

# Technology Market Scan

## ASIA PACIFIC

### IT spending by SMBs in ASEAN

Small and medium businesses (SMBs, or companies with up to 999 employees) are set to invest US\$ 12.5 billion this year to strengthen their IT infrastructure across key countries in ASEAN - Singapore, Malaysia, Indonesia, Thailand, The Philippines and Viet Nam. This amount is up 17 per cent over last year's IT infrastructure spend of US\$ 10.7 billion across Asean economies, according to the latest study by Access Markets International (AMI) Partners, Inc. For SMBs across ASEAN, the top three priorities for IT spending this year will be computing, Internet, and IT services.

"The top three countries which are leading in IT spending in ASEAN's SMB space are Indonesia, Malaysia, and Singapore - in that order," says Balaji Sreedhar, Singapore-based Research Analyst at AMI-Partners. "These countries together contribute over 66 per cent of the SMB IT spend in ASEAN. Indonesia's IT spending is set to grow 19 per cent this year over last year, Malaysia will see IT spend rise 14 per cent, and Singapore will go up 8 per cent. The bulk of the IT spending for SMBs in Indonesia will be on computing, Internet, security, and storage. In Malaysia and Singapore the bulk of the spending will be on computing, Internet and IT services." SBs (small businesses, or companies with under 99 employees) will account for up to two thirds of ASEAN's total IT spend. SBs will focus the bulk of investments on computing, which is essentially PCs, servers and printers.

"Spending on security, storage and networking solutions is not big, since SBs in ASEAN are just setting up their IT infrastructure and their first priority is to beef up on basic computing needs," Mr. Sreedhar says. "The ASEAN market is poised for some exciting times ahead and IT vendors should take notice of this market and should start marketing solutions tailored for specific economies across ASEAN."

As for the rest of ASEAN, Thailand will see IT spend among SMBs grow at

nearly 17 per cent, while the Philippines will see IT investments grow at a faster 18 per cent this year. The top spot will be Viet Nam, which will see IT spending grow at a scorching 24 per cent over last year. "SMBs in Singapore are more mature than their counterparts in Viet Nam, Indonesia and Thailand, which is also reflected in Singapore's muted spending growth," Mr. Sreedhar says. "SMBs in Singapore are spending in incremental amounts to reinforce their IT infrastructure, whereas in countries like Thailand and Indonesia, many SMBs are just starting to invest on IT Infrastructure. This accounts for the high rate of growth in IT spending in the two countries."

Among vertical sectors that are contributing to the IT spend across ASEAN are manufacturing, professional services (which include financial planning, billing and recordkeeping) and retail. Manufacturing (both discrete and process) is the leading vertical in IT spending. Indonesia, The Philippines and Viet Nam contribute a major portion to the pool of manufacturing SMBs. "SMBs in the manufacturing sector in these countries are barely equipped with PCs and printers, and quite a few don't even have this basic IT infrastructure," Mr. Sreedhar says. "However, with the economy being on the upswing in these countries, SMBs in the manufacturing vertical are flourishing. This, in turn, is leading them to invest more in IT infrastructure."

<http://www.tekrati.com>

### CHINA Government supports software innovation

China will enhance government support for software innovations, with concerted efforts on developing China's proprietary generic, core and supportive software, said Wang Bingke, Deputy Director of Economic System Reform and Performance Department, part of the Ministry of Information Industry (MII), at a software outsourcing forum held on April 25, 2007. MII will provide more guidance for software innovations, and facilitate technology cooperation and innovation alliances in different forms, along with the implementation of

key software projects, in an attempt to establish a proprietary technological innovation system headed by industry. Meanwhile, it will initiate a range of information security software related innovations and R&D.

According to predictions, China's domestic software and information service marketplace will expect a sale volume exceeding RMB 1 trillion in 2010. Chinese made software and information service will take up a domestic share of 65 per cent or above. Home made key generic software products and core technologies will see major breakthroughs, with a raised industrial value and scale.

