REWIRING DEMOCRACY

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REWIRING DEMOCRACY:
Better e-government for the UK

Adam Smith Institute
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Introduction

"If liberty and equality, as is thought by some, are chiefly to be found in democracy, they will best be attained when all persons alike share in the government to the utmost."

ARISTOTLE

e-government has the potential to deliver huge benefits to the citizens and businesses of the UK through more open and accountable government and more efficient and responsive services.

Since 1997 there have been many initiatives and policy announcements on implementing e-government in the UK. Credit must be given in as much as the legislative framework and technological infrastructure are now both in place to allow the uptake of government services using electronic technology. Yet despite this, there is an appallingly low uptake of government services via these same technological means by both the British public and British business. What has gone wrong with the strategy and implementation of e-government to cause this level of apathy? Why has e-government so far failed to capture the imagination?

Furthermore, e-government has not reached the level of maturity or sophistication that it ought to have done when compared to competitors such as the USA and Canada. Worse still, the signs are that the rate of growth in this maturity is slowing both as an absolute value and relative to these competitors. In short, e-government in the UK has hit a plateau.

This is partly because as a policy, e-government is seen as an end in itself, rather than a means to achieving better governance: performance is measured in crude capability terms rather than by uptake and satisfaction. It is also because of the lack of a coherent strategy of what e-government is meant to achieve and the means with which to implement it, that e-government has failed to live up to its promise in the UK.
In addition, policymakers rely on too narrow a definition of e-government. This definition focuses on service delivery and even in this area no great efficiency savings have been achieved due to the low uptake. This stems from the final problem that is stalling the growth of e-government, which is that it is being conducted in an overly centralized manner and micromanaged to suit the needs of the producer (the government) rather than the consumer (the citizen). Yet e-government can and should be able to deliver personalized services to every citizen and business. This can only happen if government takes a more citizen-oriented approach.

**e-government : a definition**

As noted above, the current definition of e-government by the British government is too narrow in that it is considered to be a goal to be achieved *alongside* better and more open government, rather than a means to achieving these. Rather than being a separate part of policy, e-government can and should fundamentally change the nature of the relationship between citizen and government. Therefore, in the first instance the definition of e-government in this paper will be taken to mean the use of electronic technology to enable better and more open government.

But what does better and more open government mean? Better government is about meeting citizens' expectations and reducing costs. Through e-government, expectations can at last be met because for the first time a government can actually find out what its citizens expect and respond to these expectations. Costs can be reduced in many ways – for example, the more transactions that are carried out online using software capable of checking and detecting errors, the less need there is to employ an administrator to proofread forms. (The government’s own Gershon Review stated that e-government was central to reducing administrative costs in real terms.)

Open government is about providing transparency and accountability in government by making processes open to public scrutiny and allowing freedom of information. Every day the lives of millions are affected by government decisions and expenditure. e-democracy should facilitate better and more frequent communications between citizen and government.
Despite this broader definition it is important to recognize that *e-services* remain a crucial aspect of e-government and are the part of e-government most likely to be used by citizens and business.

*e-services* themselves can be broadly thought of as informational or transactional, the former being the most primitive type of e-service and the latter the most sophisticated. These e-services include revenue collection; postal services; human services (health, social care, welfare, employment services, etc); justice (courts, police, immigration, security); education; and services that combine the activities of two or more departments or levels of government.

**e-government around the world**

e-government has become an integral part of government policy across the globe: so much so that several institutions now publish annual reports into the state of e-government in different countries compared to one another. One of the longest running of these is by the consultancy Accenture, which looks at the progress of e-government in 22 countries.¹

A snapshot of the benefits from around the world identified in the latest (2004) Accenture report include:

- In Canada an online transaction costs less than Can$1 whereas an in-person transaction costs Can$44. The online return of tax forms has allowed 1,350 staff to be redeployed.
- In Ireland, registration of a birth automatically triggers registration for a public service number and child benefits.
- In Australia, the time it takes for a company to reconcile its tax return has fallen from 2 weeks to 3 hours due to the availability of online information and reports.
- In Canada, 300-450 online forms can be issued in the 15 minutes it takes to create 1 paper form.
- In Singapore, it is possible to gain all of the necessary licences for a new business from one site after filling in one form.

The task is to learn from the best practice of others and apply these principles to achieve such benefits in the UK.

¹ Australia, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Malaysia, Mexico, The Netherlands, Norway, Portugal, Singapore, South Africa, Sweden, United Kingdom and United States.
e-government in Estonia

Estonia is a country not among the 22 studied by Accenture. Yet Estonia has set the pace in e-government:

In many countries, ‘e-government’ is more political rhetoric than hard reality. But not in the tiny Baltic nation of Estonia, where democracy is running about as close to real time as you can get.¹

After becoming independent from the Soviet Union in 1991, Estonia has shown remarkable advances in e-government in spite of a lack of resources and an economy making the painful transition from centralized state planning. Estonia is recognized as a world leader in e-government by the press and international bodies alike.

The government promotes this Baltic nation as E-storia, and it has a point.²

The United Nations Development Programme has worked in partnership with the Estonian government to create an e-Governance Academy and a recent Harvard University report listed Estonia as 5th in the world when it comes to e-government development.

Estonia also accepts a definition of e-government that is fuller than one based purely on service delivery. With a history of closed and undemocratic government, Estonians wanted to create for themselves a new political culture in which the past could not be repeated. Innovations such as e-cabinet meetings as well as a website that allows ordinary citizens to amend draft legislation has made Estonia one of the most open governments in the world as well as one of the most efficient.

