

ICA COUNTRY REPORT

Singapore

INTRODUCTION

- 1) Singapore's second e-Government Action Plan (www.egov.gov.sg) was launched by Deputy Prime Minister and Minister for Finance Mr Lee Hsien Loong on 15 July 2003. The focus of the second Plan is to transform the Public Service into a Networked Government that delivers accessible, integrated and value-added e-services to our customers, and to help bring citizens closer together.
- 2) The e-Government Action Plan II builds upon the first e-Government Action Plan where Singapore made some progress in the area of implementing e-services to benefit citizens, businesses and public employees.
- 3) This report is an update on Singapore's e-Government and national ICT progress and developments. This report also briefly outlines the major initiatives spelt out in the recently launched e-Government Action Plan II.

E-GOVERNMENT ACHIEVEMENTS

Usage

- 4) At the 2003 e-Government Customer Perception Survey conducted by AC Nielson on behalf of the Government, 75% of all those who transacted with the Government in the past year did so at least once electronically, out of which 4 in 5 expressed satisfaction with the quality of the online service.

National Portal: e-Citizen

- 5) The eCitizen Portal (www.ecitizen.gov.sg) is Singapore's single gateway to government services and information. eCitizen was launched in 1997 as a pilot and pioneered the concept of citizen-centredness through the integration of services and information according to intuitive categories such as "Education", "Housing" etc.
- 6) The portal has an average of close to 9 million hits per month. The top 5 e-services registered about 3.2 million transactions for the 3-month period of April to June 2003. The most recent award given to eCitizen is the Stockholm Challenge (www.challenge.stockholm.se) award in October 2002.

My.eCitizen: Personalised Services

- 7) As at June 2003, more than 1,600 government services representing all key public services have been put online. Instead of requiring users to cull through hundreds of services, we have started to personalise eCitizen to provide individuals customised access to information and services according to their selected profiles. Users can choose from five profiles, namely *Student*, *Working Adult*, *Homemaker*, *Senior Citizen* and *Business Person*. My.eCitizen also provides alert services that individuals can choose from, sent either through email or SMS (Short Messaging Service).

Integrated Services

- 8) *The Online Application System for Integrated Services* (OASIS) is a project to deliver a seamless one-stop end-to-end business registration and licence application system. A first step towards OASIS was taken in June 2002 with an online guide that assists users in their search for information on licensing and registration requirements across agencies. Coined the Startup eAdvisor, the business-centric Government-to-Business (G2B) portal (www.business.gov.sg) aims to create a more pro-enterprise environment in Singapore, particularly for would-be entrepreneurs who may lack the resources and expertise to identify the licences that they need. Besides guiding users to information on business licencing and registrations, the eAdvisor provides easy access to application forms in downloadable format.
- 9) We moved to the next phase of OASIS with 4 integrated licences launched recently. These licences are the Telecommunication Equipment Dealer's Class/Individual Licences, the Travel Agent's Licence and the Employer Registration. Users who require these licences and registrations can now enjoy the convenience and time-savings of applying for them through the eAdvisor.
- 10) Another example of business-related integrated services is the Government's fully web-based end-to-end procurement application that links public procurement officers with the Government's suppliers. GeBiz (www.gebiz.gov.sg) allows public officers to perform a range of procurement activities such as publishing tender notices and awarding contracts and allows suppliers to respond to procurement opportunities. As of Aug 2003, we have 140 government agencies and 8,359 suppliers using GeBiz, and the cumulative value of transactions for procurement through quotations and period contracts using GeBiz reached about S\$152m (US\$86.6m).
- 11) On the citizen front, the Online Donation Portal (www.donation.org.sg) is a one-stop portal that allows members of the public to donate online to over a hundred charities and other voluntary organizations such as arts, education, health and medical groups.

Bundled Services

- 12) Many agencies already deliver their services through tie-ups with the private sector. For example, drivers can apply to renew their driver's licence issued by the Singapore Police Force through the 40-odd Singapore Post offices located throughout the island. Recently, the Singapore Immigration and Checkpoints Authority (ICA) collaborated with a group of photo outlets to help customers with their passport applications. After

having his/her picture taken at the outlet, an applicant can get help to apply for a passport online. As an incentive, the registration fee is lower than applications made over the counter. This saves the customer time and money. (Users can also apply or renew their passports directly through the ICA website, for a lower fee than over-the-counter transactions).

