City of Cape Town

Provincial Government of the Western Cape

E-Government Services Research Project (PMO1035)

Initial research to inform the design and development of e-government services

August 2003

Executive overview

This report is a product of a research project jointly undertaken by the City of Cape Town and the Provincial Government of the Western Cape to provide a basis for the development of e-government services. The core research was done between March and May 2003.

E-government is the public sector equivalent of e-business. It seeks to use information and communications technology to improve efficiency and deliver services in a more customer-centric manner. [In local government the term 'beneficiary' is preferred as many services are delivered without being directly paid for.]

The research purpose was to help to answer the question: which government services should be transferred into digital form and made available online?

The research approached this question entirely from a beneficiary perspective: that is, how are government services understood and perceived by beneficiaries?

The research has gone some way to answering this by doing the following:

Developing an understand the likely users of e-government information and services. Potential user segments have been identified and defined, and three categories of services identified and defined. These are direct services (delivered on application and/ or payment), general services (provided for the general benefit of communities), and obligations (legal requirements placed on individuals and organisations to comply with various requirements for the general good of the community and society)

Developing an understanding of the potential ways in which users may access e-government information and services. Relevant data on penetration of various access technologies has been gathered. The concept of 'service' in a government context is explored

Development of an understanding the range of possible e-government services and information. A consolidated list of services provided by all three spheres of government from a beneficiary perspective has been created; 161 service clusters have been identified and described

Providing a basis for prioritizing and evaluating the needs for e-government information and services. Four generic elements of all services have been identified and described: these are promotion, access, fulfillment and support. This analysis can be used as basis for moving the appropriate elements of every service online

Collecting data on segments, services and access technologies. Relevant census and related data has been gathered and analysed

Proposal of a basis for a joint approach between the City and the Province to e-government implementation. A vision for electronic service delivery in the Western Cape is proposed and a 17 point program outlined

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1. Introduction

About this report

As the impact of information and communications technology (ICT)[1]* is felt ever more deeply in our lives, and the availability of technology grows, then government organisations have the opportunity to make use of technology to improve the way they do things just as much as business. As a differentiator from 'e-business' this has been called 'e-government'.

This report is a product of research commissioned by the City of Cape Town and the Provincial Government of the Western Cape. It provides initial input as to how technology can be used to improve the way in which people access and receive services from government. It does this by:

> Approaching the issue of the delivery of government services from a beneficiary perspective
> Exploring the concept of service within a government context
> Considering the various categories of recipients of government services
> Discussing the kinds of services provided by all three spheres of government
> Proposing what governments need to do to make sure that their efforts to improve service delivery benefit from what technology has to offer
> Proposing a vision for the electronic delivery of public services provided by government in the Western Cape[2]

The proposed vision for electronic service delivery is:

Vision for the electronic delivery of services in the Western Cape

As a clear step towards the improved delivery of government services in the Western Cape, the Provincial Government and the City of Cape Town will work together to ensure that information about services, and – where appropriate - access to services - provided by all three spheres of government will be provided online.

> This information will be presented in ways that are easy to find and understand by intended beneficiaries, and by service staff who assist residents, businesses and visitors. It will not be necessary to first know who provides a services in order to apply for a service or seek assistance
> The procedures for applying for services will be standardised and simplified as far as possible. Standardised application forms will be available electronically, and the procedure for submitting them will be explained. The level of service that can be expected will be stated
> As far as possible, applications, service requests and other information will be accepted electronically. Service information and support will be available to the beneficiaries through multiple channels, such as walk-in, telephone, post and web. Where appropriate, transactional services will be made available online
> Projects to progressively provide service elements online will be rolled out in a phased manner, starting with information about services and support for services. This will be done in conjunction with projects to ensure that beneficiaries have appropriate access to networked computers, and the necessary skills to use them

Everyone should be able to easily and quickly find out what they need to know to benefit from the full range of government services, and where possible apply for them without having to visit a government office.

The electronic delivery of services should allow government to do more, and better, for less.

E-government services are effectively online content, somewhat like words in a book. [The concept of e-government is more fully defined later.] The words in a

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* Note to the reader: numbered references can be found at the end of the document

book are of no value if the people they were written for do not have access to books, cannot afford books or cannot read. The shift to providing government services online should be accompanied by programs to ensure that citizens also have access to computers and the Internet, and are provided with the means to gain the skills to use them. This report is not directly concerned with how people access e-government services through the provision of networked computers, though this is a vital component of the overall program.

To continue the analogy, this report *is* concerned with what stories to tell, and how to present them in the book so that they are easy to find and read. It is also important to tell people that the book exists. In the same way, online services must be designed and structured so that they are easy to find and use, and must be promoted to their intended users.

The potential benefits are more than the pleasure of a good story; well designed services improve internal efficiencies and reduce actual costs – reduced time to deliver, less waste in the process, fewer mistakes that need rectifying and a quicker fix when things do go wrong.

Research approach and method

This report summarises the results of a project that set out to conduct preliminary research on the market needs and demand for e-government services in Cape Town and the Western Cape.

The research was jointly sponsored by the City of Cape Town and the Provincial Government of the Western Cape. Both are involved in planning or implementing a number of beneficiary facing e-government projects.

The departments concerned are respectively:

The Smart City office of the City of Cape Town, together with other interested directorates including Economic Development & Tourism, Social Development, Transformation and Communications

The Knowledge Economy and E-Government branch of the Provincial Government

The objective of this project was to help to answer the question:

Which government services should be transferred into digital formats and made available online?

This project is a one part of a phased approach to introducing e-government services and information. This project set out to:

Gather, analyse and document existing relevant information to inform the process

Provide a basis for a segmentation of the overall market for e-government services

Inform detailed and specific field research to shape the specification of specific services

The critical position of this project within the overall rollout of e-government services is illustrated below.

The following table lists the expected benefits of the project, and the extent that they have been realized:

Expected benefits	Extent achieved
Understand the likely users of e-government information and services	Potential user segments identified and defined; categories of services identified and defined
Understand the potential ways in which	Data on penetration of access technology

Expected benefits	Extent achieved
users may access e-government information and services	gathered
Understand the range of e-government services and information	Consolidated list of services from a beneficiary perspective created; service clusters identified and described
Basis for prioritizing and evaluating the needs for e-government information and services	Generic elements of all services identified and described – basis for moving these elements online explored
Collect data on segments, services and access technologies	Relevant census and related data gathered and analysed
Establish a basis for a joint approach between the City and the Province to e-government implementation	Proposed vision for electronic service delivery in the Western Cape; 17 point program proposed

Diagram: position of this project overall program to implement e-government services
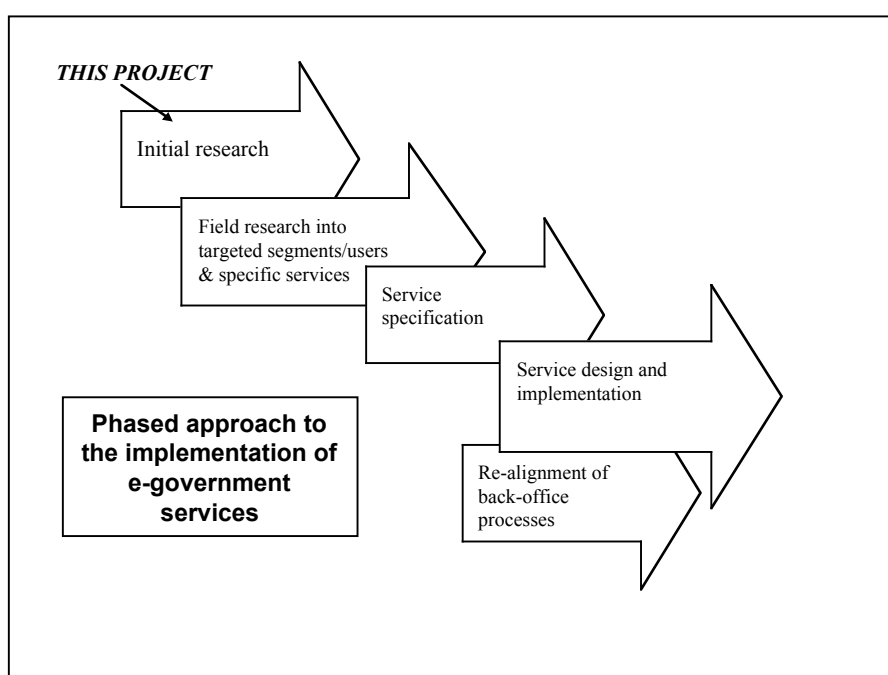
The research scope extended to:

Compilation of a schedule of the different services provided by the relevant spheres of government, as experienced and perceived by the beneficiaries of those services

Development of a demographic profile (including distribution and urban/ rural split) of the Western Cape, including details of literacy; level of education, employment and language

An overview of the business sector, including a matrix of main sectors/industries and the extent to which these are composed of established businesses, SMEs, emerging businesses, etc.

An assessment of the various access technologies available for their suitability as a delivery channel for e-government services

Distribution and penetration within the Western Cape of access to telephones, cell phones, fax machines, Internet connected computers and other digital media devices

Overview of public access projects, in the public, NGO and private sector. To include goals of project, segment reached, and success rating

Only a summary of the data gathered in terms of this project scope is given in this document.

The scope restricted the project to interactions between government departments, and citizens and business (defined during the course of the project as externally focused public services); information about internal, back-office services was specifically excluded.

The research method primarily involved gathering and assessing existing information. This was done through face-to-face interviews (officials of all externally facing City and Provincial Directorates and Departments), telephone, e-mail and Internet.

2. What is e-government?

Fundamentally, e-government is about transforming government organisations to become more efficient and more customer centred.[3] ICT is the tool that can help to bring this about.

ICT can be used to either improve the 'back office' processes that support service delivery, or to change for the better the way in which services are delivered to government's customers. Both are critical. In past decades, government departments have progressively made more use of computer technologies to manage their internal processes. The more recent focus on the way in which information technologies facilitate *communication* has resulted in the application of ICT to directly impact the way in which the recipients of government services interact with government when actually receiving services.

A useful definition of e-government is 'the provision of online government services – that is, any interaction one might have with any government body or agency – using the Internet or World Wide Web'[4].

Other definitions focus more on the transforming impact of e-government. The City of Cape Town has a broader definition which envisages 'the transformation of internal and external public sector relationships through Internet enabled operations, information technology and communications to optimise government service delivery, constituency participation and governance'.[5]

What ever the definition used, the implementation of e-government revolves around the use of technology to enhance the access to and delivery of government services through three sets of activity:

Improving back office administrative processes

Connecting beneficiaries by providing online services and ensuring that the means to access them are available

Building relationships between government departments, public agencies and other

> **Citizen, Customer or Beneficiary?**
>
> With its focus on service, the literature on e-government has come to commonly use the term 'customer' for the person who receives the benefits of a service. But the word 'customer' strictly means 'a person who *buys* goods or services from a *shop* or *business*' (South African Concise Oxford Dictionary 2002 – italics added). Use of this word may be taken to mean that governments only serve those who pay directly for services, rather than all members of a community. Further, many government services benefit visitors who come to trade, to invest, or as tourists. For this reason the City of Cape Town prefers the word 'beneficiary', meaning 'a person who gains benefit from something', which is more encompassing and less exclusive. It also includes both individuals and businesses.

institutions[6]

It is important to appreciate that historically most peoples' perception of government service has been poor. Contacting government by what ever means brings with it the expectation of long waits and cumbersome procedures. Interacting with government is seen as convoluted, frustrating and time consuming.

Beneficiaries are not 'demanding e-government' as a fix for this. Most individuals are unaware of the potential for technology-driven change in the way in which government interacts with beneficiaries. E-government initiatives are not a response to any direct demand for e-government as such, but rather a way for government to improve its responsiveness to beneficiary needs.

E-government services delivered online should also not be seen as 'new' services, but rather as a new way of delivering existing services using digital media and technology to improve convenience, save time and lower costs (both for the beneficiary and the government), and to enable the more equitable distribution of services. This approach has the potential to fundamentally alter the way in which public services are delivered and managed.

The potential benefits of e-government initiatives for government itself are hard to dismiss. These include providing easier beneficiary access, increasing service volume, getting better information on operations, reducing complaints, reducing employee time spent on non-productive administrative activities, improving the image of government, and strengthening governance.

But the potential benefits for beneficiaries are even greater. These include:

Being more easily able to find out about government services. All the information is together in one place, hence it should not be necessary to know which government department provides a service in order to learn about it. This information can be easily maintained and updated to ensure its currency. It is also available at any time ('24x7'), from any place with a computer connected to the Internet. This reduces the need for people to visit government offices to find out how to apply for services (or comply with regulations). The necessary forms can also be printed on demand.

Being able to more easily apply for services and interact with government as the service provider. Information about eligibility, costs etc. are easy to understand, and forms can either be printed out and then faxed or posted back, or even completed online. Eventually it may even be possible to pay directly for services online.

Being able to get help more easily. Specific contact telephone numbers go straight to the relevant person, or an e-mail address can be provided. Personal account statements and other customer specific information can also be made available, automatically on demand.

Overall, e-government services are a form of 'electronic self-service' that should be more convenient, faster, and more personal in nature. Because they should more easily fit in with back office administrative processes, they should be cheaper to provide as well. The impetus provided to the integration of back office should reinforce this.

3. Getting started with e-government

Experience elsewhere in the world[7] has identified six stages of e-government. The first is to publish and disseminate information electronically. Typically, individual government departments set up their own web sites[8] and provide information

about who they are, the services available and how to contact them. This can, for example, usefully reduce the number of phone calls individuals need to make to reach the appropriate employee who can fulfill their service request. At the time of writing, both the City and the Province are at this stage.

The Cape Online portal – due to be launched in February 2004 - is a move toward the second stage, which is a complete 'electronic encyclopedia' of government services. Additionally, information transactions may be possible - for example, the submission of information or applications using online forms.

Further stages (3 and 4) envisage portals that provide a single point of entry for all services that cuts across departmental boundaries, and which allow financial transactions for the payment for services or the payout of allowances and grants to be concluded. Later (stage 5), these portals become personalised to meet the particular needs of the specific individual user. Such developments naturally spur the reorganisation of government internally as once disparate services become unified and clustered around beneficiary needs. Ultimately (stage 6) technology enabled processes become integrated between front line and back office, with new departments formed as the organisation reshapes around beneficiary needs and information flows.

An initiative to provide e-government should obviously start with an assessment of government services. Specifically, what services should be offered and how?

What e-government strategies are already in place?

The **Cape Online** strategy of the Provincial Government of the Western Cape is the responsibility of the Knowledge Economy and E-Government branch (KEEG). This involves the creation of structures, systems and processes that support e-government. The focus is on the use of ICT, change management and business process transformation to improve the efficiency and effectiveness of the provincial government's service strategy. Three main domains of activity have been identified: e-Administration (improving government processes); e-services (connecting citizens); and e-society (building civil society institutions). Cape Gateway is the flagship project. This will create a single point of access to provincial government services, available through a web site, call center and walk-in 'shop front'.

