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January 2006

25 January 2006

SITF 2006 ICT Business Outlook Forum

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The Infocomm Development Authority of Singapore (IDA) is committed to growing Singapore into a dynamic global infocomm hub. IDA uses an integrated approach to developing info-communications in Singapore. This involves nurturing a competitive telecoms market as well as a conducive business environment with programmes and schemes for both local and international companies.

Head Office
8 Temasek Boulevard,
#14-00,
Suntec Tower Three,
Singapore 038988
Tel: (65) 6211 0888
Fax: (65) 6211 2222

U.S. Office
333 Twin Dolphin Drive,
Suite 145,
Redwood Shores,
CA 94065, USA
Tel: (1-650) 654 1185
Fax: (1-650) 654 8889

India Office
Unit 1, Level 3, Explorer
Block, International Tech
Park, Whitefield Road,
Bangalore 560 066, India
Tel: (91-80) 5115 6400
Fax: (91-80) 5115 6104

China Office
No. 268, Xizang Road
Central Unit 2602
Raffles City Shanghai
Shanghai 200001
People's Republic of China
Tel: (86-21) 6360 6622
Fax: (86-21) 6360 6699

Website: www.ida.gov.sg Email: info@ida.gov.sg

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Asia to lead the way in consumer IT and open source software: Pg 4

In its latest prediction, market research firm Gartner believes Asia will lead the way in consumer IT and open-source trends over next few years.

Singapore government bolsters desktop security: Pg 6

The Singapore government enhances the security of its PC systems with the launch of a new Centrally Administered Desktop Firewall project for public sector agencies.

Singapore plays integral role in resolving Net governance impasse: Pg 9

The two opposing camps claimed their respective victories in the debate over Net governance at the recent World Summit on Internet Society in Tunis, but a little-known fact is that Singapore pulled off the feat of ensuring everyone went home with something good to report.





THE YEAR THAT WAS

THE DAWN OF A new year is often associated with two "Rs" - Reflection and Resolution. In retrospect, 2005 marked a year of renewed growth for most players in the world of technology, with hope that the momentum will gather steam over the next 12 months.

Last year also witnessed the departure of a somewhat iconic IT personality. In early 2005, Mark Hurd replaced Carly Fiorina as the CEO of computer giant Hewlett-Packard. Some industry watchers pegged Fiorina's fate to her decision to acquire former rival Compaq. Another straight-talking technology helmsman, Oracle CEO Larry Ellison, however, appears undeterred. Consolidation continued in the IT industry in 2005, and probably none higher profile than Oracle's acquisition of CRM (Customer Relationship Management) behemoth Siebel. Having just integrated PeopleSoft products and staff into its fold, the timing of Oracle's bid for Siebel surprised many, though analysts have long postulated the move.

Locally, 2005 marked the long-anticipated launch of third-generation mobile networks and services on local shores. While the promises of high-speed Net access, video conferencing and TV on the go did not spark a mad rush among Singaporeans, statistics show that local consumers are slowly but surely warming up to the idea.

Besides 3G, IDA also paved the way for the introduction of new services like wireless broadband and IP telephony with the allocation

of radio-frequency spectrums and phone numbering. Towards the tail end of 2005, Singapore staked its place firmly on the world gaming map by staging the World Cyber Games (WCG) Grand Finals. With WCG in the limelight, cybergaming walked out of its geek shadows into the realm of the glamorous. The icing on the cake was undoubtedly local boy Wilson Chia, Singapore's first and only sliver medallist in this year's tournament.

The New Year is also a time when technology soothsayers issue their prognosis for the months ahead. In 06, IDC bets on the trend towards EEE (e-Empowered Employee), while Gartner believes Asia-Pacific will lead the way in terms of consumer IT trends and the open-source movement. The relentless onslaught on cyber threats is expected to continue, and even possibly extend over the wireless networks onto our hand phones and PDAs.