A history of e-government in Estonia

In the early 1990s the Estonian government took the decision to scrap all of its existing outdated Soviet hardware and replace it with a new infrastructure. Despite difficulties

including a lack of finance and limited communications networks, progress was made and now Estonia boasts some of the world’s most dynamic Information and Communication Technology (ICT) companies. Software such as Kazaa, which allows file sharing, and Skype, an Internet-based phone service, both originate from Estonia.

Data protection legislation, in the form of the Personal Data Protection Act, came into force in July 1996. The Act governs the collection, sharing and handling of personal data and also allows individuals to obtain and correct records containing personal information about them held by public and private bodies. A Databases Act was implemented in March 1997 to regulate digital databases and creating a state register of databases.

The Estonian Information Policy and an Information Policy Action Plan, the first of which was published in April 1998 with the aim of prioritizing annual objectives, govern strategy. The current document, covering the period 2004-2006, was approved in 2004. The new policy aims to strengthen the central co-ordination and increase consistency and collaboration in developing the information society.

In October 1998 the administration launched the government-wide backbone network EEBone (PeaTee in Estonian) connecting all government offices and providing them with secure email and Internet access.

The Digital Signatures Act, which gives electronic signatures equal standing with physical signatures, was approved the following March. In October the launch of the Estonian e-Tax Board application enables taxpayers to file, view and correct their income tax returns online. It also allows VAT returns to be filed and VAT refund applications to be submitted, as well as calculating social tax and permitting tax account balances to be viewed.

The Public Information Act became law in January 2001 institutionalizing open government through freedom of information. During the summer, the website Today, I Decide (Täna Otsustan Mina, or TOM in Estonian) was launched, allowing citizens to participate in the legislative process.
A data exchange system was implemented in December 2001, allowing government databases to communicate and providing a single interface. Anyone from citizen to civil servant can access information although authorization and authentication is required for personal access.

In January 2002 an electronic ID card became compulsory for all citizens. As well as acting as physical identification, the card has electronic functions that facilitate secure authentication and legally binding digital signature.

During the summer of 2002 (as mentioned above), an e-Governance Academy (eGA) was established in partnership with the United Nations Development Programme (UNDP) and the Open Society Institute (OSI).

In March 2003 a citizens’ portal was launched. In May of that year Estonia signed an agreement with Finland to standardize digital signatures.

In January last year, an e-voting pilot was conducted in Estonia’s capital Tallinn, paving the way for a generalized use of e-voting for all e-ID card holders at the local government elections in 2005.

**e-government in Estonia today**

National strategy and implementation is the responsibility of the Ministry of Economic Affairs and Communications while coordination and support comes under the remit of the Department of State Information Systems. The Estonian Informatics Centre supports the development of common information systems in the Estonian administration. government departments and agencies are responsible for departmental projects.

The State Audit Office carries out auditing functions while the Data Protection Inspectorate supervises the enforcement of data protection laws; a private company, AS Sertifitseerimiskeskus (SK), is charged with providing a secure electronic authentication.
Estonia versus the UK

At first thought, one would expect a developed country such as the UK to compare favourably with a country that as recently as 15 years ago existed as a nation but not a state. That first thought would be wrong.

The figures in Table 1 show a much greater use of the Internet by individuals in the UK than Estonia. From this, one would expect (assuming similar infrastructure) to see the UK having the largest uptake of government services via the Internet. This is not the case.

| Table 1: comparative information society indicators (sources; Eurostat, TNS Emor, AS Turo-Uuringud) |
|----------------------------------------------------------|----------------------------------------------------------|
| Internet usage by individuals                           | Estonia | U.K. |
| Internet usage by enterprises with 10+ employees         | 50%    | 61% |
| Individuals having purchased/ordered via the internet    | 90%    | 81% |
| (excl shares/financial services)                         | 7%     | 31% |
| Enterprises having purchased via the internet            | 32%    | 19% |
| Enterprises having received orders via the internet      | 8%     | 9%  |
| Internet usage by individuals to interact with           | a) 45% | a) 19% |
| public authorities: a) obtaining information, b)         | b) 29% | b) 8% |
| obtaining forms                                          |         |     |
| Internet usage by enterprises to interact with           | a) 63% | a) 26% |
| public authorities: a) obtaining information, b)         | b) N/A | b) 20% |
| obtaining forms                                          |         |     |

Despite a lower level of personal Internet usage in Estonia, Estonians are over twice as likely to utilize the Internet to interact with public authorities. There is a particular disparity when it comes to enterprise, but one must consider that Estonia has only been a functioning market democracy since 1991 so its firms are likely to be smaller and more dynamic:

As Estonia is a small country, it is much easier for its local companies and organizations to change their IT systems than it is for older multinational organizations.¹

¹“Estonia – the state of the e-state,” The Baltic Times, 22nd July 2004
Table 2: comparative sophistication of e-services for citizens (source: IDBAC)  