<http://www.most.gov.cn>

### S&T insurance pilot project

As a supporting policy for implementing the Outline for the National Long-and Medium-Term S&T Development Planning (2006-2020), the Chinese Ministry of Science and Technology (MOST) and China Insurance Regulatory Committee (CIRC) will jointly stage S&T insurance pilot projects at national high-tech parks, and in selected cities, in an attempt to promote the diffusion of S&T insurance.

The pilot projects will work on the following missions:

- Raise the insurance awareness of high-tech businesses, through government guidance and promotion, in an effort to set up S&T insurance examples;
- Provide insurance for technological innovation activities at high-tech businesses, using insurance means, and gather up experience, models, and cases for supporting industrial technological innovation using S&T insurance;
- Further develop insurance products tailored to the needs of high-tech businesses; and
- Collect S&T insurance data for verifying the scientific nature and rationality of S&T insurance policies.

Application for an S&T insurance will go through the following procedures:

- The government or administrative committee initiating an S&T insur-

ance pilot project will submit an application to S&T authorities at the provincial level;

- S&T authorities at the provincial level will review the application together with the local insurance regulatory bureau, before sending the application to MOST and CIRC. The areas proposed by the provinces or municipalities for S&T insurance must not exceed two in number;
- MOST and CIRC will evaluate application materials in a balanced manner, and choose the right candidate for S&T insurance; and
- MOST and CIRC will sign a memorandum with the chosen candidates, to formally start the pilot project.

<http://www.most.gov.cn>

### INDIA

## IT exports in 2006-07

The country's IT exports have grown at 38.28 per cent to touch Rs 1,585 billion (US\$ 37 billion) during 2006-07, according to an estimate by the Electronic and Computer Software Export Promotion Council (ESC). "The growth of exports of electronic hardware, computer software and services and ITes has been significant at 38.28 per cent in April-March 2007 and we are optimistic about a solid growth in IT exports in the next fiscal going by the present trend," ESC Chairman Sanjiv Narayan said in a statement. He said computer software and services were the key drivers with a 40 per cent growth at Rs 1,050 billion (\$ 25 billion) during the period as against Rs 750 billion (\$ 18 billion) in the same period last year.

ITes exports during 2006-07 increased to Rs 410 billion (\$ 9.6 billion), up from Rs 300 billion (\$ 7 billion) in the previous year, a growth of 36.67 per cent. Electronic hardware exports grew by 29.87 per cent during 2006-07 at Rs 125 billion (\$ 3 billion) as compared to Rs 96 billion (\$ 2.2 billion) during the last fiscal, Narayan said.

<http://economictimes.indiatimes.com>

## Contract research to drive pharma growth

Continuing buoyancy in the domestic market and increasing revenues from contract

research and the manufacturing services business will be the key drivers for the growth of the Indian pharmaceutical industry in the current financial year. The major pharma companies with significant presence in the regulated markets of the US and EU will withstand the pricing pressures to come up with impressive gains in 2007-08, analysts predicted.

"Domestic market, global generics business, contract research and emerging drug discovery, and development arena are the four major value creators. Contract research and manufacturing will continue to grow and will be the biggest value creator in the next 5-10 years," said ChrysCapital managing director Sanjiv Kaul. Analysts feel the \$ 7-billion domestic pharmaceutical market will have a steady growth of 10-11 per cent in the current financial year. "The double-digit growth is primarily because of the stupendous growth of the Indian economy, the increasing spending capacity of patients and a healthy life style," analysts point out.

The country's biggest drug maker Ranbaxy registered a 26 per cent growth in its domestic sales at \$ 65 million for the quarter ended 31 March 2007, compared with the corresponding period of 2006. It launched 18 new products in the domestic market during the three-month period. It also raised the full-year sales growth to 20 per cent.

Similarly, Jubilant Organosys, the biggest player in contract research and manufacturing, reported a 32.5 per cent growth in net profits for the quarter ended 31 March 2007, on a quarter-to-quarter basis. The company is hopeful of maintaining the momentum next year. "Our focus on the pharma and life science product business continues to deliver strong results, validating not just our strategy but also our ability to create a global niche for ourselves. We have created multiple global relationships through our contract research and manufacturing business, and it will be our intention to be an outsourcing partner of choice for leading pharma and life science companies," Shyam S. Bhartia, CMD, Jubilant Organosys, said.