Industry aside, 2006 will also mark a year of change for Singapore Wave. In the months ahead, we will endeavour to bring you more industry news and opinion pieces. We will embrace the online model and introduce an e-version of the newsletter in months to come. These enhancements are all aimed at making Singapore Wave more informative and timely for the people who matters most - our readers. Thank you for your past support and here's wishing you a healthy and prosperous New Year ahead!

The Editor

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wave
INFOCOMM NEWS FROM IDA

Editorial Team
Winston Chai
Vincent TK Lim
Kartina Rosli
Ng Sook Fun

Writers
Ken Wong
Larry Loh
Victor Ng

Design
atomz ll pte ltd

Singapore Wave is a monthly publication for executives worldwide. Readers are welcome to send their views via email to:

vincent_tk_lim@ida.gov.sg

Singapore Wave is distributed on a complimentary basis. To receive a free hard copy and/or an electronic version, email your request to Kartina at:

kartina_rosli@ida.gov.sg

and include your name, designation, company name and mailing address. You may also write or fax to us at:

Singapore Wave
IDA Singapore
8 Temasek Boulevard
#14-00 Suntec Tower Three
Singapore 038988

DID: (65) 6211 1998
Tel: (65) 6211 0888
Fax: (65) 6211 2227

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IDC: REGIONAL IT MARKET TO BE BUOYED BY MOBILE WORKER TECHNOLOGY SPENDING

WHEN IT COMES TO predicting regional technology spending patterns for 2006, market analyst IDC is hedging its bets on investments in mobile worker technologies or the rise of the so-called e-Empowered Employee (EEE).

Industry watchers have long predicted the proliferation of mobile worker tools such as remote access devices and wireless technologies within the enterprise in a bid to optimise worker productivity. Over the next 12 months, IDC expects regional ICT spending to be fuelled largely by further investments in EEE tools.

In the case of the EEE however, the trend is consumer-led rather than company-driven, the research firm said.

"Continued adoption of hardware, software, connectivity and content by consumers will move beyond the home and into the workplace," according to IDC. "As consumers migrate their home experiences into the enterprise, they will demand the same, if not higher levels of knowledge-based services in their work environment."

"Work takes place anywhere, anytime, anyplace. The 9 to 5 work hours will make way for 24/7 operations," said Ms Eva Au, Managing Director of IDC Asia-Pacific.

Successful companies will be those who can rise to the challenge and capitalise on the technology opportunities to further enable the e-empowered employee. It has direct impact on organisational efficiency, access to real-time information, quicker time-to-market and the ability of businesses to react to dynamic market conditions, she added.



From a macro perspective, IDC expects 2006 to be a healthy year for the IT and telecommunications sectors in the region, excluding Japan. The company said spending on telecommunications services will grow 8 percent in 2006 to exceed US\$175 billion. IT investments, on the other hand, are poised to rise by 9 percent to over \$US110 billion, with China and India accounting for the bulk of this growth.

"The economic outlook for 2006 is healthy, despite continued global political, health, and environmental uncertainties. This, combined with the relentless pursuit of enterprises and their employees to be more competitive, bodes well for the ICT industry in the region," Ms Au stressed.

Other major predictions by IDC include:

- ¥ Wireless content packages keep consumer spending on the boil - The combined wireless content industry, which encompasses games, music, ring tones, video and TV, will be fuelled by the proliferation of content and feature-rich applications that service providers can offer in the entertainment space, together with cost-saving services bundled with broadband access.
- ¥ The Skype factor and consumer VoIP - The consumer VoIP (Voice over Internet Protocol) market continues to demonstrate healthy growth, with non-traditional operators moving into this space. eBay's acquisition of Skype and Yahoo and Microsoft's move to purchase VoIP service providers are prime examples.
- ¥ Business Intelligence (BI) graduates to prime time - BI tools will mature in the region and is expected to grow at 10 percent in 2006 to US\$315 million in Asia-Pacific, excluding Japan. BI capabilities are expected to improve and applications will become more tightly-integrated, allowing for easy but controlled access by employees. Users will demand for faster and more user-friendly search engines and there will be pressure on software vendors to fill the gaps.
- ¥ Identity and access management takes centre stage, driven by compliance - underpinning this growth will be increased concerns on the possibility of large-scale identity thefts, data control issues and the business and legal consequences that may ensue following unauthorised access to data. Compliance is the primary driver triggering information asset management investment decisions. Offerings will be based around scalable solutions, compliance and standardisation. Local players with established presence in their markets and strong channel and partner networks will provide formidable competition to even the strongest global vendors.

