AUSTRALIA

Overview

The Australian economy is enjoying a period of sustained, moderate growth. In the 1995 calendar year, real economic growth slowed to 3.1 percent, due mainly to a downturn in the housing sector and a build-up in the level of stocks held by the business sector. In the 1996 calendar year, real GDP growth is expected to pick up slightly, to around 3.5 percent. Growth should continue at the 3-4 percent level in the medium term. Australia currently is well-positioned for continued solid economic growth, with very little in the way of unfavorable indicators. With increasing links to the dynamic economies in the region, and a continuation of economic reform, Australia's trade and investment climate will be attractive for the foreseeable future.

Defense Industry Environment

Principal elements in Australia's defense policy include: recognizing that Australia must develop and maintain an ability to defend itself from low-to medium-level conflict; fostering regional security and stability through partnerships and cooperation with the region and, maintaining strong alliances, particularly with the U.S., through shared defense facilities, technology, training and exercises, and intelligence. Australia's military strategy focuses on defending the northern latitudes, its most vulnerable area, without manifesting regional power projection. Its goal of self-reliance is being achieved through forging a closer relationship between Defence, industry and the community. Regional security is being cultivated by consultation and collaboration with countries in Southeast Asia and the Southwest Pacific.

A major investment program has been designed to achieve the forward strategic objectives. Consequently, capital expenditure through to 2000 and beyond reflects a sustained level of spending. The involvement of Australian Industry is being progressively sought, but without apparent ongoing subsidies. The use of commercial products and standards for capability needs will be pursued wherever suitable. Tender specifications will increasingly prefer commercial to military standards. Like the trend in the United States, support for the armed forces of the 21st century will be information-based, and there will be a growing industry involvement at strategic level. The significance of industry support to military action close to the front lines in Desert Storm was not lost on the Australian coalition partner.

To enable this determined program to proceed, Australia has annual defense budget of \$8 billion (untouched by recent government-wide austerity programs), around \$4 billion of which is purchasing outlay. Of this purchasing outlay \$2.3 billion is spent on capital equipment, \$1.3 on logistic support, repairs and maintenance and stores, and \$0.4 billion on capital facilities as reflected by the following chart.

(\$ Millions)

Expenditure	Year			
	1995/6	1996/7	1997/8	1998/9
Capital Equipment	2,300	2,390	2,500	2,650
Imports	820	840	865	905
Local Production	1,540	1,625	1,725	1,865
Exports	60	75	90	120

Owing to the presence of many U.S. and European subsidiaries operating as local Australian companies, import figures should be taken as indicative of market shares only. There are numerous American companies with subsidiary operations in Australia, often in partnership with Australian companies for specific projects, and sometimes teamed with local subsidiaries of foreign companies. Identifying countries of origin of the resulting capital solutions has not been undertaken in this study.

During the period 1985-1995, defense procurement expenditure fell 67% in the United States; 25% in the United Kingdom, and 50% in Germany. Australia's procurement expenditure has averaged \$4 billion annually (in 1996 dollars) during this period, and is forecast to remain at this level until at least the year 2000. Capital equipment procurement comprises half this procurement budget, allocated for the most part to a number of major projects which include over-the-horizon radar, submarine and frigate construction, and aircraft upgrades.

Australia, relatively unaffected by the end of the cold war, has in the past decade, defined its own defensive capability in relation to its position and role in the Asia Pacific region. Seeing itself as a dominant economic, political, and military force in the region, it has embarked on an ambitious program of air, sea, and land asset acquisition. It is determined to rely upon its own industrial base for logistic and materiel support; to push the limits of technological advances, and to focus on the defense of the exposed northern reaches of the continent - the vulnerable "sea-air gap". Its firm goal of a self-reliant defense is underpinned by an aspiration to an independent foreign policy while maintaining its alliance with the United States.

Possessing relatively limited active forces, Australian defense strategy focuses on infantry mobility and round the clock combat capability; well equipped ships and submarines; surveillance and early warning; effective command and control; offensive and defensive electronic warfare suites; precision weapons, and advanced communication links.