<http://www.business-standard.com>

## Nano mission

The Government of India has approved the launch of a mission on nano science

and technology - Nano Mission with an allocation of Rs 1,000 crore for five years. The Nano Mission has been structured in a fashion so as to achieve synergy between the national research efforts of various agencies in nano science and technology and launch new programmes in a concerted fashion.

The department of science and technology will be the nodal agency for implementing the Nano Mission. The Government's approval furthers the belief that nano technology is a knowledge-intensive and "enabling technology" which is expected to influence a wide range of products and processes with far-reaching implications for national economy and development.

The Government has made it clear that capacity building in this upcoming area of research will be of utmost importance for the Nano Mission so that India emerges as a global knowledge hub in this field also. For this, research on fundamental aspects of nano science and training of a large number of manpower will receive prime attention.

Equally importantly, the Nano Mission will strive for development of products and processes for national development, especially in areas of national relevance, like safe drinking water, materials development, sensors development, drug delivery, etc. For this, it will forge linkages between educational and research institutions and industry and promote public-private partnerships.

<http://www.efytimes.com>

## Fund to push mergers and acquisitions and joint ventures

A Milan-based business advisory firm aims to create a 100 million euro (Rs. 5.4 billion) equity fund to push mergers and acquisitions (M&As) and joint ventures (JVs) between Italy and India. "I am talking to Italian banks and Luxembourg-based funds. I have also received positive feedback from Indian banks," Carlos Paris of Paris & Partners said of the equity fund to promote "arranged and love marriages that last" between Indian

and Italian businesses in the areas of lifestyle products, food processing, cinema and infrastructure.

"Ninety per cent of Italian businesses are family-owned and form the core of our economy. There are similar traditions in India. So, I am now looking for good DNA with Indian groups," Paris, a former banker, told media. Toward this end, the equity fund will function as a third party professional with the capability to lead investment to provide Italian-quality goods at Indian prices," Paris explained.

The timing could not be better, with 2007 being celebrated as the Year of Italy in India. Italian Prime Minister Romano Prodi, accompanied by a delegation of more than 300 top businessmen was in India in February 2007, while Deputy Prime Minister Francesco Rutelli, who is also the country's tourism minister, is expected in India later in 2007.

Two other delegations, one led by Minister of International Trade Emma Bonino and the other by the president of Lombardy province Robert Formigoni also visited India this year, indicative of the "renewed interest in India due to its surging economy", Paris pointed out. According to him, talks are underway with Indian business groups like the Dalmias, the Modis, the Chandერიyas and the Ruparels to facilitate ties with Italian business houses for M&As and JVs.

In addition, Paris&Partners would set up representative offices later this year in New Delhi and Mumbai to help Italian companies understand how to do business in India. "We have also got positive responses from other companies like Godrej and Dabur for joint ventures in areas of food and cosmetics," Paris stated.

As for Italian companies that were interested in India, he said the Merloni group hoped to invest in India's alternative and renewable energy sector, the Cattaneo family in the beauty products sector and the Bianchi family in the duplicating machines sector.

This apart, premier Italian bank San Paolo Banca IMI has already opened an office in Mumbai and is now looking at entering India's financial sector. Three Italian wine majors, Calatrasi, Ferrari and Pallini were also keen on investing. "India's wine industry has tre-

mendous potential to witness a major boom in the coming years," Paris said. In this context, he said that Italian vintners could even develop "wine courtyards" in India.

"The soil is similar, the weather is similar. It's entirely possible that Italian wine that is comparable in terms of quality and price could soon be produced in India," Paris said. His optimism is not misplaced. 'The Italian Wine Guide' lists a staggering 312 wines - ranging from Rs. 610 to Rs. 30,000 a bottle that are available in Delhi and Mumbai alone.

*IANS, 11 June 2007*

### IRAN Software exports at \$ 9 million

Some 250 companies, mostly small or medium-sized, are involved in designing multimedia software. Export of software reached \$ 9 million during March 21-November 21, 2006, vice chairman of the Association of Software Exporters said, and hoped that the figure will rise to \$ 30 million during the year ending March 2008.