The City of Cape Town has adopted a **Smart City** Strategy. This has five aspects: (1) leadership role of the City of Cape Town in the digital/knowledge economy and in bringing about a smart city (2) intervention to create an appropriate policy and regulatory environment to encourage and support the development of a smart city (3) building and executing an e-government strategy (4) promoting and supporting the role of ICT in the economic and social development of the City (5) using ICT's to contribute towards good governance through enhanced process transparency and increased citizen involvement (sometimes called 'digital democracy').

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4. Government services – an overview

Public and back-office services[9]

A review of the various departments of the three spheres of government must distinguish between those that provide services directly for the benefit of the public or who interact directly with the public, and those who do not interact directly with the public, but whose activities support those who do.

These latter back office activities, such as finance, human resources, technology infrastructure, legal and other administrative functions, are no less critical, but they do not provide services directly experienced by the public.

The transfer of government services online primarily concerns public services. Beneficiaries are only concerned with public externally focused services as these are the only services they experience. Technology can also be used to make back-office services more efficient, and the full benefits of e-government will only be felt when back-offices processes are integrated with public facing services. But the transfer online of services directly experienced by the public should be the focus.
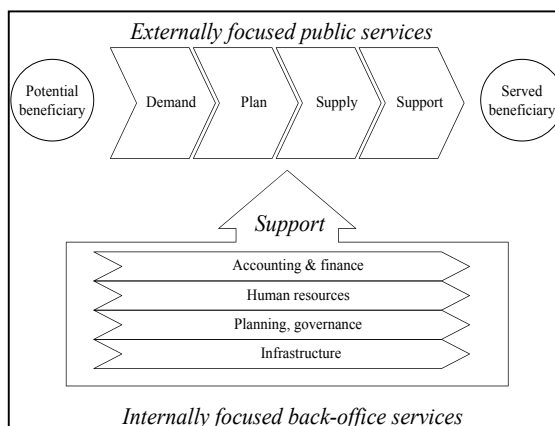
Examples of government services

A review of the public services provided by all three spheres of government from a beneficiary perspective was undertaken. This did not start from the position of what services each sphere of government should provide as mandated by the constitution (the relevant schedules are reproduced at Appendix 2), but instead took the position of an individual seeking service and cataloguing the services actually provided.

A count of he services identified in this way amounted to 161.[10] These are not individual services, but rather baskets of related services provided by a specific department or local government directorate. [A complete list of all of the service baskets can be found at Appendix 1.]

For example, the national Department of Home Affairs delivers a single basket of related civic services that includes issuing identity documents; travel documents; citizenship, birth, marriage and death certificates.

A second basket of Home Affairs services are migration related, such as issuing visas, authorising temporary or permanent residence, and dealing with refugees and asylum applications.

What is meant by the word 'service'?

A 'service' can in general be defined as 'the action or process of providing service' (South African Concise Oxford Dictionary 2002). This should be distinguished from the word 'service' as in the context of 'she gave me good service' that rather reflects the attitude and manner of the person providing a service and the service experience perceived by the recipient. This document is concerned with services as actions and processes. It is not concerned with issues such as courtesy or projection of a brand.

The Oxford Dictionary further defines 'public services' as 'a system supplying a public need such as transport, or utilities such as electricity and water'.

What most people mean by 'service' in this context is the ease and efficiency with which they can interact with government to apply for services.

At the local level, the Directorate of Transport, Roads and Stormwater is responsible for road maintenance and new road construction (which involves a whole series of public interactions from planning and consultation through to issuing tenders and repairing potholes). In addition they are responsible for public transport services.

A third example is the Provincial Department of Environmental Affairs and Development Planning, which provides a basket of services under the heading of environmental protection and awareness.

In general terms, these 'baskets of related services' correspond with the competencies of the three spheres of government mandated by the Constitution (see Appendix 2).

Analysis of government services

The 161 baskets of services identified reflect the reality of what services are offered to beneficiaries on enquiry (not the services that are supposed to be provided in terms of policy, viz the Constitution). Of these 161 services:

32 are delivered by national government

58 are delivered by provincial government

71 are delivered by local government

Consideration of these services reveals that not all government services have the same intent. Government services fall into three generally distinct categories, which are usefully distinct when considering how to transfer them online. These are direct services, general services, and obligations.

Direct services

87 external public services are undertaken and delivered directly to individual beneficiaries at their specific request, for example: the delivery of clean potable water to dwellings at the request of the house resident; the provision of primary health care services to citizens who present themselves at Health Department clinics; the loan of books to library members; the intervention of municipal ombudsman on behalf of a citizen; the delivery of metered electricity to buildings; or the provision of tourism information. Direct services are usually either traded (or provided free of charge upon registration or request); or are community services such as police, sports facilities or emergency services.

General services

62 external public services are undertaken for the general good of all beneficiaries. The benefits are experienced either broadly by the users of infrastructure such as public buildings or bridges, or in by way of public safety, economic growth or quality of life.

General services do not have to be specifically requested for them to be delivered – for example, public safety, the provision of street lighting; the maintenance of roads; the planning of housing developments; or the promotion of the region as a tourist and trade destination. Typically these services are developmental or community services.

Direct services	General services	Obligations
For the direct benefit of an individual, based on need	For the general benefit of everyone in a community	Placed on certain individuals for the indirect benefit of everyone in a community
e.g. electricity	*e.g. road maintenance*	*e.g. licenses, taxes*
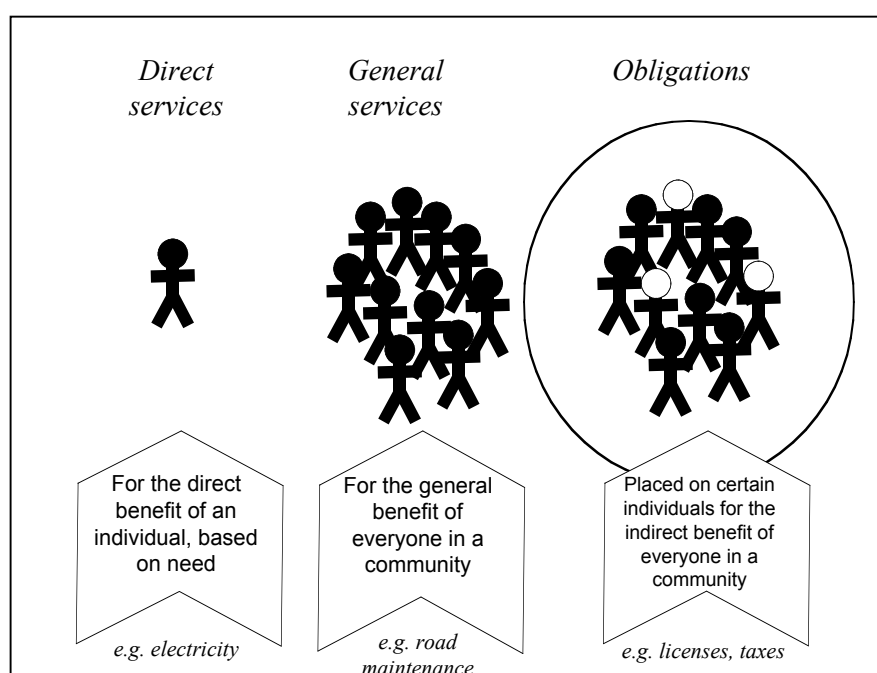
Obligations[11]

29 external public services are better thought of as obligations of citizens and businesses. For example: pay certain taxes or levies; register vehicles, businesses or animals; or abide by some regulation or law with which they must specifically comply, such as having a valid drivers license or maintaining a food preparation establishment in a state of sufficient hygiene. In doing so, members of the public must interact with national, provincial or local government officials and systems.

Obligations are generally perceived to be of no direct benefit to the citizen or business, though they are clearly understood as being for the benefit of the public as a whole. Fulfillment of obligations can be considered to be an activity undertaken reluctantly (that is, adding no direct value, in the same category as replacing car tyres or buying short term insurance) and so should be made as easy and pleasurable as possible.

Alternative categorization of services

The draft access strategy prepared by the national government identifies six predominant service types that are required by citizens:

	SERVICE	TYPES	PRIMARY CHANNEL
1.	Generic information on government, services, and other related topics	Information provided in answer to questions such as, 'where do I find my local General Service Centre?' 'how much do I need to pay for an ID book?' etc	On-line Call Centre Service Points
2.	Information specific to a citizen or company	For example, has the UIF received my contribution, is my passport ready, etc.	On-line Call Centre Service points
3.	Payments	Basic regular payments made to government – rates & taxes, water & lights, fines, maintenance, UIF, etc.	On-line Service Points
4.	Basic transactions	Require relatively little engagement with government – receipt of pay-outs, job applications, licenses, registrations for birth and death, visa and work permit applications	On-line Service Points Service Centres
5.	Value-added transactions	Require personalized assistance – counseling, advice, training, etc.	Service Centres
6.	Basic need services	Health, justice, etc	Purpose-built facilities (courts, hospitals, etc)

This is a categorisation of the aspects of any service that can be conceivably delivered online, not a categorization of all services. It also mirrors the common pattern of e-government implementation, which typically progresses through four stages: 1) publishing, 2) interactivity, 3) completing transactions, and 4) delivery. This does not assist in deciding *what* services should be placed on line, which the goal of this research.

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If the 161 government services are analysed in terms of the sphere of government providing them, then it is interesting to note that most services are

delivered by the municipal government, and most services are direct or general in nature.

	DIRECT	GENERAL	OBLIGATIONS	TOTALS
Municipal	30	38	14	82
Provincial	38	20	8	66
National	18	4	8	30
Totals	86	62	30	178

[Note that the totals are different from those above, as some services fall into more than one category.]

The three categories of service identified here reflect the relationship between the public as beneficiary and the way in which government provides these services. This in turn defines the way in which these categories of service can be delivered online.

5. Delivering services online

How can services like 'receiving electricity' or 'maintaining roads' be delivered online?

Clearly, in most cases, this cannot be done!

What *can* be delivered online are certain elements of services. These are:

> Promotion
>
> Access
>
> Fulfillment
>
> Support

Almost any service can be broken down into these four elements. Together they represent a *value chain* (see box).

Interestingly, when most people talk about 'service' (for example, traveling on a train) they do not mean the actual delivery of some benefit (being transported from work back home), but *the way that the provider of the service interacts with them*, e.g. informing them about the service (timetables, notice boards, announcements), providing access to the service (tickets, stations, trains), and help when problems arise (security, being informed of delays, opportunities to comment on how to improve the service, etc.). These interactions reflect the elements that can be provided online.

The service value chain

A value chain is a business concept. It consists of all of the steps that must take place to satisfy the needs of a customer.

These typically start with identifying the needs of a group of possible customers (the target market), and designing a product or service to meet their need.

Next comes *promoting* the product or service to the intended customer, and giving them some idea where to buy it and how much it will cost.

By buying the product or service, the customer gains *access* to it and can benefit from it. Products first need to be manufactured and delivered; services are characteristically 'produced' at the same time as they are delivered. In either case this is a *fulfillment* process.

Finally, the value chain should include some mechanism for providing customers with *support* – not least so that some feedback is generated which can be used to improve the product or service.

Promotion

Promotion is the dissemination of information about a service to intended beneficiaries.

In order to benefit from a direct service or comply with an obligation, beneficiaries must first have knowledge of the service. The individual beneficiary must know that the service is provided, and what the benefits are. This can only happen if the service features and benefits are promoted.

The Internet and related digital media are ideal for informing enquirers about the range of services offered and publishing information about these services. This information can be relatively easily managed and updated without the need to reprint leaflets or booklets.

The existence and benefits of general services as well as direct services and obligations can, of course also be promoted online.

In order to find out about different services there should not be any need for the enquiring beneficiary to know which department or directorate is responsible for delivering the service. This is a problem with most government related websites at present. It is first necessary to know where to look or who to ask before one can find out about a service. A better approach is to group service information together around life events or the needs of different categories of beneficiaries, such as individual citizens, or commercial organisations. (This idea of beneficiary segmentation is explored more later.)

Further, government web sites often seem to be most concerned with telling visitors *who the department is* (name of minister and staff, details of responsibilities, policies and other organisational information) rather than *what the department does*, that is, what services are offered to the public. The design of government information web sites needs to be centered on the needs of the public.

Electricity services online

When he bought his first house, Johan visited the web site of the local municipal electricity utility to get information about how to open an account or get a pre-paid meter transferred into his name. He decided not to fill in the necessary forms online but instead downloaded them in order to complete later.

The site also includes details of the tariffs and how to pay (and hints about how to reduce consumption). Johan made a note to visit www.energy.co.za to buy electricity online using his credit card. He also jotted down the 0800 number to call to report outages.

After studying the form, he called the number given to query the erf number of the property at his new address, and then faxed the form off. An hour later his cell phone received an SMS informing him that his application had been processed, and provided a telephone number to call to arrange for the collection of his smart card.

Governments cannot depend only on web sites to inform beneficiaries about services. Potential beneficiaries must know to go to a particular web site to find out about a particular service in the first place. Services (not departments!) must therefore be promoted in other ways also (posters, advertisements, newspaper and magazine articles), which can then direct beneficiaries to the appropriate web site. In short, online media is not much good for the promotion of services (i.e. telling people that they are available), but is very good for telling people about services (i.e. the details of a service and how to access it).

Access

The second element of service delivery is providing access.

Access is the selection or procurement of the service required by the beneficiary, with appropriate qualification of the applicant (including

his/her need for or entitlement to the service).

To benefit from a direct service or comply with an obligation, beneficiaries must know how to access the service, that is, who to ask for it, what is required to qualify for it, what information must be provided, how much it will cost (and how and when to pay), and how long it will take.

Providing access to a service means providing information about it, and the means to apply for it. This can include electronic forms that can be downloaded for completion (thereby eliminating a trip to a government office to collect an application form), or even forms that can be completed and submitted electronically. If an application involves payment, then account application forms can be included for ongoing services such as electricity supply, or even payment facilities for once-off fees.

Other access information includes where to send completed forms, who to ask for additional information (preferably by e-mail as well as by telephone), and how to check up on the progress of an application.

Access could also go as far as the online processing of an application. This requires that the web site be integrated with back office procedures and databases. By providing information online the applicant could immediately be screened for eligibility or compliance with certain conditions could be checked.

There is obviously no need to provide access to general services. By definition, these are provided for the general good of a community without specific request. But even the means to request the extension of a general service, for example, street lighting to an otherwise underserved area, can be usefully placed online.

Providing access online is not just for the benefit of beneficiaries with computers and the Internet. When information and access to services is provided online, it effectively turns any government office or public facility, including libraries, into a contact point. Public servants can answer queries using the information provided, and can make applications or download forms for printing on behalf of members of the public.

Vehicle license renewal online

Karen was surprised to get an e-mail from the City Council reminding her to renew her car license. But then she remembered ticking a box on the form last year that offered a 10% discount. The e-mail gave instructions to visit a secure web site and enter the Vehicle Register Number.