<table>
<thead>
<tr>
<th>Level of sophistication</th>
<th>Estonia</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Income tax declaration</td>
<td>4/4</td>
<td>4/4</td>
</tr>
<tr>
<td>2. Job searches by labour offices</td>
<td>3/3</td>
<td>3/3</td>
</tr>
<tr>
<td>3. Social Security contributions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Unemployment benefits</td>
<td>2/4</td>
<td>1/4</td>
</tr>
<tr>
<td>b. Family allowances</td>
<td>4/4</td>
<td>4/4</td>
</tr>
<tr>
<td>c. Medical costs</td>
<td>4/4</td>
<td>N/A</td>
</tr>
<tr>
<td>d. Student grants</td>
<td>1/4</td>
<td>4/4</td>
</tr>
<tr>
<td>4. Car registration</td>
<td>2/4</td>
<td>2/4</td>
</tr>
<tr>
<td>5. Personal Documents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Passport</td>
<td>2/3</td>
<td>3/3</td>
</tr>
<tr>
<td>b. Driving licence</td>
<td>1/3</td>
<td>1/3</td>
</tr>
<tr>
<td>6. Application for building permission</td>
<td>1/4</td>
<td>1/4</td>
</tr>
<tr>
<td>7. Declaration to the police</td>
<td>3/3</td>
<td>3/3</td>
</tr>
<tr>
<td>8. Public libraries</td>
<td>3/3</td>
<td>2/3</td>
</tr>
<tr>
<td>9. Certificates (birth, marriage) request and delivery</td>
<td>0-1/3</td>
<td>3/3</td>
</tr>
<tr>
<td>10. Enrolment in higher education</td>
<td>2/4</td>
<td>4/4</td>
</tr>
<tr>
<td>11. Announcement of a change of address</td>
<td>1/3</td>
<td>N/A</td>
</tr>
<tr>
<td>12. Health related services (such as making an appointment)</td>
<td>N/A</td>
<td>1/4</td>
</tr>
</tbody>
</table>

Furthermore, as Tables 2 and 3 demonstrate, the overall level of sophistication of e-services is about the same, though the sophistication of e-services to business in Estonia is higher than that offered in the UK.

Table 3: comparative sophistication of e-services for business (source: IDBAC)  

<table>
<thead>
<tr>
<th>Level of sophistication</th>
<th>Estonia</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Social contribution for employees</td>
<td>4/4</td>
<td>4/4</td>
</tr>
<tr>
<td>2. Corporation tax declaration and notification</td>
<td>4/4</td>
<td>4/4</td>
</tr>
<tr>
<td>3. VAT declaration and notification</td>
<td>4/4</td>
<td>4/4</td>
</tr>
<tr>
<td>4. Registration of a new company</td>
<td>4/4</td>
<td>3/4</td>
</tr>
<tr>
<td>5. Submission of data to statistical offices</td>
<td>3/3</td>
<td>N/A</td>
</tr>
<tr>
<td>6. Customs declaration</td>
<td>4/4</td>
<td>4/4</td>
</tr>
<tr>
<td>7. Environment related permits</td>
<td>4/4</td>
<td>2/4</td>
</tr>
<tr>
<td>8. Public procurement</td>
<td>4/4</td>
<td>2/4</td>
</tr>
</tbody>
</table>

Of course, it is important to recognize that there are reasons that any comparison between the UK and Estonia might be described as invalid. For example:

1. Size: Estonia has a population of 1.4 million spread over an area of 45,277 km² compared with 59.9 million and 243,820 km² respectively for the UK.

2. Infrastructure: the Estonian government started from scratch with a clear aim whereas the UK has a highly developed and complicated bureaucracy with many cultural and institutional barriers to change.

3. Political Culture: Estonian politicians as a whole were quick to embrace the idea of open government after years of dictatorial Soviet misrule.

However, these differences are important only when one is considering implementation: when it comes to the strategic goals of e-government, a great deal can be learnt from the Estonian example in achieving better and more open government.

**Understanding Estonia’s success**

**Accessible and responsive government**

e-cabinet has resulted in every minister having a computer with a flat screen monitor at their seat that displays the agenda as well as all the supporting information necessary for the minister to come to a decision. Furthermore, the fact that everything is electronic means that the cabinet can meet even if some ministers are not in the room: they can simply join the meeting online. If an action is requested of a minister at a meeting, they can immediately email their staff to get the ball rolling: questions and problems can also be emailed back for discussion. e-cabinet alone is saving the Estonian government US$200,000 a year in paper and copying costs.¹

The administration’s broadband network, EEBone, allows data communication between government institutions, while software known as X-Road Middleware allows government databases to communicate with each other. It allows queries to many databases to be made

in a standardized way and is an important development in delivering services that require information from more than one database (and therefore more than one institution).

In the UK, cabinet minutes are bound by a 30-year rule that keeps them out of the public eye until much later. In contrast, Estonian government decisions are made available online within 30 seconds, by courtesy of press officers who sit in on cabinet meetings. Cabinet meetings that used to take ten hours now take on average 45 minutes. And in the UK, the Prime Minister would not be able to get away with merely going through the motions of cabinet meetings and leaving decision making to a cabal of close advisors.¹ The marginalization of the Cabinet from decision-making would be stopped dead in the water by a UK e-cabinet because under online scrutiny it would become rapidly apparent if questions of state were not being decided in the appropriate forum.

In Estonia, Today, I Decide allows citizens to comment on government policy: legislation has been changed on the basis of such comments. By January 2003, 372 ideas that had been submitted in Today, I Decide were being considered for the legislative process in different government agencies, five acts based on submitted ideas were in the signing stage, and ten draft laws were being worked on by the relevant ministries.

The final plank of e-government in Estonia is a public information act that aims to put information in the public realm proactively rather than wait for a request for it, as currently happens under Freedom of Information legislation in the UK.

