

New Zealand E-government Strategy - June 2003 - Update

STATE SERVICES COMMISSION Te Komihana O Ngã Tari Kāwanatanga



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FOREWORD

It has been very interesting to take stock of where we stand two years since the E-government Strategy was first released.

I am continually surprised at New Zealanders' willingness to embrace new technology. For example, over 50 percent of our homes now contain a personal computer. This is more than have dishwashers.

The Internet has become part of our daily lives . We now use it to access our bank accounts, reserve library books or to keep in contact with friends and family. International research shows that New Zealanders are some of the highest users of the Internet in the world - with 71 percent of New Zealanders having accessed the Internet in just one month in 2002.

The Government has been moving fast to keep pace with these changes. We have had some good news during the past year about our performance in this area. The 2002 United Nations report *Benchmarking E-government: A Global Perspective* ranked New Zealand third among 169 nations on a global e-government leadership index.

We want to ensure that New Zealanders benefit from the ways that the Internet can be used to improve government. We see e-government enabling a transformation in the way government operates and delivers results for New Zealanders. The E-government Strategy shapes the way government agencies will contribute to this transformation through the way they design and deliver services using information and technology.

The beginnings of transformation are becoming apparent. For example:

- The Health sector's development of the e-Health concept, that will mean doctors and nurses get better information when and where they need it, so that they can treat patients better.
- The Inland Revenue Department's new e-Enablement Strategy that shows how Inland Revenue will use e-government to interact with taxpayers in ways that are more convenient for them.
- The collaborative development by five agencies of *WorkSite*, the new labour market portal, giving people and business convenient and integrated access to information about employment in New Zealand.
- In education, our ICT in Schools strategy addresses the fact that information and communications technologies are vital to giving our kids the educational opportunities they need in a knowledge society. In tertiary education, our e-Learning strategy will change the way education is delivered.

The launch of the new all-of-government portal (www.govt.nz) is the most tangible demonstration of what is being achieved by e-government so far. People and business now have unprecedented ability to access government information and services via the Internet. More than 2500 government services can be accessed through the portal and this continues to grow.

The portal and other e-government milestones listed in this updated strategy, demonstrate three essential aspects of e-government in New Zealand.

First, **e-government is built on solid foundations**. The portal would not exist without the development of the metadata standard that agencies use to create the information in the portal. Also, it would be difficult for many people to access the portal if it were not built according to the Web Guidelines.

Another aspect of foundation building is the Government's commitment to ensuring that New Zealanders have access to a broadband communications infrastructure, which it is working towards through the PROBE initiative.

Second, **the portal shows the benefits of collaboration**. So far, nearly 90 central government agencies, and 86 local authorities, have contributed to the content of the portal. The number of agencies contributing to the portal continues to grow.

Collaboration is critical to e-government, especially as agencies now move on to begin integrating services, and share the back office technologies and infrastructures that support their delivery.

Third, **e-government is people-centric**. The design of the portal reflects what people want, not what the Government wants to provide. People were extensively involved in the design of the portal, which is now delivering the results they were looking for.

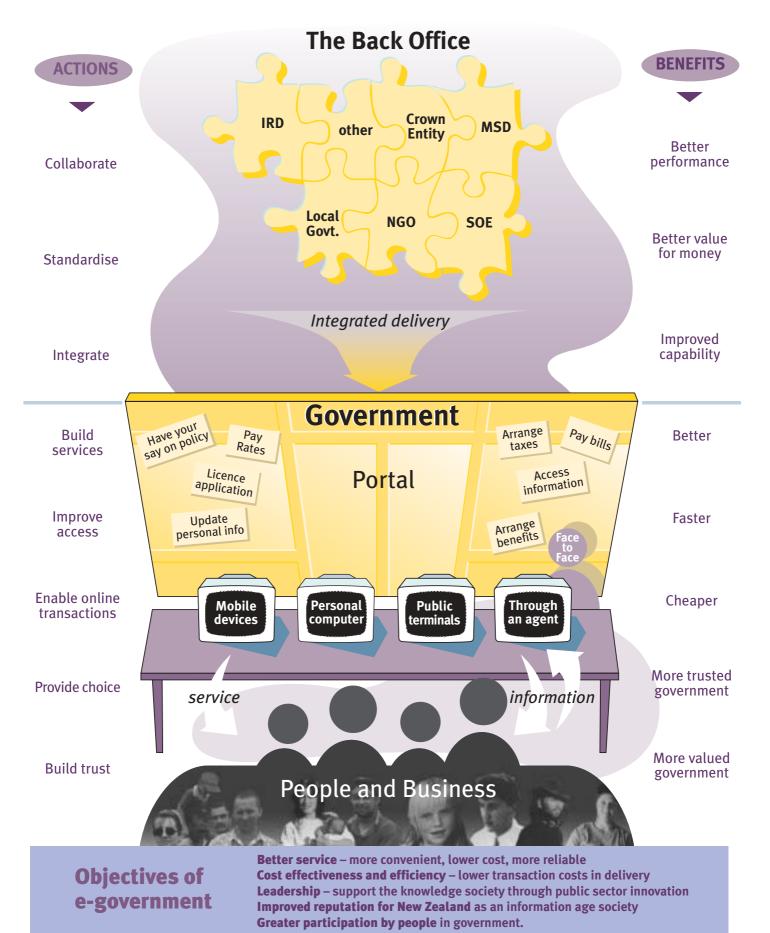
The Government wants the State sector to deliver better results for New Zealanders. I encourage all agencies to look to this strategy for a sense of direction, purpose, and support in using e-government to do this.

M.M.

Hon Trevor Mallard *Minister of State Services* June 2003



New Zealand's e-government strategy



INTRODUCTION

This is the second update of the E-government Strategy, which was first released in May 2001.

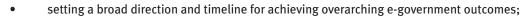
The update builds on very good progress in two areas – building the foundations for e-government (especially the new all-of-government web portal www.govt.nz), and delivery of a growing range of e-government initiatives by government agencies.

The updated strategy shows how e-government is an enabler of the changes in the public sector Ministers are seeking, as they focus more on agencies delivering results that people value, rather than merely on the efficient production of outputs.

E-government is a way of tapping unrealised potential for high quality government in New Zealand. It enables government agencies to separately and collectively lift their performance and deliver better results through using information and technology in new, more collaborative, ways.

The revised strategy emphasises that fact that, while the centre of government needs to create the right conditions for e-government, it is agencies that actually deliver government information and services, and therefore deliver on e-government goals. For this reason, achieving the goals of the strategy requires a mix of top-down and bottom-up initiatives.

The strategy deliberately does not identify explicit e-government goals and initiatives that agencies will undertake alone or in clusters. These should be identified in agencies' Statements of Intent, or other strategic planning documents. Accordingly, the strategy confines itself to:



- specifying a set of all-of-government initiatives that need to be undertaken to allow agencies to go forward and deliver e-government; and
- identifying ways that agencies efforts can be facilitated, coordinated and supported by the centre of government.

The updated strategy has some major new implications for agencies:

- The e-government mission has additional aspirational targets out to 2010, recognising Internetenabled access to government is only a first step in a long-run process of change.
- A "service delivery architecture" is now central to the strategy. This architecture will help shape the ways in which agencies develop their information and technology environments and use them to deliver services. During 2003/04 the E-government Unit will develop a framework for creating and using technology components to implement this architecture.
- A number of new challenges ahead have been identified, reflecting progress and learning to date. Over the next phase of the e-government programme these will demand serious attention.
- The all-of-government work programme has been updated. Agencies should assess the way the work programme intersects with their own planning, and participate in this work as appropriate.



PART 1—Why e-government?

E-government delivers better results by adapting government to the environment of the information age and the Internet.

The public has invested hugely in the information, technology, and processes used by government, as well as in people and public management systems. E-government makes the best of this investment to deliver improved services to New Zealanders.

Technological change is only part of achieving this goal, and the Internet will not fully replace all the other ways government relates to people. Technology does not guarantee better public sector performance on its own. Success also depends on making ongoing improvements to the design, operation, and culture of the public sector, so that it can better respond to the changing demands of New Zealanders.

E-government is best understood in the context of:

- the Government's broader goals to improve public management;
- what New Zealanders (people and business) want from e-government;
- public sector ethics, values and standards; and
- new thinking about how service delivery should be electronically enabled.

E-government improves public management

Before the State sector reforms of the 1980s, government undertook its role with an emphasis on probity and legality, and within a tightly prescribed framework of management processes and input controls. While keeping the focus on probity and legality, the reforms of the eighties moved government toward management efficiency through output specification, more management discretion, and advanced financial management.

These reforms contributed to big performance gains in the 1990s, but yet more can be achieved.