Australia's alliance with the United States remains a cornerstone of its defense policy. However, its industry policy is leaning progressively in favor of indigenous capability, and U.S.

companies have to compete more intensely and more intelligently to remain dominant among local and international competition. American companies most successful in selling their products and services to the Australian defense forces are those which have established subsidiary, autonomous business units within Australia. Teaming partnerships, an alternative to subsidiary investment, are also successful, and often include international companies that have Australian-based operations. The high degree of commonality between the U.S. and Australian armed forces and cooperative history provides continuing opportunities for American suppliers. However, the strong competitive position is under relentless challenge from companies often backed by, or synonymous with, foreign governments.

Domestic Production

The former government-owned aircraft factory, Aerospace Technologies of Australia, has been sold to Boeing (formerly Rockwell), and Amalgamated Wireless Australia (AWA) Defense Industries has been purchased by British Aerospace. The defense division of the Australian company Stanilite has been acquired by Australian Defence Industries (ADI). ADI itself is expected to be offered for sale by its owner, the Australian Federal Government, sometime in the near future. With a re-shaping of the high-end of the defense industry, competitors are becoming fewer and larger, with partners becoming competitors overnight.

Some items, including ordnance, are supplied to Defence by ADI. In the absence of economies of scale in a small domestic market and (currently) limited export possibilities, Defence will pay a premium on locally produced ordnance, which it considers strategically justifiable.

Third Country Imports

Imports have fallen as a percentage of total defense requirements in real terms over the ten-year period to 1996, reflecting the growth of local industry capability. The proportion of equipment obtained through U.S. Foreign Military Sales (FMS) has declined in favor of commercial transactions, where the more open market environment is favored. There have been instances of third country benefits resulting from U.S. export restrictions, but this is not significant in the current supply situation. As mentioned above, there are aggressive third country efforts to make gains in the Australian defense market, as recent campaigns for naval helicopters and lead-in-fighters demonstrate.

U.S. Market Position

Despite the intensity of the competition, the outlook is optimistic for U.S. suppliers, be it through partnerships, subsidiaries or distribution arrangements. American equipment and technology is highly regarded, proven and effective. As noted above, there is a high level of commonality between U.S. and Australian equipment; however, U.S. companies should be aware that Australia inclines toward more multi-role assets than the U.S., therefore there is a variation in operational capability which should be addressed. For the most part, the U.S. offers value for money and timely delivery. Commercial supplies of spare parts are preferred to FMS largely because of long-lead times for delivery ex U.S. inventory and pricing levels. The U.S.

Government can, according to established guidelines, offer support in the form of advocacy to U.S. companies bidding on projects where no other U.S. competitor is involved, in an effort enhance its image as a capable and reliable supplier which will provide the "best" solution.

Defense Opportunities

Demand for defense equipment will remain buoyant for the coming three years, although the value of major acquisitions will decline to more moderate levels following completion of contracts for over the horizon radar; submarines; frigates; aircraft; army vehicles, and major upgrade work. Opportunities for smaller companies exist in the provision of electronic components, specialized equipment and technologically advanced items not manufactured locally, and which parallel equipment in service in the U.S. armed forces. Companies with the greatest potential are most likely those which can contribute, in partnership with Australian firms, to the demand that is being created by the Revolution in Military Affairs, turning future battle campaigns into electronic wars, where victory will be determined by the speed and accuracy of electronic signals instead of pieces of metal. The Revolution in Military Affairs has arrived in Australia, a country which already possesses a high-technology force which is being progressively updated.

Areas of opportunity in the foreseeable future include advanced information technology; equipment enabling precision engagement; adaptive sensors spanning the electromagnetic spectrum; critical target identification products, and precision guidance systems for weapon delivery. These requirements add up to an increasing demand on systems in favor of hardware. Crucial needs for the Australian defense forces in the near-term will include equipment and systems for data acquisition, processing and distribution (airborne, ground and ship-based); high quality surveillance and reconnaissance (early warning); secure communications; effective command and control; capable electronic warfare suites; long range precision weapons (airborne, ground-based, surface and subsurface) and defensive systems; low observables; and unmanned aerial vehicles. The soldier in the early 2000s will be an integrated fighting system, a cell within a neural net, all-weather, all-seeing and highly mobile. To prepare personnel to cost-effectively and efficiently use the technology-based equipment, there will be a requirement for accurate simulation and modeling to provide virtual, real-time scenarios.

