PART II : VISION AND STRATEGIC THRUSTS

VISION

Our vision is for Singapore to be Asia's leading provider of world-class services. We will harness the creativity of our people to develop excellence and be globally competitive in an array of key service clusters, with Asia as our hinterland. Our target is for our exportable services sector to grow by 6.5% pa, and by 2012, add 0.4%-points to our long term GDP growth. It is expected to create about 200,000 new jobs that will give Singaporeans a greater variety of careers to fulfil their talent and potential.

BUILDING STRONG SERVICE CLUSTERS

2 To achieve this vision, we must reinvent and reposition our established service industries to stay ahead, as well as develop new and emerging service industries as additional cylinders for our services engine. This will enable us to create a dynamic and well-diversified services sector.

(i) Reinvent and reposition established service industries

3 Fortunately, we are not starting from ground zero. We have made good progress over the years and established solid strengths in service industries such as trading & logistics, info-communications technology (ICT), financial services, and tourism. However, with competition intensifying and industry trends changing rapidly, we need to differentiate ourselves, create more value, and find new growth niches to stay ahead.

Trading

4 Our goal is to become a **Global Trade Hub**. Singapore has gained international recognition as a reputable trade hub with a substantial pool of international players and an efficient supporting trade infrastructure. However, we face mounting global competition, and our role as a trade hub and intermediary will be under threat from increasing direct trade. We must enhance the business and operating environment for trading, improve

support services, and develop new growth segments, such as energy trading and risk management for derivatives trading.

Logistics

5 Logistics has always been one of our strongest and strategically most important service industries. As a key enabler of our trade and industry, it accounts for 8% of our GDP, and supports and contributes to our manufacturing, financial services, shipbuilding & repair and professional services industries. However, Singapore's position as a logistics hub has come under intense pressure recently, arising from the shift of manufacturing activities to North Asia, and increasing regional competition. To maintain our competitiveness, we must progress beyond a physical hub to become a **leading global integrated logistics hub**. In other words, besides the physical moving of cargo, we should move into the control and optimisation of cargo flow. We should also develop Singapore as an **international maritime centre**, by attracting more maritime ancillary services such as ship financing, marine insurance, maritime law, maritime training. The formation of such support clusters will spur the growth of the sea logistics industry and maritime commerce.

Info-Communications Technology (ICT)

6 ICT has been one of the fastest growing service industries in Singapore since 1986, with one of the highest productivity gains. Our earlier advances in IT, such as Singapore One, gained us a valuable reputation as a wired nation. However, we have since lost the lead we once commanded – our telecom services are not the most cost competitive, and our crowded and fragmented IT sector has been unable to establish any particular strong niche, like Korea has in broadband and Japan in wireless communications. Nevertheless, we still have great strengths and potential in ICT, with our highly-skilled IT work force, a tech-savvy population, and telecommunications infrastructure that is among the world's best. We need to regain global mindshare in the ICT industry by repositioning ourselves as a **Living Digital Hub**, where innovative and complex ICT solutions are created, tested, commercialised and deployed.

Financial Services

7 The Financial Services sector is the largest exportable services sector in Singapore, and has the highest productivity. However, global industry consolidation, continued weakness in our regional hinterland, as well as competition from Hong Kong, Sydney, and Shanghai in the longer term, pose immense challenges. To remain competitive and relevant, we need to identify new growth areas and develop distinct competencies that are less location-dependent, more knowledge-intensive, and scalable internationally. Our aim is to position Singapore as a **pre-eminent financial centre in Asia for selected regional/global niches**, including wealth management, back-office processing, and risk management.

Tourism

8 Singapore is already a well-known tourist destination, attracting some 7.5 million tourists a year. However, our tourism receipts peaked in 1995 and growth has slowed in the past few years, affected by the Asian crisis, haze and the September 11 attacks. In addition, in the face of intense regional competition, we have been losing market share in visitor arrivals to East Asia and Pacific region. We need to arrest this trend and revitalise the tourism sector. We must transform Singapore into a **vibrant and welcoming destination that offers visitors a diverse range of attractions and distinctive experiences**. We should develop unique tourism products, and encourage more creativity in arts, entertainment, fashion and food. We should tap more fully on the regional markets, especially the rapidly growing Chinese and Indian markets, by capitalising on Singapore's position as one of the most sophisticated cities in Asia. We should also establish Singapore as a tourism business capital and a tourism education hub.

