THE GOVERNMENT IT STRATEGY   **ANNEX E**

1   INTRODUCTION

This Annex describes the background and the underlying principles of the Government IT Strategy. It also provides some comment on the content and structure of the Strategy itself, and on the high-level options for management and implementation. However, it must be remembered that the development of the detail of the Strategy is still at an early stage. A great deal of work remains to be done to develop the detailed policies, and to define and cost the implementation.

2   THE NEED FOR A STRATEGY

In the private sector, the pressure to restructure, innovate, and reduce costs comes from increasing, and global, competitiveness – consumers are becoming ever more demanding and discerning. In response, many Private Sector organisations have transformed their businesses, using information and communications technology to support process rationalisation, and to deliver customer-focused and cost-effective services. For Government, there is pressure to deliver better service at affordable costs which do not burden the nation with debt and the citizen with taxes.

Government Departments have made significant strides over the past few years to improve their customer focus. However, Government is, in a number of respects, still perceived to be organised for the convenience of administrators, rather than customers, with interactions characterised by multiple form-filling, duplication and the need to deal with many different offices.

Ministers have decided that Government must respond to its customers' needs through the strategic use of IT. The strategy which is proposed will effect a fundamental transformation in the way Government provides its services. Such a transformation could also impact on the nation's global competitiveness. A country where it is easy and straightforward to do business with government, at low cost, will be attractive for trade and inward investment.

The techniques and technologies which could enable Government to transform its service delivery operations – process rationalisation and the effective application of technology – could also be used to transform the administrative procedures of Government. This would remove the need to continue with stovepipe processes which cannot interact with one another, and would free Government from organisational constraints.

Thus, instead of applying information and communications technology to the way in which government business is currently done, it is essential to grasp the opportunity to transform the whole operation of government business, to improve the quality and efficiency of service and to reduce the proportion of national wealth that the government spends.

In the private sector, the pressure to restructure, innovate, and reduce costs comes from increasing, and global, competitiveness. Consumers are becoming ever more demanding and discerning as they seek out, and find, better service and quality at lower prices. For government, there is pressure to deliver better service at affordable costs which do not burden the nation with debt and the citizen with taxes.

Consumers of government services are becoming less tolerant of bureaucracies, drawing comparisons with private sector organisations who have transformed their businesses, and have used information and communications technology to support process rationalisation and to deliver customer-focused and cost-effective services.

Government is perceived to be out of date and organised for the convenience of administrators, rather than customers. The customer's contacts with government are characterised by form-filling, duplication and the need to deal with many different offices. This is unsatisfactory and inconvenient.

Government must respond to its customers' demands by effecting a fundamental transformation in the way it provides its services. Such a transformation could also impact on the nation's global competitiveness. A country where it is easy and straightforward to do business with government, at low cost, will be attractive for trade and inward investment.

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3   THE STRATEGY OBJECTIVE

The overall objective of the Government's IT Strategy must therefore be to enable the Government radically to improve:

- service delivery to its customers (citizens and businesses)
- its internal, administrative processes.

Reflecting these objectives, the CITU team has developed a vision for the future, a set of principles for service delivery and administrative improvement, and criteria for a successful implementation. These have been refined and validated through discussions with Departments and Agencies, and with representatives from industry and from citizens' groups.

4   THE VISION

The UK Government will provide services, delivered electronically, which will be world-wide benchmarks for quality, efficiency and value for money.

5   THE PRINCIPLES

If the Strategy is to achieve the vision, and is to meet customers' needs and transform the administration, then it must deliver:

1. Choice

The Strategy must aim to make technology-based service provision a preferred option for Government's customers (citizens or businesses). However, it is likely that there will always be people who are either not willing or not able to use IT-related services. These groups must not be disadvantaged. The Strategy must therefore ensure that the customer retains the option of a traditional, face to face or paper-based service.

2. Confidence

The Strategy must deliver safe and secure information stewardship. The customer must be able readily to understand the processes and must be confident that personal information is safeguarded and used in accordance with the principles embodied in data protection law.