Privacy and Data Protection

- 13) A lack of confidence in using government electronic services will discourage usage. The Data Protection and Privacy policy in the Government's Instruction Manual (a set of rules governing the conduct of public administration) sets out the minimum requirements for the protection of personal data, whether in manual or electronic form, by all Ministries, Statutory Boards and Organs of State. The policy encompasses collection, consent, control, disclosure, processing and use.

e-Governance

- 14) The Public Service Consultation Portal (www.feedback.gov.sg) was launched in April 2003. This is yet another channel for Singaporeans to give their feedback on national issues and policy proposals that have an impact on them. With this Portal, citizens will only need to visit this one-stop destination to give views on policy proposals by the Government. This Portal will be enhanced to support e-polling and provide references to related policies so as to enable citizens to better understand public issues. The public can comment on ministry-specific policy consultation papers or debate with fellow citizens on a wide range of current issues.
- 15) The concurrent revolutions in info-communications, biology, technology, religious fundamentalism and globalisation have necessitated a fundamental review of Singapore's strategies for economic growth and survival as a nation. The Remaking Singapore Portal (www.remakingsingapore.gov.sg) is an open channel for anyone to offer their views on how they would like their country to take shape. The suggestions are considered by the Remaking Singapore committee comprising members drawn from a wide cross-section including the people sector and tertiary institutions and chaired by the Minister for National Development.

Infrastructure

Single Authentication Framework

- 16) We now have a single authentication framework for all government e-services. SingPass, which stands for Singapore Personal Access, aims to provide one authentication system for access to all government e-services requiring single-factor authentication, so that users need only remember one password when transacting with the Government. SingPass makes it simpler and more convenient for the public to transact online with the Government. Citizens reaching the age of 15 and have registered for their National Registration and Identification Card¹, and new employment pass and dependent pass holders will be automatically issued with a new

¹ This is an identity card given to all Singaporeans 15 years and older. The card contains identifiers such as the individual's name, age, photo, address, and blood type.

SingPass ID/password. In addition, a network of service points offers SingPass issuance and reset services to the public.

Business Authorisation Service

- 17) We have recently implemented a Business Authorisation Service (e-Service Authorisation System) that allows companies and businesses to authorise their staff to transact with the relevant government agencies electronically. Agencies are able to ensure that a user has the proper authorisation given by his/her establishment, before allowing the user to perform the online transaction.

Service-Wide Technical Architecture

- 18) In line with our 'Many Agencies, One Government' vision, we need to create an environment of information sharing and interoperability within the Public Service. The Service-Wide Technical Architecture (SWTA) was developed to meet this objective. It is a set of principles and standards, which provides a semantic framework for information sharing and interoperability of systems across all agencies. The SWTA is organized into nine domain architectures which represent logical groupings of related technologies. Guidelines on the design, acquisition, implementation and management of infocomm technology are specified for each of these domains.

Internal Governance

- 19) In terms of internal governance, we recognise that Government itself does not have all the answers and have formed an e-Government Advisory Panel chaired by the Head of Civil Service that comprises representatives from private and public sectors. The Panel:
- a) advises the Government on global trends in e-Government and their impact on Singapore; and
 - b) provides feedback and advice to the Government on areas where we can improve our e-Government implementation efforts.

Boosting Internal Government Capabilities

Knowledge-Based Workplace

- 20) The Knowledge Management (KM) Experimentation Programme was established in July 2001 to facilitate public sector-wide learning through coordinated planning and research on KM concepts, promotion of KM ideas, as well as sharing of project experiences amongst participating agencies. When completed, we will see some knowledge bases and intellectual assets created in legal service, scholarship administration, and education.

Infocomm Education

- 21) The Infocomm Education Programme (IEP) aims to equip public officers with new ICT-related skills and competencies to stay relevant in e-Government. The programme offers courses tailored for different roles and jobs within the Public Sector and provides core and elective courses to meet the various needs. Since the start of the programme in August 2001, 13 courses have been developed, and about 3,800 public officers have benefited from them.