(ii) Develop new services

9 Besides remaking our established service industries, we must also develop new industries where we have comparative advantages. We should harness our language skills, capabilities and high professional standards to build up emerging services such as education, healthcare and legal services. These are well developed in Singapore but not yet fully exploited for economic gains due to social concerns or regulatory issues. We should now unleash the economic potential of these industries, but in such a way that

will not undermine our key social objectives. In addition, the creative industries have previously not been regarded as services that can contribute to economic growth. However, the experience of developed countries like the US and UK suggests that the creative industries have great economic potential. Hong Kong, Korea and Taiwan have also gotten into the act. They have identified the creative industries as new engines of growth and are critical enablers of product innovation and differentiation.

Healthcare

10 Regional demand for healthcare will rise in tandem with the growing population, longer life expectancy and increasing purchasing power in Asia. Singapore has strong capabilities in the whole spectrum of healthcare services, and has established an excellent reputation for quality healthcare. However, we have not been actively growing this industry due to concerns over healthcare costs and affordability, and have lost market share as a result. We must step up our promotion effort and position Singapore as both a **Clinical Medical Hub** and an **Economic Medical Hub**. The former entails building an enduring brand name based on excellence in research and education, while the latter focuses on attracting high volumes of patients through a combination of world-class standards and cost competitiveness. We should also embark on a national marketing initiative to reinforce our brand image as the region's medical hub.

Education

11 Education is one of Singapore's core competencies and an area where we are internationally competitive. We have a highly-regarded public education system. Our experience in education in a multi-cultural context, and use of English as the language of instruction confer on us a formidable comparative advantage as an education hub. In addition, we are located in a region which is the top source of international students. We should therefore make Singapore a **Global Schoolhouse** that offers a diverse and distinctive mix of quality education services to the world, including tertiary education, commercial and speciality schools, education support services, corporate training and executive education.

Legal Services

12 The legal profession can play an important role in supporting the growth of our economy and servicing the legal needs of clients regionally. We need to equip the legal profession with good working knowledge of international legal know-how, as well as the capability to deal with cutting edge practices. We also need to make Singapore an attractive place for foreign lawyers and in-house counsel to locate themselves, so that more work can be done from Singapore. In addition, we should promote Singapore as a **regional alternative dispute resolution centre**, and a **regional hub for legal training and research**.

Creative Industries

13 The creative industries, which comprise arts & culture, design and media, are a potential growth engine for our economy.

14 The economic importance of the creative industries is well recognised in the US and UK. They accounted for 7.8% of GDP in the US and over 5% of GDP in the UK. (The figures do not include spin-offs to tourism, retail and distribution.) The growth of the creative industries in both countries has outstripped that of the overall economy. In comparison, the size of the creative industries in Singapore is estimated to be 2.8% of GDP, with much scope for increase.

15 In the new innovation-based economy, where ideas, creativity and knowledge are the key drivers of growth, we should develop a **vibrant and sustainable cluster of creative industries**. The creative industries can then be an economy-wide enabler – much like ICT – that can help to differentiate our products and services. A national concerted approach must be adopted to build capabilities, stimulate sophisticated demand, as well as develop the industries.

HOW DO WE GET THERE?

16 Just as our transformation into a manufacturing powerhouse did not occur spontaneously or by chance, we cannot count on a vibrant and robust services sector to develop on its own – especially given the small window of opportunity that we now have. We need to actively create the conditions

that will allow our service industries to thrive and flourish, by removing impediments to their growth and leveraging on enablers that can catalyse their expansion.

17 However, to grow our service industries, we cannot simply follow the success formula for our manufacturing sector. There are distinct differences between the characteristics of manufacturing and services, which we need to factor into when formulating our strategies to develop services.

18 The strategies that the Sub-committee is recommending for growing the various service industries fall under **four main broad thrusts**:

- Growing demand;
- Removing regulatory impediments;
- Nurturing enterprises; and
- Developing manpower.

The detailed strategies and recommendations for each of the service industries are in the Working Group reports. The following section will highlight the key issues that cut across the services sector.

Strategic Thrust 1: Growing Demand

19 Services are location-centric. Unlike manufacturing, where goods can be manufactured in any part of the world and shipped to markets globally, most services have to be rendered near the place of consumption. This has three main implications.