Defence is a customer in a range of industry sectors due to its need for equipment, services, consumables, facilities, spare parts, software and systems. Likewise, capital equipment constitutes a wide range of products purchased by the Australian Department of Defence; this study, therefore, is correspondingly broad in scope. There is a great deal of information now available to industry seeking to sell defense items, and a number of these sources are listed in Section D (publications). Also, Defence increasingly is using the Internet, and known home page addresses are listed in this chapter.

Defense Procurement Process

The use of Invitations to Register Interest (ITR) is common practice in Australian capital equipment purchasing plans. The use of short listing companies for major bids will increase, and

decision making will continue at a devolved level on many acquisitions. Currently, prime contractors manage about 95% of the acquisition budget.

The number of very large projects is decreasing, and the future investment program will comprise relatively smaller projects. The challenge for suppliers will be to continually seek out improvements to manage risks and to minimize costs. Tendering for both acquisition and through-life support is also a feature which will be used more frequently.

Winners will be those companies which consistently meet all of the tendering requirements across the board, show a willingness to include a high level of Australian involvement, and whose regional business development plans focus on a partnership either with or within Australia.

Today, information is easily obtained on approved and unapproved defense projects. Each of the respective Divisions publishes regular updates on the status of projects, both major and minor (minor are up to \$16 million). A consolidated list of major projects cataloged for approval is also available from the Defence Directorate of Publishing. Information on unapproved projects can be sought from Force Development Offices and from the Materiel Divisions. The status of many projects is now updated regularly on the Internet. Recently, Defence Project Offices have requested inclusion in the Commercial Service Industry Market Insights (IMI) to alert U.S. companies to Invitations to Register Interest on major projects such as Wedgetail (AEW&C capability), and Echidna (EWSP for RAAF aircraft).

Defence looks for value for money, taking into account:

- price
- compliance
- risk
- track record
- teaming (what will be added to Australian industrial infrastructure)
- commercial issues
- logistics support.

The trend will be to select commercial-off-the-shelf-products (COTS) wherever possible, although this may, in part, be limited by the need to adapt equipment to meet the climatic and geographical idiosyncracies of the Australian environment. Australia still looks to U.S. industry for critical support, enabling U.S. companies to enjoy a strong competitive position. However, there is intense pressure from, among others, the United Kingdom, Sweden, Germany, Israel, France and South Africa. Successful companies from most of these countries manage Australian operations, promoting their involvement in local industry. These subsidiaries, to be considered "local" must have financial and management autonomy, and must be able to compete with their parents in export markets.

There has been a strong growth in software and systems integration in Australia, stimulated by the tasks resulting from local submarine and frigate building and creating an intensely competitive climate.

The Australian Defence Organization is responsible to the Minister for Defence (currently the Hon. Ian McLachlan), assisted by the Minister for Industry, Science and Personnel (the Hon. Bronwyn Bishop).

The Organization (Defence) comprises the Australian Defense Force (ADF) (Army; Navy; Air Force; Defense Headquarters (HQADF), and the Department of Defense (Department). Within Defence there are eight subdivisions, or programs:

- Forces Executive: (HQADF, Force Development, policy and management);
- Royal Australian Navy: (Maritime Operations, Corporate Management, Logistics Support, Training);
- Australian Army: (Land Operations, Corporate Management, Base Logistics, Training);
- Royal Australian Air Force: (Combat Forces, Executive, Logistics, Training);
- Strategy and Intelligence: (International Strategic Policy, Force Development and Planning, Intelligence, Program Management);
- Defence Acquisition (until July 1996, Acquisition and Logistics: (capital equipment procurement, industry involvement and development, contracting policy, quality assurance, exports);
- Budget and Management: (financial and personnel management, program delivery assessment, facilities);
- Science and Technology: (aeronautical and maritime research, electronics and surveillance research, executive).

Defence Acquisition, the most important point of contact for domestic and foreign firms seeking to sell major items to Defence, is responsible for supporting the materiel acquisition process. Defence Acquisition, which includes a network of regional offices, is active in:

- industry and Defence awareness, advising industry on how to do business with Defence, and Defence on industry capabilities;
- the Australian Industry Involvement program, and monitoring "obligations";
- export facilitation and control (Australia takes an active part in international export control efforts to bring in the Wassenaar arrangement the successor to the old COCOM regime);
- industry capability, providing information for defense industry policy development;
- defense industry development, assisting in the formulation of projects to enhance local industry;

- contracting support, advising on complex requirements and procurement policies and practices,
- quality assurance, watching suppliers' processes to ensure that quality is built, not inspected, in.