Online she entered the odometer reading, (the program noticed when she accidentally put in a number lower than last year), and noted the reference number to quote when paying from her online bank account.

The day after she paid the fee, including a few parking fines that were outstanding, she got an SMS confirming payment; the new license disk arrived by post the following week.

Fulfillment

The third element of service delivery is fulfillment. This is the actual provision of the service resulting in the beneficiary experiencing the benefits of the service. This could take physical form such as water or a drivers license, or information exchange such as a receipt for payment of taxes.

To benefit from a service or to comply with an obligation, government must fulfill a direct service request, fulfill its mandate to provide an general service, or process and acknowledge the fulfillment of an obligation.

In doing so, beneficiaries take delivery of the service and benefit from it. From the perspective of a government department or agency, this is the process of fulfillment, or rather, fulfillment is that set of processes that actually delivers something of value to beneficiaries.

Fulfillment often requires some tangible delivery infrastructure, such as an electricity distribution grid or tourist information offices. Where fulfillment takes the form of providing information, for example tourist information, then fulfillment itself can take place on line, e.g. by providing a tourism information web site and an e-mail address for queries.

The fulfillment of obligations often means being provided with some tangible evidence or confirmation of compliance, such as a receipt, certificate or license. These can also be created and delivered electronically.

Fulfillment may also include the process of billing (where relevant) and collection of payment, though in some circumstances this is better considered to be a part of providing service support.

Important attributes of fulfillment include the reliability of the service, consistency of delivery, and the extent to which expectations about the service are met.

The Internet is really only useful for the fulfillment of information based services, that is, where the benefit is in the form of information. Direct services such as support for small businesses by providing tender information can be fulfilled electronically. The processing of obligations and issuing of receipts and licenses can also be fulfilled using web-based forms, electronic payment systems and e-mail.

Support

Support essentially means providing help, training, information, repairs and other ancillary activities to make sure that the beneficiary receives the full benefit of the service.

Typically, beneficiaries of a service, especially a direct service, may want to follow up on applications, raise complaints about installation, query invoices, request statements, report service lapses, or make suggestions for improvement.

The operational processes which are required for fulfillment are rarely directly perceived by beneficiaries (or even the concern of them); for example, building and maintenance of dams and pipes for the supply of water; creation of property registers for the assessment and collection of property taxes. These are not internally focused back office activities, but rather core activities critical to the delivery of a particular service. General services consist primarily of these operations – beneficiaries receive the benefits of them without specifically requesting them.

Business support services online

Tefo's attempts to build his car repair business have been greatly helped by the information put out by the local and provincial government. Through their web site he has learned how to promote his business, and how to handle the process of employing others to help him. His business is now a registered CC – he has to pay taxes, but he also gets advice on managing his money, both from the electronic newsletter that he gets each week when he visits the library, and directly from the consultant employed by the council who answers his e-mail questions.

Generally, beneficiaries only have cause to consider operations when something goes wrong – for example, the electricity goes off; a road has a pot hole; a street light outside your house goes out; or tourist trade declines due to ineffective promotional activities. On other occasions beneficiaries may have trouble making use of a service, and so they need help and advice. Under these circumstances, beneficiaries need support.

The first problem that beneficiaries face is to find out where to get support. Single point of contact telephone numbers is helpful here. These and other telephone numbers

where help is offered can be published on the web sites. It should also be possible to deal with specific queries by e-mail. Many queries are likely to be similar in nature – thus, lists of frequently asked questions ('FAQs') can also be published.

Queries about charges, invoices and payments can potentially be answered by sending the necessary information electronically; ultimately it should be possible to view personal account information online.

6. Targeting online services – who benefits?

Putting government services online also requires an understanding of who benefits. This is especially important in deciding which services to put online first.

Segmenting beneficiaries

Clearly in basic terms the potential beneficiaries of e-government services are 'everybody'. But this is not very helpful. What must be done is to break down 'beneficiaries' into useful groups.

Segmenting markets

Segmentation is a marketing concept, used to define the target market for a product or service (in this instance, the beneficiaries of a service) in some useful way so that:

  The product or service can be refined to better meet their needs

  Communication about the product or service can be more precisely and efficiently targeted at the intended users

Classically, a segment is a group of buyers with similar purchasing characteristics. Classic segmentation variables are social class, income, age, gender and similar demographics. For the purposes of this study, a segment is a group of beneficiaries with similar needs that are met by a particular service (or set of services).

There is no 'correct' way to segment a market. The important aspect is that a segmentation results in reasonably well defined segments of an overall population that:

  Have a defined need, which can be met

  Are measurable – metrics are available as to how many members each has, where they live, etc

  Are reachable – we can communicate the benefits of the service offered and deliver the service promised to the members of the segment

  Are differentiated – each is significantly different from other segments so as to allow the intended service to be positioned so as to appeal to the members of that segment

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Segmenting by beneficiary group

A useful segmentation of the beneficiaries of the services provided by national, provincial and local government is illustrated below. This segmentation is hierarchical, i.e. each level in the hierarchy inherits the characteristics of the linked elements below it. The lower in the hierarchy that a service beneficiary can be clearly defined, then the better is government able to tailor the services to that class of beneficiaries.

Beneficiary segmentation hierarchy

Level 1		**Beneficiaries**	
Level 2	Individuals		Organisations
Level 3	Citizens / Residents / Visitors	Commercial (Trade / Investment)	Social & Community Organisations (inc NGOs) / Other Government
Level 4	Tourists	Manufacturing / Agriculture / Mining / Construction / Wholesale/Retail/Hospitality / Financial/Professional Services / Electricity / Transport/Storage/Communication / Other	

This segmentation progressively subdivides all beneficiaries as follows:

The beneficiaries (level 1) of government services are either *individuals* or *organisations* (level 2)

Individuals can be either:

Citizens (level 3) currently living in the Western Cape, or elsewhere including overseas

Residents (level 3) – individuals living in the Western Cape who are not citizens of South Africa, or individuals who are citizens of other countries who own property in the Province

Visitors (level 3), primarily in the Province as tourists

Citizens and residents may also be tourists (level 4) in their own Province. Further, visitors may also come into the Western Cape for business purposes – to engage in *trade*, or to seek out *investment* opportunities.

Organisations are either:

Primarily *commercial* in nature

Non-profit organisations, either social or community organisations, or NGOs (some of which may be business organisations)

Other government entities – for example, municipalities served by the Provincial administration

Commercial organisations can be further segmented according to the *economic sector* (level 4) in which they are active. Those used here are as measured and tracked by Statistics SA.

The lower levels of the hierarchy could be broken out into further segments, but generally this does not enable government to target any given service any more precisely, and so is of no real value. The exceptions may be services for particular industries, such as permitting for the film industry or outreach service for particular agricultural sectors, such as the fruit industry. But these services are more likely to be provided by industry bodies – government web sites should direct enquirers to these sites.

Segmenting by service needed

The 161 services identified as being actually provided by government fall into a five basic groups.[12]

SERVICE GROUP	DESCRIPTION	BENEFICIARY SEGMENTS
Individual services (29)	Services primarily for the direct benefit of specific individuals, such as education or obtaining a passport	Mainly individuals, primarily citizens and residents
Business services (45)	Services principally for the benefit of commercial organisations, such as industry regulation or promotion. Some of these are direct services provided to individual companies on application, whilst other are obligations (complying with regulations, paying taxes) or general such as trade promotion	Organisations – primarily commercial though also social and commercial organisations and other government agencies. Some of these are more specifically targeted at specific industries Visitors for the purpose of trade are also beneficiaries of some business services
Community services (60)	Services mainly for the creation and maintenance of economic infrastructure or the social environment, such as law and order, public transport or support for sports organisations. Many of these are general services, paid for by taxes	Community services benefit both organisations and individuals – citizens and residents as well as tourists
Health related services (15)	These are a significant group of services that deserve to be separately identified. Some of these are direct services whilst others are obligations (public health compliance by food companies) or general services (pollution monitoring)	Direct health services are primarily for the benefit of citizens and residents, whilst health obligations mainly apply to organisations. General services are for general benefit of communities
Housing related services (12)	These are a significant group of services that deserve to be separately identified. These include provision of low income housing (a direct service), building planning approval (both an general service and an obligation) and property valuation (an obligation) for the purposes of collecting rates (which is a tax on property ownership)	Housing related services are primarily directly for the benefit of individuals, though organisations are also obligated

This segmentation can also be used to analyse which spheres of government mostly provide which kinds of services. Interestingly, in general national

government focuses more on business, whilst at the local level the focus is more on community services.

	INDIVIDUAL	BUSINESS	COMMUNITY	HEALTH	HOUSING	TOTALS
Municipal	11	18	32	4	8	73
Provincial	10	16	20	11	3	60
National	9	13	8	0	1	31
Totals	30	47	60	15	12	164

[Note that some services fall into more than one group.]

Another approach is to see which groups of service fall into which category:

	INDIVIDUAL	BUSINESS	COMMUNITY	HEALTH	HOUSING	TOTALS
Direct	17	25	28	9	7	86
General	5	16	34	5	2	62
Obligations	7	6	8	5	3	29
Totals	29	47	70	19	12	177

[Note that 'community obligations' *benefit* the community, though the obligation may rest on an individual, such as licensing of animals.]

Some important observations are that:

Services are provided to all five groups by all three spheres of government. From the beneficiary perspective it is important that these services are presented in an ingenerated manner. For example, the health services provided by municipalities and the Province should be provided in a seamless way, with no duplication of patient records

In most cases, one sphere of government is predominantly responsible for a group of services – for example, local government is mainly responsible for housing related services, whist provincial government is the main provider of health related services. A concerted effort by one sphere of government can make a significant difference to the online delivery of the information service elements of a number of related services

Most services aimed at the individual and business are direct in nature. Accessing them currently requires providing the same personal information to a number of different departments. If back office administration can be integrated, then repetitive form filling can be reduced

Segmenting by access to computers

The draft access strategy prepared by the national government[13] segments beneficiaries into 'user groups' according to their typical access to computers and the Internet, and then projects their expected service requirements.

USER GROUPS	SERVICE REQUIREMENTS
High end urban residents, based in cities or large towns, with good access to government because of availability of public transport, government infrastructure and telecommunications linkages and high levels of functional and technical literacy. Likely to fall within the 3 million direct Internet users group	Convenience is a large factor – making payments and applications on-line, accessing information easily, reducing time wastage, satisfying needs immediately
Urban residents, based in under-developed areas linked to cities, who are not geographically remote, but are still under-serviced by government and cut off from	Require information on service rights, job opportunities, etc Require value-added services to enable them to exploit economic and educational

USER GROUPS	SERVICE REQUIREMENTS
infrastructure such as phones and electricity and hence do not have the means at their disposal to engage government. Usually have accessed services such as birth registrations and ID books	them to exploit economic and educational opportunities, as well as grants and resources available from government; payment facilities for municipal services, where they are being used Require ease of access, through government coming physically closer
Peri-urban residents, based in areas linked to smaller towns, who have general access, are able to get to town fairly easily, in which government is represented in a sufficient form through the municipality and local branches of national and provincial government but again do not necessarily have the required infrastructure at their disposal to target government directly	May require improvements of basic services such registrations and grant payments, but more likely value-added informational services Require payment facilities for services received from government
Rural residents, based in generally remote and under-serviced villages, in which unemployment is high, hence no income to pay the costs of travel into neighboring towns and infrastructure is poor. The cost of providing telecommunications infrastructure has proven to be prohibitive to the fixed line operator, and little has been done beyond small pilot initiatives to address connectivity and improved services. People very seldom experience government services and are therefore marginalised	Due to lack of access, primary service requirements in the short term are the basics – birth certificates, ID books, grant applications, and general information on other government services and support mechanisms available to them There is also a need for proactive steps in these areas to deal with poverty and unemployment challenges through the deployment of community development workers Once these services are in place, second phases services will be required, such as employment opportunities, housing grants, etc
Medium to large corporates, largely based in towns and cities, with a similar profile of access to government services, as reflected above	Company registration, tax returns, VAT registration, submission of company documentation Tender opportunities, including e-procurement

The usefulness of this approach is that it predicts how beneficiaries are likely to access services. However, it does not indicate what services to offer, or with what priority, which is the purpose here.

That said, it would be foolish to focus on online services whose main beneficiaries are unlikely to be able to use them. For this reason, if for no other, it is important that issues of physical access and skills are addressed alongside the enablement of e-government services (which – as already noted - are effectively online content).

Understanding the beneficiaries

An understanding of the beneficiaries of services is necessary to target the service elements more effectively and to understand how to make sure that everyone can use them. An overview of the Western Cape - based largely on 2001 Census data - is at Appendix 3.

Individuals

There are 4,525,000 individual resident beneficiaries of external public services in the Western Cape. [14] 64% live in Cape Town. 56% are under the age of 30. More people (55%) speak Afrikaans than any other language. Unemployment is 17% - those in work are most likely to have an elementary occupation, do clerical work or be in the craft and service sectors. Trading, manufacturing and agriculture are the major employers.

Almost everyone has a telephone or access to one. 41% have a cell phone; 79% have a radio; 74% have a television, and 18% have a computer (not necessarily connected to the Internet). [The national figure is 8.6% - but only 2% of African-headed households have a computer, as opposed to 46% of white-headed households.]

There were 806,130 international visitor arrivals in 2001, and 4,100,00 domestic visitors.[15]

Organisations

There are approximately 60,000 formal commercial businesses in Cape Town, which contribute 73% of gross regional product and 9.8% of national gross domestic product. 71% of firms employ less than 20 people.

Social and community organisations and the government sector represent a significant proportion of the Western Cape economy.

Implications

Business organisations are the beneficiaries of a significant block of services, and also benefit, directly or generally, from the 60 odd community services. Businesses are more likely to have a computer and the skills to make use of online services.

Helping government and community organisations to know what other spheres and departments are doing is likely to help them all perform better.

Online services of benefit to individuals are currently unlikely to be accessed by very many. However, pulling information together about health and housing services may help public servants to help individuals make better use of these services.

7. Delivering e-government services

… or more precisely, delivering appropriate elements of government services online.

Basic issues

Using appropriate media

Internet based and related digital media can only be used to deliver the information elements of a service. These are usually information about the service, access to it and support for it. Sometimes fulfillment is in the form of information as well, but mostly some other operational process is also required, e.g. physically inspecting premises that have asked for a liquor license, or connecting a newly built house to the electricity grid.

Other communications channels can – and should – also be used. For example:

Face to face meetings will be necessary when dealing with complex or irregular issues, or with beneficiaries who are not confident or willing to use the telephone or the Internet. But even in these situations the government

service official can use the web based data about services to advise, provide forms, or even make applications on behalf of the beneficiary

Many beneficiaries will prefer to deal with a 'real person', and so telephone call centres designed to handle incoming service enquiries and queries are needed. The call centre agents can again use the same web based data to support their beneficiary interactions

Post will still be required in order to receive forms which have been downloaded and completed but which cannot be delivered electronically, as well as for cheque payments and other financial transactions which cannot be made online

Fax will also continue to be used for both service applications and notifications.