Technology Experimentation

- 22) The Technology Experimentation (TE) programme was launched in July 2002 with a budget of S\$5 million (US\$2.9m). It aims to encourage and facilitate technology experimentation in specific implementations within the Public Sector. Since the launch, the programme has started six trials in four technologies. They are: Free Space Optics (FSO), Next Generation Wireless LAN, Radio Frequency Identification (RFID) and Fingerprint Biometrics. Successful experiments can then be replicated service-wide and not-so-successful experiments are shared with other agencies so that the Public Sector as a whole benefits from lessons learnt.

DEVELOPMENTS AT NATIONAL LEVEL

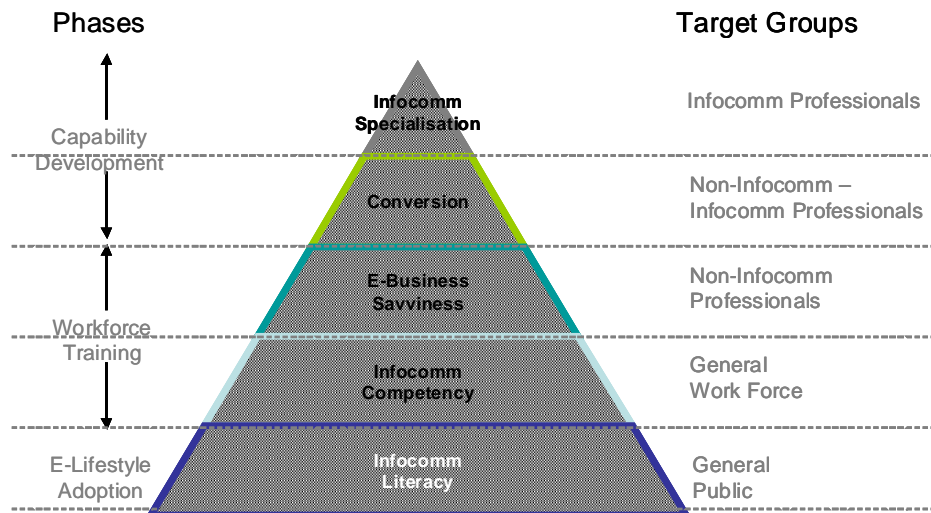
Broadband Network – Singapore ONE

- 23) We are working on maintaining Singapore's world-class network readiness, and extending the broadband capabilities of Singapore ONE to the wireless realm, thus providing users with the combined benefits of high-speed connectivity and mobility. An integrated network linking wireless LAN, mobile telephony, broadband Internet will bring Singaporeans closer to "anywhere, anytime" communications and computing. Under a S\$200 million (US\$114 million) Wired With Wireless programme launched in October 2000, we have successfully initiated 30 projects in mobile payments, wireless Java and mobile workforce. In March 2003, we initiated a year-long collaboration with Intel to explore ways to bridge the communications between different Wireless LANs, Wireless WANs and Fixed Wide Area Networks. An inter-operability test will subsequently be conducted among various vendors and operators across networks and countries from the Asia Pacific region.
- 24) Through the FastTrack@School programme, schools are encouraged to work with industry partners to jointly develop and test interactive multimedia content on broadband. The programme benefits students by offering an enhanced learning process, particularly in the understanding of video-streaming, interactive animations, virtual simulations and online experiments. By working closely with the schools, industry players garner valuable experience and gain the opportunity to strengthen their product development capabilities, giving them a competitive edge in the global marketplace.

Usage and Access

Education and awareness

- 25) The aim of training and awareness programmes is to prepare Singapore for the digital age. The end goal is a population that is not only infocomm-literate, but well prepared for employment in the digital economy.



- 26) In June 2001, we introduced the Infocomm Training Framework to guide the development and implementation of infocomm training programmes. The framework's five levels address the infocomm training needs of the general public, the general work force, and infocomm and non-infocomm professionals. (see Figure 1: Infocomm Training Framework)
- The framework begins with infocomm literacy, which is promoted through the National IT Literacy Programme (NITLP). For just S\$7 (US\$4) per person, the programme trained over 100,000 in its first year through 35 authorised training centres.
 - The second level of the training framework aims to provide the general work force with competency in infocomm technologies and applications. The Infocomm Competency programme was launched in August 2001 to meet this goal and has trained over 42,000 people.
 - Level three of the framework offers e-business skills to non-infocomm professionals through the e-Business Savviness Programme, which has trained over 200 professionals.