"We are hopeful that software exports will rise to \$ 30 million this year, thanks to financial support from Iran Trade Development Organization and Software Exporters Union," Mohammad Reza Talaei told ISNA. He recalled that software export reached close to \$ 15 million in the year ending March 2006.

Talaei blamed failure to comply with the law on supporting computer software designers for the low foreign and domestic investments in the sector. Low investment as well as poor quality of domestically-designed products will create problems for software exports, he added.

Iranian software products are exported to Germany, Syria, Zimbabwe and the Central Asian republics. Talaei highlighted that 250 companies - mostly small or medium-sized - are members of the Electronic Publishers Association and are involved in designing multimedia software. "These firms which are helpful in conveying Iran's history and culture to the world are largely losing their assets due to piracy of multimedia software." He appealed to the govern-

ment to support the industry in which young Iranians are active.

<http://www.iranmania.com>

### KOREA IT exports grow over 8 per cent in first quarter

Korean exports of information technology (IT) items grew more than 8 per cent in the first quarter from a year earlier, boosted by brisk sales of chips and flat panels in overseas markets, a government report showed. According to the report by the Ministry of Information and Communications, IT exports by South Korean firms during the January-March 2007 period amounted to \$ 28.8 billion, up 8.3 per cent from the same period of 2006. The report also showed that in March alone, the nation's IT exports grew 6.6 per cent to \$ 9.9 billion.

The ministry attributed the year's growth of IT exports to expanded overseas shipments of semiconductors and flat panel products, despite a traditional slowdown in winter. During the first quarter, exports of semiconductors jumped 13.1 per cent from a year earlier to \$ 3.2 billion, while those of flat panels surged 21.6 per cent to \$ 1.7 billion.

However, mobile phones, one of the nation's top IT export goods, saw their overseas shipments decline 3 per cent, mainly due to sluggish sales in the European market. By country, Korean IT exports to the U.S. grew 11.5 per cent to \$ 1.2 billion and those to European countries increased 10.2 per cent year-on-year to \$ 1.7 billion, thanks to a robust demand for high-end products, the report showed.

<http://www.korea.net>

### IT exports grow over 4 per cent in April

Korean exports of information technology (IT) goods grew more than 4 per cent in April, driven by a rebound in demand for mobile handsets, a government report showed. Korean companies exported a combined \$ 8.88 billion worth of IT goods during the month, up 4.6 per cent from a year earlier, accord-

ing to the report by the Ministry of Information and Communication.

During the month, IT imports rose 15.5 per cent to \$ 5.45 billion, bringing the nation's trade surplus in the sector to \$ 3.43 billion, the report showed. The on-year growth of IT exports was mainly attributable to a brisk demand for mobile handsets, which expanded 14.1 per cent from a year earlier to \$ 2.05 billion, the Ministry said in a press release.

Exports of semiconductors, however, grew only 1.1 per cent to \$ 2.78 billion in the same period as the industry was under pressure from continuing falls in chip prices and sluggish global demand for computer memory products. In March, the growth rate had stood at 13.1 per cent. For flat panel products, exports amounted to \$ 1.43 billion, up 5.8 per cent from the same period of 2006, but decelerating from the March figure of 21.5 per cent.

The Ministry forecast that IT exports will accelerate in the second quarter, but the pace will be limited, as chip and flat panel markets are expected to remain sluggish, and there are concerns over a possible slowdown in the economy of the USA, one of Korea's main export destinations.

<http://www.korea.net>

## Technology protection law

Korea will start enforcing a law banning unauthorized transfers of technology that could have an adverse impact on the economy and national defense, officials said. The law calls for a newly created industrial technology protection committee to designate sensitive technologies and monitor their cross-border movements, the Ministry of Commerce, Industry and Energy said. Local companies and the government spend roughly 24 trillion won (\$ 25.8 billion) each year on various research and development (R&D) projects. The government provides support to such sectors as semiconductors, display panels, autos, shipbuilding, steel, energy and defense.

Under the law, private companies, universities and laboratories that received state R&D funds will have to get authori-

zation before they export technology. Small and medium enterprises that do not have the resources to protect their technology could receive funds and security training from the government. The ministry said the new law defines the illegal transfer of technology as a felony and allows the government to confiscate any profits from such transfers.

