



**Western Cape
Government**

e-Government Strategy 2012-2019

Version 1.0 as of 1 September 2012

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Executive Summary

The only sustainable way to beat poverty is by creating opportunities for growth and jobs. This insight informs our strategy, which is this: to shift resources and energy into the creation of growth and job opportunities without compromising our ability to deliver better outcomes in health, education, and social development, and while refocusing our efforts to promote social inclusion with a more pragmatic, more measurable and less ideological approach.

Helen Zille, Premier of the Western Cape¹

Achieving this strategy of the Western Cape Government (WCG) largely depends of the effective use of modern information and communication technologies (ICT). Recognising this, the WCG has planned to extensively invest in fast and affordable broadband infrastructure in order to link over 4,000 government facilities in the province to one another and to business, civil society and citizens. It is envisaged that 70% of government facilities and every school in the province will be connected to the broadband network by 2014 and that at least one public ICT access facility in every ward will have this fast connection. By 2020, the WCG aims to have connected every citizen in the metropolitan area, towns and villages to affordable broadband infrastructure.

These ICT infrastructure development plans require new ideas and approaches regarding government services that are to be delivered to the citizens, businesses and other stakeholders in the Western Cape, which necessitated a need for developing this e-Government Strategy 2012 -2019. In support to the Western Cape Government's vision of "Delivering an open opportunity society for all" and the Provincial Strategic Objectives (PSOs) this strategy hopes to refocus the efforts of the Western Cape Government on how it improves its internal abilities by using ICT as an enabler and how it renders its services in a manner that puts citizens and other users first. In that regard, the key objectives of this e-government strategy are:

- Using ICT to foster efficiencies in the provincial government, thus freeing up resources by doing the work of government efficiently.
- Transforming provincial government services for the benefit of citizens, businesses and those charged with delivering services at the coal-face (such as doctors, teachers, nurses and social workers). These areas are not just focus areas of ICT but need to be focus areas of each provincial department.

In this document, the e-Government strategy is described in the following main sections:

Introduction brings the background against which this strategy is devised and describes the main elements of this strategy. It further gives the past and current situation analysis, which led to creation of e-government vision. The envisaged benefits for the users and government employs are also given in this section. This section ends by describing enablers of this e-government strategy that require appropriate management.

The Strategy section clarifies various e-government definitions, explains the forms of e-government, brings a set of guiding principles, states planned outcomes and the way of achieving them. Monitoring and evaluation of the development and deployment of e-government agenda in the Western Cape is a legal prerequisite and (together with benchmarking) also useful practice that will help to determine the success of the WCG in serving its citizens and other stakeholders. Identified and possible challenges regarding

¹ State of the Province Address, Western Cape Provincial Legislature, February 17 2012

implementation of this strategy are also taken into account and are here described through success and failure factors.

General implementation model for this e-government strategy and the belonging methodology guidelines are given in section **Implementation model and methodology**. The implementation of this strategy should be done through concrete implementation or action plans that will be driven by the line-function Departments and supported by the Centre for e-Innovation (Cel). Implementation of this strategy is tightly linked to achieving three main strategic outcomes: E-Services Transformation, Enhanced E-Governance and Digitally Enabled Communities. These will be achieved through various projects addressing specific strategic deliverable described in this section.

The set of Annexures is appended to this strategy document in order to give more details regarding some important terms and models used in this strategy.

Acknowledgements

This strategy document is based on the e-government “best practice” reported in the relevant literature and on input of a number of relevant professionals from the Centre for e-Innovation (Cel), other departments within the Western Cape Government (WCG) as well as external experts. Based on that input, this version of the WCG E-Government Strategy 2012 - 2019 is compiled by the following Cel team:

Hilton Arendse, Ghalieb Mohamed, Aslam Levy, Thomas Bevan, Clayton Wakeford, Emelda de Bruyn, Augi de Freitas, Joy-Anne Jean, Fidel Mbhele, Vuyo Klaas and numerous other contributors from workshops within Cel.

Consultation with: CITCOM and DITCOM

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Introduction

This section of the WCG e-government Strategy 2012 -2019 describes the background and situational analysis against which this strategy was developed. It further brings the e-government vision and the planned benefits that are to be achieved by effectively implementing this strategy.

1.1 Background

Traditional government processes are gradually being replaced by new ones designed to make government operate as a single unit serving the needs of citizens. This has been the result of a realisation that while the internal operations of government define departments and spheres of government this division is often invisible to the citizen that requires services. The move to a singular view and presentation of government services is supported, in part by the capabilities of information and communication technologies (ICT). ICT provide opportunities of simplifying internal government processes and thereby increasing efficiency and effectiveness. The technologies also increase and extend the reach of desired services beyond traditional delivery mechanisms.

Through electronic government (e-government) the use of information and communication technologies, and more specifically Internet-based solutions, enables governments to enhance the access to and delivery of government information and services to citizens, business partners, employees, and government entities. In countries where e-government has reached a high Level of maturity² it have improved relationships between government and the public by making interaction with citizens smoother, easier, and more efficient. This is where the Western Cape Government (WCG) aspires to be.

ICT are essential tools in the implementation of national development plans in many countries, supporting their efforts to secure the welfare and prosperity of their citizens. However, while ICT have had a profound effect on most socio-economic, political and cultural aspects of society, the prevalence of digital divisions worldwide hinders the application of ICT capabilities in areas vital for development, such as agriculture, health and education, thus impeding progress towards the achievement of an inclusive society. This is an area that this strategy will also attempt to tackle.

The premise and offering of e-government is that government will be made more effective and efficient in its internal operations and that services can be delivered in an innovative manner, thus overcoming issues of physical reach.

This strategy hopes to refocus the efforts of the Western Cape Government in how it improves its internal abilities by using ICT as an enabler and how it renders its services in a manner that puts citizens first. In that regard, the key aims of this strategy are:

- Creating efficiencies in the provincial government: freeing up resources by doing the work of government efficiently.

² E-Government Maturity model is given in Appendix D

- Transforming provincial government services for the benefit of citizens, businesses and those charged with delivering services at the “coal-face” such as doctors, teachers, nurses and social workers. These areas are not just focus areas of e-government strategy but need to be focus areas of each Provincial Department.

By doing so, this strategy supports realisation of the Provincial Strategic Objectives (PSOs³) and the WCG vision “*Delivering an open opportunity society for all*”.

1.2 Elements of this e-government strategy

In general, this Western Cape Government e-government strategy 2012 – 2019 addresses the following:

- Situational analysis that includes a brief history of e-government in the Province and appraisal of the current situation;
- The definition of e-government that includes key areas to be addressed and identification of stakeholders;
- A vision that is easily understood and briefly expresses the WCG's concept of and plans for e-government;
- Specific goals and objectives, tightly linked to the Provincial Strategic Objectives, that can be monitored and measured;
- Guidelines for policies necessary to support e-government;
- Issues regarding sustainability e-government initiatives in the Western Cape.

All these elements are elaborated in more details in the following sections.

1.3 Situation Analysis

e-Government is by no means a new concept to the Western Cape Government (WCG) as its Cape Gateway, e-government portal, was previously considered to be amongst the best-of-breed and was recognised with an award at the World Summit on Information Society in 2005. Unfortunately this flagship portal has not kept pace with developments in e-government over the past few years due to various factors.

The Cape Gateway portal was developed and viewed through the lens of government. Consequently, the primary function of the portal was to provide information to the citizens. Today the landscape has changed significantly and information alone is no longer the primary need. Many services within the WCG have been digitised and many disparate websites were developed over the past six years. More importantly, citizens have become skilled in interacting with online services and being exposed to the benefits of ICT in their work, business and educational environments.

An internal benchmarking process against the United Nations Development Programme (UNDP) e-government maturity model⁴ resulted in an e-government maturity classification of Level 1 (emerging information services). In order to progress to e-government maturity Levels 2 (enhanced), 3 (transactional) and eventually 4 (connected services) – a standard for best run governments – our e-government services, websites, processes, performance and capabilities have to be unified and transformed to world class standards.

The Western Cape Government ultimately aims to achieve a Level 4 of e-government maturity, according to the UNDP e-Government Maturity Model, through the provision of

³ Refer to Annexure A

⁴ This model is briefly described in Annexure D

electronic services and solutions which are tailor-made to citizens' (and other stakeholders') needs and an environment that enables citizens' active participation in government activities and decision making processes.

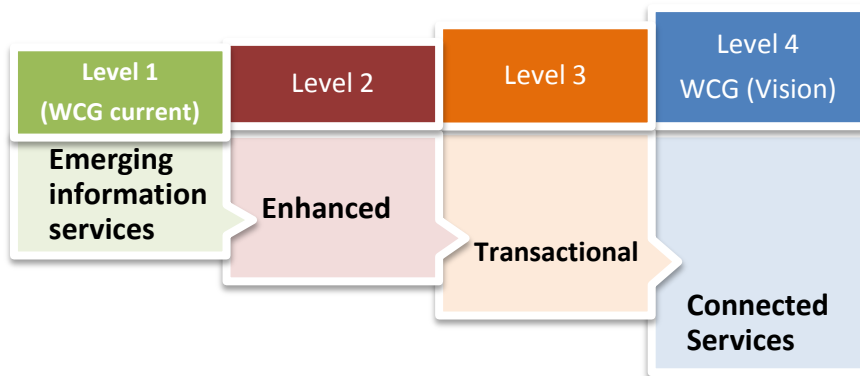


Figure A: Maturity levels of e-government

There are various challenges that may impact on or impede the successful evolution from the Province's current level of e-government maturity to being recognised globally as one of the leaders in e-government. The key internal challenges include obtaining buy-in from officials in all spheres of government, prevention of duplication of websites, the high prevalence of legacy technologies, integration of systems, out-dated and/or conflicting content and the re-engineering of business processes. The major external challenges are our telecommunications/ broadband infrastructure, the levels of general literacy and digital literacy of our citizens and the access to ICT in the rural areas. These and other challenges are also described in section 2.8 "Addressing Challenges and Converting them into Opportunities".

1.4 Current Situation

Even though e-Government, as a transformation tool, has been spoken of in the WCG for some time there has been a lag in implementation. The Western Cape and South Africa, in particular, have regressed significantly over the past five years when compared to other developing countries and cities. The 2012 UNDP Report on e-Government progress, readiness and maturity around the world has shown that South Africa is slipping in the rankings from position 58 held in 2005 to position 101 in 2012. This regression implies government as a whole has not beneficially appropriated ICT to improve how it does things internally and how it delivers services to its citizens. A further implication is that there are no coordinated and shared plans nor is there a common approach to using ICT in transforming government.