Today, the Government wants agencies to deliver 'outcomes' as well as outputs, and achieve better results for people. This will involve agencies working more effectively across their traditional boundaries and collaborating with other agencies, stakeholders and their customers.

The last three years have seen a number of major new initiatives to achieve this, of which e-government is just one. These initiatives have several goals in common:

- focus more on results managing for outcomes;
- be more citizen- and community-centred in how the public sector does business; and
- build public sector capability through:
 - strengthening people, culture and leadership.
 - strengthening the integration of structures and processes breaking down the silos, building
 a network culture and processes, improving coordination, and using enabling-technology
 better.

The initiatives with the strongest connections to e-government are:

- Managing for Outcomes, which aims to improve results for citizens by refocusing central government planning to achieve results and build departmental capability, as well as deliver outputs.
- Initiatives arising from the Review of the Centre, which was established by the Government in 2001. The December 2001 report and recommendations of the Review's Advisory Group endorsed a range of existing initiatives and changes (including the development of e-government), and identified three priorities for change:
 - better integrated, more citizen-focused, service delivery;



- addressing fragmentation and improving alignment in the State sector; and
- enhancing people and culture.

The Review also identified a need for more innovation in the sector, and for central agencies to exert greater leadership, especially on whole-of-government matters, and wider than just the Public Service.

The State Sector Standards Board also looked at how government can perform better. Some of its findings and suggestions are relevant to e-government. In its first report to the Minister of State Services, the Board noted, "State Sector activity is remarkably fragmented and needs to be more strongly oriented to whole-of-government issues". It stated that it "considers that value would be gained by the centre having a stronger role in areas such as setting common standards and protocols for IT systems and specific technologies and improving government procurement."

What people want from e-government

In October 2002, New Zealand was part of an international survey of public use of e-government. The New Zealand results of this survey tells us broadly that New Zealanders are:

- aware of e-government;
- likely to use e-government, if they use the Internet;
- currently most likely to use e-government to find information; and
- interested in more convenient proactive e-government, for example:
- being automatically reminded of obligations (such as renewing a driver's licence);
- finding all related information and services with one search;
- being automatically told about entitlements; and
- having services from several agencies bundled together.

The survey also tells us that there is a challenge ahead in making sure that people feel safe about using the Internet, and e-government.

What business wants from e-government

E-government is not good just for citizens – business benefits too. Above all, business would welcome lower compliance costs. Like citizens, business wants government to deliver information and services in an easier, cheaper, more accessible and responsive, integrated, and customer-oriented way, so they can more easily meet their legal and regulatory obligations.

E-government and the community and voluntary sector

E-government is seen by many parts of the community and voluntary sector as a desirable addition to the existing channels for accessing and delivering government information and services. There are, however, valid concerns that, if developed unwisely, e-government could:

- create inequities in public access and service delivery (e.g. through inappropriate closure of offline channels);
- compromise privacy and security of personal information; and
- load additional costs on to the sector (e.g. driving additional need for voluntary assistance, increased costs of technology and consumables, and need to train voluntary workers to use technology).

These concerns must be borne in mind when agencies are planning their e-government efforts. While e-government may replace other modes of delivery, more often it will augment them. Agencies must think carefully about their stakeholders' needs, and how best e-government can assist in meeting them. They should heed the desire of the public and the Government for integrated services. They should also avoid arbitrary decisions to close offline channels in favour of online ones, and should not assume that community and voluntary organisations have the resources needed to act as intermediaries for those who cannot access and use e-government.





E-government vision, mission, goals, and outcomes

Vision

New Zealand is a world leader in e-government.

Mission

By June 2004 the Internet will be the dominant means of enabling ready access to government.

By June 2007, networks and Internet technologies will be integral to the delivery of government information, services and processes.

By June 2010, the operation of government will have been transformed through its use of the Internet.

Goals

Better services — more convenient and reliable, with lower compliance costs, higher quality and value; **Cost effectiveness and efficiency** – cheaper, better information and services for customers, and better value for taxpayers;

Improved reputation—building an image of New Zealand as a modern nation, an attractive location for people and business;

Greater participation by people in government—making it easier for those who wish to contribute; and Leadership—supporting the knowledge society through public sector innovation.

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Outcomes

The Government has identified three broad characteristics that mark out successful e-government:

Convenience and Satisfaction Services provided anytime, anyhow, anywhere	People will have a choice of channels to government information and services that are convenient, easy to use and deliver what is wanted.
Integration and Efficiency Services that are integrated, customer-centric and efficient	Information and services will be integrated, packaged, and presented to minimise cost and improve results for people, businesses, and providers.
Participation Participation in government	People will be better informed and better able to participate in government.

These outcomes will not be achieved overnight, rather progressively through several phases of development:

	Ready access (by 2004)	Delivery (by 2007)	Transformation (by 2010)
ConvenienceandSatisfactionServicesprovidedanytime,anyhow,anywhere	People will be able to find details of a wide range of government services on the Internet.	Many services will be fully or partially delivered electronically (where appropriate). Traditional service delivery channels (counter, postal, telephone etc) will continue to exist but will be enhanced by use of technology.	Service delivery will be more proactive. People will allow agencies to use information they hold to 'push' services out to them (e.g. reminding people to meet an obligation, or advising of an entitlement). Agencies will have redesigned the way they deliver services – traditional channels may be used less, in favour of the Internet which will reach most New Zealanders, and often be more convenient for them. People will have more choice about who delivers them a service – they might select from a range of agencies, intermediaries, or even private sector providers.
IntegrationandEfficiencyServicesthatareintegrated, customer-centric and efficient	Agencies will begin to integrate services through use of common e-government "foundations" (technology, standards and policies). Agencies will be more citizen- and results-oriented in the way they design services.	Front-office integration will be well developed – many services will have been redesigned and bundled together in ways that meet customers' needs better. Back-office integration will be advancing through adoption of the interoperability framework, and progressive build of components of the service delivery architecture.	Cross-agency service integration will be the norm in government – standalone services will exist only where there are strong reasons for not integrating them. Services will be increasingly targeted at individuals (people or business), based on their personal circumstances. The range and design of services that agencies provide will be more flexible, and more valuable to customers. The back office of government will be widely shared – there will be much less investment in agency or service-specific technical, information, and business process infrastructures. Better value for money will be achieved.
Participation Participation in government	Government agencies will be making better use of the Internet to inform the public of what is happening in government, and of opportunities to be involved in government processes. Agencies will be learning ways to make use of the Internet to consult people about policy development, and service design and delivery.	Online participation will be an increasingly important part of policy development and service delivery. Democratic processes may be electronically enabled (e.g. e-voting in local body elections).	Online participation will have become the norm for many New Zealanders. Policy processes will have become more open and consultative. Service design and delivery will be much more customised and based on interaction with service recipients. Democratic and political processes may be undergoing some significant change as the relationships between government, civil society, and business adapt to the information society context they will exist in.

Key messages

E-government changes how government works

The Government is concerned that the public sector has become fragmented — a collection of so-called 'silos' that do not work with each other very well, making it hard to deal with government as a whole. E-government enables a more networked style of government, where agencies act more coherently, making government as a whole easier to deal with.

The all-of-government web portal is just the first step in what will be a major transformation of government. Successful government will become synonymous with processes and services integrated across the traditional boundaries between government agencies, rather than ones confined to compartments. It will also mean people being able to participate more readily across a spectrum of public sector activity and processes.

The prerequisites for this transformation are expressed in a service delivery architecture and an agreed set of information and technology standards. But they also lie in developing shared public sector data resources, building an infrastructure of shared software and hardware; and in finding innovative ways of conducting business with citizens, customers and stakeholders and between agencies.

E-government focuses on people

People want information or services delivered quickly and easily. They are less interested in which part of government provides what. E-government focuses on what gets delivered to people more than on the agencies that deliver it.

E-government means better service

E-government means people's needs can be met in a more timely, tailored, and convenient ways, while maintaining their privacy and the security of their personal information.

E-government means better value

E-government doesn't just mean better delivery of results. It also enables better use of taxpayers' funds. Agencies will share more information and technology, and design improved business processes, generating a better return on the public investment involved.

E-government affects all government organisations

E-government can't be ignored. All government agencies will inevitably be part of e-government in some way because they all deal with the same people, who have the same expectations of government. E-government is good for both customers and providers. It is the only sensible way to organise and deliver results in the 21st century, and will be a significant factor in the success of organisations across the public sector.

The Public Service is required to participate fully in all aspects of the e-government programme. Other State sector organisations are encouraged to participate fully in the programme. Local government is invited to participate in the programme.