3. Accessibility

The Strategy must ensure that the opportunities afforded by technology are used to simplify the interface into Government, providing services how, where and when the customer requires them. This may involve implementing a 'one stop shop' for multiple government services and providing out-of-hours (perhaps 24-hour) service.

4. Efficiency

The Strategy must support the streamlining and integration of processes across functional and organisational boundaries to provide transparent and seamless services. It must also utilise the advantages of emerging technologies to simplify and automate the routine processes of Government, thus reducing the need for manual operations and error-prone paper interfaces, particularly in the areas of information sharing and information transfer.

5. Rationalisation

The Strategy must support the sharing of resources for common functions and processes, thus reducing costs, rationalising infrastructures, and sharing information where this is legally permissible.

6. Added Value

The Strategy must support Government in its aim systematically to organise its information holdings in order to assist the citizen and help business to improve its competitive position.

The achievements of the Strategy will be measured by the extent to which they deliver against these 6 key principles.

6   THE CRITERIA FOR SUCCESS

The implementation of the Strategy must be securely based on the application of practical criteria. The IT provision will, therefore:

1. support the provision of high quality and cost-effective services which meet customer needs
2. support efficient and cost-effective administrative business processes.
3. facilitate change in the machinery of Government
4. allow for maximum Departmental autonomy
5. use technology only where added value can be achieved
6. support a variety of media for service delivery, thus ensuring flexibility
7. encourage partnerships between the public and private sector
8. be amenable to appropriate Private Finance mechanisms
9. provide for continuous review.

The success of the Strategy implementation will be measured against these 9 criteria.

The criteria imply a focus on process analysis, a strategy based on a minimal number of policies, sound management structures and a phased implementation approach.

7   THE STRATEGY COMPONENTS

The detail of the strategy will be embodied in a framework of pan-governmental policies. These will afford departments the greatest possible freedom to maintain and implement systems to meet their business objectives, while:

- ensuring conformance to the common standards necessary to implement the strategy
- supporting and enabling process rationalisation

The "technical" element of the strategy consists of four inter-related components. These components are intended to be implemented in parallel although each would need to be implemented in a number of steps because of their scale and because Departments will have differing needs and, therefore, different implementation programmes

The four components are as follows

1. The implementation of a range of service delivery media
2. The interconnection of Government Departments
3. The re-design and re-development of systems to take maximum advantage of the opportunities offered by the service delivery media and the interconnection of Government Departments and Agencies and, most importantly, to support simplified service delivery and administration processes.
4. The provision (by Government) of public domain information, either for the direct advantage of the citizen or business, or to encourage commercial advantage.

The components are described in more detail below.

8 THE IMPLEMENTATION OF THE STRATEGY COMPONENTS

8.1 The Current Situation

The current situation is presented in diagrammatic form in Figure 1. This diagram shows Departmental IT systems which have no electronic connection with each other or with the customer (citizens or businesses). The diagram indicates the multiple interactions which can exist between a single customer (or a single business) on the one hand, and a series of Government Departments, on the other.
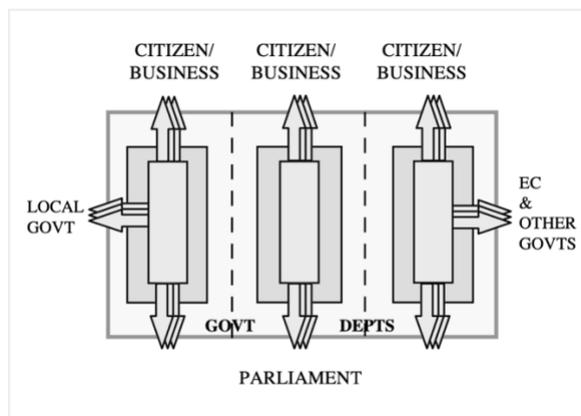

Figure 1 – The Current Situation

The various components of the Strategy will, together, ensure that electronic communications exist, both between Government Departments and Agencies and between Government and its customers.

8.2 The Implementation of Service Delivery Media

This component of the Strategy aims to provide electronically-based service delivery to Government's customers, and to make it so secure, efficient and user friendly that it becomes the customers' preferred way of dealing with Government.