GARTNER: ASIA TO LEAD THE WAY IN CONSUMER IT AND OPEN-SOURCE



ASIA HAS ALREADY staked its claim as a powerhouse in areas like IT manufacturing and software development but the region looks set to lead the way in consumer IT and open-source in next few years, says research firm Gartner Dataquest.

According to the company, Asia will soon be taking a leading role in most areas of consumer technology, mobile and broadband content. In addition, the twin powers of China and India will see a big surge in mutual trade and their maturing technology competencies will start to have a global impact.

China will become the population with the largest English-speaking capability by 2008, said Dion Wiggins, Vice President and Research Director at Gartner. Removing the language barrier will enable Chinese companies to work in a wider range of markets and segments. According to Wiggins, China and India will compete in the external service provider (ESP) segment, with Hong Kong being overshadowed by the rise of Beijing and Shanghai.

Strides will also be made in the area of intellectual property protection in Asia. "The percentage of GDP spent on R&D is rising, particularly in China, toward OECD levels and technology/IP value chains are emerging, said Wiggins. This will provide the incentive for Asian companies with multinational intent to put additional pressure on governments to enforce IP protection and support IP creation at home."

In addition, China and India will continue to turn to open-source software in the enterprise and small- and mid-sized enterprise space, taking away 20 percent of the software pie from IP-based software vendors, who stand to lose over \$100 billion in revenue by 2010.

Other predictions by Gartner for 2006 and beyond include:

- 1. Continued increase in Enterprise IT spending**
 Total worldwide enterprise IT spending, including hardware, software, telecommunications and IT services, will top US\$1768 billion in 2006. The compound annual growth rate (CAGR) of the total worldwide enterprise IT spending will hit 4.5 percent from 2004 to 2009. Asia-Pacific should see almost US\$210 billion spent in 2006, with a CAGR of 7.5 per cent over the same period.
- 2. Consumer technology leads the way**
 Between 2006 and 2012, the majority of new information technologies adopted by enterprises will first see the light of day in the consumer market. Platforms capable of delivering services to support business processes will find their way into enterprises, such as 3D graphics and rich media. Consumer-oriented Web sites like Amazon, eBay and Google are also emerging as business service platforms.
- 3. Enterprises deal with information overload**
 By 2015, enterprises will face 30 times more information than they did in 2005. Proactive measures using service-level, policy-based automation virtualisation tools need to be in place to enable organisations to build a Real Time Infrastructure. Accordingly, the importance of Service Oriented Architecture (SOA) and Web services will broaden, with increasing emphasis on business processes.
- 4. Outsourcing out, multi-sourcing in**
 "Multi-sourcing", which is based on utility-style IT services, will be driven by the adoption of Service Oriented Architecture in enterprise sphere. As the IT arena changes from a product model to a service model, the IT profession will fragment into four separate and distinct domains of expertise: Technology Infrastructure and Services; Information Design and Management; Process Design and Management; and Relationship and Sourcing Management.
- 5. The need for better risk aversion and attack readiness**
 By the middle of 2006, less than 5 percent of businesses will have adequate business continuity plans in place to cater for disasters like avian influenza and malicious software attacks. This is despite the fact that organisations that are properly prepared will recover from such incidents 80 percent faster. Asian companies need to step up their IT preparedness by integrating it into a business continuity plan that will mitigate risks and minimise the impact from such possible threats.