Overall the established principle of there being 'no wrong door' by which to approach government should prevail. Individual and company beneficiaries should be able to approach and deal with government in person, by post, by telephone or electronically and always receive the same level of attention and be given the same information.

Leaflets and brochures, print media (newspapers and magazines), electronic media (radio and television) and outdoor media (posters and billboards) also all have an important role to play as a means to promote services by making potential beneficiaries aware of them. But these are one-way communications with limited ability to communicate important details. They should include a 'call to action' by directing enquirers to a web site or call centre.

Web based information has the specific advantages that:

It can be kept constantly up to date relatively easily and low cost

Beneficiaries can find out about services at any time ('24x7') from anywhere

Forms can be provided to be either downloaded or completed online

Support information ('frequently asked questions') can be provided

Payment can be made electronically by providing bank account and invoice details

Specific queries can be sent direct to the responsible official by e-mail

A two way flow of information between service provider and beneficiary can become a reality

Beneficiary information can be shared across fulfillment departments – duplication and errors are reduced, and beneficiaries are less burdened by repetitive questions, missing files or inaccurate data in future government encounters

Once back office systems allow it, then individual beneficiaries can specifically identify themselves, allowing:

Follow-up information to be sent by e-mail

Specific account informaition to be provided

Reminders to be sent – by e-mail or by SMS

Web site information to be customised to the interests of the beneficiary

Further, much of the information provided by the beneficiary can be processed automatically, reducing the need for clerical back office staff and freeing resources to be devoted to front line beneficiary interaction.

There are also disadvantages to delivering service elements online:

Relatively few people have access to them, lacking either the necessary physical equipment and network connections, and/ or the skills to use them

The cost of access is high – in equipment (hardware), time invested in gaining the skills to use it, connectivity and bandwidth

In a low bandwidth environment, web based interaction can be frustratingly slow

Online services still must be promoted – both the individual services and the fact that they can be accessed using the Internet

Services may also require communication by post or 'phone before fulfillment can be completed or to provide support. This means that several different information delivery channels have to be coordinated, linked to the same beneficiary and service request

Prioritising services

With 161 service bundles, it can be hard to know where to start! Possible supply-side approaches include:

Focus first on a category of services, such as obligations or direct services

Focus first on a particular element common to all services, such as providing information about all services available – who is eligible/ obliged, what the cost it, what forms to fill out, etc.

Focus on a particular service element common to a number of services, such as electonic bill presentation for rates, water, electricity, vehicle licencing, etc.

Focus first on a service cluster, such as business or housing, thus addressing the needs of a particular market segment

Start with those services which feature high volume, routine contact with beneficiaries

Demand side approaches instead first conduct comprehensive surveys and focus groups asking the public what types of electronic service they would like to have and are likely to use. In reality a blend of both approaches is probably expedient.

Approaches that should be avoided are:

Focusing specifically on the services provided by a single department. The perpetuates the 'silo' based delivery of services, and is likely to result in web sites built around departmental structures, rather than beneficiary needs. Services need to be presented in an integrated way – it should not be necessary to know which department provides a service in order to benefit from it

Providing channels for interaction such as by telephone or e-mail, for example, without having first ensured that there are trained staff to respond, and that they have the knowledge and authority to respond effectively. Back office processes must first be redesigned to interface with these new communications channels

Important considerations include[16]:

The potential impact on the intended beneficiary group. The number of people in the group may be relatively small, but the impact in terms of time a cost savings considerable. An example would be automating the submission of building plans by architects for approval

The potential impact in terms of the likely number of users. Clearly a service that is used by a large number of beneficiaries, such as mains water or child inoculation programs, should have some priority

The potential impact in terms of time saved. Services which are used infrequently and thus time consuming to find out about when needed are candidates – such as booking the local community hall for a function

The potential impact in terms of recognition and visibility - for example, putting the names and e-mail addresses of all councillors is easy to do but represents a significant step towards broader participation in the democratic process

The time taken to implement an online service. A service element which is complex and lengthy to put online is not a good initial candidate

The financial cost of implementing an online service (this should include consideration of resource acquisition costs, development costs, implementation costs and maintenance costs, balanced against potential increased revenue, potential direct cost savings, etc). This should be considered together with the potential return on the investment made in implementing the online service

Strategic aspects such as criticality – urgency of need and alignment with strategic goals need to be considered

Assessment of difficulty, which should include consideration of the ease of technical development and implementation, user support, training and/ or maintenance

As a start, the access and support information elements about all services can be put online. Choosing priorities only becomes critical when selecting services that involve information or financial transactions.

Obligations are a reasonable first candidate. These are often completely information based, and so all four service elements can be transferred online. Doing so makes it far easier and convenient to comply.

General services are a low priority. Nothing is required of beneficiaries for the service to be provided. Services can be promoted online, and service level expectations set. The only interactivity required is by providing support.

Direct services are the most challenging to fully make available online. Whilst access information and support can be relatively easily provided, full information and transaction processing first requires considerable back-office re-engineering. In such cases the prioritisation criteria above need to be rigorously applied.

Services benefiting businesses are likely to be made use of more quickly that those for individuals, and have a greater direct effect on the economy. However, pulling together information about health services and housing is likely to help a large number of individuals, even if only in that they get improved service from better informed government employees.

Recommendations: e-government services step-by-step

The steps to putting government services on line will vary depending on the sphere of government and the case-by-case assessment of each service in terms of the above prioritising criteria. But in general terms the following steps seem clear:

1. **Get organised.** Put together a team to champion the creation of e-government services. This should at least include representatives of the departments responsible for communications and IT, but should ideally include people from each department that delivers public services to beneficiaries.

2. **Create a vision.** The team needs to have a clear vision of what it is hoping to achieve. An example is given at the beginning of this report. This vision

should be used to gain the support of all relevant departments. The vision should be publicly owned by the most senior officials and public representatives.

3. **Adopt a beneficiary perspective.** In a commercial organisation, this would be thought of as being ' customer centric'. This is more of a mindset that must be adopted before doing anything else, and which has sometimes been lacking in the past where service delivery processes have been designed primarily to suit the service provider, rather than the receiver. Beneficiary focused governments make satisfying beneficiary needs the centrepiece of their planning. It is important to understand who the beneficiaries of a given service are, and how they would want to receive it. In general terms the location of information about a service should be easy to find, without first having to understand which sphere or branch of government is responsible for delivery.

4. **Ensure cooperation.** There should be collaboration between the adjacent spheres of government from the beginning. Service information on a municipal website should also point to services provided by the province or nationally. Provincial service information should include information about the services provided by municipalities, and point people to them depending on where they live.

5. **Plan the process.** The team should create a clear plan for the progressive development and roll out of e-government services, including the integration and re-engineering of existing service delivery processes. This plan should be used to gain the cooperation of all relevant departments. Inevitably the short term goals will be more concrete that the longer term objectives, and so the plan should be revisited and revised as the process unfolds.

   The planning process also needs to ensure that sufficient budget is allocated to deliver the shorter-term goals.

6. **Create a service directory.** This is the first major implementation step. Identify each of the individual services delivered, using the schedule in this report as a basis. Arrange the directory according to service group and category, not service provider. The directory should include frequently asked questions, and contact details (telephone number, fax number, e-mail address, physical address) for queries and support.

   The information about each service should be presented in a common format, using language that is easily understood by beneficiaries. Clearly identify the nature of the service, the intended beneficiaries, who is eligible or must comply, how to access the service, what it costs, etc. This may require creating templates so that each department responsible for a service can break down the information about the service into its four basic elements, namely promotion, access, fulfillment and support.

   Make each service provider initially responsible for compiling and maintaining information about their services. They should also provide a statement of the level of service that beneficiaries can expect. For example: how long will my application take to be processed? How often can I expect to be invoiced? How do I report faults and how quickly can I expect remedy? What can I do if I am not satisfied?

   The service directory is best published electronically. It is likely to be large and constantly being amended, and so physically printing it may not be realistic. Even if the service directory is initially only used internally, it should be published on the organisation's intranet so that all public officials can access it.

7. In order to publish an electronic directory that is authored by many people, it will probably be necessary to **make use of a suitable content management system**. This must allow each department to be responsible for the information about the services that it provides, whilst also ensuring that there is sufficient control over publication to ensure that the information is published in a standardised way. This may in turn first require building a data model so that all departments use a common terminology and information hierarchy.

8. **Build a call centre.** Most beneficiaries will most easily first make the transition from face-to-face to telephone. Publicise a single contact number, and then have the call centre agents use the services directory to give enquirers information and direct them to the right department or office. The directory can also be used by service agents at walk-in service centres.

9. **Re-design the organisation web site.** Typically, government web sites focus on who the organisation *is*, not what it *does*. Information about policies, staff members and other internal issues are of secondary interest to beneficiaries. Design the site around the service information needs of beneficiaries. Provide channels for support – FAQs, telephone numbers and e-mail addresses.

   Each sphere of government and government department should start its own initiative, but should continually consider how to integrate its activities with those around it. The core team should ensure that these efforts are coordinated and harmonised, and that outputs conform to agreed standards.

10. **Promote the call centre and web site.** Encourage beneficiaries to interact with government through specific channels rather than on a department-by-department basis. Teach them how to use e-government services. Walk-in one-stop service centres should also be promoted at the local level. Service agents at these centres can use the online service directory to give information to enquirers.

11. **Standardise all forms.** Set up forms clearing house. All of the forms that need to be completed by beneficiaries to apply for or comply with services should be re-designed to a common format (not the same as design). Name, address and other identification or service delivery information should be collected according to a common format in accordance with the standard data model. This will make it easier to hold beneficiary information in interoperable databases, so that a single picture of each beneficiary can be built up and information capture is not duplicated. Each form should also clearly state what other supporting information is required, who processes it, and options available for payment (if appropriate).

12. **Train staff to meet beneficiary expectations.** Use the service directory and the standarised forms to train and motivate staff to deliver appropriate levels of personal service. Thereafter such training should be ongoing. This should be a part of a broad change management process. This will include interpersonal skills for those in the front line, but everyone should understand their role in fulfilling the needs of service beneficiaries (including those providing back office services).

13. **Put the forms on to the web site.** Provide all the necessary forms for download. Give a return postal address, processing office or fax number. Train service agents and other officials who interact with beneficiaries to print required forms on demand.

14. **Automate information transactions.** This is a big step! Identify all services that involve either an information transaction (those with forms!) and/or a

financial transaction (beneficiaries pay or receive money). Prioritise these services according to the criteria above.

Before creating forms that can be filled in and submitted electronically, reengineer the back-office processes behind chosen information transactions to accept electronic information and process it automatically.

As far as possible, consolidate and hold beneficiary information in a single database.

15. **Reorganise departments around information flows.** As information about beneficiaries becomes increasingly shared and centralised, so the traditional separations between directorates/ departments will start to become less meaningful. As integration across functions gains momentum, front line staff are likely to be the first to be reorganised and consolidated. Fulfillment operations will likely continue to remain discrete, but back office activities dealing with service usage and accounting should logically merge, provided that the investment in consolidated systems can be justified. This could be done, for example, by linking legacy systems.

A critical component of reorganisation around service delivery and information flows is the change management process. Staff have to be reoriented to new roles, trained to interact with beneficiaries using technology and instructed how to use technology appropriately.

This process will be ongoing, reflecting the evolution of the organisation as processes become increasingly automated.

16. **Automate financial transactions.** Electronic payment of utility accounts is already possible using commercial electronic banking facilities (including those at *Pick 'Pay* and *FoodWorld* if you don't have an online banking facility of your own). Pre-paid electricity can already be purchased online and even using cell phones. In the circumstances this may not really be the 'last' step. But full automation would include electronic bill presentation, online account queries including access to statements, and payment of once-off amounts. Government should be able to process monetary transactions across multiple departments. Consolidated accounts for utilities, licenses, fines and other payments should become possible.

The major challenge is also to develop and provide mechanisms for payment by those with no bank account (difficult) or with no access to electronic banking.

17. **Start now!** There are multiple benefits to be gained in terms of improving service delivery, internal efficiency and beneficiary satisfaction just by *preparing* to put service elements online. Planning the process of developing e-government services forces consideration of optimal and equitable service delivery and consideration of appropriate service standards, and should result in common effort to identify, standardise and integrate processes. These initiatives can themselves lead to efficiency gains and concrete service improvement before any online services are even launched.

Throughout the process incentives should be developed to encourage beneficiaries to interact with government online. Doing so is more efficient for government as service provider as well as more convenient for the beneficiary. Some of these savings should be passed on to beneficiaries.

Underpinning the above is need for a **standardised approach** between departments and across spheres, and systematic process of interacting with departments so that their points of interaction with beneficiaries are eventually described and delivered in a structured and standardised way. Aside from its

implicit efficiency benefits, back office process alignment and integration will only be possible if this is rigorously done.

The overlapping function of government spheres and various delegations of competencies requires that a **framework for collaboration** between adjacent spheres is agreed, and that this includes agreement about terminology and standards – which should ideally become common across the Republic.

As the process unfolds it will also become increasingly necessary (and possible) to get **feedback from beneficiaries** who use online services. Was all the information easy to find? Was all the necessary information provided? Did the online processes work? Was there a real saving in time or improvement in convenience? Answers can be used to continually fine tune online services to make them easier, faster and cheaper to use.

How are the Province and City doing?

Both the City of Cape Town and the Provincial Administration have made progress along this path in different ways – partially a reflection of the different mix of services that they provide.

Both have a broad vision for how e-government will change the 'way they do things'. The Province has almost finished the development of a services directory, supported by a content management system. This will be published on a specially designed web site that will go live in early 2004. The Province also has a call centre, and a walk in one stop information shop in Long Street. However, the process of re-organising the Administration's departments to work more efficiently in order to take advantage of the technical possibilities has yet to really start.

The situation in the City – where a number of municipal administrations have merged – has necessitated a different approach. A number of back-office processes have been consolidated, and so many non-operations information flows are no longer constrained by department boundaries. The web site has a lot of information on it, but still needs to be structured around beneficiaries and geared to service delivery. A website audit is being currently undertaken. A call centre has been launched, and the initial compilation of a services directory (based on the research in this report) is underway. Some forms are already available online, but these have not been standardised, and must still be downloaded and posted or faxed back after manual completion.

The relevant departments of the City and the Province have agreed on a collaborative framework to give substance to the necessity to collaborate in the development and provision of e-government services.

The issue of creating a unique beneficiary identifier

The logic of automation is to consolidate information about beneficiaries and the services provided to them. If individuals are allocated a different identity number or account number each time they apply or comply with a service, then the silo approach to service provision will be sustained, and the potential benefits of automation will not be realised. Already health systems and other service providers are tackling this issue. The aim of both the City and the Province is to have a single unique patient identification number for each patient in use by all facilities run by both.

