# E-GOVERNMENT MASTERPLAN 201-2015 COLLABORATIVE GOVERNMENT

The emergence of new infocomm technologies calls for fundamental rethinking and transformational shifts in the way we look at e-government. Governments must take on the roles of a facilitator and enabler – to collaborate with the public, private and people sectors in creating new solutions, new businesses, and new wealth.

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## PREFACE

We live in exciting times.

The rapid emergence and advancement of infocomm technologies have pushed new boundaries and opened up new opportunities. Technologies have also become very much part of Singaporeans' daily lives and will continue to shape the way we live, work, play and socialise.

The digital revolution will facilitate new partnership models with businesses, non-governmental organisations, communities and individuals at multiple levels, beyond basic service delivery and internal integration. The Government must continue to leverage and adapt to the changes in technologies and demographics to provide the best possible public service to our people and customers.

The eGov2015 Masterplan opens a new chapter in Singapore's e-government journey. We hope our vision of a collaborative government that co-creates and connects with our people, will bring Singapore to the next frontier of e-government.

## THREE DECADES OF E-GOVERNMENT TRANSFORMATION

For more than 30 years now, the Government has tapped advances in infocomm technologies (or ICT) to transform public administration and service delivery. This has in many ways benefited citizens and businesses, providing higher levels of convenience and cost savings through greater productivity and effectiveness in service delivery.

From the Civil Service Computerisation Programme in the 80s, to the e-Government Action Plan I and II from 2000 to 2006, to the iGov2010 Masterplan from 2006 to 2010, continuing digitalisation efforts have made Singapore a pioneer in e-government development and innovation.

## iGov2010

Under the iGov2010 Masterplan, government agencies have successfully rolled out new services and tapped on new channels to improve both reach and service delivery.

Notable examples include improving citizens' experience of finding map locations and driving directions through OneMap – an integrated map system; improving the channel of communication between citizens and the Government through REACH – the official government e-engagement platform; and making Singapore a more convenient location to do business through a single identification number format known as the Unique Entity Number. Internal government processes have also improved with the deployment of more than 50 shared systems and services like the Alliance for Corporate Excellence, a shared human resource, finance and procurement system for 11 government agencies, leading to higher efficiency.

This has helped our people embrace e-government, with almost 9 in 10 citizens expressing satisfaction with the quality of e-services in 2010 and more than 9 in 10 citizens recommending others to transact with the Government through e-services.

## Based on the 2010 e-Government Customer Perception Survey,

87% of the people are satisfied with the quality of government's e-services.

93% of the people will recommend others to transact with the government through e-services

## e-Government International Recognition

Singapore is recognised as an e-government leader by international benchmarking agencies.

- Singapore topped the Waseda University World e-Government Ranking for three consecutive years from 2009 to 2011.
- We are consistently ranked amongst the top 3 in the e-government indices of the World Economic Forum Global IT Report from 2009 to 2011. We were ranked 2nd for overall Networked Readiness in 2010 and 2011 respectively.
- In the United Nations e-Government Survey 2010 of 192 countries, Singapore was ranked 11th for the e-Government Development Index and 9th for the e-Participation Index. Singapore also received the UN Special Award for Outstanding Progress among the top 20 in 2010.

## **A NEW ERA**

The Singapore e-Government Masterplan 2011 – 2015 (or eGov2015) ushers in a new era, where the Government aims to shift from a *"government-to-you"* approach to a *"government-with-you"* approach in our delivery of government electronic services (or e-services). Expanding integration from within the Government to beyond the Government, the eGov2015 Masterplan will realise the vision of a **Collaborative Government**.

The goal is to facilitate more co-creation and interaction between the Government, the people and the private sector to bring about greater value creation for Singapore and our people.

Evolving with changing technologies and social trends, the eGov2015 Masterplan will enable the Singapore Government to be better prepared to meet the challenges ahead and bring us to the next e-government frontier.



eGov2015 is about building an interactive environment where the Government, the private sector and the people work together seamlessly, through the enabling power of infocomm technologies.