20 First, to develop the service industries in Singapore, we must **actively grow demand**.

21 In the case of manufacturing, we need to focus only on supply conditions with respect to our role as a production base, viz. providing world-class infrastructure, ensuring the availability of skilled manpower, and keeping our costs competitive. On the demand side, manufacturing companies will already have established markets for their manufactured products.

22 However, for services, companies tend to locate themselves where the demand is. To develop our services sector, we must find the markets and build the demand. Most of services demand will be domestic and regional, unlike manufacturing, where our markets are world-wide.

23 Second, it is necessary to have **robust and sophisticated local demand**. For many service industries, domestic demand is a much larger component than external demand. For example, local demand accounts for more than 90% of overall demand in financial, healthcare and legal services. Having demanding consumers that have sophisticated needs and expect high standards and quality will encourage experimentation, innovative solutions and cutting edge services. This will raise the overall standard of the local service industries, and enable them to compete effectively in the international arena. Box 1 gives some examples of the impact of sophisticated demand on services development.

Box 1: Impact of sophistication of demand on services development

Denmark's International Service System

Denmark has a leading international cleaning services company, International Service System (ISS). ISS's rise is in part because the demand for industrial cleaning in Denmark extends beyond just cleaning to total environment management. This demand is a reflection of the deep concern in Denmark with all aspects of the environment.

United State's investment banks

The needs of America's corporate leaders for complex financial services such as mergers, buyouts and restructuring have helped create the American investment banks. These investment banks have in turn, introduced such services to the rest of the world, and accelerated the adoption of such practices by foreign companies.

Illustrations drawn from Michael E Porter, "The Competitive Advantage of Nations"

24 Third, we need to **leverage on external demand**. Some service industries like tourism and trading are international-oriented and cater primarily to overseas demand. For logistics, we have to go overseas and be plugged into the global logistics network. Even for service industries with a large domestic demand base, having a strong exportable sector will help to obtain greater scalability. Besides, the greatest growth potential will come

from overseas demand – with a fast growing middle income and affluent class in the region, there will be rising demand for quality education, healthcare, wealth management services etc. We should tap on these opportunities.

25 Services, which thrive on demand, tend to congregate in cities that have a critical mass of population and purchasing power. This partly explains why London and New York are key services hubs. Although Singapore is a relatively small city, we have the advantage of having one of the highest concentrations of discerning customers in the region. Our burgeoning hinterland also provides a rich source of services demand where we can draw from. We are thus in a good position to be a hub city for services if we can harness and grow demand.

Recommendation #1-1: stimulate sophisticated local demand, where appropriate

26 There is scope to stimulate sophisticated local demand for services. The purpose is not to encourage services consumption per se, but to create a high quality demand environment, as well as demand opportunities for service providers to meet and fulfil. First, as a major consumer of services, the Government can play a role by **outsourcing** activities. Second, in most countries, private sector sponsors and patrons play a key role in commissioning works and providing funding support to institutions in the education, healthcare and cultural fields. Many of the world-class providers in these fields have been able to develop expertise and excellence because of such support. In Singapore, we should encourage such private **philanthropy**. Box 2 illustrates the role which philanthropy has played in the United States. The Government also has a role to play, given that we do not yet have a rich layer of wealthy entrepreneurs who can act as patrons. Third, the Government can help to **catalyse experimental and cutting edge projects** that will push us to the forefront of services evolution. Some proposals are:

Box 2: Philanthropy in the United States

In 2001, private contributions in the United States totalled US$212 billion. Of this, US$18.43 billion went to healthcare organisations, US$31.84 billion for education and US $12.14 billion for arts & culture[1]. Many of the world-renown healthcare and education institutions in the United States are heavily dependent on such funding. For example, Mayo Clinic obtains US$146 million in donations from private sources and foundations. This accounts for more than half the clinic's funding. In education, Stanford University and Harvard University each obtained around US$500 million worth of donations in 2000[2]. Most of the donations come from private individuals, which made up 76% of all contributions in 2001. The next highest source was from foundations, which donated US$25.9 billion last year.

Outsourcing

- In the past, the outsourcing of IT services by the Government has helped to build up local IT services companies. The Government should examine what other non-core services and business processes can be outsourced to the private sector. Examples include commercially viable healthcare and education services, or backroom operations like benefits management and transaction processing.