The transformation of government through the use of ICT lags behind and is seen in the following ways in the WCG:

- Government processes are generally not designed with the citizen in mind;
- Some of the systems have been designed as standalone systems making the prospect of sharing data between applications difficult;

- Most of the technology investment has been on existing legacy systems which no longer meet the needs of public servants or citizens;
- Efficiencies have been difficult to demonstrate with current investments in ICT;
- Most of the internal processes are still paper based and so are interactions and citizens;
- The portal and numerous other channels provide no or limited transacting capability;
- The front-office often receives less support than the internally focuses parts of government;
- The private sector has improved how it renders services electronically and citizens increasingly expect the same efficiencies from government – which often cannot be met;

1.5 The e-Government Vision

Modern ICT alone cannot transform government but transformation also cannot happen without it. The vision of this strategy is achieving technology enabled change in the WCG – focusing on how services are rendered. In that regard, the vision of e-government in Western Cape entails the following strategic goals:

- Providing seamless services to citizens whereby they interact with government without really knowing which government department or sphere of government they are interacting with;
- The provision of electronic services and solutions which are tailor-made to citizens' needs. In this regard, services requirements that cut across different government departments should be provided in the form of packaged services;
- Improving transparency and accountability of government, thus enabling citizens to actively participate in government activities and decision making processes through various forms of electronic and digital media;
- Capacitating government through appropriate technologies, skills and processes that will result in the reduction of the cost of rendering services to citizens as well as alleviating the pressure on understaffed government departments;
- Creating an enabling environment whereby the majority of citizens have easy access to ICT and the Internet; are suitably skilled to engage government through its channels and have access to low cost broadband;

1.6 Envisaged general benefits of e-government

The e-government “best practice” from both developed and developing countries reports on numerous benefits achieved by use of ICT by governments. According to OECD⁵ benefits from e-government projects can be grouped in the following categories: (i) Direct financial benefits, (ii) Direct non-financial benefits, (iii) Programme benefits and (iv) Good governance benefit (Figure B).

Type of Benefit \ Beneficiaries	Business	Citizens	Government
Direct Financial Benefits	Reducing Burden: administrative simplification	Reducing Burden: administrative simplification	Realising Efficiency Savings: freeing resources for public and private innovation
Direct Non-financial Benefits	Meeting Public Expectations: improving customer satisfaction and equity; meeting security and privacy concerns ; transparency and choice		
Programme Benefits (Direct & Indirect)	Improving Policy Effectiveness: Achieving overall policy and programme outcomes		
Good Governance Benefits (Indirect for society)	Supporting Growth and Legitimacy: Good governance contributes to a sound business environment and democratic legitimacy; promotion of the information economy; supporting public sector reform; creating business opportunities		

Figure B: Benefits from effective implementation of e-government (source OECD, 2005)

It is, based on the above, realistic to expect the following benefits coming from effective deployment of this e-government strategy:

- efficiency gains mean capacity could be freed up from back-office to front-office operations, which also translates in
- achieving value for money, i.e. more efficient services;
- citizens can feel more connected and engaged with their government;
- the Western Cape Government's employees will have better tools to undertake their jobs and in so doing improve the services they render;
- a leaner public service means less wastage, and less of an impact on the environment;
- establishing connected service delivery;
- enhancing public sector capability;

In order for users and providers of WCG e-government services to achieve here envisaged benefits, these services should have the following characteristics:

⁵ OECD (2005) eGovernment Measurement Agenda, eGovernment Economics Project (eGEP) Second Workshop, 1 July 2005, Brussels

- to be easy to locate;
- to be easy to use;
- to be easy to understand;
- to allow quick interacting with government;
- to allow straightforward interacting with government;
- to have appropriate channels for delivery;
- “*only once*” provision of information (avoiding duplication) – store once and publish to many different channels;
- to guarantee privacy and security;
- to allow for electronically managed relations with stakeholders;
- to provide connected/integrated services;

The best e-government practice also shows that well-devised strategy provides building blocks for re-use to all government tiers. As this holds equally for centralised and decentralised governments, this e-government strategy will be particularly useful to the local governments in the Western Cape.

The Strategy

This section represents the core of this e-strategy document. It begins with working definitions (based in commonly accepted definitions) of e-government as well as similar terms of e-governance and m-government. This is followed by brief explanations of forms of e-government, which also pinpoint main stakeholders: citizens, businesses, other tiers of government (local and national) and the WCG employees. This e-government strategy is based on the South African ICT House of Values principles, which was the foundation for the sets of general and delivery principles depicted in this section. The section also depicts the main outcomes and objectives of this e-government strategy with given responsibilities and the deadlines. This section ends with the set of monitoring, evaluation and benchmarking guidelines, followed by brief description of potential challenges and the need to convert them into opportunities wherever possible.

1.7 E-Government definition and stakeholders

To avoid a frequent confusion of terms used in the context of e-government, here are given definitions of the concepts used in this strategic document: *e-government*, *e-governance* and *m-government*.

1.7.1 E-Government

e-Government is the sustainable use of ICT to enable improved information and service delivery as well as encourage citizen participation in decision making. This term is often used interchangeably with similar notion of e-governance (given below).

1.7.2 E-Governance

Governance is the societal synthesis of politics, policies, and programs. In that regard, e-governance is defined as the application of ICT to the system of governance to ensure a wider participation and deeper involvement of citizens, institutions, non-government and non-profit organisations (NGOs and NPOs) as well as private firms in the decision making process.

1.7.3 M-Government

"M-Government" is the extension of e-government to mobile platforms, such as laptops, tablet's and other forms of mobile devices. The main advantage of the mobile platform is its ubiquity, that is, the potential availability of services anytime, anywhere. Due to its mobile characteristic, m-government can be particularly useful for emergency situations, such as in the provision of disaster warnings or dissemination of information vital for local communities. This bears a particular significance for the Western Cape (and South Africa) since the penetration of the cellular phones is much higher than that of the personal computers.

1.7.4 Working definitions

E- Government

In this e-government strategy document the term **e-government** is used inclusively and incorporates use of ICT to enable improved information and service delivery as well as encourage participation of citizens, institutions, non-government and non-profit organisations (NGOs and NPOs) as well as private firms in the decision making process.

M-Government

M-government definition in this document is used as it is given above.

1.8 Forms of e-government

The definitions of forms of e-government are adopted as follows:

1.8.1 G2G: Government to Government

This form of e-government is concerned with the interaction between:

- different levels of government (Provincial, Local, National),
- collaboration between Departments and Agencies at the Provincial level;

These ICT-enabled linkages across the levels and spheres of governments are aimed at both efficiency (better value for many) and efficacy (faster, timely and accurate) delivery of government services.

1.8.2 G2C: Government to Citizen

Government to citizen indicates the interaction between government and the citizen. This interaction could be in consuming public services or in communicating and interacting with government.

1.8.3 G2B: Government to Business

This form of e-government is concerned with supporting business activities. Although it is important to support big businesses, which are significantly contributing to the Western Cape economy, the support for emerging and existing small and medium businesses is vital part of this e-government strategy.

1.8.4 G2E: Government to Employee

This form of e-government refers to the relationship between WC government and its employees and is considered as an effective way to *inter alia* bring employees together and to promote knowledge sharing among them.

For more detailed discussion regarding the forms of e-government, refer to Annexure B.

1.9 Set of Guiding Principles

This e-government strategy is based on the South African ICT House of Values:

- An appropriate government architecture;
- Secure service transactions;
- Interoperability of delivery platform;
- Reducing (and eventually eliminating) duplication of applications and services;
- Leverage economies of scale by procuring ICT products and services for government centrally;
- Achieving Digital Inclusion- WCG needs to empower the previously disadvantaged by providing them with access to economic opportunities;

- Citizen convenience of using e-government services- provide citizens with cost effective way of accessing government services via different channels- anywhere, anytime and anyhow;
- Lower cost and increased productivity within government departments and agencies;

These principles are here translated into the sets of general and delivery principles.

1.9.1 General principles

- Equitability, i.e. Citizen-oriented e-government services (care for everyone);
- Meeting stakeholders' needs (e.g. citizens, businesses, civil society organisation, education, health service providers);
- Effectiveness (result-oriented);
- Flexibility (easy adopting to the changed needs);
- Honesty;
- Transparency through "open data" policy and practice;
- Accountability;
- Cultural transformation/harmonisation (e.g. horizontal collaboration and cooperation between government layers and departments resulting in the development of coherent common views, understanding and approaches);
- Promoting trust within the government structures and between government and communities (trust is the main ingredient in developing Social Capital and Social Cohesion);
- Care for environment ("green" e-Government)

1.9.2 Delivery principles

The delivery principles are in this document presented through: (i) resource driven versus needs driven, (ii) organisational principles, (iii) multi-channel delivery, (iv) integration of services, (v) simplification of service organisation .

1.9.2.1 Resources driven vs. Needs driven e-government development

Having in mind limited government resources and the versatile needs of the dual society (and economy) in the Western Cape, this e-government strategy adopts a balanced approach between the resource-driven and needs-driven paradigms. This balance should be particularly addressed in the implementation plan of this strategy by considering the Provincial developmental priorities and the resources allocated.

1.9.2.2 Organizational principles

This principle addresses a separation between the **front** and **back** (technology support) offices. This separation requires changing the underlying business processes, decision-making structures, and procedures, by using ICT to raise the overall efficiency and effectiveness of both offices. At the same time, this separation of task must bring a mutual outcome: better delivery of government electronic services.

1.9.2.3 Multi- channel delivery

The multi-channel delivery of e-government services is envisaged as the way of serving the Western Cape stakeholders due to the diverse needs and abilities of accessing and using these services. Thus, the delivery of e-government services should be done through:

- "One-stop-shop" that is optimised for mobile platform
- Mobile portal that includes all kind of mobile devices in nowadays and future prevailing use (e.g. mobile phones with and without 3G or WiFi capabilities, tablet computers, laptops). It is also envisaged by this strategy that these two portal will be integrated thus offering high level of e-government services.

- Having in mind current (and most likely future) usage of electronic social media, the use of this type of channel for the government service delivery will be explored and utilised.
- For citizens that currently do not have access to ICT devices (computers or cellular phones) delivery of e-government services will be done through Cape Access Centres, Multi-purpose centres, municipal offices or any other government office - the concept is to be able to offer varied services from anywhere where government has a physical foot-print in the Western Cape.

This approach is believed to increase richness of services as well as personalisation of e-services as much as possible.

1.9.2.4 Integrating e-government services

The government of the Western Cape offers a number of services that can be delivered electronically and it is envisaged that the number in such a way delivered services will increase. In order to deliver e-government services effectively and efficiently these services will be integrated focusing on both: *what* kinds of services are provided and *how* they are provided. This approach to maximising servicing potential of WCG includes:

- *Organisational integration*: This requires inter-departmental and inter-agency integration of autonomous systems and service at the Provincial level.
- *Channel integration*: integration e-government services with other government servicing channels: government offices, access centres or telephonic services (call centres).
- *Servicing integration*: amalgamation of e-government services according to specific user situations such as life events for citizens or discrete business activities for organisations. This approach will produce the integrated website services provided as "one-stop" government virtual office.
- *System integration*: integration of new and legacy systems with a focus on providing an aggregated e-government solution.
- *Policy integration*: as e-government is considered as an enabler (not an end in itself), it needs to be integrated into broader policy and service delivery. Thus, this e-government strategy is ultimately based on the Provincial Strategic Objectives.
- *Skills integration*: In order to achieve effectiveness and efficacy of e-government services, the relevant skills and knowledge possessed by government officials at all levels should be also integrated.