## WHAT SHAPES eGov2015?

Technology will continue to evolve at an accelerated pace. At the same time, the environment in which the Government operates will become increasingly complex with new emerging external forces. eGov2015 recognises three major trends facing the Government:

### Advancements in ICT, allowing for unprecedented connectivity

The advent of Web 2.0 and the widespread use of social networking tools such as Facebook and YouTube have driven online sharing and collaboration to new heights. How can we tap on these platforms to reach out to our people, and share information and ideas?

#### Increasingly multi-faceted and dynamic issues

Operating in this new complex environment will require public officers to work together across agencies, as well as to reach out to both citizens and the private sector to gain greater insights and knowledge. How can we facilitate greater collaboration both within and beyond the public sector to bring about more effective decision-making and deliver better outcomes?

### Better educated and informed populace

There is a growing pool of Gen-Y and Digital Natives who are keen to voice their views, and participate in the development of policies that affect them. How can we effectively tap on this collective voice and intelligence of the crowd to improve our service delivery and policy making processes?

These emerging trends create both an impetus and an opportunity for the Government to focus on mass collaboration, both within the public sector, and also with the people and the private sectors.

By harnessing the resources, expertise and collective knowledge of individuals and communities, the Government can create greater value for our people and businesses.



Today, citizens and businesses can access more than 1,600 online services and more than 300 mobile services provided by the Government.

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## **OUR VISION**

## "To be a Collaborative Government that Co-creates and Connects with Our People"

eGov2015 is about building an interactive environment where the Government, the private sector and the people work together seamlessly, through the enabling power of infocomm technologies.

The vision of a *Collaborative Government* will be achieved through three strategic thrusts, namely:

- Co-creating For Greater Value
- Connecting For Active Participation
- Catalysing Whole-of-Government Transformation

### For Greater Value

Customers are empowered to co-create new e-services with the government **For Active Participation** 

Citizens are informed & involved to engage government on national policies

## CATALYSING

COLLABORATIVE GOVERNMENT

### Whole-Of-Government Transformation

Whole-of-government collaboration is enhanced through innovative and sustainable technologies

## **OUR STRATEGIC THRUSTS**

## **CO-CREATING FOR GREATER VALUE**

Today, citizens and businesses can access more than 1,600 online services and more than 300 mobile services provided by the Government. Besides continuing to improve the richness and quality of public services, the focus of eGov2015 will be to empower citizens and businesses to co-create new e-services with the Government.

## **Government as a Service Provider**

Recognising the Internet as an important channel for the direct delivery of information and services to the public, the Government will continue to improve the information and services delivered through government websites. Our Website Transformation Strategy seeks to provide customers with a seamless and integrated web experience across all government websites, while developing standards, common tools and capabilities to support government agencies in improving their websites.

Riding on the high smartphone penetration in Singapore, the Government will also be driving the next phase of Mobile Government (mGov) programme to deploy more feature-rich and innovative mobile services. Customers can look forward to an enhanced mobile experience while accessing information from, and transacting with, the Government on the move.

## **Exploring New Delivery Channels**

The progress in mobile technologies and the high mobile penetration today in Singapore offer unprecedented opportunities for the Government to provide featurerich and innovative mobile services (or m-services).

The mGov programme will facilitate the exchange of information and ideas between government agencies and mobile developers, and catalyse the development of new feature-rich m-services. A new one-stop government mobile site (mGov@SG) also facilitates discovery of, and access to, various m-services offered by different government agencies.

As technologies evolve, other service delivery platforms will also be explored for easier access by citizens and businesses. With the impending roll-out of the Next Generation Nationwide Broadband Network, one possible channel is the use of interactive Internet Protocol Television to serve and connect with citizens.

With the desire to improve e-service delivery, the Government is always exploring the creation of useful e-services, including personalised e-services offered at the whole-of-government level. To this end, the Government will be deploying a one-stop trusted platform called OneInbox for the delivery of government electronic correspondences to individuals and subsequently, to businesses.