Collaboration is key

E-government depends on agencies working together to deliver results, integrating their services, sharing information and technology, and committing to jointly deliver better results for New Zealanders.

E-government is about delivering results, not technology.

E-government is not an IT project. Although building infrastructure and putting services online will generally involve IT projects, e-government is about delivering results through better information management, and organisational and cultural change enabled by Internet era technologies and business models. Without this change, technology will just add to the cost of government without improving the results it delivers.



Public officials need to understand technology

Even though e-government is not an information technology project, IT is critical to delivering the outcomes of the programme. If public officials do not understand how IT, and especially the Internet, underpins success, then they are less likely to deliver quality results.

The E-government Unit has a role

The E-government Unit provides leadership, it develops strategy and policy, it facilitates, fosters collaboration and coordinates, and it assesses progress towards e-government. The Unit has also played a central role in building the foundations for e-government, including developing and operating the new infrastructures needed for e-government (e.g. the portal, S.E.E., and policies and standards such as the Interoperability Framework, the Metadata standard and the Web Guidelines).

Government agencies have a role

Agencies will deliver e-government, building on the foundations they have worked alongside the E-government Unit to create. Involvement in this process is not entirely discretionary. For some agencies (especially those of the Public Service), Cabinet has made some aspects of e-government mandatory. To engage effectively in the e-government programme agencies should:

Plan

Work with Ministers, Boards, Councils, or other stakeholders to incorporate e-government into agency objectives, strategies, and business plans from 2003 onwards.

Prepare

Make delivering e-government a top-tier management responsibility.

- Spread accountability for delivering e-government through all levels of the organisation.
- Recruit and retain people with the skills to deliver e-government.
- Prepare the organisation to operate in an integrated environment built on common foundations.
- Assess the impact of meeting mandatory e-government requirements.
- Prepare to eliminate or change activities and projects that are not aligned with, or superseded by, e-government initiatives.
- Develop the capability to understand people's wants, needs and abilities to interact with the agency online.

Participate

- Participate in e-government networks.
- Align organisation strategy and activities with the e-government strategy.
- Actively seek opportunities to deliver e-government in collaboration with other agencies.
- Work with customers and stakeholders to learn how they can benefit from e-government.
- Meet mandatory requirements, such as authoring NZGLS metadata and complying with e-GIF.
- Volunteer or ask to be included in e-government projects and activities that are congruent with the department's activities.
- Ensure business plans (outputs, services, budgets) cater for e-government.
- Integrate the common foundations of e-government into the organisation's business environment.

While these have been made explicit responsibilities for the Public Service, they are good practice for any organisation participating in e-government in the wider State sector and local government.



PART 2—Strategic assumptions, risks & mitigations

Assumptions

The strategy assumes:

- e-government is a means to an end, namely better results and value for money from government;
- e-government is a long-run programme, extending beyond June 2004;
- e-government is relevant to all central and local government organisations, and all will participate in creating it;
- agencies will recognise and contribute to the collective interest of government;
- agencies will collaborate with one another, and be proactive in seeking opportunities for integration;
- systemic barriers to collaboration can be overcome;
- complete decentralisation of government information and technology does not necessary produce good results. More collaboration and sharing by agencies will produce better results all round;
- the centre of government has an important role in e-government especially in developing strategy, setting standards, and providing all-of-government infrastructure; and
- too much centralisation is as bad as too little. Agencies must be free to flexibly deliver the outcomes expected of them, and to innovate.



Risks and mitigations

Risk	Mitigation
Agencies too slow to adopt the e-government strategy and migrate services online.	SSC and OAG monitor progress and report to State Services Commissioner, Ministers and Parliament. EGU supports agencies to make progress.
Government fails to capitalise on 'e' opportunities, especially integration opportunities that achieve economies and improved effectiveness.	EGU works with agencies to identify and pursue these opportunities, developing frameworks, models and tools to achieve economies and improved effectiveness.
Agencies act independently of EGU and make decisions inconsistent with the e-government strategy.	Cabinet has directed the Public Service to consult the SSC on all e-initiatives. Departments should oversee the efforts of Crown entities.
Government does not make the most of agency initiatives that present opportunities across government. And conversely does not minimise risks.	Encourage agencies to identify these opportunities early on and make the most of them.
The E-government Unit can't make the most of these opportunities (or minimise risks) without the core work programme suffering.	Develop the Unit's capability to work with agencies around these opportunities.

PART 3—Strategic direction

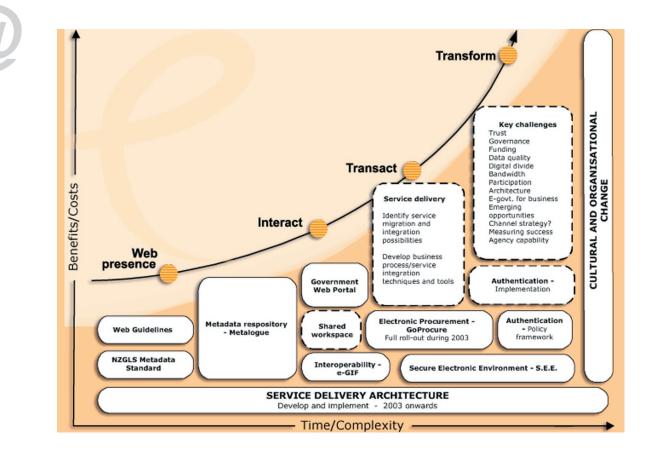
E-government leads to transformation

The Internet, and its associated technologies and business models, is profoundly affecting the way government, business, and people interact. Government is adapting to this new environment in a way that will eventually transform how it operates. The design and delivery of services is already changing to meet the changing needs of New Zealanders.

To be successful in this new environment agencies will need to work together more effectively, sharing resources and integrating their services. People and businesses will have a better, more consistent experience of government if agencies work together. This approach will also help reduce the costs of delivering services online and through other channels.

Transforming the way the public sector operates will not be achieved overnight.

Bearing in mind that more than just e-government will effect the transformation, the model below shows how the foundation components of the e-government programme support the change process through a series of phases. Each phase of the process is described in more detail below.



Bear in mind that, with this model:

- Different services will sit at different points along the curve. Some services will only ever need a simple web presence, while others may never involve online transactions, or be part of integration efforts.
- Some services will never be delivered electronically, even though public officials are supported by technology in delivering these services.
- Agencies should consider where each of their services or functions should be positioned on the curve, rather than where the organisation as a whole should sit.

Phase 1 — Web presence

Agencies provide a website to deliver basic information to the public.

Most government agencies moved beyond this phase some time ago. Many have moved on from publishing information in a way that reflects their agency's view, to one that reflects the view of people and/or business it services. Some have started to develop cross-agency, subject specific, portals.

Phase 2 — Interaction

Agencies extend the capability of their website so people who used to visit a government office now have online access to critical information, can download forms, and can contact the agency by email.

Again, many government agencies in New Zealand already have this capability.

Phase 3 — Transaction

Agencies add self-service applications to their websites so that people can complete entire transactions or processes online. The web begins to complement other service delivery channels, providing around the clock access independent of users' geographic location. Increasingly, agencies develop services that involve different agency business delivery systems that are seamlessly integrated.

Some New Zealand agencies are currently in this phase with some of their services. Many of the foundation projects in the e-government programme are designed to help agencies move into this phase—especially the work being done on authentication.

Phase 4 — Transformation

The delivery of government services and potentially the operation of government itself is redefined. Information, service delivery and government processes are integrated across traditional boundary lines. Information and services are increasingly customised to the particular needs of individuals and businesses. The identity of individual agencies matters less to people as information and services are accessed through a single point of contact on the web. E-government reshapes the relationships between government, individuals, and business¹.

The long-term goal of New Zealand's e-government strategy, in conjunction with other programmes, is to change the design, operation and culture of the public sector to better respond to the needs of New Zealanders.

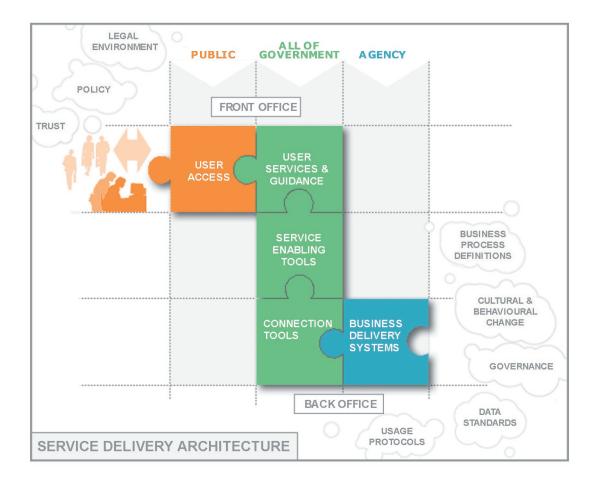
Increasingly, agencies will take a whole-of-government perspective when designing and implementing services. This will involve collaboration with other agencies, and meeting whole-of-government requirements.



