

Singapore in 2015

by Dr Vivian Balakrishnan, Minister for Community, Youth and Sports, and Second Minister of Information, Communications and the Arts, Singapore

Singapore has been a hub of international trade for centuries. Today, to thrive in the global information economy, it is transforming itself into a hub of telecommunications and Information and Communications Technology, *ICT*. To exploit *ICT*, including Interactive and Digital Media, as a key strategic enabler and enhance Singapore's economic competitiveness, Singapore has formulated a ten-year infocomm master plan - 'Intelligent Nation 2015', *iN2015*. Singapore wants to be a global leader in harnessing infocomm for the benefit of the economy and society.



Dr Vivian Balakrishnan is Singapore's Minister for Community, Youth and Sports and, as well, the country's Second Minister of Information, Communications and the Arts. An elected member of parliament since 2001, Dr Balakrishnan has served as Minister of State for National Development, and as Senior Minister of State at the Ministry of Trade and Industry, as Chairman of the 'Remaking Singapore' committee and Chairman of the National Youth Council. Dr Balakrishnan, a medical doctor, was the CEO of the Singapore General Hospital, the Medical Director of the Singapore National Eye Centre, a Council Member of the Singapore Medical Association, a member of the National Library Board, a member of the Singapore Broadcasting Authority Programmes Advisory Committee and of the National Volunteer Centre Committee. He was also the Commanding Officer of the 2nd Combat Support Hospital of the Singapore Armed Forces. He enjoyed a long stint on national television, where he hosted a televised series and presented health education programmes.

Dr Balakrishnan was awarded the President's Scholarship to study Medicine at the National University of Singapore, where he was elected President, and later Chairman, of the National University of Singapore Student's Union, NUSU. Subsequently, he pursued post-graduate specialist training in Ophthalmology and was admitted as a Fellow of the Royal College of Surgeons of Edinburgh in 1991.

Singapore is a small nation with slightly over 4.5 million people occupying a strategic nexus between the Asia-Pacific, South Asia and South-East Asia. It has been an open entrepot - a tax-free point of transit between countries - for nearly two centuries, and flourished with the exponential growth of global trade. The onset of the digital age has made it natural, even essential, for Singapore to transform itself into a global telecommunications hub and to exploit information technology's borderless nature for the next phase of our economic growth.

Fortunately, Singapore was one of the early movers in computerization, the use of broadband and telecommunications market liberal-

ization. Today, Singapore is a major telecommunications hub in Asia and one of the most connected cities in the world. Information Communications Technologies, *ICT*, permeate every facet of the way we work, live, learn and play.

To stay ahead, Singapore must continue to exploit *ICT* as a key strategic enabler. With the advent of user-generated content and the convergence of the telecommunications, media and IT sectors, 'conduit-and-compute-based' strategies are necessary but no longer sufficient. Advancement to the next level of knowledge-based competitive advantage requires a parallel 'content-based' strategy.

To ensure the continued growth of our *ICT* industry, the Infocomm Development Authority of Singapore, *IDA*, has formulated our latest ten-year infocomm master plan, 'Intelligent Nation 2015', better known as 'iN2015'. *iN2015* is Singapore's strategic answer to the challenges that confront us in the innovation age.

An intelligent nation, a global city, powered by infocomm

We have made a conscious effort to give key stakeholders - the people, public and private sectors - the opportunity to contribute their ideas and hence share in the creation of Singapore's digital future.

“iN2015’s strategic thrusts aim to enhance further Singapore’s economic competitiveness. We will develop and grow a globally competitive infocomm industry, and transform key economic sectors through more sophisticated and innovative use of infocomm. To facilitate these transformations, we need to nurture an innovative, entrepreneurial and infocomm-savvy workforce.”

More than 3,000 students and working professionals contributed their personal visions of the future. Ten steering committees were set up to focus on specific sectors. Industry and consumer focus groups were also formed to obtain deeper research findings. In addition, an International Advisory Panel was set up so that we can learn from and tap into the expertise and experience of our overseas counterparts.

iN2015 focuses on fuelling creativity and innovation among businesses and individuals. It provides an infocomm platform that supports enterprise and talent. It connects businesses, individuals and communities, giving them the ability to harness resources and capabilities efficiently across diverse businesses and geographies. In addition, iN2015 will be the conduit for access to the world’s resources as well as for exporting Singapore’s ideas, products, services, companies and talent into global markets.

iN2015’s strategic thrusts aim to enhance further Singapore’s economic competitiveness. We will develop and grow a globally competitive infocomm industry, and transform key economic sectors through more sophisticated and innovative use of infocomm. To facilitate these transformations, we need to nurture an innovative, entrepreneurial and infocomm-savvy workforce. We will also establish a nationwide, trusted and intelligent next-generation infocomm infrastructure, consisting of both wired and wireless networks, to support the various iN2015 initiatives.

We aim to be a global leader in harnessing infocomm for the benefit of the economy and society. iN2015 aims to double our infocomm industry’s value-add to S\$26 billion (US\$17 billion) and triple our infocomm export revenue to S\$60 billion (US\$40 billion) by 2015. Simultaneously, we are looking to create 80,000 additional jobs, achieve 90 per cent household broadband usage and 100 per cent

“Driven by opportunities, competition and consumer demand, broadband prices have fallen by as much as 37 per cent while access speeds have climbed to 100 Mbps in the span of one year.”

computer ownership in homes with school-going children in the same time frame.