### **Developing Personalised Services**

OneInbox will allow customers to receive electronic correspondences from the Government, in place of hardcopy letters. It is expected to bring greater convenience to the customers, by providing onestop access to all correspondences from government agencies. To those who travel frequently, and for Singaporeans living abroad, OneInbox also allows them to access government correspondences instantly, even when they are not in Singapore.

This platform will subsequently be extended to the business community, such that businesses can also choose to receive government correspondences electronically via a single and secure platform. Businesses can also look forward to new initiatives under the eGov2015 Masterplan. Today, Singaporeans are able to access government services online using their national identity card number and a password. We call this single access system SingPass. To differentiate between business and citizen-related transactions, the Government will be introducing a separate access system for business users to transact with the Government, complementing the existing SingPass.

## **Government as a Platform Provider**

With the rising popularity of social networking, Government can more easily tap on the collective intelligence of the crowd. As such, the Government can go beyond its traditional role as a service provider, to also serve as a platform provider to encourage greater co-creation of new e-services. For instance, members of the public will be able to readily look for and download publicly available government data from data.gov.sg, which can be used for research purposes, as well as to encourage the development of innovative and impactful applications.

#### **Providing Co-Creation Platforms**

The data.gov.sg platform will help to provide easy discovery of, and access to, available government datasets. More than 3,000 government datasets will be made available at launch, and more datasets will be progressively made available. Users can make use of the data for research and analysis, or to deploy innovative products and services.

Other platforms to facilitate co-creation will be explored over the next 5 years.

The focus will be on linking up citizens who are keen to provide views on the formulation of public policies with government agencies.

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## CONNECTING FOR ACTIVE PARTICIPATION

Today, more and more Singaporeans are logged onto the Internet, with faster broadband connections and increased smartphone usage. Singaporeans are also increasingly going online to express their personal views on many issues. Popular social media platforms include Facebook, Twitter, YouTube as well as blogs and discussion forums.

The eGov2015 Masterplan will build on the iGov2010 efforts in raising awareness and engaging the citizens in the policy-making process. The Government aims to widen and deepen the e-engagement efforts and experiment with new ways to tap on the wisdom and resources of citizens.

## **Consulting the Public**

Public consultation is a critical tool that government agencies can leverage on when shaping public policies, or developing new initiatives and schemes.

Since the formation of the Feedback Unit in 1985, the Government has consulted extensively with the public. In 2010 alone, there was an average of two to four public consultation exercises launched each month. Under eGov2015, the focus will continue to be on raising the awareness of Government's e-engagement efforts by keeping citizens informed and linking up citizens who are keen to provide views on the formulation of public policies with government agencies.

The REACH (or Reaching Everyone for Active Citizenry@Home) portal will be further enhanced as the official channel for news and updates on all government consultation exercises. New features, such as alerts on new e-consultation exercises for citizens via social media channels and mobile applications will be introduced. To encourage participation, simpler ways for citizens to provide feedback (e.g. via quick polls) will also be considered. Guidance to government agencies will also be provided to facilitate the adoption of best practices in e-consultation exercises.



The eGov2015 will build on the iGov2010 efforts in raising awareness and will seek to explore new means of connecting with the citizens.

#### Social Media in Singapore

Facilitated by faster broadband connections, increasing popularity of smartphones and more affordable data plans, more Singaporeans are now logged onto the Internet. The Nielsen Media Index, published by Nielsen in Oct 2009, found that three in five Singaporeans are logging onto the Internet every day. On average, Singapore households were found to have more than one broadband subscription each<sup>1</sup>. More than six million subscriptions to wireless broadband were also recorded in Sep 2010<sup>2</sup>.

In particular, social media has grown significantly more popular in the past two years. A Dec 2009 survey by Singapore Polytechnic found that 64% of local vouths visited Facebook daily, while 35% visited YouTube daily. Another Nielsen study, reported in Feb 2010, found that over half (52%) of the Singapore population were participating in at least one social media website, with the most popular being Facebook (42%), followed by YouTube (35%). Today there are an estimated 2.2 million Facebook user accounts in Singapore, and Facebook has remained the most visited online site by Singaporeans since Aug 2009.

