

ICA Country Report 2004

Singapore

Structure of the Singapore Government

Singapore is a republic with a parliamentary system of government. A written constitution provides for the organs of state, namely the executive, the legislature and the judiciary.

President S R Nathan is the Head of State. The Prime Minister is Lee Hsien Loong, who is appointed by the President. On the advice of the Prime Minister, the President appoints other Ministers to form the Cabinet. The Prime Minister and the other Cabinet members are appointed from among the Members of Parliament, of which there are currently 94.

The Prime Minister leads the Cabinet, which is responsible for all government policies and the day-to-day administration of the affairs of the state. It is responsible collectively to Parliament, and comprises the Prime Minister and the Ministers in charge of the Ministries of Community Development, Youth and Sports; Defence; Education; the Environment and Water Resources; Finance; Foreign Affairs; Health; Home Affairs; Information, Communications and the Arts; Law; Manpower; National Development; Trade and Industry; and Transport (details of each of the Ministries are available online at www.gov.sg).

Singapore e-Government Leadership and Management

Singapore's e-Government programme is widely acknowledged as one of the most advanced in the world (please see Annex A for awards and accolades). Having strong leadership and clear vision is central to the success of e-Government in Singapore.

The e-Government Policy Committee [eGPC] is a high-level committee comprising Permanent Secretaries of Ministries to provide strategic directions to achieve the e-Government vision: to be a leading e-Government to better serve the nation in the digital economy. The eGPC is chaired by Head of Civil Service, Lim Siong Guan.

The Head of Civil Service also chairs the e-Government Advisory Panel that comprises representatives from both public and private sectors. Besides advising on global trends in e-Government and their impact on Singapore, the Panel also provides feedback to the Government on areas where implementation efforts can be improved.

The eCitizen Council was formed in January 2004 to provide an avenue for discussing and sharing among eTown Mayors on the overall direction and policies for the eCitizen portal so as to achieve the vision of 'Many Agencies, One Government'. This Council is chaired by the Head of Civil Service, with the Permanent Secretaries of eight Ministries as members. Each of the Permanent Secretaries is an appointed eTown Mayor who is responsible for the development of a particular eTown in the eCitizen Portal.

The Ministry of Finance [MOF] owns most of the central Infocomm technology [ICT] infrastructure, services and policies within the public sector.

The Infocomm Development Authority of Singapore [IDA] is the Chief Technology Officer and Chief Information Officer to the Government of Singapore. As the CTO and CIO to the Government, IDA:

- Provides technical advice and recommendations
- Defines and recommends ICT policies, standards and procedures
- Performs service-wide ICT master planning
- Advises on and manages the central ICT infrastructure
- Manages central ICT infrastructures and projects

Permanent Secretaries of Ministries, Heads of Organs of State and Chief Executive Officers of Statutory Boards are responsible for agency-specific ICT infrastructure and services within their own organisations. Assisted by their CIOs, they:

- Articulate the organisation's vision in the exploitation of ICT
- Align ICT policies, standards, projects, systems and infrastructure with those of the central authority, to meet business needs and priorities
- Provide leadership in the planning and prioritisation of IT initiatives
- Ensure appropriate management attention, manpower and monetary resources are given to implement ICT initiatives

In May 2004, the CIO Forum was formed to promote inter-agency sharing of best practices and systems, consultancy and review of existing central systems and investment, thereby creating opportunities for greater collaboration.

Singapore's e-Government Action Plan II

The Singapore Government aims to be a leading e-Government to serve Singapore and Singaporeans better in the digital economy. Both e-Governance and e-services are considered the two pillars of this initiative.

Capitalising on the strong foundation that has been established in government computerisation in the past two decades, the S\$1.3 billion (US\$760 million) e-Government Action Plan II was launched in July 2003. This plan has incorporated new strategies to adapt to the needs of the changing environment and herald a new era in e-Government, including the adoption of a customer-centric approach to transform the Public Service into a Networked Government that delivers accessible, integrated and value-added e-services. By 2006, the aim is to achieve the goal of '*Delighting Customers, Connecting Citizens*' with the following three key outcomes.

Key Outcome 1: Delighted Customers

In seeking to delight customers, whether individual or business users, with convenient and easy-to-use e-services, the targets for 2006 are to:

- Implement 12 or more cross-agency integrated e-services
- Have 90% of the Government's customers use e-services at least once a year
- Have 80% of these users satisfied with the overall quality of e-services

Key Outcome 2: Connected Citizens

To support Singapore's nation building efforts, new ways are sought to exploit ICT in reaching out to all Singaporeans, whether they are living in Singapore or overseas. They can find out more about public policies online through the various government websites, as well as participate in the policy-making and review process through a public feedback channel.