As one of the steps towards e-government service delivery, a project will have to be undertaken to allocate each individual beneficiary with a single unique identifier for health, library and other social services. This should be linked to a single consolidated account number for all financial transactions linked to an individual (vehicle licensing, fines, etc) as well as to payments made in terms of ownership of property (utilities, rates, etc). Ideally this should be done in

conjunction with national government to create a unified system across all thee spheres of government.

8. Conclusion – making it happen

This report has focused on outlining what it might take to transfer the appropriate aspects of government services online. In doing so, it has made clear that in most cases the actual fulfillment of services cannot be done online. What can be done is to put various associated service elements online. These are principally information about services, including how to access them and how to get help when things go wrong.

Even putting just this information online in an easy to find and well-structured way represents a significant step. Providing standardised downloadable forms is a further step towards information transactions and financial transactions. For those with access to online banking, payment (in response to posted paper invoices) is already a reality.

If the benefits of such steps, for government departments as well as beneficiaries, are to be realised, then they must be accompanied by programs to also expand access to the necessary infrastructure, i.e. computers and networks (principally the Internet), and the skills to use them. But these are a means to an end. The goal of doing so should be to allow people access to useful content, including (but not restricted to) information about government services. Even this is not a goal in itself, but rather a necessary step in the dawn of the information age towards improving the efficiency and effectiveness of government services so as to improve the social and economic quality of life for all South Africans.

Making this happen is not a question of technology. The computers and software to do all of what is described in this report are readily available. Technology alone cannot improve the delivery of services. The challenge is rather in realigning government departments and structures to better understand and serve the needs of beneficiaries, and in changing the way in which public servants work to use the available technology to do this more effectively and efficiently. This, in turn, requires both the necessary political will and leadership, and organizational alignment both within each sphere of government as well as between them. But ultimately comes down to the attitude of each individual involved towards change.

Appendix 1 – Schedule of government services[17]

Note that this schedule was assembled from a beneficiary perspective. It lists the services actually offered on enquiry (i.e. reflecting reality as a beneficiary perceives it) rather than the services that any given sphere of government is supposed to provide or is mandated to provide. It thus cannot be considered to be 'complete' or 'accurate' from a formal government perspective (though this was not its intent). From a rigorous perspective this schedule does have apparent contradictions – this reflects the confusing situation faced by beneficiaries in dealing with government when seeking to obtain services.

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPON SIBLE DEPART MENT	CATEGOR Y [DIRECT/ GENERAL / OBLIGATIO N]
1	Markets	Facility for marketing of fresh produce (Epping)	Commercial organisations (produce growers, wholesalers and retailers)	BUSINESS	MUNICIPAL	Markets (Trading Services)	Direct
2	Abattoir (Maitland)	Humane slaughter of animals for human consumption	Agricultural commercial organisations (butchers, livestock farmers)	BUSINESS	MUNICIPAL	Abattoir (Trading Services)	Direct
3	Informal trading capacity building	Regulation of informal trading; skills and capacity development in conjunction with trading associations	Commercial organisations (esp. informal traders; property owners, organised informal and formal business bodies)	BUSINESS	MUNICIPAL	Economic Development and Tourism (Development)	Direct
4	Procurement supplier development and tender advice	Skills development and capacity building for suppliers of goods and services to the municipality; advice to potential suppliers as to how to set about composing and submitting tenders	Commercial organisations (small to medium enterprises supplying - or seeking to supply - the municipality with goods and services)	BUSINESS	MUNICIPAL	Economic Development and Tourism (Development)	Direct
5	Opportunities to supply goods and services	Tenders to supply the municipality; registration as supplier	Commercial organisations	BUSINESS	MUNICIPAL	Procurement (Finance)	Direct
6	Opportunity to purchase redundant stock	Management of municipal movable assets	Commercial organisions	BUSINESS	MUNICIPAL	Procurement (Finance)	Direct
7	Vetinary services	Vetinary information and services	Agriculture sector and general public	BUSINESS	NATIONAL	Agriculture	Direct
8	Maps and Mapping	A collection of maps, graphics and diagrams, illustrating environmental issues.	Commercial organisations (industry, NGO's, interested individuals)	BUSINESS	NATIONAL	Environmental Affairs and Tourism	Direct

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPONSIBLE DEPARTMENT	CATEGORY [DIRECT/ GENERAL / OBLIGATION]
9	SETA Services	Training services	Commercial organisations	BUSINESS	NATIONAL	Labour	Direct
10	Maps, aerial photographs, geodetic and digital products	A collection of maps, graphics and diagrams, illustrating environmental issues.	Organisations (researchers, industry, NGO's), (interested) individuals	BUSINESS	NATIONAL	Land Affairs	Direct
11	Creating assets through the Community Based Public Works Programme	Providing employment while building facilities useful to the community	Individuals (unemployed)	BUSINESS	NATIONAL	Public Works	Direct
12	Information about innovation and funding	Providing a list of funding resources and guidelines for innovators	Organisations (primarily commercial)	BUSINESS	NATIONAL	Science and Technology	Direct
13	Business services	Advice for businesses, information about funding and government schemes	Commercial organisations	BUSINESS	NATIONAL	Trade and Industry	Direct
14	Agricultural engineering services	Advise on irrigation, mechanisation, processing and land use	Agricultural sector	BUSINESS	PROVINCE	Agriculture	Direct
15	Agricultural training	Provision of training for new farmers	Agricultural sector	BUSINESS	PROVINCE	Agriculture	Direct
16	Farmer settlement	Land redistribution, resettlement and infrastructure development	Agricultural sector, individuals	BUSINESS	PROVINCE	Agriculture	Direct
17	Agricultural information	Economic and statistical information of interest to farmers	Agriculture, manufacturing and other related commerce; investors	BUSINESS	PROVINCE	Agriculture	Direct
18	Agricultural risk management advice services (not insurance)	Provide information and advice to minimise commercial risk and maximise agricultural output	Agriculture	BUSINESS	PROVINCE	Agriculture	Direct
19	Laboratory services	Soil, water and other testing facilities (on a fee basis)	Agriculture	BUSINESS	PROVINCE	Agriculture	Direct
20	Veterinary health services	Health services for livestock - animal health and disease control; inspection of animal derived foods	Agriculture, food manufacturers, individuals	BUSINESS	PROVINCE	Agriculture	Direct
21	Entrepreneurial support	Entrepreneurial support programmes	Commercial and other organisations, including service providers and tertiary education institutions	BUSINESS	PROVINCE	Economic Development and Tourism	Direct

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPON SIBLE DEPART MENT	CATEGOR Y [DIRECT/ GENERAL / OBLIGATIO N]
22	Support for small businesses	Support (non-financial) of SMMEs	Commercial organisations	BUSINESS	PROVINCE	Economic Development and Tourism	Direct
23	Business support	Organisation and support for business development organisations and service providers, including mentorship training, youth entrepreneurship programs, Library Business Corners, etc.	Commercial organisations, community and social organisations, individuals	BUSINESS	PROVINCE	Economic Development and tourism	Direct
24	Survey services	General surveying for property boundaries	Individuals and organisations	BUSINESS	PROVINCE / MUNICIPAL	Land Affairs	Direct
25	Film industry regulation and support	Promotion and regulation of the film industry, including issue of film permits	Commercial organisations (film industry and suppliers to it)	BUSINESS	MUNICIPAL	Economic Development and Tourism (Development)	Direct / General/ Obligation
26	Business development and support	Support for small businesses and businesses in identified sectors; support for the creation of job opportunities. Annual Small Business Week.	Individuals and commercial organisation (informal sector participants; small to medium enterprises, job seekers)	BUSINESS	MUNICIPAL	Economic Development and Tourism (Development)	General
27	Strategic economic sector support	Support of the growth and sustainable development of identified industrial and commercial sectors	Identified sector participants (businesses and individuals)	BUSINESS	MUNICIPAL	Economic Development and Tourism (Development)	General
28	Export and trade development	Create an environment conducive to regional and international trade (in conjunction with WESGRO)	Commercial organisations (business sector, investors)	BUSINESS	MUNICIPAL	Economic Development and Tourism (Development)	General
29	Tender advice	Advice to potential suppliers as to how to set about composing and submitting tenders for the supply of goods and services to local government	Commercial organisations (informal sector participants; domestic as well as international businesses; major investors - land and property owners, multi-national companies, organised informal and formal business bodies, small business)	BUSINESS	MUNICIPAL	Economic Development and Tourism (Development)	General

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPONSIBLE DEPARTMENT	CATEGORY [DIRECT/ GENERAL / OBLIGATION]
30	Investment facilitation	Attract and maintain investment and re-investment within the City (in conjunction with WESGRO)	Commercial organisations and individuals (business sector, investors, land and property owners, small business, job seekers)	BUSINESS	MUNICIPAL	Economic Development and Tourism (Development)	General
31	Development of tourism industry	Enhancement of range and quality of tourism resources; financial support to Cape Town Tourism	Tourists; commercial organisations (especially the hospitality and related industries)	BUSINESS	MUNICIPAL	Economic Development and Tourism (Development)	General
32	Economic information and research	Provision of strategic economic data and information; monitoring of key trends	Commercial organisations (investors; organised informal and formal business bodies)	BUSINESS	MUNICIPAL	Economic Development and Tourism (Development)	General
33	Creditor status and payment	Administration of all payments made for services and goods delivered to the city	Commercial organisations (suppliers to the municipality of goods and services	BUSINESS	MUNICIPAL	Expenditure (Finance)	General
34	City promotion	Promotion of the City to tourists, traders and investors	Tourists, overseas business sector, investors, individuals and commercial organisations	BUSINESS	MUNICIPAL	Communications	General
35	Information about genetic resources	Information about Genetic resources	Agriculture sector and individuals	BUSINESS	NATIONAL	Agriculture	General
36	National Plant Protection	To promote and regulate the availability of healthy and productive plant material and the quality of agricultural products in South Africa.	Agriculture sector and general public	BUSINESS	NATIONAL	Agriculture	General
37	Livestock health and meat safety	Animal disease inspection, monitoring and prevention; monitoring and regulation of animal derived foods	Agriculture, individuals	BUSINESS	PROVINCE	Agriculture	General
38	Tourism promotion and tourism industry development	Promotion of the Western Cape as a tourism destinations; guide registration; support for tourism bureaus; entrepreneurship support; signage; etc	Tourists, commercial organisations, social and community organisations, individuals	BUSINESS	PROVINCE	Economic Development and Tourism	General

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPON SIBLE DEPART MENT	CATEGOR Y [DIRECT/ GENERAL / OBLIGATIO N]
39	Business promotion	Industrial Development and Marketing	Commercial organisations and businesses	BUSINESS	PROVINCE	Economic Development and Tourism	General
40	Procurement (business) opportunities	Provision of provincial government needs on a commercial basis	Commercial organisations	BUSINESS	PROVINCE	Economic Development and tourism	General
41	Regional Services Council Levy	Tax on businesses	Individuals, organisations (through revenue generation to support the provision of municipal services)	BUSINESS	MUNICIPAL	Revenue Services (Finance)	Obligation
42	Agricultural regulatory services	Information about Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies	Agriculture sector and general public	BUSINESS	NATIONAL	Agriculture	Obligation
43	Export support and regulation	Information about export regulations and application	Agriculture sector and individuals	BUSINESS	NATIONAL	Agriculture	Obligation
44	Registration for UIF	Provision of UIF	Commercial organisations	BUSINESS	NATIONAL	Labour	Obligation
45	Abattoirs	Abattoirs - planning, inspection and registration	Agriculture, food manufacturers, individuals	BUSINESS	PROVINCE	Agriculture	Obligation
46	Child care facilities and nursery schools	Ensuring the provision of child care provision, in a manner which benefits the psycho-social development of the child	Individuals; community organisations involved in child care	COMMUNITY	MUNICIPAL	Social Development (Community Services)	Direct
47	Public transport	Provides public transport services, including bus, rail, minibus, taxis, plus Dial-A-Ride service for disabled	Individuals	COMMUNITY	MUNICIPAL	Transport, Roads and Stormwater (Development)	Direct
48	Road maintenance and new road construction	Management and maintenance of public transport infrastructure (e.g. repairing roads)	Individuals, organisations (road users, as well as property developers, architects)	COMMUNITY	MUNICIPAL	Transport, Roads and Stormwater (Development)	Direct
49	Municipal airports	Provision of airport facilities (where appropriate)	Individuals, organisations	COMMUNITY	MUNICIPAL	Public Housing & Transport, Roads & Stormwater (Development)	Direct
50	Income from surplus municipal property	Selling and leasing of surplus immovable municipal owned property (land and buildings)	Commercial organisations (developers, property owners, parastatals, NGOs, individual investors)	COMMUNITY	MUNICIPAL	Property Management (Development)	Direct

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPON SIBLE DEPART MENT	CATEGOR Y [DIRECT/ GENERAL / OBLIGATIO N]
51	SA Tourism	General tourism information, bookings, local information, what's on	Tourists - local and international, businesses operating in the sector	COMMUNITY	NATIONAL	Environmental Affairs and Tourism	Direct
52	SA National Parks	General information, bookings	Tourists - local and international, businesses operating in the sector	COMMUNITY	NATIONAL	Environmental Affairs and Tourism	Direct
53	SA Weather Bureau	Weather information, current and historic	Individuals, weather sensitive commercial enterprises e.g. agriculture	COMMUNITY	NATIONAL	Environmental Affairs and Tourism	Direct
54	National Botanical Institute	Information about botanical gardens and events, research	Individuals, (academic) organisations	COMMUNITY	NATIONAL	Environmental Affairs and Tourism	Direct
55	Promote proper police conduct	Deal with complaints relating to: 1. Deaths of persons in police custody or deaths which are as a result of police action. 2. The involvement of police members in criminal activities such as robbery, theft of motor vehicles and assault. 3. Police conduct or behaviour which is prohibited by the Police Regulations, such as neglect of duties or failure to comply with the Code of Conduct.	Individuals and organisations	COMMUNITY	NATIONAL	Independent Complaints Directorate	Direct
56	Media services	Communication channel between provincial government and beneficiaries	Individuals, organisations	COMMUNITY	PROVINCE	Communicatio ns	Direct
57	Archives (other than National Archives)	Catalogued library of government and other documents	Individuals, organisations	COMMUNITY	PROVINCE	Cultural Affairs	Direct
58	Language services	Enforces and promotes the use of the three official languages of the Western Cape	Individuals	COMMUNITY	PROVINCE	Cultural Affairs	Direct
59	Arts and culture	Funding support of arts and culture organisations	Organisations (artistic and cultural)	COMMUNITY	PROVINCE	Cultural Affairs	Direct
60	Sports recreation	Organise and support sports organisations and events - focus on pre-schoolers and youth in disadvantaged	Individuals, community and social organisations	COMMUNITY	PROVINCE	Cultural Affairs	Direct