**Personalized, popular services**

Government in Estonia is becoming less and less reliant on paper transactions to carry out its business and is becoming quicker and more efficient as a result. Online interactions require secure authentication and authorization, which is provided via a national ID card and certification service run by a company independent of government. The ID card can be used on public transport similar to an Oyster card in London, and also contains a digital signature to allow identification to take place on line and provide a legally binding digital signature.

¹ This is one of the findings of the Butler report into Tony Blair’s style of government with specific reference to the decision to go to war in Iraq.
Every citizen has an individual homepage through the central citizens’ portal that they can personalize and use as a one-stop access to government services. There is also a webmail account which provides every citizen with a standard email address through which the government can communicate.

Tax returns can be filed online in 2-3 minutes and a range of other services including the registration of births is also available. Programmes such as Tiger Leap and Look@World (the latter is a non-governmental initiative) have seen 100% of schools and libraries getting Internet access as well as training 100,000 (nearly a tenth of the population) on computers within two years. Estonia can boast one of the highest numbers of public internet access points in Europe.¹

Value for money is provided by the Public Procurement State Register which acts a portal for e-tenders. All the information in the register is publicly accessible over the Internet free of charge. Estonia is currently looking at extending the reach of its e-procurement to include e-auctions and e-catalogues.

**A clear strategy and stable funding**

In the development of e-government, Estonia is a decentralized country: responsibility for IT projects lies with IT managers in government organizations. Central management deals only with genuinely central functions such as strategic planning, setting and financing priorities, fixing IT standards, drafting necessary legislation and managing networks.

In order to become a world leader, Estonia has spent less than 1% of its total government expenditure on IT at time when leading developed countries are spending 2-4%.² So it is obviously not the quantity of spending that matters: rather, stable financing, clear goals and coherent actions are crucial when it comes to delivering results.

The Estonian IT policy sets down priorities, details what actions need to be taken for these priorities to be achieved, and outlines whether legislation needs to be enacted to help achieve them. It is only 12 pages long.

Clarity is the key: the Estonian IT policy has no direct UK counterpart. Instead, papers gush forth from the e-government Unit, the Office of the Deputy Prime Minister, the Performance and Innovation Unit and the Office of Government Commerce, all competing for the limelight in forwarding their own particular strategies. In short, it is not really clear who is in charge of it all.

**Summary of Estonia’s success**

1. Clear IT policy
2. Constant, predictable levels of funding
3. Active and positive role for government
4. Active and positive role for private enterprise
5. Favourable political and administrative culture
6. Large numbers of public internet access points
7. Innovation driven
e-government in the UK

A history of e-government in the UK

The use of technology to assist with government thinking has been part of UK government thinking since as early as 1957 when the Technical Support Unit (TSU) was established, using engineers from the telecoms industry to evaluate and advise on computer use. However, it was not until 1972 that the Central Computer Agency (CCA) was formed within the Civil Service Department from a merger of the TSU with other departmental computer offices. The CCA was tasked with supporting and improving computer use and infrastructure within government.

A change in name and role followed in the 1980s as the CCA became the Central Computer and Telecommunications Agency (CCTA) and lost its job of coordinating central ICT functions. Against a backdrop of reduced government expenditure, the CCTA was given the role of procuring and managing outsourced contracts under Treasury supervision.

In 1992 the CCTA became the responsibility of the Cabinet Office rather than the Treasury, and in 1994 a central government website was launched offering links to all departmental and agency sites. The CCTA also began to host some departmental and agency sites on its own servers.

November 1995 saw the establishment of a Central IT Unit (CITU) within the Cabinet Office with the task of developing a government-wide strategy on the use of ICT by government to:

1. deliver better and more efficient services to citizens and businesses
2. improve the internal workings and efficiency of government.

This was followed a year later by a Green Paper outlining how this strategy might be achieved. However, by this time the winds of political change were starting to blow on a government that was popularly perceived to have run out of steam. A General Election was
called for May 1st 1997 which was won by the opposition Labour Party. Labour policies on
governance called for:

1. Open government through Freedom of Information (FoI)
2. Better government through better regulation
3. Electronic (or e-) government through the use of technology to deliver simpler
efficient and responsive services to citizens and businesses

But rather than being seen as a means of delivering open and better government,
e-government was considered separately and purely as a means of delivering existing
services. This has left the UK far behind in terms of the potential benefits that are
achievable through a well-executed e-government strategy.

**Current government objectives**

It is undeniable that the current government has been very active in driving forward the
vision of e-government. However, it is important to discriminate between activity and
achievement. We should look at what has been delivered, whether the targets have been
met, whether those targets are in fact the right things to aim at, and whether the
government’s vision is correct or too narrowly focused.

Certainly, a focus on the delivery of services is important, and is all very well setting
targets for the availability of e-services. But there is no use in having functions that no one
uses. That is comparable to buying an exercise bike that is never taken out of the box: you
might feel better for buying it but you do not get any fitter unless you actually use it. And
this is the key problem: e-government is full of potential benefits, but they will not be
realized until government and the public at large begin to participate more fully.

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1 Eurostat underlines the UK’s low take-up levels in http://63.247.135.168/~jxp123/images/uploads/e-
    gov_EU25.pdf

16
e-government in the UK today

The UK is currently ranked 9th out of the 22 countries globally by Accenture (2004) in terms of the overall maturity of e-government.

The UK strategy revolves around having 100% of public services available online – citizen-centred, accessible, inclusive, and knowledge-driven. A digital strategy was published in April 2005, with other documents such as Transformational Government emerging later in the year, aimed at driving up low take-up rates of e-government and changing government practices to facilitate this.