<http://www.korea.net>

## MALAYSIA Biotech hub

Malaysian Biotechnology Corporation Sdn Bhd (BiotechCorp) has strengthened its cooperation with Biotechnology Industry Organisation (BIO) to enhance Malaysia's image as a biotechnology hub in Asia. For this purpose, the company has sealed a memorandum of understanding (MOU) with BIO, said BiotechCorp's chief executive officer Iskandar Mizal Mahmood.

BIO represents about 1,100 biotechnology companies, academic institutions, state biotechnology centres and related organizations in all the states in USA and 31 other nations. The MOU signing was witnessed by Deputy Prime Minister Datuk Seri Najib Tun Razak while on a working visit to attend the BIO International Convention (BIO 2007).

Earlier, Najib, who is also the Defence Minister, received a courtesy call from BIO chief executive officer James Greenwood. According to Iskandar, the collaboration with BIO also demonstrated BiotechCorp's commitment to put in place an economic, political and policy framework to fulfil the vision of Malaysia becoming a biotechnology hub in Asia.

BiotechCorp is an agency under the purview of the Science, Technology and Innovation Ministry and is wholly owned by the Ministry of Finance Incorporated. Some of the objectives of BiotechCorp are to identify value propositions in both research and development (R&D) and commerce, and support these ventures via financial assistance and developmental services. Iskandar said that, under the MoU, BIO would provide two opportunities over the course of the next year for BiotechCorp to place articles in "BIO News" promoting Malaysia as an Asian biotechnology hub.

These placement opportunities would be positioned within "BIO News" to ensure their exposure, he said after the MoU signing. BIO would also provide a webcast opportunity on its website for BiotechCorp to promote Malaysia with the weblink remaining on the BIO website for one year, Iskandar said. BiotechCorp would be responsible for developing the content for the website, he added.

<http://www.bernama.com.my>

## Policy to promote IP

To encourage the development of Intellectual Property (IP), the Government has unveiled a new policy which includes the setting up of a RM 5 billion fund, an academy and a special court to deal with disputes. Prime Minister Datuk Seri Abdullah Ahmad Badawi said the Intellectual Property Fund would promote the growth of IP, while the academy would increase the management capability by creating more experts in the field. The Intellectual Property Court, he added, would speedily hear cases of infringement, so that any compensation due can be made quickly.

"This is an incentive to creators and innovators to register their Intellectual Property. It will also serve as a warning to individuals and companies not to breach Intellectual Property," he said in his speech, before launching the National Intellectual Property Policy. Abdullah said that IP was at the heart of investment, innovation and technological development, and a pivotal component of economic growth and development. Hence, he hoped the policy would make Malaysians understand IP and how to protect and profit from it.

"I look forward with great anticipation to the day when Malaysians are known around the world as inventors of technology and not mere users of technology," he added. Abdullah believed the policy would encourage commercialization of IP and draw in more investment and technology transfers. He said there was huge potential for commercializing the findings of research, citing as an example Universiti Sains Malaysia's

new product, thypidot rapid, which was an antibody for typhoid. He said thypidot rapid had been licensed to and commercialized by a local company which produced 95 per cent for the international market, and the royalty from it came up to RM 7 million.

Abdullah urged the Domestic Trade and Consumer Affairs Ministry to expedite and shorten the period of approving patents, as delays would be a loss and render a product outdated as new more sophisticated ones come up. He said in Malaysia it often took four to five years for patents to be approved and sometimes even up to seven years, while the international standard was about three-and-a-half years.

<http://thestar.com.my>

## PAKISTAN IT revenue crosses \$ 2 billion

Under a methodology developed by WTO-IMF and used by countries like India, the total revenue of Pakistan's informational technology industry crossed \$ 2 billion in fiscal year 2005-06, a Pakistan Software Export Board (PSEB) official said. Similarly, the IT exports from the country exceeded \$ 1 billion in the same period, using the internationally accepted methodology to report the industry size, the official added. A break-up of the total export revenue of \$ 1.05 billion shows that direct exports were \$ 150 million, revenue from sales to multinationals, multilaterals and foreign missions in Pakistan was \$ 200 million, overseas revenue of Pakistan-owned companies \$ 450 million, and annual salaries of non-immigrant IT workers \$ 250 million.