- d) The fourth level helps convert non-infocomm professionals into infocomm professionals through Strategic Manpower Conversion Programmes in both infocomm and e-learning. The programmes have trained over 500 people.
 - e) The final level – the Critical Infocomm Training Resource Programme – provides specialist skills for infocomm professionals. The programme has trained 9,500 professionals.
- 27) A central programme to boost consumers' confidence and trust, accelerate the adoption of an online culture, and improve access for all is e-Celebrations, an annual e-lifestyle festival which offers a full year of activities and events that are organised thematically. Surf Singapore is a mega annual event where thousands converge to learn about ICT and be immersed in an exciting digital atmosphere.

Consumer Confidence

- 28) To regulate the online business world, the private sector has implemented a trust mark programme called TrustSg. We are also studying the use of similar trust mark accreditation scheme for our e-services. It is hoped that with a trust mark, users would have the assurance of transacting online in a secure environment with the Government. The Government's trust mark programme will mirror TrustSg and adopt the set of best practices and standards that is used in the private sector. The core principles are Business Practices and Communication; Disclosure; Confirmation and Payment; Fulfillment; Data Protection; Security; Availability; Redress and Dispute Resolution; Protection of Minors and the Elderly; and Accessibility for People with Disabilities.

Access

- 29) Convenient access must be provided to anyone who wants to transact with the Government. We aim to address the issue of access in a three-pronged manner: through equipping individuals/households, tying up with other organisations and sourcing other channels to deliver services.
- 30) Equipping Individuals/Households
- a) Through the Neu PC Scheme, over 5,500 low-income households² have received new or refurbished PCs. The PCs are donated by the public and private sectors and come bundled with free Internet access and training. The PCs are also donated to IT resource centres.
- 31) Tying up with other organisations
- a) The *eCitizen Helper People-Private-Public Partnership* aims to provide all users with the means of transacting with the Government online, even if they

² With monthly incomes not exceeding S\$2000 (US\$1,140)

do not own a computer or know how to use the Internet. In this programme, public and private sector organisations (“eCitizen Helpers”) at various locations offer Internet access and help to guide users in accessing government services online. This is part of the Government’s commitment to ensure that no user is deprived of the convenience and benefits of e-Government and e-services. The eCitizen Helper 3P Partnership is a joint collaboration between the Government and public and private sector organisations.

E-GOVERNMENT ACTION PLAN II

32) The e-Government Action Plan II launched in July 2003 is a 3-year plan that will build upon the work done under the first Plan. The focus of the second Plan is to transform the Public Service into a Networked Government that delivers accessible, integrated and value-added e-services to our customers, and helps bring citizens closer together. The S\$1.3 billion (US\$741m) Plan will achieve three key outcomes: namely, Delighted Customers, Connected Citizens, and Networked Government.

33) Delighted Customers

- a) This key outcome aims to deliver more value-adding, integrated e-services and to drive usage of these services through creating more awareness of and access to e-services. We will also consult widely and continually to understand the public’s needs and improve the way we deliver our services.

34) Connected Citizens

- a) On a national level, there is a need to strengthen social cohesion and cultivate a sense of belonging to the nation, even among Singaporeans living overseas. In order to do that, we will exploit ICT to explain public policies and their rationale online and explore other channels to engage Singaporeans in policy formulation and review.

35) Networked Government

- a) In order to achieve the first two outcomes, the Government must first see itself as a single entity and not as disparate agencies. A ‘Networked Government’ is one that collaborates, shares information and leverages on its collective self to serve the public seamlessly and effectively.

CONCLUSION

36) The progress made under the first e-Government Action Plan has not only put us in a better position as we embark on the second Plan, it also serves as a bedrock of

experiences we can rely on. The e-Government Action Plan II will be the blueprint guiding our prioritisation of resources for the next three years.