A 'service delivery architecture' underpins the transformation

For agencies to work together in the new e-government environment and successfully bring about this transformation they need a common design framework or architecture for service delivery using information technology.

The "service delivery architecture" depicted below shows how the Government expects agencies to use and be a part of the government information, technology, and standards environment in future.



Architectures of this kind are becoming increasingly important to governments around the world. In 2001, the Gartner Group stated that "over the next two years 70 percent of governments that do not develop an e-government architecture will duplicate efforts and infrastructure, and will fail to meet constituent expectations for service delivery, resulting in complaints and wasted public funds".²

The main benefits of adopting the service delivery architecture are:

- agencies make better use of taxpayers' funds when delivering services in the future;
- people and business face lower compliance costs, and experience higher quality and greater consistency when dealing with government; and
- Ministers are able to evaluate agencies' proposals for future e-government initiatives in a context that emphasises and enables and the collective use of information and technology.

The architecture requires that some elements of agencies' service delivery be developed from an all-ofgovernment perspective (i.e. 'develop once, use many times') in the future. In particular, there are benefits to having a common architecture for:

- how services are presented to people (*User services & guidance*);
- how service delivery is actually electronically enabled (Service enabling tools); and
- how agencies connect to one another and their customers (Connection tools).

² Kreizman, G and E. Fraga, E-Government Architecture: Development and Governance (TG-14-6799) October 2001

This is because many aspects of agencies' service provision are generic (e.g. 'accept an electronic payment', 'authenticate an individual', 'change address', 'deliver a secure e-mail') and are therefore best done in a standardised manner by all agencies.

This does not mean that all agencies will share exactly the same information and technology. Instead, the architecture embraces:

- *common components*: components developed and implemented only once, and used by many or all agencies (e.g. the Portal);
- *modular components*: standard components that support a generic activity, but are implemented locally (e.g. a technology solution for handling an online registration process that can be incorporated into different business processes in different agencies); and
- *unique components*: components that are specific to a particular agency, function or service (that may still need to be e-GIF compliant).

A full discussion of the architecture is available on the e-government website.

Implementing the architecture—the e-government component architecture

During 2003/04, the E-government Unit will work with agencies to develop and pilot a new approach to developing and using technology across the sector.

Called the e-government component architecture, the approach augments agency-specific application development by designing and developing modular reusable technology components. These components will:



- comply with the NZ e-GIF; and
- make e-government best practice available across the sector.

The labour market *WorkSite* portal (www.work.govt.nz) launched in late 2002 successfully piloted the approach by reusing several components developed for the government portal (www.govt.nz). This saved \$400,000 in development and data gathering, \$18,000 in annual operating costs through shared infrastructure, and unquantified savings in on-going data maintenance.

Currently available components include web-based search tools, reusing the capabilities of the government portal; feeds from the central metadata repository for reuse in agency and agency-cluster initiatives; prototype shared workspaces and mailing list applications; and the S.E.E. Mail framework.

Components planned for future release include LDAP agency directory services; a gateway or hub for the interchange of XML messages; workflow tools for inter-agency shared business processes; and all-of-government news syndication via the portal.

Making the architecture work

The architecture is at the heart of the e-government strategy. It is essential that all agencies can take part in creating a business and ICT environment based on this architecture. This means that:

Agencies need to:

- work with the E-government Unit to understand and develop the architecture, and
 - bring their own ICT environments into alignment with it;
 - design service delivery processes that make use of the architecture;
- participate in the ongoing design and governance of the architecture;
- collaborate with each other in the development and use of access channels, and sharing of backoffice information and business delivery systems;
- contribute to the all-of-government parts of the architecture (e.g. creating metadata; developing the e-GIF; designing, developing and sharing modular components); and
- use collective governance arrangements to share some decision-making around their information and technology environments to meet whole-of-government objectives.

E-government Unit needs to:

- develop and operate some of the common and modular components of the architecture;
- work with agencies to design governance structures appropriate to the various components of the architecture;
- assist agencies to develop access and delivery channels, and back-office systems collaboratively; and
- explore the possibility of rationalising and consolidating government ICT infrastructures, applications and data to deliver better quality services and better use taxpayer's funds.

Implications of the architecture

The service delivery architecture has major long-run implications for how agencies operate, the design of their business processes, and the shape of their information and technology environments. It reinforces e-government's drive toward a more homogenous information and technology environment characterised by:

- collaboration and sharing;
- focus on leveraging maximum value from taxpayers' investments in data and infrastructure;
- increasing standardisation of data, information systems and business processes; and
- development of new governance arrangements at a whole-of-government level.

The bigger picture: e-government and other "e" initiatives

Government has been working on a broader set of "e" issues.

E-commerce

The E-commerce Action Team (ECAT) has made continued progress in building New Zealand's e-commerce capability. It reached a major milestone in the passing of the Electronic Transactions Act on 10 October 2002.

Bandwidth

In the May 2002 Budget, the Government announced that it was providing for 'tens of millions' of dollars' through project PROBE to ensure that all schools and their communities would be able to have broadband Internet access by the end of 2004. PROBE will give farmers and other business owners and communities in most rural areas the opportunity to work online with a service quality similar to that enjoyed by people in the major metropolitan centres.

Although the needs of the education sector initially drove the PROBE project, the Ministry of Health recently announced that it is joining PROBE because it is planning to use broadband to enhance Health network services through services such as telemedicine. Other government agencies are likely to become involved as the PROBE rollout begins. It is expected that PROBE will accelerate the development of broadband communications capabilities right across the country, something that will be essential for e-government in the future.

Digital divide

New Zealand, like all other countries, faces the challenge of the digital divide. Addressing this, the Community Employment Group of the Department of Labour is leading Connecting Communities, the Government's strategy to increase "communities ability to access, participate in and efficiently use ICT".

A major milestone marking the first six months of its implementation is the establishment of ICT partnerships in three pilot communities to test and adapt a community 'ICT planning route map'. This tool enables disadvantaged communities to design, develop, and evaluate local ICT projects.



E-localgovernment

The goals of the E-government Strategy apply to the whole public sector, including local government. Responding to this, local authorities have come together during 2002 to develop an e-localgovernment strategy. Its goals are

- **Access:** To provide easy interactive online access to local government information and services to build relationships to benefit all our people.
- Innovation: To provide innovative products and services to benefit our people.
- **Participation**: To ensure that our people's participation in local government democracy will be higher than it is today.
- **Leadership:** To ensure effective local government leadership of E-business initiatives for the benefit of the whole community.

Local government has worked with the E-government Unit to make local council information and services available through the portal.



PART 4—Achievements during 2002

This section describes some of the major achievements of the e-government programme during the past year. These achievements include the foundation-building work of the E-government Unit, as well as some highlights of the range of ways that agencies are now using e-government to deliver results to people and businesses.

E-government Unit-foundation building

Metadata and the government portal

The launch of the government web portal was a major achievement. The portal provides a citizen-focused 'front-door' to a wide range of central and local government information and services. The establishment of a metadata framework was central to the design of the portal. It allows agencies to describe their information and services consistently, making them easier to find through the portal.

In the first month of the portal's operation, more than 3,000 visits per day were recorded, with traffic levels averaging 20% higher than the earlier NZGO (NZ Government Online) website. Subsequent analysis shows use of the portal growing faster than underlying growth in Internet usage. Many users have commented on the ease of finding and accessing Government services via the portal, providing endorsement of the metadata project.

The infrastructure and metadata developed for the portal has already been reused by the agencies involved in the WorkSite portal. In the coming year, other agencies will be able to deliver web-based projects in a timely, cost-effective way by reusing the metadata collections, search technology, service delivery architecture, and IT systems developed by the E-government Unit.

Interoperability

Common data and information technology policies and standards underpin the service delivery architecture and are integral to the E-government Strategy. The New Zealand e-Government Interoperability Framework (NZ e-GIF) sets out these policies and standards. They range from the metadata standard, through to the Web Guidelines, and security policies and standards. The NZ e-GIF will be extended as new policies and standards are identified and approved.

Cabinet mandated the NZ e-GIF for implementation from 1 July 2002 onwards. Agencies will be integral to its development through involvement in the e-GIF Management Committee, and involvement in e-GIF working groups.