Figure 2 below shows Departmental IT systems which, while still not interconnecting with each other, use one of a series of common user interfaces to communicate with their customers.
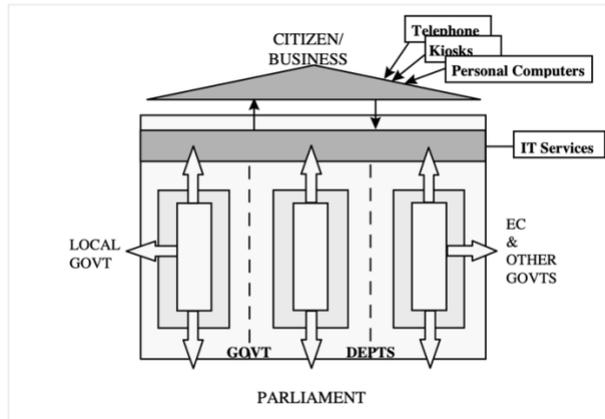
Figure 2 – Implementation of Service Delivery Media

Service delivery would probably be as follows:

- to business, via office IT systems.
- to individual citizens, via public access terminals in places such as libraries, post offices, government offices and shopping centres, and/or using privately owned personal computers or other domestic terminals (interactive TV services, for example).

For some services it might be appropriate, and cheaper, to use telephones and a call answering centre, following the model developed for telephone banking.

The linking system (the triangle shown in Figure 2) could be owned by private sector service providers, who would contract with individual departments and agencies for the delivery of their services.

Implementing this component of the strategy may require an electronic mechanism to support personal or business identification. For example, all those who choose to deal with government electronically could be issued with a smart card which would identify them uniquely to government systems. To prevent impersonation using stolen cards, each card could be used in association with a "biometric" of the authorised user (for example, a thumbprint, a hand shape or a record of the pattern on the iris of the eye). Although there are many positive advantages to the use of this type of technology, this is potentially controversial, since the technology has come to be associated with identity.

8.3   The Inter-connection of Government Departments

A second component of the strategy is to provide the means of linking Government Departments and Agencies. Figure 3 below shows a series of linkages.
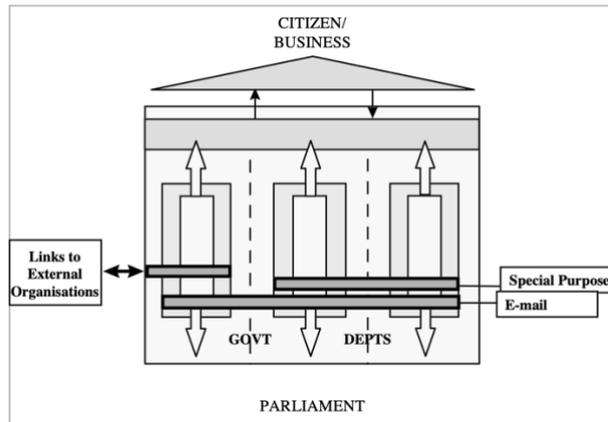
Figure 3 – Interconnectivity

A number of different types of linkage are possible

1. Electronic Mail

Most departments and agencies either have, or are planning to install, electronic mail (e-mail) systems and it would be technically simple and relatively inexpensive to link these, passing text, images and numerical data by discrete, manually initiated transfers. This service is illustrated by the long bar across the bottom of Figure 3. It is likely to be the first of the components to be implemented completely, and might be expanded later to support videoconferencing, if this was demonstrated to be cost effective.

2. Special-purpose Systems

Special-purpose systems could be used to link particular areas of government where a specific need has been identified and cross-Departmental processes are defined. At present, plans exist or are being developed for this kind of service in the areas of criminal justice, health administration and education administration. These links are illustrated by the short bar linking the centre 'Department' to the right-hand 'Department' in Figure 3.