By integrating services across different spheres of governments, channels and departmental/agencies websites, the WCG will offer a range of seamless e-government services without the citizens necessarily knowing what department or what level of government they are dealing with.

In order to achieve this, a numerous databases maintained by various departments (e.g. containing personal details of our citizens) will be integrated. This challenging task will be done by obtaining input ("learning lessons") from relevant stakeholders (e.g. citizens, businesses) based on their experiences while interacting with the physical government offices.

The objective is not simply to deliver services more quickly, but also to strengthen the ideals of citizenship by treating all users of e-government services with respect and dignity. The service rules and standards should be applicable to all - irrespective of a person's social status, occupation, race or gender. This approach will help in increasing respect from the public for the government and its employees.

1.9.2.5 Simplification of service organisation

In order to achieve a full effect from the integration of e-government services, the Cel and the line-function departments will work on the simplification of organisation of the provided service. This will be done through introducing regular, simpler and routine like procedures allowing, for example, to easier find, access and use e-government services. This is particularly important for services delivered to previously disadvantage community in the Western Cape.

It is experience of many countries that administrative simplification and user-friendliness is closely related to the effective use of e-government services. The simplification of organisation of e-government service should be accompanied by administrative simplification in the WCG, which includes reconsidering responsibilities for service delivery and inter-government administrative simplification. The Cel will, in this regard, enable simplification of access through the portal organisation, thus making services more user-friendly.

1.10 E-Government Strategy Outcomes and Objectives

This e-Government strategy aligns with the Provincial Strategic Objectives, in general and the Strategic Objective 12 (Building the Best Run Regional Government), in particular. This PSO12 has the following outcome themes that e-Government strategy will support:

- **Efficient and transparent institutional governance:** The institutional arrangements ensuring that the WCG is managed and controlled in a manner that ensures accountability and instills public confidence through efficient utilisation of resources.
- **Financial management:** Financial planning, budgeting, and expenditure monitoring, evaluation and reporting that will improve allocation processes and application of resources.
- **People management:** Provide a highly capable workforce, create an enabling workplace and develop leadership that enables employee engagement and optimal service delivery.
- **Citizen-centric service delivery:** Implementation of the citizen centric philosophy by continuously improving citizens' experience in their interaction with the Western Cape Government.
- **Management for results:** A strategic management approach focusing on performance in terms of achieving desired outcomes and ultimate impact.

Consequently, the e-government strategic objectives have three key outcomes that are linked directly to the Provincial Strategic Objectives in general and PSO12, in particular:

1.10.1 E-Government Services Transformation

Citizens are becoming skilled in interacting with online services and being exposed to the benefits of ICT in their work, business and educational environments. Therefore, citizens now expect similar "one-stop shopping" and "in-an-instant" service experiences when interacting with government.

1.10.2 Enhanced e-Governance

A high Level 4 of e-governance maturity (e-government integration) is therefore a prerequisite for the successful adoption of e-government services by the citizens. To achieve this outcome, the **WCG will coordinate and facilitate projects over the medium term** with the aim of: (i) *improving back-office efficiency*, (ii) *increasing the number of the Intranet based applications and services*, (iii) *increasing information technology skills (e-skills) capacity*, (iv) *establishing core strategic infrastructure*, (v) *integration of systems - connected presence*, (vi) *implementing an appropriate institutional delivery model*, (vii) *improving governance of ICT* and (viii) *improving Internet functionality aligned to the WCG departments' business requirements*.

Confirmation of the importance of the above approach comes from many countries that have adopted the stance that initiatives focusing on the usage and impact of e-government services beyond their simple availability will become more and more important in so called "age of austerity".

1.10.3 Digitally enabled communities/citizens

Providing world class services via the Internet can inadvertently lead to a widening of the digital divide if all of our communities and citizens in the Western Cape are not enabled to exploit the benefits of e-government. The successful implementation and uptake of e-

government services in the Western Cape therefore requires us **to implement projects over the next three years** that will positively influence key external constraints such as: (i) *the lack of telecommunications infrastructure*, (ii) *the existence of legacy systems*, (iii) *low levels of digital literacy*, (iv) *the prevailing high costs of the Internet connectivity* and (v) *the limited access to ICT or the Internet in the Western Cape rural communities*.

1.11 Plans to achieve strategic outcomes

The planned strategic outcomes will be achieved through various projects that will address the strategic deliverables grouped in three main themes: *E-Services Transformation*, *Enhanced E-Governance* and *Digitally Enabled Communities*.

1.11.1 Outcome 1: E-Services Transformation

The quality of information content, services and service channels will be improved to provide a one-stop service to citizens that is structured around personalised needs (e-Government services is primarily externally focused):

1. Services will be designed around citizens and businesses. Accessibility will also be key in service design;
2. All Western Cape provincial government institutions will provide services online via the Internet, e.g. retrieval and printing of online forms, online bids, payments, applications, car registration, public grievance systems and online feedback;
3. Citizens' access to and uptake of services and information using ICT will be increased by raising citizens' awareness of the WCG portal and ensuring that citizens can access services online;
4. The number of financial and non-financial transactions that citizens can perform online will progressively be extended, thus enabling citizens to create personal accounts or profiles, to submit forms, make applications and pay securely online, and to monitor service progress through online tracking systems.
5. New processes for engaging with citizens will be developed.
6. Government call centres will be rationalised – with a considered move to one government telephone number.
7. The web presence of provincial departments will be rationalised – thereby reducing the number of places the citizen must approach for services.
8. Mobile phones will be used to improve access to services for those with poor conventional connectivity.

The key strategic deliverables, responsibilities and dates regarding the Service Transformation tasks are given in Table 1 below.

Table 1: E-Services Transformation Strategic Deliverables

	Strategic Deliverable	Responsibility	Date
1.	Services designed around citizens and businesses	Line-function Departments & Cel	2012 -214
2.	All Western Cape provincial government institutions provide services online	Line-function departments & Cel	
3.	Raise citizens' awareness of the WCG portal and ensuring that citizens can access services online	Department of Premier, Cel & Line-function Departments	On-going
4.	Extended the number of financial and non-financial transactions that citizens can perform online	Cel & Line-function Departments	2013 -2019
5.	Developed new processes for engaging with citizens	Cel & Line-function Departments	2013 -2014 thereafter On-going
6.	Rationalised government call centres	Cel	
7.	Rationalised the web presence of provincial departments	Cel & Line-function Departments	
8.	Designed and implemented mobile services (m-government)	Cel	

1.11.2 Outcome 2: Enhanced E-Governance

Internally focused information and Internet technologies will be utilised to enable efficient and effective integrated government services:

1. The WCG will embrace a shared services approach in order to meet citizen and public servant needs. Areas where this will first be implemented are in Human Resources Management, Data Sharing and a Common Technology Infrastructure across the provincial government.
2. Systems will be integrated between departments to enable and ensure connected services. All new systems will be built on WCG approved application platforms and in line with architecture principle of open standards that supports integration across government departments. A single sign-on service across departments will be made available.
3. Legacy systems that prevent integration across departments and spheres of government will be phased out and eventually eliminated where possible.
4. In order to eliminate duplication, reduce costs, improve security and enable inter-interopability, and thereby improve productivity, efficiency and citizen value, there will be a focus on the consolidation and development of provincial wide systems (transversal) and thereby promoting the principle of "one common system" for each process e.g. Human Resources;
5. Core strategic enabling infrastructures will be created in all departments to provide a platform for e-Government. Specific priorities that will be addressed in this regard are the provision of an appropriate fixed and mobile broadband infrastructure for the WCG corporate environment, equipping all administrative staff in government institutions with a computer, ensuring that all administrative staff have access to the Internet, and creating mobile phone technology platforms for government institutions to enable them to offer mobile phone technology accessible services.

6. Back-office efficiency will be improved to ensure that information and service requests via e-Government channels are closed within agreed upon timeframes. This will require that a Client Relationship Management system be implemented across the WCG to monitor response periods for each and every contact via Internet and digital media. Back-office processes will be mapped and effectively implemented to efficiently respond to information and service requests from citizens.
7. Network technology infrastructure refresh, expansions and additions will be required in order to provide stable, fast and reliable electronic communications. New communication technologies will be introduced focusing on exploiting the benefits of unified communications and enabling the convergence of data, voice and video.
8. Technology platforms will continue to be modernised until all users have been migrated to the new platform services. Further technologies will be introduced and implemented in order to maximise the existing investment; and
9. End-user technologies will be reviewed and new ones introduced to improve the IT tool set of users for improved productivity, efficiency and effectiveness in services delivery.

The key deliverables, responsibilities and dates regarding the Enhanced E-Governance tasks are given in Table 2.

Table 2: Enhanced E-Governance Strategic Deliverables

	Strategic Deliverable	Responsibility	Date
1.	Introduce shared services approach	CSC	
2.	Integrated ICT systems between departments	Cel & Line-function Departments	
3.	Phased out legacy systems	Cel	
4.	Developed provincial wide (transversal) systems	Cel	
5.	Created core strategic enabling infrastructures in all departments to provide a platform for e-Government	Cel & Line-function Departments	
6.	Improved back-office efficiency	Cel	On-going
7.	Refreshed and expanded network technology infrastructure	Cel & external partners	On-going
8.	Modernised technology platforms	Cel	On-going
9.	Reviewed end-user technologies and tools	Cel	Periodical (6m -1y)

1.11.3 Outcome 3: Digitally Enabled Communities

Macro-environmental factors (key external constraints such as the lack of telecommunications infrastructure, low levels of digital literacy and the limited access to ICT or the Internet in rural communities) will be actively influenced through external partnerships and engagements to bridge the digital divide, and to ensure the successful implementation and uptake of e-Government services in the Province:

1. Public access to ICT and the Internet in Western Cape municipal wards will be increased. Furthermore, multiple access channels will be made available for citizens wanting to interface with government, namely call-in, login, walk-in, e-mail, cell phone and self-help terminals.
2. Mobile access will be progressively improved to ensure that citizens are able to access and view web pages as well as to transact with government by mobile devices.

3. The digital literacy (skills to use ICT and the Internet) of the Western Cape population will be improved to ensure that citizens are capacitated to interact with government through ICT and the Internet; and
4. Enable connecting government, businesses, households and communities in integrated manner.

The key deliverables, responsibilities and dates regarding the Digitally Enabled Communities tasks are given in Table 3.

Table 3: Digitally Enabled Communities Strategic Deliverables

	Strategic Deliverable	Responsibility	Date
1.	Increased public access to ICT and the Internet in Western Cape municipal wards	Cel & external partners	
2.	Introduced multiple access channels for citizens to interface with government	Cel	
3.	Improve mobile access for citizens	Cel & external partners	
4.	Improved the digital literacy (skills to use ICT and the Internet) of the Western Cape population	Cel, Line-function Departments, WC e-Skills Hub	On-going
5.	Enabled integrated connections of government, businesses, households and communities	Cel, Line-function Departments & external partners	2019

The deliverables by the strategy term are given in the Table 4.