In the domestic IT market, revenues from personal computers, laptops and servers made up the major chunk of the total earnings of \$ 1.15 billion. Export growth in each of the last three years has been around 50 per cent while the domestic market has grown at 33 per cent annually.

Ashraf Kapadia, President, Pakistan Software House Association (PASHA), said the study shows that Pakistan is now on the map of the IT world, and

that more international customers can feel comfortable in outsourcing work to Pakistan. These benchmarks were established following preliminary studies undertaken by PSEB and have been fully endorsed by the PSEB Board of Directors. More exhaustive studies in collaboration with the Gartner Group, State Bank of Pakistan and the Statistics Division are underway, the PSEB official added.

<http://www.thenews.com.pk>

## THE PHILIPPINES New memo promotes value added services

In a major move to promote competition in the nation's duopolistic telecommunications sector and prop up the lethargic value added service subsector, the National Telecommunications Commission has come out with a draft memorandum circular that seeks to define, promote, and strengthen value added services. The draft memo, which will be subjected to public consultations before its promulgation and implementation, seeks, among other things, the deregulation of service rates and the non-discrimination of providers by infrastructure owners, especially major telcos like Philippine Long Distance Telephone Co. and Globe Telecom.

Among other things, the draft memo defines VAS as those involving the following: messaging services; audio and video conferencing; voice mail services; electronic mail services; information services; gaming services; application services; content and programme services; audio-text services; domain name hosting services; facsimile services; IP multicasting services; virtual private network services; and PBX services. It does not include VoIP services, which the draft memo says, are already covered by a separate memo-circular.

The draft memo says leased line service shall be classified as VAS, but mandates telcos not to discriminate against providers. It says telcos should provide providers with the same kind of services given to other subscribers at prices not higher than those charged to the latter. Also, the VAS rates will be deregulated, although the draft memo

requires providers to advise the NTC of their price structures. The draft memorandum says the department should protect consumers.

The draft memorandum circular is part of the overall competition policy, which the NTC is putting in place primarily to make the telecommunications sector more competitive, promote universal access, and protect consumers.

The Philippines has been widely criticized for its failure to promote competition despite the deregulation and liberalization of the telecommunications sector in the 1990s and the wireless boom in the early 2000s. The enactment of Republic Act 7925, of the Public Telecommunications Policy Act of 1995, did little to break up the then existing telecommunications monopoly. What has emerged in the last 12 years is a duopoly composed of PLDT and Globe Telecom.

It would appear that the NTC wants big telcos, or infrastructure owners, to sell wholesale services, while the VAS providers perform the retailing. This has been in consonance with the structure existing in developed markets, primarily Europe. A study on the country's telecommunications structure says that major telcos have been poor sellers of retail services as indicated by their own heavy operational and financial losses. The pursuit of a new overall competition policy is seen as a way to restructure the sector to make it more suitable for the changing times.

Developments: Pacific Internet Ltd., the largest Internet service provider by geographic reach in the Asia-Pacific region, is pursuing a \$ 12 million (almost P 600 million) investment and expansion plan for its local subsidiary, Pacific Internet Philippines. This is the nation's first WiMAX rollout to provide wireless broadband services initially in Metro Manila. Its plan includes multiple wireless technologies to support its core business: leased lines and broadband Internet access and other IP-based services mainly for corporate customers. Its local subsidiary has recently been assigned the 15 MHz spectrum in the 2.5-2.7 GHz band, suitable for broadband wireless access for corporate customers.

The infrastructure expansion will make Pacific Internet Philippines (PIPH) an important component in PacNet's regional strategy, by providing the means to extend corporate networks from the other PacNet countries into the Philippines, while having full end-to-end control over the service delivery and quality. PIPH will also be able to strengthen its brand name and market positioning by owning its infrastructure down to the last mile. Also, the expansion is in line with Pacific Internet's five-year business plan announced in 2006, to transform Pacific Internet into an IP-based communications and solutions provider.