Authentication

Government agencies and the people they deal with online need to be confident of each other's identity. The authentication challenge is to do this consistently and cost-effectively across government, and to a level appropriate to the service being delivered. It must also occur in a way that meets privacy and security requirements, and engenders trust in government. Cabinet has agreed to a set of policy and implementation principles for authentication, providing a basis for the development of an all-of-government authentication solution.

Procurement

The Government Online Procurement system – GoProcure – is intended to improve the efficiency of government purchasing, making it easier for suppliers to deal with agencies. A prototype was demonstrated to agencies and suppliers between June and August 2002. Work on the first pilot phase of evaluating GoProcure began in November 2002.

Other achievements

Other achievements during the year include:



- Internet skills In partnership with the Public Sector Training Organisation, a unit standard has been developed and will be introduced as part of its Core Skills for Public Officials. This will assist public officials in gaining a level of Internet skills appropriate to online service delivery
- Electronic billing & payments A follow-up analysis to the 2001 report recommended that a centrally operated e-billing/e-payment solution is not currently required. However individual agencies may develop solutions where they have a business case to do so. Agencies should consider offering appropriate solutions for inclusion in the e-GIF or as a component for the service delivery architecture.
- *Change of address* A working group has been established to develop a government name and address schema. Once agreed, this schema will be published as part of the NZ e-GIF. Along with authentication, this will underpin development of a change of address facility in the future.
- *E-awareness* Information about agencies' e-government activities was collected in a successful first-round pilot.
- *S.E.E.* During the year there was a lot of progress in developing the Secure Electronic Environment. Thirty-four agencies are now using S.E.E.Mail, and the S.E.E. PKI and S.E.E. Directory policies have been developed and codified in the e-GIF.
- Shared Workspace The functional requirements for an all-of-government shared workspace have been established, based on learning from the experiences of agencies and networks already using online tools for sharing information and ideas. Eighteen groups are now using the first prototype workspace solution.
- Updated Web Guidelines The new version of the Guidelines will continue to raise awareness of the importance of accessibility for public sector websites and provide practical ways to achieve this consistently across government. A number of agencies that followed the first version of the Guidelines to redevelop their sites have produced examples of accessibility that rank alongside many sites internationally.

Agency service delivery

During the last 12 months, agencies have continued to increase the range of online services, building on the foundations of e-government they helped create. The following is a sample of a range of online services available today:

- Public Access to Legislation (PAL) The Parliamentary Counsel Office is undertaking this landmark project which, when completed, will make New Zealand legislation freely available to the public over the Internet. This project makes a major contribution to the Government's e-government participation goals. An interim website of legislation has been established.
- WorkSite (labour market portal) this multi-agency initiative provide access to information and services related to the New Zealand labour market. The portal is both a good example of interagency collaboration, and of agencies reusing some of the architecture and components of the allof-government portal, in line with the intent of the service delivery architecture.
- Online immigration services during the year the New Zealand Immigration Service made it possible for some people to apply for visas or permits over the Internet.
- *Landonline* during the year, issuance of certificates of land title moved from a paper based to an online electronic service. Landonline is currently New Zealand's most significant e-government initiative in terms of the transformation of service delivery.
- *Community Organisations Grants (COGS) Online* The Community Grants Scheme, administered by the Department of Internal Affairs, provides financial grants to community organisations. This process is now managed completely online, enabling community groups (on their own, or working with a Grants Advisor) to submit, track progress and maintain a history of their grant applications. The system can be accessed online by both Grants staff in DIA, processing the application, and the Grants Committee members assessing the applications.
- *E-licencing* The Department of Internal Affairs issues and re-issues gaming licences (e.g. for Lotto, Housie, Bingo, one-armed bandits, etc). Trusts can now apply online for re-licencing or changes to licenses.



- *eEnablement of the Inland Revenue Department* The IRD has developed and launched a comprehensive eEnablement Strategy that sets out a series of 52 linked initiatives that will be implemented over five years. Customers can now use the online calculators to establish their tax position, can file their GST obligations online and can pay their tax liabilities electronically. Work is well underway to provide customers with the ability to file their individual Income Tax Returns electronically and to send and receive emails securely.
- Online Examination Results The New Zealand Qualifications Authority has recently made 750,000 students' results and records of learning available online.
- Diabetes Disease Management Counties Manukau District Health Board has implemented an integrated diabetes disease management programme. This offers best-care guidelines, patient-held care plans, free three-monthly reviews and comprehensive data collection, all supported by a diabetes care coordinator. The "Integrated Care Server" (ICS) is a notable feature of the programme. The ICS can provide clinicians with feedback on clinical management, and allows clinical care providers to share information.
- Department of Conservation extranet this site provides access to DOC databases and GIS/spatial information. It is accessed by over 20 agencies, including regional councils, Landcare Research and the Museum of New Zealand Te Papa Tongarewa.
- *Public Good Science & Technology investment processes* the Foundation for Research, Science & Technology has implemented two systems for managing these processes. One system allows those successful in obtaining grants to negotiate and complete their contracts online, and provides intelligence to help them match their research with the Foundation's funding. The second system allows researchers to develop and submit research proposals online.
- Online import declarations businesses can now submit import declarations, manifest information and export data to Customs via an Internet gateway.
- *PapersPast* Since April 2001 the National Library has added over 400,000 pages of 19th century newspapers to its website.
- www.marketnewzealand.com Developed by Trade New Zealand, the Market New Zealand website is New Zealand's online gateway to international trade. It provides a database profiling New Zealand exporters' products and services; a trade-enquiry system that distributes buyer enquiries by email to exporters with the appropriate capability and interest; and a news, events and market intelligence service.
- Online consultation The Department of Internal Affairs has used its website to consult widely on the Gaming Review, proposed legislative changes in Local Government and leaking buildings. MoRST used similar approaches to consult on the New Zealand Biotechnology Strategy.
- USAR website this provides an information source for the various agencies involved in Urban Search and Rescue in New Zealand.
- *NZTopoOnline* Land Information New Zealand (LINZ) provides free public access to topographic information through its website. Emergency services, and other key stakeholders, now have another way to access the most up-to-date topographic information in the New Zealand Topographic Database, and Internet-based delivery of a new map series called NZTopo50.
- *PositioNZ* another LINZ service provides free satellite-accurate data to determine the precise position of points on the Earth's surface. PositioNZ enables LINZ's geodetic survey contractors to derive accurate positions with a single GPS receiver. LINZ is also expecting cadastral surveyors to use PositioNZ to get points with the highest available accuracy for their own work.
- Bali Bombing: MFAT's "e-appeal" to Overseas New Zealanders The Bali bombing presented the Ministry of Foreign Affairs and Trade (MFAT) with its biggest ever consular emergency. Within 24 hours of first reports of the bombing, the Ministry found itself trying to locate around 1400 New Zealanders thought to have been on the resort island at the time. After three days, with the missing list still alarmingly large, MFAT realised it needed to use the medium by which most expatriate Kiwis get their news from home: the internet. This worked extremely well. For example, placement of a banner advert on Xtra's hot mail home page for travelling New Zealanders resulted in 460,971 page impressions of the "Call Home" button with around 500 people clicking through to the actual message. MFAT's innovative use of an "e-appeal" to quickly gather important information from the public earned praise from the media and established a valuable new tool in government's crisis management armoury.



PART 5—Challenges ahead

When the E-government Strategy was revised in December 2001, five major challenges were seen to lie ahead. Deeper understanding of e-government has seen this list of challenges grow considerably in the past twelve months.

Building trust in government – authentication, privacy and security

New Zealanders must be able to trust government. For e-government, this means, for example, that they require confidence that their personal privacy is not threatened. Agencies require confidence that they are delivering information and services to the right person. That information must also be secure from a wide variety of threats.

This is a major issue. Survey results show that many New Zealanders are yet to be widely convinced that using the Internet to deliver government information and services can be trusted.

Developing trust in e-government requires ongoing effort in a variety of areas. Providing the underpinnings of all these efforts are the ethics, values and standards expected of government organisations. In developing e-government, agencies should ensure that these things are reflected in the services that they offer, and the way that they behave and relate to the public. A good example of how this can be achieved is provided by the revised Web Guidelines, which are now organised around core principles of equity, integrity, trust, and economy.

Regarding privacy, New Zealand is fortunate to have a robust privacy environment that provides effective checks against misuse of personal information.

Augmenting this, during 2002/03, much work has gone into development of a policy framework for online authentication. In 2003/04 the focus will be on detailed design of the preferred option for implementing this framework.

In the area of security, during 2002 more agencies have become part of the Secure Electronic Environment (S.E.E.) initiative, which is addressing some of the security challenges that e-government is faced with. Also, the Centre for Critical Infrastructure Protection came into operation, and 'Security in the Government Sector', which details the Government's protective security policies, principles, and procedures, was updated.