Table 4: Delivery e-government strategy by the strategic term

Term	Strategic Deliverable	Responsibility	Maturity level of e-Government
Short 2012 - 2014			
Medium 2012 - 2016			
Long 2012- 2019			

1.11.4 E-Government strategy outcome indicators and targets

The achievement of the above outcomes will be measured by the set of general indicators (Table 5) that provide for short to medium term targets:

Table 5: General set of outcome indicators

Outcome	Indicator	Target
Improved e-Government services	% of e-government service users who are satisfied with the service (increase uptake and usage) in given year	80% by 2019
	% of citizens requests processed using ICT vis-à-vis overall number of requests annually.	80% by 2019
Enhanced e-Governance	% of information and service requests via e-government channels closed within agreed upon timeframes (back-office efficiency) within a given year	80% by 2019
	Level of ICT governance maturity rating in the Western Cape Government within a given year	Level 4 by 2019
Digitally enabled communities	Ratio of residents with public access to ICT per 1000 people (public access) in a given year	150 per 1000 people
	% of Western Cape youths that have been trained through state ICT training initiatives in a given year	70 by 2019
	% of broadband penetration in Province (broadband penetration) in a given year	70% by 2014

The achievement of the above strategic outcome targets are underpinned by an institutional delivery model, an e-Government implementation roadmap and an e-government implementation plan.

1.12 E-Government Enablers

1.12.1 Marketing and Awareness

A Province-wide awareness and marketing campaign is essential to ensure that the stakeholders know that: (i) e-government services are available, (ii) convenient to use, and (iii) benefits derived from using such services. This awareness campaign will be an on-going activity performed through informational and educational sessions using all available communication channels. Specifically designed and timed campaigns (e.g. launch of specific services or to target a particular stakeholder group) will also form the part of this strategy.

Such campaigns are seen as necessary for changing potential users' attitude and behaviour in order to create culture of using e-government services. In order to plan and execute marketing and awareness strategy effectively, a central strategy is needed but should be shared by all WCG departments and agencies.

The details of the marketing and awareness campaign will be outlined in the opposite implementation plans, based on the following elements:

- *Target groups* (e.g. citizens, business, visitors);
- *Communication channels* (e.g. Internet, newspapers, TV, billboards);
- *Messages* to particular stakeholder groups;
- *Timing* of campaigns;
- *Establishing decision making processes and actors* responsible for development and end reviewing (feedback) of marketing and awareness strategy;
- *Raising Awareness* (e.g. proactive marketing of a coherent and common view of public sector service provision within the public sector and communities);
- *Advocacy*;

1.12.2 Strategic Leadership and Objectives

Leadership is generally defined as the will of political leaders, management, and line staff to support e-government implementation as a strategy to provide electronically government services to stakeholders.

A strong leadership is always needed when the confidence in some project and programme is needed and also for mobilising sustainable resources for these project and programmes. As e-government effective implementation includes various processes and requires many changes (within and outside the government), a strong leadership is indispensable in order to prevent failure of the e-government projects. Strong leadership is needed not only for making e-government related decisions but also the commitment to these decisions and creating an environment in which the collaborative culture can be developed. Leadership political and administrative commitment is a precursor for progress of the e-government initiatives.

Thus, it will be crucial for execution of this strategy that already established e-government dedicated office (Centre for e-Innovation) is strongly supported by the top WCG officials – notably by the Premier. In that regard, clear communication, collaboration and support are needed. This leadership is also seen as catalyst for creating basic infrastructure for the provincial transition into a knowledge society.

Strategic leadership in the e-government context also includes shared (co-leadership) and coordination with the partners enabling delivery of e-government services. Such partners are private companies (included in the public-private partnerships - PPP) or the local governments included in the cross-boundary service delivery leadership.

By integrating services across different spheres of governments, the WCG wants to offer a range of services electronically without the citizens necessarily knowing what department or what level of government they are dealing with. In order to achieve this, the myriad of databases maintained by our departments containing personal details of hundreds and thousands of our citizens need to be integrated. The integration of databases will be challenging though as architectural and privacy issues will require much attention.

1.12.3 Environmental concerns

In addition of utilising of the contemporary ICT for more efficient and effective government operations and better service delivery, this e-government strategy also emphasises use of these technologies in protecting and, where possible, bettering natural environment. This will be done in two ways:

- Using environmental friendly ("green") ICT to build WCG information systems; and
- Use "green" e-government systems (also called Environmental Information Systems -EIS) to care for the natural environment in the Province;

The implementations plans for building the EIS and use of these systems for caring for the environment will be made in collaboration of Cel, the line-function Departments and also the Department of Environmental Affairs and Development Planning. This collaboration is needed as the risks of environmental catastrophes call for more sophisticated information infrastructures and analytics to be built into policy-making in this area. Thus, the Departments have to work collaboratively and innovatively in order to come up with solutions to environmental multi-dimensional problems.

The particular strategic and implementation plans will include standards; introduce measures to reduce waste and carbon emissions, and to improve environmental performance of ICT, particularly in terms of energy efficiency.

1.12.4 Capacity Building

The ability of the government officials to deliver electronic service efficiently and effectively is a crucial for the success of e-government initiatives. Thus, the government officials must possess certain knowledge about the services they deliver, skills to effectively use modern information and communication technologies and also to develop right attitude for delivering these services. Employees should be trained to provide different services allowing for flexibility in responding to fluctuation in the demand for various services. In this regard, it is envisaged that the employees in both “front” (service delivery) and “back” (technological support) offices will be appropriately capacitated through regular knowledge upgrade and the acquisition of new skills required by fast technological changes.

The potential users of e-government services should also have required competences for use of the provided services for personal and community socio-economic benefits. As it is evident that majority of the citizens of the Western Cape either do not have access to or relevant skills to use modern ICT (notable computers), the WCG is already partnering with the Western Cape e-Skills Knowledge Production and Coordination Hub in order to give its citizens (particularly those from the previously disadvantaged communities) necessary skills and knowledge thus enabling them to use e-government services for personal and community advancement. In that regard, the WCG will support or initiate activities aimed at e-skilling citizens of this province, particularly those in danger of so called “digital” and social exclusion.

1.12.5 Information and knowledge management

Capacitating the government officials also includes practice of managing individual and departmental knowledge. It is thus particularly important to learn from past experiences, particularly those of planning in implementing e-government related projects. In this regard the WCG will utilise its Project management Offices, which should be responsible for the knowledge management (collection, storage, organising and dissemination) within the WCG, its department and agencies. In this way collected knowledge will be regularly assessed against the relevant “best practice” published in the pertinent literature in order to enable a successful transition of e-government through the maturity stages (from the Present phase through Interaction, Transaction to the ultimate phase of Transformation and integration). It is envisaged that the Knowledge management systems, based on web technologies and use of mobile devices will be build (long-term strategy) in order to enable WCG to convert information to intelligent knowledge and services. As a consequence, an increased responsiveness of government, through new product and service innovations, can be achieved. This will enable delivering e-government services to different types of users in new ways.

1.12.6 Research and development

It is envisaged by this strategy that the WCG will explore new ways of service delivery through modern information and communication technologies. The sustaining innovation⁶ will be utilised in order to improve existing services and the delivery channels. In that regard, the concept of so called "disruptive innovation" will be explored and will be deployed in order to introduce new e-government services and innovative ways of delivery these services.

In order to stay up-to-date in the e-government arena and be successful in the benchmarking with the "best practice" worldwide, it is necessary to continuously explore new processes and services but also rapid development of ever changing ICT. The new technologies that should be explored in this regard include but are not limited to:

- innovative use of cell phones (all generations) for e-government service delivery
- use Cloud Computing and wireless networks and services;
- use of the social networks and applications for delivering e-government services;
- use of Ambient technologies;
- utilisation of open source applications and open innovation as the experience shows that the open source supports massive innovation and considerable growth;
- use of so called Web "mash-ups" as it is predicted that in the near future the mix content from publicly available sources, will be the dominant model for the creation of new enterprise applications;

This strategy also recommends that e-Innovation Centre establishes a formal mechanism for evaluating emerging trends and technologies and researching new ideas and innovations, especially those that are being driven by users and Web 2.0 technologies.

As stated elsewhere in this document, the future e-government models and operations in the Western Cape need to reach beyond ordinary public services and public sector modernisation. This requires the introduction of fundamental changes in the governmental operations, arrangements, and particularly, culture. To achieve this this, the development of incremental transition is required, based on the research regarding different scenarios in the long-term strategic planning.

1.12.7 Evidence-based policy-making

Research studies⁷ show that many policy processes are only weakly informed by research-based evidence leading to inadequate and ineffective policies. Thus, it is highly important that the future WCG e-government policies are based on:

- research conducted within the WCG departments and agencies;
- academic research in South African and international context; and
- research published by the international and national reputable organisations (e.g. OECD, UN, World Bank, IBM, Gartner);

In this regard, it is necessary to mobilise all available resources within the WCG and create an enabling environment for the research collaboration within and between departments and agencies. These efforts should be coordinated by the Centre for e-Innovation.

⁶ By innovation we mean a capacity to generate, acquire and apply knowledge needed for addressing social, economic, political and technological issues in new, contextually relevant, effective ways. By sustaining innovation we mean continuous innovation capable to support continuous development of e-government services.

⁷ For example, Bird, K. & Pratt, N. with T. O'Neil & V. Bolt (2004) Fracture Points in Social Policies for Chronic Poverty Reduction, ODI Working Paper 242. London: ODI

1.12.8 **Enabling Technologies and Technological Capacity Building**

As stated elsewhere in this strategy, it is important to closely follow the development of information and communication technologies in order to deploy the appropriate ICT in various e-government projects. The current ICT global development suggests use of the networking technologies such as the Internet, Cloud Computing, mobile devices (including mobile phones, tablets, laptops) and the Social Media. All these technologies will be closely monitored and explored and appropriately included in e-government projects in the Western Cape.

Capacity of citizens and government employees to effectively use ICT is a pre-requisite for e-government based service delivery. While building of digital skills will be done in cooperation with the Western Cape e-Skills Knowledge Production and Coordination Hub⁸, building technological capacity of the WCG Departments and agencies in order to effectively deliver e-government services, will be responsibilities of Cel and the line-function departments and agencies. This technological capacity building will involve:

- *Interoperability and standardisation of technology;*
- *New, flexible information architectures: re-organisation of back office and process including workflow redesign – this will then enable*
- *"one-stop shop" e-government service delivery*
- *Introduction of new technologies that will enable cooperation for production and sharing knowledge among relevant stakeholders;*
- *Enable access to both ICT infrastructure and e-government services to all users across the Province;*
- *Ensure user friendly and accessible interfaces that include local languages and content.*
- *Explore use of so called "smart technologies" (e.g. smart search engines or tagging technologies used in ICT-based social networks) in order for users to manage potential information overload, which is common in today's increasingly networked world;*

1.12.9 **Standards and policies**

The role of e-government is seen as an *enabler* for better government and is generally articulated around principles: (i) cost-effectiveness and efficiency, (ii) the creation of public value, and (iii) the realisation of the citizens' empowerment. Thus the standards and policies concerning e-government implementation and the service delivery should evolve around these principles. This should be done by:

- *establishing standard framework for e-Government operations and services;*
- *adhering to the "best practice" of ICT governance;*
- *simplify regulations and procedures;*
- *engage citizens in the design of e-government applications in order to make them more citizen-centred. Focusing on users and putting them at the centre of public sector activities diminishes silo-thinking and increases civil service providers' awareness of user needs and demands;*
- *enable citizens (and other stakeholders) to participate in the policy-making process allowing for the feedback thus obtaining a valuable information regarding, for example, reasons for use (or otherwise) of e-government services;*

Introducing standardisation (e.g. of languages, application or interfaces) often leads to organisational realignment, re-structuring and process innovation. Eliminating redundancies

⁸ This Hub is situated in the University of the Western Cape and WCG actively participating in its activities.

and ensuring the sharing of resources where possible, enabled through adequate policies and standardisation, still dominate the e-government agendas in almost all countries. As this requires an unprecedented change of mind-sets and traditional in-silo thinking, it is necessary to innovatively think about further policies and standardisation.