MCAFFEE: MOBILE THREATS, PHISHING SCAMS AND IDENTITY THEFT UNDER SPOTLIGHT IN 2006

THE NUMBER OF malicious threats has dramatically increased in recent years and it appears there are no signs of a slowdown in 2006. However, over the next 12 months, the target of attacks will increasingly extend beyond PCs to converged mobile devices such as smart phones.

This is one of the key threat predictions by security software specialist McAfee for this year. According to the firm, the increased connectivity of gadgets like smart phones will lead to a significant spike in mobile malware, or malicious programs aimed at mobile platforms. Such attacks will cause more damage than threats aimed at the PCs due to the proliferation of smartphones and the lack of adequate protection, McAfee predicted.



"For example, in 2004, the I Love You virus penetrated tens of millions of PCs in just a couple of hours despite the fact that half of all PCs had Internet security software installed. By comparison, a mobile threat targeting several operating systems could infect up to 200 million connected smartphones simultaneously because the majority of these devices do not currently have mobile security protection installed," the company said in a statement.

According to McAfee, consumers are less inclined to take security precautions for their mobile devices due to the fact that the perceived risk of attacks is significantly lower. However, statistics from McAfee Avert Labs revealed that mobile malware is growing almost 10 times faster than PC malware when compared over a one year period. The false sense of security could result in mature mobile threats that are capable of devastating networks and consumer data with little fanfare or warning, the firm warned.

Besides the projected rise in mobile malware, the deluge of Potentially Unwanted Programs (PUPS) is also set to continue. These include spyware like keyloggers and password stealers as well as adware. McAfee said 2005 witnessed a 40 percent increase in commercial PUPS, and the rise of malicious Trojans was even more evident.

In a similar fashion, phishing scams and incidents of identity theft will continue to be a security concern this year, the company predicted. However in 2006, such attempts to steal usernames and passwords through ploys like a bogus login page will become more targeted through the use of spyware programs and password stealers. As evidenced by the phishing attacks following catastrophes like Hurricane Katrina in the United States, malicious users are likely to continue to prey on the public's willingness to help those in need. The situation will be exacerbated by flaws in e-mail protocols, security weaknesses in Web browsers and the lack of computer security education, McAfee explained.

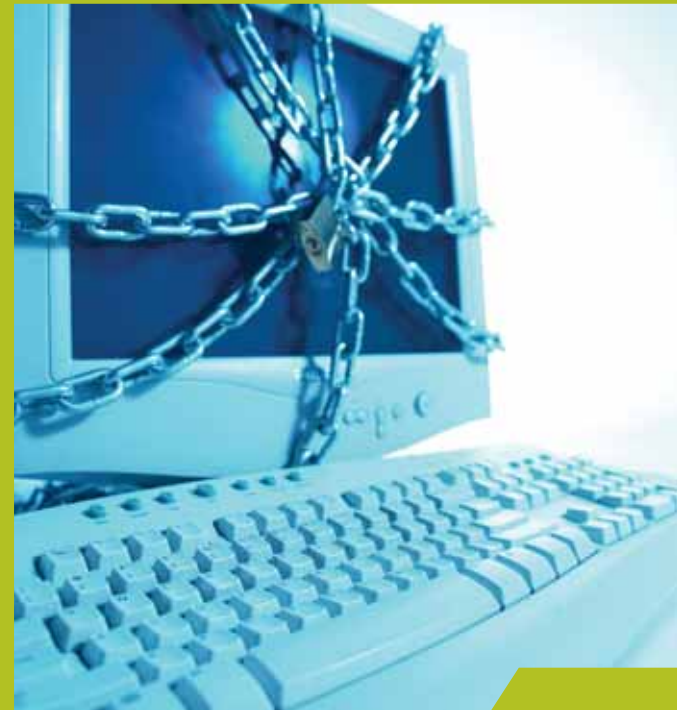
On the same note, McAfee expects to see an increase in distributed phishing Trojans, backdoor programs that turn an infected computer into a phishing site and that will also spam other users to visit the portal.

To protect against these threats, McAfee advises both enterprises and consumers to adhere to the usual security practices like updating their anti-virus software regularly, installing the latest patches, employing current spam filters, and implementing a multi-layered approach to detecting and blocking security attacks.