- To help stimulate the growth of the fund management in Singapore, the Government can place out funds to attract all types of private equity fund managers, similar to what the Technopreneurship Investment Fund (TIF) has done for venture capital funds. It should also encourage statutory boards and other government entities to outsource the management of their assets.

- The Sub-committee supports the recommendation of the Sub-committee on Taxation, CPF System, Wages and Land to allow CPF funds to be aggregated for fund management. This will provide greater critical mass to bolster our position as an asset management centre, as well as enable CPF members to benefit from wholesale fund management fees.

[1] Source: AAFRC Trust for Philanthropy/*Giving USA 2002*
[2] Source: *The Chronicle of Philanthropy*, 2001

Patronage and Philanthropy

- We should encourage the spirit of philanthropy amongst businesses and individuals in Singapore. The Sub-committee supports the recent move to allow double tax deduction for private donations. We should continue to foster the development of private endowments to education, arts and healthcare by favourable tax treatment for gifts to non-profit organisations.

- As it will take time before a culture of philanthropy takes root in Singapore, the public sector would need to fill the gap in the interim. We should allocate a budget each year for the development and endowment of cultural institutions such as the Esplanade and museums. This can be done via the Totalisator Board. The Government can also support a "percent for the Arts" scheme, where government agencies devote 1% of their developmental budget to public art. However, the objective should be for it to lead to an active corporate sponsorship tradition eventually.

Experimental Projects

- The Government should lead or support ICT pilots and trials in selected key areas such as trade, logistics, financial and healthcare sectors to develop sophisticated ICT demand and stimulate e-business adoption in Singapore. Some examples are given in <u>Box 3</u>.

- A 'Creative Town' initiative can be piloted in a township to integrate arts, business and technology into community planning and revitalisation efforts. The project can help to stimulate sophisticated demand across a wide range of services to generate new activities and opportunities. This prototype can be fine-tuned and eventually adopted by other townships.

<u>Box 3: Examples of Government-led ICT pilots and trials</u>

TradeNet & Singapore InfoPort

TradeNet is the first nation-wide Electronic Data Interchange (EDI) system for trade administration to reduce the cost and turnaround time for the preparation, transmission and processing of trade and customs declarations. With TradeNet, Singapore is widely seen as a leader in paperless trading. We could further integrate Tradenet with the financial and commercial trade logistics systems in Singapore through a national collaborative platform for the development of *Singapore Infoport*. With this, businesses in Singapore can achieve end-to-end paperless trading from invoicing, to delivery and payment and be competitively positioned in global supply chain management.

National Shared E-payment Infrastructure
To enable interoperability between different payment service providers and banks, the Government could facilitate the development of a National Shared E-Payment Infrastructure to allow merchants to have internet direct debit access to banks in Singapore. This would encourage businesses to go online by reducing the cost for accepting payments as compared to other traditional methods.

Recommendation #1-2: Promote regional & global demand

27 We must tap on the growing regional demand and differentiate ourselves by providing a level of sophisticated services not available elsewhere. We need to market our service industries more aggressively, **improve Singapore's branding as a services hub, and enhance our reputation for quality and reliability in service delivery**. We should also **make it easy for overseas consumers to come to Singapore to make use of our services**.

Marketing

28 While concerted efforts are made to bring in foreign investments and service providers to Singapore, we have done very little to promote or market our services to the region. For example, in developing the education cluster in Singapore, EDB attracts world class universities like INSEAD and Chicago Business School here, but we do not have the equivalent of the British Council or Education Australia to market our educational institutions to foreign students. Ditto for healthcare services, where we have lagged behind our regional competitors in marketing. **We should step up the promotion and marketing of our services to the region, and systematically build up our branding as a services hub**. This is a key gap in our services development effort which we should plug.

Improving Market Transparency

29 Given the greater asymmetry of information and potential of moral hazard for services like education and healthcare, we need to **improve market transparency to strengthen the trust and confidence of consumers**. Some proposals include:

- Establishing a Quality Assurance (QA) framework for private schools to put in place clear industry standards, improve market information, and help consumers make more informed choices.

- Establishing a Healthcare Consumer Association to champion greater transparency on pricing and clinical practice norms, as well as to advise and act as an intermediary for patients with grievances. Alternatively, the existing Consumer Association of Singapore (CASE) can expand its expertise and mandate to play this role.