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPONSIBLE DEPARTMENT	CATEGORY [DIRECT/ GENERAL / OBLIGATION]
		areas, and senior citisens					
61	Schools sports	Organisation of sporting activities in schools	Organisations (schools) and individuals	COMMUNITY	PROVINCE	Cultural Affairs	Direct
62	Sports federations	Financial support and organisation coordination of sports federations to enable then to fulfils their responsibility for the oversight and promotion of sporting codes	Organisations (sports federations)	COMMUNITY	PROVINCE	Cultural Affairs	Direct
63	Major sports events	Organisation and promotion of major sporting events	Organisations (sports federations and related)	COMMUNITY	PROVINCE	Cultural Affairs	Direct
64	Traffic management - special events	Traffic escorting services and traffic regulation at special events	Organisations (event organisers), individuals	COMMUNITY	PROVINCE	Community Safety	Direct
65	Waste removal	Solid waste management - refuse and garden waste collection; street cleaning; beach cleaning; provision of litter bins, control of dumping, composting and recycling	Individuals, organisations (including recyclers, waste collectors; community groups; commercial waste companies)	COMMUNITY	MUNICIPAL	Solid waste (Trading Services)	Direct / General
66	Law and order	Law enforcement; social crime prevention and strategic surveillance (CCTV), control of public nuisances	Individuals, organisations	COMMUNITY	MUNICIPAL	City Police (Community Services)	Direct / General
67	Law and order - roads and traffic	Traffic policing and management services including regulation of parking (enforcement of rules; safety)	Individuals, organisations (especially road users)	COMMUNITY	MUNICIPAL	City Police (Community Services)	Direct / General
68	Community facilities management - public halls, caravan parks, camp sites, etc	Management and maintenance of public halls, toilets, bathhouses, statues, fountains and monuments	Individuals, community organisations (inc. social and civic clubs; youth and school groups, families, tourists)	COMMUNITY	MUNICIPAL	Community Facilities (Community Services)	Direct / General
69	Control of outdoor advertising and signage	Billboards and the display of advertisements in public places	Individuals, organisations (inc property owners, event organisers, advertisers)	COMMUNITY	MUNICIPAL	Planning and Environment (Development)	Direct / General
70	Information services	First line channel of communication between the City and the Community	Individuals, organisations (specifically internal customers,	COMMUNITY	MUNICIPAL	Customer Care (Communications)	Direct / General

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPONSIBLE DEPARTMENT	CATEGORY [DIRECT/ GENERAL / OBLIGATION]
			tourists, residents, business, developers, ratepayers, service providers, community organisations, other spheres of government, other external partners)				
71	Gambling	Regulation of casino's, racing, gambling and wagering (excluding lotteries and sports pools)	Individuals, commercial organisations	COMMUNITY	PROVINCE	Economic Development & Tourism	Direct / General
72	Environmental protection and awareness	Development and implementation of environmental protection programs, including Cape Nature Conservation; environmental awareness information dissemination	Other governmental organisations, social and community organisations, individuals	COMMUNITY	PROVINCE	Environmental Affairs and Development Planning	Direct / General
73	Road Accident Fund	Administration of a fund to recompense victims of road accidents	Citizens and residents	COMMUNITY	PROVINCE	Health	Direct / General
74	Government relations	Management of relationships with other spheres of government, other cities - nationally and internationally	Organisations	COMMUNITY	MUNICIPAL	International and Intergovernmental Relations (Office of the Assistant City Manager)	General
75	Public pounds	Component of animal care, public health, parking, etc	Individuals, organisations	COMMUNITY	MUNICIPAL	City Police (Community Services)	General
76	Community facilities management - beaches, including pontoons, ferries, jetties, piers & harbours	Integrated beach management, including beaches, resorts & tidal pools, and waterfront facilities	Individuals, organisations (inc. social and civic clubs; youth and school groups, families, tourists)	COMMUNITY	MUNICIPAL	Community Facilities (Community Services)	General
77	Arts and culture	Organise cultural events and festivals	Individuals, community organisations (inc. community groups, youth organisations, schools)	COMMUNITY	MUNICIPAL	Social Development (Community Services)	General
78	Public open spaces	Open space management (parks, scenic drives, sand dune reclamation)	Public at large: community groups, youth organisations, schools	COMMUNITY	MUNICIPAL	Open Spaces and Nature Conservation (Community Services)	General

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPON SIBLE DEPART MENT	CATEGOR Y [DIRECT/ GENERAL / OBLIGATIO N]
79	Nature conservation and management of reserves	Conservation and preservation of natural environment, especially commons, vleis	Individuals (inc. community groups, youth organisations, schools)	COMMUNITY	MUNICIPAL	Open Spaces and Nature Conservation (Community Services)	General
80	Sports and other recreational facilities	Provision of sports fields, stadia, recreation centres, swimming pools, indoor sports centres	Individuals, community organisations (esp. social and civic groups, youth and sporting clubs, schools, visitors)	COMMUNITY	MUNICIPAL	Sports and Recreation (Community Services)	General
81	Support for sports organisations	Monetary subsidies for community sports clubs, etc.	Community organisations (inc. social and civic groups, youth and sporting clubs, schools, visitors)	COMMUNITY	MUNICIPAL	Sports and Recreation (Community Services)	General
82	Major sporting events	Support service for major sporting and recreational events (in conjunction with Major Events department within Economic Development & Tourism)	Individuals (inc. social and civic groups, youth and sporting clubs, schools, visitors)	COMMUNITY	MUNICIPAL	Sports and Recreation (Community Services)	General
83	Transport planning	Planning of roads and other transport infrastructure	Public at large, property developers, architects	COMMUNITY	MUNICIPAL	Transport, Roads and Stormwater (Development)	General
84	Transport engineering services	Manages traffic flows, incidence; capturing accident data	Individuals, organisations (esp. property developers, architects)	COMMUNITY	MUNICIPAL	Transport, Roads and Stormwater (Development)	General
85	Surface water management	Catchment, stormwater and river management	Individuals, organisations (inc. property developers, architects)	COMMUNITY	MUNICIPAL	Transport, Roads and Stormwater (Development)	General
86	Street lighting	Lighting of streets and other public places	Individuals, organisations (road users)	COMMUNITY	MUNICIPAL	Electricity on behalf of Transport, Roads and Stormwater (Development)	General
87	City planning	Spatial planning and urban monitoring	Individuals, organisations (inc. architects, developers, builders)	COMMUNITY	MUNICIPAL	Planning and Environment (Development)	General
88	Management of municipal property	Maintenance and development of municipal property (which provides facilities for municipal departments); lease and encroachment of public land	Municipal departments and the individuals and organisations who use them	COMMUNITY	MUNICIPAL	Property Management (Development)	General
89	Tourism and events promotion	Tourism and events marketing	Visitors especially tourists (domestic and foreign) and commercial	COMMUNITY	MUNICIPAL	Economic Development and Tourism (Development)	General

Initial research to inform the design and development of e-government services

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPONSIBLE DEPARTMENT	CATEGORY [DIRECT/ GENERAL / OBLIGATION]
			organisations (especially the tourism and hospitality industry; events organisers; event participants and visitors; organised informal and formal business bodies)				
90	Provision and management of state property	Maintain state property, including museums	Individuals	COMMUNITY	NATIONAL	Public Works	General
91	SAPS	Safety and security	Individuals and organisations	COMMUNITY	NATIONAL	SA Police Service	General
92	Forests	Administration of Indigenous forests	Individuals	COMMUNITY	PROVINCE	Agriculture	General
93	Traditional leadership	Set policy with regard to the way in which traditional leadership structures interact with / are incorporated in provincial and local government	Individuals (inc. traditional leaders)	COMMUNITY	PROVINCE	Local Government	General
94	Crime prevention activities	Monitoring police conduct; complaints investigation; initiate and support social crime prevention projects	Individuals	COMMUNITY	PROVINCE	Community Safety	General
95	Roads	Road construction and maintenance	Individuals, organisations	COMMUNITY	PROVINCE	Transport	General
96	Museum services	Financial and organisational support to affiliated museums	Organisations, other government (municipalities)	COMMUNITY	PROVINCE	Cultural Affairs	General
97	Public transport	Management of public transport infrastructure, facilities and services	Individuals	COMMUNITY	PROVINCE	Transport	General
98	Vehicle and traffic regulation and safety	Monitoring of traffic flows, accidents. Vehicle licensing. Road safety education.	Individuals and organisations (vehicle owners)	COMMUNITY	PROVINCE	Transport	General / obligation
99	Licensing of animals	Licensing of dogs	Individuals (especially dog owners)	COMMUNITY	MUNICIPAL	City Police (Community Services)	Obligation
100	Regulation and provision of fences	Regulation of residential fencing and walls; provision of fencing in public areas	Individuals (residents of private housing, road users)	COMMUNITY	MUNICIPAL	Public Housing & Transport, Roads & Stormwater (Development)	Obligation

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPON SIBLE DEPART MENT	CATEGOR Y [DIRECT/ GENERAL / OBLIGATIO N]
101	Land use management	Process applications to change land use in terms of regulations	Individuals, organisations (inc. architects, developers, builders)	COMMUNITY	MUNICIPAL	Planning and Environment (Development)	Obligation
102	Environment al impact assessments: heritage impact assessments	Management of the built environment	Individuals, organisations (inc. architects, developers, builders)	COMMUNITY	MUNICIPAL	Planning and Environment (Development)	Obligation
103	Motor vehicle licensing	Licensing of vehicle ownership and registration of ownership (associated with roadworthy test)	Individuals, organisations	COMMUNITY	MUNICIPAL	Revenue Services (Finance)	Obligation
104	Registration of non-profit organisations	Registration of Non-profit organisations	Community organisations	COMMUNITY	NATIONAL	Social Development	Obligation
105	Regulation of the liquor trade	Licensing of the liquor trade	Commercial businesses, individuals	COMMUNITY	PROVINCE	Economic Development and Tourism	Obligation
106	Health care	Primary health care - professionally staffed clinics; health information services	Residents - dependant on public sector for health care needs (women between 15-45, sick children under 13, men and women with sexually transmitted diseases, TB sufferers)	HEALTH	MUNICIPAL	City Health (Community Services)	Direct
107	Ambulance Services	Provision of ambulance emergency services	Individuals	HEALTH	PROVINCE	Health	Direct
108	Public health services	Provide public health services through professionally staffed public hospitals and clinics	Citizens and residents	HEALTH	PROVINCE	Health	Direct
109	Emergency health services	Ambulance and emergency services	Individuals	HEALTH	PROVINCE	Health	Direct
110	Home based care and terminal care	Funding and support for home based and terminal care programs and service providers	Citizens and residents	HEALTH	PROVINCE	Health	Direct
111	Mental health care	Mental health care services	Citizens and residents	HEALTH	PROVINCE	Health	Direct
112	Rehabilitation programs	Occupational therapy, physiotherapy, hearing, eye care; psycho-social rehabilitation	Citizens and residents	HEALTH	PROVINCE	Health	Direct

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPON SIBLE DEPART MENT	CATEGOR Y [DIRECT/ GENERAL / OBLIGATIO N]
113	Feeding schemes	Feeding schemes and nutrition programmes	Under privileged individuals	HEALTH	PROVINCE	Health	Direct
114	Occupational health	Occupational workplace health programs (in conjunction with the Department of Labour)	Citizens and residents, organisations	HEALTH	PROVINCE	Health	Direct / obligation
115	Air quality management	Pollution law enforcement; emission testing and control	Individuals	HEALTH	MUNICIPAL	City Health (Community Services)	General
116	Pollution control	Monitor and regulate emission of pollutants	Individuals	HEALTH	PROVINCE	Environmental Affairs & Development Planning	General
117	Environment al health	Environmental health services - monitoring of food safety & hygiene, water quality, waste management, health surveillance of premises, monitoring and control of communicable and environmental related diseases; environmental pollution (including noise); enforcement of Tobacco Control Act	Individuals, organisations	HEALTH	MUNICIPAL	City Health (Community Services)	General / obligation
118	Environment al health	Monitoring and regulation of the environment (includes management of medical waste and pollution control)	Beneficiaries	HEALTH	PROVINCE	Health	General / obligation
119	Food services control and licensing	Licensing and control of undertakings that sell food to the public	Individuals. Organisations (inc. public at large, food establishments and related businesses)	HEALTH	MUNICIPAL	City Health (Community Services)	Obligation
120	Regulation of private health care facilities	Licensing of private healthcare facilities – support and facilitation of the process	Health care institutions and organisations; individuals	HEALTH	PROVINCE	Health	Obligation
121	Water	Fresh (potable) water supply - bulk water management, reticulation, quality monitoring, sewerage	Individuals, organisations (industrial premises, residents, schools, informal settlements)	HOUSE	MUNICIPAL	Water and Waste (Trading Services)	Direct

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPONSIBLE DEPARTMENT	CATEGORY [DIRECT/ GENERAL / OBLIGATION]
122	Electricity	Electrical power supply	Individuals, organisations (domestic consumers; very large consumers e.g. hospitals, shopping malls, industrial complexes; small power users e.g. small factories, small businesses)	HOUSE	MUNICIPAL	Electricity (Trading Services)	Direct
123	Low income housing	Allocation and development of basic housing	Individuals (esp. people who rent and those who lease)	HOUSE	MUNICIPAL	Public Housing (Development)	Direct
124	Municipal housing maintenance	Maintenance of municipal flats and hostels	Individuals (occupants of municipal housing)	HOUSE	MUNICIPAL	Public Housing (Development)	Direct
125	The Housing Network	A list of companies and other NGO's that actively contribute to the Housing process in South Africa.	Commercial organisations (businesses in the building industry) individuals (prospective homeowners)	HOUSE	NATIONAL	Housing	Direct
126	Housing - agricultural labour	Provision of hosing for agricultural labourers of resource poor farmers	Individuals employed in the agricultural sector	HOUSE	PROVINCE	Agriculture	Direct
127	Provision of accommodation	Lease of Western Cape Housing Development Board assets	Individuals, organisations	HOUSE	PROVINCE	Housing	Direct
128	Management of informal settlements	Management of informal housing and settlements	individuals (living in informal areas)	HOUSE	MUNICIPAL	Public Housing (Development)	General
129	Housing	Promotion and facilitation of housing development projects/ housing subsidies	Individuals, other municipal government	HOUSE	PROVINCE	Housing	General
130	Building plan approval	Building development management	Individuals, organisations (inc. architects, developers, builders)	HOUSE	MUNICIPAL	Planning and Environment (Development)	Obligation
131	Property valuation	Valuation of property for the purposes of levying rates	Individuals, organisations (through rates collection)	HOUSE	MUNICIPAL	Property Valuations (Finance)	Obligation
132	Property rates	Tax on property owners	Individuals, organisations (through revenue generation to support the provision of municipal services)	HOUSE	MUNICIPAL	Revenue Services (Finance)	Obligation
133	Emergency services	Disaster Management - planning for responding to disasters	Individuals, organisations (especially shopping malls, factories,	INDIVIDUAL	MUNICIPAL	Emergency Services (Community Services)	Direct