Vibrancy, speed and skill

Since the launch of the iN2015 master plan in June last year, we have made good progress in implementing many of the critical initiatives.

Vibrancy

Following its launch, iN2015’s vision has attracted global attention from international infocomm giants and nations as well as companies. It has helped to generate further growth in Singapore’s infocomm industry, which already grew an estimated 7.5 per cent in the past year, with its total revenue hitting S\$40 billion (US\$26 billion) for the first time. For instance, multi-nationals, such as Credit Suisse and DaimlerChrysler, have recently picked Singapore as the location for their IT nerve centres and shifted their operations here.

Driven by opportunities, competition and consumer demand, broadband prices have fallen by as much as 37 per cent while access speeds have climbed to 100 Mbps in the span of one year. The drop in the prices of broadband has fuelled a continued surge in broadband adoption.

The government will also play its part. Our third e-Government master plan, iGov2010, will build upon the 1,600 government user-friendly services available online to create new platforms for the people, private and public sectors to interact and transact conveniently on a daily basis. As a country with one of the highest mobile penetration rates in the world, we are looking at repackaging many of these services for the mobile platform.

Speed

Speed is a critical element in this new environment. Hence, we will be investing in a suite of world-class, next-generation infrastructure capabilities to meet our infocomm needs decades into the future. Our objective is simple. We want everyone working and living in Singapore, citizens and foreigners alike, to access cutting-edge online services, create new services and to experience lifestyles of the future.

The wired component of this infrastructure is termed the Next Generation National Broadband Network. When completed in 2012, it will deliver ultra-high speed of 1Gbps or more, to all homes, schools and businesses. Complementing this wired network is a nationwide Wireless Broadband Network, or Wireless@SG, which was launched in January this year. Currently, 1,300 hotspots around our island offer free wireless Internet access. By September this year, we expect the wireless coverage to be extended to more than 5,000 hotspots island-wide, benefiting at least a quarter-million users.

Skill

Besides the state-of-the-art hardware, an infocomm-savvy, highly-skilled workforce and a pool of globally competitive infocomm professionals are crucial to support Singapore’s economic competitiveness. Over the next ten years, we will implement a S\$120 million (US\$79 million) Infocomm Manpower Development Roadmap to develop, attract and retain infocomm talent, professionals and business leaders.

As infocomm becomes increasingly indispensable, it is important to build a digitally inclusive society in which no one gets left behind. To date, we have launched programmes to ensure that needy students are able to obtain computer and Internet access; people with disabilities are able to receive infocomm training to improve employability; and, the less tech-savvy, including the elderly, are able to get connected effortlessly.

An interactive digital media future

Given the growing phenomenon of digital convergence, Singapore has also identified the development of the Interactive and Digital Media, *IDM*, sector as a complementary strategic thrust to iN2015 and, more importantly, a definitive driver in positioning Singapore as a global media city. To achieve this, Singapore’s National Research Foundation has set aside S\$500 million (US\$329 million) over five years to increase our IDM R&D capacity. This programme aims to contribute S\$10 billion (US\$6.5 billion) in value-add to the economy as well as create approximately 10,000 new jobs by 2015. This strategic focus on IDM

“As the world advances into an era of increasing connectivity, countries that aspire to be in the league of leading economies must make an unrelenting effort to harness ICT.”

R&D underscores the government’s commitment to developing the IDM sector and to create a new field for Singapore to excel in.

To spearhead our efforts, a multi-agency IDM Programme Office was set up last August to undertake four initiatives that would enhance the local IDM sector. These include plans to make Singapore the choice location as a test-bed for innovative and commercially-viable IDM R&D applications, and to build a global network of local and international research institutions. Other plans include the development of i.JAM, an online collaborative platform for both researchers and industry practitioners to exchange breakthrough ideas and opportunities. i.JAM will also encourage key industry players to invest in the development of new open access platforms to stimulate the development of IDM applications, products and services in Singapore.

These initiatives have received tremendous support and have already shown results. Last

October, The Media Authority of Singapore, MDA, and Massachusetts Institute of Technology, MIT, announced the Singapore-MIT International Games Lab to further global research and develop world-class academic programmes in games technology. This is a huge growth area as the market potential for games is predicted to exceed that of Hollywood blockbusters in the near future. So far, over 30 IDM stakeholders and partners have come on board. Our educational institutions have also ramped up their IDM R&D efforts, while local research institutes have offered a slew of technologies for further development.

Games, animation and film

Other than R&D, Singapore’s strategic investment in the IDM sector includes the development of a critical mass of media enterprises and talents, the internationalization of local IDM content and enterprises, and the strengthening of Singapore’s role as a Digital Exchange to process, manage and distribute digital assets.

We hope to promote development in Singapore’s media industry by nurturing and supporting companies to produce quality made-in-Singapore digital content, which we could take internationally. Our local companies are encouraged to work with international companies to co-produce animation, games and film.

Singapore - a land of excitement and opportunities

As the world advances into an era of increasing connectivity, countries that aspire to be in the league of leading economies must make an unrelenting effort to harness ICT. I am confident that the iN2015 master plan will ignite a new level of imagination, creativity and exuberance in our people and spur new opportunities and possibilities to bring Singapore into the innovation age. ●

CWR - CONNECT-WORLD RECRUITMENT THE INTERNET EMPLOYMENT INTERCHANGE

LOOKING FOR ICT SECTOR EXPERIENCE AND TALENT?