Facilitating the Entry of Consumers

30 To tap on regional demand, we need to **simplify our procedures and regulations to make it easy and convenient for businessmen and individual consumers to visit Singapore**. Specifically, Government should:

- Ease the entry of foreign students by introducing different categories of student passes, reducing documentary requirements, and shortening processing time. The approval process can be integrated with the education Quality Assurance system (mentioned above), so that qualified institutions can be granted "green lane" treatment in securing student passes.

- Facilitate the inflow of tourists, patients and businessmen by relaxing visa controls where appropriate, especially for the high growth markets like China and India. We should also introduce special "green lane" privileges for selected low-risk, high-value segments.

- Reduce the inconvenience of visitors driving into Singapore from Malaysia. Malaysian visitors find driving to Singapore expensive, and the need to rent and install an IU for ERP a hassle. We should review and fine tune our entry policies and requirements to facilitate their visit.

Strategic Thrust 2: Removing Regulatory Impediments

31 Compared to manufacturing, services are **subject to more regulations**. This is because some services have a social or public welfare element (e.g. education, healthcare and broadcasting), and others (like telecommunications and port) have high market concentration, or require supervision to safeguard standards (e.g. professional services).

32 **Many service industries are negatively impacted by regulations directly or indirectly**, and sometimes unintentionally. For instance, the regulations imposed on Malaysian cars entering Singapore are due to our local transport policies, but they end up affecting our tourism industry.

33 As pointed out in the preceding section, in many service industries, the local demand base is much larger than the exportable component. This has resulted in the following:

(i) **The social concerns of our domestic demand have taken priority over the development of the exportable component**. As a result, the emphasis is weighed towards regulation rather than promotion. For example, for social policy reasons, we have deliberately restricted the supply of healthcare and legal services in Singapore.

(ii) In some service industries, the **Government inevitably gets deeply involved beyond being a mere regulator, to becoming a dominant player**. However, the government agencies' charter is to provide adequate services for our local residents, not to develop and export these services overseas for economic gains. This has hindered the growth of the exportable component. Healthcare and education are good examples.

34 This problem is compounded by the **lack of strong champions for the services sector**. In the case of manufacturing, EDB as the designated industry champion is able to engage government agencies and resolve regulatory issues that affect manufacturing development. However, in the

services sector, there is no EDB-equivalent to take on the regulators and champion for change.

35 To enable services to take off as an engine of growth, we need to address the regulatory issues, especially for certain sensitive industries like education and healthcare, where the social concerns are real. We must resolve conflicting priorities, put in the necessary social safeguards, and allow maximum freedom for the exportable component to grow and compete internationally.

Recommendation #2-1: Regulator must not be a Promoter

36 The roles of the regulator and promoter are often **conflicting**. For example, it is difficult for the Ministry of Health to be promoting exportable healthcare given its heavy emphasis on regulating the industry, just as Ministry of Education would find it difficult to promote exportable education services. **The responsibility of growing the exportable component should be assigned to an agency outside of the regulators**. However, the regulators must be sympathetic to the development of the service industries, and not be divorced or disinterested.

Recommendation #2-2: Appoint champions for services industries

37 We need to **appoint a powerful champion for each of the service clusters**, to effectively engage the regulatory agencies and remove impediments. (Please see section on implementation.)

Recommendation #2-3: Regular review of regulations that affect services growth

38 The Working Groups have proposed the **review of various regulations to facilitate the development of service industries**. These include:

- Relax the restrictions on advertising by healthcare providers so that they can market medical services to overseas patients.

- Extend special customs treatment to cargo movement beyond the current Free Trade Zones (FTZ) around the airport and seaports to other parts of the island, subject to certain criteria and checks.

- Allow the formation of multi-disciplinary partnerships between Singapore lawyers and other professionals outside Singapore for offshore legal work.

- Review regulations that affect the positioning of Singapore as an eventful city with a vibrant nightlife, e.g. restrictions on liquor licensing hours; regulations on dancing and live entertainment; usage of streets for retail activities and events; etc. We should review some of these regulations to free up the creativity of the private sector, and to enhance the vibrancy in the city.

39 The review of regulations should not be one-off, but should be done on a **continual basis** to ensure that they stay relevant to the changing environment. For example, with the growing convergence of the ICT industry, traditional boundaries between telecommunications and media sectors have started to blur. However, government policies and regulations in these areas still fall under different Acts and different agencies. This has resulted in gaps that hinder experimentation in the "converging spaces". There is a lack of clarity and coherence in the way licenses are issued and market competition issues are dealt with.