On a national level, strategy and coordination is the responsibility of the e-government Unit (eGU), assisted by a Chief Information Officers Council drawn from all areas of government that meets three times a year. At a local level these responsibilities fall to the Office of the Deputy Prime Minister (ODPM).

Implementation is a responsibility shared between the eGU and the relevant departments nationally, but at local level the responsibility is the local authorities’ alone. Support is provided on both levels by the eGU with this responsibility shared with the Office of Government commerce (OGC) on a national level, and with five other bodies including the ODPM and the Local Government Association (LGA) on a local level. Auditing is carried out by the National Audit Office.

Legal framework

The Freedom of Information Act 2000 makes it a legal requirement for public bodies to supply citizens with information on request, with certain security exemptions. To ensure compliance, an Office of the Information Commissioner was created to enforce the right of access to information.

Data Protection is covered by the Data Protection Act 1998 which lays down guidelines for the collection, sharing and handling of personal data. The Act also allows individuals to obtain and correct records containing personal information about them held by public and
private bodies, while the Electronic Communications Act 2000 provides a framework for e-commerce and the use of e-signatures. Successive legislation has brought the UK into line with EC directives governing e-communications, e-signatures and privacy.

Legislation is in process to implement an EU directive on e-procurement.

Just after the election in May 2005, the government re-introduced its ID Cards bill – though a few days later the Passport Service published results of the trial of biometrics, showing that these are by no means foolproof.

**UK infrastructure**

Key aspects of the UK e-government infrastructure include the following.

**Portal**

Direct.gov.uk, launched in March 2004 as a replacement to UK Online, offers a single portal to government for citizens. It is not maintained by a central team: rather, each government department monitors and updates its own content. As well as being available on the internet, DirectGov can be accessed via digital TV and is complemented by the BusinessLink.gov.uk portal for business.

**Network**

The UK can today boast a highly sophisticated governmental ICT infrastructure. The Government Secure Intranet (GSI) offers a secure network for intra government communications. This includes secure web access, file transfer and search facilities, a directory, web publishing, email, and broadband that can carry voice and video data. There are 280,000 users but it is not currently linked to the NHS or MoD.

**e-Identification capability**

The Government Gateway, launched in February 2001, is a central registration and authentication engine enabling secure authenticated e-government transactions to take place over the Internet. Users need to register with the Gateway in order to enrol for using online government services and subsequently transact securely with government departments.
Different systems in different departments are able to communicate with the Gateway and with each other.

Different methods of authentication are available: the government currently favours the introduction of e-ID cards that contain authentication and authorization information, and has legislated to that effect, though it speaks volumes that the major spending departments have no plans to rebuild their systems around this Home Office identifier.

Knowledge management
The Knowledge Network (KN) is a government-wide electronic communication tool that helps government departments to share knowledge with each other. It also provides an online collaborative working environment across government. The KN is available through the GSI.

eProcurement
There is currently no central eProcurement infrastructure. Zanzibar, an eProcurement platform that will provide an electronic marketplace, a purchase to pay solution, and a pan-public sector data warehouse, is set to go live from 2006.

Other
UKGOV XML (Extensible Markup Language) was adopted as the standard programming language to enable further interoperability and integration.

Summary
In infrastructural and legislative terms at least there is very little difference between the UK and Estonia. One difference is that the UK does not currently have a system of universal digital signatures for citizens that enables a secure means of authorization and authentication: in Estonia this function is provided by ID cards. But as mentioned above, even if the UK government is successful in introducing ID cards, the various government departments have no obvious intention of rebuilding their systems around them.
A critique of current UK policy

The UK has many of the foundations required for a successful e-government programme including the necessary legal protection and a developed infrastructure. However, that has produced little public benefit, and nor will it unless there is a fundamental change in approach. So what is wrong?

1. Too narrow a definition

It has already been noted that the definition of e-government as used by the UK government is too narrow and this feeds through into how performance is measured. An approach based on measuring capability has not worked: putting all public services online achieves nothing if the online services available offer the users no greater convenience or opportunity for savings. The definition tends to focus exclusively on e-services rather than better and more open government as a whole.

2. Lack of authority behind e-government strategy

A clear strategy has been a long time coming, though some hail the recent Transformational Government report from the e-Government Unit as just that. It talks of 'customer group directors' who will break down the old departmental and agency silos – sharing information and allowing outsiders to use their systems. But departments are jealous of their own ways of working and quick to dismiss other methods as simply impractical in their case; so it is questionable who would have the authority to make this collaboration and openness happen. There is not much sign of any sanction if it does not; nor does there seem to be anyone at the Cabinet table (for that is the level of authority that would be needed) with the power to force jarring ministers to embrace non-silo ways of working. But without that, citizen-centred, accessible, inclusive, and knowledge-driven services are no more than an aspiration.

While the eGU has its vision, other public bodies and agencies generally miss the point. Rather than technology changing the whole way that government works, it is regarded, in the words of the National Audit Office (2002) as "something that must be added on to all the activities that the agency does already." Implementing e-government means transforming government as a whole: it is not merely an extra burden on the civil
service and should not be regarded as such. But nobody seems to have the power to move things towards this vision through real cross-government action.