3. Linkages to External (to Government) Organisations

Some Departments and Agencies are already considering the use of data from external 'data donors'. These are organisations, such as Banks and Insurance Companies, which could provide valuable data to Government. An example of this might be to link Insurance Company and MOT Test Centre data (with the permission of the individual or business concerned) to the DVLA databases. This would enable vehicle licence production to be simplified and rationalised, thus providing the customer with an improved service while ensuring that only legitimately insured and certificated vehicles were allowed on the roads. These links are illustrated by the short bar in Figure 3 which links the left hand 'Department' to the external (to Government) world.

It would be possible to use the interconnectivity thus provided to extend the "data matching" scheme already in place within the DSS and to correlate personal data supplied to different government departments. This would help to detect anomalies which might be indicators of fraud (for example, differences in financial circumstances reported to different government departments by the same individual). Data matching could be applied not just to social security benefits but to all transactions involving grants or benefits. However, this is potentially one of the more controversial aspects of the strategy and the one with the greatest legislative implications.

8.4 The Re-design and Re-development of Processes

This component of the Strategy is the area where most benefit is expected to be derived from successful implementation.

Purely applying technology to existing working practices, or at the customer interface, will not achieve the full benefits that Information Technology has the power to deliver. History has shown that the application of technology alone does not result in business benefits which correspond to the necessary levels of investment.

It is therefore essential that Departments and Agencies should review their processes at the earliest opportunity, and this is the area where work is expected to start as soon as the Strategy is approved. Some Departments and Agencies have already embarked on process rationalisation activities, and further Departments have plans in place.

Figure 4 shows the effects of re-engineering, with horizontal bars showing processes that have been rationalised across Departments, some of which will lead to improved services to the customer, and vertical bars showing the rationalisation of processes within Departments.
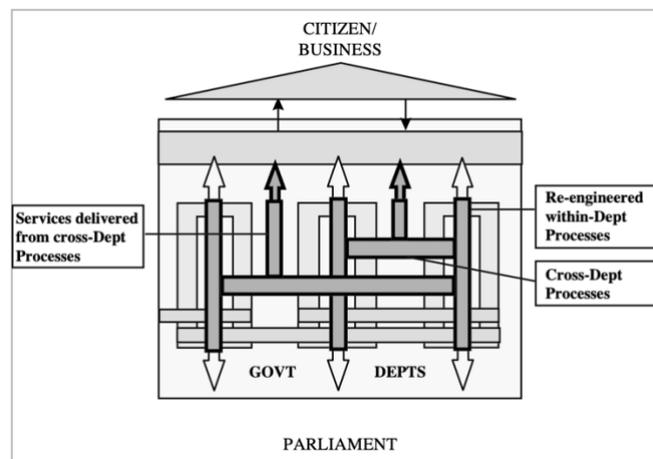

Figure 4 – Re-designing the Processes

If maximum benefit is to be achieved, Departments will need:

1. radically to review their existing processes for both service delivery and administration, and ensure that every activity is value adding, that replication is eliminated, and that the capabilities of the technology are fully utilised.
2. to examine the common processes which exist in a number of different Departments, and ensure that, wherever cost-effective, these processes are supported by the appropriate enabling technology
3. to remove any cross-Departmental process or data duplications, rationalising these wherever possible and legally acceptable, and supporting the rationalisation with technology where appropriate.

The Strategy will identify policies which will support Departments in undertaking process rationalisation activities.

Effective process management will ensure a sound understanding of the costs and quality of service delivery from which comparison with similar services can be achieved. Benchmarking with "best of breed" services (in the UK Government, foreign Governments and the Private Sector) is a pre-requisite if real service improvements are to be delivered. It is therefore important that measures of Government service delivery are available covering whole service delivery cost, transaction costs, customer satisfaction, service availability and service quality.

In some cases process rationalisation could be most effectively achieved through contracts let to the private sector for the support and/or delivery of whole processes.

8.5   The Provision of Information by Government

Within this component of the strategy, Departments will look at all the potentially publishable data which government collects, to see how this could best be collated and distributed in order to provide value-added services to the Government's customers, and/or give an advantage to UK-based businesses. This is a major task in its own right.