Key Outcome 3: Networked Government

In order to achieve the two desired outcomes of *Delighted Customers* and *Connected Citizens*, the third outcome of a *Networked Government* must be realised. There may be numerous government agencies, each having different charters and bearing different responsibilities but in a Networked Government, these many agencies collaborate, share information and leverage on collective knowledge to serve the public seamlessly and effectively, hence achieving the 'Many Agencies, One Government' approach.

Operationalising the e-Government Action Plan II

To realise the 3 key outcomes of the e-Government Action Plan II, specific programmes and projects have been put in place. In delighting customers, besides improving their access to Government websites and e-services, efforts have been made to enrich and enhance their online experience when transacting with the Government. In connecting citizens, Government agencies have increasingly stepped up efforts in explaining the rationale behind policies and seeking public consultations using an online channel. And in achieving a networked Government, common infrastructures and standards have been developed. The building of a knowledge enterprise is also in the works.

Increasing Awareness of e-Services

The eCitizen Portal will be enhanced in October 2004 to improve its ease of use. Developed with the customers in mind, the portal is available 24 hours a day, seven days a week to provide a single access point to Government information and services that are organised in intuitive categories. This means the customer can get what he wants without having first to understand the complexities of Government. To give the customers greater convenience, integrated e-services packages are also presented for e-services that need to be consumed together, for example, road tax and insurance.

The portal has been popular with individuals but to step up usage further, a ***national public communications plan*** will be implemented to publicise the enhancements of the eCitizen Portal and educate customers on the use of both new and existing e-services. The communications plan will also leverage and incorporate IDA's programmes to widen the outreach; for example, the ***National IT Literacy Programme*** (<http://www.nitlp.com.sg/>) that equips the non-IT literate with basic IT skills to get online and the ***e-Celebrations*** campaign (<http://www.ecelebrations.gov.sg/>) to help everyone hasten their adoption of an e-lifestyle with round-the-year activities. This plan is a concerted effort of relevant agencies and will employ mass media channels, mass training events, exhibitions and direct marketing channels. The objectives are to create higher awareness and encourage usage of the e-services.

Providing Convenient Access to e-Services

Convenient access is necessary for anyone who wants to transact online with the Singapore Government. Those without access to a computer or Internet can go to public libraries and e-clubs at community centres to get online. Selected Government agencies have also set up *self-service terminals* to allow customers to transact with them online instead of joining queues at the service counters. In addition, with the *Neu PC programme* (<http://www.ecelebrations.gov.sg/eceleb2004/neupc.html>), households that earn less than S\$2,000 a month can choose to purchase a new PC at low cost or get a refurbished one for free. The computers are bundled with Internet connectivity and basic Infocomm literacy training.

To reach out to even more citizens, the Government has identified web accessibility as one of the strategic priorities aimed at providing convenient access to government websites and online services to all segments of the population, including people living with disabilities. As a result, the Government is recommending all agencies to adopt the World Wide Web Consortium's [W3C] *Web Content Accessibility Guidelines [WCAG]*.

Moving on, as Singapore enjoys an extremely high mobile phone penetration at 87%, the Government will also explore the use of mobile technologies to deploy e-services. This will enable users to enjoy a new suite of personalised, location-based and time-sensitive services.

Improving the e-Service Experience

The Singapore e-Government continuously strives for excellence in serving the people better and this includes improving on their experience when they are transacting online with us. For example, with the *Web Interface Standards (WIS)* put in place, users can now experience consistent, intuitive and smooth transactions from one government website to another. To do so, the WIS will define a new set of common standards and guidelines for the design and organisation of all government websites. Besides benefiting the users with increased ease of navigation and information retrieval, this initiative will also create a consistent and cohesive online branding for the Singapore Government and its agencies, taking us another step closer towards achieving 'Many Agencies, One Government'.

In creating a richer and more satisfying online experience for the citizens, the eCitizen Portal promises more personalised e-services via *My.eCitizen*. For example, a user will receive an email to remind him when the library books that he has borrowed are overdue. Other alerts include those for the renewal of road tax and passport, season parking and six-monthly medical check-ups for domestic workers.

To help users who are not familiar with or do not know how to use the Internet to transact with the Government online, the *eCitizen Helper Service* is set up in partnership with public and private sector organisations. This service is staffed by volunteers to assist Singaporeans in the use of government e-services - whether it is for applying for /renewing a passport, encashing Economic Restructuring Shares [ERS], checking Central Provident Fund [CPF] statements, filing income tax, paying bills or paying fines. Today, the eCitizen Helper Service is offered free of charge at 208 outlets located island-wide - at libraries, e-Clubs at community centres, retail outlets and public access areas in offices.