3. **Too many agencies involved**
The reason that there is not one clear strategy is that there are far too many bodies and agencies involved in the strategy and implementation of e-government. This is best exemplified by the support functions at local government level being split between six bodies. The problem is not helped by the fact that many parts of the government’s strategy have been repeatedly re-launched, renamed and relocated. The result is an unnecessary conflict and lack of coordination between different bodies.

There is also a desire to micromanage every aspect of e-government centrally. It comes from the political anxiety to produce ‘results’ and push through change. But it just adds to the confusion, especially since the politicians tend to measure success in crude technology terms (how many, how modern, how much) rather than public take-up and satisfaction.

4. **Cultural resistance**
There is cultural resistance to e-government both on the supply side (within the civil service) and on the demand side (from citizens).

Certainly, the recent history of IT projects in government is grim: a House of Commons Public Accounts Committee report in January 2000 criticized the government IT projects for providing poor value for money. The Parliamentary Office of Science and Technology followed this up in August 2003 by publishing a report analysing the reasons for public-sector IT problems. These failures create a wider reluctance to develop IT, based on bad experience and a sense that any association with a disastrous project is damaging to the career prospects of those involved:

...they do not want to have their careers tainted through any association with any more disasters

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1 NAO 2002
Another problem is the over-reliance on experts, creating an imbalance in the company-client relationship. Where senior managers have little or no experience of IT they are likely to trust IT firms to tell them what they need, rather than ask them for what they really want:

...there are few incentives for companies to provide up-to-the-minute equipment when it is not requested.

A lack of experience among senior management can also lead to a suspicion of technology and the feeling that it would be better to ignore it and hope it proves to be just another flash in the pan. Furthermore, the thought of a two-way relationship is unsettling in civil-service organizations with no history of customer relations:

...government organizations tend to have a rather fatalistic approach to thinking about what their citizens want, partly because they do not think it is possible to find out.

The inherent desire to bureaucratize and formalize the procedures of government has led to organizations squandering the benefits of e-government by adding superfluous processes. This is best exemplified by the requirement in some government organizations that all emails be printed and filed, an order that is unlikely to produce a progression to paperless government anytime soon.

An additional problem lies in the fact that a large proportion of staff does not have Internet access themselves, or perhaps do not even use computers. Staff feedback, an important part of developing websites, is therefore missing in the delivery of e-services.

5. Over-reliance on marketing
Accenture (2005) praises the UK government for its impressive marketing of e-government, but this reflects an over-reliance on marketing rather than any real success. The best advertising campaign in the world will not be successful if the underlying product is below standard:

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1 NAO 2002
2 NAO 2002
...private sector companies greatly value the potential of the Internet to provide them with information about what electronic services their customers will and will not use...the alternative has always been to spend large amounts on advertising, the benefits of which are hard to assess and take a long time to materialize.\footnote{NAO 2002}

Unfortunately, the UK has followed the route of merely advertising existing services. Once again we see a centralized approach that revolves around telling citizens what is on offer rather than getting feedback on what would suit them.

6. **Lack of integration between front and back office**

   e-government in the UK must become more sophisticated in e-services, making the transition from merely providing information to enabling integrated online transactions. This can only be achieved by greater integration in government: this means cooperation and interoperability not only between departments and levels of government, but with departments and levels of government:

   ...most local authorities have failed to re-engineer back-office processes...this will create problems for councils trying to achieve savings.\footnote{"UK local e-government progress held back by insufficient back office engineering, finds survey," e-government news, 14\textsuperscript{th} December 2004}

   Being able to find and print off a form online only to have to fill it in and return it to be processed by the normal means achieves very little. Therefore, front- and back-office functions must be integrated more closely.

7. **Lack of a secure means of authentication**

   Without a means of verification, there is likely to be little faith in e-government either from users (who expect security) or providers (who expect identification).
A way forward for the UK

The Estonian experience demonstrates that with a clear set of goals massive strides can be made in e-government, even on a limited budget. Implementation in the UK may be harder, because Estonia was starting with a clean slate whereas the UK has a large, complex bureaucracy with a cultural aversion to major change. But these problems are surely not insurmountable. It is instructive, therefore, to look at practical ways of implementing an Estonian style e-state in the UK.

The myth of a ‘digital divide’

Many papers on e-government¹ agonize about the development of e-government exacerbating a ‘digital divide’ between those households with a home computer and those without. While it is undeniable that the latter are found disproportionately among lower-income groups, the claim that there is a growing digital divide is a distraction.

e-government does not make society more unequal: in monitoring how and where people choose to contact government, e-government merely highlights the inequalities that already exist in any functioning market economy. Take for example the fact that lower-income households are also less likely to own a car (a ‘gasoline gap’ perhaps?). This does not mean that people without cars are trapped in their houses: they can walk, cycle, or use public transport. Similarly, provided there are plenty of available public access points (libraries, internet cafés, etc) with people on hand to demonstrate the technology, it is matters less whether individual households possess a computer or not.

Delivering e-government

When asked “what came first: the technology or public awareness?” Ivar Tallo (the Estonian head of the e-Governance Academy) responded:

¹ In particular, the IPPR’s Digital Manifesto (2005)
The technology came first.... But the solutions are more in people’s heads, to change the way we actually operate the government. A top-down approach may be necessary...Big countries like the UK haven’t started it yet from the government side.¹

With substantial amounts of the technological infrastructure now in place in the UK, it is time to ‘start it’. But a ‘top-down approach’ does not mean a centralized, micromanaged system: it means a defined aim, strong leadership and the means and authority with which to see goals through to fruition.