SINGAPORE GOVERNMENT BOLSTERS DESKTOP SECURITY

TO SAFEGUARD ITS systems against malicious programs like computer viruses and Trojans, the Singapore government is taking steps to bolster security measures at the desktop level.

The IDA has unveiled a new project called (Centrally Administered desktop Firewall) which allows desktop systems in public sector agencies to obtain the appropriate desktop firewall policies. Currently, PCs are prime targets for malicious programmers and industry watchers have also warned that



the human element is a major weakness in the security chain. For example, users could unsuspectingly allow a piece of malware into their company's network by using an infected diskette or CD.

With the implementation of the CAFE solution, malicious programmes unwittingly transferred to the desktop will be stalled from initiating network-based attacks within government systems.

CAFE also has the ability to enforce a consistent security baseline, which consists of the policies needed to minimise the risk of an organisation to an acceptable level. Government agencies can also opt to add on to these baseline policies to suit their needs. As such, the project will effectively enhance the security of infocomm and technology resources within the public sector.

Another benefit of CAFE is that the solution is easy to adopt and there is no need for heavy infrastructural or service investments. It leverages existing infrastructure by interoperating with other vendors' products. CAFE also allows for the security policies of agencies' desktop systems to be managed from a central location. Its scalability enables government agencies to factor in growth and expansion without affecting the operations on existing CAFE infrastructure.

Singapore-based IT services provider Frontline Solutions has been awarded the three-year contract to build, deploy and manage the CAFE project. The contract comes with an option to be extended for two additional one-year periods. The total value of the project is S\$6 million.

Frontline is pleased to be partnering IDA and the Singapore Government on this major security initiative. With our extensive experience in providing security solutions and services for both public and private sectors, and our strong understanding of the Government network, we look towards helping the agencies minimise work disruption, reduce helpdesk and security costs, as well as raise productivity levels," said Mr Lim Chin Hu, President and Chief Executive Officer of Frontline.

CAFE, which also incorporates anti-spyware capabilities, will initially be deployed on 25,000 desktops in the public sector. Frontline will also be embarking on a series of road shows this month to demonstrate the benefits of the system to government agencies.

NCS SNAGS S\$45M DEAL WITH MINDEF

SINGAPORE'S MINISTRY OF DEFENCE (MINDEF) has awarded NCS Pte Ltd a S\$45 million contract to manage and operate its My Internet World (MIW) men Web portal.

The MIW project was initiated in October 2000 with the aim of better leveraging IT for the communicating and providing of services to MINDEF's mammoth target audience pool. MIW currently offers a host of information and online services for pre-enlistees, full-time NS personnel, NS men and even members of the public. For example, NS men can apply for exit permits and book their fitness test sessions online, as well as purchase items ranging from uniforms to footwear from the MIW e-store.

The new five-year contract with NCS covers the provision and enhancements to the MIW portal infrastructure, data centre, call centre services and e-services operations and delivery. The new portal will focus on delivering a friendlier and personalised portal for access to all MINDEF and Singapore Armed Forces (SAF) e-services. NCS will take over the full management and operations of the MIW portal from the incumbent operator by the second quarter of 2006.

While the portal currently focuses mainly on providing services and information on all NS-related issues, it will eventually integrate with

other commercial and public offerings, thus providing a wider variety of services that will include lifestyle services to the NS community.

Another objective is to develop the portal into a one-stop community and knowledge-sharing portal for all NS men. It will be designed to proactively engage the NS/SAF community and to implement IT and non-IT services to enhance interaction, knowledge-sharing and community-building.

With the proliferation of wireless technologies, the public will also be able to access the information on MIW via mobile and wireless devices such as mobile phones and handhelds.

"We are honoured to partner MINDEF to deliver a high-tech, high-touch portal for NS men and public in general. This is an excellent project that showcases the partnership between public and private enterprise," said Dr Chong Yoke Sin, CEO of NCS.