Prospective suppliers are encouraged to establish and maintain contact with appropriate areas of Defense, and these can be identified for inquirers by Defence Acquisition offices. These are located in each State within Australia, and at the Australian Embassy in Washington DC. Logistic and Support Commands are points of contact for spares, maintenance, and minor capital items. Most Logistic and Support Command purchases are below \$4 million. However they comprise the vast majority of Defence purchases. (Refer Section D, Key Contacts, for address details of Acquisition and Service Commands).

The U.S. and Australia are members of the ANZUS Treaty, a formalized relationship reflecting the shared strategic interest in maintaining the security of the Asia Pacific region and joint contribution to world stability. The two countries participate in military exercises, intelligence exchanges, and cooperation in defense science and technology, communications and logistics. For the U.S., Australia is a reliable, strategically-placed partner; for Australia, the U.S. is a source of leading technology, systems, and equipment. Many of the American companies selling to the Australian defense forces have established subsidiary operations in Australia, enjoying sufficient autonomy for them to be categorized as "Australian" companies. Defence has a requirement that for a company to be considered "local" (as a subsidiary of a foreign company) it must be Australian or New Zealand registered in accordance with the corporations law. Teaming arrangements are preferred by Defence, as partnerships increase industry consolidation, whereas the presence of additional subsidiaries can contribute to industry fragmentation.

American companies have developed many successful collaborative working relationships with Australian counterparts to bid on major project procurements. Recognizing the increasing need for the Australian defense industry to develop export markets to insure survivability through the peaks and troughs of defense purchasing patterns, a Defence spokesperson said recently that the subsidiaries of international companies in Australia will need to make more of their presence in the region as a base for the growing Asian market.

Diversification and Commercial Opportunities

In addition to business opportunities in the defense sector, Australia's sophisticated and diversified economy provides many commercial opportunities for U.S. firms. Several of the larger industry sectors are briefly described.

Computers & Peripherals

Australia ranks second after the U.S. as a per capita user of personal computers with a ratio of one pc/single-user computer for every 6.3 Australians. It is expected that during 1996 between 1.3 and 1.5 million computers will be shipped to Australia. PCS account for over 70

percent of computer hardware sales in Australia, growing at an annual rate of around 13 percent in terms of volume. However, while sales increase strongly, hardware prices are continuing to fall at dramatic rates, especially for hard drives, CD drives, and memory, reducing the market's relative value. The extremely high penetration of PCS in business, government, and homes is a result of the users' desire to connect PCS in networks, and to link existing networks to other networks. The Internet and multimedia applications are driving sales of PC's and modems capable of providing fast and efficient access.

Single-user systems (PCS, single-user workstations, associated peripherals), accounting for over 70 percent of the hardware market, have high growth rates because of the growing demand for computer power at an individual user level, the increase in networking, and the high acceptance of single-user platforms. Data communications hardware (network interface cards, hubs, bridges, routers, modems, multiplexers, packet switching equipment), are growing at a high rate due to the growing demand for networking of PCS and mid-range server systems.

American products are well regarded and received in Australia. They dominate the local market, with competition from Asian suppliers. Major U.S. hardware suppliers either are represented in Australia or involved in local manufacturing through .subsidiary operations. Australia has become an attractive location for computer hardware firms owing to its strategic regional location in the Asian time zones, an advanced skills base, and the availability of a skilled workforce. The domestic industry consists mainly of small companies assembling PC's from a variety of imported sources.

Multinational companies from Europe and Asia are represented alongside U. S. counterparts in this crowded market. The Australian market tends to be a microcosm of the U.S. market, and is therefore often used as a testing ground for some products from European and Japanese vendors. This provides Australia with early access to the latest technology, producing an aware, discerning customer base. Imports classified as computer hardware are duty free. Telecommunications components are not. Therefore, as computer and telecommunications technologies increasingly converge, tariff anomalies are emerging.

Strong growth is occurring in single-user, multimedia systems, notebook computers, scanners, modems, graphics cards and accelerators, virtual reality gear, Ethernet cards for LANS, WANS, and intranet systems. Some sources are predicting 1996-97 as the year of the add-on, where dominant sales will occur in items which enable people to hook up to the Internet.