<sup>1</sup> IDA Statistics on Telecom Services for 2010 – Household Broadband Penetration Rate <sup>2</sup> IDA Statistics on Telecom Services for 2010 – Total Wireless Broadband Subscription

## Inviting Ideas from the Public

Beyond public consultation exercises, the Government will also look at new ways of engaging citizens and tapping on their views and ideas. New platforms for engaging citizens, such as crowdsourcing tools, will be explored for inviting ideas and initiatives that will contribute towards a better Singapore. Crowdsourcing tools could be used to engage citizens in areas such as enhancing community relations and improving neighbourhood amenities.



At the heart of a Collaborative Government is an effective and innovative workforce operating in an environment that supports inter-agency collaboration empowered by ICT.

## CATALYSING WHOLE-OF-GOVERNMENT TRANSFORMATION

At the heart of a Collaborative Government is an effective and innovative workforce operating in an environment that supports inter-agency collaboration empowered by ICT. To achieve this, the Government will build on the foundation established by past e-government efforts to transform the public sector ICT infrastructure, services and capabilities.

## **Transforming Public Sector Infrastructure and Services**

To keep pace with new technological developments, the Singapore Government will design the next generation whole-of-government infrastructure to enhance crossagency collaboration. This will harness Singapore's high-speed Next Generation Nationwide Broadband Network, and leverage cloud computing and energy-efficient technologies.

The Government will invest in a government private cloud (or G-Cloud) to provide a resilient and secure ICT environment, where government agencies may purchase computing resources on demand and pay based on actual usage, allowing them to flexibly scale up or downsize operations based on changing needs. This will change the way government agencies design, develop and deploy applications and services in the future.

## **Cloud Computing for Government**

G-Cloud will adopt a two-phase approach, starting with commercial cloud solutions having little or no customisation, followed by upgrading to a full private cloud. G-Cloud will progressively replace and expand the capacity of the Government's current shared hosting environment.

It is expected that the time and cost for the development and deployment of government agencies' applications and pilot innovations will be significantly reduced with G-Cloud.

To ensure continued alignment of ICT to business goals and strategies, a central Singapore Government Enterprise Architecture repository will be established to provide an aggregated view of government data, applications and technologies. This will help identify potential new shared services and possible cross-agency integration, while increasing data sharing opportunities.

In transforming the Government's ICT infrastructure, the Government recognises that ICT is a large energy consumer and one of the contributors of carbon emissions. To signal the Singapore Government's commitment towards international sustainable development goals<sup>3</sup>, government agencies are encouraged to incorporate sustainability planning and adopt sustainable ICT practices.

<sup>&</sup>lt;sup>3</sup> Singapore, in the Sustainable Singapore Blueprint, has pledged to achieve a 35% improvement in energy efficiency (from 2005 level) by 2030 to reduce carbon emissions through sustainable use of limited resources.

## **Transforming Public Sector Workplace and Capabilities**

The public sector workplace will also be transformed to promote closer collaboration and improve productivity. Public officers will be empowered to proactively share knowledge, work smarter and faster together, across agencies, to serve our customers better.

A key capability that the Government will develop is in business analytics. With the ever growing volume of digital data collected through computerisation over the years, equipping public officers with the right tools and competencies in business analytics will allow them to generate intelligent insights to enhance agencies' performance and improve service delivery and policy formulation.

To support an increasingly infocomm-savvy workforce, a blueprint for the future ICT workplace will be developed to spearhead government-wide adoption of innovative workplace technologies, analytics-enabled processes and automated solutions.

## **Smarter Decision Making with Business Analytics**

The Government Business Analytics programme will deploy business analytics shared services such as common tools, and consultancy services. This will allow government agencies to quickly deploy agency-specific business analytics applications, when the need arises.

With these enhanced capabilities, public officers are able to analyse the wealth of government data through greater use of visualisation, statistical techniques, modelling, simulation, and predictive analytics tools. Agencies can also improve processes, and identify gaps and opportunities to achieve greater resource optimisation and operational efficiency.







## In today's increasingly interconnected world, greater collaboration is key.

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Ministry of Information, Communications and the Arts



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