8.6   The Completed Implementation

The successful implementation of all four components will deliver a streamlined, rationalised and cost-effective administration providing efficient, technology-based services to Government's customers, through:

- comprehensive process rationalisation and re-engineering
- the installation of appropriate service delivery media
- connecting Government Departments and Agencies to each other, and to external organisations, using the appropriate enabling technology.

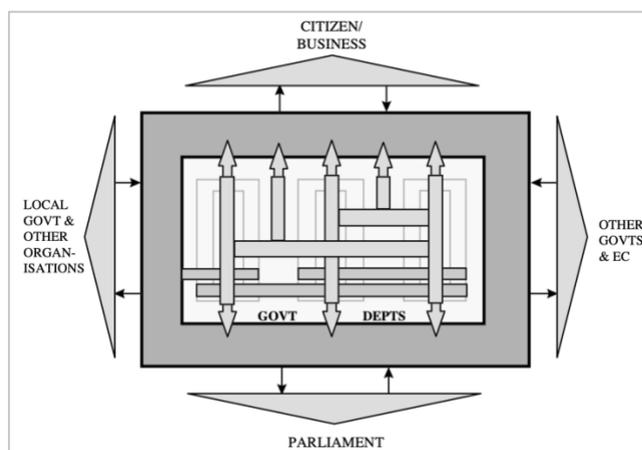The completed implementation is shown in Figure 5 below:

Figure 5 – Full Implementation of the Government IT Strategy

In order to achieve a successful and co-ordinated implementation of the Strategy, it is essential to give proper attention to:

- the policies which will be needed to support the Strategy
- the management of the implementation
- implementation planning.

The following sections provide an outline of the issues already identified under each of these headings.

9   MANAGEMENT AND TECHNICAL POLICY DEFINITION

9.1   The Enabling Technologies and Services

The technologies and services required to enable successful delivery of the Strategy are, in the main, available and in use today. There are some particular technologies/services, however, that are key to providing the catalyst for change in the delivery of Government services and internal administration and have been identified as being of particularly

importance in the delivery of the four implementation components identified above. These technologies/services are:

- Call Handling Management Systems
- Public Access Kiosks
- Smart cards
- Networks
- Domestic Systems and Services
- Information Management Systems

The remainder of this section considers the inter-relationship between these technologies, and the policies needed to manage and support their implementation.

9.2   How Government Electronic Service Delivery Will Inter-operate

Government Departments, and their service delivery partners, need to understand the types of electronic services required, the way in which they will interact, and the need to accommodate change over time. It is essential to achieve service contracts which do not inhibit optimal performance in Government service delivery. Figure 6 illustrates the ways in which Government electronic service delivery will inter-operate. This model will form a basis for the implementation of the strategy. Each layer in the model provides the opportunity for private finance – ranging from the simple provision of Public Access Terminals to the delivery of whole Government processes.
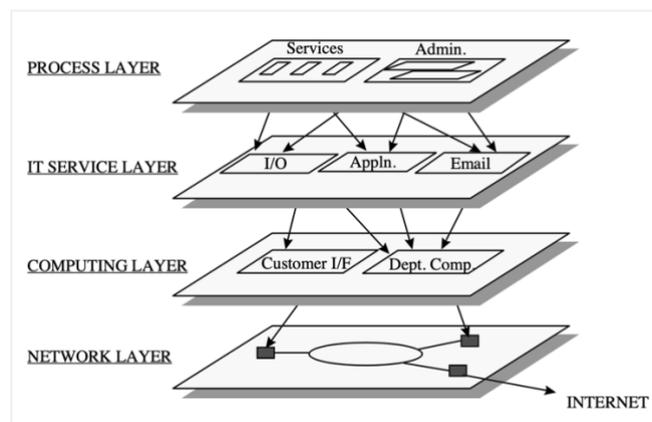

Figure 6 – Government Electronic Service Delivery Interoperability

To ensure flexibility of service procurement, whilst maintaining the necessary interoperability and change management, the interfaces between the layers and the interfaces between the elements within the layers, need to be encapsulated within a framework of management and technical policies.