Telecommunications Services

Telecommunications services in Australia are booming, and U.S. products play an ever increasing part in them. U.S. exports of telecommunications services should continue growing by 15-20 percent annually. After June 30, 1997, easing of restrictive Federal government conditions imposed on the telecommunications services industry will encourage further growth in a freer market environment.

U.S. exports are extremely competitive, presently holding approximately 45% of total

sales. Major players include AT&T, U.S. Sprint, MCI, WorldXChange Communications Inc, and a host of international Callback suppliers. The rest of the market share is held by prominent local companies such as AAP Telecommunications, Axicorp, and by international firms including Singcomm, BT Australia, Telecom New Zealand, PacStar, and Telecom Italia. This developing market is constantly changing and is expected to remain fluid for some years.

The Service Providers Action Network (SPAN) identifies the main types of service providers as Switched-based; Switchless, also known as resellers or aggregators; and Value Added. Pay TV and Broadband Interactive Services are about to be added as categories. Services available include voice and data services including E-mail, Frame Relay, Voice Mail, Callback, enhanced fax services, Paging Services, Videotext Services, and 0055/190 information services. Good market entry opportunities are found in providing Internet access, facilities management (billing services, call centers, etc.), electronic funds transfer at point-of-sale (EFTPOS), electronic data interchange, simple resale, facsimile services, callback services and the simple resale of capacity.

Computer Software

Computer software remains one of the fastest growing sectors of information technology. Recent annual growth rates have averaged between 17 and 13 percent. Hardware performance improvements have been dramatic during 1995/96, paving the way for more powerful software applications, systems and games. Windows-based distribution has been dominated by Tech Pacific since its takeover of rival Merisel early in 1996. As in the United States, distributors represent most of the software majors with local subsidiary offices. The Macintosh market is more diverse, with a large number of quite specialized value-add and niche distributors. Mail order houses are thriving, offering especially CD-ROM based entertainment, educational and utility software. U.S. imports dominate the overall packaged software market, as well as the major growth areas, including: client/server application solutions; client/server database management systems and application development tools; client/server-oriented systems management software; middleware software for connectivity and inter-operability in client/server environments; UNIX-based tools, solutions and, to lesser extent, systems management software. The software market is regarded as the most diverse and fragmented of any IT market segment, with overseas and domestic suppliers vying for market share. Local companies have gained a strong position in the development of applications software. The concentration of domestic developers and multinational suppliers of packaged software has meant that the market has been consistently strong. As business moves to computerize more complex applications, this growth is expected to be sustained.

Opportunities for new players are almost totally within the domain of application solutions, as tools and systems software is already dominated by foreign developers. In the solutions marketplace, existing (legacy) application solutions are being migrated (converted, replaced) and integrated with new types of "information access" applications on the desktop. Current activity is focused on Internet applications: access packages, web browsers, HTML, large drive partition managers; intranets; image capture and presentation packages; systems integration; small business applications and CD-based games.

Telecommunications Parts & Equipment

In this exciting and rapidly advancing industry sector, U.S. exports of telecommunications equipment to Australia represent about 23 percent of the total import market and have the potential to grow at about 20 percent annually. Telecommunications products are segmented as: customer premises equipment (CPE) such as telephone handsets, and network equipment and infrastructure.

Australia's telecommunications industry is well developed and mature, is presently upgrading to leading edge technology heading toward a broadband system, and is on the verge of further expansion as it heads toward further deregulation in mid-1997. Synonymous with deregulation is the expected end of Telstra's monopoly for carrying local calls, as rival carrier Optus plans to introduce a local call service along its Cable-TV system, presently being laid. Private network operator AAP Telecommunications is also mooted as a future public supplier of telephony. Meanwhile Telstra, Optus and mobile operator Vodaphone continue developing and upgrading existing networks. These carriers usually carry out network infrastructure purchases on an 'invitation only' basis to selective international telecommunications suppliers, who must also be prepared to include some aspect of local industry development. Nonetheless, U.S. exporters of network infrastructure products should consider presenting their products to the carriers.

The Australian telecommunications market was valued at \$12 billion sales volume in 1994, with Telstra accounting for \$9.5 billion sales revenue. Almost every Australian household has a telephone, and there are an estimated 1.6 million mobile phone users in a population of 18 million.