The improved portal is expected to be ready by the second quarter of 2006.

SINGTEL EXPANDS COVERAGE WITH NEW SUBMARINE CABLE

SINGAPORE TELECOMMUNICATIONS (SingTel) has boosted its worldwide connectivity with the addition of a new fiber-optic submarine cable.

The telco's new high-capacity SMW4 (South East Asia, Middle East and Western Europe) cable spans three continents and is the result of a joint effort by 16 telecommunications players. SingTel has invested US\$40 million and owns 8 percent of this project. It covers a distance of 20,000 kilometres and is the fourth in a series of cables connecting Asia, Europe and North Africa. The network lands in 14 countries: Singapore, Malaysia, Thailand, Bangladesh, India, Sri Lanka, Pakistan, United Arab Emirates, Saudi Arabia, Egypt, Italy, Tunisia, Algeria and France.

This will strengthen our ability to serve companies which plan to expand their operations into Asia, Europe and the Middle East," Mr Wong Soon Nam, SingTel's Vice President of Corporate Business Marketing, said in a statement.

Besides enhancing its infrastructure, SingTel has also opened two new offices in the United Arab Emirates and Bangladesh, bringing the total number of worldwide operations to 35.

These new offices will leverage the new SMW4 cable to better position SingTel in meeting the strong demand for Internet and data access from markets in Asia and the Middle East," added Mr Mark Chong, CEO of SingTel Global Offices.

The SMW4 will also enable SingTel to beef up connectivity to Europe through its offices in London, Paris and Frankfurt. SingTel will make the most of our offices in Europe to provide a faster, reliable communications network for our customers all over the globe," he said.



S'PORE STRENGTHENS INFOCOMM TIES WITH CHINA



IDA's Mr Thomas Lim with Mr Zhu Zhi Hong, Vice-Mayor, Municipal People's Government of Chengdu

FURTHERING SINGAPORE'S commitment to China as its long-term infocomm partner and to encourage IT co-operation, the IDA recently brought leading companies in Singapore's gaming industry on a first-ever mission to Chengdu.

The aim of this trip was to visit the Chengdu Hi-Tech Industrial Development Zone and to meet with local IT companies and gaming industry players.

The visit was supported by the Chengdu Government and the Chengdu Municipal Informatisation Office (CDIO). Two events - the 2005 Sino-Singapore Gaming Seminar and the Sino-Singapore One-on-One Business Networking session were also jointly held by CDIO and IDA.

Over 80 IT companies from Singapore and Chengdu attended the seminar including Idealsoft, Webvision, Insiro, WooWorld, Singapore Computer Systems, Seasky, Netdragon and PhillipCapital.

IDA remains committed to identifying more cooperation opportunities and further promoting partnerships between Singapore and Chinese infocomm companies, said Mr Mok Boon Poh, Country Director IDA and Consul (Infocomm) of the Consulate-General of Singapore, who was present at the seminar.

Mr Thomas Lim, Director of Games and Entertainment (Industry Group), IDA, also used the event to introduce Singapore's Digital Exchange strategy. The initiative aims to position Singapore as a global distribution hub and trading centre for the processing, management and distribution of digital assets. He identified three strategic thrusts that will drive the growth of the digital media and entertainment industry in Singapore: Computer Animation, Digital Cinema and Online Games.

Mr Lim highlighted the fact that Singapore is equipped to offer game developers and publishers a one-stop deployment solution to access key markets in South East Asia. Singapore's joint government-industry Games Market Access Programme offers services such as monthly fixed-priced regional deployment, hosting and distribution, community building and marketing support.

We are very happy that SeaSky, a local Chengdu internet gaming company, has chosen Singapore to launch its first gaming product to South East Asia, said Mr Lim. We believe we provide an ideal business environment and markets for more and more companies to realise their expansion plans.