Also, the Intellectual Property Office of the Philippines and the NTC have signed the rules and regulations to govern the resolution of cases filed with the NTC against cable operators involving violations of intellectual property rights. The IRR allows the offended parties to file criminal or civil complaints against alleged cable pirates for violating laws on intellectual property rights and cable piracy. The complainant may also opt to file first with the NTC, which exercises jurisdiction over all administrative cases involving violation of permits, issuance of licenses and authority to operate radio and television broadcasts, including cable TV. If the department determines that the case is an IPR violation, it shall endorse the complaint to IP Philippines for appropriate action. The IRR forms part of a joint programme of IP Philippines and NTC to monitor and enforce IP laws in the cable industry. The two agencies have a calendar of activities that include workshops and trainings for their officials to enhance skills in resolving issues related to cable piracy.

<http://www.manilastandardtoday.com>

### VIET NAM

## Software industry aims at US\$ 800 million

Though obtaining satisfactory results recently, the software industry of Viet Nam has not demonstrated its full ability yet. The expectations for this key industry have been raised again since the government approved the pro-

gramme to develop the software industry of Viet Nam to 2010 in mid April. The most important point of this programme is identifying the goals, policies, specific measures and the expenses for the programme. According to many IT experts, those goals are appropriate to the country's ability if solutions are performed seriously.

In the government's view, the software industry is a knowledge-based, hi-tech economic sector, with high value addition and export revenue, significantly contributing to modernization and industrialization. Viet Nam especially encourages and creates favourable conditions for drawing investment and developing this industry as a core economic sector of the national economy. Developing human resources is considered the key to the success of the software industry. Information services will be a focus, firstly outsourcing services for foreign clients, along with expanding the local market and developing some major software to replace imported products.

The programme aims to obtain an average growth rate of 35-40 per cent a year, a total revenue of over US\$ 800 million, including at least 40 per cent from exports. The workforce for the software sector will be around 55,000-60,000, with an average production value of \$ 15,000/person/year. By 2010, Viet Nam must have around 10 software companies which have over 1,000 employees and 200 companies with over 100 employees.

Viet Nam has also set the goal of becoming one of the leading countries in attracting foreign investment in the software industry and one of the top 15 nations providing software outsourcing services in the world. Another goal is reducing the rate of software infringement to the average of the region. To realize those targets, the Software Industry Development Programme proposes some policies and solutions, including the improvement of the legal environment and State management capability. The programme also proposes measures to develop human resources for the software industry.

Accordingly, software companies that meet conditions on human resources

and infrastructure, especially companies in Hanoi, Da Nang and HCM City, will be helped to raise their competitiveness. Some software parks will be also developed in the three above cities. The programme also lays out many projects and schemes to develop the software industry in various aspects like human resources, trademarks, trade promotion, market development, and software export.

One of the most important points of the programme is that in 2010 the State will give priority to the programme. Accordingly, \$ 70 million will be invested in the programme: 30 per cent from the State budget, 30 per cent from local budgets, and 40 per cent from enterprises, associations, ODA sources and other sources. The Ministry of Post and Telematics will coordinate with ministries, government agencies, and local authorities to implement this programme.

<http://english.vietnamnet.vn>

## Influenza vaccine technology transfer

Viet Nam is one of the six developing countries to be awarded grants to establish in-country manufacturing capacity for influenza vaccine as part of the global action plan against bird flu, the World Health Organisation (WHO) reported. The other beneficiaries are Brazil, India, Indonesia, Mexico and Thailand, WHO said in a press release. Each country will get up to US\$ 2.5 million from the governments of Japan and the USA as immediate funding, to begin the process of acquiring the needed technology, WHO said.

"The current global influenza vaccine manufacturing capacity is far short of the capacity needed to protect the world's 6 billion people in the event of an influenza pandemic," the press release quoted the US Secretary of Health and Human Services Mike Leavitt as saying. These grants are an important step forward in the global effort to prepare for an influenza pandemic, he added. Japan has provided US\$ 8 million and the USA, US\$ 10 million, for technology transfer.

<http://english.vietnamnet.vn>