The need therefore, is for this leadership to provide a strategy, to make the transition from primitive to sophisticated services and to popularize these services. Furthermore, the challenge is to not only make these e-services attractive, but also to make structural changes to public services in order to realize the efficiency savings, reduce the cost of administering government, and make government processes more transparent.

**Providing leadership**

The first task is to create one organization that is responsible for strategy and support while devolving all responsibilities for implementation down to the organizational level. This requires something much more authoritative and much more central than the ‘customer group directors’ envisaged in the recent *Transformational Government* report. It needs something more like an ‘Office of IT’ (OffIT?) with a cabinet minister at its head who has the power to push through change.

This ‘Office of IT’ should take on all responsibilities for strategy from the e-government Unit, the Office of Government Commerce and the relevant sections from Office of the Deputy Prime Minister. It should:

- Create a coherent and simple UK IT policy: the aim should be to make the UK the worlds leading e-state.
- Have a set budget with which to achieve its goals.

¹ "How Estonia claims wireless title,” http://www.infoworld.com/article/05/09/16/HNestoniawireless_1.html
- Be responsible for the network of servers for governmental websites and the portal Direct.gov. Maintenance of specific areas should remain the responsibility of the specific service provider or area of government.
- Stipulate a common programming language and other such measures as will provide a seamless and interoperable service.
- Build upon the Chief Information Officers’ Council to develop regular and healthy communications with all governmental organizations.
- Appoint and supervise specific teams when inter-organization cooperation is needed on a project (in accordance with IT policy).
- Be responsible for developing and marketing an e-procurement platform.

In order to set an example of efficiency, this Office of IT should contract out its administrative and server-maintenance functions.

**Overcoming barriers to take-up**

Inability to access e-government is the largest barrier preventing take-up of e-government. This has been tackled by the UK Online initiative, launched in 2000 to deliver universal access. The UK IT policy should therefore aim to build on this and follow the example of Look@World in Estonia where (as we have seen) 100,000 people were trained in computer use within two years: this must be done in partnership with non-governmental bodies.

Low expectations of government are another problem that is currently endemic in the UK, with successive Eurobarometer surveys showing a continued lack of trust in government. Trust in government as a whole can only be increased if processes are transparent and the expectations and aspirations of ordinary citizens are met.

For e-government to realize its potential, it must be delivered to the citizen in a way that seamlessly integrates all the services that he or she may require. This requires a level of integration and interoperability between organizations and within them. When a citizen receives a service, it is probably not their first concern who is providing it, but rather that it is provided conveniently. e-government has to result in a transformation of government
because any distinction between local and national or department and agency is little more than an administrative nicety.

The government’s current thinking on low take-up is spelt out in a 2005 document from the Performance and Innovation Unit (PIU):

Compelling customers...is another option.

Compulsion is the worst option available. If citizens already distrust government, forcing them to go online is going to do little to redress this problem. It also does not address the fact that bad design of an eService might be behind the low take-up.

**Meeting expectations, reducing costs**

In order to achieve the necessary transformation, all government administrative and customer-based services should become commercial entities with set contracts that stipulate a reduction in the cost of delivery and administration of services. Other contractual obligations would include a requirement to offer e-services through the citizens (or business) portal and to adhere to guidelines on commonality and interoperability as set by the Office of IT. They would also be responsible for maintaining an area on the citizens/business portal. Otherwise, the agencies would be free to make profit, borrow, merge and float.

In light of the public sector’s inability to deliver value for money in IT projects, contracting out the administrative and customer-based services would provide an incentive for new organizations to build e-services that people will actually use. Ideally those contracts should aim at outputs, such as increasing uptake and reducing costs, rather than the mere administration of existing ways of doing things.

The Gershon Review talked about reducing administrative costs by cutting out unnecessary waste in each part of government. But a thoroughgoing e-government strategy would put the very structure of government under the spotlight. Are existing bodies such as HM Revenue and Customs too big to do their job efficiently, for example? Or are many local-government bodies simply too small? With a genuinely user-focused e-government, the
momentum of the status quo would give way to collaboration – with administrative agencies pursuing both horizontal and vertical integration of services as the means to achieve greater efficiency and public satisfaction. Take for example the fact that small businesses currently have to register with three different ministries. It would be far more convenient if a business only had to complete one form containing all the relevant information that goes automatically to the relevant bodies on completion – and that those bodies collaborate to make sure the form is simple and pertinent.

Providing secure authentication
There is a need in the UK for some system of secure authentication to allow confidence in online transactions. There is a considerable level of anxiety among civil libertarians regarding the proposed introduction of ID cards: there needs to be a debate about what form authentication should take in order to protect our liberties and resist a Big Brother culture.

What is clear at least is that ID cards as currently proposed are not acceptable. Should an ID card be found to provide the most convenient method of secure authentication (as is likely) the administration of the card, along with its attendant national identity register, should be overseen by an independent third party and not the Home Office.

In the UK the Office of the Information Commissioner already exists as an independent body set up to police the Freedom of Information Act. Under an ID card scheme, this office should be strengthened and placed in control of administering and protecting the integrity of a national identity register. But this register would be much less intrusive than the government proposes. It would aim to provide every citizen with a secure digital signature, which would also be encoded on the card along with a certificate for the digital signature.

It would be via this signature that service organizations (such as the NHS) would request information about a citizen from the national register. The information would only be released with the explicit consent of the citizen, and limited to information that was relevant to service delivery. Should service providers want to collaborate or integrate, they would have to request permission to share data from the Information Commissioner. In this
way, it is possible to protect the privacy of the individual while at the same time delivering the convenience of accessing government in one place.