SINGAPORE PLAYS INTEGRAL ROLE IN RESOLVING NET GOVERNANCE IMPASSE



Minister Lee Boon Yang delivering his address at the WSIS in Tunis

MUCH INK HAS BEEN spilled in past months about who should govern the Internet, the United States, a UN-type body or something in between. The impasse came to a head in Tunis in mid-November with the global community voting to further internationalise existing mechanisms, which essentially still remain subject to the oversight of the US for now.

While the two camps in this digital divide claimed their respective victory, a little known fact is that Singapore pulled off the feat of ensuring everyone went home with something good to report.

Singapore, namely the International team from IDA, steered the global representatives towards a more evolutionary and less radical solution in the Internet governance debate. This is because advocating either the status quo or the UN-style of Internet Governance, spells consequences that may not be in the interest of Singapore, nor the world.

Singapore thus became a proponent of a solution which reflected the importance of a more internationalised regime, but one which did not jeopardise the stability of the Internet.

This evolutionary stance is important for Singapore on two levels:

- ¥ Locally: Singapore's dependence on the Internet is tremendous. On the individual level, its citizens are actively online, be it for their own e-commerce business, or transacting with the Government and other businesses.
- ¥ Globally: Singapore needs to assert its position on the WSIS stage, since so much of Singapore's trade, commerce and communications depend on the stable and secure functioning of the Internet.

The world's dependence on the Internet has also clearly grown. Not just the developed nations, but developing ones too are staking their digital presence on the Web. Yet, the Net must continue to develop and flourish freely as it has. Thus, Singapore recognised that any decision on how the Internet is to be managed should recognise the nature of the technology and allow for its unimpeded development.

If oversight rests only with the United States, via its administration of the non-profit organisation Internet Corporation on Assigned Names and Numbers (ICANN), some fear that their country's digital presence could depend on the largesse of that one country. Should a UN-type of structure take over then and bog down the development of the Net with red tape and vetoes? Clearly, that alternative is not an option. Neither is maintaining the status quo.

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The concerns expressed by governments over the roles of the US and that of ICANN are valid, given their countries' dependence on the Internet. However, what the Internet does not need is the stifling of innovation, which placing a heavy, top-down structure would impose. Recognising this, Singapore together with Canada, Mexico, Malaysia, Uruguay, Ecuador, Argentina, Japan, Australia and New Zealand, pushed for an evolutionary internationalisation of today's structures which acknowledges the interests of other countries, but does not create unwieldy and bureaucratic inter-governmental constructs for the Internet.

Singapore worked hard both behind the scenes and at the meetings proper to make this happen.

Singapore's stand, as given by Dr Lee Boon Yang, Minister for Information, Communication and the Arts in Tunis: "We accept that while there is a need to improve governance of the Internet, we should not view such governance as the sole domain of governments."

Recognising that the Internet is always about multi-stakeholder participation, some new form of Internet governance is thus needed. Governance as a partnership of equal participation from all quarters is an ideal. But it need not be that far-fetched. The Internet Governance Forum (IGF) which emerged from the WSIS may achieve just that.

To be convened by the Secretary-General of the UN, this body will provide a space for discussion on cross-cutting and emerging issues pertaining to the Internet. The IGF will not have decision-making mandate and participation will be based on a multi-stakeholder model, on an equal footing.

INFO BYTES

M1 INTRODUCES MULTI-SIM SERVICE CARD

M1 customers can now use a multi-SIM service card to conveniently switch between devices. The new offering from M1 allows customers to acquire an extra SIM card with the same mobile phone number. The extra card can be used on another device such as a Blackberry, car phone, or PDA or without subscribers having to transfer their SIM card from one gadget to another.

Singapore chaired the drafting group to broadly determine the form and function of the IGF. While countries were in general agreement over the need for such a forum, the specifics of it were hotly debated - a debate which Singapore chaired.

Among the points of contention were whether the IGF should be organised by the UN or the Internet Society and if the five-year sunset clause for this forum was indeed necessary.

Singapore was able to play a brokering role when it became clear that neither of the more extreme positions would succeed.