Initial research to inform the design and development of e-government services

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPON SIBLE DEPART MENT	CATEGOR Y [DIRECT/ GENERAL / OBLIGATIO N]
		(management of both risks and consequences)	educational institutions, stadia, multi-story buildings, homes, hotels, clinics, residential, entertainment, retirement homes, hospitals)				
134	Emergency services	Prevention and fighting of fires; protection and rescue of lives and property from fire and related dangers	Individuals, organisations (especially shopping malls, factories, educational institutions, stadia, multi-story buildings, homes, hotels, clinics, residential, entertainment, retirement homes, hospitals)	INDIVIDUAL	MUNICIPAL	Emergency Services (Community Services)	Direct
135	Public complaints	Receipt and investigation of complaints about local government services	Individuals and organisations	INDIVIDUAL	MUNICIPAL	Public Complaints Commissioner (previously known as Ombudsman) (Office of the Assistant City Manager)	Direct
136	Emergency services	107 public emergency communications service	Individuals, organisations (especially shopping malls, factories, educational institutions, stadia, multi-story buildings, homes, hotels, clinics, residential, entertainment, retirement homes, hospitals)	INDIVIDUAL	MUNICIPAL	Emergency Services (Community Services)	Direct
137	Libraries	Public library services	Individuals, community organisations (inc. community groups, youth organisations, schools)	INDIVIDUAL	MUNICIPAL	Library Services - Social Development (Community Services)	Direct
138	Animal care	Accommodation, care and burial of animals	Individuals	INDIVIDUAL	MUNICIPAL	None (service not provided) - refer to SPCA, PDSA	Direct
139	Information about foreign representatio n in South Africa	Contact details for foreign missions in SA	Citizens, residents, tourists	INDIVIDUAL	NATIONAL	Foreign Affairs	Direct
140	Services to SA citizens travelling abroad (Consular Services)	Help with official documentation, business assistance	SA citizens touring abroad, SA businesses exporting	INDIVIDUAL	NATIONAL	Foreign Affairs	Direct

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPON SIBLE DEPART MENT	CATEGOR Y [DIRECT/ GENERAL / OBLIGATIO N]
141	Contact details for government officials	List of details	Individuals, organisations	INDIVIDUAL	NATIONAL	Government Communicatio n (GCIA)	Direct
142	Master of the High Court	Deal with 1. Deceased Estates 2. Liquidations (Insolvent Estates) 3. Registration of Trusts 4. Tutors and Curators 5. Administration of the Guardian's Fund (minors and mentally challenged persons)	Individuals and organisations	INDIVIDUAL	NATIONAL	Justice and Constitutional Development	Direct
143	Complaints about government services	investigating, monitoring, evaluating, communicating and reporting on the public administration	Individuals and organisations	INDIVIDUAL	NATIONAL	Public Service Commission	Direct
144	Consumer protection	Logging and resolution of consumer complaints regarding commercial goods and services and public services provided by various spheres of government	Individuals, organisations	INDIVIDUAL	PROVINCE	Economic Development & Tourism	Direct
145	General school education	General education and training (GET - grades 1 - 9) and further education and training (FET 0 GRADES 10 - 12)	Individuals - child learners	INDIVIDUAL	PROVINCE	Education	Direct
146	Specialised education	Specialised education facilities for those with special needs; adult basic education and training	Individuals - child and adult learners	INDIVIDUAL	PROVINCE	Education	Direct
147	Learner Transport Scheme	Provides transport for learners in non-urban areas	Individuals - learners	INDIVIDUAL	PROVINCE	Education	Direct
148	Social services	Developmental welfare services for the socially and economically disadvantaged in cooperation with NGOs and other social welfare organisations who provide community and social services	Individuals, community and social organisations	INDIVIDUAL	PROVINCE	Social Services	Direct

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPONSIBLE DEPARTMENT	CATEGORY [DIRECT/ GENERAL / OBLIGATION]
149	Social security grants	Cash payments to eligible individuals, e.g. eligible families, war veterans, fostered children, etc.	Individuals	INDIVIDUAL	PROVINCE	Social Services	Direct
150	Elections	Registration of voters, holding of municipal elections for local government representatives	Citizens	INDIVIDUAL	MUNICIPAL	Municipal Electoral Officer (Office of the Assistant City Manager)	General
151	Cemeteries and crematoria	Provision of cemeteries and crematoria	Individuals	INDIVIDUAL	MUNICIPAL	Open Spaces and Nature Conservation (Community Services)	General
152	Play activities	Play facilities for young children	Individuals, community organisations (esp. social and civic groups, youth and sporting clubs, schools, visitors)	INDIVIDUAL	MUNICIPAL	Sports and Recreation (Community Services)	General
153	Library services	Provision of public libraries in conjunction with local municipalities	Other government (municipalities)	INDIVIDUAL	PROVINCE	Cultural Affairs	General
154	Creation of job opportunities	Funding of viable projects which will create sustainable job opportunities	Other government (municipalities), organisations and individuals	INDIVIDUAL	PROVINCE	Economic Development and Tourism	General
155	Emergency services	Fire prevention legislation enforcement	Individuals, organisations	INDIVIDUAL	MUNICIPAL	Emergency Services (Community Services)	Obligation
156	Payment of TV license	Annual payment of TV license	Individuals (TV watching public)	INDIVIDUAL	NATIONAL	Communications	Obligation
157	Civic services including identity documents, travel documents, citizenship, birth, adoption, marriage, death, amendments	Issuing of documents	Citizens	INDIVIDUAL	NATIONAL	Department of Home Affairs	Obligation
158	Migration services including visas, temporary residence, permanent residence (immigration) and refugees & asylum	Issuing of documents	Residents	INDIVIDUAL	NATIONAL	Department of Home Affairs	Obligation
159	Collection of taxes	Collection of personal and business tax	Individuals and commercial organisations	INDIVIDUAL / BUSINESS	NATIONAL	SA Revenue Service	Obligation

	SERVICE - general name	Service Description	MAIN BENEFICIARY - by segment	SERVICE GROUP	PROVIDER [MUNICIPAL/ PROVINCE/ NATIONAL]	RESPON SIBLE DEPART MENT	CATEGOR Y [DIRECT/ GENERAL / OBLIGATIO N]
160	Registration of Independent schools	Monitor standards of private schools that are not directly funded by the Government	Educational organisations, individuals	INDIVIDUAL	PROVINCE	Education	Obligation
161	Deeds services	Housing of title deeds to property	Individuals and organisations	INDIVIDUAL	PROVINCE / MUNICIPAL	Land Affairs	Obligation

Appendix 2 – Responsibilities of provincial and local government as defined by the Constitution

The Constitution of the Republic does not define the services to be provided by the provincial and local spheres of government. Instead, it lists the 'functional areas of competence' – that is the areas for which provincial and local government are responsible.

These are listed in two schedules of the Constitution. Schedule 4 concerns those that the national and provincial spheres are jointly responsible, whilst Schedule 5 lists those for which provincial governments are exclusively responsible.

Each is then subdivided into two parts:

Part A of Schedule 4 lists those functional areas for which the national and provincial spheres are jointly responsible. Effectively these become the responsibility of provinces under national direction

Part B of Schedule 4 lists those functional areas for which provincial governments are exclusively responsible, that is national government has no direct responsibility. Provincial governments establish municipalities to effect these responsibilities. Municipalities have specific executive authority in these matters

Part A of Schedule 5 lists those functional areas for which provincial governments are uniquely responsible. These functions are not generally delegated to municipalities

Part B of Schedule 5 finally lists those responsibilities generally held by municipalities alone

These schedules are therefore the official policy as to what services should be provided and functions performed, and by whom.

SCHEDULE 4
Functional Areas of Concurrent National and Provincial Legislative Competence

Part A
Administration of indigenous forests
Agriculture
Airports other than international and national airports
Animal control and diseases
Casinos, racing, gambling and wagering, excluding lotteries and sports pools
Consumer protection
Cultural matters
Disaster management
Education at all levels, excluding tertiary education
Environment
Health services
Housing
Indigenous law and customary law, subject to Chapter 12 of the Constitution
Industrial promotion
Language policy and the regulation of official languages to the extent that the provisions of section 6 of the Constitution expressly confer upon the provincial legislatures legislative competence
Media services directly controlled or provided by the provincial government, subject to section 192

Nature conservation, excluding national parks, national botanical gardens and marine resources
Police to the extent that the provisions of Chapter 11 of the Constitution confer upon the provincial legislatures legislative competence
Pollution control
Population development
Property transfer fees
Provincial public enterprises in respect of the functional areas in this Schedule and Schedule 5
Public transport
Public works only in respect of the needs of provincial government departments in the discharge of their responsibilities to administer functions specifically assigned to them in terms of the Constitution or any other law
Regional planning and development
Road traffic regulation
Soil conservation
Tourism
Trade
Traditional leadership, subject to Chapter 12 of the Constitution
Urban and rural development
Vehicle licensing
Welfare services

Part B
Air pollution
Building regulations
Child care facilities
Electricity and gas reticulation
Firefighting services
Local tourism
Municipal airports
Municipal planning
Municipal health services
Municipal public transport
Municipal public works only in respect of the needs of municipalities in the Discharge of their responsibilities to administer functions specifically assigned to them under this Constitution or any other law
Pontoons, ferries, jetties, piers and harbours, excluding the regulation of international and national shipping and matters related thereto
Stormwater management systems in built-up areas
Trading regulations
Water and sanitation services limited to potable water supply systems and domestic waste-water and sewage disposal systems

SCHEDULE 5
Functional Areas of Exclusive Provincial Legislative Competence

Part A
Abattoirs
Ambulance services
Archives other than national archives
Libraries other than national libraries
Liquor licences
Museums other than national museums
Provincial planning
Provincial cultural matters

Provincial recreation and amenities
Provincial sport
Provincial roads and traffic
Veterinary services, excluding regulation of the profession

Part B
Beaches and amusement facilities
Billboards and the display of advertisements in public places
Cemeteries, funeral parlours and crematoria
Cleansing
Control of public nuisances
Control of undertakings that sell liquor to the public
Facilities for the accommodation, care and burial of animals
Fencing and fences
Licensing of dogs
Licensing and control of undertakings that sell food to the public
Local amenities
Local sport facilities
Markets
Municipal abattoirs
Municipal parks and recreation
Municipal roads
Noise pollution
Pounds
Public places
Refuse removal, refuse dumps and solid waste disposal
Street trading
Street lighting
Traffic and parking

Appendix 3 – An overview of the Western Cape

| Population – Western Cape total | 4,524,323 | Stats SA |
| Population – Cape Town | 2,893,251 | Stats SA |

Annual population increase	81,000 (1.8%)	Stats SA; Wesgro
Population groups		
African	1,207,426 (26.7%)	Stats SA
Coloured	2,438,976 (53.9%)	Stats SA
Indian / Asian	45,023 (1%)	Stats SA
White	832,908 (18.4%)	Stats SA
Total	4,524,333 (100%)	Stats SA
Age breakdown		
0 – 4	405,539 (9.0%)	Stats SA
5 - 19	1,277,405 (28.2%)	Stats SA
20 – 29	856,635 (18.9%)	Stats SA
30 – 49	1,299,261 (28.7%)	Stats SA
50 – 64	451,396 (10.0%)	Stats SA
>65	234,087 (5.2%)	Stats SA
Age 20-65 years	57.6%	Stats SA
Gender ratio		
Female	51.5%	Stats SA
Male	48.5%	Stats SA
Home language		
Afrikaans	55.3%	Stats SA
English	19.3%	Stats SA
Xhosa	23.7%	Stats SA
Urbanisation	88.5%	Stats SA
Services (dwelling)		
Piped water	67.5%	Stats SA
Telephone	50.5%	Stats SA
Electricity (for lighting)	88.0%	Stats SA
Labour force	1,880,000 (42% of population)	Stats SA; Wesgro
Unemployed	526,994 (17.1% of labour force)	Stat SA
Adult literacy level[1]	81% (SA = 73%)	Stats SA; Wesgro
Child literacy rate	60.7%	Stats SA
Pupil enrolment at school	215.7 per 1,000 of population	Stats SA; Wesgro
Human development index[2]	0.673 (SA = 0.702)	Wesgro; UNDP
HIV infection rate	7.1% (SA = 22%)	Stats SA; Wesgro

[1] Adult literacy is 'the proportion of the population who are 15 years of age and older who are able, with understanding, to both read and write a short, simple statement on their everyday life' (Ref: www.statssa.gov.za/RelatedInverseSites/children%20Internet_new/Excel%20files/WC.xls)

[2] The Human Development Index is a composite index measuring average achievement in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living (Ref: http://www.undp.org/hdr2001/indicator/indic_17_1_1.html)

Infant mortality	29 per 1,000 births	Stats SA; Wesgro
% of households below poverty line	19% (SA = 47.4%)	Stats SA; Wesgro
% of households occupying a house on a separate stand	65.1%	Stats SA
% of households living in informal dwelling or shacks	16.2%	Stats SA
% of houses electrified	88%	Stats SA
% of households with access to piped water	98.3%	Stats SA
% of households with a flush or chemical toilet	86.5%	Stats SA
% of households receiving municipal refuse removal service (at least once per week)	87.7%	Stats SA
Gini coefficient[3]	0.55 (SA = 0.69)	Wesgro; http://www.btimes.co.za/99/0711/news/news07.htm

Individual segments

Citizens and residents

The population of individuals (citizens and residents) in the Western Cape – using the 2001 census data – is 4,524,323.

Place of residence:

Urban formal	77%
Urban informal	12%
Commercial farms	10%
Other rural	1%

Regional breakdown:

West Coast District Municipality	282,667	6.2%
Boland District Municipality	629,489	13.9%
Overberg District Municipality	203,514	4.5%
Eden District Municipality	454,924	10.1%
Central Karoo District Municipality	60,478	1.3%
City of Cape Town	2,893,251	63.9%
Total	4,524,323	100%

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[3] The Gini coefficient is a number between 0 and 1, where 0 means perfect equality (everyone has the same income) and 1 means perfect inequality (one person has all the income, everyone else earns nothing). The Gini coefficient for the USA is 0.38 – thus, income distibution in the Western Cape is less equtable that in the USA

Visitors[4]

Tourism is a major contributor the Western Cape economy, generating about R5.7 billion[5] per year (5% of gross regional product). Additionally, tourist visitors are important potential business partners, both as traders and investors.

Overall, the Western Cape receives 7.6 million foreign and domestic tourists per year.

Overseas tourism figures are:

Number of oversees visitors to the Western Cape (2002)	976,000
Number of African-air visitors to the Western Cape (2002)	70,000
Number of African-land Visitors to the Western Cape (2002)	326,000
Percentage of South Africa's oversees visitors visiting the Western Cape (2002)	53%
Percentage of South Africa's African-air visitors visiting the Western Cape (2002)	21%
Percentage of South Africa's African-land visitors visiting the Western Cape (2002)	8%

Organisation segments

Commercial

The gross regional product (GRP) of the Western Cape is R125.7 billion (14.3% of the SA total).[6] Real growth in 2002 was 2.5%.

The economy of Cape Town contributes approximately 73% of the provincial GRP and 9.8% of the national GDP[7]. Pro rata there are thus estimated to be 55,000 formal businesses in the Western Cape.