All of the personal information contained on the register should be accessible to the individual via the citizens' portal. Citizens should be able not only to view this information but also change it or even remove it. For example, a change in details (such as a change in address) would be communicated to the relevant departments by the portal.

So that the individual remains the guardian of their identifying information, consent to use the information should be revocable and a facility should exist that requires an organization to delete any information it holds on request. In this way, a person's entry on any national database need be no more that a digital signature with a name next to it if they choose not to use e-services: and there would be no compulsion to use or hold an ID card. In other words, the kind of card being proposed here is more along the lines of an augmented national insurance number to verify entitlement to state services rather than a superpassport designed to track an individual's movement.

Any system of authentication requires a certification body: in Estonia, a private company (SK) has the contract to provide certification services (and the ID card). Whatever means of authentication were adopted in the UK, there is no reason to not follow the Estonian model and contract out certification services.

**Opening up government**

The Freedom of Information Act has been a major achievement for the current government. There are criticisms about its scope and depth, with too many areas restricted or protected, but the fact that the legislation was passed is significant.

The move now has to be towards a more proactive culture of publishing information: rather than waiting for material to be requested before it is released, information should be published as soon as possible on a single database of official data.
An example should be set at the highest level of government by the adoption of an Estonian style e-cabinet. This would require a simultaneous abandonment of the 30-year rule, a rule which only serves to encourage obfuscation and diminish political responsibility by delaying the time at which the decision becomes apparent.

Local authorities must also follow suit: decisions made on citizens’ behalf should be publicly accessible from the central citizens’ portal.

*e-democracy*

e-democracy involves the use of technology to improve communications between citizen and government. This means more than communication via the ballot box: e-voting trials in the UK have been successful but have failed to increase turnout.

The UK should follow the Estonian example and set up a website forum for citizens to comment on public policy. A threshold should be set so that if a topic is particularly popular, there is a statutory requirement for it to be discussed both in Parliament and in the Cabinet. There should be suitable local branches to the forum also with their own thresholds that require a discussion of an issue at local authority level if it proves popular enough. Trust in government to be honest, to meet citizens aspirations and to respond to their criticisms will only be restored if a cultural change that embraces greater two-way dialogue takes place.
Conclusion

In other countries, e-government has made appreciable changes not only to government processes and efficiency but also to how citizens perceive government and receive services from it. A notable example of e-government in action is in Estonia, which is credited as being the world’s first e-state.

Though infrastructure and legislation have secured a sound foundation for e-government in the UK, its full potential will not be realized unless current policies are changed. There is a clear criticism of the current administration’s approach to e-government which revolves around a lack of a clear strategy and the leadership to carry it out, and cultural barriers that result from the current ‘silo’ structure of government.

A 5-point action plan

1. e-government in the UK has so far failed due to a lack of clear strategy and coordination. A single body, the Office of IT, charged with making the UK the world’s leading e-state, should take over from the current array of bodies to provide a clear voice and clear direction so that the UK can lead the technological revolution currently spreading around the globe.

2. e-government is about more than making forms easier and quicker to fill in: it is about increasing the participation in democracy as a whole. To recast democracy in a way that involves more people, greater openness must be pursued by abandoning the 30-year rule and making the decisions taken by the Cabinet and all other government bodies immediately available to the public.

3. There must be a means by which the public can comment on or even propose legislation. Only when citizens become more involved in the decisions that shape their lives will the process of political re-engagement occur.

4. The low take-up of e-services is symptomatic of the top down approach taken to public services. To refocus services on the needs of the citizen, a radical transformation of
governmental structures is required. The Direct.gov portal should be developed to allow more sophisticated online services: this will require a means of authentication, such as an entitlement card. e-Services themselves can only meet the needs of the citizen if the private sector becomes involved in their delivery and administration.

5. Any entitlement card that is adopted must be independently run, free from compulsion, and be free from any obligation for the citizen to provide more personal information than they are comfortable with.
References

Accenture (2004), *e-government Leadership: High Performance, Maximum Value*

e-Governance Academy (2004), *e-Estonia Roadmap: with modest investments to significant results*


Institute for Public Policy Research (2005), *Modernising with a Purpose: A Manifesto for a digital Britain*

National Audit Office (1999), *Government on the Web*

National Audit Office (2002), *Government on the Web II*

National Audit Office (2002), *Better Public Services Through e-government*

OECD e-government Studies (2003), *The e-government Imperative*


Parliamentary Office of Science and Technology (2003), *Government IT projects*

Performance and Innovation Unit (2000), *e.gov: Electronic Government Services for the 21st Century*


Swiss Federal Institute of Technology at Lausanne (2003), *Government and Democracy in the Information Age*

UNESCO/ COMNET-IT (2002), *Country Profiles of e-Governance*
REWIRING DEMOCRACY
Better e-government for the UK
By Andrew Lomas

The UK’s e-government strategy is fragmented and producer driven, says Andrew Lomas, and will never deliver its full potential benefits to the public. By contrast, tiny Estonia has re-thought its government systems around the new technology — resulting in much higher online access to government services and greater public satisfaction.

Images of e-government in Estonia

Left: wi-fi areas make public internet access to government easy.

Left Below: Estonian children learn to use the internet.

Bottom Left: An Estonian Cabinet meeting in progress.

Bottom Right: Government decisions are online within seconds of being made.