As the IDA International director Valerie D Costa said: "It was a challenge to ensure that all the various viewpoints were acknowledged and reflected. Many of these extreme positions just couldn't be reconciled. I could sense positions hardening when discussions resumed in Tunis just prior to WSIS. But as deadlines loomed and it became clear to us all that those more extreme positions were not gathering support, the more moderate voices in the room, like Singapore's, were able to step in and advocate a reasonable compromise."

"I'm glad Singapore was among those who worked to propose a suitable solution. The key now is to make sure that the process of improvement and internationalisation continues for existing organisations and that the IGF gets off to a good start. So the work isn't over just yet."

APCERT COMPLETES ANNUAL SECURITY DRILL

Singapore joined a host of Asian nations in taking part in an annual exercise to test the timeliness and response capabilities of regional computer security incident response teams (CSIRT) in the event of a cyber security threat. In this year's Asia Pacific Computer Emergency Response Team (APCERT) drill, the scenario centred on the detection of a botnet attacking numerous sites in Korea. KrcERT subsequently requested intervention and assistance from its regional counterparts to help curb the attacks by closing the bot networks in their countries.

TUNING IN TO THE SWEET SOUND OF MUSIC

Long before Apple's iTunes service came onto the scene in 2003 and popularised the online music distribution platform, other companies have already tried their hand at a similar promise. Incorporated in 1999, Singapore-based Soundbuzz was one of them.

At that time, Soundbuzz focused its efforts on paid digital music distribution to the consumer. However, the same year witnessed the rise of the controversial file-sharing software Napster. As people were using Napster to swap music files for free, albeit illegally, the nascent potential for Soundbuzz's pay-to-download service got drowned in the noise. At this point, the company turned its attention to a business-to-business model and started creating music portals to serve the customer base of well-known brands like MSN, Hewlett-Packard and Nokia.

Soundbuzz was soon working extensively with telcos and internet service providers to provide download of copyrighted ringtones and tunes. Today, Soundbuzz is one of Asia's largest online music aggregators with the widest selection of songs. It has tie-ups with Telstra and Optus in Australia, TATA VSNL in India and SingTel, M1 and Pacific Internet in Singapore, amongst others. As testament to the company's innovative business model and foresight in addressing the youth market, it even allows youngsters with no credit card access to use the service, with billing undertaken by their ISPs instead.

Soundbuzz founder and CEO Sudhanshu Sarronwala feels the time is right to revisit the business-to-consumer model. The convergence of several factors makes this a much more feasible model now than in 1999, he said. "We now have solid licensing across the industry, with 60 record labels on board including Sony BMG, Universal, Warner and independent labels. Broadband penetration has achieved critical mass in countries like Hong Kong, Australia, Taiwan and Singapore. And MP3 players are everywhere."

Mr Sarronwala was also quick to ink deals with MP3 device makers Creative Technology and iRiver to have the Soundbuzz store integrated with their device's desktop software, making it much easier for their users to buy music online.

Soundbuzz uses Microsoft's Windows Media Rights Management to safeguard its downloaded material. Intellectual property awareness is growing and Digital Rights Management (DRM) keeps honest people honest, said Mr Sarronwala. "We have chosen a system that is strong, yet flexible enough to allow for personal fair use. If the DRM is too restrictive, we end up frustrating legitimate users."

Soundbuzz's sophisticated distribution technology uses IP detection and credit card information checks to determine where the user is trying to

purchase music from. This allows for the market to be segmented geographically and for different pricing models to be put in place. Although a song costs less in India, you can't get it for that price if you're buying from Singapore.

Despite the fact that Soundbuzz predated iTunes, Mr Sarronwala sees no end to comparisons between the two services. The biggest difference is that the iTunes service is not available in Asia, except in Japan and Australia, he said. Soundbuzz is available in 14 Asian countries, from India to Hong Kong. With the growing popularity of MP3 devices and 3G, multimedia phones, we expect to serve up more full-track MP3s and rich media content to the Asian market. We've built the runway in 2005 and we're ready for a big take-off in 2006.



Mr Sudhanshu Sarronwala, CEO, Soundbuzz