40 It is thus recommended that a **regular review of regulations** be carried out to ensure that they do not impede the development of service industries.

Strategic Thrust 3: Nurturing Enterprises

41 We can only grow our service industries if we have vibrant and dynamic service enterprises. In developing our manufacturing sector, a key strategy was to target and attract MNCs to Singapore, as they bring with them technology, expertise and markets. Similarly in services development, it is important to anchor key international service players here as they add to the quality and depth of our service industries.

42 However, unlike manufacturing where there is a core of big and established companies that are clear targets in each industry, **the services sector is much more fragmented with a predominance of small players** (except in certain capital-intensive sectors like telecommunications). As an illustration, service companies in Singapore had an average sales turnover of only about $4.4 million per firm in 2000, compared to $39 million per firm for manufacturing.

43 In view of the fragmented and more multifarious nature of the services sector, it will not be sufficient to identify and attract key service providers here. We need to supplement it by adopting a more broad-based approach, viz. providing a fertile ground for a diverse spectrum of service companies to sprout, grow and thrive.

44 We must **create a conducive total business environment** for service industries by:

- keeping our taxes internationally competitive;
- providing land and infrastructure;
- increasing access to funding; and
- unlocking intellectual property within the Government.

Recommendation #3-1: Keeping our taxes internationally competitive

45 We should maintain a low overall tax regime to encourage enterprise across the board. The Sub-committee thus welcomes the tax changes announced by the Government in May 2002. At the same time, for the various service industries, **we must ensure that our tax treatment and tax rates are internationally competitive**.

Recommendation #3-2: Implement systematic, well-articulated policy of making land available to appropriate service industries

46 Even though service industries are generally less land intensive than manufacturing, we must **keep our land cost competitive** as it is still a key component of business costs. This is especially important for services like healthcare and education, which may require sizeable land parcels. We need to set aside sufficient land for their development. In addition, we should aim

to **create a conducive physical environment for our service industries** – one that has excellent supporting infrastructure, fosters clustering and interaction of firms, and creates synergy. Some proposals are:

- For the education industry, we can designate about 90 hectares of institutional land for service providers to build educational institutions as well as support facilities like housing. We should also facilitate the development of 'Edumall', which provides shared facilities for education-related businesses such as corporate training centres, commercial and speciality schools.

- For the healthcare industry, co-locating medical care with basic and clinical research can facilitate cross-fertilisation of ideas on new medical products and procedures. One cluster is already evolving around Biopolis, NUS and NUH. Another hub of research activities can potentially cluster around existing infrastructure in SGH.

- For the ICT and creative industries, we can establish within *one-north*, centres with state-of-the art equipment and facilities for innovation and experimentation. One such centre is the Mediapolis, which can serve as a focal point for the media cluster to achieve the vision of Singapore as a Global Media City. It can cover the full spectrum of the media value chain to house production and post production studios, state of the art digital media facilities, screen lounges, multi-format cinemas, exhibition spaces, media libraries, and a Media Academy for manpower and capabilities development.

Recommendation #3-3: Increase access to financing

47 Funding is a key challenge that enterprises in both manufacturing and services face. However, services companies generally have less fixed assets to offer as collateral and face greater difficulties in obtaining loans. We should thus **enhance the range and variety of funding options available to enterprises**, such as by:

- Setting up a "Discover Singapore Gazelle Fund" to co-invest in growth champions or gazelles in the international trading sector with capital injection from public and private sectors.

- Establishing a Tourism Investment Fund to seed investments in strategic tourism projects. Such a fund could help to catalyse the development of new tourist attractions or enhancement of existing ones.

- Identifying and encouraging successful gazelles to list on the Singapore Exchange (SGX), to create a benchmark that will attract analysts' and investors' attention.

- Further developing and deepening Singapore's corporate bond market.

Recommendation #3-4: Unlock Intellectual Property within Government

48 Unlike in manufacturing, where goods are mostly produced by the private sector, the Government has for a long time been a major (and some times the only) provider of services like education, healthcare, power, infrastructural services and telecommunications. **Many of the public agencies have built up deep knowledge and expertise in services**. The development and deployment of eGovernment solutions have also generated new capabilities and intellectual property (IP) within our agencies (e.g. TradeNet, and the Electronic Road Pricing System). The universities and public research institutes are another rich source of IP which could be exploited for developing new products and services. Some government agencies possess data that can be mined to provide commercial insights, e.g. utilities billing data and airport retail data.