There are about 40,000 formal businesses registered on the City of Cape Town RCS Levy database. Various estimates of the number of business enterprises in the City – including informal businesses – range up to 60,000.

The estimated contribution of these businesses by sector to the provincial economy[8] is:

Sector	Share of Western Cape economy[9]	Proportion from non-urban areas
Manufacturing	20.9%	6.3%
Agriculture	3.6%	74.2%
Mining & Quarrying	0.3%	0.3%
Construction	9.1%	2.7%
Wholesale/ retail/ hospitality	17.2%	3.6%
Financial/ professional services, including insurance, real estate, business services	11.6%	1.3%

[4] Source: G. Thornton & K. Feinstein ' Western Cape Trends Card' Wesgro, 25 April 2003

[5] 1998 figures. Source: City of Cape Town quoted from 'Cape Town's Economy: Current Trends and Future Prospects 2001'

[6] Figures for the year 2000. Source: Wesgro http://www.wesgro.org.za

[7] Source: http://www.capetown.gov.za/home/economic.asp

[8] Source: 1996 census (comparable 2001 census information not yet available)

[9] These total 72%; the balance is GRP is contributed by the public sector and the not-for-profit sector (social and community organisations)

Electricity, water and parastatals	1%	0,2%
Transport/ storage/ communications	6.2%	1.3%
Other	2%	Not available

Firm size structure[10]:

3% of all firms are large (100+ or 200+ employees depending on the sector)

4% of firms are medium-sized (50+ or 100+ employees depending on the sector)

22% of firms are small (10-50 or 20-50 employees depending on the sector)

71% of firms are small (5-10 or 5-20 employees) and micro (less than 5 employees)

Social and community organisations, including NGOs

Non-commercial organisations make up 21.8% of the Western Cape Economy.[11] These include:

Academic institutions
Arts and culture groups
Business organisations
Charitable organisations
Environmental groups
Parastatals
Professional bodies and institutions
Technology and science organisations
Tourism organisations
Trades unions
Sport organisations and hobby groups
Various other NGOs

Government

The government sector contributes 6% to the economy of the Western Cape.

From a services perspective, each sphere of government (national, provincial and local) can be considered to be a customer (beneficiary) of the others. National government relies upon the other spheres to deliver most public services (the exceptions are macro-economic management, defense, foreign affairs, home affairs, police and the legal/ judicial system).[12]

Provincial governments have relations with each other as well as responsibility for the municipalities within each province. However, 'category A' municipalities – such as Cape Town, have a considerable level of autonomy and a more equal relationship with their provincial authority.[13]

The internal exchange of information between provincial and municipal departments, or between municipalities is an important aspect of both the Smart

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[10] Source: City of Cape Town quoted from 'Cape Town's Economy: Current Trends and Future Prospects 2001'

[11] For key organisations in each category, see http://www.westerncape.org.za

[12] Interestingly, those national government departments that deal directly with the public tend to have a clear e-government policy and well-designed and maintained web sites. See, for example, www.sars.gov.za or www.home-affairs.pwv.gov.za. www.saps.org.za is a notable exception.

[13] South Africa has six metropolitan municipalities, namely Tshwane (Pretoria), Johannesburg, Ekurhuleni (East Rand), Ethekwini (Durban), Cape Town and Nelson Mandela (Port Elizabeth)

City strategy and the Cape Online project, but from the perspective of this research cannot be considered a direct government service since these activities do not directly benefit the defined beneficiaries – they are support activities.

Appendix 4 - Assessment of delivery channels

Assessment

This assessment provides information about the penetration of various information channels in the Western Cape.

Telephone

According to Telkom, the monopoly provider, there are "approximately 1,000,000" fixed telephone lines in the Western Cape.[14] The split of these between urban and rural is likely to be broadly in line with the distribution of the population.

The telecommunications infrastructure of Cape Town (2000) is[15]:

Domestic			Business		
Pre-paid	114,671	23.3%	Ordinary lines	228,396	82.8%
Primary rate ISDN	556	0,1%	Basic rate ISDN	10,832	3.9%
Conventional	377,022	76.6%	Primary rate ISDN	366,000	13.3%
Total	492,249	100%	Total	275,828	100%

Cellular 'phone penetration is[16]:

Own / Rent / Use a cell phone	1,084,000
Contract cell phone	269,000
Pre – paid cell phone	815,000

Penetration by population group in Western Cape is[17]:

Population group	% households with a telephone in dwelling	% households with only a cell phone	% households with a telephone & a cell phone
African/ blacks	10.7%	18.8%	8.2%
Asian/ Indian	22.6%	10.2%	59.6%
Coloured	26.7%	9.4%	22.1%
White	24.6%	11.8%	60.7%

Fax

No accurate data available.

Note that it is possible to have a 'fax number' that diverts faxes sent to it to an e-mail address and delivers them electronically to an e-mail client on a personal

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[14] In spite of repeat requests, Telkom was unwilling to provide any more precise data

[15] Source: Telkom, quoted in 'Cape Town's Economy: Current Trends and Future Prospects 2001'

[16] Source: AMPS 2002 B (Jan 02 – Dec 02)

[17] Source: Stats SA: Census 2001

computer. This can be used to distribute incoming faxes throughout an organisation.

SMS

All cell phones can receive SMS ('short message service') messages. SMS messages can also be sent to fixed line phones (they are converted to a computer generated spoken message). E-mail messages can also be delivered by SMS to cell phones.

Web

The number of people in the Western Cape who have accessed a web site at least once on the Internet during a four-week period is estimated to be 369,000.[18]

The total number of South Africans with access to the Internet at the end of 2001 was 2.89 million.[19] *Pro rata* to the South African population (44.82 million) there are thus 292,000 people in the Western Cape with access to the Internet.

The total number was expected to have grown to 3,1-million by the end of 2002.

The number of Internet cafes in Cape Town listed in the white pages of the Telephone Directory is 17.

E-mail

The number of people with a functioning e-mail address in the Western Cape is unknown.

Post

The number of post offices in the Western Cape is:

Cape Peninsula	45
West Coast	36
South Cape	27
Overberg	43

Additionally, there are 33 commercial *Postnet* branches.

Print media

Adult literacy is in the Western Cape is 81%.[20]

Electronic media[21]

Access to electronic media in the Western Cape:

  The number of people with access to a radio is 2,539,000 (56% of the population)

  The number of televisions in the Western Cape is 276,000

  The number of households that have a radio and a television set by population group is as follows:

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[18] Source: AMPS 2002 B (Jan 02 – Dec 02)

[19] Source: The Goldstuck Report: Internet Access in South Africa, 2002 quoted on http://www.theworx.biz/access02.htm

[20] Source: Stats SA, Wesgro

[21] Source: AMPS 2002 B (Jan 02 – Dec 02) and Stats SA

Population group	Radio	TV's
Black African	64.7%	48.1%
Coloured	77.8%	77.9%
Indian / Asian	91.1%	92.2%
White	95.9%	93.7%

Access to banking facilities[22]

The number of people in Cape Town with personal access to banking facilities is:

	Total	Fully Banked	Partially Banked	Unbanked
Metropolitan total	1,790,744	464,078	599,394	590,899
Row %	100%	26%	33%	33%
Informal settlement	135,274	0	30,737	104,536
%	39%	23%	33%	58%
City Centre	56,790	7,099	28,395	7,099
%	3%	2%	5%	1%
Suburbs	903,642	349,335	342,148	136,145
%	50%	75%	57%	23%

The number of people in Cape Town with an ATM, savings account or credit card is:

	Total	Fully Banked	Partially Banked	Unbanked
Have ATM/Savings Account	692,644	71,369	540,299	27,511
% of metro total	39%	15%	90%	5%
Credit Card	476,012	392,709	0	20,413
% of metro total	27%	85%	0%	3%

Some implications

In general:

All services can be promoted, accessed, fulfilled (in conjunction with the appropriate service specific infrastructure, where necessary) and supported face to face

Telephones can be used to provide access to services, and for support, and have limited use for promoting services, such as promotional 'on hold' messages. Telephones can only be used for the fulfilment of a small range of pure information services

Fax machines used to provide access to services, and for support, but are unsuitable for promoting services, and can only be used for the fulfilment of a small range of pure information services

SMS technologies have very few applications – primarily only for alerting pre-registered users of some event (this may constitute fulfilment in the case of a pure information service, such as providing weather information)

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[22] Source: Source 'The landscape of access to financial services in South Africa' David Porteous

Websites can be used to promote services, provide access to them using downloadable forms or web-based forms, and support them using help wizards, lists of frequently asked questions (FAQs) and e-mail links to service agents. They have limited use for the fulfilment of most services

E-mail can be used successfully to provide access to services by providing information and/ or e-mailing forms and other attachments; e-mail is also an excellent potential channel for providing support. However, e-mail cannot be reasonably be used to promote services or to deliver anything but pure information services

Post has almost exactly the same profile as fax, with the advantage that is can be used to return previously posted, downloaded or faxed forms that need to be individually signed (at least until the use of digital signatures becomes commonplace and legally acceptable)

The main application of print media is to promote services, and in some instances provide access by giving information about how to apply for or comply with a service

Electronic media (television and radio) should be used primarily to inform beneficiaries about services and to give information about how to apply for, or comply with, a service

Leaflets and brochures can provide detailed information concerning access, and can include application forms. However, they are costly to produce and distribute and often quickly become outdated. Similar information is almost always best delivered by web site

Outdoor media (posters etc.) are an important means of promoting services, so that intended beneficiaries will know how to get access information from web sites, or by telephone, or face to face

Appendix 5 – Project Team

The original research reflected in this report was principally carried out between March and May 2003 by the following project team:

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Yana Jardine (contracted researcher)

Project governance was provided by the City of Cape Town and Provincial Government of the Western Cape Consultative Forum on e-Government Services. The members of the Steering Committee were:

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Dr Harold Wesso (Provincial Government)

The project (Project Number PMO 1035) was jointly funded by the City of Cape Town IT Directorate and the Provincial Government of the Western Cape branch for Knowledge Economy & E-Government

End notes

[1] The term 'information and communication technology' means the use of interconnected computers and related digital technologies for the electronic display, processing, storage and transmission of information

[2] The Western Cape is made up of the Provincial Government, five district municipalities (Boland, Eden [Klein Karoo/ Garden Route], Central Karoo, Overberg and West Coast) which include 29 local municipalities, plus the City of Cape Town, which is the only 'category A' metropolitan municipality. This research project focuses on the services provided by the Provincial Government and the City of Cape Town, though the conclusions may be equally valid for other municipalities as the services that are provided by similar spheres of government in different geographies are essentially the same (difference s are mailnly in terms of scale and quality)

[3] 'Roadmap for e-government in the developing world' Working Group for E-Government in the Developing World, April 2002. See also 'At the Dawn of e-Government – the citizen as customer' Deloitte Research, 2000

[4] Quoted from 'Framework for e-government services market research survey' Cape Online Interim Steering Group, Carol Wright October 23, 2001

[5] Nirvesh Sooful, IT Directorate, City of Cape Town, 2001

[6] See http://www.egov4dev.org/egovdefn.htm

[7] See 'At the Dawn of e-Government – the citizen as customer' Deloitte Research, 2000

[8] Classically, the development of Internet presence has three essential elements: selection of appropriate technology, design of the interface and architecture for the information, and the preparation of content, such as information, applications and other aspects

[9] 'Government services' are not specifically defined by the constitution of the Republic. The responsibilities of the various spheres of government are listed in Schedules 4 and 5 as 'functional areas', such as 'housing'. 'cultural matters', pollution control', electricity and gas reticulation', 'municipal health services', 'cleansing', 'licensing of dogs' and 'street lighting'. Services are thus defined by example. A complete list is at Appendix 1.

'A recent legal opinion found that there is no ordinary definition of the term 'municipal services'.' [Ref: Horizontal Learning Programme for Local Government - see http://www.hologram.org.za.]

The Municipal Systems Act (number 32 of 2000) has a definition of 'basic municipal services', which means 'a municipal service that is necessary to ensure an acceptable and reasonable quality of life and, if not provided, would endanger public health or safety or the environment'. This is more a definition of the word 'basic' as a qualifier of the phrase 'municipal services' rather than a definition of municipal services themselves.

Other than this, the Act goes into considerable detail as to how municipalities must organize themselves so as to provide services, but does not further define in general terms what services are. Services have been treated in the report as 'provincial and local government activities intended for the benefit of the public and visitors, delivered by a provincial or local government department or its agents'.

[10] It is important to understand that this list may not be exhaustive, and does not necessarily reflect all of the services that a department is capable of providing or is supposed to provide. It does reflect the services found to be on offer at the request and instigation of an external enquirer.

[11] Beneficiary obligations are not to be confused with the obligations of the Provincial Government and the City of Cape Town to provide public services in terms of the Constitution and the Municipal Systems Act

[12] A common method for grouping services is by 'life event'. This concept has been developed during the process of a number of e-government projects as a way of organizing and clustering services in way that is easy for users to navigate. See, for example the document 'e-Government – a common understanding' published 19 September 2001 by the Department of Public Service Administration (http://www.dpsa.gov.za/e-gov/2001docs/e-govt%20a%20common%20understanding/e-govtCommonUnderstanding.pdf). This identifies the life events of a 'natural person' as

birth/ health/ education/ transport/ job/ marriage/ properties/ national defense/ environmental conditions/ tax/ research/ investment/ social/ travel/ benefits/ communication/ politics/ death. Those in the 'life' of a business include incorporation/ finance/ subsidy &/or funding/ vehicle/ exports & imports/ business development/ human resources/ sales/ purchases/ administration/ corporate citizenship/ accreditation/ politics/ communication/ research/ statutory requirements/ liquidation

The Provincial Government has also devised a system of life events, as well as a list of 'topics'. These are: YOUR LIFE – Birth/ Childhood/ Education/ Employment & Unemployment/ Marriage/Divorce/ Family & Parenting/ Health/ Housing/ Crime & Safety/ Travel/ Recreation/ Tax/ Legal Matters/ Seniors/ Death. TOPICS Agriculture/ Arts & Culture/ Basic Services/Infrastructure/Utilities/ Small Business/ Trade & Industry/ Elections/ Environment/ Gambling/ Investment/ Libraries/ Law & Justice/ Licensing & Permits/ Social Services/ Science & Technology/ Sport/ Tourist Information/ Transport/ The Western Cape Province

[13] 'Services to citizens – the access to services strategy for the e-government Gateway' version 1 30 April 2003, Centre for Public Service Innovation, Department of Public Service & Administration and State Information Technology Agency

[14] South Africa 2001 Census, Stats SA http://www.statssa.gov.za

[15] Cape Town's Economy in 2001 – Key Facts & Trends, City of Cape Town, http://www.capetown.gov.za/econstats

[16] These criteria have been extracted from the Master Systems Plan definition document, KEEG, Provincial Government of the Western Cape, February 2003 (with permission)

[17] This list is available in the form of a spreadsheet - which can easily be re-ordered and sorted – on request