Thus the future policies and actions plans need to be based on an explicit value based vision on future e-government in the Western Cape. These values and vision should be synchronised with the values and vision of WCG and are to be achieved in an increasingly networked e-government environment. Thus, future policies should include cooperation, co-ordination and harmonisation between all departments and agencies belonging to WCG. Particular attention should be paid to policies ensuring security and privacy rights of citizens, businesses and other stakeholders. This approach to policy making, therefore, will require full political commitment and strong leadership in order to have an impact on the entire e-government agenda in the Western Cape. Furthermore, transparency of governmental actions should be also embedded in the design of e-government systems.

1.12.10 Partnerships

The best e-governments in both developed and developing countries are based on the multi-stakeholder engagement - e-government strategies are developed and executed with broad stakeholder involvement. In the broadest sense, these stakeholders come from business, education, civil society and other levels (e.g. local and national) of governments (e.g. SITA, SALGA).

Table 6: Main stakeholders in building WCG e-Government

WCG Stakeholders	CABINET
	PTM
	CITCOM
	Provincial Telecoms Steercom
	Provincial Departments
	Ce-I
	ADM Forum
	eG4C
	DITCOM Chairpersons
	PSO12 work streams
	E-Government Work streams
	Projects Managers
	External Stakeholders
DPSA (OGCIO)	
GITOC Chairperson	
Department of Communications	
Western Cape Knowledge Production Hub	
Academia	
IDA	
Gartner	

According to the intentional experience the public-private partnership (PPP) is one of the most important for an effective service delivery. Co-development and delivery of PPP-based e-government services (from straight forward outsourcing to truly joint effort) will secure that the local experience is used and the local needs are met in accordance with the PSOs.

E-government partnerships also include extensive participation of citizens (through, for example, "e-engagement) in, for example, designing services but also in supplying vital

information (through, for example, “crowdsourcing”) for an informed developmental (political, social or economic) decision making.

A multi-stakeholders partnership approach will provide means for all the relevant key stakeholder groups to be included in ways that not only demonstrate the value of their contributions but also provide for a synergistic impact that can be visible and that can be measured.

In order to ensure that the best e-government practice is utilised in designing and developing e-government services, the partnership with the international organisations (e.g. UNDP, World Bank) and governments from both developed and developing countries (e.g. OECD, BBRICS countries) will also be fostered and their experienced used.

1.13 *Monitoring, Evaluation and Benchmarking*

Monitoring and evaluation of the development and deployment of the e-government agenda in the Western Cape is a legal prerequisite and also useful practice that will help to determine the success of the WCG in serving its citizens (and other stakeholders) in general, and achievements and usefulness of the particular electronic services, in particular. The best practice in assessing e-governments cautions that the measurement system must remain relevant in order to indicate efficiency and usefulness of government electronic services, particularly in times of prolonged austerity.

The evaluation of governmental systems has been the focus of a number of studies that take different approaches. Each of these approaches was proposed to address a particular aspect of evaluation whether it is “hard” (tangible risks and benefits) or “soft” (intangible risks and benefits including, for example, organizational, social, political, or cultural impacts). However, e-government evaluation is both an underdeveloped and under-managed area and there are only a few evaluation frameworks that combined hard and soft aspects but are not simply transferable in any context. This thus required that a specific model for evaluation and monitoring of WCG e-government initiatives will be developed.

The model for monitoring and evaluation of e-government services in the Western Cape will be developed and will form a part of the e-government implementation plan. This model will serve as a tool for understanding what would be necessary to change while developing and implementing projects as well as to assess the impact of the e-government agenda in the Province. The “best practice” suggests that the model for evaluation of e-government should include (but not limited to) the elements such as:

- **Topic:** relates to what should be evaluated;
- **Criteria:** relates to the key issues which should be considered for the evaluation (e.g. technical, economic, social);
- **Process:** relates to the way how evaluation results should be obtained;
- **Method:** this element is concerned with methodologies and tools to be used for the evaluation purposes;
- **Stakeholders:** this elements is involve the identification of key e-government stakeholders;

The monitoring side of the WCG e-government monitoring and evaluation plan should include but not limited to:

- **Government side:** monitoring planning and policies, execution of e-government projects. degree of readiness (continues assessment);

- **User side:** users should be able to monitor the progress of their application, see which stages and which authorities are responsible for handling the request through a personal space, a functional mailbox or an electronic document repository.

Generally, this e-government strategy envisages that the monitoring and evaluation of e-government encompasses areas such as: (i) e-government services, including e-government content development (ii) ICT infrastructure and technical services, and (iii) capacity development. In particular, monitoring and evaluation will revolve around the e-government services (section 4) and the targets (section 5) stipulated in this strategy.

Benchmarking has long been used to evaluate and improve businesses and comprises of comparing two or more institutions or entities using a set of indicators. Benchmarking e-government in the Western Cape will serve to:

- **Measure** retrospective achievement (progress or development) in order to rank against the “best practice” or other e-government initiatives;
- **Plan** prospective direction and priorities relevant to the strategic decisions and appropriate courses of action) and
- **Make** the departments and agencies **accountable** for the investments in e-government;

As it is believed that benchmarks can have a significant practical, political and potentially economic impact, this strategy includes benchmarking as an important component. The detailed benchmarking plan, which will be given in the e-government implementation plan, will include but will not be limited to: (i) International indices (e.g. UN indices) and (ii) e-government maturity models (e.g. UN, OECD, World Bank, Gartner).

1.14 Addressing Challenges and converting them into Opportunities

General challenges facing implementation of e-government in the Western Cape are:

- The lack of telecommunications infrastructure as well as the low penetration broadband connectivity;
- The high prevalence of legacy systems in the environment in the provincial government;
- Low levels of digital literacy amongst our citizens;
- Lack of comprehensive national e-government strategies that is accepted and pursued by all spheres of government;
- The prevailing high costs of Internet;
- Geographic dispersion of the rural towns and villages;
- A lack of buy-in and participation from all WGC departments;
- Low corporate governance of IT maturity levels;
- An extremely high dependence on SITA as Primary Systems Integrator;
- E-Government seen as an “ICT” imperative by departments and also seen as a foreign and separate phenomenon by ICT staff and practitioners;

All these challenges can be classified in three main categories, which will allow for more systematic managerial action:

Table 7: E-Government Challenges Categories

Category	Challenge
Organisational/Governance	<ul style="list-style-type: none"> • lack of comprehensive national e-government strategies • lack of buy-in and participation from WGC departments • low corporate governance of IT maturity levels • high dependence on SITA as Primary Systems Integrator • I-Government seen disparately by ICT practitioners and line-function departments
Social/Economic	<ul style="list-style-type: none"> • high costs of Internet • geographic dispersion of the rural towns and villages • low levels of digital literacy amongst our citizens
Technological	<ul style="list-style-type: none"> • the lack of telecommunications infrastructure • low penetration broadband connectivity • the high prevalence of legacy systems

Failure to successfully address the above and other challenges that might be approached could lead to either a lack of integrated services, low uptake and usage, insufficient funding for projects, widening of the digital divide and poor response rates for services access via the web. In addition to the general and deployment principles given in this document (sections 2.3.1 and 2.3.2), approach to addressing challenges and converting those into opportunities should follow these guideline principles⁹:

- Build on existing systems where and when possible;
- Design and deliver the demand-driven e-government services;
- Determine feasibility of and financial responsibilities for e-government projects;
- Ensure equitable technology and services access for citizens and organisations;
- Design and delivery services with local content;
- Build government capacity to deliver and citizen competences (skills, knowledge and attitudes) to use e-government services;
- Use technologies having in mind technology development foresight approach;
- Build knowledge partnerships with stakeholders;

⁹ Adopted from OECD/ITU (2011) *M-Government: Mobile Technologies for Responsive Governments and Connected Societies*, OECD Publishing, <http://dx.doi.org/10.1787/9789264118706-en>

Implementation Model and Methodology guidelines

The current worldwide and South African e-government practice cautions that many well-defined strategies fail to deliver benefits due to an inadequate or poor implementation. Thus, the implementation of this strategy will be executed by devising precise e-government implementation/action plans with clear responsibilities and the deadlines. The guidelines for these plans are given in section “Plans to achieve strategic outcomes”. The model on which are the WCG e-government strategic outcomes are based is given in this section and also in Appendix E.

1.15 Model

The WCG model has three outcomes namely *e-services enhancement* that focuses on the depth and width of services; *e-governance* that focuses on ICT governance, policies and back-office efficiencies and *digital enablement* that focuses on the broadband penetration, e-skills development, mobile platforms and public access to ICT.