Despite this, these challenges are ever present, and demand constant attention from agencies if New Zealanders' trust in e-government, and government more broadly, is to increase.

Governance

E-government is a new way of doing business for government. As agencies become more interconnected there will be challenges for public sector governance. In particular, there is a need for decision-making processes that support integrated back office and service delivery strategies and business processes.

During 2002/03, the E-government Unit identified three dimensions of this challenge:

- governance of shared inputs (i.e. joint use of information and technology);
- governance of shared outputs (i.e. integrated service delivery); and
- governance across levels of government (i.e. central and local government working together to deliver information and services).

So far, progress has been made on addressing the first of these. The E-government Unit developed a methodology for allocating decision-rights over shared inputs and has discussed it with agencies. This will be refined and published in 2003/04.

During 2003, work on the shared outputs question will be progressed in two ways. First, it will be explored as part of the service delivery project. Second, work on managing for outcomes will look at questions of governance and accountability in a more integrated outcome-oriented public sector. The Unit will contribute to this work.



Funding

In 2002, the question of how much funding e-government activities require, and how this requirement should best be met, was identified as a major challenge. Work on this question with the Treasury reached the following conclusions:

- it is hard to separate e-government funding from normal departmental expenditure on information and communications technologies;
- e-government funding should not be treated separately from other funding requirements. It should be addressed as part of normal budget processes;
- Government should be prepared to invest in a "portfolio" of e-government initiatives that may have some initiatives with negative fiscal benefits, but positive social or economic benefits. Overall, the portfolio should have positive net benefits; and
- the quantum of e-government funding required in future is currently unknown. A more accurate picture should be revealed through the 2003/04 Budget process.

It was determined that, at this stage, no special funding arrangements for e-government are justified. During 2003/04, the E-government Unit will continue to look at this matter with the Treasury and to work, on request, with agencies preparing business cases for e-initiatives.

Data quality and information management

The nature and quality of the data held by government agencies in their individual business systems presents a major challenge as the e-government programme moves beyond the initial information access phase.

Realising the full potential of e-government will require the progressive introduction of new ways for clients to interact with government electronically, independent of time or place. Consistent with the principles of the Privacy Act 1993, this implies the ability to seamlessly and securely exchange or share data between business systems, both within and across agencies. The delivery of integrated government services will be especially constrained by data problems as agencies confront issues of variable quality and consistency of data.

The data integration work already undertaken in projects such as the Student Loans project (a joint initiative involving Statistics New Zealand, Inland Revenue, the Ministry of Education and the Treasury) highlights the fact that the way agencies collect and manage even common information varies greatly. For example an agency may record a person's name as 'Jane Citizen' in one business system, while in another of their systems the same person may be recorded as "Citizen, Jane', and in yet another as "Citizen, J". The problem increases when data held in multiple agencies systems are compared.

These data management challenges are compounded by the fact that the same information is not just structured differently in different systems and agencies, but is also stored and managed on disparate software and hardware platforms. Many of these were developed at a time when there was no perceived need to consider the wider collective information management interests of government, nor to adopt a more focused approach to clients.

This was inevitable given the stage of computing at the time, the degree of autonomy each agency had in developing its information systems and associated technology investments, and the lack of any unifying whole of government frameworks for service delivery and information management. This diversity of approach to the management of information is now a major obstacle in the way of business process and/or service integration efforts.

Such challenges are not unique to New Zealand. Most developed nations want to take advantage of the opportunities to develop the more adaptive and client-focused government services now possible. More broadly, many businesses in many industries are confronting the same sorts of barriers to progress that are now before the e-government programme.

An important step toward dealing with some of the more technology specific aspects of these challenges has been taken through creation of the E-government Interoperability Framework (e-GIF). This framework takes advantage of international work on interoperability through codifying and promulgating various technical standards. Across time, coupled with development of the service delivery architecture and the NZGLS Metadata Standard, this framework will need to evolve to address all of the barriers to cost-effective service integration and delivery created by the disparity of agencies' data quality, information management, and



technology environments. Two examples here are the inclusion in the e-GIF of:

- Extensible Name and Address Language [xNAL] as the stipulated means for exchanging name and address data between disparate agency systems; and
- the NZGLS metadata standard as the approach to creating discovery level metadata across government.

On their own, however, the e-GIF and the architecture will not be enough. To make any significant progress, agencies will have to align with the framework, help improve it where it does not meet requirements, and invest in improving their own data, information, and technology management practices to comply with it. A good example of how this challenge will be addressed is the development, under the leadership of Land Information New Zealand, of the Emergency Services and Government Administration (ESA) data standards project. The ESA data standards will be included in the e-GIF.

The digital divide

The full benefits of e-government will come when as many New Zealanders as possible have access to the Internet, and the attitudes and skills to make effective use of it. Even though Internet use in New Zealand compares well internationally and the Government is taking steps to address the issue, the digital divide remains a challenge.

Agencies must ensure that online services can be used by the people they are aimed at, providing alternative service delivery channels for those who currently cannot.

Bandwidth & accessibility

The lack of nationwide broadband connectivity, and the problems that many rural people have in accessing information on the Internet, is a major challenge. The project PROBE broadband initiative and the government Web Guidelines are addressing this problem.

The Guidelines aim to make government websites accessible to people with disabilities, and ensure that people with low grade Internet access can use them. During 2003, it is expected that the Government will make use of the Guidelines mandatory across the Public Service.

In the longer run, however, advanced online service delivery and new ways for people to participate in government processes depend on the widespread availability of broadband Internet access.

Participation

One of the aims of the e-government programme, since its inception, has been to improve people's ability to participate in government. There are many facets to participation, ranging from being involved in the design and delivery of services, to consultation on policy, and voting in elections. Participation in the online world poses a number of challenges, ranging from ensuring equity of opportunity through to establishing that people are who they say they are and, therefore, that their contributions are valid.

With the early focus of e-government programme on foundation building, there is more work to be done in the area of participation. The authentication project is addressing the question of how you identify people online, and the shared workspace has looked at aspects of participation. There has also been work on the relationship between government and communities, much of which will inform future efforts around e-participation.

E-government for business

Even though the e-government strategy has focused on the benefits for people, it is clear that e-government can deliver just as much to business, especially the possibility of lower compliance costs. The EGU will work with the business-focused agencies to ensure e-government initiatives are coordinated to deliver the maximum benefits for the business community.

Seizing emerging opportunities

Agency e-government initiatives are beginning to emerge with the potential for benefits to wider groups of agencies and their customers. This is entirely in accord with the e-government strategy. A major challenge over the next 12 months will be to identify these opportunities and respond to them.



Do we need a 'channel strategy'?

The Internet is one of several channels used by government to deliver services. With agencies using the Internet alongside a mix of other channels such as counter services, the mail, call centres, and third party service providers, the question arises: should there be an overarching strategy for e-government's role in supporting these channels to make the best use of them?

The E-government Unit will be looking at this during the next twelve months.

Measuring the uptake and effectiveness of e-government

By mid-2004, Ministers expect to know how well the e-government programme is succeeding. During 2003/ 04, the E-government Unit will work to determine:

- how much progress agencies have made in creating and delivering e-government; and
- how useful e-government is to people and business.

The E-government Unit will continue to collect information from agencies via the e-awareness project, and will be developing an evaluation framework to assess e-government's value for people and business. This will involve asking people and businesses what does and doesn't work for them.

Building capability in agencies

E-government demands that agencies develop new and diverse capabilities. For example, agencies will have to:

- learn how to make best use of the Internet to reach their customers;
- integrate e-government into their overall strategic planning;
- adapt themselves to an environment in which more information and technology is shared, or subject to all-of-government policies and standards; and
- find ways of collaborating with other agencies in potentially complex webs of integrated service delivery.

This challenge rests mostly with agencies as they develop specific capability to meet their needs. The centre will need to support agencies in this.



E-government programme: All-of-government projects and planning information

Main E-government Unit activity

During 2003/04 the Unit will have five main areas of activity:

- progressing major development projects;
- implementation and uptake of the service delivery architecture;
- operating and enhancing e-government infrastructure;
- developing e-government policy and strategy; and
- relationship management and support for agencies.

Major development projects

The Unit will undertake the following major project activity:

Authentication

- consult agencies and other stakeholders about options for authentication;
- recommend to Ministers the choice of authentication solution(s); and
- begin to implement the chosen approach(es) for authentication.

Shared workspace

- operate pilot workspaces to evaluate user needs and technology requirements;
- complete the business case for shared workspace; and
- progressively implement production versions of shared workspace tools from July 2003 onwards (depending on funding).