CPE is defined as a product attaching to the network at the customer end and includes not only telephones, small business systems and PABXs, but any other piece of equipment required to attach externally to the network. U.S.-made CPE is generally less saleable in Australia without modification to comply with regulations set down by telecommunications regulator AUSTEL.

U.S.-made analog mobile phones have sold well in the past, being compatible with the analog AMPs network. However the gradual withdrawal of spectrum space in that network and increased spread of the digital GSM network see a shift of emphasis on supply of CPE from the U.S. to Germany which is the primary manufacturing location for Motorola's GSM Mobile Phones. This could change in time if the U.S. operates digital GSM networks and begins manufacturing GSM equipment.

U.S. products, including advanced network equipment such as ATM switches, call processing and managing equipment, modems and routers, are competitive in Australia. A number of U.S. companies including Scientific Atlanta, ADC Communications, Digital Equipment and North American company Nortel, have contracts to supply network equipment to telecommunications and Pay (Cable) TV operators. Major network equipment competitors include Ericsson of Sweden, and Alcatel of France. There are also many quality local suppliers, most of which are subsidiaries of international companies, including Ericsson and Alcatel. Motorola is a major player, with products coming from the U.S. and Europe.

Restrictive Industry Development Arrangements requiring some local content of the CPE are expected to end on June 30, 1996. However future industry development programs are presently unclear, with federal telecommunications policy makers indicating they are still awaiting policy guidelines from the recently elected Liberal/National Party coalition government. CPE suppliers are encouraged to join federal government programs such as Fixed Term Arrangements (FTA's) or Partnerships For Development (PFD's), which require the participant to negotiate with government on local content or industry development schemes.

Security & Safety Equipment

Prospects for U.S. companies in the Australian security and safety industry remain encouraging, with steady demand for state of the art products in surveillance equipment, perimeter control and monitoring, identification devices, access control equipment, electromagnetic locks, digital signal processing CCTVs, and computer security systems. Market growth is around 5 percent per annum. Australia is a mature market for safety and security equipment and systems. There is indigenous production and research, combined with imports from the U.S., Europe and Japan. The U.S. is in a strong position, supplying needed equipment such as access control systems, closed circuit television systems, general alarm systems, security doors, etc. The Australian Security Industry Association Limited (ASIAL) maintains close contact with its U.S. counterpart. With the advances in processor technology, the market is likely to become increasingly competitive. As U.S. military technology becomes decontrolled further and/or becomes commercially available, the market for these technologies - as in the U.S. - will grow for civilian safety and security applications.

Local manufacturers pose a significant challenge in the marketplace for most types of safety and security equipment. Countries with a reputation for quality of manufacture enjoy stronger positions because of the need for reliability in this type of equipment.

Laboratory Scientific Instruments

In common with most industrialized economies, the Australian scientific sector is focusing increasingly on applied research aimed at improving economic output. The introduction by the GOA of Cooperative Research Centres (CRCs), with the purpose of merging the research and managerial talents of universities, government research organizations, and industry to produce industry-specific, results has reinforced this trend. In the FY1995 Australian Budget, \$100 million was allocated to 61 CRCs, with particular attention being paid to energy and mineral research, medical and health, food and agriculture, and manufacturing industries. In this climate, the market for U.S.- manufactured sophisticated scientific equipment will continue to grow significantly.

Most sophisticated laboratory equipment is imported, with U.S. products attaining 46 percent of the market, largely because of technical and quality factors. There is no significant price advantage or disadvantage attached to U.S. products when compared with third country suppliers.

The market for laboratory equipment is growing at approximately 6 percent annually. The National Association of Testing Authorities (NATA) estimates there are more than 10,000 laboratories in Australia. Of these more than 25 percent are NATA certified, comprising laboratories from the medical, wool, construction materials, minerals and energy research areas. U.S. suppliers should be particularly aware of the requirement that equipment conform to Australian electrical standards. The Australian laboratory equipment market is scientifically sophisticated, with a demand for the latest technology in analytical and monitoring instruments and systems. The most promising areas include energy and mineral research, medical and health, food and agriculture, and materials testing equipment.