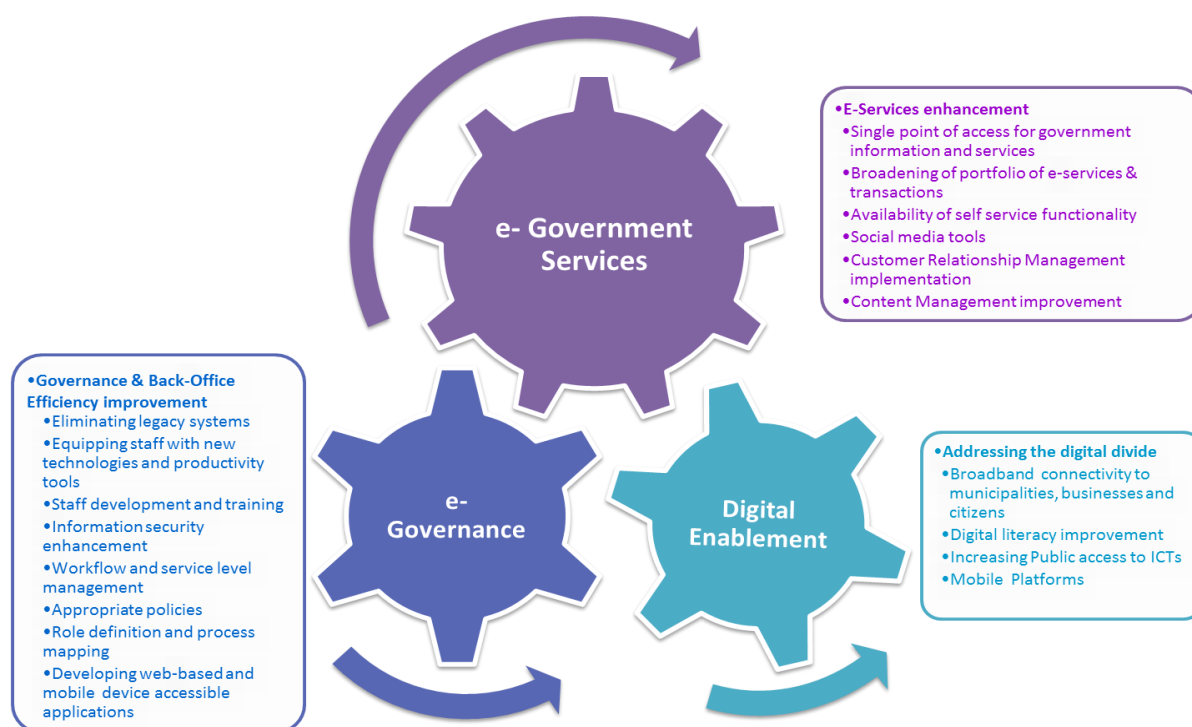


Figure C: Western Cape e-Government Implementation Framework

Even in developed countries, many elderly people, low-income individuals and families, and minorities are outside the realm of the Information Society. Therefore, in order for e-government to be inclusive, it must reach out to all segments of the population with e-services that meet the needs of the digitally excluded. In terms of the UN Survey Report (2010: p89) the following steps must be included in a developing country strategy that aims to expanding access to information and knowledge:

- Increasing the number of Internet users and personal computer usage;
- Increasing the broadband capacity to allow for greater use of mobile devices for e-government;
- Developing content that citizens find important and useful;
- Improving education levels, so that citizens are able to use the information and knowledge provided; and

- Encouraging citizen participation

While the WCG is a provincial rather than a national government it recognizes the fact that focusing on the key areas for e-government improvement will indirectly influence the country's e-government ratings. Currently, there is no implementation framework, and as a consequence no measuring instruments, that exists for holistic regional e-government implementation. Two prominent implementation frameworks¹⁰ for national governments have been found relevant to this e-government strategy development and are, therefore, assessed in order to develop a framework that is relevant to the Western Cape (Figure 1). This framework is (explain in more details in Appendix C) takes into account elements of this e-government strategy discussed thus far.

1.16 Guidelines for Action Plans

The successful worldwide practice suggests the implementation of e-government strategy through action (implementation) plans that will be executed through various projects. It is, thus, envisaged by this strategy existence of multiple Action plans: Master Action Plan and Departmental Action Plans.

Master Action Plan should be based on the Implementation model (Figure 1) and should include:

- the main elements of the Departmental Action Plans
- set of objectives outline in this strategy, which can be summarised as:
 - securing, through e-government, trusted and beneficial service delivery to all citizens of the Western Cape
 - implementing transparency and accountability and simplifying administrative procedures by enforcing effectiveness and efficiency
 - introducing effective services for e-government users (citizens and businesses) such as public procurement or public transactional services
 - putting the key enablers outlined in this strategy in place
 - introducing e-government tools that will enable e-participation thus strengthen public participation in the socio-economic and political decision making

Departmental Action Plans should include elements of the particular implementation of this strategy at the departmental level, including *inter alia*:

- assessment of the departmental e-government readiness and the capacity development plan,
- prioritisation of services that will be electronically delivered,
- planned resources
- risk management plan

These Action plans should be tightly linked to the Departmental plans for executing PSOs and will also include the policy options necessary to support e-government objectives.

As the implementation of e-government strategy requires government agencies to have and effectively manage adequate technological resources. In that regards, the implementation plan of the **e-Innovation Centre** should, among other elements, contain:

- ICT infrastructure
- ICT security

¹⁰ These frameworks are the "e-Government Implementation Toolkit" of the International Telecommunications Union (ITU) and the "Strategic Framework for iGov 2010" of the Infocomm Development Authority (IDA) of Singapore.

- Technical compatibility of various systems in use
- ICT standards
- Technical expertise

The development and implementation of the Action Plans will be accomplished according to the schedule given in Table 7.

Table 7: Milestones for Action Plans

Phase	Milestone	Responsibility	Date
1	Development of Departmental Action Plans	Line-function Departments & Cel	
2	Development of Master Action Plan	Department of Premier & Cel	
3	Implementation of Action Plans	Line-function Departments & Cel	
4	Monitoring & evaluation	Line-function Departments & Cel	On-going

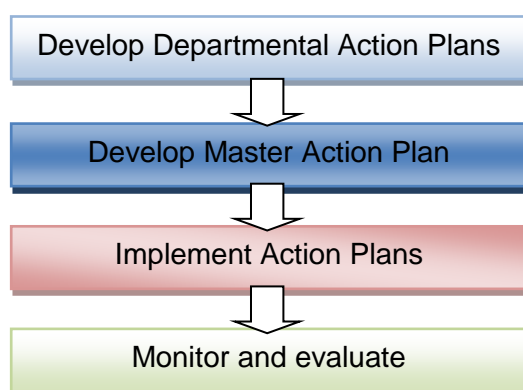


Figure D: Steps in developing and implementing Action Plans

1.17 Guidelines for projects prioritisation

The analysis of the strategic direction of the business in the line-function departments and identifying the service-delivery related concerns in these departments that can become stumbling blocks towards achieving the strategic goals and objectives of WCG should be the first step in prioritising e-government projects. These business concerns should be then translated into business requirements and prioritised in the departmental e-government implementation (action) plans and classified as short, medium or long time priorities. In order to avoid duplication of resources and effort, it is required that the particular departments and Cel be involved in prioritising, initiating, executing, monitoring, and finalising of these e-government projects.

The recent Cel analysis of the strategic direction of the business of the line-function revealed a number of major business concerns that can become obstacles for achieving the strategic goals and objectives of WCG. These business concerns, being prevailing in many departments and tightly linked to the PSOs, will be used as general guidelines for prioritising e-government projects. Thus, the projects that address the following will be considered as priority e- government projects¹¹:

¹¹ For an example of prioritising e-government project Refer to Annexure F

- Strengthening organisational responsiveness towards service delivery
- Improving service access and delivery
- Integrating service delivery for maximum socio-economic impact
- Improving internal and external operational efficiency
- Building capacity for service delivery (e.g. skills, knowledge sharing)
- Enhancing visible accountability
- Improving effectiveness of monitoring and evaluation
- Improve effectiveness of internal business and technological governance
- Addressing the citizen's participation in e-governance
- Creating opportunities for growth and jobs and reducing poverty
- Improving education outcomes
- Increasing access to safe and efficient transport
- Increasing wellness and safety
- Developing integrated and sustainable human settlements
- Creating opportunities for growth and development in rural areas
- Promoting environmental, economic and social sustainability
- Increasing social cohesion

Addressing the above issues will help in realising the PSO of Building the best run regional government in the world. However, the concrete proposal for e-government projects must come from the concerned department within the WCG.

The further criteria that will be used for assessing viability of e-government projects are:

- Strategic alignment, i.e. alignment of the particular project's intended product or service with this strategy;
- Socio-economic rationalisation of a particular project with clearly defined values/benefits to be achieved;
- Clearly defined monitoring and evaluation criteria and set of appropriate indicators. This includes defining, monitoring and evaluating the following aspects of e-government projects:
 - *External*: benefits for citizens, organisations and businesses;
 - *Internal*: benefits for government employees, i.e., the public administration officials responsible for service delivery to citizens, organisations and businesses;

WCG e-Government Implementation Roadmap

Table 8: WCG e-Government Implementation Roadmap

	Emerging	Enhanced	Transactional	Connected	Outputs	Projects
Phase 3 2016 - 2019			Seamless government <ul style="list-style-type: none"> Horizontal & Vertical integration of systems that enable Integrated Service Delivery. One-stop shop for Citizens 		<ul style="list-style-type: none"> Single portal for all government services within the Western Cape All systems developed in line with common architecture that supports integration across government boundaries 24/7 access to information and services Free public or private access to ICTs to households and businesses 70% of WC Youths digitally literate Broadband Connectivity available to all household and business 80% of Services accessible through mobile devices 	<ul style="list-style-type: none"> Elimination of legacy technologies that hampers integration Public Access Terminals in shopping malls & stations Single citizens' card for all government services Local, Provincial and Nationally integrated databases E-Services enrichment E-Skills Development Mobile Platforms Broadband Access to Households & Business
Phase 2 2013 - 2016		e-Service oriented Government Moving beyond emerging phase to providing a richer experience to citizens			<ul style="list-style-type: none"> Red tape reduced significantly Online Transactions Online Bidding 	<ul style="list-style-type: none"> Enhanced Portal with transaction functionality Rural Libraries Connectivity Project Online Bidding Online Recruitment System Cape Access Broadband Strategy roll-out Khanya Back-end processes reengineering E-Services enrichment E-Skills Development
Phase 1 2011-2013		"Responsive" Government <ul style="list-style-type: none"> Moving from traditional government to "transparent and responsive" government 			<ul style="list-style-type: none"> Approved Strategy Establishing understanding of e-government. Single portal for PGWC Policies and structures in place Service Access points identified and increased Provincial e-Govt Steercom established Departments owning its content 	<ul style="list-style-type: none"> Enhanced Portal with Social Media functionality Rural Libraries Connectivity Project Microsoft Migration training Enhanced Tenders Site Online Recruitment System Public Servants' Toolkit Cape Access Broadband Strategy Business Advisory Centres City of Cape Town Fibre Optic

- Khanya
- Public Access to Executive Projects Dashboard via web

Concluding remarks

This e-Government strategy 2012 -2019 serves a purpose to support the WCG overall strategy to alleviate and eventually eradicate poverty by creating opportunities for growth and jobs, deliver better outcomes in health, education, and social development as well as by promoting social inclusion in the Province. This support is here outlined through supporting the Provincial Strategic Objectives (PSOs) and assisting the line-function Departments within the WCG to effectively deliver services to citizens and other stakeholders.

In above regard, this strategy document brings a situation analysis regarding e-government development in the Western Cape, which served (together with the PSOs) as a foundation for building e-government vision: (i) *providing seamless, "tailor-made" services*, (ii) *improving transparency and accountability of government*, (iii) *enabling citizens to actively participate in government activities and decision making processes*, (iv) *capacitating government through appropriate technologies, skills and processes*, (v) *increase service delivery internal and external efficiency*, (vi) *creating an enabling environment whereby the majority of citizens have easy access to ICT and the Internet*.

Realisation of this vision is outlined through the sets of general and delivery guiding principles, which particularly emphasise importance of: (i) balance between the Provincial developmental priorities and the resources allocated, (ii) multi-channel and integrated e-government service delivery and (iii) simplifying service organisation.

This strategy document also outlines the particular support to realisation of PSOs through: (i) efficient and transparent institutional governance, (ii) supporting better institutional financial, human resources and performance management and (iii) citizen-centric service delivery.