Electronic procurement (GoProcure™)

• run first-phase operations with pilot agencies and evaluate options for further roll out.

Implementation and uptake of service delivery architecture

The service delivery architecture now sits at the heart of the e-government programme: it is the key to both better delivery of service, and better use of taxpayer's resources. Its development and widespread uptake is now fundamental to the work of the E-government Unit. There are two challenges here:

- building it in a way that involves agencies and allows their diverse operational requirements to be reflected in the architecture; and
- getting widespread uptake of the architecture by agencies.

Over the next 12 months the E-government Unit and agencies will:

- test and refine the architecture;
- build components of the architecture or sponsor their development;
- develop ongoing governance arrangements for the architecture; and
- identify opportunities, strategies and approaches to use the architecture to take offline services online, and integrate services where appropriate.



Operating and enhancing e-government infrastructure

The Unit has responsibility for operating some of the shared infrastructure that underpins the e-government programme. Currently, this infrastructure includes:

- the Portal;
- Metalogue[™] (the metadata collection and metadata management tools);
- S.E.E. (the Secure Electronic Environment); and
- e-GIF (the Interoperability Framework).

During the year, the following activity is scheduled:

Portal & Metalogue™

- bed-in and operate current version of the government portal;
- leverage the portal infrastructure;
- enhance the Metalogue;
- moderate the .govt.nz domain;
- develop a strategy for 'phase 2' (service delivery) development of the portal;
- expand the metadata collection; and
- improve the metadata collection processes.

S.E.E.

- develop and implement S.E.E. Mail version 2; and
- manage process of continued agency uptake of S.E.E. Mail.

e-GIF

- support the operation of e-GIF Management Committee;
- facilitate the operation of e-GIF working groups; and
- ensure the overall value of the e-GIF is maintained and enhanced.

E-government policy and strategy

There is an ongoing requirement for e-government policy and strategy. While much of this work is project specific, and new requirements may come to light, during the year the Unit will be developing policy and/or strategy around:

- governance;
- funding of e-government (especially on how to value e-government initiatives);
- rationalising and consolidating government ICT infrastructures, applications and data to deliver better quality services, and improved value from taxpayer's funds;
- research and evaluation on:
 - the success of the e-government programme;
 - agency e-government activity;
 - future directions for the e-government strategy and programme; and
 - the e-government contribution to improving public management.
- the need for a channel strategy;
- linkages to e-commerce and digital opportunities initiatives; and
- participation.



Relationship management and support for agencies

This is a major part of the Unit's work. During the year, there will be a focus on:

- continuing to manage relationships and communications with government agencies (Public Service, State sector and local government) and other e-government stakeholders (e.g. community organisations, Mâori, business organisations, ICT suppliers, media);
- increasing the number of agencies that the Unit works with, and the range of people in each agency that the Unit works with;
- brokering relations and facilitating clusters of agencies working on e-government where appropriate; and
- working to identify and leverage all-of-government opportunities and benefits from specific e-initiatives undertaken by agencies.

Work programme for agencies and the E-government Unit

This section sets out the joint work programmes for agencies and the E-government Unit to June 2005. It should be read alongside Charts A and B. Chart A provides an overview of the work streams and their relationship to one another. Chart B shows how agencies are expected to respond or contribute to the work streams. Each work stream is identified with a reference number in the tables below and on the charts.

The major work streams of the programme are described briefly below and in more detail on the e-government website (http://www.e-government.govt.nz/). This does not, of course, describe entirely what each agency should or may do with regard to e-government. Much of that detail will be specific to individual agencies, and integrated into their future planning.

Agency and E-government Unit (EGU) responsibilities in the work streams to June 2005 are set out below. The need for agencies to plan for this work, and for the E-government Unit to consult with stakeholders, is implied.

In some cases, ongoing management and operation of relationships, services, and infrastructure is currently identified as a responsibility of the E-government Unit to work in conjunction with lead agencies. The governance work to be carried out in coming months will determine what organisational structures and ownership arrangements are required.



	Work streams	Agency Responsibilities	EGU Responsibilities
1	Strategy Ongoing development of e-government strategy	 Participate in consultation (as required). Endorse all-of-government strategies (as required). Incorporate e-government into agency business plans (annually). Contribute to the development and common understanding of e-government (ongoing). Consult SSC over alignment of e-initiatives with the E-government Strategy. 	 Deliver revised E-government Strategy and work programmes: Updted e-government work programme (by June 2004) Updated E-government Strategy (by June 2003) Assist agencies with business planning and strategy development (as required).
2	 Policy development Develop policy on governance and operational arrangements for e-government initiatives and on funding of e-government initiatives. Investigate the feasibility and need for a channel strategy. Investigate participation issues and opportunities. Examine the scope and feasibility of rationalising and consolidating government ICT infrastructures, applications, and data to deliver better quality services, and improved value from taxpayer's funds. 	 Contribute to the development of governance arrangements, through participation in working groups of business and technical experts (and other mechanisms) (ongoing). Some agencies will become lead agencies for hosting specific elements of e-government infrastructure. Some agencies will become lead agencies for specific elements of the ongoing governance or operations portfolio, including identifying funding requirements and sources (as required). Contribute agency views and information to policy development processes. 	 Develop policy advice on governance and operational arrangements for e-government initiatives and infrastructure, funding of e-government initiatives the feasibility and need for a service delivery channel strategy opportunities to address issues around participation the scope and feasibility of rationalising and consolidating government ICT infrastructures, applications and data to deliver better quality services, and improved value from taxpayer's funds. Implement policies where required.
3	Research and evaluation: Evaluate the success of the e-government programme and agency initiatives. Undertake research to inform the e-government programme, and to inform policy advice on the public management system.	 Share relevant e-government research with e-government networks (ongoing). Provide input into the e-awareness tool to inform evaluation of e-government progress (as required). Demonstrate alignment of agency initiatives with the e-government strategy (where appropriate) (ongoing). 	 Develop facility for effectively sharing research across government. Improve the e-awareness information-gathering tool to inform the evaluation of e-government progress. Report on e-government uptake to Ministers and agencies (ongoing). Develop and operate a framework for evaluating the alignment of agency e-government initiatives with the e-government strategy.