Medical Equipment

U.S. products enjoy a major share of the Australian market for medical equipment (56 percent). Growth, however, is likely to remain relatively static in the short term due to budgetary constraints imposed by government on public hospitals. There has been a marked drop in the purchase of capital equipment by public hospitals, which will eventually have to lead to increased sales in this area. The major end-users of medical equipment are public hospitals (50 percent), followed by private hospitals (28 percent), other professional outlets (10 percent), retail (6 percent), and other (6 percent). In 1993, there were 696 public hospitals, 314 private hospitals and 89 day hospitals in Australia. This represented a total of 77,669 beds, or 4.4 beds per 1000 population. In 1994 the number of public hospitals had dropped from 1099 to 669. The number of private hospitals had increased to 329, and day hospitals to 111.

American medical equipment is traditionally well-received in Australia due to its perceived high quality and usually competitive pricing. U.S. equipment dominates imports, followed by Europe with 33 percent (mainly from Germany), and Japan (8 percent). Most of the major U.S. medical manufacturing firms including 3M, Baxter Healthcare, Bard, Becton, Eli Lilly are represented in Australia. The major Australian producer of medical equipment is Cochlear. Most other Australian manufacturers are smaller firms producing medical furniture, wheelchairs, orthopedic and rehabilitation equipment, pacemakers and consumables. 28 percent of medical equipment requirements is met by local manufacturers.

Medical equipment, such as electromedical products, sterile devices, implantables, etc. from all sources may require approval from the Australian Therapeutic Goods Administration (TGA) before they can enter the Australian market. As this approval can only be obtained by an Australian sponsor, U.S. exporters need to appoint an Australian sponsor (representative) before their products can gain approval from the TGA. The most promising sub-sectors for U.S. firms are capital equipment, diagnostic products, and sophisticated consumable items such as cardiac catheters.

Aircraft & Parts

Prospects in Australian aviation market remain favorable due to an active general aviation market, growth in commercial air traffic, and Australia's growing prominence as an international

hub for the Asia-Pacific region. Australians travel by commercial aircraft routinely and often, and Australia has one of the highest per capita uses of light aircraft in the world.

Owing to the relatively small population, the market is fairly modest by world standards. Aviation industry turnover is estimated to be about one percent of that of the U.S. There are over 9,500 aircraft registered in Australia, representing 150 different manufacturers and a wide range of models. Almost all aircraft, and many of the associated parts and accessories, are imported. The U.S. holds market share of up to 90 per cent in some subsectors. The market is relatively constant. Annual growth in the number of aircraft over the past five years has varied between one and two per cent, and is expected to grow by between 2 and 3 per cent per annum until 2000. As there is no indigenous aircraft production, market demand is driven by the need for maintenance, replacements, retrofitting, spare parts and service.

American corporations can maximize business through sole distributorship. Multiple distributors tend to compete strongly with each other in the market and thereby reduce profitability. Factors that give a competitive edge are product performance and functional ability, after-sales service and spares. Good distribution is a prerequisite for new entrants, along with competitive price, quality and reliability. Australian firms are not offered incentives to manufacture locally. Therefore, competition from local manufacturers for much of this equipment is negligible. However, there are some niche areas, such as ground-based guidance systems, where local expertise poses strong competition. Major competitors include the U.K. (British Aerospace); France (Thomson, Airbus); Sweden (CelsiusTech), and Japan (Sony, Matsushita).

Australia is a signatory to the international Civil Aviation Organization (ICAO), and has adopted the U.S. Airworthiness Codes and the Operational and Airworthiness Regulations, which are published in the Air Navigation Order (ANO). The U.S. Technical Standards Order (TSO) is accepted in Australia. Due to the lack of local production, there is no import duty or sales tax on most imported aviation and avionics products.

A number of defense projects present opportunities in the areas of avionics, aviation, and ground support equipment. For example, GPS/Navstar for forces general aviation; aerial surveillance and fire support equipment; an AEW&C system; tactical air defense radars; upgrades of communications, radar and navigation equipment in military aircraft. GPS has experienced recent growth rates approaching 15 percent annually. Fuel management systems linked to GPS, which enable close management of fuel loads and fuel consumption projections and usage, are emerging as a promising subsector because of the usefulness in general aviation cost control. Navigation aids, communications equipment.

Doing Business in Australia

The U.S. is deeply involved in Australian defense structure, in terms of hardware, systems and strategic position. The U.S. and Australia share military training, exercises, intelligence exchanges, and cooperation in defense science and technology, communications, and logistics. Australia remains a stable, strategically-placed partner in a rapidly changing region. The presence

of U.S. companies is generally readily accepted, and further investment is invited, particularly in partnership with a local company.