49 The knowledge and expertise built up in the Government have considerable commercial and export potential. However, they have yet to be exploited, because they continue to be owned by the various ministries and statutory boards, which have neither the mandate nor the incentive to commercialise their know-how and technology. We therefore have to find ways to **unlock the public sector expertise and allow the private sector to tap on them to develop new products and services**. The Sub-committee recommends the following:

- **Push on with the corporatisation and privatisation of government agencies**, so that they can build on their expertise and good reputation to go global. We have already seen some early results with PSA and the former PWD (now CPG Corporation), which have become more active in venturing overseas since.

- **Designate a central agency to collate the inventory of Government IP** and to sell or license them for productisation and commercialisation. Another alternative is to engage private sector companies specialising in brokering IP and technology for this purpose.

- **Incentivising Research Institutes and Institutes of Higher Learning to license their IP,** in addition to the traditional approach of spinning off companies.

- **Supporting technology and skills transfers from Government IP owners** such as MINDEF to Singapore-based ICT companies, as well as co-develop technology with them. Box 4 gives an example of public-private sector collaboration in developing IP.

- **Set up an IP academy** to help equip our companies with the skills to manage their IP, and facilitate the extraction of commercial value from the patents filed.

Box 4: Collaboration between Singapore Technologies and National Library Board

The National Library Board (NLB) and Singapore Technologies (ST) entered into a collaboration in 1998 to work on a suite of Radio Frequency IDentification (RFID) applications for use in libraries to reduce the queue time, which averaged 1 hour during peak periods. The library was serving 5.7 million visitors a year, making 10 million loans out of 10 libraries.

Today, 28 million visitors borrow approximately 28 million books a year but there are no longer any queues for returning books, and less than 5 minute queues during peak periods to check books out at NLB's 21 public libraries. With RFID, returned books are scanned instantaneously when they are put through the book-drop. RFID has also simplified the book sorting process, such that the books can be made available for borrowing less than 15 minutes after they are returned.

RFID has been patented, and adopted for use in Australia and Hong Kong. There has been much interest among the international library community, and the product has potential to be implemented world-wide over time.

<u>Strategic Thrust 4: Developing manpower</u>

50 Developing manpower is a national imperative that is common for both manufacturing and services. However, services are especially talent-dependent.

51 **Services are also subject to more constraints in manpower supply and development**. Forty years of industrialisation have geared our education system towards manufacturing. There is a comprehensive manpower development strategy to support manufacturing from ITE to post-graduates, from locals to foreign workers.

52 On the other hand, manpower development for the service industries has been largely left to the market (with some exceptions like the professional services). **As a result, a significant portion of the skills training for the service industries (like design, hospitality, performing arts, media) lie outside the mainstream education and manpower development system**. As an example, less than one-third of ITEs' full-time courses cater to services, even though services account for two-thirds of our economy.

53 **Services are also subject to more stringent control in the employment of foreign workers.** The dependency ceiling for foreign workers in the services sector is 30% of total workers, compared to 50% for manufacturing.

54 To grow our services sector, we need to ensure that there is an adequate flow of talent and workers, well-trained and properly skilled, for the service industries.

Recommendation #4-1: Increase the training of service professionals at the tertiary level

55 At the tertiary level, we must train enough people specialising in the various services fields to meet the manpower requirements of our service industries. We also need to address the absence of training at the tertiary level, especially in areas such as **design and art**.

- For legal services, we should review the quota for admission to the NUS Law Faculty regularly to make it more responsive to market needs. We should also change the local legal education curricula to allow combined law degree courses, accelerated degree courses and Master of Law degrees in different areas of specialised law.

- For the creative industries, we should establish a flagship art, design and media university programme, in collaboration with leading institutes such as the Royal College of Arts (London), University of Art and Design (Helsinki), and Pasadena Art Centre (Los Angeles). A MediaLab can also be established, with partners such as MIT MediaLab, to nurture multidisciplinary researchers who can conduct research on innovative applications, services and devices.

- For healthcare, we should abolish the quota on female medical student intake into the National University of Singapore.

