financial Network), an Electronic Data Interchange System (EDIS) which allows MINDEF to advertise its tenders, invite suppliers to tender or quote, and place orders with suppliers. PROFNET also allows suppliers to tender or quote their offers and send invoices for payment to MINDEF. The software necessary to access EDIS costs approximately \$900.00 and a usage fee is billed on a monthly basis. Subscriptions to PROFNET are available through:

Singapore Network Service
75 Science Park Dr #B1-01/13
CINTECH II Building
Singapore 118255
Tel: 65-778-5611
Fax: 65-778-5277

Diversification/Commercial Opportunities

In addition to providing a market for defense equipment, the sophisticated and expanding Singaporean economy offers many dual-use or commercial trade opportunities for U.S. firms. Some of the larger industry sectors are described below.

Aerospace

The aerospace sector continues to be one of Singapore's major industries. Singapore is evolving into a world class component manufacturing and overhaul center for the world market. This sector has grown steadily over the past five years and is expected to continue growing at an accelerated pace well into the 21st century.

Electronic Components

Electronics is a major industry in Singapore, accounting for 38 percent of the country's manufacturing output, 42 percent of its exports, and 34 percent of employment. The presence of many U.S. multinational companies in Singapore has generated a strong demand for U.S. equipment and components. Manufacturing know-how for "ruggedized" electronic components used in military applications is of interest to some Singaporean firms.

Transportation/Infrastructure

Changi Airport is Southeast Asia's major hub airport, linking 108 cities through more than 2,100 flights by 58 airlines each week. Singapore's goal is to become the leading air hub in the entire Asia-Pacific region by the end of the century. With two terminals and two runways, Changi Airport is capable of handling 24 million passengers a year. Physical planning for a third terminal and reclamation of land for a fourth terminal and a third runway have begun. Cargo capacity will be expanded to 1.3 million tons by 1995. As a result, demand for ground support equipment will increase. These expansion plans will present significant opportunities for U.S. suppliers of airport equipment and for consulting engineers

Telecommunications Equipment

Singapore places great emphasis on the development and maintenance of a sophisticated and advanced telecommunications sector. For the next five years, \$2.19 billion has been earmarked for capital investment in technologies such as intelligence networks, broadband ISDN, and optical fiber links to all homes and offices.

Security and Safety Equipment

As Singapore has become more urbanized, its infrastructure more sophisticated, and its population more affluent, security systems have become part of new and existing buildings' standard features. Singapore enjoys a reputation as a relatively crime-free country, and wants to maintain this reputation. There is great emphasis on security, be it for individuals, for private dwellings, or for industrial/ commercial buildings and installations. Singapore's labor shortage means that advanced equipment and systems to replace traditional guard services are in demand. These developments augur well for U.S. manufacturers of high technology detection and surveillance equipment and systems.

U.S. Government Points of Contact

The following is a list of points of contact for U.S. firms that are interested in the Singapore market.

U.S. Embassy

David Fulton
Senior Commercial Officer
U.S. Commercial Service
27 Napier Road
Singapore 258508

Mailing Address

U.S. Commercial Service
PSC 470, BOX FCS
FPO AP 96534-0001

Tel: 65-476-9037
Fax: 65-476-9080

U.S. Embassy-Singapore
Office of Defense Cooperation - Singapore & Brunei
27 Napier Road
Singapore 258508

Mailing Address

Office Of Defense Cooperation
PSC 470, BOX ODC
FPO AP 96534-0001
Tel: 65-476-9336
Fax: 65-476-9483

Chief, ODC - LtCol Kaufhold
Tel: 65-476-9379
e-mail: mkaufhol@san.okc.disa.mil

Dep Chief, ODC - LTC Drake
Tel: 65-476-9033
e-mail: wdrake@san.okc.disa.mil