9.3   The Need for Management and Technical Policies

The interoperability model illustrated in Figure 6 identifies the requirements for the strategic management and technical policies which will address the principles and success criteria described above in paragraphs 5 and 6. In particular they will:

- ensure that the full capability of IT services will be delivered
- enable competition in the delivery of Government services
- ensure appropriate inter-operability at all levels
- guard against contractual inhibitors
- maximise the opportunities to benefit from service and system commonality and procurement scale
- enable multi-departmental arrangements for IT services

- ensure that data protection security requirements are met
- ensure efficient, cost-effective implementation of IT to support new legislation.

9.4 Strategic Management and Technical Policies

The Strategy will enable Departments to use knowledge of their own businesses to define optimal business processes and to identify the most relevant technologies. A minimal number of management and technical policies will be set centrally to cover the following:

- Process definitions
- Common information formats
- Process – Application mapping
- IT service level agreements
- E-mail system inter-operability
- Customer interfaces
- Network access and inter-connectivity
- Access security
- Business continuity
- Information sharing
- Change control
- Government information presentation style and formats

The policies produced to cover the above requirements will be complemented by descriptions of current best practise relevant to the policy area.

10 MANAGEMENT OF THE STRATEGY

10.1 Management Policy

It will be necessary to achieve an appropriate balance of central co-ordination with maximum autonomy of Departments within the strategy. This will support effective change management across Government, maximise value for money and quality of service, and ensure a common "look and feel" at the customer interface.

10.2 Management Structures

The strategy will comprise a set of policies and a programme of projects. The programme will need to be co-ordinated and reviewed centrally, by CITU. Individual projects, conforming to the Strategic policies, will be managed by Departmental Project Managers or Project Managers representing a consortium of Departments. There would be benefit to be gained from ensuring that all projects have cross-Departmental representation on the Project Boards and within the project teams.

Management responsibilities are therefore expected to be assigned as follows:

- IT Strategy definition and change control   CITU
- Policy formulation and change control   CITU
- Implementation programme co-ordination   CITU
- Implementation project management   Depts, supported by the CCTA
- Implementation project support   CCTA
- Process analysis and re-engineering   Depts, supported by the CCTA
- IT service procurement   Depts, supported by CITU's PFI team

10.3 Inter-Departmental Programme Steering Group

Ownership of the Strategy by Government Departments is crucial to the successful delivery of the Strategy objectives. An Interdepartmental Programme Steering Group will need to take responsibility for:

- the authorisation of the Strategy
- the Strategy's continuing review and development
- communication, and the maintenance of Departmental awareness
- continuing Departmental commitment to the Strategy implementation

This Group will also need to ensure that the appropriate mechanisms for sharing experiences, best practice, and learning are in place.

11   IMPLEMENTATION

11.1   Implementation Policy

The programme of work is very large. It will be necessary to break the components down into a number of elements in order to manage risks. Moreover, Departments have differing requirements, and a single approach for all would almost certainly be counter-productive. Implementation must therefore consist of a series of staged projects, often running in parallel.

Further, extensive pilot exercises must be undertaken to establish detailed costs, risks and (in the case of service delivery components) customer take-up.

11.2   The Implementation Framework

The Strategy needs to provide a dynamic, integrated framework for implementing Government service renewal over the next five years. Several Departments, and particularly several Agencies, have important initiatives already under way. These need to be completed and the results and lessons learned effectively communicated. Implementation of the Strategy requires:

- Leadership and commitment from Ministers
- Commitment from Government Departments, Business and Citizens' Groups.
- Partnership between Government Departments and between Government and the Private Sector.
- Quick wins providing proof of concept, customer benefits and early cost reductions in service delivery.

11.3   Implementation Drivers

Implementation of the Strategy will be based on:

- Alignment of Government Business and IT strategies
- Alignment of culture, Business Processes and IT
- Departmental ownership of internal IT strategies and IT service delivery
- Correct balance between Department autonomy for IT, and common practices and procurement

11.4   Implementation Stages

The status of process re-engineering and IT maturity in Government Departments varies widely. The Strategy document can only legitimately address the generic capability picture against which individual Departments can complete their own self-assessment.

CITU / OPS

28 June 1996