For business users, a one-stop online hub called *Business eTown* (<http://www.business.gov.sg/>) has been launched to act as a guide for potential investors and budding entrepreneurs to set up, sustain and expand their businesses. Information on the website is grouped according to business topics such as regulations, government incentive schemes, legal environment, networking and recruitment assistance. Analysis of trends and outlooks of key business industries adds further value to this information gateway.

The Government understands that starting a business can be a complicated and tedious process. From registering a business as a legal entity to applying different types of licences/permits to start the business, the applicant most likely has to visit several different agencies and find himself filling in the same set of particulars and business information repeatedly for each application form. The entire process can take a couple of months and can result in missed business opportunities.

The *Online Business Licensing Services [OBLS]* was thus conceived to help business users. Providing a one-stop licence application filing experience, business users can now submit one application for multiple licences. With OBLS, the Government hopes to create a more pro-enterprise environment in Singapore, where new businesses can be started quickly, made more affordable and hassle-free.

In time to come, local entrepreneurs, especially small and medium-sized enterprises [SMEs] will be also able to apply for relevant government incentives and/or financial schemes online to help set-up their businesses.

As the use of e-services mostly involve the payment of fees, bills, taxes and fines, Government agencies are deploying e-payment services to let customers enjoy greater convenience. A *One-Stop Government Bills Payment* website was also set up at the eCitizen Portal to help customers save time in finding the correct e-payment service, instead of having to sift through numerous government websites.

Instilling Confidence in e-Services

As some e-services involve the release of personal or sensitive information, like Central Provident Fund [CPF] statements, the *Singapore Personal Access [SingPass]* is a common password that authenticates the customer in his transactions with different Government services online. All Singapore citizens, permanent residents, employment pass holders and dependant pass holders who are at least 15 years old can apply for SingPass online at the eCitizen Portal. For business users, the *e-Services Authorisation System* allows organisations to authorise their staff or a third party to access Government e-services on their behalf but the representative will also need to use his SingPass as a form of authentication.

To further instil confidence in e-services, a *TrustSg Accreditation Scheme* has been introduced. Under this scheme, Government agencies that offer online transactions are required to undergo an assessment in order to become awarded with the TrustSg seal. This trust mark is only awarded to agencies that comply with a stringent code of conduct for online business practice set by the National Trust Council in Singapore (<http://www.trustsg.org.sg/>). For example, TrustSg accredited agencies will disclose

sufficient relevant information about their services to help customers make a well-informed transactional decision.

Engaging Citizens Through Active Consultation and Virtual Communities

Today, about 91% of all government policies have been made available online with explanations to help citizens understand the rationale behind them. Government agencies have also increasingly made use of online channels to seek consultation on public policies like human organ transplant and the introduction of privately-managed pension plans. Leveraging on the high penetration of mobile phones in Singapore and its popularity with the youth, the Ministry of Community Development, Youth and Sports even invited young Singaporeans to share their thoughts, dreams and aspirations using SMS. This consultation was a follow-up to the Prime Minister's call to the youths to step forward to make a difference to themselves, to fellow citizens and to Singapore at his swearing-in ceremony in August 2004.

With the launch of the *Government Online Consultation Portal* (<http://www.feedback.gov.sg/>) in April 2003, citizens have been further engaged in the formulation of public policies. They can visit this one-stop destination to air their views on national issues and policy proposals. The portal also supports e-polling and offer references to related policies to deepen citizens' understanding of public issues. Users of this portal can choose to comment on ministry-specific policy consultation papers via the e-Consultation Paper channel or opt to debate with fellow citizens on a wide range of current issues in the Discussion Forum.

Transcending Organisational Boundaries

To realise the vision of a Networked Government, the public sector must evolve into a knowledge enterprise where collective knowledge is harnessed effectively to add greater value to customers and enhance service quality. Thus, it is necessary to manage intellectual assets and enhance ICT capabilities. The *Knowledge Management Experimentation Programme* was a first step towards catalysing knowledge management in the public sector. Moving forward, programmes will be developed to ensure a common understanding about Knowledge Enterprise and define specific knowledge-based initiatives.

Common infrastructure and common IT standards across the public sector are also necessary. In recent years, Singapore has developed the *Public Sector Infrastructure [Psi]* that allows speedy deployment of large-scale, sector-wide e-services. *Service-Wide Technical Architecture [SWTA]*, a set of principles, standards and guidelines, have been prescribed to ensure interoperability of ICT systems across the public sector. Continued improvements in such service-wide ICT standards and architectures will help to build on existing ICT management capabilities and strengthen ICT management fundamentals within the public sector. This in turn helps to promote cross-agency collaboration and optimise resource allocation.

The development of an *IT Portfolio Management (ITPM)* framework has just been completed. It provides agencies with a set of management tools to evaluate, prioritise,

select and manage new and existing ICT projects systematically. This will help to ensure that projects are aligned to the agencies' strategic objectives and achieve a balance between risks and returns.