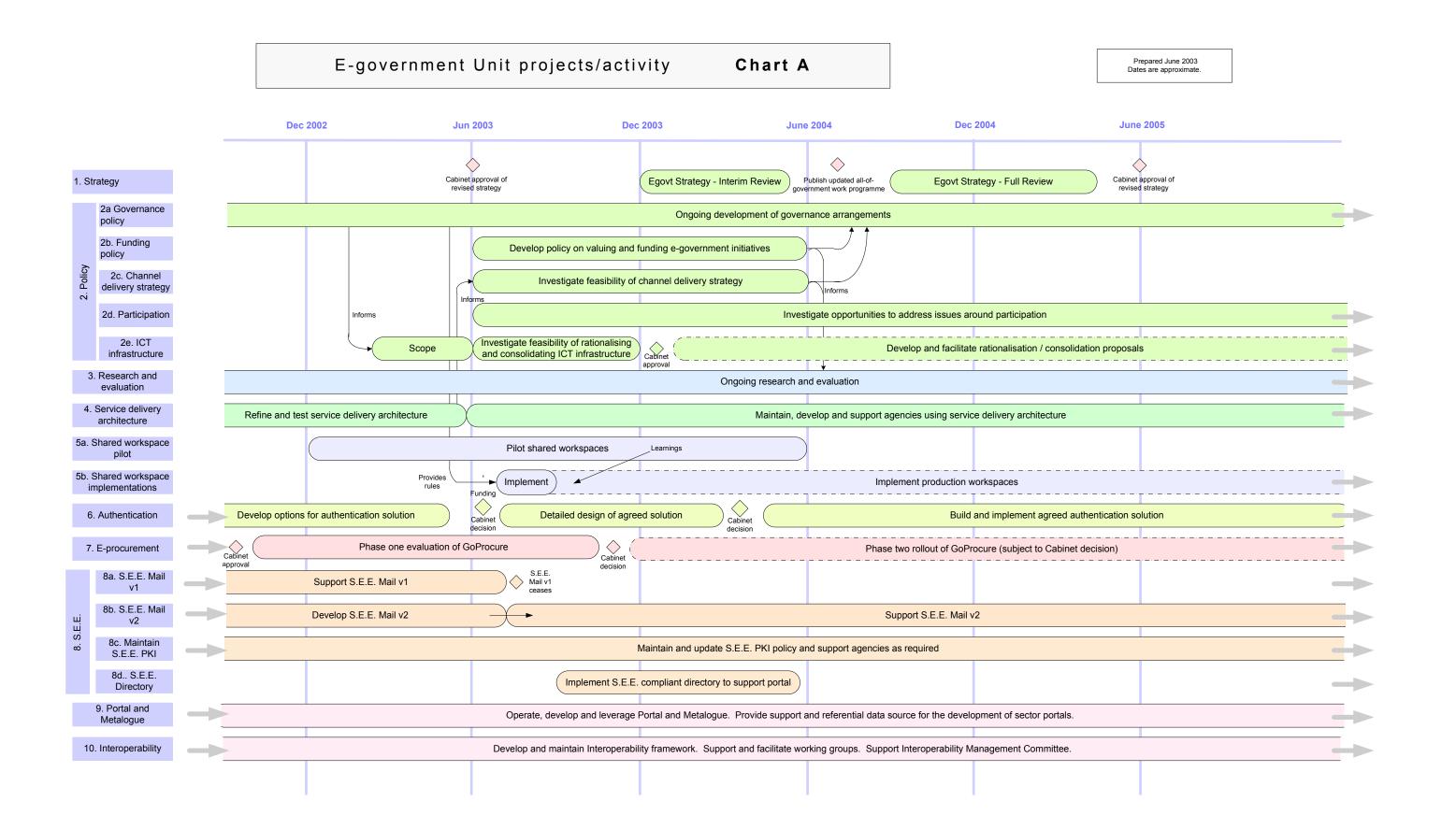
4	Service delivery architecture Develop, test, and implement a service delivery architecture for government. Identify opportunities for government services to be brought online and integrated where appropriate.	 Contribute to the refinement and testing of the service delivery architecture (February – June 2003). Contribute to the ongoing maintenance and development of the service delivery architecture (as required). Use the service delivery architecture to inform: how services are presented to people (User services & guidance); how service delivery is actually electronically enabled (Service enabling tools); and how agencies connect to one another and their customers (Connection tools). Identify and prioritise services for delivery online and incorporate in business plans and other relevant accountability documents where appropriate (ongoing). Implement online delivery of appropriate services (information, forms and services) (ongoing). 	 Refine and test the service delivery architecture (February – June 2003). Maintain and develop the service delivery architecture (as required). Work with agencies to identify opportunities to expand online service delivery across the public sector (ongoing). Support agencies in using the service delivery architecture. 	
5	Shared Workspace Pilot secure electronic shared workspaces for projects and policy development across government agencies, and scale up to production systems (if required and funded).	 Participate in pilot studies as required (January 2003 onwards). Use shared workspaces (when implemented). 	 Manage and evaluate pilots (November 2002 – June 2004). Implement shared workspace application (by September 2003) (contingent on pilot evaluations and ratification of business case). 	

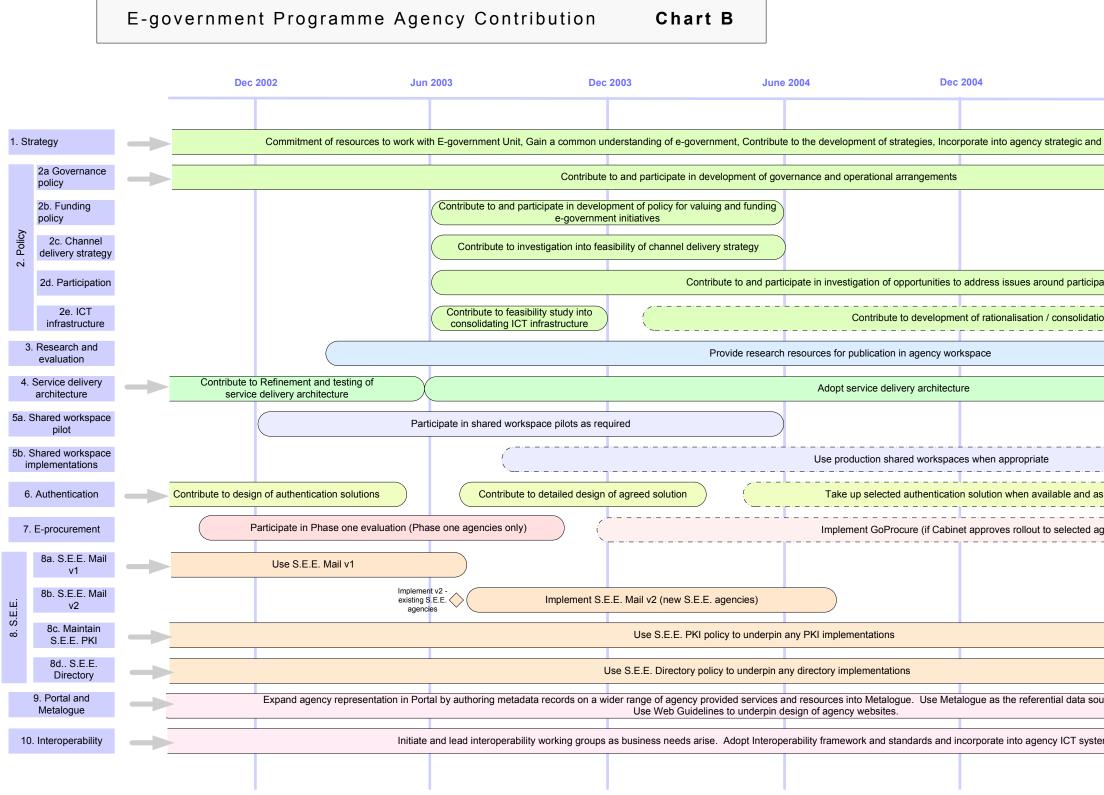
6	Authentication Develop and implement an all-of-government framework for online authentication to ensure government services delivered over the Internet are going to the right person and their privacy is protected (subject to Ministerial direction.	 Contribute to the development of the implementation proposal, specifically the level of authentication needed to manage risks associated with particular online transactions (to June 2003). Contribute to detailed design of the agreed authentication solution (to March 2004) Use solutions developed by the EGU (contingent on Cabinet approval and business needs of agencies) (from April 2004). 	 Develop options for all-of-government authentication solution (to June 2003). Seek Cabinet approval of implementation proposal (June 2003). Detailed design of agreed authentication solution (from June 2003). Build and implement agreed solution (from April 2004)
7	E-procurement Evaluate viability of GoProcure as electronic purchasing system for government.	 Participate (phase 1 agencies) in e-procurement Phase 1 pilot. Assess procurement practices and future requirements, including participation in syndicated procurement, use of electronic tender systems, online catalogue access and fulfilment, full integration of e-procurement systems with corporate financial and logistics systems (ongoing). Adopt procurement best practices; identify opportunities for leading or using syndicated procurement (ongoing). Adopt the all-of-government e-procurement solution (contingent on phase 1 results). 	



8	S.E.E. Implement S.E.E. Mail v2 to facilitate the secure exchange of email between agencies. Support agency initiatives using S.E.E. Mail, PKI and Directory.	 Implement S.E.E. Mail v2 (by August 2003). Use S.E.E. PKI when deploying digital certificates to authenticate government employees using government business applications (as required). Ensure that directory developments are consistent with the S.E.E. Directory policy . Scope linkages to all- of-government directory (when required). Integrate business applications and systems with directory where applicable (when required). 	 Provide support and advice to agencies implementing S.E.E. Mail (ongoing). Manage supplier accreditation (ongoing). Maintain S.E.E. PKI policy framework. Build directory to support portal operations (contingent on need and funding) (commence September 2003).
9	Portal and Metalogue Operate and further develop the New Zealand Government web portal (www.govt.nz). Grow and leverage Metalogue and other portal components to support the development and implementation of sector portals and other e-government infrastructure by sectors, clusters and agencies.	 Adopt Service Level Agreements (SLAs) with the EGU for portal operations. Adopt trust and privacy charters for the operation of the portal. Populate Metalogue with descriptions of services and information resources using NZGLS metadata standard and thesaurus terms (ongoing). 	 Enhance portal (ongoing). Provide system and processes for agencies to capture and manage NZGLS metadata centrally. Facilitate ongoing collection of metadata by agencies (ongoing).
10	Interoperability Framework Support the ongoing development and operation of the E-government Interoperability Framework (e-GIF).	 Use the interoperability framework to guide the design and implementation of service delivery, business systems, and information that crosses agency boundaries (ongoing). Contribute to the ongoing development of the interoperability framework (as required). Form, lead and contribute to interoperability working groups to develop standards to address interoperability issues (as required). 	 Ensure ongoing development and management of the interoperability framework (ongoing). Support and facilitate the formation and work of interoperability working groups (as required). Address emerging interoperability issues (ongoing). Support Interoperability Management Committee (ongoing).

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Prepared June 2003. Dates are approximate

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