The plan to achieve here set strategic outcomes include: (i) e-services transformation, i.e. focusing innovative e-government services around the needs of citizens and businesses, (ii) enhanced e-governance through integrated and shared services between line-function departments and (iii) digitally enabled communities, which *inter alia* includes improved public access to ICT through the municipal wards, progressive access to mobile networks and services and digital literacy (skills to use ICT and the Internet) for all citizens in the Western Cape.

Effective implementation of this strategy is inevitably linked to certain key issues that must be appropriately managed. These issues, here named as "e-government enablers" include: (i) successful marketing and awareness campaigns, (ii) good strategic leadership and well defined objectives, (iii) attending to environmental concerns, (iv) capacity building of the WCG government officials, (v) effective information and knowledge management, (vi) strong research that will support evidence-based policy-making, (vii) closely monitoring development of enabling technologies and related standards and (viii) technology-related capacity building within WCG. This document also recognise that effective implementation of this e-government strategy will not be possible without meaningful partnerships with business, education, civil society and all levels of governments.

Monitoring and evaluation of the development and deployment of the e-government agenda in the Western Cape is a legal prerequisite and also useful practice that will help to determine the success of the WCG in serving its citizens (and other stakeholders) in general, and achievements and usefulness of the particular electronic services, in particular. Thus, this strategy brings a guidelines regarding monitoring and evaluation and also sets some general delivery deadlines.

This strategy document also recognises certain challenges (e.g. lack of telecommunications infrastructure as well as the low penetration broadband connectivity, low levels of digital literacy amongst our citizens, geographic dispersion of the rural towns and villages) that must be addressed preferably by converting them into opportunities. Failure to successfully address the above challenges could lead to either a lack of integrated services, low uptake and usage, insufficient funding for projects, widening of the digital divide and poor response rates for services access via the web.

Implementation of this e-government strategy will be based on the Western Cape e-Government Implementation Framework and the Departmental and Master Action Plans stating clear, achievable and measurable objectives and deadlines. These action plans will be executed through e-government projects which prioritisation will be based on the guidelines outlined in this strategy.

A number of annexures are also provided in order to give more details regarding some important terms and models used in this strategy.

In designing this document the authors tried to give clear general instructions that will guide execution of this e-government strategy but also to build-in necessary flexibility (through flexible guidelines) in order to accommodate possible future business requirement changes as well as technology changes and adoption.

ANNEXURES

ANNEXURE A: WC Provincial Strategic Objectives

The Western Cape Government implemented a two pronged response to the challenges posed by global and local macro environmental factors such as politics, economics, environment and technology. As an immediate high impact response, a comprehensive programme to modernise the tools and functions of government was introduced in June 2009. The primary objectives of this programme were to bring the tools and functions of government on par with international best practice; to ensure that they are fit for their respective intended purposes; and to ensure that they serve the government, and thus residents, in a cost effective and efficient manner. As a strategic response, a coherent provincial strategic plan, with 12 provincial strategic objectives (PSOs), was developed (WCG PSO 12 strategy document).

The Western Cape Government has adopted the vision of "Delivering an open opportunity society for all" to guide the strategic goals and objectives of its line-function departments. The Provincial Strategic Plan, which is currently in an advanced draft phase, provides an integrated approach to achieving eleven clearly defined Provincial Strategic Objectives (PSOs). These are:

- Creating opportunities for growth and jobs;
- Improving education outcomes;
- Increasing Access to safe and efficient transport;
- Increasing wellness;
- Increasing safety;
- Developing integrated and sustainable human settlements;
- Mainstreaming sustainability and optimising resource-use efficiency;
- Increasing social cohesion;
- Reducing Poverty;
- Integrating service delivery for maximum impact;
- Creating opportunities for growth and development in rural areas;
- Building the best run regional government in the world;

ANNEXURE B: Forms of e-government

G2C applications and services¹²

Government-to-Citizens services enable citizens to interact with government in a way that is responsive to citizen needs and communication preferences. G2C services allow citizens to stay current on government information, ask questions, request services, complete transactions, submit comments, report problems, request emergency assistance and access data.

G2C services fall into four categories:

- informational and educational services;
- interactive services;
- transactional services;
- governance and citizen engagement;

Informational and educational services (Push services)

This type of G2C service involves distributing information to citizens (e.g. related to services, schedules, education, emergencies, regulations and other flat content). The government service is mainly comprised of pushing information through SMS, for example, or making it available on a Web or WAP site. Much of the information is static and there is little interaction with citizens. Most inquiries to government from citizens are for basic service information, and providing push services both enables real-time communications to citizens, and creates cost savings for government.

Services can be related to:

- general information for citizens (e.g. weather, tourism, recreation, health, public safety, contact information, services, regulations);
- specific information (e.g. exchange rates, market rates, exam results, events and programmes, news, road closures, holiday schedules, public hearing/meeting schedules, service or fee changes);
- emergency alerts (e.g. severe weather, terrorism, fires, accidents, health risks);
- health and safety education (prevention and preparedness);
- educational programmes;
- notifications (e.g. library book deadlines, security notifications, social media posts, RSS feeds for news and updates);

Interactive services

Through interactive G2C services, citizens can engage in dialogue with governments and send inquiries, problems, comments, or service requests to specific agencies. Citizens also can access forms, applications, and databases. In this stage, the interaction becomes more personalised, detailed and targeted to specific citizen interests and service needs, and specific agency divisions and service areas. The communication becomes one-to-one, rather than one-to-many. The focus is on citizen convenience and increased participation, with citizens choosing to receive specific notifications, such as neighbourhood crime reports, exam results or the availability of a special library book. Mapping, location-based services and photo/video capabilities enhance the functionality of SMS and mobile applications.

Social media tools build communication networks for breaking news, events and emergencies, with real-time citizen feedback and information sharing.

¹² All description given here are taken from: OECD/International Telecommunication Union (2011), *M-Government: Mobile Technologies for Responsive Governments and Connected Societies*, OECD Publishing, <http://dx.doi.org/10.1787/9789264118706-en> and ITU Bookshop at www.itu.int/pub/D-STR/m-gov

Services can be related to:

- health services (e.g. screening and tests, monitoring, health forms);
- education services (e.g. grades, admissions, exam results);
- security services (e.g. crime reporting, service requests, law enforcement, emergency assistance requests);
- filing claims and reporting problems (e.g. service interruptions, suspicious activity, voting issues, complaints about government officials);
- information inquiry services (e.g. account information, traffic and transportation availability, service request status); and
- schedules (airline flights, field crew locations, etc.);

Transactional services

With G2C Transactional Services, governments begin to transform themselves by expanding two-way interactions between citizens and government to new levels. In this stage, citizens can complete their transactions with government electronically and at their convenience. This includes self-service options for paying taxes, making payments, lodging tax returns, applying for services and grants, as well as other similar G2C interactions, allowing the citizen to access these services 24/7.

Services can be related to:

- employment (e.g. job postings, applications, matching services, interviews);
- government transfer programmes (e.g. food coupons, relief compensation, basic income grants, social benefits);
- paying taxes (e.g. income, real estate, etc.);
- booking appointments (e.g. officials, inspections);
- transportation services (e.g. buying train tickets, parking, bus tickets, airline flights);
- signing a transaction with mobile signature;

G2G applications and services

With G2G services, governments transform themselves into a connected entity that more effectively and efficiently responds to the needs of its citizens by developing an integrated back-office infrastructure.

Connections can be:

- horizontal connections (among government agencies);
- vertical connections (between central and local government agencies);

Services can be related to:

- co-ordination of government activities for inspections, controls and supervisions;
- security services (law enforcement, citizens' security);
- emergency management;
- access to knowledge bases and records (public safety, health, education, etc.);

G2B applications and services

Government to Business (G2B) services include providing information regarding policies, regulations, forms, and applications related to procurement, licensing, permitting and payment of taxes, as well as support of small and medium enterprises and business development. With considerable value for rural businesses, government agencies are providing support including accessible kiosks and low-cost handsets, digital signature services, SMS weather and market updates, mobile wallets and maps for transport and tourist sites.

G2E applications and services

With Government to Employees (G2E) services, governments provide tools, training, and data access to their employees that not only assist those employees in their daily operations, but also improve organisational efficiencies and accountability, maximise limited resources and enhance the quality of service to citizens. Mobile technologies have substantial impact on improving G2E services, especially for field crews and staff who work in secondary or remote locations, enabling real-time access to enter, retrieve and share data.

ANNEXURE C: Monitoring and Evaluation

The United Nations report on e-Government maturity points out that significant challenges exist in measuring the efficacy of e-government maturity. Most of the statistics are based on the supply side of e-government but very few statistics are available of the demand side (United Nations 2010, P6 94). The most common form of monitoring is the assessment of the websites alone.

In order to address this imbalance in monitoring, a compendium of 18 indicators has been developed by the United Nations task team to measure progress towards e-government maturity. These indicators take into account both demand and supply side indicators and will therefore be used by the WCG to measure its performance:

Transformation Indicators

- Percent of government institutions providing services online and type of services; e.g. retrieval and printing of online forms, use of interactive online forms, online bids, payment of bills, tax filing applications, car registration, voting, public grievance systems, online feedback;
- Percent of requests processed using ICT vis-à-vis overall number of requests;
- Percent of requests processed online vis-à-vis overall number of requests processed using ICT;
- Degree of satisfaction of e-government service users, disaggregated by gender;

Capacity indicators

- Percent of staff in government institutions with a computer, disaggregated by gender;
- Percent of staff in government institutions with Internet access at the office, disaggregated by gender;
- Percent of government institutions with websites and/or databases;
- Percent of government institutions with corporate networks (LAN, intranet, extranet);
- Percent of government institutions offering mobile phone technology accessible platforms;
- Percent of ICT personnel in government institutions, disaggregated by gender;
- Number of intrusions and hacking of networks and websites of government institutions;
- Percent of spam messages per total email messages received;
- Percent of expenditure on ICT per total expenditure of government institutions;
- Percent of ICT budget spent on institutional capacity-building and human resource development;
- Percent of government institutions with access to the Internet by type of access (narrowband, fixed broadband, mobile broadband);

Usage indicators

- Percent of open source software vis-à-vis proprietary;
- Percent and type of applications used, e.g. word processing, accounting, data base, website;
- Percent of staff in government institutions who are trained on use of ICT, disaggregated by gender;

In addition the WCG will also use the following indicators that are important to measure the success of our influence on e-government environment:

- Number of WCG departments making use of social networking tools to interact with citizens;
- Percentage of e-government services of which the back-end processes are mapped and effectively implemented;
- Percentage of Western Cape wards with public ICT access centres annually;
- Number of visits by citizens to Public ICT Access centres;
- Number of state ICT training opportunities in a given year;
- Percentage of WCG buildings with broadband infrastructure;

At this stage there is no baseline for many of the 24 indicators listed above and will have to be determined as a matter of high priority. Monitoring of progress towards these targets will be done through the provincial e-Government Steercom with the CIO reporting to the PTM on a quarterly basis of progress.