In addition, the development of the *Singapore Government Metadata Standards (SGMS)* was launched in June this year. The aim is to enhance users' navigation and search experiences on all Government websites by implementing a service-wide metadata and taxonomy standard.

In a world of increasing security risks, it is important to have a co-ordinated, proactive and preventive approach to enhance the Government's overall ICT security preparedness for any contingency. Towards this end, on-going efforts are made to enhance the infrastructure resiliency of the public sector.

Strengthening Infocomm Capabilities and Exporting e-Government Expertise

The Singapore Government is a sophisticated user of ICT and leads the nation in exploiting the technology for strategic and economic gains. Thus, the Government plays a pivotal role in realising the potential of many emerging technologies. The implementation of e-Government plans over the last two decades has given many opportunities for the Infocomm industry to participate in e-Government initiatives. As a result, Singapore's Infocomm companies have developed capabilities in delivering quality work for e-Government projects. Today, the Singapore Government has collaborated with these companies and established close working relationships with other nations on e-Government, by exporting expertise in e-Government planning and implementation.

Scaling Greater Heights

In the last 20 years, the Singapore public sector has evolved from using Info-Communications Technology as a mere productivity tool to leveraging it to deliver integrated e-services to individuals and businesses.

More than 1,600 government services are now available online. The next step is to offer higher value through the delivery of integrated e-services. As of end March 2004, selected agencies within the public sector have collaborated in the implementation of five of such e-services. The challenge for the public sector now is to look beyond internal partnership among public agencies, and find new ways to further delight its customers and connect the citizens.

Public-Private Cross Boundary Integration

Moving forward, the Singapore Government intend to collaborate with the private sector in rolling out integrated e-services that will provide a seamless online experience and offer higher added value to our customers and citizens. This can take the form of bundling, front-end integration or value-chain integration.

Bundling of government e-services with private sector offerings is the basic level of collaboration using hyperlinks to facilitate access to related e-services.

On the next level of integrated e-services, which involves the sharing/exchange of data with the private sector, the customer will just need to provide details with a single application and the information will be automatically routed to relevant organisations.

The most sophisticated form of delivering integrated e-services will call for the optimisation of the entire value chain of e-services by achieving end-to-end integration with the private sector.

To get to this level of e-services integration, we will need to review the entire value chain of e-services delivery with relevant private sector organisations to look into how various processes along the entire value chain can be streamlined or integrated, in order to deliver e-services in its most comprehensive and logical manner. Customer-centricity will be the primary consideration in this initiative.

In collaborating with the private sector to deliver such integrated e-services, some governance issues need to be addressed:

- Compliance with Public Sector Policies - the ownership of the website or e-service will be a fundamental criterion for deciding if the website/e-service is subject to our Government policies
- Impartiality and Transparency - the inclusion or equal opportunity for all private sector organisations in the same category in a public-private partnership
- Data Protection - the adherence to data protection policies and expressed consent from the customer in sharing/exchange of data across the sectors

Conclusion

As the Singapore e-Government seeks to push the envelope of service transformation, mere integration across agencies within the public sector will no longer be sufficient. In creating a truly Networked Government, it is important to collaborate with the private sector. The goal is to create a Networked Economy, in which information and decisions flow across agencies and organisations efficiently to offer timely and effective e-services to customers and citizens. This is line with the vision of a Connected Singapore¹ - technologically advanced in the exploitation of Infocomm by the Government, business communities and society.

¹ Connected Singapore is the blueprint for our national Infocomm development. Please visit the IDA website (www.ida.gov.sg) for details.

Annex A: Singapore e-Government - Making Waves Internationally²

May 2004

Singapore Clinches 2nd Position for 5th Consecutive Year in Accenture 2004 e-Government Leadership Study.

September 2003

Singapore is Top e-Government Country Among 198 Nations by Center for Public Policy, Brown University.

February 2003

Singapore Tops e-Government Category in World Economic Forum's Global Information Technology Report for Government Readiness.

October 2003

Singapore's eCitizen Portal Wins Prestigious Stockholm Challenge Award 2003.

July 2002

Singapore Placed 11th out of 60 Countries in the Economist Intelligence Unit 2002 e-Readiness Rankings.

June 2002

Singapore Recognised for Excellence and Innovation in e-Government at e-Gov 2002 Show in Washington DC, USA and Honoured with Explorer Award.

January 2002

Singapore's Public Sector Infrastructure Wins Prestigious Intelligent 20 Award.

October 2000

eCitizen Centre Wins Bronze in Commonwealth Association of Public Administration and Management's International Innovation Award.

² Visit the Singapore e-Government website (www.egov.gov.sg) for an updated list of awards and accolades.