The Australian Department of Defense's fundamental requirement is that companies be Australian (or New Zealand) registered in accordance with the Corporations Law, even though it may be a subsidiary of a foreign company. Defense does not at this time have a formal view on the question of the citizenship of the subsidiary's directors. Access to sensitive technologies and information is protected under the Australian Ownership and Control of Information and is assessed on a case-by-case basis.

The U.S. has the most advanced technology in most areas. Strong competition comes from the British, Swedes, French, Israelis, Italians, and Germans. It is important to work early and cooperatively with the military, which increasingly is looking to industry for solutions, and to be aware of the political situation in order to learn how to include and integrate local "flavor" into the bid. Commitment to the market is very important.

Trade Regulations

Apart from the necessity to team or partner for major bids, and the requirement to include local content components in major bids, there are no barriers to selling general items through a local distributor on a regular commercial basis.

Offsets, once routinely required, are being replaced for the most part by Australian Industry Involvement (AII) requirements, the inclusion of a local work component in Defense bids. As part of recently implemented revised guidelines for AII, Two-Tier Tendering has been introduced to manage AII aspects of major capital equipment projects. Its stated purpose is to enable the Department of Defense to identify premiums that may be incurred as a result of increased levels of Australian industry involvement. Responses to both Tiers are required as part of the tender response. Tier One requires tenderers to propose a cost-effective AII program to meet minimum specified AII levels which are included in tender documents, and which are detailed enough to allow industry to develop proposals that can be assessed on an equal footing. Tenders which fall below this minimum will be deemed non-compliant.

Tier Two requires tenderers to offer their maximum cost-effective AII. The activities specified will improve the ability of local industry to support defense objectives, but are not critical to the success of the project. Tenderers will be required to provide costing and appropriate performance measures.

Offsets may or may not apply. The draft copy of the revised guidelines states with regard to offsets that "the level and type of Defence Offsets required will be determined by the industry objectives on a case by case basis." In recent discussions with Defense officials, it was not made clear what the future of offsets will be.

It has been claimed that these new requirements are adding to the cost of tendering. At least three bidders on the P3C upgrade, for example, have asked for the costs of the tender

preparation to be included in a credit deed that can be used to cover obligations incurred against future business.

Whatever the outcome of these specific requests, Australian Industry Involvement will feature as a requirement in most tenders. AII management may pass from the Industry Involvement and Offsets Division to individual project managers.

The Australian Department of Defense has recently announced the establishment of a Defence Preferred Systems Integration Panel (DPSI), consisting of companies in the information technology segment which will be able to increase their chances of defense business through membership on the Panel. By establishing the DPSI Panel, Defense aims to encourage potential Prime Contractors to develop relationships with Australian companies that can offer specialized information technology skills and capabilities to Defense Programs. DPSI Panel members will work closely with Defense to provide consulting and systems integration services for a three-year period.

USCS and Embassy Canberra will monitor progress of the DPSI Panel to address any ensuing restrictions to market entry or participation.

U.S. Government Points of Contact

The following is a list of useful contacts for U.S. firms seeking additional information concerning the Australian market.

U.S. Commercial Service

Defense Advisory Service, US&FCS American Consulate General, Sydney PSC 280, Unit 11024 APO AP 96554-0002

Tel: 011-61-2-373-9200 Fax: 011-61-2-221-0573

Chief, Office of Defense Cooperation American Embassy (Canberra) Unit 11006, PSC 277 APO 96549-9998

Tel: 011-61-2-373-9200

USCS Sydney produces a quarterly newsletter, "Defense Focus", containing defense market opportunities and items of interest on Australian defense procurement matters. Copies of the newsletter may be obtained by contacting US&FCS Sydney office. "Defense Focus" also offers Gold Key Club Membership to companies at an annual fee of \$100 dollars and provides additional services in defense market facilitation.

U.S. Department of Defense

Mr. Wayne Laskofski Defense Security Assistance Agency DSAA OPS-ERP Washington, D.C. 20301-2800

Tel: (703) 604-6609 Fax: (703) 604-6041

Additional points of contact:

American Chamber of Commerce in Australia GPO Box 2215 Canberra ACT 2600