The validation of the WGC's progress to the different levels of maturity at 2014, 2016 and 2019 will be performed by a reputable external entity which is yet to be decided upon.

ANNEXURE D: Maturity models and WCG e-Government Implementation Roadmap

UNDP Maturity model

In an effort to determine a country's performance in e-government the United Nations developed the online services index, which is one component of the United Nation's e-government development index. It proposes four stages namely Emerging, Enhanced, Transactional and Connected. The first phase entails government establishing a web presence and providing information to citizens. In the Enhanced phase citizens are engaged in simple two way conversations with government agencies and are able to download certain forms. Some sites also have audio and video capabilities. The third stage provide transactional functionality to citizens, two way communications and interaction is possible and governments even elicit inputs from citizens on government policies and programmes. In the final phase, known as the Connected stage, the use of interactive tools, social networking and web 2.0 functionality and cross-departmental services becomes the order of the day.

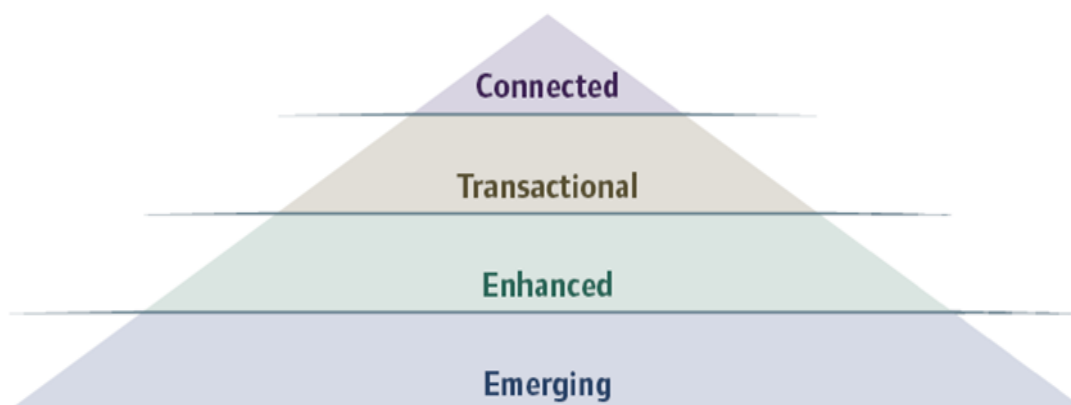


Figure AD1: UNDP's Four Stages of Online Service Development

The stages and the related activities of the United Nations online services maturity model can be categorized as follows:

Table AD 1: Maturity stages of e-government

Stage No	Stage	Characteristics
Stage 1	Emerging information Services	<ul style="list-style-type: none"> • Information on government services, policies, departments and ministries • Citizens can easily access information
Stage 2	Enhanced	<ul style="list-style-type: none"> • Enhanced one-way or simple two-way communications possible between government and citizens • Websites provide for downloadable forms and applications • Sites have audio and video capabilities
Stage 3	Transactional	<ul style="list-style-type: none"> • Websites provide for two-way communications with citizens – requesting and receiving inputs on government programmes and policies • Financial and non-Financial transactions are processed
Stage 4	Connected Services	<ul style="list-style-type: none"> • Using Web 2.0 tools government becomes proactive in their engagement of citizens • Seamless services are provided that cut across departments • Data is shared between and across departments • Government becomes citizen centric • Service offerings are tailor-made for specific groups of or segments of the citizens • Citizens are empowered to be more involved with government activities

WCG e-Government Implementation Roadmap

The WCG's e-Government plan will be implemented in three phases over a period of seven years in the following phases:

Phase 1 will entail moving from the emerging phase to the Enhanced phase (level 2) by March 2014. In line with the UNDP maturity model, this will include the limited use of social media by all departments, ensuring that a single website is in place for the Western Cape Government, the functionality to submit forms online and some sites having video and audio capability. While these seem like extremely modest objectives cognisance must be taken that the work towards the 2016 and 2019 e-government objectives also need to start during this phase. Objectives are therefore merely milestones in progressing towards the ultimate goals. A key deliverable in this phase is the completion of a survey of all government services in all government departments across the whole of the province. Other key deliverables that will contribute towards the 2016 goals will be the establishing of the relevant institutional delivery structures, policies and prioritisation.

During **Phase 2**, that will occur from 2014 to 2016, the WCG will move from the Enhanced to the Transactional level. This is inarguable the period where the citizens of the Western Cape will see the biggest value added to their lives as they will now be able to transact with government online with as much as 20 services. Services will be rendered via a e-Citizens

portal that will enable online service requests and service level request management. Electronic authentication of citizens identity will be a crucial pre-requisite for the successful implementation of online transaction functionality.

Phase 3 will see the WCG moving from Transactional to the Connected Services phase of which the central feature is a e-citizen portal with integrated government services delivered as packaged solutions to citizens. An example of such a packaged solution is the event where an entrepreneur would want to register a business. Through a single application he should be able to apply for his company registration, tax registration, a liquor licence request if needed and registration as an employer. This is just one of a few consolidates services solution that will be available to citizens if the WCG is successful in achieving connected services across all three spheres of government.

Table AD 2: WCG e-Government Implementation Roadmap

Emerging	Enhanced (2014)	Transactional (2016)	Connected Services (2019)
Disparate portals	Social Media supported by all departments	Online transaction Services (2016)	Citizens' Portal with personalised portal profiles
Provide links to ministries and government depts.	Single WCG Website	Requesting and receiving inputs on govt programmes	Integrated/packaged services that cut across governments depts.
Push information	Submit forms online	Single sign-on to government services in WC/RSA	Self Service functionality
Downloadable forms available online	Sites have video and audio capability	Electronic authentication of Citizens' identity	Citizens Portal enabling electronic service request
		Engaging citizens through Social media tools	

ANNEXURE E: Western Cape e-Government Implementation Framework

The WCG model has three outcomes namely *e-services enhancement* that focuses on the depth and width of services; *e-governance* that focuses on ICT governance, policies and back-office efficiencies and *digital enablement* that focuses on the broadband penetration, e-skills development, mobile platforms and public access to ICT.

e-Services Enhancement

This element of the WCG e-government implementation model refers to:

- *Single point of access for government information and services.* This feature will address integration of e-government service in the Western Cape and enable the users to save time and effort in accessing and using these services. Although this is a feature of the top maturity level of e-government, the work on the single point of access for government information and services will start immediately after an official approval of this strategy.
- *Broadening of e-services and transactions.*

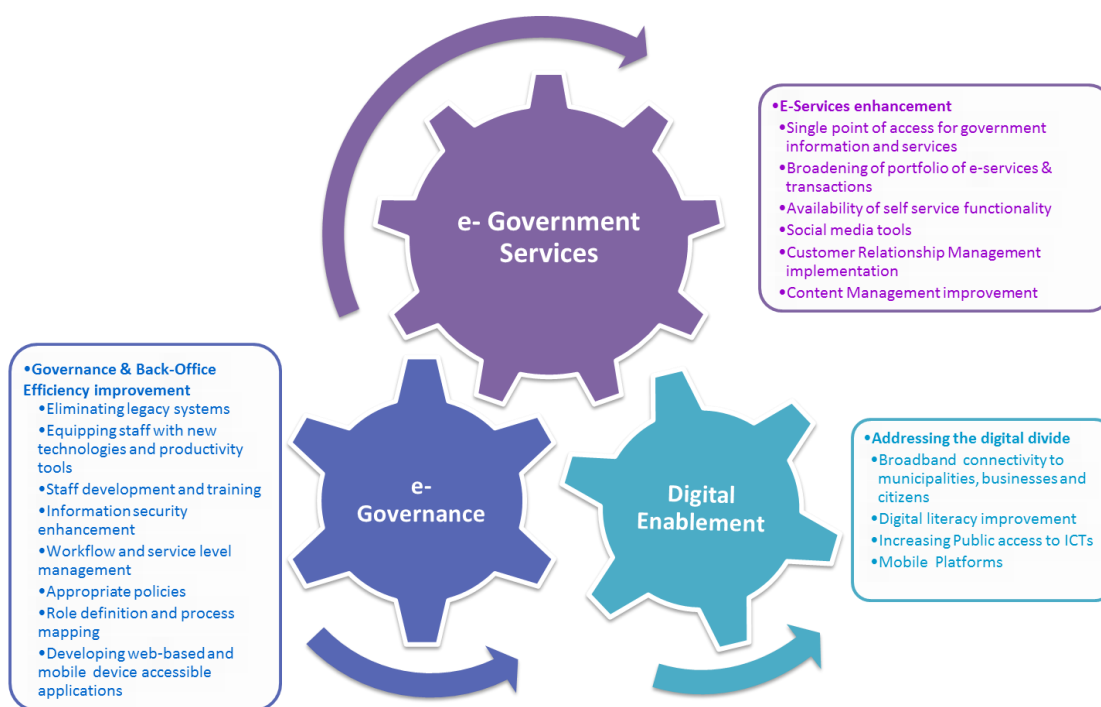


Figure AE 1: Western Cape e-Government Implementation Framework

ANNEXURE F: Example criteria for the project prioritisation

An example for the criteria for the project prioritisation (Source: *Provincial Strategic ICT Plan 2011- 12*):

Business Concern	Business Requirement
Inadequate organisational responsiveness	Create an integrated 'single' view of the customer.
	Provide shared information for cross-functional service delivery.
	Implement standard operating procedures for standardised and consistent service delivery and improved efficiency.
	Build an efficient communication model for both internal and external communication (including guidelines for public participation. Develop a change management and communication strategy to prepare the organisation for change.
Inadequate service access.	Improve accessibility to government programs and services regardless of location, time, and method of access or socio-group (language, culture, gender, age and ability).
	Provide a single point of contact for coherent government information and service, spanning departments and other levels of government.
	Optimise existing filing systems and introduce a uniform e-filing as practice in province. Address duplication, legal compliance, accessibility and safeguarding of institutional memory and information.
Lack of integrated service delivery	Create information harmonisation through shared terminology and standards.

Business Concern	Business Requirement
	Create a defined authoritative enterprise information source list.
	Create a customer-centric view of the enterprise.
	Comply with the constitutional imperative to monitor, support and promote the development of local government capacity to enable municipalities to perform their functions and manage their own affairs by preparing standard by-laws, policies and systems for adoption by municipalities; presenting training on governance matters; and providing legal support.
	Identify and implement any departmental or public entity restructuring that will be required.
Lack of effective monitoring	Implement information management solutions that support operational, tactical and strategic reporting in WCG.
	Improve outcomes-based planning and service delivery.
	Develop WCG-wide score-card to guide performance management.
Lack of effective governance	Provide sound stewardship of programs and services and associated resources to ensure accountability for departmental performance.
	Access to information and service authenticated to the degree required by specific information and services.
	Information protected to level required both internally and externally. The availability and integrity of on-line information and services are assured.
	Develop a project-driven approach to governance, enforced by the dashboard system.
	Develop and approve a cabinet manual that includes practices, processes and templates.
	Introduce new legislation, amend provincial laws and repeal old order legislation.