- For trading, elective courses on trade-related topics such as trade finance, trade research and risk management can be introduced in undergraduate and postgraduate degree programmes.

Recommendation #4-2: Step up post-employment training

56 We should also **step up post-employment training to raise the standards and professionalism of our services workforce**. Some examples are:

- For tourism, we should establish an international hotel management school in collaboration with renowned overseas institutions to provide Masters and Executive programmes in hospitality management. In addition, a tourism academy could be established to provide skill-based training for students and tourism workers from Singapore as well as the region.

- For financial services, we should establish an oversight committee to develop standards of excellence in financial education and establish an accreditation system for providers of educational and training programmes

- For ICT, there is a gap between the demand and supply of manpower, especially given the fast-moving nature of the industry. We should address this issue of growing skills gap by setting up competency centres to provide industry-relevant training in existing and emerging technologies, for tertiary students and those already in the workforce.

Recommendation #4-3: Review foreign manpower policies

57 We should **review our foreign manpower policies to give service industries greater flexibility to employ foreign workers where local expertise is not available**. For example, with logistics companies undertaking more upstream manufacturing activities (e.g. configuration, light assembly), it is increasingly anomalous to subject services to a lower foreign worker quota than manufacturing.

58 In healthcare services, there is a need for an increase in nursing and paramedical manpower, some of which will have to be met from abroad. There should be more flexibility for healthcare providers to recruit and retain such qualified foreign healthcare workers.

IMPLEMENTATION – NEED FOR CHAMPION AGENCIES

59 The above strategies will only be as effective as how they are executed. A key factor behind the success of our manufacturing sector is the role played by EDB in driving the manufacturing promotion and development effort. Similarly, for services, we need to have clear champions that will work closely with the industry to implement these strategies and realise the vision.

60 Currently, **many agencies are involved in the promotion and development of the various service industries, but with no one being clearly identified as accountable**. Companies are confused by the plethora of incentive and assistance schemes offered by the various agencies. A common plea from the Working Groups is for a single champion for their respective industries. Some have suggested the formation of a dedicated Services Promotion Board ala EDB for manufacturing.

61 However, unlike manufacturing, the **development of the service industries requires more types of competencies**: (a) inward investment attraction (EDB's type), (b) outward marketing (STB's type); (c) internationalisation promotion (IE Singapore's type); and (d) industry capability building (Spring Singapore's type). It is difficult for a single agency to have all the necessary competencies and network of overseas offices to do it alone. Inevitably, **a distributed approach** leveraging on the resources and competencies of the various economic agencies is the practical way to go.

Recommendation #5-1: Assign an overall champion for services -MTI

62 Notwithstanding the need to involve multiple agencies, **a single Ministry must be clearly designated to drive and be responsible for the health of the entire services engine.** This has to be the **Ministry of Trade & Industry (MTI).** As proposed in recommendation #2-2, there should also be **a clear champion for each service cluster** who will co-ordinate the efforts of various agencies, work with the industry, and be responsible for the results.

63 MTI and the industry champions will have to **focus on capabilities development, besides removing regulatory hurdles. Administratively, the co-ordination between agencies and client account management must be improved, and incentive schemes streamlined**.

Recommendation #5-2: Set up a Ministerial Committee to oversee development of the services engine

64 MTI and the various service champions can only achieve their mission if they have the whole-hearted support of the regulators. Developing a world-class services engine will therefore require top-level attention and supervision. There will be many policy issues that will have to be deliberated. The legitimate concerns of the regulators have to be taken into account, and some policy trade-offs between economic goals and social objectives will have to be made. The costs and benefits must be carefully weighed, and a decision reached on how much and how fast to deregulate our service industries. This cannot be a one-off exercise, but rather a continuous process of incremental liberalisation, close monitoring, and

appropriate policy adjustments. We therefore recommend that a high level Ministerial Committee on Services be set up to provide a platform for such policy debates so that rational trade-offs can be made.

TO SUM UP

65 Since the Economic Committee's Report of 1985, our service industries have made good progress. Moving ahead, we need to further sharpen our competitive edge. To differentiate ourselves, we must position Singapore as a Creative Economy, so as to unleash the full promise of our services sector as a second engine of growth. The economic case is compelling. We have what it takes to be a leading services hub, but we have to act fast as others are closing the gap with us. This requires a joint effort by our public and private sectors, to forge a partnership that will propel our services sector onto a new trajectory of growth.